

**Investigating the “Ring Midden” Phenomenon in the Lower Mississippi Valley:
An Examination of Evidence from Feltus and Beyond**

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As highlighted in this volume, sites with oval, circular, or semicircular plans—which for convenience here we call ring middens—are found throughout the American South, spanning many regions and periods. Studies of such sites have recognized patterns of spatial and temporal variation in terms of site layout, size, formation process, and use that have given rise to debates about site function and meaning (e.g., Marquardt 2010; Russo 2004; Sassaman and Heckenberger 2004; Saunders 2004; Thompson 2007; Trinkley 1985). Despite the ubiquity of the ring-shaped site plan, it has been differentially studied, meaning that certain site types have been more heavily considered than others. The study of circular sites is particularly well developed in coastal regions where shell rings are easily identifiable, but similarly rigorous studies of both inland and non-shell-bearing sites are less common (but see Pluckhahn 2010; Russo et al. 2014; Stephenson et al. 2002). This is somewhat surprising given that the practice of constructing sites with circular and semicircular plans was present at least from the inception of monument construction in the Lower Mississippi Valley (LMV) and likely before (Saunders 2012). In addition, survey, testing, and excavation at LMV sites has uncovered ample evidence of ring-shaped middens that have generally been left out of previous discussions (Belmont 1967; Kassabaum 2019; Phillips 1970; see also Mehta, this volume). Particularly in the southern portion of the LMV, circular or oval zones of dense archaeological material often sit under later mound sites and have been interpreted as important to the establishment of formalized site plans

(Belmont 1967; Steponaitis et al. 2015). In this chapter, we review the evidence for ring middens in the LMV, with particular focus on sites that eventually included earthen mounds. We then draw on surface-collected and excavated data from Feltus (22Je500) in Jefferson County, Mississippi to scrutinize the arguments for and against the existence of a pre-mound ring-shaped occupation at the site. We conclude that the midden itself is less important to understanding and interpreting Feltus's site layout than the plaza that it enclosed. Finally, building on this conclusion, we suggest a more plaza-centric approach for studies of ring middens more generally.

Circular Sites in the Lower Mississippi Valley

Though often treated separately from shell rings in the scholarly literature, the South is also home to ring middens, or curvilinear arrangements of dark, organically enriched soils intermixed with cultural material that at least partially surround central open areas (Russo et al. 2014:127). These sites generally date to the Woodland period, and although they overlap in both space and time with shell rings, they contain little or no shell and have minimal topographic relief. Such characteristics make them more difficult to identify from the surface, but a previous review by Kassabaum (2019) discussed 35 circular and semicircular middens (see also summaries in Pluckhahn 2010; Russo et al. 2014; Stephenson et al. 2002). Due to their lack of relief, ring-midden sites have typically been identified based on distributions of artifacts and middens recorded during systematic surface collecting, shovel testing, or auguring surveys. These distributions have then been used to produce the artifact and feature density maps that are commonly presented as evidence for the circular patterns (e.g., Bense 1998:267–268; Pluckhahn

2003:91–125; Randall et al. 2014:fig. 1.4; Russo et al. 2014:figs. 6.2–6.4). Importantly, these surveys often reveal irregular semicircles or discontinuous rings made up of distinct midden patches rather than consistent closed rings (Russo et al. 2014:127). Moreover, in most cases, only small portions of these middens have been subjected to larger-scale excavation after they have been identified, which complicates their interpretation.

