

**Kincaid in the New Century –**

**Recent Investigations of *A Prehistoric Illinois Metropolis***

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## Introduction

After decades of quiescence, the great Mississippian mound centers of the lower Ohio Valley, Kincaid and Angel Mounds, are again beginning to yield their stories to the renewed efforts of archaeologists. In this paper we review some of the results of the new research at Kincaid Mounds carried out since 2003 by Southern Illinois University Carbondale (SIUC). Previously, our view of this imposing site complex was based largely on the pioneering work by University of Chicago archaeologists, but as a result of this new work, we now comprehend Kincaid (see Figure 1) as a substantially different place than was envisioned only ten years ago. Not surprisingly Mississippian Kincaid has proven to be more complex and with more mounds than Chicago archaeologists documented. We did not, however, anticipate that it is a significantly larger place than previously estimated, with both expansions and contractions in its limits. We now also have a better appreciation of the dynamic alluvial landscape where the mounds were built, one with greater cultural time depth and physical complexity than once thought.

In 1934 University of Chicago archaeologists began what was to be a nearly ten-year research program at a little known Mississippian mound site located on Avery Lake in the Black Bottom of the Ohio River in southern Illinois. The culminating publication of that work, Fay-Cooper Cole's 1951 volume, *Kincaid, A Prehistoric Illinois Metropolis*, formally documented the site as one of the great mound centers of the Mississippian culture and framed our basic understanding of the site. Following the 1951 publication

and the abrupt dismantling of the Midwestern archaeology program at the University of Chicago, the site dropped from the forefront of research on Mississippian sites.

The site re-emerged as an object of active research in 1967-68, when Jon Muller and Phil Weigand of SIUC conducted some brief salvage excavations on a portion of the Avery Lake frontage damaged by earthmoving (Muller 1986:20; Weigand and Muller 1974). This work led to Muller's long-term interest in the Kincaid site, as well as to an intensive research program directed at the Mississippian culture in the Black Bottom and the lower Ohio River Valley.

Muller did not do more excavation at Kincaid proper. Rather, he saw a major weakness in the prevailing research paradigms that focused only on the large mound sites and embarked on a program of detailed systematic survey and small-scale excavations to document the supporting settlements around Kincaid. Ultimately this work resulted in the near-total survey of the Black Bottom and the adjacent terrace margins (Muller 1978, 1993). This was innovative research that showed the value of documenting the distribution of settlements around the major mound centers, and it was soon to be emulated elsewhere. This research led to a considerable number of MA and PhD projects under his direction, as well as to the data and insights that he synthesized in two books (Muller 1986, 1997), both of which deal extensively with Kincaid and the Black Bottom Mississippian society. In the 1980s, Muller shifted the focus of his field research out of the Black Bottom but continued to examine other sites (notably the Great Salt Spring) and issues in the lower Ohio Valley. Thus, the 1970s and

early 1980s were a period of intense archaeological activity in the Black Bottom and around Kincaid, but not *at* Kincaid. Although our understanding of Kincaid was better informed by aerial photography, an improved regional chronology (Clay 1997), and a detailed knowledge of its surrounding settlements, until about ten years ago, our view of the site was still largely that portrayed in the 1951 volume.

The new period of work at Kincaid began in 2003 as a collaborative effort by Paul Welch and Brian Butler of SIUC. Both felt that, with Muller's earlier work in Kincaid's support area and more recent work on Mississippian settlements in the southern Illinois hinterlands (Cobb 2000; Cobb and Butler 2002, 2007; Butler and Cobb 2012), it was time to return to Kincaid. The initial goals were to assess the organization and complexity of the site and chronicle its emergence and decline as a major mound center, none of which were adequately documented by the previous work. A workable site chronology was clearly also needed.

The research history of the site is conditioned by the fact that Kincaid is divided by the north-south boundary between Massac County on the west and Pope County on the east. The Massac County portion, essentially the old Kincaid family farm, comprises roughly two thirds of the site area and includes the western or "main plaza" and the largest mounds. Nearly all of the University of Chicago's excavations took place there. The Pope County portion contains a number of smaller mounds the largest of which comprise a cluster known as the Eastern Mound Group located ca. 300 m east of the main plaza. This part of Kincaid contains large areas of low, wet ground and much of it

is now covered by regenerated bottomland forest. The only significant work that took place on the Pope County side were the excavation of the low Mississippian burial mound Pp<sup>o</sup>2 (Cole et al. 1951: 103 ff) and some small excavations of Late Woodland habitation areas which provided the basis for defining the Lewis focus (MacNeish 1944). The latter are scantily described in the published volume and the excavation locations are not even shown on the master site map. In 1975 the State of Illinois purchased most of the Massac County portion of the site. The Pope County portion remains in private ownership and is unavailable to archaeologists. Thus, all recent excavation at Kincaid has been limited to the Massac County portion.

The new work began in 2003 with a small testing project in the southeast corner of the main plaza for an interpretive platform and visitor parking area (Butler and Welch 2005). That small effort ultimately gave rise to a new research program which has included an examination of old collections and records, a multiyear geophysical survey of the site, and annual excavations carried out by the SIUC field school, augmented in 2008-2011 by students from the Southeast Missouri State University. The annual excavations, guided by the geophysical results, began in 2005 and have continued each year since. In 2006 there was an additional excavation to clear the footprint of the new interpretive platform, located just west of the 2003 test area. Table 1 lists the excavations by season. The geophysical survey, conducted by Berle Clay, Michael Hargrave, Staffan Peterson, and John E and John A. Schwegman, began in 2003 and was completed in 2009. The magnetometry survey is obviously an integral part of the research program, and a summary of that work and some of the initial insights have been published

(Butler et al. 2011). This paper focuses primarily on the results of the nine seasons of excavation.

Since 2003, a total of 30 new radiocarbon dates have been obtained from Kincaid. Two are from Archaic occupations, five from the Early and Middle Woodland Baumer component, and 23 from the terminal Late Woodland and Mississippian occupations. The latter are presented in Table 2. The contexts of some of the dates are further described in the text.

### **Before the Mounds**

Kincaid is primarily understood and appreciated as a large Mississippian mound center constructed along the north bank of Avery Lake, but within its confines are major components of earlier periods, which we have encountered in the recent work and which are important in the regional archaeological picture. Chicago investigators reported both Baumer (Early and Middle Woodland) and Lewis (Late Woodland) occupations at the site. Our excavations have found relatively little Late Woodland occupation in the Massac County side, although the 2011 work found plentiful Lewis ceramics in the fills and on the original land surface at the base of mound Mx<sup>08</sup>. Baumer peoples, however, made extensive use of the Kincaid locale for nearly 500 years, long before the mounds were built. Their materials are widely distributed across the site but are especially concentrated near the lakefront. Our work for the interpretive platform in 2003 and 2006 encountered an area of intense Baumer habitation with numerous pit features, including large, trash-filled storage pits. These features have provided

excellent samples of ceramics and botanical remains – the most useful since the Baumer construct was defined over 60 years ago. Radiocarbon dates range from around 300 BC to AD 200<sup>1</sup> (Butler 2006; Butler and Scott 2008).

