

Missouri Archaeological Society

# Quarterly



## The Common Field Site

Uncovered by the 1979 Mississippi River Flood

October–December 2017 ❧ Volume 34, Number 4

# Viewpoint

I am asking a big favor. Please think of one person, friend or acquaintance, even someone you just met off the street—someone who you think might be interested in becoming a member of the Missouri Archaeological Society. Invite them to join or drop a mere \$25 as a gift for them to become a member for the year.

Invite them to attend a local chapter meeting, the annual meeting, the fall symposium, or introduce them to another one of our great MAS members.

I wish I was aware of this Society when I was younger. I always had an interest in what was known as arrowheads when I was a kid. I could never find any on the farm and even asked the guy that farmed for my grandfather where I could find some. He pointed to different areas of the field and said check there. He did not, however, suggest I wait for a rain.

I also recall as a youngster a couple old timers who noticed me looking at a frame of artifacts in a flea market many years ago. One started telling the other this story of travelling out to "Indian" land when he was a kid and got



to watch the Indians make arrowheads. He knew he had my undivided attention and proceeded with the story that the Indian heated the rock super hot. Then he dropped very cold water on the heated rock in precise places to make an arrowhead. I know now that many of the explanations I heard growing up are not true, but rather they were given by lay people trying to explain how things were done in the past. Since its inception, the MAS has offered scientific explanations to avocational archaeologists like me.

The Missouri Archaeological Society is for me a fun mix of avocational and professionals with a love for archaeology and the desire to preserve the past. New friendships for life are what are most important to me in this Society. It is something I hold with the most profound happiness. I'm so grateful for the educational knowledge I have gained as a member of this Society.

I am humbled to be a part of this great organization.

*Clark Montgomery, President*

It's that time of year again...renewal notices were mailed in early October. Please contact the MAS office if you didn't receive yours.



# Missouri Archaeological Society

# Quarterly

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COVER: POTTERY FROM THE COMMON FIELD SITE.

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# Member News

## Paleoindian Database Update

**D**enise Wallace Campo recorded several points in a private collection from Lafayette County. These points are all from one recently recorded site. Recorded points consist of three Daltons and one possible Dalton of Burlington chert; three Dalton points of Winterset chert; two possible Meserve points of Winterset chert; two indeterminate points of Burlington chert; two Hardin Barbed points of unknown material; one possible Scottsbluff of Quartzite; and one Graham Cave of Winterset chert.

Dan Elliott also recorded one Dalton of Gabbro from Jackson County; one Clovis of Quartz from Howard County; three Dalton points of Burlington chert from Howard County; and one Dalton point of Warsaw chert from Howard County.



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## New Student Member

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Anthony Farace, Carbondale, Illinois

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## New Active Members

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Steven Bender, Cape Girardeau, Missouri  
Sidney Madison Russell, Greenville, Missouri  
Kate Stryker, Wheatland, Missouri  
Jason Wilson, Springfield, Missouri

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## New Patron Member

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R. Scott Buchanan, Columbia, Missouri

## A Note from the Editors

**Y**ou probably noticed something different about this issue of the *MAS Quarterly* ... It's in **color**!

This improvement is the result of two actions. First, we did some price comparisons of printing costs and found a quality printer with lower prices than those of our previous printer. Black-and-white issues can now be printed for around \$630 less per issue, resulting in a potential yearly savings of around \$2,500. The new printer's charges for each partial-color or full-color issue are only \$150 to \$350 more than charges for black-and-white issues. We will use around \$2,000 of the potential savings to reduce the annual deficit between member publication/distribution costs and dues.

Second, MAS members have made generous donations to the Chapman Color Publication Fund. The remainder of the printing-cost savings and generous donations will fund the printing of one full-color and three partial-color issues per year.

We hope you enjoy this upgrade, the color really shows the artifacts to be works of art. We have some interesting articles lined up for 2018 with great color photos. While you are filling out your membership renewal, please consider making a donation to the Chapman Color Publication Fund in support of this endeavor.

We welcome input from the membership regarding this change. Comments may be directed to [mas@missouristate.edu](mailto:mas@missouristate.edu) or by phone to 417-836-3773.

## Chapter Activity

**M**embers of the Southwest Missouri Chapter of the MAS exhibited at the George Washington Carver National Monument near Diamond, Missouri for the 11th consecutive year.

Pictured are (l-r) Dr. Paul Teverow, Dr. Conrad Gubera, Ellis Motley, chapter president Sam Clausen, and Lyle and Martha Sparkman





# 2017 Fall Symposium

The Fall Symposium was October 7 in Columbia on the University of Missouri campus.

The theme for Archaeology Month 2017 was the *Archaic in Missouri*. Attendees enjoyed presentations by Joe Harl, Neal Lopinot, Michael Meinkoth, Jack Ray, Robert Reeder, and Candace Sall

After the presentations, we enjoyed a picnic lunch catered by Big Daddy's BBQ (we highly recommend) at the new Museum of Anthropology at Mizzou North.

Attendees then participated in a curator-led tour of the new Museum. The Museum is beautifully arranged and attendees enjoyed viewing several famous artifacts from Missouri, including the Lilbourn Mace, the Jaguar Gorget, and shoes from Arnold Research Cave, among others. Much of the work done at these sites and relative to these storied artifacts would not have been possible without the contributions of MAS members, so to be able to actually view these iconic artifacts was especially nice. We are sure many members appreciate that these and other artifacts are being shared with the public. If you were not able to attend the Fall Symposium, we recommend that you visit the Museum when you have a chance. It is well worth your time.

Special thanks are extended to Candace Sall, Amanda Staley-Harrison (designer of the 2017 poster), and Alex Barker from the University of Missouri. We would also like to thank our presenters, who generously shared their research with us.



# *The Common Field Mississippian Site (23SG100), as Uncovered by the 1979 Mississippi River Flood*

*Richard E. Martens*

**T**he Common Field site occurs near the bluffs in the Mississippi River floodplain 3 km south of St. Genevieve and approximately 90 km south of St. Louis. It is a large Mississippian-period site that once had as many as eight mounds (Bushnell 1914:666). It was long considered to be an unoccupied civic-ceremonial center because very few surface artifacts were found. This all changed due to a flood in December 1979, when the Mississippi River swept across the Common Field site. The resulting erosion removed up to 40 cm of topsoil, exposing:

[a] tremendous quantity of archaeological material including ceramic plates, pots and other vessels, articulated human burials, well defined structural remains containing daub and carbonized wall posts, midden deposits, pits containing large quantities of charred corn and a variety of ground and chipped stone artifacts (O'Brien et al. 1982:176).

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## Background

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Many collectors and avocational archaeologists visited the site shortly after the flood. Some even visited in boats to collect complete ceramic vessels before the flood waters had fully subsided. The author made several trips after the site had been cultivated in 1980. It was truly an unbelievable situation. My journal from that time notes that:

... many burned houses were evident and very large pieces of Mississippian vessels and plates were distributed over the site. Further, projectile points and smaller pottery sherds were concentrated into piles by the flood waters.

Two of the pictures I took during an early visit to the site are shown in Figure 1. The first shows Mound A, the largest of the six then-existing mounds. The nose of my brand-new 1980 Volkswagen parked on the farm road is in the lower right corner of the picture. The second photo shows the outline of a burned house structure typical of many evident across the site. Although it has been noted that many people visited the site shortly after the flood, I did not meet anyone during several visits in 1980 and 1981.

I subsequently learned that Dr. Michael O'Brien led a group of University of Missouri (MU) personnel in a limited survey and fieldwork activity in the spring of 1980. The first phase entailed aerial photography (black-and-white and false-color infrared) of the site. The second phase entailed intensive surface collection in nine blocks. These blocks included areas of structural remains and concentrations of lithic, ceramic, and faunal materials. The details of this activity are documented by O'Brien et al. (1982) as well as two M.A. theses—Ferguson (1990) analyzed 6,814 ceramics and Trader (1992) analyzed lithic material.

No archaeological work was conducted at the site for the next 30 years. Then, Meghan Buchanan of Indiana University (IU) initiated four field expeditions between 2010 and 2012 in support of her Ph.D. thesis (Buchanan 2015). Her fieldwork was concentrated in the southeast portion of the site, approximately 80 m from the nearest MU study area.

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## Site Description

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The map in Figure 2 is adapted from Ferguson (1990:7). The site occurs on a sand ridge cut by a remnant channel of the Mississippi River. Six mounds are still visible, but they have been eroded as a result of many years of cultiva-



*Figure 1. Photographs of the Common Field site taken in the spring of 1980. (a) View of Mound A; (b) burned house outline typical of the many outlines evident across the site; size estimated to be 9-x-7 m.*