Willey (1949:403) provided an early explanation of the ring-midden site type as representing either fortifications or the remnants of ceremonial activities. Then, when ring middens became the focus of intensive study in the mid-1970s, a number of influential conference papers asserted that they were the remains of villages associated with Woodland-period burial mounds (see Russo et al. 2014:124). The presence of post holes within some examples (e.g., Bense 1998:258–259; Pluckhahn 2010) and the discontinuous nature of many others (e.g., Stephenson et al. 2002:345–346) was cited as evidence that they represented domestic dumps associated with distinct, spatially ordered residences (see also Russo, this volume). Excavations in the off-mound activity areas at Kolomoki, one of the most extensively studied Southern ring-midden sites, have supported this domestic interpretation (Pluckhahn 2000, 2003, 2010; Pluckhahn et al. 2018; Sears 1956; West et al. 2018; see also Chapter 5, this volume). Kolomoki comprises an earthen embankment, at least nine mounds, and twelve activity areas arranged such that they make up two distinct midden rings. Excavations in the activity areas revealed post-hole scatters, hearths, pits, and a semi-subterranean structure and uncovered floral, faunal, and ceramic assemblages that suggest at least a portion of the population of Kolomoki was living at the site year-round (Pluckhahn 2000, 2003). Based on the data from Kolomoki and other ring-midden sites on the Coastal Plain, the domestic interpretation of the site type has been widely accepted and broadly applied (Pluckhahn 2010:105; Russo et al. 2014:125),

often without the detailed analyses of features and artifact assemblages that would be necessary to truly evaluate the variable processes of midden deposition and concomitant differences in site organization and function. With this in mind, let us now turn our attention to the various ring-shaped sites present in the LMV and consider what we know about their construction and use.

Central open areas at sites of communal aggregation have likely been used by Native groups since Paleoindian times (Anderson 2012; Kidder 2004:516; Robinson et al. 2009), and the practice of creating distinctly circular and semicircular sites was so prevalent during subsequent millennia that Kennedy (1994:8–15) described the Middle and Late Archaic periods as the “Age of the Rings.” We know that the practice was present in the LMV at least by the inception of mound construction, with Middle Archaic (ca. 6900–3800 BC) mound sites like Watson Brake, Hedgepeth, Caney, Insley, and Frenchmen’s Bend clearly taking this form (Sassaman and Heckenberger 2004; Saunders 2012). Research on Middle Archaic sites has generally focused on establishing the age and stratigraphy of mounds through coring and limited test excavations, a strategy that has offered little evidence from which to identify activities that took place between or around the mounds. That said, there is clear evidence that the empty spaces at these sites were carefully planned (Clark 2004; Sassaman and Heckenberger 2004), suggesting that the activities that took place within them should likewise be carefully investigated. Based on their work at Watson Brake, one of the few extensively excavated Middle Archaic mound sites, Saunders and colleagues (2005) argued that the site initially developed as an oval-shaped midden to which the mounds were later added. Excavated assemblages suggest that domestic activities such as processing, cooking, and consuming food and manufacturing stone tools and beads took place around the edges of the site before, during, and after mound

construction, while the central open space was kept clean throughout the site's history, perhaps indicating that it served ritual functions.

This pattern of initial midden deposition surrounding a central open space has also been identified at sites dating to the subsequent Late Archaic period (ca. 3800–1200 BC). When examined collectively, these sites demonstrate that inland sites often had a semicircular configuration whether or not mounds were eventually constructed there. For example, Late Archaic mound sites in the LMV, including Jaketown (Ford et al. 1955), Savory (Phillips 1970:338–339), and Teoc Creek (Connaway et al. 1977), demonstrate initial midden deposition and subsequent mound construction, while Cedarland and Claiborne (Bruseh 1991; Clark 2004) represent contemporary non-mound sites with semicircular middens surrounding central open areas. Of course, the Late Archaic Poverty Point site provides a particularly recognizable example of monumental constructions oriented in a semicircular pattern.

While considerable amounts of midden accumulated at Poverty Point before and/or during the building of the earliest mounds at the site (Gibson 2019:104–107; Kuttruff 1975:142–146; Ortmann 2007:304–305), the overall arrangement of this midden remains unknown. The construction of the elaborate ridge-and-swale complex, however, clearly defined the semicircular character of the site. A range of activities took place on the ridges at Poverty Point. Excavated assemblages suggest that they served as residential locations, but features indicative of domestic architecture are rare. Stone-tool production and use and the manufacture of stone ornaments were important activities, with different stages of production or different raw materials predominating in different areas of the ridge structure (Gibson 2001:99–105; Kuttruff 1975; Ortmann 2007:282–296). Perhaps most importantly though, the ridges served to define a large, level 15-ha plaza.