The most surprising pre-Mississippian encounter, however, was the 2011 discovery of intact Archaic deposits on a ridge in the western part of the site, an area now designated Mx<sup>v</sup>1F<sup>2</sup> (Pursell and Butler 2012; Butler and Crow 2013). This area was investigated because of its highly unusual magnetic signatures, but Mississippian artifacts proved scarce and were limited to the plowzone and slopewash. The area is a sand ridge, portions of which were capped with 80 to 90 cm of cultural deposits consisting of an artifact-bearing buried A-horizon and a midden that formed on top of it. The initial occupation of the buried land surface is late Middle Archaic, dated to ca. 3700 to 3900 B.C. The overlying midden is divided roughly evenly between the Late Middle Archaic and Late Archaic. Based on the diagnostic points, the Archaic occupation extended until around 1000 B.C.

This find was especially surprising as land surfaces of this age are customarily not near the present surface in this part of the Black Bottom. The Archaic occupation was situated adjacent to an abandoned channel segment, now a deep swale, that runs northwest-southeast. The Ohio River channel had to be located south of this point by around 4,000 B.C. Avery Lake, the channel remnant on which the Mississippian mound center is situated, is oriented northeast-southwest and is clearly a younger feature. The Baumer occupation is the oldest occupation documented there, with the earliest dates

(currently) falling no earlier than about 300 B.C. The survival of this ridge-top Archaic deposit tells us that the geomorphology in this outer band of the floodplain is much more complex than we had realized.

### **Terminal Late Woodland and the Mississippian Emergence**

The earlier work at Kincaid offered an orderly albeit generalized picture of the transition from Late Woodland to Early Mississippian at the site. Not surprisingly, as new data have emerged, the picture has become more complicated. The Late Woodland occupation in the Black Bottom has been described in terms of the still poorly understood Lewis focus (phase) that MacNeish (1944) defined, largely on the basis of collections from the Pope County side of the site (summarized in Cole et al. 1951: 11-13). Lewis occupations are widely distributed throughout the Black Bottom but generally are very light, almost ephemeral, except along the south bank of Avery Lake opposite the eastern portions of Kincaid, where there is a clustering of larger Lewis components (Rudolph 1981; Butler 1977). Lewis materials have generally been scarce in the recent excavations except at the base of mound Mx<sup>08</sup>.

Most of the new data on Lewis comes from the interior of southern Illinois, chiefly the Cypress Citadel site (11JS76) in the Cache River drainage (Butler and Wagner 2012). MacNeish's descriptions of Lewis ceramics unfortunately lack critical detail and the late Lewis layer (Lewis 2) he describes at Pp<sup>02</sup> (MacNeish 1944: 18-21) appears now to be a temporally mixed deposit (Butler 2007); thus, it is not entirely clear which ceramics are late/terminal Lewis in age.



Muller (1986: 159-162) has championed the existence of a terminal Late Woodland Douglas phase at Kincaid, based on the Douglas "horizon" originally proposed by R. S. MacNeish (n.d.) who derived this concept from a sample of about 150 sherds from the base of mound Mx<sup>o</sup>7. The other Chicago archaeologists thought that these ceramics were a temporally mixed lot and the proposed horizon was not accepted. Muller bolstered his case for the reality of a Douglas phase with the ceramics from 11MX109, a site located on the Brownfield Terrace above the Black Bottom. Recent analysis of the Woodland ceramics from MX109, however, has shown that they are mostly late Middle Woodland (Rohm 2008). We have also been unable to identify MacNeish's "Douglas horizon" sample of Mx<sup>o</sup>7 ceramics in the extant collections.

The picture was further complicated by the 2010 excavations near the north palisade (Brennan 2011), where we excavated our first Late Woodland feature, a large storage pit whose contents were consistent with a terminal Late Woodland occupation. The associated ceramics, all grog-tempered, included folded-rim cord-marked jars and a large cord and fabric-marked pan. These ceramics do not fit our current understanding of late Lewis (Butler and Wagner 2000; Jackson and Butler 2012) but would be consistent with Dillinger phase terminal Late Woodland, if they were found near the Mississippi River (see Maxwell 1951; Butler and Wagner 2000). A radiocarbon date of ca. AD 1050 to 1090 (best 1 Sigma) (Table 2, no. 16) was obtained from the pit. This date aligns with recently reported dates on a large Dillinger-like occupation (including some shell and mixed temper pottery) at the Grassy Lake site downstream on the Ohio River across from Cairo (Sharp et al. 2012). This Grassy Lake assemblage contains some

obvious transitional and early Mississippian ceramic forms. The picture at Kincaid is further compounded by the fact that examples of incised and filleted Yankeetown pottery have also been recovered there. The Yankeetown phase is located well upstream on the Ohio River at and above the Wabash confluence (see Redman 1990). We should also note the Rowlandtown Mound (15McN13), located a short distance downstream from the Black Bottom on the outskirts of Paducah, Kentucky (Wesler 2006). The sub-mound midden and initial mound construction yielded ceramics similar to the Grassy Lake assemblage described above, although it is not clear if Dillinger-like attributes are present. Some Yankeetown pottery was also present. Radiocarbon dates indicate a pre-AD 1100 date.

Based on current data, we would suggest a terminal date for the Late Woodland at Kincaid at around A.D. 1050. The available information about the terminal Late Woodland-Early Mississippian occupation at the site thus presents a problem. Is the terminal Late Woodland occupation derived from the resident Lewis culture but with pottery that has evolved into something we would classify as Dillinger, or, are there two different terminal Late Woodland cultural groups at Kincaid, one Lewis-related and the other Dillinger-related? Resolution of this question has important consequences for how we view the initial appearance of Mississippian society at Kincaid.

### **Mississippian Kincaid**

At present our data show that the bulk of what we typically think of as the Kincaid site, including its palisades and large mounds, is the product of an intensive phase of

activity beginning between AD 1150 and 1200 and ending by around AD 1400, with the possibility of some small post-AD 1400 habitation. Of the 22 new radiocarbon dates available from fully Mississippian contexts (Table 2), only one date's probability distribution clearly predates AD 1150; eight have probability distributions that fall largely between 1150 to 1300, and ten fall between AD 1300 and 1430.

### *Searching for Early Kincaid*<sup>3</sup>

The emergence of Mississippian culture and the early part of the Mississippian sequence at Kincaid remain poorly documented. We have encountered surprisingly little occupation that can be clearly attributed to the early part of the sequence. Within the Massac County portion, it appears that the early Mississippian habitation areas are limited in size and mostly located along the lakefront and beneath or around the major mounds where they may be deeply buried. We have long suspected that the Eastern Mound Group (in Pope County) might be the center of early occupation, but we have no data from there other than the Chicago excavation of the Pp<sup>o</sup>2 cemetery mound.

The 2003 test excavations at the southeast corner of the main plaza did identify the remnants of a low earthen mound that is most likely early (Butler and Welch 2005). The area was labeled as a mound (Mx<sup>o</sup>2) in the initial survey of the site, but Chicago archaeologists were subsequently unwilling to designate the area as a mound. The 2003 work confirmed (*contra* Cole et al 1951:40) an initial low platform that was clearly a constructed feature, built on the north rim of the ridge that fronts Avery Lake. This low mound was later capped with a layer of dense refuse deposits of Middle and Late

Kincaid age. The Mx<sup>02</sup> contexts suggest that the initial low platform should be an early construction but the mound deposits were not directly datable in our small test units. A radiocarbon date of AD 1010 to 1050 (best one Sigma) was obtained on some redeposited charred debris, found in a large basin a short distance west of the mound, but associated with much younger ceramics (Table 2 no. 2) (Butler and Welch 2005). The date is what we would expect it to be for an Early Kincaid feature but the contradictory field context limits its utility.