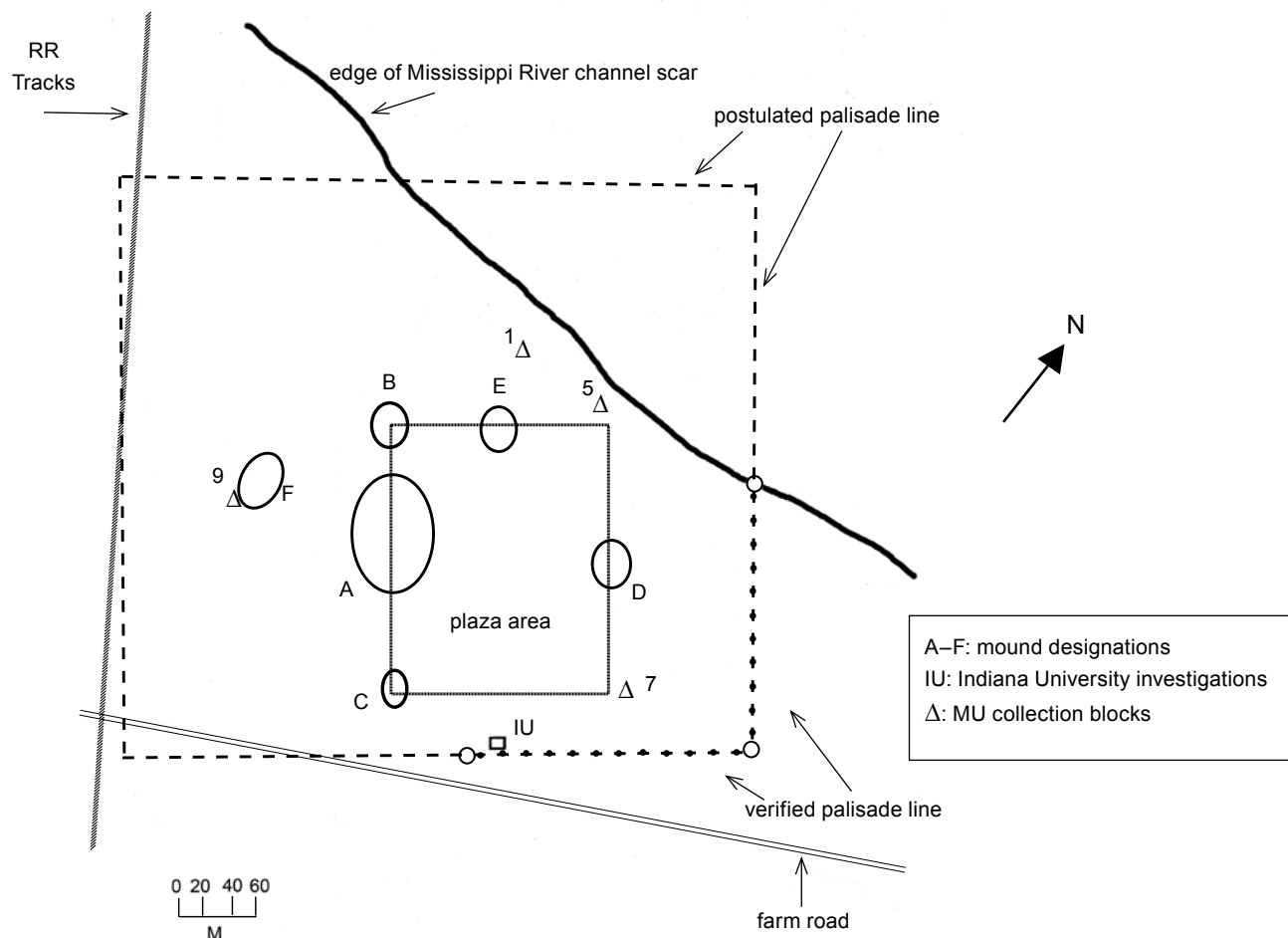


Figure 2. Map of the Common Field site showing locations of the six mounds and plaza, verified and postulated locations of the palisade line, and important areas of research by MU in 1980 and IU in 2010–2012.

tion. The largest, Mound A, is loaf-shaped and 4 m high. Mound A was originally more than 9.1 m tall and there were eight mounds, although two have been plowed down beyond recognition (Adams et al. 1941:15). The heights of the remaining mounds range from .5 to 2.3 m. Mound A, in conjunction with Mounds B, C, D, and E define the major plaza, which was found to be essentially devoid of cultural debris after the flood. Burned house stains were noted on the northeast border of the plaza and elsewhere at the site.

The location of MU survey Blocks 1, 5, 7, and 9 are also noted. A 1-m excavation in Block 1 revealed a skeleton in a burned house that was also the source of charred wood for two MU radiocarbon ages. The MU ceramic analysis determined that the earliest occupation area was located in Block 7 and the latest in Blocks 5 and 9 (Ferguson 1990:217). The location of the IU investigations, including excavations of the palisade trench and that of a second skeleton in a burned house, are also noted.

Infrared aerial photographs clearly showed traces of a palisade line extending southeast from the south edge of the channel scar and defining the northeast site boundary (O'Brien et al. 1982:179). Subsequent excavations confirmed this palisade line and determined that it was built with logs up to 18 cm in diameter (Buchanan 2015:164). The line then turns 90° southwest, forming the southern margin of the site.

The postulated palisade line locations shown in Figure 2 were based on analysis of infrared aerial photographs (Buchanan 2015:102). The photos clearly show the limit of the burned houses on the sand ridge and that the palisade follows a straight line from the channel scar to the railroad bed on the northwest. It is assumed that the channel scar was created after the site was burned. Similarly, the palisade line was extended to the railroad bed on the southeast. The railroad bed protected a portion of the site, which apparently continued below it and possibly to the southwest as far as the bluff line.



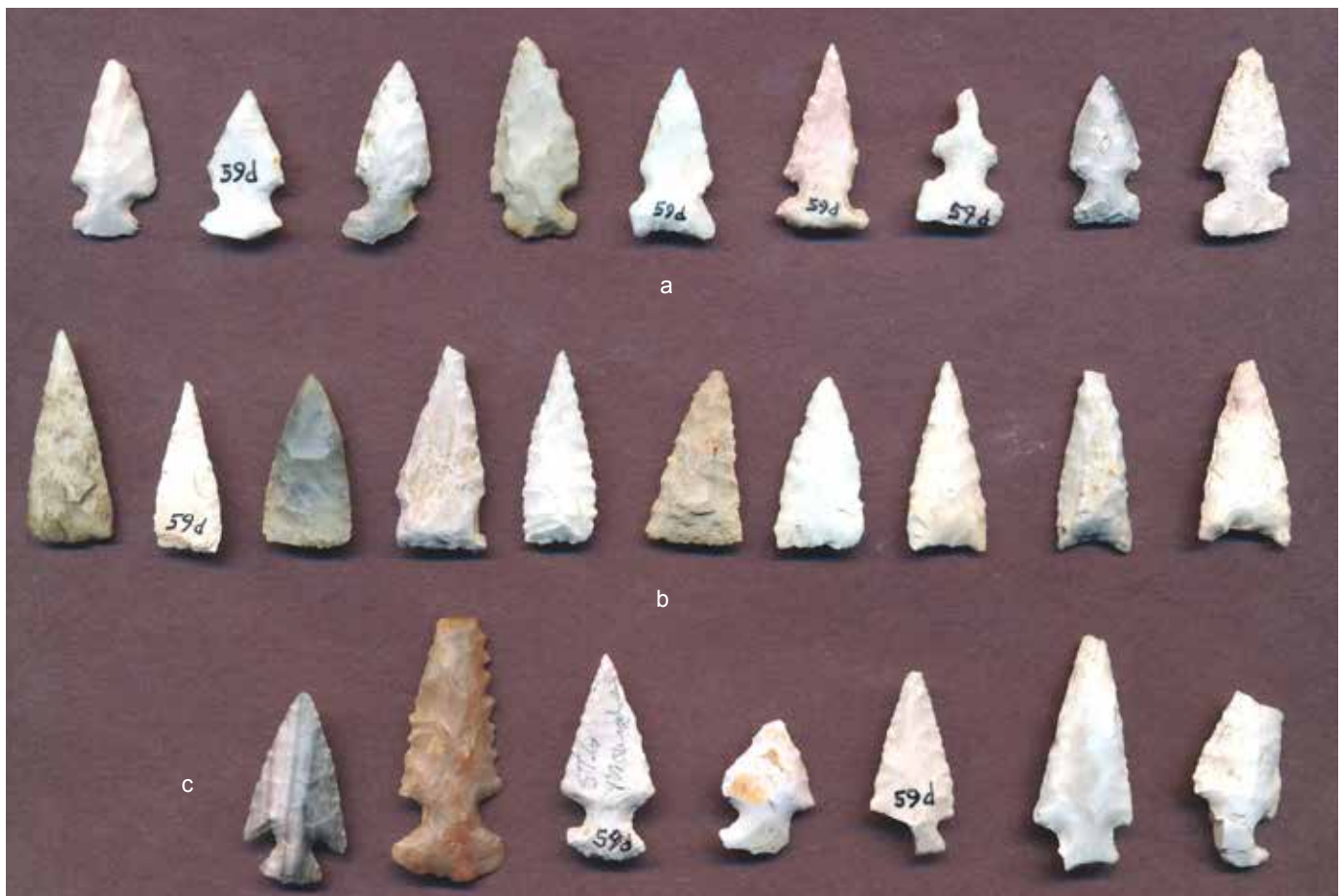


Figure 3. Arrow points attributed to the Late Mississippian occupation. (Row a) side notched; (Row b) triangular; and (Row c) stemmed.

The area enclosed by the palisade and the railroad bed measures about 56.1 acres, including the 7.1 acres scoured by the river. This area is equivalent to 42.4 football fields, including the end zones. If the palisade extended to the bluff line, the enclosed area would be 85.8 acres. The mounds, plaza, and palisade locations clearly reflect an alignment of about 45° east of due north (Figure 2). Surprisingly, none of the previous site investigators noticed or commented on this. The Cahokia site exhibits an orientation that is 5° from due north, possibly for a solar alignment. The Common Field orientation was most likely selected to align with the adjacent bluff line, as have the adjacent railroad tracks.

## Site Destruction

Five calibrated radiocarbon ages are available from the site, two by MU and three by IU (Buchanan 2015:164). The MU samples were obtained from a 1-m square in Survey Block 1 that was excavated to salvage a burial that was being plowed out of the ground. A charred post yielded an age range (at two standard deviations or 2-sigma) of A.D. 1155–1400. A piece of a charred roof beam adjacent to the skeleton dated to (at 2-sigma) cal A.D. 1296–1485. One IU age (2-sigma) of cal A.D. 1258–1283 was obtained for charred

nut shell recovered in the palisade support ditch. Samples from Features 13 and 26 yielded age ranges (2-sigma) of cal A.D. 1278–1305 and A.D. 1265–1300, respectively. The tested samples were charred nut shell and charred maize.