When compared to the other Archaic sites discussed here, the plaza at Poverty Point has been relatively well investigated. Excavations have revealed that it was a purposefully constructed, artificially leveled space (Gibson 1984, 2019:53–56; Greene 1990; Ortmann 2003; Woodiel 1990) that contained relatively sparse but unusual features. Haag (1990) uncovered large postholes in the plaza and more recent investigations have revealed a series of massive post circles (Gibson 2019:106–107; Hargrave et al. 2018). In addition, Mound C was built within the plaza and represents one of the most complex earthworks at the site with at least 16 distinct floor deposits made of differentially colored and textured sediments. The mound was built gradually and each of its floors used intensively before construction proceeded. Several of these floors supported temporary buildings and a wide variety of activities took place on others; in all cases, nonlocal materials and evidence of short-term activities suggest ritual use (Gibson 1984; Ortmann 2007:148–181). Thus, while the exact functions of Poverty Point’s plaza remain poorly understood, the fact that it required significant labor investment and was home to a series of elaborate mound and post features suggest that ritual activities were conducted within it. Gibson (2001:83) hypothesizes that it was kept clean and used for dances, games, social events, and ceremonies.

Moving later in the cultural chronology of the LMV, mound sites associated with the Middle Woodland period Marksville culture (ca. AD 1–400) and early Late Woodland period Troyville and Baytown cultures (ca. AD 400–750) continue to demonstrate a commitment on the part of their builders to arcuate forms, particularly through the elaboration of the mound-and-plaza center concept. For example, the Marksville site includes a central precinct consisting of six mounds and a plaza surrounded by a C-shaped earthen embankment (McGimsey 2010; McGimsey et al. 2005). Outside of this central area were additional mounds and embankments

and approximately 70 small, ring-shaped earthworks (McGimsey 2003). Similarly, the Troyville site consists of at least 10 mounds and an earthen embankment outlining a central plaza (Walker 1936). Finally, constructed during Baytown times, McGuffee comprises six or seven mounds and a causeway surrounding a central plaza space all enclosed within an earthen embankment (Shuman et al. 1999) and the Baytown type-site has nine mounds surrounding an open space (Phillips 1970:903–904).

Because little off-mound excavation has taken place at these sites, it is difficult to say whether a ring midden prefigures the mound-and-plaza layout as at some of the Archaic sites discussed above; however, Manny, another mound center constructed during Baytown times, provides significant evidence that this practice characterizes Woodland-period sites in the LMV as well (Greengo 1964; Phillips 1970:615–697). Phillips identified four mounds at Manny, each of which overlaid thick deposits of Middle Woodland midden. He excavated three additional non-mound locations around the perimeter of the plaza and also found them to contain extensive Middle Woodland midden, suggesting the presence of a fairly complete pre-mound, ring-shaped configuration of refuse. Phillips interpreted his additional excavation locations as house mounds or dumps and suggests that some comprised one or more distinct residential locations, while others may not have included formal habitations.

In addition to his work at Manny, Phillips (1970:549) also recognized a pattern of shell-bearing ring-midden sites dating to Baytown times along the Yazoo River and nearby streams. Naming it the “Tchula Lake pattern,” Phillips documented at least eight sites containing circular or semicircular arrangements of shell-bearing midden heaps (Figure 1): Palusha Creek (1970:265–268), Tchula Lake (1970: 270–272), Yucatan (1970:334), Shellwood (1970: 352–359), Pete Clark (1979:361–363), Barry (1970:373–376), Hunt (1970:391–394), and Payne

(1970:420). He interpreted the shell-midden patches that made up these rings as individual household trash deposits arranged around clean plazas. He also acknowledged that, while they were not as common, this same arrangement existed at sites that did not have shell. In some cases mounds were later built atop these arcuate middens, and in other cases they were not. It is important to note that, given the difficulty of identifying both non-monumentalized and non-shell-bearing sites, it is likely that such examples are underrepresented both in Phillips's survey specifically and the archaeological record more generally.