In 2011 we specifically targeted an area that we expected to have Early Kincaid deposits. This was the south base of Mx<sup>08</sup>, where we hoped to date the beginning of mound construction and any associated refuse deposits. The specific objective was to locate a light-colored clay layer that Chicago archaeologists had found at the base of the mound and described as a “flood deposit” (Cole et al. 1951: 87). They had reported similar deposits below two other mounds at the site. Excavating through a thick layer of slopewash and the toe of a later mound phase, we did find the southern edge of this clay layer and, as expected, it proved to be a prepared floor placed on top of the original ground surface beneath the edge of the mound. The floor consisted of a discontinuous and variable layer of clean, light-colored clay topped with thin lenses of orange-red and nearly black sands. Numerous postholes were found intruding through and apparently associated with the floor, indicating the presence of a structure or possibly a rebuilt stockade near the edge of the feature (Pursell and Butler 2011). The ceramics from the A-horizon below the clay layer were largely grog tempered and included obvious Late Woodland cord-marked ceramics as well as a considerable amount of plain grog

tempered pottery. A small amount of plain shell tempered pottery was also present along with a Yankeetown Incised sherd. A unit excavated about 5 m south and downslope from the edge of the clay floor encountered the same buried A-horizon, which yielded a similar mix of shell tempered and grog tempered ceramics, along with Yankeetown Incised and Filleted sherds.

Despite these indications, radiocarbon dates from charred materials taken from just above the floor surface showed that the clay floor is, at the earliest, a mid-sequence feature, likely dating to the 13<sup>th</sup> century (Butler 2012) (Table 2, nos. 19 and 20). These results do not preclude the existence of a small early mound at the core of Mx<sup>08</sup>, as was the case with the adjacent Mx<sup>07</sup> (Cole et al. 1951: 84), but do suggest that the bulk of this large mound is a much later construction.

#### *Enlarging the Site: Tracing the Palisades*

Nowhere has our understanding of Kincaid been more dramatically altered than in the physical layout of the western end of the site, as defined by the palisades. Palisades are important structural features that can represent de facto site boundaries as well as potential internal subdivisions, and we devoted considerable effort to examining them. The 2006 and 2008 field seasons were largely devoted to confirming their existence and construction in specific locations (Welch 2007; Pursell and Butler 2008). Remnants of an embankment and bastion features still exist in the wooded margins along the south bank of the slough complex that forms the northern boundary of the site. The 2006 work targeted a segment of that as well as a suspected bastion feature shown in the

magnetometry data on a north-south palisade line, which, at the time, we believed to mark the western limit of the site (Welch 2007). The excavations on the northern (main) palisade line verified at least two construction phases, with the wall posts associated with the earthen embankment (the 2<sup>nd</sup> construction) having been intentionally dug out and removed. The bastion on the north-south palisade line was verified and shown to have been rebuilt twice (three phases).

Subsequent investigations showed that this north-south palisade line was not the western limit of the site. In fact, the northern palisade line continues further west along the bank of the slough before arcing to the southwest toward the bank of Avery Lake, extending just beyond New Cut Road, the western boundary of state-owned property (see Butler et al. 2011:Fig 2, 5 B). The 2008 excavations confirmed the western extension in two places and also investigated a structure complex, a sequence of overlapping wall trench structures, located near the palisade wall in this area (Pursell and Butler 2008; Butler et al. 2011:Fig 5 D). This western palisade configuration extends the site another 400 m west and encloses an additional 13 ha within the palisade system (Butler et al. 2011: 34).

We now know that the most expansive palisade configuration at Kincaid, which includes the western extension just described, was constructed around AD 1200 (Table 2, nos. 4 and 5). A similar date was also obtained on the earliest in a series of structures in the northwest habitation area near this wall (Table 2, no.3). This configuration may also be the first major palisade construction at the site, although that remains to be

proven. The short north-south palisade line examined in 2006, where we found that the bastion was rebuilt twice, is now known to date to the 14<sup>th</sup> century, and appears to represent a contraction of the site area and its defenses (Table 2, nos. 10 and 11).

Additional palisade constructions exist within the arc of the outer palisade system. The 2006 work for the interpretive platform found the southern end of a north-south palisade or stockade trench that extended from the lake bank out into the plaza. In the magnetic data, the feature extends about 40 m to the north and disappears in a low area that contains a thick deposit of slopewash (Butler et al. 2011: Fig 7 A). The trench is undated but later Mississippian features superimposed it. How it relates to the organization of the mound and plaza complex is not clear, although it does run parallel to and 6 to 7 m east of a north-south running line of houses visible in the magnetometry image (see Butler et al. 2011: 34, Figure 12). One of these structures was excavated in 2009 and proved to be Late Kincaid. Should they prove contemporaneous, the palisade effectively “includes” these structures as part of the plaza area.

#### *Adding Mounds*

The frontispiece of the Kincaid volume (Cole et al. 1951:ii) shows a simple plan map of the site with certain locations identified as “mounds.” Some of these were never investigated, and many other topographic highs on the site were never characterized one way or the other. From the beginning we assumed that there were more earthen constructions at the site than the Chicago work identified. In a few cases, it is clear that some areas that Chicago researchers identified as village areas, notably Mx<sup>v</sup>1A and

portions of Mx<sup>v</sup>1C, were, in all probability, mounds or platforms (see Butler and Welch 2005:139-140). The major mounds are obvious but there are also small, low platforms and possibly other constructions whose original shape and dimensions are uncertain. Decades of cultivation have rounded and lowered many of these. We have previously used the term “platform” to distinguish low earthen constructions, sometimes less than a meter high, often no more than 20 m across, and usually surmounted by a building (Butler et al. 2011: 30). The number of mounds of all kinds, including low earthen platforms, is currently estimated at 27.

The geophysical survey was only partially successful in identifying remnant mounds and platforms (Butler et al 2011:31), but excavations have verified two previously undesignated mounds. The first was what is now called the West Mound, a large low rise at the western end of the site. That it was some kind of man-made feature was clear but we could find virtually no prehistoric artifacts on the surface. Because a farm house had once stood on the summit, it was possible that this might be a modern mound constructed to elevate farm buildings above floods, two examples of which stood nearby on the other side of New Cut Road just beyond the state land acquisition.

The magnetometry results strongly suggested that the West Mound was a prehistoric construction and that was confirmed in the 2005 excavations (Welch and Butler 2005). At that time we thought this construction was outside of the fortified area of the site, but we now know that it is enclosed within the western arc of the main palisade. This is a single-stage platform mound which probably measured 60 by 60 m



and at least 1.2 m in height. The magnetometry showed that the mound is surrounded by a dense cluster of 16 or more structures, which comprise the densest habitation area in the western part of the site (Butler et al. 2011: Fig 8). This activity was not detected on the modern surface because the original habitation surface had been sealed by some 50 to 60 cm of alluvium. Two of the nearby structures were investigated, both burned. Radiocarbon dates place all the West Mound area activity in the mid-to-late 1200s AD (Table 2, nos. 6-9). Dates from the base and near the top of the mound indicate that the mound was constructed around AD 1250 and abandoned early in the 1300s. Thus, the West Mound, the only one in the western end of the site, was built after the area was enclosed within the palisade, and it was abandoned prior to or at about the same time as the western palisade line was pulled back to the east.