Buchanan concluded that the Common Field community was destroyed by fire ca. A.D. 1280 during the Sand Prairie phase. This assessment was based on the fact that the three IU ages and one of the two MU ages overlap at cal. A.D. 1278–1283.

## Initial Occupation

Ferguson (1990) analyzed 6,814 surface-collected sherds from the 1980 MU survey. The majority of the sherds were attributed to the Moorehead and Sand Prairie phases, but a significant number were earlier and others were attributable to southern origins. She also found that plates were the most frequent pottery class.

Ferguson (1990:217) concluded that the site was continuously occupied from the Emergent Mississippian to the early Vulcan phase, ca. A.D. 975–1450. Specifically, an early occupation was located in Survey Block 7 (Figure 2), contemporaneous with late Emergent Mississippian (also known as Terminal Late Woodland) and the Mississippian



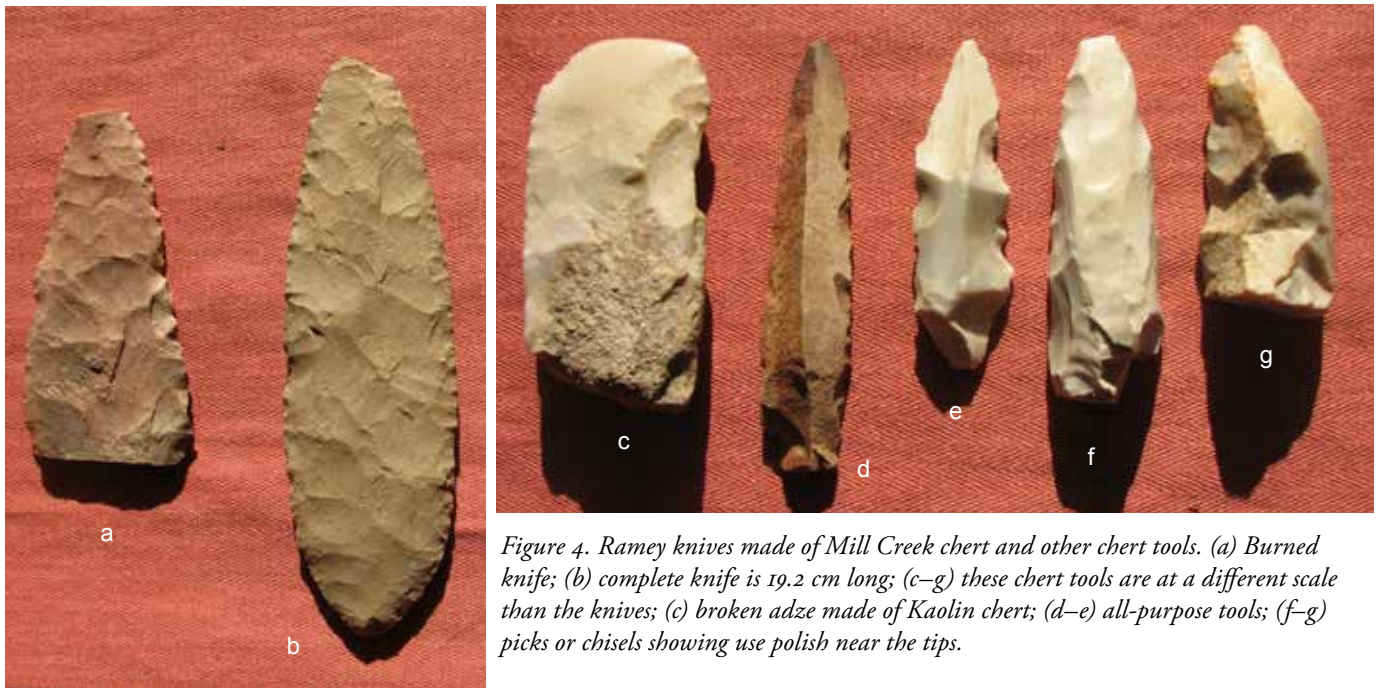


Figure 4. Ramey knives made of Mill Creek chert and other chert tools. (a) Burned knife; (b) complete knife is 19.2 cm long; (c–g) these chert tools are at a different scale than the knives; (c) broken adze made of Kaolin chert; (d–e) all-purpose tools; (f–g) picks or chisels showing use polish near the tips.

Lohmann and Stirling phases (A.D. 975–1200). The most recent occupation, located in Blocks 5 and 9, was probably contemporaneous with the late Sand Prairie and early Vulcan phases (A.D. 1350–1450). The remaining parts of the site have materials dating between the two extremes, i.e., the pottery was similar to Moorehead-phase and early Sand Prairie-phase materials (A.D. 1200–1350). It was noted that sherd abundance varied significantly across the site and that find locations of early pottery types coincided with the low sherd-frequency areas, indicative of low population density.

Surveys and excavation were conducted during several IU expeditions between 2010 and 2012, and the most extensive excavations were conducted in 2011 (Buchanan 2015:146). This was coupled with analyses of available ceramic, faunal, and human skeletal material. The major data-acquisition activities were conducted about 80 m southwest of Survey Block 7, which Ferguson noted yielded the earliest occupation material (see above).

Buchanan analyzed 1,755 sherds collected by IU, but only 600 (8.8%) sherds collected by MU. She concluded that the site was occupied during the Moorehead and Sand Prairie phases. She noted that only two artifacts collected by MU—a stumpware foot and a seed jar rim—potentially predated the Moorehead phase (Buchanan 2015:253). However, she also commented that “Ferguson analyzed several types that are pre-Mississippian and several that are non-local...” (Buchanan 2015:105). These comments are somewhat confusing. That confusion is compounded by the fact that there were four limestone-tempered Monks Mound Red sherds among those early sherds identified by Ferguson (1990:103). This ceramic type has been dated to Emergent Mississippian (Terminal Late Woodland) times (A.D. 900–1050).

Based on the conflagration date of ca. A.D. 1280 and evidence from two burned houses, Buchanan (2015:254) estimated that the palisaded settlement was founded ca. A.D. 1250. The walls on one house had been rebuilt once and two walls on the other house had been rebuilt twice. Since these walls may have lasted only 10 to 12 years, she estimated that at least one of the houses was about 30 to 36 years old when it burned down.

The author agrees with the date for the construction of the excavated houses, but not the extrapolation to the date for the founding of the settlement. Older houses would not have been standing at the time of the fire. Furthermore, Ferguson found the oldest ceramics in Block 7 more than 100 m away from the location of Buchanan’s excavations (Martens 2017). The author instead suggests that a small village was founded at the Common Field site ca. A.D. 975, associated with the known occupations of the Mississippian sites at and near the Kreilich salt spring (23SG5) and 23SG4 (Bushnell 1907, 1914). The Common Field site perhaps grew in size and importance due to its location on the Mississippi River, with access to the salt spring as well as the mineral wealth of the St. Francois Mountains region. These minerals consisted of: fine-grained diabase for celt manufacture; galena and hematite for white and red pigments; and to a lesser extent, rhyolite for tool manufacture. They would have been readily accessible by way of the Saline Creek and Auxvasse Creek.

The site grew rapidly during the unsettled times of the Sand Prairie phase as people moved from Cahokia and also from the southern Mississippi River valley. The ruling class probably decided that a palisade was required to defend their large community and sacred places. Since this required a considerable expenditure of labor and time, as would construction of the mounds, one would assume



Figure 5. Four hoes made of Mill Creek chert and a limestone hoe preform. (a–d) Complete and broken hoes, the largest is 26.3 cm long; (a, c, d) hoe bits exhibit gloss/polish from digging; (e) limestone preform is 33.6 cm long.

that either the mound complex had been built before the palisade construction began or vice versa.

Unfortunately for the inhabitants, the palisade did not provide the planned protection. Buchanan (2015:168) makes a compelling argument for the ferocity of an attack based on the analysis of skeletal material found in the remains of a burned house. Clearly, an individual in that house was not buried after death and scavengers—possibly abandoned dogs—attacked the remains before decomposition was complete. The skeleton excavated by MU was also found in a burned house rather than as a prepared burial. These two cases suggest that the survivors of this attack never returned to the village to bury their dead.

## Lithic Artifacts

### *Spear Points*

Seven Archaic-period points were most likely found by the Common Field occupants when they were away from their village procuring plant, animal, and lithic resources as well as salt. The collection includes Karnak and Godar points attributed to the Helton phase of the Middle Archaic period. The artifact assemblage associated with this phase has been summarized in Martens (2009:12–19). Karnak points date to 4500–3800 B.C. and Godar points date to 5500–2900 B.C. (Reber et al. 2017). Three Etley points from the Titterington phase of the Late Archaic period are also

in the collection. The artifacts associated with this phase, which lasted from 2800 to 2500 B.C., are described in Martens (2008:12–22). Finally, there are two Cypress stemmed points dating to the Prairie Lake phase of the Terminal Late Archaic period (1400–900 B.C.).

### *Arrow Points*

All but three arrow points shown in Figure 3 are made of Burlington chert. The exceptions are composed of Cobden, Salem, and St. Genevieve chert. Most points were crudely made. Side-notched (Figure 3a), unnotched (Figure 3b), and corner-notched (Figure 3c) types are all represented. Although these point types were used over a wide time span, similar point assemblages have been recovered from Mississippian sites in Illinois and Missouri. These sites have been dated to the Moorehead and Sand Prairie phases, which is consistent with the major occupation of the Common Field site (Brad Koldehoff, personal communication 2016).