The regular presence of early Late Woodland, non-shell-bearing ring middens underlying later Late Woodland mound-and-plaza sites associated with the Coles Creek culture (ca. AD 700–1200) supports this hypothesis. One of the earliest recognitions of this pattern comes from Belmont's (1967) work at Greenhouse. The Baytown occupation of Greenhouse consisted of two crescent-shaped middens at either end of an open space, with smaller middens on the sides and no signs of occupation either inside or outside of the ring. The mounds at Greenhouse were then constructed atop this ring of midden by Coles Creek people, at which point the site became a major mound center (Figure 2). Referring to the layout of the pre-mound midden as the "Black River site plan," Belmont notes that the pattern was not unique to Greenhouse, but rather first appeared at earlier Middle Woodland sites (such as Manny, discussed above) before becoming widespread during late Baytown and Coles Creek times.

Since Belmont's initial identification of this pattern, numerous Coles Creek mound centers have been demonstrated to have been built atop earlier oval or parentheses-shaped middens similar to the one at Greenhouse. Strong evidence for the existence of the Black River site plan has been uncovered at Feltus (Kassabaum 2014:28–30; Steponaitis et al. 2015:16–17), Mazique (LaDu 2016:361–380), Gold Mine (Belmont 1982), and Fredericks (Girard 2000), and

the pattern likely also existed to some degree at Raffman (Roe 2010:77), Morgan (Fuller and Fuller 1987:9), and Lake Providence (Weinstein 2005:56–61, Figure 5-23). Moreover, it is important to note that investigations at many additional Coles Creek mounds (as well mounds from a wide variety of other periods) have uncovered impressive submound midden deposits. Because most of these sites lack significant excavation in the off-mound areas that might allow us to connect the dots between these deposits and envision a pre-mound midden ring, it is impossible to say how well they fit the Black River site plan; however, it is likely that at least some of them do and this could be borne out with excavation strategies that emphasize testing off-mound areas.

Evaluating the Evidence for the Feltus Ring Midden

The types of evidence most often presented in support of the existence of Southern pre-mound ring middens include extensive midden deposits located directly under mounds (e.g. Kassabaum 2014:28-30; LaDu 2016:361–380), as well as data from systematic surface collections, geophysical surveys, and shovel-test grids that have documented arcuate patterns of feature and artifact densities across sites (e.g., Bense 1998:267–268; Kassabaum 2014:28-31; Pluckhahn 2003:91–125; Russo et al. 2014:figs. 6.2–6.4). While the existence of such ring middens is clear, we must critically examine the assumptions that are often made in jumping from these data to the assertion of a contemporary ring-shaped occupation. We do so here by re-assessing the evidence for such a pattern at Feltus.

The Feltus site represents a typical Coles Creek mound-and-plaza center consisting of four mounds forming a rectangular arrangement around a central open space (Figure 3). Our

investigations at the site, which began in 2006, have revealed a great deal about the site's layout and chronology (Graham et al. 2019; Kassabaum 2014; Kassabaum et al. 2014; Steponaitis, Kassabaum, and O'Hear 2012, 2013, 2015; Steponaitis, Peles, and O'Hear 2018).