The second case was what we now term the Douglas Mound, a previously undesignated low rise located immediately northwest of the west end of mound Mx<sup>o</sup>10, the large east-west mound with the conical addition which forms the north side of the main plaza. This rise was the former location of a large barn that was built by the University of Chicago in 1937 to replace a barn that their farm tenant, Mr. John Douglas, lost in the 1937 flood. On the published site map (Cole et al. 1951: Fig. 69), the rise is a vaguely rectangular mound-like eminence, about a meter high, measuring roughly 60 by 40 m with a clear northeast-southwest long axis. Curiously, Chicago archaeologists never identified this feature as a mound even though they labeled a number of less-obvious high spots across the site as mounds.

The 2012 and 2013 test excavations showed that the rise was indeed a constructed platform mound with two building phases (Welch 2013a and b). The first stage measured roughly 56 by 60 m, but the second stage, roughly 35 by 28 m, was added only to the center portion of the low mound. Wall trench segments from at least two mound-associated buildings were identified, and sub-mound structures are also present. The mound was constructed using large amounts of refuse, similar to the upper layer at Mx<sup>o</sup>2 at the southeast corner of the plaza. Large samples of well-preserved bone and pottery were recovered. Much of the pottery is Late Kincaid and may, in fact represent some of the latest ceramics recovered from the site. A small fragment of a Caborn-Welborn decorated vessel has also been identified. A radiocarbon date on charred maize from a wall trench associated with the first mound stage returned a late 14<sup>th</sup> century date (most probable one sigma range, Table 2 no. 21). The Douglas Mound is a very late addition to the complex, the latest mound construction currently documented, and its use may have extended into the 1400s.

At Mx<sup>o</sup>2, the early platform construction was capped with a layer of heavy refuse containing Middle and Late Kincaid ceramics. At the time it was not clear if this was a remnant of a much later mound phase or simply an accumulation of village refuse, as Chicago archaeologists decided. The discovery that the Douglas Mound was made of similar deposits suggests that the upper deposit at Mx<sup>o</sup>2 may have been part of a later mound construction. We also suspect that the nearly 2 m of midden-like deposits that the Chicago excavators designated Mx<sup>v</sup>1A may also be a mound.

*Non-domestic Architecture*

Mississippian mound centers are often noted for the presence of large and unusual buildings that were not common habitation structures, and two such features have been investigated at Kincaid. The most dramatic discovery was on top of Mx<sup>08</sup>, the highest and best preserved of the large platforms at the site (Welch et al. 2007). Mound-top investigations were not originally high on the research agenda, but we could not forego the opportunity to investigate a large and very striking circular feature identified in a magnetic survey of the top of the mound (see Butler et al. 2011: Fig 10). The 2007 excavations targeted this feature, which proved to be a heavily built, circular wall trench structure with daubed walls, a large central post pit, and a likely entrance facing east. It is 23 m in diameter with a floor area of ca. 380 m<sup>2</sup>. The structure was rebuilt more than once and was eventually destroyed in a fire intense enough to vitrify some of the daub. Indirect evidence suggests that this was a roofed structure, and small pieces of crushed fluorite in the wall trench fill suggest a votive or dedicatory offering (Welch et al. 2007; see also Boles 2012:71). Clearly this is not a habitation but rather a council house, temple, or some other kind of ritual structure. Radiocarbon dates place the structure in the 1300s, a date consistent with its association with what is likely the last utilized mound surface (Table 2, nos. 12 and 13).

A second unusual building complex has been documented within the plaza. In 2012 and 2013 work focused on a large magnetic anomaly located east of Mx<sup>09</sup> and south of Mx<sup>10</sup> (see Butler et al 2011: Fig. 12 A). This anomaly was notable as it was situated in

an area that was otherwise magnetically quiet. Excavation showed that the anomaly was, as expected, a large burned structure, of which about 25% of the floor area was ultimately examined (see Figure 2). The location, however, proved to have a complex history. There was an initial 20 cm thick layer of fill as the surface was raised slightly and leveled. Segments of two narrow, deep wall trenches were found on this surface and these may not belong to the same structure. This surface was subsequently capped with a layer of reddish clay sediment ( 2.5YR3/2 or 3/4 “dusky red” to “dark reddish brown”). On this clay floor a large and very unusual building was erected, one whose ultimate destruction by fire created the magnetic anomaly.

Within the structure a large prepared clay fire basin was exposed along with portions of 5 large, very deep pits for support posts, apparently part of an orthogonal array of nine massive roof supports. None of these five post pit features was fully exposed. Two of these were investigated by partial excavation and coring and found to be at least two meters deep and filled with large amounts of fired clay and daub. Insertion and extraction ramps could be identified, and it is clear that at least one of the roof supports had been replaced while the building stood. Excavation failed to identify any external walls of the structure, either wall trench or post alignments, so the exact nature of the construction is undetermined (Welch 2013a and b). The structure appears to be a large roofed building, estimated at 10 x 8 m, without external load-bearing walls. The size and number of unusually large roof supports suggests that the superstructure must have been massive and of great height. Large amounts of fired clay and daub and a few charred structural members were found on the floor but actual refuse was

extremely scarce and of small size. The floor and hearth had been systematically cleaned prior to the building's destruction. Wash deposits buried the remaining debris on the floor and the area was not subsequently disturbed.

Two radiocarbon dates (Table 2 nos. 22 and 23) place the structure in the 12<sup>th</sup> century. The building was clearly extant in the later 1100s, but its potential longevity is clouded by the multiple ranges of the earlier date (Table 2 no. 23). That date derives from the charred stump of a 20 cm diameter cypress post that may have been a brace for one of the massive roof supports. Its size and context are similar to postholes inside insertion ramps for the massive roof support posts described by Knight (2010:192) for the large building atop Stage II of Mound E at Moundville. Regardless, a large special purpose structure stood in the plaza right before or during the beginning of what we believe was the period of most intensive growth and development of the site.

#### *Habitation Areas and Domestic Architecture*

Having access to the results of a detailed magnetic survey has given us the luxury of targeting specific anomalies/features with great precision. The excavations that have not been directed at either mounds or palisades have focused on specific magnetic anomalies assumed, in most cases correctly, to be burned structures. This focus was driven by a specific interest in the potential variability in domestic architecture across the site and through time (see Brennan 2007a). A total of seven such structures and structure complexes have been examined, not including mound associated buildings

and small remnants of structures encountered in other excavations. Of the seven, all but one are wall trench constructions.

The earlier dated structures are in the western areas. The two structures near the West Mound consist of a ca. 4 by 4 m standard wall trench structure and a smaller post structure. Both date in the 13<sup>th</sup> century (Table 2, nos. 8 and 9). The 2008 excavations in the northwestern area near the western palisade arc tested a complex of five or six superimposed wall trench structures (Pursell and Butler 2008). Dimensions could not be ascertained but the earliest structure was dated at around AD 1200 (Table 2, no. 3).