### *Ramey Knives*

This high quality artifact—a major Mississippian trade item—was named by Perino (1963:99–100) for the Ramey family who farmed part of the Cahokia Mounds site. The average length of these knives ranges from 15.2 to 22.9 cm and they were frequently made from Mill Creek chert. The primary sources for this material are in the southern Illinois counties of Alexander and Union. This material was also used to make Mississippian hoes and spades. Both knives in





Figure 6. Mississippian celts made of diabase from the St. Francois mountains. (a) Utilitarian celt bit; (b) preform of ceremonial celt; (c) 20.8-cm long utilitarian celt.

the collection (Figures 4a–b) are composed of Mill Creek chert. The complete knife is 19.2 cm long. The other, which was burned and broken, would have been about the same length.

### Flaked Tools

Five chert tools are shown in Figure 4. Figure 4c is an adze that measures 94.4 mm in length and is made of Kaolin chert. The primary source for this material, which was used extensively during the Mississippian period, is in Union County, Illinois (Ray 2007:244). Two all-purpose flake tools (Figures 4d–e) and two picks or chisels (Figures 4f–g) complete this tool inventory. The flake tools are crude and made of Burlington chert (Figure 4d) and a low-grade chert (Figure 4e). A pick (Figure 4f) made of Burlington chert is complete and exhibits use polish on the top and side surfaces. The other pick (Figure 4g) is made of Kaolin chert and exhibits the same use-polish characteristics.

### Hoes

Mississippian people used notched and unnotched hoes and spades in their agricultural activities. The hoes were hafted to the L-shaped bend at the end of a relatively short (about 1 m) handle. The Birger figurine from the BBB Motor site near Cahokia shows a kneeling woman holding such a hoe. The Common Field site collection includes four unnotched Mill Creek hoes (Figures 5a–d) and a limestone preform (Figure 5e). The hoe bits (Figures 5a, 5c–d) exhibit a bright waxy silica polish resulting from digging through soil while cultivating maize and other plants. The two complete hoes also exhibit a dull haft polish that was the result of slight movement of the upper blade against the haft. The largest complete hoe is 26.3 cm long. The limestone hoe preform is 33.6 cm long. If completed, its dimensions would likely have approached those of the larger chert hoe. Limestone hoes are most frequently found at Late Woodland sites (Lopinot et al. 1982), but they are also found at Mississippian sites in Illinois and southeast Missouri (Chapman 1980:259; Brad Koldehoff, personal communication 2017).

### Utilitarian Celts and Adzes

Two utilitarian Mississippian celts were made of a fine-grained diabase from the St. Francois Mountains of Missouri (Figures 6a, c). In fact, all of the ground-stone diabase tools were made of this material. The length, width, and thickness of the complete celt (Figure 6c) are 208-x-69-x-42.7 mm. These measurements fit within the 95% confidence cluster for Mississippian utilitarian celts (Koldehoff and Wilson 2010:238). The broken celt would have been slightly longer than the complete celt. A small ceremonial adze preform made of diabase is also shown in Figure 7b.

Celts were apparently quite rare at the site. Trader (1992:83) reported that only eight diabase worked tool fragments were recovered. Of those, five were from Survey Block 7 and most were fragments too small to determine the original tool type. The total weight of this group was only 288.4 g, or 10 oz. Three of these fragments could have been from celts (Trader 1992:83). Trader also reported that 25 (53%) of the 47 diabase celt flakes, which averaged about 1 g each, were recovered in the same Block (Trader 1992:48). Similarly, Buchanan (2015:283–284) only recovered a small fragment of a diabase celt and four pieces of debitage with weights ranging from .34 to 3.5 g.

### Discoidal

Two discoidal fragments (Figures 7c–d) were collected. Figure 7c is from a 56-mm diameter gaming piece made of





Figure 7. Tool and gaming assemblage. (a) Sandstone abrader; (b) small diabase adze fragment; (c–d) discoidal fragments made of diabase and sandstone, respectively; (e–f) ceramic whorls; (g) sandstone mano; (h) sandstone gaming disc; and (i–j) ceramic gaming discs.

diabase. Figure 7d is from a sandstone preform measuring 64.7 mm in diameter. Pecking to create concavities on both sides had been initiated.

## Ground-Stone Artifacts

Four types of sandstone tools were collected and two are shown in Figure 7. An abrader (Figure 7a) measures 121 mm long and the groove is 3.7 mm wide by 2 mm deep. A longer matched pair of this type of artifact recovered from a Mississippian site (Chapman 1980:238) supports the theory that they were arrow-shaft smoothers. The mano (Figure 7g) was probably used for grinding plant foods and is sized to fit nicely in the hand. Tool classes not shown are two awl sharpeners with two and five grooves each, and a 63.8-mm-long sharp saw that was probably used to cut bone or shell.

A single ground-stone bead (Figure 8a) made from calcite exhibits 4.8-mm-diameter holes drilled from both sides. The centers of the two holes were not properly aligned. Consequently, the diameter where the two holes meet is only 3.6 mm.

Twenty-nine pieces of galena were collected. The Common Field inhabitants had many uses for this mineral, including religious applications. For example, pieces of

galena were placed at the bottom of the palisade ditch prior to installing the defensive wall posts, possibly for additional spiritual protection (Buchanan 2015:179). Galena was also ground to make a white pigment for use in body decorations, slipping/painting ceramics before firing, and for painting decorations on the walls of buildings.

Sixteen pieces of galena were ground on at least one surface and had an average weight of 60.8 g. The individual weights range from 15 to 155 g. Thirteen pieces were unmodified and the average weight of 12 is 62.4 g. The thirteenth fragment was a big one—it weighed 725 g, or 1.6 lbs.! Very little galena was reported as a result of the MU and IU investigations, but a large amount was collected at the nearby Bauman site (23STGI58).

## Antler, Bone, and Shell Artifacts

### General Artifacts

Representative examples of these tools are presented in Figures 8b, d–f. The highly polished spatulate tip of a leather-working tool is shown in Figure 8b. An antler billet (Figure 8d) has been cut and snapped at both ends; its use is unknown. One of the three deer bone punches (Figure





Figure 8. Stone bead with antler and bone tools. (a) calcite bead; (b) spatulate bone tool tip; (c) antler projectile point; (d) antler billet; (e) long bone punch; (f) broken bone pin; and (g) unusual bone weaving tool.

8e) is 149.6 mm long. A well made solid bone pin (Figure 8f), possibly used as a hair pin, has a broken length of 125 mm. It is pointed on one end and circular in cross-section with a diameter of 4.4 mm. This pin is quite straight, with only a slight bow of about 3 mm.

#### Loom-Weaving Tool

The most unusual bone tool (Figure 8g) was likely used to weave fine cloth. It is 114.7 mm long, but only 1.3 mm thick. In weaving, the vertical threads attached to the loom are called warp threads. The horizontal threads, which pass alternately over and under adjacent warp threads, are called the woof. The woof thread would have been attached through the 2.7-mm-diameter hole on one end of this tool. The tool would be used to weave the woof thread between warp threads on a loom, and then pulled through. Then, the process would be repeated to return the tool and woof thread to the original position, having woven two passes. Willoughby provides an excellent description of Mississippian weaving materials, quality, and methodology based

on examples found in Spiro Mound (Hamilton 1952:107–124, 264–276).

#### Antler Projectile Point

Figure 8c was made by cutting a groove around the tine near the tip and then snapping it off. Next, a conical socket was reamed out. The 47.6 mm long point exhibits rotary scratches in the socket from such an operation. It is assumed that the point would have been attached to an arrow shaft using organic glue. These points are fairly rare in collections because they do not survive in acidic soils. Several hundred antler projectile points were discovered in Mound 72 at Cahokia Mounds. The point alignments in this cache indicated that they were hafted on arrow shafts when they were buried.

#### Shell Beads

A surprisingly small number (considering the site size and collection conditions) of shell beads and bead-making material was recovered. The majority of the material (Figure 9) looks like it could have been from a single small

conch shell bead workshop. It includes raw materials, a cylindrical bead and pieces of chunky round beads, and unfinished and finished flat beads. The remainder of the collection is comprised of beads made from one ground *Anculosa* shell and several *Marginella* and *Oliva* shells.

## Ceramic Artifacts

#### Plates

This artifact type is characterized by shallow walls and long rims and became common at Cahokia during the later portion of the Moorehead phase (A.D. 1200–1300) and continued well into the Sand Prairie phase (A.D. 1300–1350). The following discussion draws heavily from the excellent work of Buchanan (2015:228–235). Plates constituted only 4–15% of the ceramic assemblage at sites in the Cahokia area, whereas jars (20–45%) and bowls (18–28%) were the major contributors. Conversely, plates are the dominant ceramic artifact at the Common Field site (32.4%), followed





Figure 9. Shell beads and manufacturing material. (a) Conch shell fragments; (b) cylindrical bead; (c) pieces of chunky round beads; (d) unfinished flat beads; (e) finished beads; (f) Anculosa shell bead; and (g) Marginella and Oliva shell beads.