At the start of field work, we conducted a surface collection of the off-mound areas at the site. The collection areas were chosen opportunistically and corresponded to irregular patches in which the plowed surface was visible. Plotting these finds on the map showed concentrations of material in the southern end of the plaza, between Mounds A and B, and in the southwest corner of the site (Figure 3a). This distribution immediately brought up the possibility that the Feltus mounds were built on an oval midden similar to that identified by Belmont (1967) at Greenhouse. We then put in a grid of shovel tests across the site that provided additional evidence for this midden. Density maps of various artifact types recovered from these shovel tests, especially Native ceramics, provided a good visual of the midden's extent (Figure 3b). Finally, Haley and Johnson (2008) conducted geophysical surveys in the off-mound areas at Feltus; the most interpretable results came from magnetic gradiometry, which can locate prehistoric features such as burned houses and midden. The geophysical results further supported the existence of a ring midden by exposing features only along the edges of the plaza with the center largely clear of significant anomalies (Figure 4a). Testing of a small number of these anomalies bore out our interpretation of the geophysical data. Excavation of the large, distinct pair of anomalies on the southern edge of the plaza revealed extensive midden deposits, three large pits, and a series of massive post holes (Kassabaum 2014:74–84; Kassabaum and Nelson 2016; Nelson and Kassabaum 2015). Similarly, excavation of the large, diffuse anomaly at the far southeastern corner of the survey grid revealed high concentrations of artifacts in the plow zone, likely representing former midden deposits that had been plowed away. On the other hand,

the excavation of a weak anomaly in the very center of the plaza uncovered few artifacts. This anomaly was probably caused by a tree tip, suggesting that the other, similarly weak anomalies throughout the otherwise clean plaza may also have been caused by non-cultural phenomena (Kassabaum 2014:86).

When we first saw these patterns, it was tempting to assume that the ring midden represented a contemporary and continuous zone of occupation. The data we have gathered at Feltus over the past 15 years have shown, not surprisingly, that the past reality was much more complicated.

Excavations at Feltus have targeted both on- and off-mound areas (Figure 4b). Our initial goal was to date mound construction by excavating flank trenches at the base of each mound. These trenches provided the opportunity to date the initial construction episodes, investigate any submound deposits present, and explore the relationship between these deposits and the mound fill episodes that overlaid them. Based on our findings in these initial trenches, we opened up additional excavation units to further explore the submound deposits in each area. In addition to these mound excavations, we also excavated extensively in the area around and under the former location of Mound D, which had been flagged as having a high potential for intact archaeological features in the initial site surveys.

The earliest evidence for use of the Feltus landscape comes from a scattering of Baytown (ca. AD 400–750) ceramics recovered in the southern plaza and a small, undated zone of midden located under Mound B. This localized midden deposit was associated with an unusual pot and twelve small post molds. Though the evidence is minimal, we can thus say that Baytown people used small portions of the Feltus landscape in ways that are, as yet, poorly understood.

More intensive use of the site began during the succeeding Sundown phase (ca. AD 750–850), when three large, cylindrical pits were dug just south of the plaza, each 2 m in diameter and about 1.5 m deep (Figure 4b, block D2). Interestingly, these pits were left open for an extended period, during which time the bottom half of each was filled with thin bands of water-deposited sediment. These may have been ritual features, or perhaps used as cisterns (Graham et al. 2019). Around the same time, rituals involving large non-structural posts took place nearby (Figure 4b, blocks D1 and D4) (Kassabaum and Nelson 2016; Nelson and Kassabaum 2015). Both radiocarbon dates and ceramic analysis confirm an early Coles Creek assignment for these features and similar assemblages have not been recovered elsewhere, suggesting that use of the Feltus landscape during the Sundown phase was strongest at the southern end of the site.

This pattern of use shifted during the subsequent Ballina phase (ca. AD 850–1000). Early in the phase, multiple episodes of feasting took place along the southern edge of the plaza, leaving behind substantial midden deposits with ceramics and food remains. The nature of these middens suggests rapid deposition, with pot breaks and partly articulated animal skeletons found throughout their fill (Figure 4b, block D2).