The structures investigated within or near the core site area have generally proven to be more recent. In 2009 a prominent magnetic anomaly on the eastern side of the plaza was investigated. It was one in a north-south alignment of structure-like anomalies that appeared to define the eastern edge of the plaza (see Butler et al. 2011: Fig 12 C). The anomaly was a large burned wall trench structure measuring 7.1 by 6.5 m that had been rebuilt once (Brennan 2010). A radiocarbon date from a small upright corner post places the structure in the AD 1300s (Table 2, no. 14).

A number of unusual artifacts were left on the structure floor prior to burning. These included complete and partial ceramic vessels and a large rectangular palette of fine-grained sandstone stained with red ochre. A cache of three miniature vessels was also placed in the burned rubble of the building's southwest corner, a find nearly identical to another cache of similar miniature vessels found in an abandoned house basin at the Millstone Bluff site (Carey 2006; Butler and Cobb 2012: note 2). A fourth

miniature was found elsewhere on the structure floor. A small pit containing the remains of a juvenile with a pinch pot were also observed in the northeast corner of the structure floor, but were not excavated. The stratigraphy of this feature indicated that the individual was interred immediately before or shortly after the structure was incinerated, perhaps coincident with the deposition of the miniature vessels.

Also in 2009 a second large structure-like anomaly was investigated about 50 m west of Mx<sup>08</sup> and Mx<sup>09</sup> in an area now designated Mx<sup>v1E</sup> (Brennan 2010). This was another large wall trench structure, about 6.5 m square, with one rebuilt wall. Plowing had removed most of the associated basin, leaving only the wall trenches and a few deeper features intact. The structure could not be directly dated but a large pit adjacent to the house and stratigraphically earlier, contained plentiful maize remains that were radiocarbon dated in the 13<sup>th</sup> century (Table 2, no. 15).

In 2010 an area along the northern edge of the village area was investigated. The area, designated JM-10, is just inside the northern palisade line. The primary focus of the work was two structure-like magnetic anomalies (Brennan 2011). The eastern one proved to be a complex of structures, the largest of which was a 7 by 8 m burned wall trench house. The basin fill contained large quantities of daub and fired clay, some charred structural members, as well as large portions of several ceramic vessels. A smaller structure, with unusually deep wall trenches, superimposed the large structure. Its length could not be determined but the width was only 3.5 m. This structure was not

burned. Radiocarbon dates from the two structures place both in the 14<sup>th</sup> century (Table 2, nos. 17 and 18).

The western magnetic anomaly proved to be a very complex set of features, whose nature could not be fully resolved by the limited excavation. Initially, the anomaly (Feature 5) was estimated to measure about 4.5 by 5 m. It proved to be an unusually deep basin (for a Kincaid house) with depths ranging from 75 cm to over a meter. This feature may have initially been a borrow pit, but portions of wall trenches were found within this basin, perhaps indicating that a smaller structure was subsequently built within a portion of it. The interpretation is complicated by what may be another large feature intruding the north side of the complex.

#### *Late Kincaid*

Although we had not intended to focus on a particular period of occupation, a great deal of our work has involved the late period of Kincaid's occupation, that is, post-AD 1300 or Tinsley Hill phase in the regional chronology (see Butler 1979; Clay 1997; Schroeder 2009). The work has included the previously described domestic structures, the north-south palisade line on the west, the circular mound-top building at Mx<sup>o</sup>8, and the Douglas Mound. Excavations in 2009 and 2010 examined five domestic structures in three locations (described above), all of which proved to be late.

A series of small diameter cores designed to sample the "magnetically quiet" areas of the magnetometry survey provide similar data (see Brennan 2011). Several base-line cores in this survey targeted clear house-like anomalies to provide reference for feature



fill, each revealing house basins at a depth consistent with excavated Late Kincaid houses, immediately beneath the plowzone. However, cores that proved positive for features within the magnetically quiet areas produced feature fill at a much greater depth, revealing that more deeply buried (and presumably earlier) features exist but are not visible in the geophysical survey. This evidence suggests that many of the house-like anomalies visible in the magnetometry survey represent Late Kincaid features.

Radiocarbon dates from the excavated structures, the bastion on the north-south palisade line, the circular building on Mx<sup>08</sup>, and the first stage of the Douglas Mound place them all in the AD 1300s, where multiple intercepts are common, thus creating a frustrating lack of precision. Somewhat surprising is the fact that none of the dates are very late in terms of the regional chronology. Currently, none of our dates has an outer 2 Sigma limit later than AD 1430 (OxCal 4.1). Based on current information, we would have to set a terminal date for the site at around AD 1400, although it is possible that the undated second phase of the Douglas Mound may fall after 1400, associated with a smaller terminal occupation.

We have not commented on the status of Kincaid in regard to the Vacant Quarter phenomenon, the dissolution of Mississippian societies and their virtual abandonment of large areas in the central Mississippi and Ohio River drainages during the 14<sup>th</sup> and early 15<sup>th</sup> centuries (Williams 1980, 1983, 1990). Cobb and Butler (2002) examined the question in the lower Ohio River Valley from the perspective of the settlements in the interior uplands of southern Illinois but before new data were available from Kincaid.

Research has increasingly focused on environmental factors, specifically droughts and their accompanying shortfalls in agricultural production, as the primary trigger for the disruption and ultimate dissolution of these polities (see Cook et al. 2007; Benson et al. 2009). Meeks and Anderson (2013) have compiled the available Mississippian radiocarbon dates and tree ring-derived evidence for drought-induced agricultural shortfalls within and adjacent to the Vacant Quarter. They argue that two periods of severe drought, one occurring at the end of the 13<sup>th</sup> century (AD 1288 to 1308) the other spanning the beginning of the 15<sup>th</sup> century (AD 1385 to 1413), were the events that unraveled Mississippian polities and ultimately resulted in the abandonment of much of the region by AD 1420. They further offer population loss and abandonment scenarios for five regions of the Vacant Quarter, including the Tennessee-Cumberland-Ohio confluence area (Meeks and Anderson 2013:74-75).

Not everyone agrees that drought impacts were a major factor in these events, but the recent data from Kincaid are largely consistent with their scenario, even to the abandonment date. Some further clarification of the situation is now possible. Clearly, the Kincaid polity sustains a major shock around AD 1300, resulting in the notable contraction of the palisaded area. Most of the outlying settlements in the Black Bottom seem to disappear but at Kincaid post-AD 1300 occupation, if anything, increases within the core area of the site. Our impression is that people from the outlying settlements have withdrawn into the core site area. The new data make earlier statements about the cessation of mound building activity after AD 1300 (Butler 1991; Cobb and Butler 2002) appear simplistic. True, there is no evidence for any new large mounds being erected

after that date, but there are some impressive constructions associated with Late Kincaid mound stages, and some small mounds, such as Douglas, were clearly being built. Kincaid does fail dramatically by the end of the 14<sup>th</sup> century, but our impression of the preceding 75 years or so is one of robust residential and ritual activity within the admittedly reduced confines of the Kincaid site.