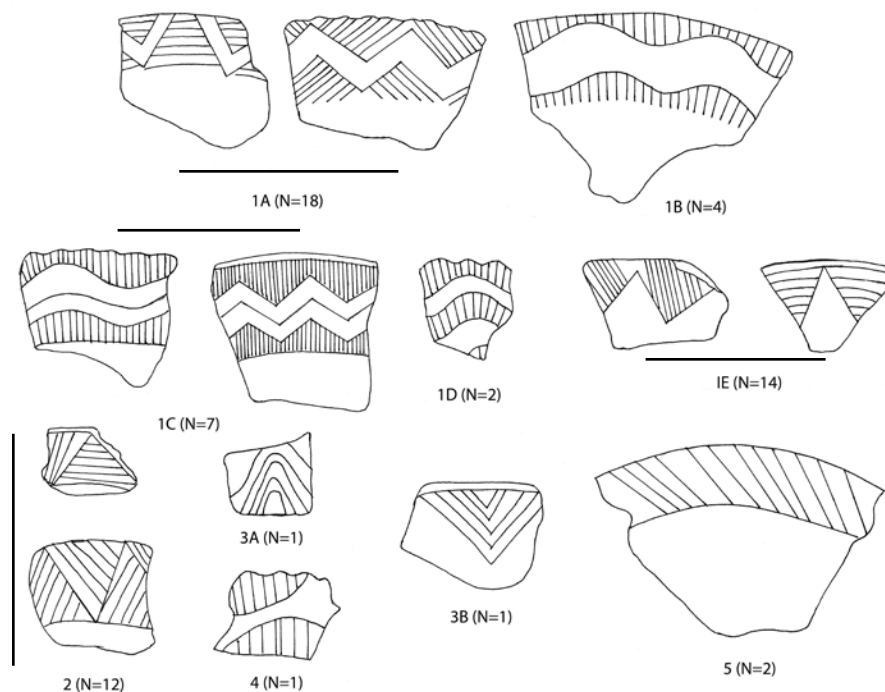


Figure 10. Decorative motifs found on Wells Incised plate rims. The number of sherds in each of the categories and subcategories is noted.





Figure 11. Incised, negative painted, and red-on-white pottery sherds. (a–b) Wells Incised plate rims; (c) negative painted black-on-red plate rim; and (d) Nodena Red-on-White painted bowl.

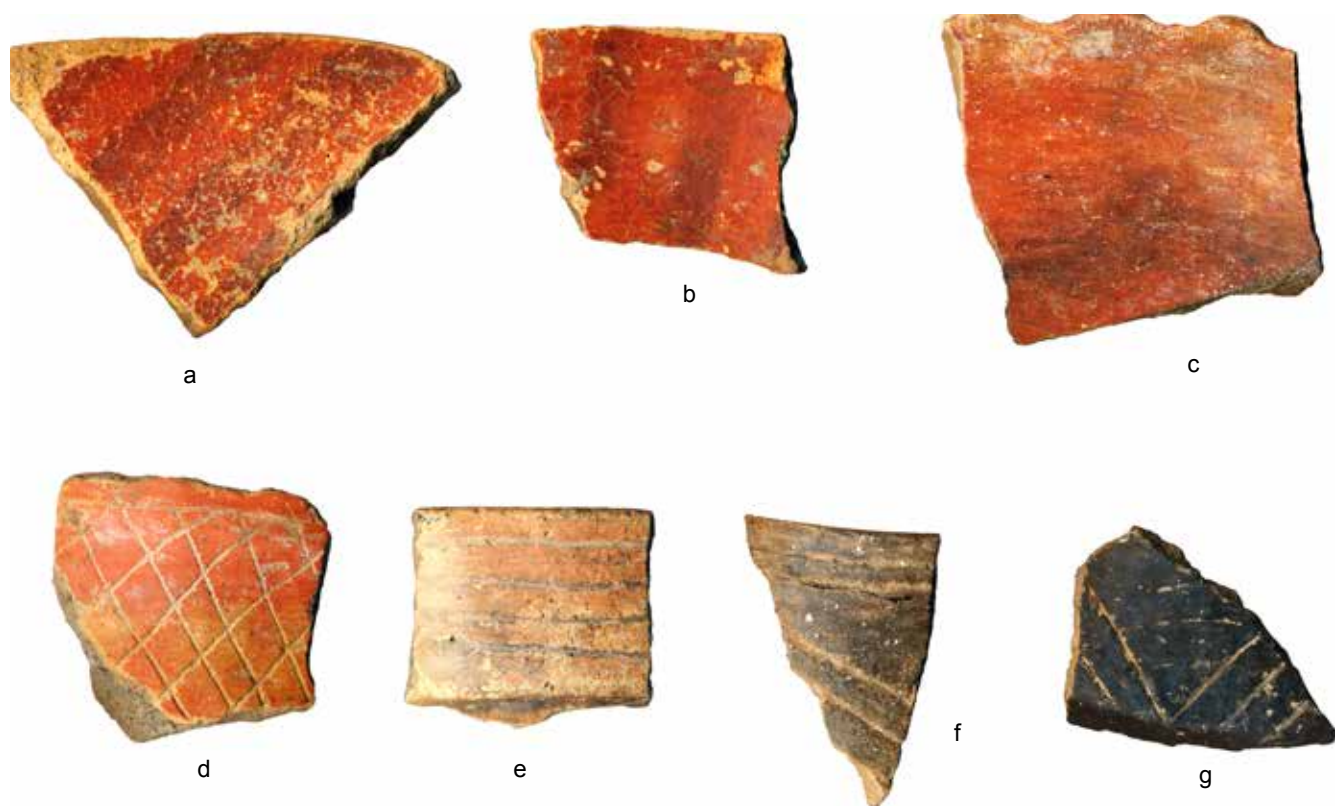


Figure 12. Negative-painted and red-slipped plate rims and various types of incised sherds. (a–b) Negative painted black-on-red plate rims; (c) plain red-slipped plate sherd with scalloped rim edge; (d) Tippetts Incised rim sherd; (e) Mound Place Incised sherd; (f) incised brown-slipped beaker rim; and (g) incised black-slipped jar sherd.

Table 1. Common Field Plate Decorative Motif vs. Rim Edge Configuration.

Decorative Motif	Rim Edge Configuration			Totals by Motif
	Smooth Rim	Scalloped Rim	Missing Rim Edge	
Incised				
1a	7	4	7	18
1b	3	-	1	4
1c	6	1	-	7
1d	-	2	-	2
1e	10	1	3	14
2	11	-	1	12
3a	1	-	-	1
3b	1	-	-	1
4	-	1	-	1
5	2		-	2
Subtotals	41	9	12	62
Plain	-	1	-	1
Negative painted				
Stripes	2	-	-	2
Circles	1	-	-	1
Totals	44	10	12	66

by jars (16%) and bowls (7%). Obviously, the Common Field people put more emphasis on displaying and serving food than did the people at Cahokia who placed greater emphasis on using vessels for storage and cooking.

Rim diameters were determined for 71 out of 89 plate sherds in the combined MU/IU collection. They range from 18 to 59 cm, with 92% between 25 and 36 cm. Further, 96% of the plates were decorated with one or more of the following: incising (47%), a colored slip (64%), and/or negative-painted designs (2%). The colored slip was a liquid mixture of clay and various materials: charcoal for black, hematite for red, and galena for white. The same materials were used for painted designs.

*Incised Plate Decorations.* Buchanan (2015:236–240) provides a detailed discussion addressing the incised decorations on 42 rims. In the literature, the plate type is referred to as Wells Incised, with fine-lined and trailed variants in the American Bottom (Griffin 1949; Vogel 1975). In the Ohio River Valley, they are called O’Byam Incised (Hilgeman 2000). The incised motifs were divided into five primary categories, with subdivisions of Categories 1 and 3. Examples of these different motifs, drawn from 62 rims in the author’s collection, are shown in Figure 10 along with the quantity of each.

The most common plate decorative motif is Category 1 (N=45 rims), which consists of chevrons and line-filled triangles. Category 2 (N=12) is decorated with line-filled triangles in alternating directions and Category 3 (N=2)

consists of nested triangles. Category 4 (N=1) has line-filled half circles positioned along the lip and shoulder of the plate rim and Category 5 (N=2) has diagonal lines filling the area between the rim and a parallel line. Two excellent examples of sherds representative of Categories 1a and 1b, respectively, are shown in Figures 11a–b.

*Negative Painted and Plain Red-Slipped Plate Decorations.* There are three black-on-red negative-painted plate rim fragments. This decoration is normally found at Angel Mounds near the Ohio River in southern Indiana and is not found at Cahokia (John Kelly, personal communication 2016). The plate with the most unique decoration is shown in Figure 11c. It has a red-slipped rim with three circles in an expanding black fan, which is adjacent to three nested black triangles. The

plate rim is 8.5 mm thick, the outer diameter is 36.6 cm, and the inner diameter is 24.9 cm. The back side of this plate has a plain red slip.

Two other plate sherds have parallel black stripes on a red-slipped background (Figures 12a–b). The stripes on sherd 12a are at a 50° angle relative to the rim edge, while those of sherd 12b are at 80°. The thickness of these rims ranges from 7 to 8.5 mm, respectively.

A scalloped rim decoration element, not present in the MU/IU collections, is found in the author’s collection (Figure 12c). The decorative motifs used on 10 scalloped rims are distributed as follows: Category 1 (N=8); Category 4 (N=1); and one is on a plain red-slipped rim. The decorative motifs versus plate rim edge configuration are summarized in Table 1 for all 66 plates represented in the collection.

### *Ceramic Vessels, Discs, and Pipes*

*Red and White Painted Vessels.* There are three sherds attributed to types commonly found in the south and southeast. Figure 11d has a red line pattern painted on the white-slipped surface of a bowl. This is an example of Nodena Red-on-White (Phillips 1970:62–63). Unfortunately, a negative-painted bottle fragment with two faint red diamonds and a red “V” on a white background did not photograph well and is not shown. An unidentifiable sherd spall, also not shown, exhibits a broad white band painted next to a red field



Figure 13. Ceramic pipes and charred corn cobs. (a–b) large bowl pipes; (b) is the most complete and shows region of stem attachment; and (c) fragments of three charred corn cobs.

*Incised Vessels.* Sherds from the four different types of incised vessels are shown in Figures 12d–g. All are either shell or shell-and-grog tempered. The Tippetts Incised sherd (Figure 12d) is red slipped on the interior and exterior surfaces and exhibits a cross-hatched design. The rim segment of a 16.5-cm diameter collared bowl of Mound Place Incised is shown in Figure 12e. The sherd has red slip on the exterior and black on the interior. Ceramics of this type were found by Perino at Mound 34 at Cahokia and date to the Sand Prairie phase (A.D. 1300–1350) (John Kelly, personal communication 2016). A rim sherd from a brown-slipped beaker with a 7.5-cm orifice diameter is shown in Figure 12f. The fourth sherd is of a type found with Ramey Incised ceramics in the Cahokia area and is dated to the late Moorehead-early Sand Prairie phases (A.D. 1200–1350).