Later in Ballina times a new focus of activity at Feltus appeared to the north. A flank trench on the east side of Mound A revealed a dense pre-mound midden underlying the eastern portion of the mound; the excavation was later expanded to better explore this deposit (Figure 4b, block A1). The midden itself accumulated gradually and shows the most diverse assemblage of both ceramic and food remains from the site. At the base of it, we identified a large number of small post holes, with some showing possible structural alignments. An exceptionally dense deposit of probable feasting remains formed a thin layer atop this midden. Based on the unweathered appearance of the midden and the exceptional level of preservation of tiny artifacts

like fish scales within it, it appears that this midden was laid down immediately before mound building began. The immediacy of this relationship was confirmed by the presence of a post-shaped void, uncovered while removing the mound fill from atop the dense refuse layer. This feature represents a hole left by a post that was set into the domestic midden, quickly surrounded by dense feasting debris, and then pulled immediately before mound construction began.

A unit placed near the southwestern corner of Mound A was excavated in order to determine if this submound midden extended entirely under the mound (Figure 4b, block A2). While a late Ballina phase midden was located in this unit, it post-dated the initial period of mound construction and was likely associated with summit activities. The buried A-horizon under this midden contained no post holes or pits indicating that the area was not heavily used prior to the later midden deposition.

Thus, a flurry of activity took place around the plaza at Feltus during the Ballina phase, representing the final pre-mound use of the site. On the southern edge of the plaza, feasting and post-setting rituals took place, beginning early in the phase, with no signs of domestic habitation. At the northern edge, a different set of activities took place, beginning somewhat later. First, a large sheet midden formed, likely associated with at least temporary habitation of the area now under the east side of Mound A. Then, after this period of habitation ended, large standing posts like those in the southern portion of the site were set within the midden and a feast was held, most likely in association with the first stage of mound construction. Similar activities did not occur on the western side of the mound, which is lacking pre-mound cultural deposits. After moundbuilding began, it proceeded rapidly, with portions of all four mounds at Feltus constructed during the Ballina phase.

The chronology presented here has the potential to clarify our interpretations of the pre-mound landscape at Feltus. When the evidence for site use is examined chronologically by phase, it becomes clear that, despite our ability to create density maps that show a near complete midden ring, the timing and nature of the activities in different parts of this ring were highly variable. This, of course, calls into question whether it is appropriate to interpret the Feltus pre-mound deposits as representing a circular domestic settlement; the evidence suggests otherwise for two reasons: (1) a lack of contemporaneity of the various portions of the ring means that the pre-mound use of the landscape was never fully circular (see Love 2021 for a similar argument), and (2) a lack of evidence for domestic occupation in all but one small area east of Mound A implies that Feltus was not primarily a habitation site. Importantly, similar statements can be applied to ring middens more broadly, in that most documented ring middens do not represent consistent, closed rings but are better described as irregular semicircles or discontinuous rings made up of distinct midden patches that may or may not have been laid down concurrently, and that may or may not have been the result of domestic habitation (see Russo et al. 2014:127; Phillips 1970; Pluckhahn et al. 2018; Saunders et al. 2005; Stephenson et al. 2002:345–346).

We therefore suggest that, rather than focusing our attention on the presence of the ring midden, we instead focus on the presence of the plaza, which appears to have guided the use of the Feltus landscape from the very beginning. In other words, Coles Creek people at Feltus do not appear to have been specifically interested in creating a ring-shaped site, but they *do* appear to have purposefully defined a plaza and respected rules regarding how it could and could not be used, choosing to emplace other activities with respect to those rules. It is likely that this process occurred repeatedly at a wide variety of sites and that it was the act of maintaining a plaza, rather

than the purposeful creation of a ring, that led to the abundance of arcuate distributions of archaeological materials on the LMV landscape and in the American South more broadly.

Recentering the Plaza

The perspective outlined above quite literally centers plazas in our discussions of arcuate sites; however, their central position in site layouts has not led to centrality in the archaeological literature. Discussions of both mounded and non-mounded circular sites have generally not focused on the plazas, but rather viewed them as empty, communal spaces that represent the byproducts of the rings of activity that encircled them (Kassabaum 2019:191–192; Kassabaum and Barrier 2018; Kidder 2004). If the opposite is true and the circular site is more likely to be the byproduct of the plaza, then it is worth focusing much more attention on understanding plazas and the range of activities that took place within them. In this section, we will summarize some of the progress that has been made towards centering the plaza in discussions of Southern Native American sites and conclude by suggesting directions for where we might go next.