### **Summary**

The recent Kincaid investigations, consisting of a large-scale geophysical survey (Butler et al. 2011) and nine seasons of targeted small-scale excavations, have significantly expanded and transformed our views of this large site complex. We now have a better understanding of the pre-Mississippian use of this alluvial landscape, which includes substantial Archaic and Early to Middle Woodland (Baumer) occupations. Late Woodland (Lewis) occupations are present and widespread but, to date, have proven to be relatively minor in the Massac County portion of the site. Some of the Late Woodland material is clearly terminal Late Woodland, and there are suggestions of two different Late Woodland ceramic traditions being present right before Mississippian culture appears at the site.

As a Mississippian mound center Kincaid is now a larger and more complex site with more constructed mounds and earthen platforms, and many more houses than we once thought. The confirmation of palisade construction extending to and beyond the western limit of state ownership has significantly enlarged the site. At its maximum

configuration, the palisade system extends for roughly 1700 m along the lakefront and encloses some 67 ha. The actual habitation area, excluding swales, low areas, and magnetically “quiet” areas, is now roughly 52 ha. Earlier population estimates for Kincaid (Butler 1977; Muller 1978, 1986: 210-216; 1997:208-221) will need to be revised upward (see Brennan 2007b).

The Early Kincaid period remains a problem. Excavations to date have encountered little early material in context, although the Chicago investigations do suggest that small early Mississippian mounds exist at the base of some of the larger mounds. At present our data show that the bulk of what we typically think of as the Kincaid site, including its palisades and large mounds, is the product of an intensive phase of activity beginning around AD 1150 to 1200 and ending by around AD 1400, with the possibility of some small post-AD 1400 habitation.

The new work has specifically clarified the organization and chronology of the western end of the site and expanded its limits some 400 m further west than previously thought. The ca. AD 1200 outer palisade line established the full extent of the site to the west, where a single platform mound, the West Mound, was built after the enclosure of that area. The West Mound and its associated habitation area comprise a distinct, short-lived occupational unit near the western end of the site. Sometime after AD 1300, the western area is abandoned and the palisade line is shifted back to the east, with a much shorter north-side palisade forming the western boundary. This contraction may have also taken place on the east as the geophysical survey did identify a previously

unknown north-south palisade line east of the main plaza (Butler et al. 2011:27, Fig 2). That feature remains unverified but its visual characteristics in aerial photographs and magnetic signature match those of palisade features identified elsewhere on the site. Although the feature is undated, its location would represent a comparable eastern boundary of the core site area after AD 1300. The small, undated north-south palisade segment found near Mx<sup>o</sup>2, extending out into the plaza, remains a mystery.

The eastern third of the site in Pope County remains largely unknown. The presence of a separate smaller mound and plaza complex has always been an unusual feature of Kincaid's layout, and that area badly needs investigation. Perhaps because relatively little Early Kincaid occupation has been identified in the Massac County portions of the site, and because Late Woodland occupation is more abundant in the east, the Pope County portions have been suspected of being important in the early sequence. Without firm new data, however, a projected major role for the Eastern Mound Group in Early Kincaid times remains speculation.

For years, some archaeologists have been struck by the perceived similarities between Kincaid and Angel Mounds (Muller 1986:178-179). Indeed, the sites were viewed as similar in size and roughly contemporaneous, and, until the recent work, were seen as having a similar layout. But as our work has progressed and as new research has taken place at Angel (Monaghan and Peebles 2010; Monaghan et al. 2013; Krus et al. 2013; Peterson 2010), it is now apparent that Kincaid and Angel are very different sites both in terms of physical organization and developmental history. Our

understanding of Kincaid is clearly a work in progress. The small-scale targeted excavations will continue and we expect that significant revelations and revisions are still to come.

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A successful research effort of this length and complexity reflects the contributions of many people other than just the authors. First, we would like to thank officials at the Illinois Historic Preservation Agency (IHPA), both the Historic Sites and Preservation Services divisions, for their permission for and encouragement of the work. They saw the importance and potential benefits of the research, encouraged it, and in the some years, provided some modest support. Joseph Phillippe of the IHPA Preservation Services Division reviewed and commented on our proposals. The Kincaid Mounds Support Organization (KMSO), which manages the property under an agreement with the state, has encouraged our efforts and supported them with many volunteer hours. A special thanks goes to KMSO members John E. Schwegman, Mark Benson, Bruce Horman, and Mike Walker for their extraordinary efforts on behalf of the Kincaid research.

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#### End Notes

1. Dates given in the text are based on calibrated radiocarbon results.
2. UC investigators divided the site's occupation sequence into Early, Middle, and Late Kincaid periods based largely on Kenneth Orr's detailed artifact analysis (Orr 1951). We continue to use these divisions but with the understanding that they may not precisely correlate with phase definitions currently in use in the region. In terms of the current regional ceramic chronology, Early Kincaid would correlate roughly with the Jonathan Creek phase (A.D. 1000 to ca. 1150), Middle Kincaid with the Angelly phase (ca. A.D.



1150 to 1300), and Late Kincaid with the Tinsley Hill phase (A.D. 1300 to 1450) (see Butler 1991; Clay 1997; Muller 1986; and Schroeder 2009).

3. The current state site files use 11MX1 and 11PP9 to identify the Massac County and Pope County portions of the site complex, but we have continued the use of the original University of Chicago numbering system to maintain continuity with the older work. In that system Kincaid was not given a single site number; instead, multiple numbers were used to designate individual areas and features within the complex. Superscript letters were used to denote the type of site: “o” indicates a mound (Mx<sup>o</sup>7), “v” a village area (Mx<sup>v</sup>1), and “f” a fortification (Mx<sup>f</sup>31, used for the palisade excavations). Letter designations and numbers were used to indicate subunits of village areas. Chicago investigators designated areas A-D within Mx<sup>v</sup>1, the prime habitation zone including the main plaza and areas to the west. In our work we have added sub-areas E and F for recent investigations within this zone.

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Table 1: The recent excavations at Kincaid Mounds

Year	Tasks	Field Director(s)	Reports
2003	Test excavations at the southeast corner of main plaza for new interpretive platform	Butler and Welch	Butler and Welch 2003, 2005
2005	Excavations on and near suspected mound (West Mound) near western margin of site. Testing of a linear magnetic anomaly on north slope of Mx <sup>1A</sup> .	Welch	Welch and Butler 2005
2006	Examination of northern (main) palisade segment and a bastion on the near western palisade; Excavation of footprint of new interpretive platform near southeast corner of plaza	Welch (field school) Butler (interpretive platform)	Welch 2007 Butler 2006
2007	Investigation of large circular structure on top of Mx <sup>8</sup>	Welch	Welch et al. 2007
2008	Confirmation of western extension of main palisade and examination of a nearby domestic structure complex.	Pursell	Pursell and Butler 2008
2009	Investigation of two domestic structures, one on eastern edge of main plaza, the other west of Mx <sup>8</sup> and Mx <sup>9</sup> .	Brennan	Brennan 2010
2010	Examination of domestic structure complexes near northern palisade line.	Brennan	Brennan 2011
2011	Work at south base of Mx <sup>8</sup> to locate clay floor thought to be a pre-mound feature; Testing of a western ridge with unusual magnetic signatures (Archaic midden)	Pursell	Pursell and Butler 2012

2012	Testing and confirmation of the Douglas Mound northwest of Mx <sup>o</sup> 10; Investigation of a large burned structure complex within the plaza	Welch	Welch 2013a
2013	Continued work on Douglas Mound to establish mound limits; Additional work on burned structure complex in the plaza.	Welch	

Table 2. New radiocarbon dates on the Terminal Late Woodland and Mississippian components at Kincaid.