*Ceramic Discs.* Two perforated discs (Figures 7e–f), called whorls, were used with a straight piece of wood (a spindle) to wind up yarn while twisting fibers together (Hamilton 1952:107–124). The spindle was inserted into a whorl to add the weight needed to maintain the rotational speed. This was desirable since it facilitated the rapid wind-up of the weaving thread with minimal additional twisting of the spindle. Apparently, it was not important to make these discs perfectly round since both exhibited variable diameters. Whorl 7f still has more than 13 mm of the original vessel rim.

Two solid discs (Figures 7i–j) have diameters of 27 and 55 mm, respectively. They are considered gaming pieces, as is the 39-mm diameter sandstone disc shown in Figure 7h. Buchanan (2015:222) indicated that three pottery discs were in the site collection that she analyzed, but none had perforations.

*Ceramic Pipes.* The two broken pipes in the collection (Figures 13a–b) had been used extensively based on the char residue in the bowls. The most complete pipe (Figure 13b) provides some interesting information on construction. The bowl is large. It has an 18.3-mm inside diameter at the top decreasing to a 6.8-mm diameter hole at the bottom. It then narrows to 3.5 mm as it turns to the stem region. It then widens to 24.1 mm at the end. The outer diameter of the pipe at this point is approximately 39.4 mm, much too large to be placed in the smoker's mouth. A large diameter wooden or cane pipe stem must have been inserted into this



hole with a smaller outer diameter at the other end sized to comfortably fit into the smoker's mouth.

## Plant Remains

### Corn

There are references to corn being found at the site, but it has not been analyzed previously. O'Brien et al. (1982:176) commented that pits containing large amounts of charred corn were exposed when the floodwaters receded. The author found a grouping of burned corn cobs on the side of Mound E while collecting on the site. The essentially complete cobs (Figure 13c) were recovered, cleaned, and stored until 2016 when they were submitted to Neal Lopinot for analysis. His October 27, 2016 assessment follows:

At least three cobs are represented, but all are fragmentary. Only one cob fragment still provides a complete circumference and it is from a 12-row ear. The other two represented ears are 14-row. The ears appear to have been small and cigar shaped. The row numbers, size and shape, cupule widths (range: 4.8–6.7 mm; N=15), and grain thicknesses (range: 3.3–3.6 mm, N=15) indicate that the maize is what has been commonly referred to as Midwestern Twelve Row (Cutler and Blake 1976; Fritz 1992). Midwestern Twelve Row, commonly recovered from Mississippian sites, can include 10-row and 14-row ears/cobs, and even more rarely 8-row and 16-row ears. Twelve Row ears tend to be the most common. No kernels are represented, so the ears had already been shelled before the cobs were perhaps used for fuel.

### Morning Glory/*Ipomoea* sp.

A cache containing more than 1 kg (about 2.2 pounds) of carbonized morning glory seeds was recovered from a hooded water bottle after the flood (Voigt 1986:220). Much smaller numbers of *Ipomoea* seeds have been recovered from several American Bottom sites, including the Robinson's Lake, Lohmann, and BBB Motor sites, and appear to occur most often in Emergent Mississippian contexts (Johannessen 1984). A concentration of 57 carbonized *Ipo-*

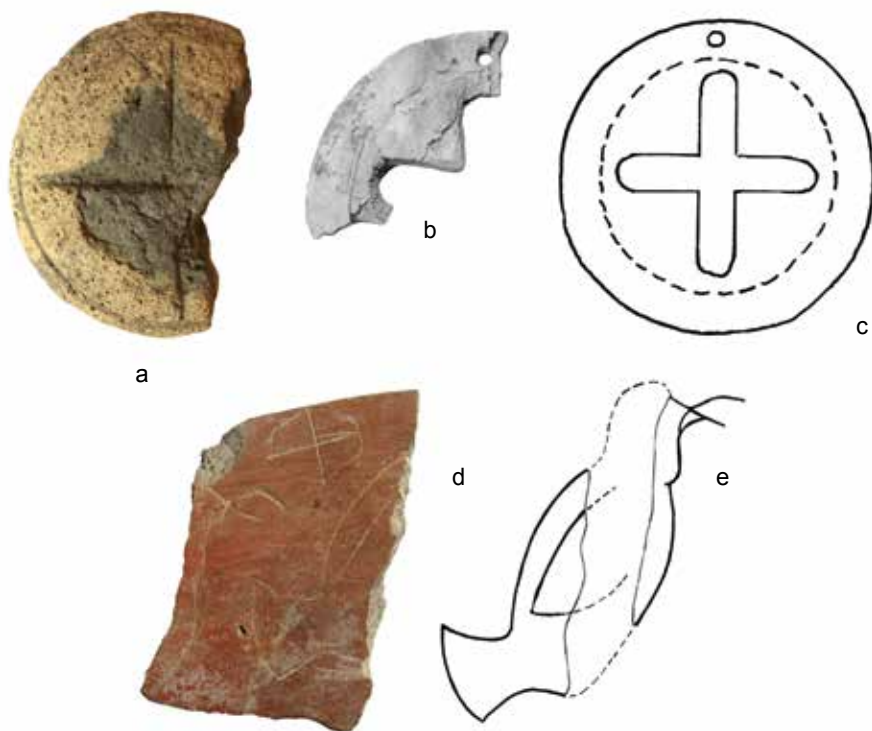


Figure 14. Ceremonial/religious artifacts. (a) Face of pottery trowel; (b–c) fenestrated marine shell gorget fragment and reconstruction; (d) Wells Fine Incised plate with cross-in-circle and bird motifs; and (e) reconstruction of bird motif. (a–d) All cross-in-circle motif.

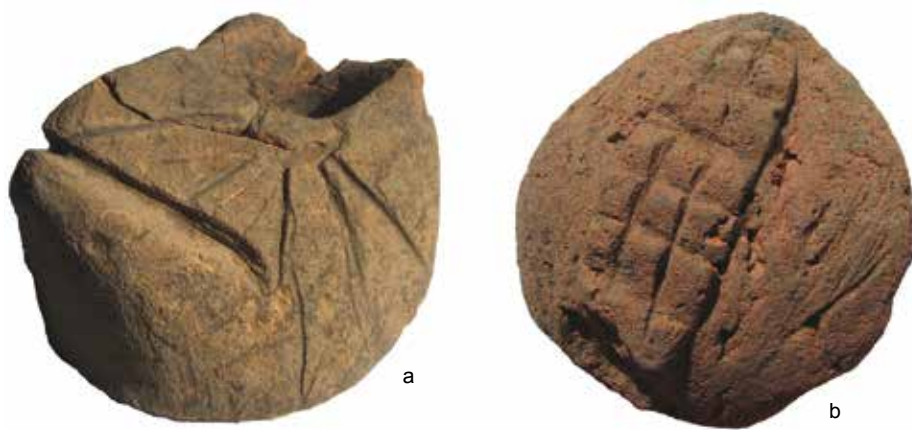


Figure 15. Lithic animal effigies. (a) Siltstone turtle effigy pipe; (b) rattlesnake rattle made of paralava.

*moea* seeds was recovered from two pits excavated at the Spoonbill site in northeast Texas, which was occupied at A.D. 800 to 1300. According to Crane (1981:86), the seeds were possibly stored for use as hallucinogens, as several species contain amides of lysergic acid related to LSD. This suggestion is based on ethnographic accounts of the Aztecs eating the ground seeds of *Ipomoea tricolor* as hallucinogens.



Figure 16. Ceramic animal effigies. (a) Bear; (b) fox or other canine; (c, g) beaver tails; and (d-f) duck heads. (e-f) Represent wood ducks.

with total and rapid destruction of the village ca. A.D. 1280. The village was never rebuilt and the remains were subsequently protected by flood deposits until 1979.

### *Cross-in-Circle Motif*

The equal-arm cross contained inside a circle was an important Mississippian design. It is postulated that the circle represented the world, while the four arms of the cross designated the four directions. This motif is evident on ceremonial shell cups associated with the so-called "black drink" (Emerson 1989:66, 72-73). The

motif also occurs on water bottles and a beaker from Cahokia, as well as engraved pottery and shell gorgets from Spiro Mound (Diaz-Granados and Duncan 2000:175, 191). The motif is also found in petroglyphs at many Mississippian sites, including the nearby Bushnell Ceremonial Cave, which is near the Kreilich salt spring site (Diaz-Granados and Duncan 2000:191).

Six artifacts bearing this motif have been recovered from the site. Ferguson (1990:110, 113) reported two examples: a black-on-dark red sunburst with a central cross on the bottom of a large plate and a black-on-orange cross-in-circle painted on the body of a water bottle. Buchanan (2015:221) reported a red-slipped beaker with a cross-in-circle and ladder motif. Three examples of this motif are also represented in the author's collection (Figures 14a-b, d).

The first example was carefully inscribed on the working surface of a well-made pottery trowel before it was fired (Figure 14a). Approximately 60% of the working surface of this 79.6-mm diameter trowel is present, including a small spalled region. This tool was not used to stamp a cross-in-circle symbol on moist clay, but rather was perhaps a religious tool used in making vessels and plates.

The second example is a beautiful fenestrated marine shell gorget, broken prior to recovery (Figures 14b-c). Fortunately, the recovered portion (Figure 14b) includes the suspension hole and about 30% of the cross. This permitted the depiction of the complete 4.9-cm diameter gorget, with a 3.7-cm diameter concentric inscribed circle (Figure 14c).