A variety of scholars have recognized the importance of studying and understanding the plazas and other empty spaces associated with earthen mound sites (e.g., Alt et al. 2010; Boudreaux 2013; Cobb and Butler 2016; Dalan 1997; Dalan et al. 2003; Davis et al. 2015; Holley et al. 1993; Kidder 2004; Lewis et al. 1998; Nelson 2014; Rogers et al. 1982). Kidder (2004:515), in his seminal article on the topic, argues that “plazas are not just empty spaces that developed because architecture enclosed an open area; they must be understood as one of the central design elements of community planning and intrasite spatial organization.” Barrier and Kassabaum (2018:166, 169–170) emphasize the specific role of plazas as gathering places,

asserting that they were “built forms that would have served to delimit and guide physical experiences through actions, the seeing, hearing, and feeling of others and the temporal rhythms of these occurrences” and thus should be useful to archaeologists in the attempts to understand “the creation and maintenance of the imagined communities that form the day-to-day social environments in which people live.” The purposeful construction of plazas at LMV mound sites such as Poverty Point (Ortmann 2003), Raffman (Kidder 2004; Roe 2010:74–75), and Mazique (LaDu 2016:381–383) underscores the importance of viewing plazas as active spaces that change through time and thus require detailed archaeological attention (Kidder 2004).

Despite the fact that central open spaces are just as essential to the definition of ring middens as they are to the definition of mound-and-plaza centers, comparatively few non-mound or pre-mound ring-midden plazas have been explicitly investigated. For this reason, they are often interpreted as much based on assumptions of their emptiness as by systematic study of their contents. Recently, a few scholars have directly tackled the question of what occurred in the plazas of coastal shell rings through excavation and geophysical survey. For example, Sanger and Thomas (2010) excavated a series of large, empty pits in the plazas of the St. Catherine’s and McQueen’s shell rings. While they suggest these may be mast processing pits or large postholes, Marquardt (2010) argues that they could have functioned as wells during dry spells. On the other hand, Thompson’s (2007) work in the plaza at the Sapelo Island III shell ring revealed ceramic remains, lithic debris, and pit features indicating intensive occupation. While these studies have provided preliminary data from which to consider the range of activities that took place in the centers of coastal shell rings, the vast majority of plazas remain untested and thus our understanding remains necessarily limited.

The plazas at Woodland period ring middens in the coastal South have generally been interpreted through a ceremonial lens. For example, faunal and ceramic assemblages excavated from pits in the plazas at Bird Hammock (Nanfro 2004) and Old Homestead (Thomas et al. 1996) have been interpreted as the remains of short-term ritual activities that included feasting. Likewise, Russo and colleagues (2011) interpret the plazas of the Baker's and Strange's middens as sites of communal feasting that provided for reciprocal food sharing during seasonal fluctuations in resource availability. Finally, Bense (1998) interprets the burials and large pits in the plaza at Bernath as evidence of elite occupation and/or infrequent ceremonial use. Building on these studies, Russo and colleagues (2014:129–136) suggest that coastal ring middens themselves were likely locations of habitation while their plazas served as public arenas for the manipulation of exotic materials during ritual events. “The open space of ring plazas facilitated verbal and visual communication and allowed for the manufacture, display, presentation, and symbolic negotiation of sacred objects” (Russo et al. 2014:134). Combined, these studies imply that the domestic and ceremonial domains merged at ring midden sites and that the two realms were likely not viewed as separate by past people; this in turn suggests that they should not be interpreted separately by present archaeologists.

Ethnohistoric accounts of Native groups in the South indicate that plazas served as essential public spaces dedicated to community celebrations, games, religious ceremonies, and diplomatic events (Black 1967:514-522; Knight 1989; Rogers et al. 1982:Tables 1 and 2). Knight (1989:283-284) takes the theoretical centering of the plaza even further by suggesting that the practice of constructing mounds may have first developed due to the piling up of debris associated with periodic cleaning and purification of central open spaces. In arguing for this

much less mound-centric view, he cites the Muskogean term *tadjo*, referring to the mounds or ridges of debris that formed during the annual cleaning of square grounds.