No.	Lab No.	Provenience	Conv. RC age (rcyb)	Technique & $\delta^{13}\text{C}$ Ratio (‰)	Cal. 1 Sigma Ranges AD with probability distributions <sup>1</sup>	Cal. 2 Sigma Ranges AD with probability distributions <sup>1</sup>
1	Beta 178763	Mx <sup>o</sup> 4, maize from F. XII, House III	780±40	Con. -8.6	1220 - 1280 (68.2%)	1170 - 1290 (95.4%)
2	Beta 191044 combined <sup>2</sup>	Mx <sup>o</sup> 2 area, large basin, F.10	991±26	Con. <sup>3</sup>	1010 - 1050 (50.3%) 1100 - 1120 (15.2%) 1140 - 1150 ( 2.7%)	990 - 1060 (63.4%) 1080 - 1160 (32.0%)
3	UGAMS 4605	Earliest structure in 2008 excavations, F. 6, thatch	870±25	AMS -24.42	1150 - 1220 (68.2%)	1040 - 1100 (13.9%) 1120 - 1230 (81.5%)
4	UGAMS 4606	Post in western-most palisade, F.4	870±25	AMS -24.42	1150 - 1220 (68.2%)	1040 - 1100 (13.9%) 1120 - 1230 (81.5%)
5	Beta 221835	North palisade trench, F. 13	810±60	Con. -23.40	1170 - 1280 (68.2%)	1040 - 1100 ( 8.6% ) 1110 - 1290 (86.8%)
6	Beta 216287	West Mound, submound thatch	800±40	Con. -13.00	1210 - 1270 (68.2%)	1160 - 1280 (95.4%)
7	Beta 216288	West Mound, upper level, F.9	660±40	AMS -27.70	1280 - 1320 (33.9%) 1350 - 1390 (34.3%)	1270 - 1400 (95.4%)
8	Beta 216289	West Md area, Structure 1, post, F. 2	780±40	Con. -26.90	1220 - 1280 (68.2%)	1170 - 1290 (95.4%)
9	Beta 216290	West Md area, Structure 2, post, piece plot 1	740±50	Con. -24.20	1220 - 1290 (68.2%)	1180 - 1320 (88.2%) 1350 - 1390 (7.2%)
10	Beta 221833	N-S Western palisade, post in bastion, F.9	610±50	Con. -23.80	1290 - 1370 (54.4%) 1380 - 1400 (13.8%)	1280 - 1420 (95.4%)
11	Beta 221834	N-S Western palisade, post in bastion, F.11	680±70	Con. -24.60	1260 - 1320 (39.0%) 1350 - 1400 (29.2%)	1220 - 1410 (95.4%)
12	Beta 237479	Mx <sup>o</sup> 8, F.3, post in wall trench of large circular structure	650±40	AMS -25.10	1280 - 1320 (31.5%) 1350 - 1390 (36.7%)	1270 - 1410 (95.4%)
13	Beta 261304	Mx <sup>o</sup> 8, F.4, central post pit of large circular structure	610±60	Con. -25.50	1290 - 1370 (53.9%) 1380 - 1400 (14.3%)	1280 - 1430 (95.4%)

No.	Lab No.	Provenience	Conv. RC age (rcyb)	Technique & $\delta^{13}\text{C}$ Ratio (‰)	Cal. 1 Sigma Ranges AD with probability distributions <sup>1</sup>	Cal. 2 Sigma Ranges AD with probability distributions <sup>1</sup>
14	UGAMS 4607	House on main plaza, F.1, wall post	620±25	AMS -23.52	1290 - 1330 (28.3%) 1340 - 1370 (26.3%) 1380 - 1400 (13.6%)	1290 - 1400 (95.4%)
15	UGAMS 6685	Mx <sup>v</sup> 1E, large pit with abundant maize, F. 9	810±25	AMS -10.9	1210 - 1260 (68.2%)	1180 - 1270 (95.4%)
16	UGAMS 9087	JM-10, F. 8. LW storage pit	900±20	AMS -26.3	1050 - 1090 (36.3%) 1120 - 1140 (11.9%) 1150 - 1170 (20.0%)	1040 - 1100 (45.2%) 1120 - 1210 (50.2%)
17	UGAMS 9088	JM-10, F. 3 post in burned structure	580±20	AMS -24.0	1320 - 1350 (46.8%) 1390 - 1400 (21.4%)	1310 - 1361 (64.4%) 1390 - 1410 (31.0%)
18	UGAMS 9089	JM-10 F. 7 later smaller structure	640±20	AMS -25.5	1300 - 1310 (24.7%) 1360 - 1390 (43.5%)	1290 - 1320 (39.4%) 1350 - 1390 (56.0%)
19	UGAMS 11498	South of Mx <sup>o</sup> 8, E685 N300, Lv 7, clay floor below md fill	800±20	AMS -25.4	1220 - 1260 (68.2%)	1210 - 1270 (95.4%)
20	UGAMS 11499	South of Mx <sup>o</sup> 8, E685 N300, Lv 7, clay floor below md fill	620±30	AMS -26.5	1300 - 1390 (68.2%)	1290 - 1400 (95.4%)
21	UGAMS 15662	Douglas Md., E600 N570 lv. 6, wall trench assoc. with first md phase	650±20	AMS -9.2	1290 - 1310 (27.1%) 1360 - 1390 (41.1%)	1280 - 1320 (41.9%) 1350 - 1390 (58.5%)
22	UGAMS 15663	Plaza Structure, E734 N464 Lv 2	860±20	AMS -24.8	1160 - 1210 (68.2%)	1050 - 1080 (2.2%) 1150 - 1230 (93.2%)
23	UGAMS 15664	Plaza Structure, E742 N460, F.10, P 13	960±20	AMS -23.0	1020 - 1050 (26.2%) 1090 - 1130 (34.5%) 1140 - 1150 (7.5%)	1020 - 1060 (32.4%) 1070 - 1160 (63.0%)

<sup>1</sup> Dates calibrated using OxCal 4.1 & 4.2, rounded to the nearest 10 years.

<sup>2</sup> Averaged result of two runs from the same sample.

<sup>3</sup> The two samples averaged had  $\delta^{13}\text{C}$  values of -25.6 and -25.0 ‰.