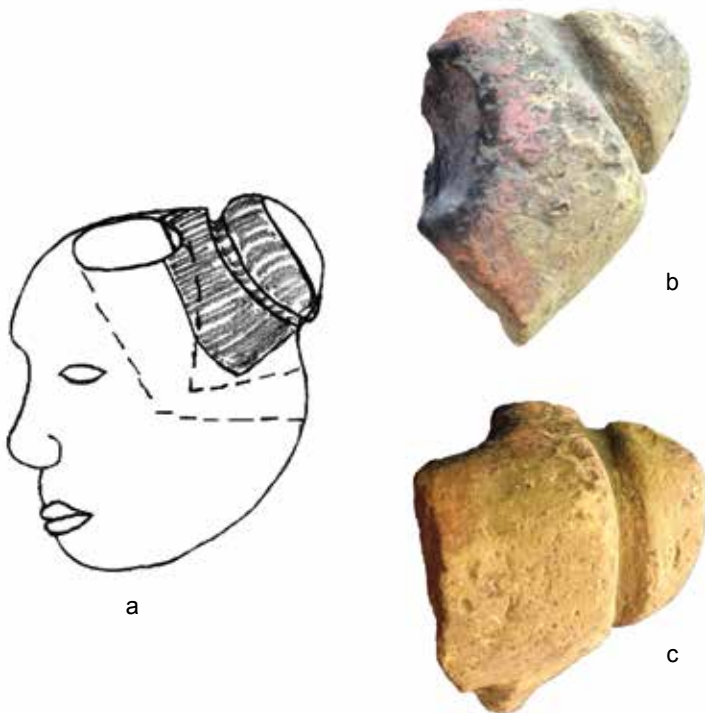


Figure 17. Human head effigy siltstone pipe. (a) Artist's conception of complete pipe; (b-c) top and side views of pipe fragment.

## Ceremonial and Religious Artifacts

Generally, Mississippian artifacts in this category are recovered through excavations and are extremely limited in quantity and type. The diversity of the Common Field surface-collected artifacts in this category is truly amazing. It resulted from a series of unique occurrences, which began

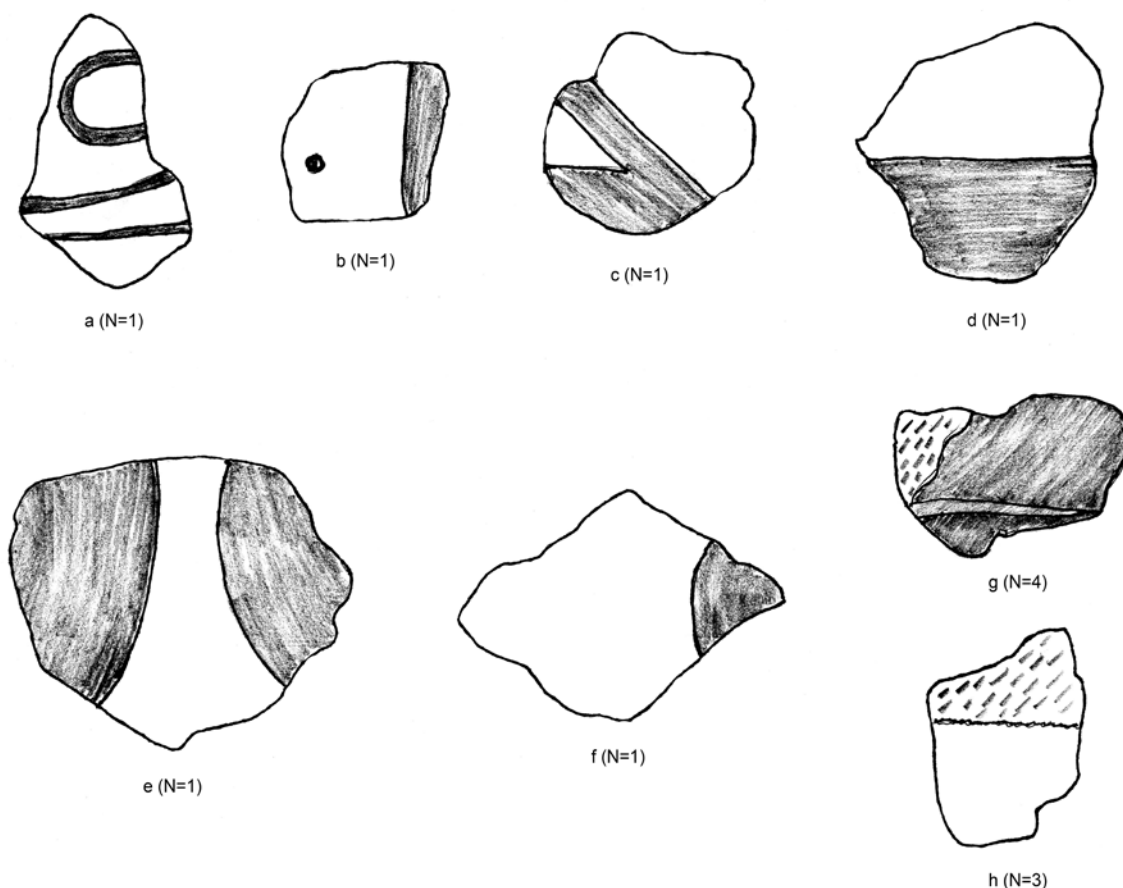


Figure 18. Drawings of decorative motifs found on burned pieces of wall daub from Mound E. The number of each motif in the collection is noted.

The final example of this motif was found in the decorations of a red-slipped plate rim (Figure 14d). There are two motifs on this sherd. One is clearly a cross-in-circle. The second appears to show portions of a bird and is discussed below.

### *Bird Motif*

The two fragmented engravings in Figure 14d are taken to represent portions of a bird. They are relatively crude considering the quality of the accompanying cross-in-circle motif. The left engraving contains the rear portion of a bird with a tail and wingtip, and the right includes part of the head, the beak, and breast. This fortunate occurrence permitted the reconstruction of the complete bird shown in Figure 14e. The original engravings are represented by solid lines, whereas dashed lines indicate ceramic fractures. Missing portions of the complete engraving are represented by dotted lines. The emphasis on the beak may indicate that this is a representation of a woodpecker.

### *Ceremonial Celt*

The preform of this celt type (Figure 6b) is made of diabase and exhibits a bit that flares out about 30% wider than those of conventional celts. Monolithic variants of this celt type, also called spuds, were recovered from

Spiro Mound group (Hamilton 1952:174–175). There are several ceremonial celt representations at the Maddin Creek petroglyph site and all exhibit the broadly flared bit (Diaz-Granados and Duncan 2000:172).

A celt-manufacturing site (23SG4) located just 6.75 km southwest of Common Field along Saline Creek has yielded four flared-bit preforms, as well as 19 preforms for conventional celts. This site and the associated materials will be discussed in an upcoming *MAS Quarterly* article by the author and Brad Koldehoff.

## **Animal Representations**

Animal motifs occur in a large number of Midwest petroglyphs, as well as on Mississippian ceramic and shell artifacts, but their meanings are unclear. They could represent animal deities, clan symbols, available hunting species, or magic. The most frequently observed are birds and snakes, but turtles, lizards, beavers, bears, foxes, and deer are also seen. Portable examples of these representations are found as 3-D effigies made of stone and ceramics, as well as ceramic paintings and engravings. Examples of many of these types are represented in the collection from Common Field.



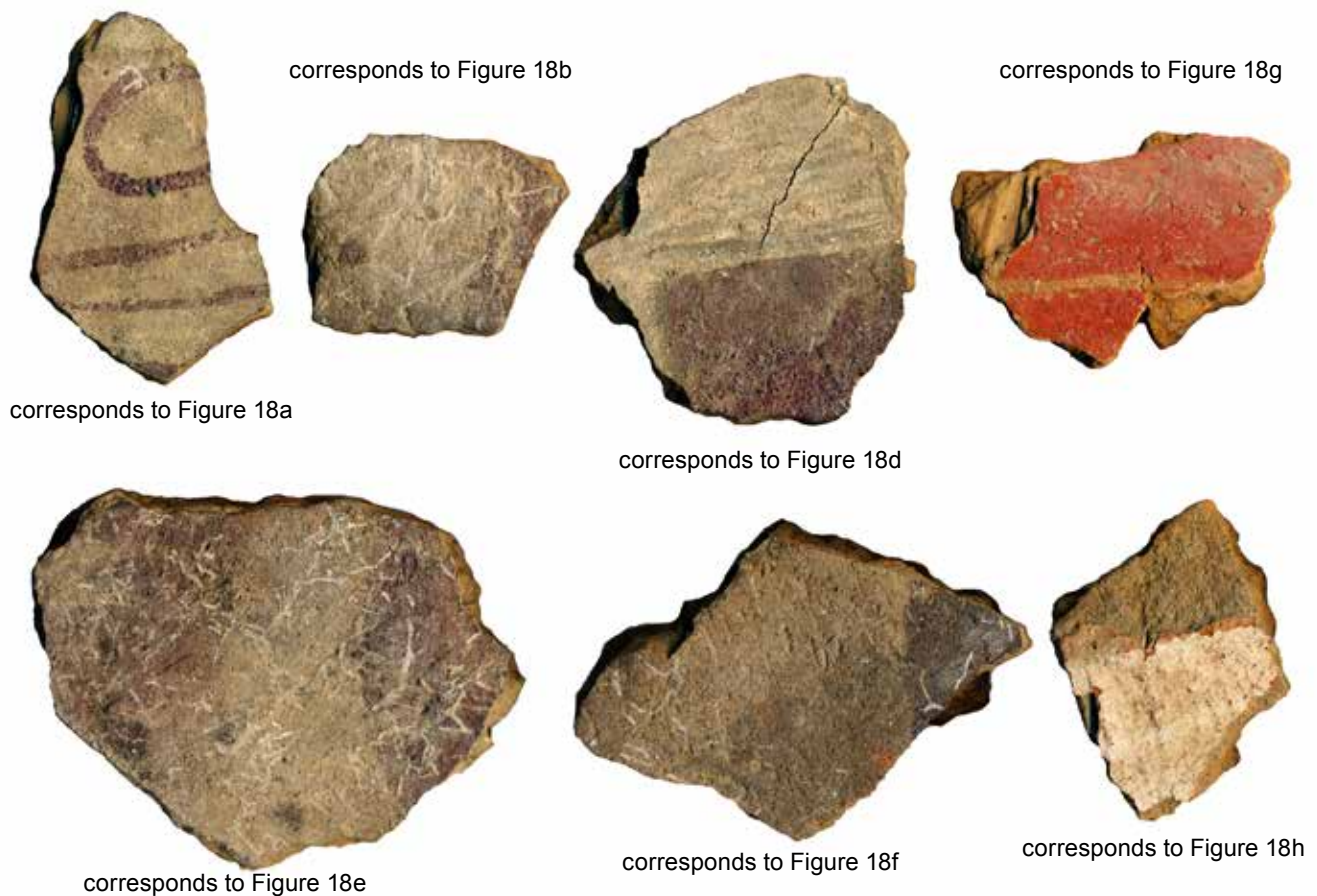


Figure 19. Photograph of seven of the decorative wall daub fragments.