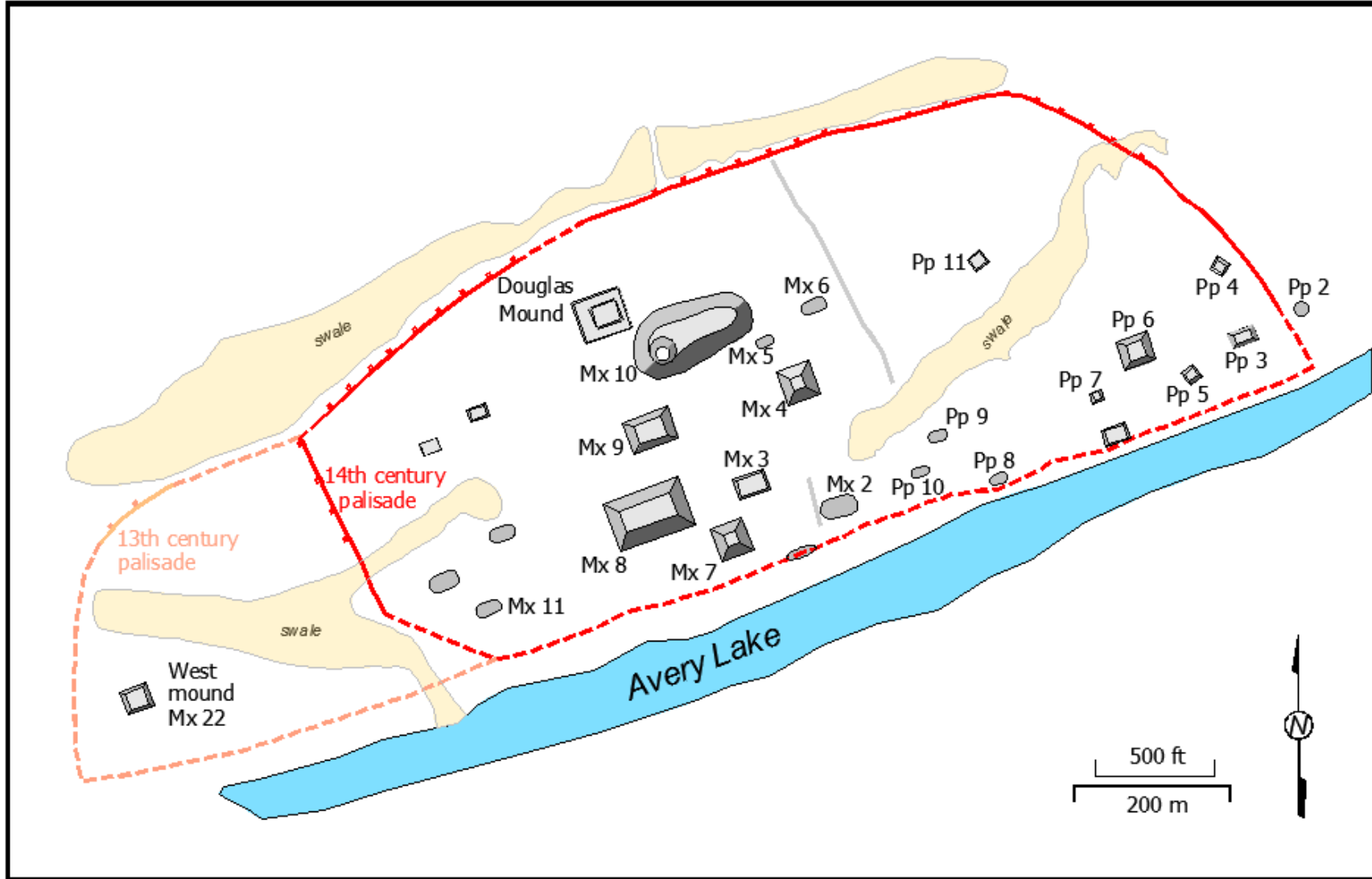


Figure 1. Schematic map of Kincaid.

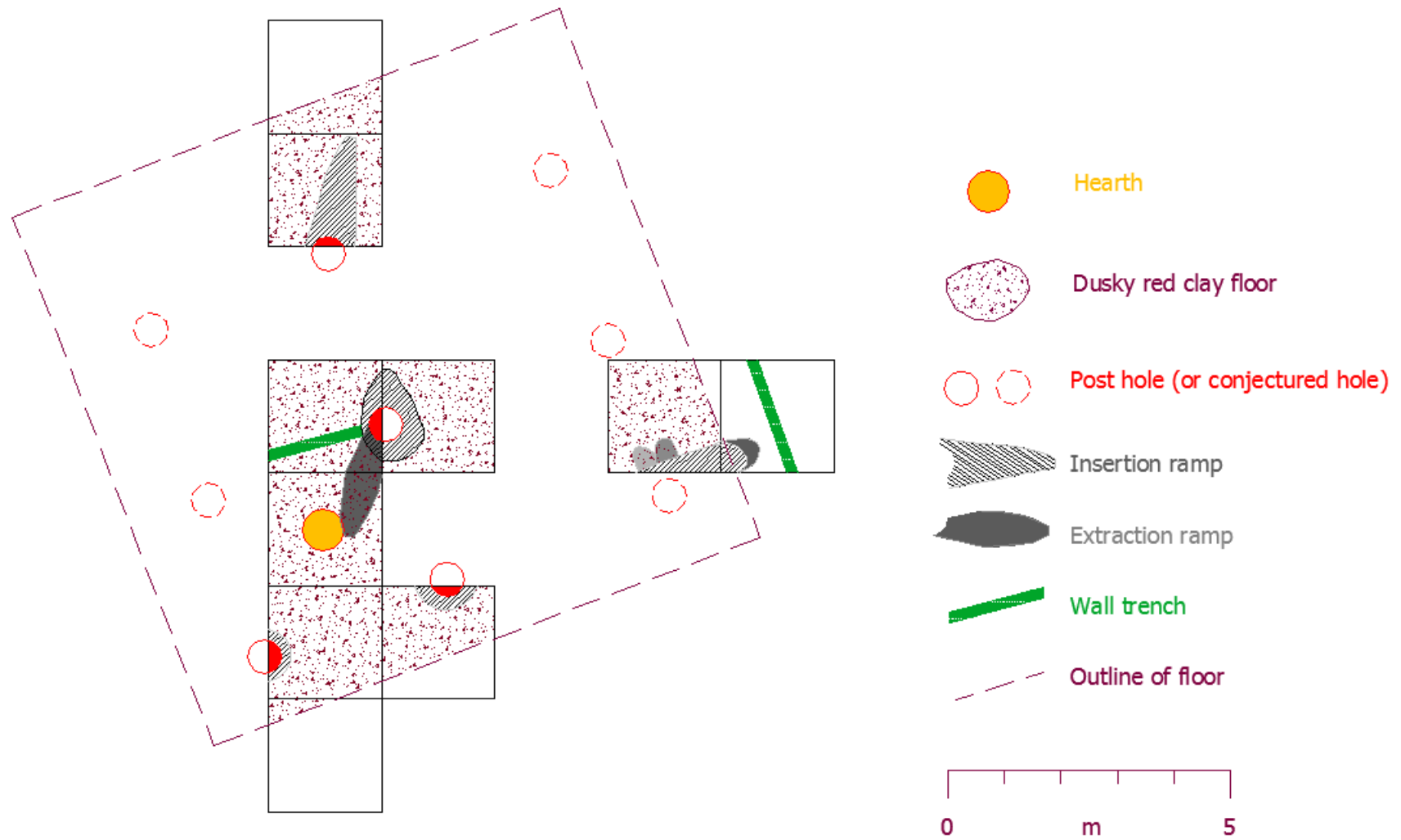


Figure 2. Large building in central plaza.