### *Turtle Effigy Pipe*

The extremely well made siltstone pipe (Figure 15a) was found just west of Mound B and could have been initially stored on that mound. There is no evidence that the pipe was ever smoked or burned and plow damage is evident. An extensive search for additional pieces of the pipe at the time of discovery was unsuccessful. The fragment is 59.7 mm tall when oriented with a horizontal mouth line. Turtles are often represented in petroglyphs in Missouri, including at Washington State Park. They also played an important role in the stories of eclipses recorded from Iroquoian speakers. It was believed that the eclipse of the sun occurred when the great turtle who held up the earth changed his position and blocked the sun with his shell (Tooker 1964:79).

### *Rattlesnake Rattle*

This unique artifact (Figure 15b) is made from a piece of paralava, a stone material from the northern plains that floats down the Missouri River (Estes et al. 2010). Buchanan (2015) also found unworked pieces of this material, also called float stone and clinker, at the site. The base of this artifact is essentially circular, with a diameter ranging from 54 to 59 mm. It is 23.4 mm tall. It is postulated that the rattles of a rattlesnake are represented on the upper

surface. A small hole was bored into the artifact directly opposite the end of the tail. It is unclear what was attached to the rattle representation, but the hole is bored at about a 30° angle above the horizontal.

The Mississippian people placed a lot of emphasis on snakes. They are the second-most represented animal in Missouri petroglyphs. An effigy rattlesnake rattle pendant, which measures about 3 inches in length, was reported from Spiro (Hamilton 1952:206).

### *Ceramic Animal Effigies*

Seven examples of these effigies are in the site collection (Figures 16a–g). The first effigy is clearly that of a bear with a robust figure emerging from the vessel rim (Figure 16a).

Only one of these effigies, which represents a fox or other canine (Figure 16b), is incorporated into a handle. The rest were attached to vessel rims. There are three duck effigies (Figures 16d–f) and Figures 16e–f clearly represent wood ducks with their unique head shape. Two beaver tail effigies are shown in Figures 16c, g. The broken tail sherd (Figure 16g) has five inscribed lines parallel to the rim with a vertical dividing line. The other tail does not include this

decoration. Ferguson reported a ducktail effigy from the site; it could have been another beaver tail.

### *Human Effigy Pipe*

An artist's conception of a complete head with the pipe fragment in place is shown in Figure 17a. The top and side views of a siltstone pipe fragment (Figures 17b–c) represents the upper rear portion of a human head with a hair bun. The pipe bowl and stem hole are indicated by dashed lines. This sketch was based on the head of a large flint clay effigy pipe recovered from the Twin Mounds site in Ballard County, Kentucky dated to A.D. 1100–1200 (Reilly 2004:135).

Extensive usage of the pipe is indicated by char residue in the bowl and a reddish tint of the adjacent stone. The patina on breakage surfaces is the same as that on unbroken surfaces indicating that the pipe was broken prehistorically. Recent breaks due to farming activities do not exhibit the ancient patina. Further, there is a second area of a reddish tint at the bottom of the hair bun, away from the previously mentioned area around the bowl. The initial pipe breakage possibly occurred when the community and the pipe were burned.

## Decorated Daub from Buildings on Mound E

Daub is a clay mixture that was plastered over a lattice of woven cane or branches, called *wattle*, to finish the walls of a building. Sixteen pieces of painted and burned daub were collected in one concentrated area. This narrow area extended from the southern portion of Mound E eastward for some distance, aligned with cultivation furrows. The painted daub pieces exhibit six patterns (Figure 18). Surface decorations consist of stippling, shading, or all-red or all-white paint. Figure 18e is 78.7 mm wide, with a 16.6-mm thickness including a 4.6-mm thick painted coating. It is interesting that decorated daub has not been found at Cahokia (John Kelly, personal communication 2016).

Examination of the pieces in the surface collection indicates that a thick daub mixture was applied first. A finishing coating and painted decorations were then added. Daub thickness varied from 10.2 to 23.3 mm. The backsides of these pieces clearly show the imprints and cavities left from the burned wattle materials. Also, the backsides exhibit the most intense discoloration and the front surfaces show the least discoloration.

The brightness of the painted surfaces was degraded by exposure to high temperatures. Some of the daub fragments, which had not been extensively burned, exhibit bright red and white colors on the front surfaces and a light tan color on the backsides. Other pieces, which had been exposed to higher temperatures, were significantly altered. The reds became blackish-purple and whites were changed to shades of gray. Similarly, the backsides changed from light tan to dark gray or black. The seven daub fragments shown in Figure 19 are the most photogenic. The fragments in the top row correspond to those in Figures 18 a–b, d, g

and the bottom row to Figures 18 e–f, h. The color degradation due to high temperatures is obvious.

## Historic Material

Historic material was very limited, with only two lead balls being collected. The diameters were .44 and .56 inches, which fit into the categories of shot and balls dating to the mid 1700s (Martens 2017:18).

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## Summary

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This report documents the collection made at the Common Field site (23SG100) after the 1979 Mississippi River flood. This unique set of circumstances provided the opportunity to survey/study a complete village destroyed ca. A.D. 1280 (calibrated) and subsequently remained undisturbed for the next 700 years. Fortunately, funding was available to conduct a limited survey of the site at that time. Two MU Masters theses documented limited ceramic and lithic materials from the site (Ferguson 1990; Trader 1992). The site was subsequently exposed to farming activities for the next 33 years, and a very limited survey and excavation effort was conducted more recently. The results and analyses were subsequently reported in an IU doctoral dissertation (Buchanan 2015).

This article documents a wide range of lithic, faunal, ceramic, and ceremonial artifacts that have never been previously shown. Probably the largest number of Common Field artifact types illustrated for the first time here are in the Ceremonial/Religious category. The recovery of 16 pieces of painted and decorated daub, used on buildings associated with a mound, was another important first.

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## Acknowledgments

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Once again the author would like to thank the Illinois and Missouri archaeologists who helped in this study. Brad Koldehoff and John Kelly were extremely helpful. Brad shared his expertise in identifying lithic materials and several of the more unusual artifacts. I called upon John for help in identifying many of the ceramic artifacts as well as the fragment of the human head effigy pipe. He also pointed out the importance of the painted and decorated daub. Neal Lopinot shared his expertise by identifying the corn kernels associated with the charred cobs collected at the site. Further, I would like to thank Neal and Lisa Haney for all their help in preparing this, the ninth in a series documenting artifacts from destroyed, or essentially lost sites.

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## 2018 Annual Meeting

The 2018 Annual Meeting will be April 6–8 in Springfield. Our Koch Lecturer will be Dr. Douglas Scott. Dr. Scott is a battlefield archaeologist most noted for his work at the 1876 site of the Battle of the Little Bighorn. He has also directed work at Big Hole Battlefield National Historic Site, Sand Creek National Historic Site, Wilson's Creek National Battlefield, Pea Ridge National Military Park, Monroe's Crossroads Battlefield, and many other national and international sites. Dr. Scott's lecture visit will be partially funded by the Missouri Humanities Council as well as the College of Humanities and Public Affairs and the History Department at Missouri State University.

The meeting will begin with a Friday-evening welcome reception with food and drinks at the conference hotel. It will continue on Saturday with all-day presentations, a silent auction (please contact the MAS office if you have items to donate), exhibits, and the evening banquet and Koch Lecture.

Activities will conclude on Sunday with a morning screening of a new episode of the PBS-series *America from the Ground Up*. This series examines early American history by blending historical and archaeological approaches. The episode to be screened is about the Civil War, and was filmed on location at Wilson's Creek National Battlefield, etc. Dr. Monty Dobson (Director) and Dr. Scott will pro-

vide an introduction to the screening and also be on hand to answer questions afterwards. Light refreshments will be served.

The meeting will be at the Oasis Hotel and Convention Center. Those who attended the meeting in 2016 will remember that this is a great hotel. Special room rates for a double queen or single king room will be \$92/night plus tax. This rate includes a free hot-breakfast buffet.

Hotel amenities include an indoor saltwater swimming pool, fitness room, and an onsite restaurant and ice bar. Room amenities include flat-screen TVs, cable, mini refrigerators, and wireless internet.

Reservations may be made by calling 1-888-532-4338 and asking for the Society's spring meeting rate. A block of rooms will be held for our attendees at the reduced rate. **Book by March 5 to receive the reduced rate.** The hotel has several concurrent events, so availability beyond that room block may be limited.

Registration materials will be mailed to all members in early 2018. Please join us.