In viewing the evidence from Feltus together with that from a geographically and temporally expansive review of sites, it is clear that the existence of plazas is essential rather than incidental to the arcuate site form. Despite this, plazas are chronically underdiscussed in interpretations of both mounded and non-mounded landscapes. The variable vocabulary used to describe empty spaces makes a comprehensive review of known plaza spaces difficult. Definitions of the term often emphasize the role of permanent architecture in bounding such spaces; however, the identification of a plaza should not be dependent on the presence of mounds. For that reason, taking a less mound-centric view will open our eyes to many additional cases from which to build more robust interpretations (see Kassabaum 2019). Moreover, it is likely that plaza spaces often go unidentified, especially at non-mound and non-shell-bearing sites, leading to fewer descriptions in the literature. Thus, we must both make more explicit efforts to identify empty spaces within site landscapes through systematic survey and undertake more focused investigations of known plaza spaces. From this foundation, we will undoubtedly be able to form a more complete understanding of the functions and meanings of arcuate sites in the South.

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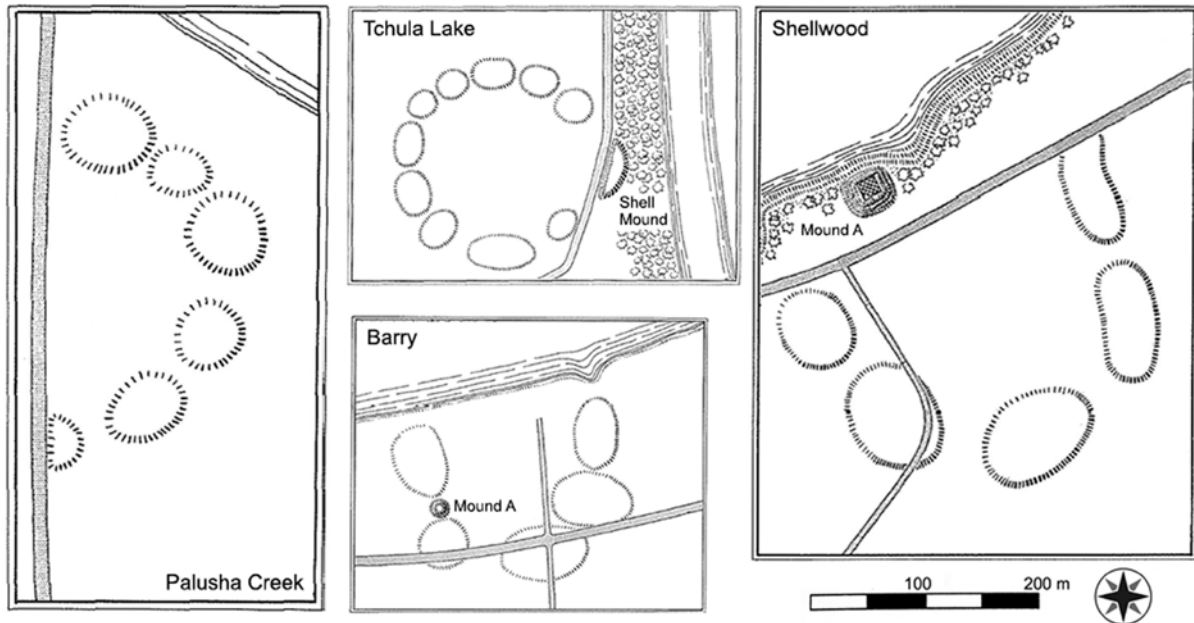


Figure 1. Site plans of “Tchula Lake pattern” ring middens along the Yazoo River and nearby streams. Dashed areas represent concentrations of midden (after Phillips 1970: figs. 77, 80, 133, and 149).

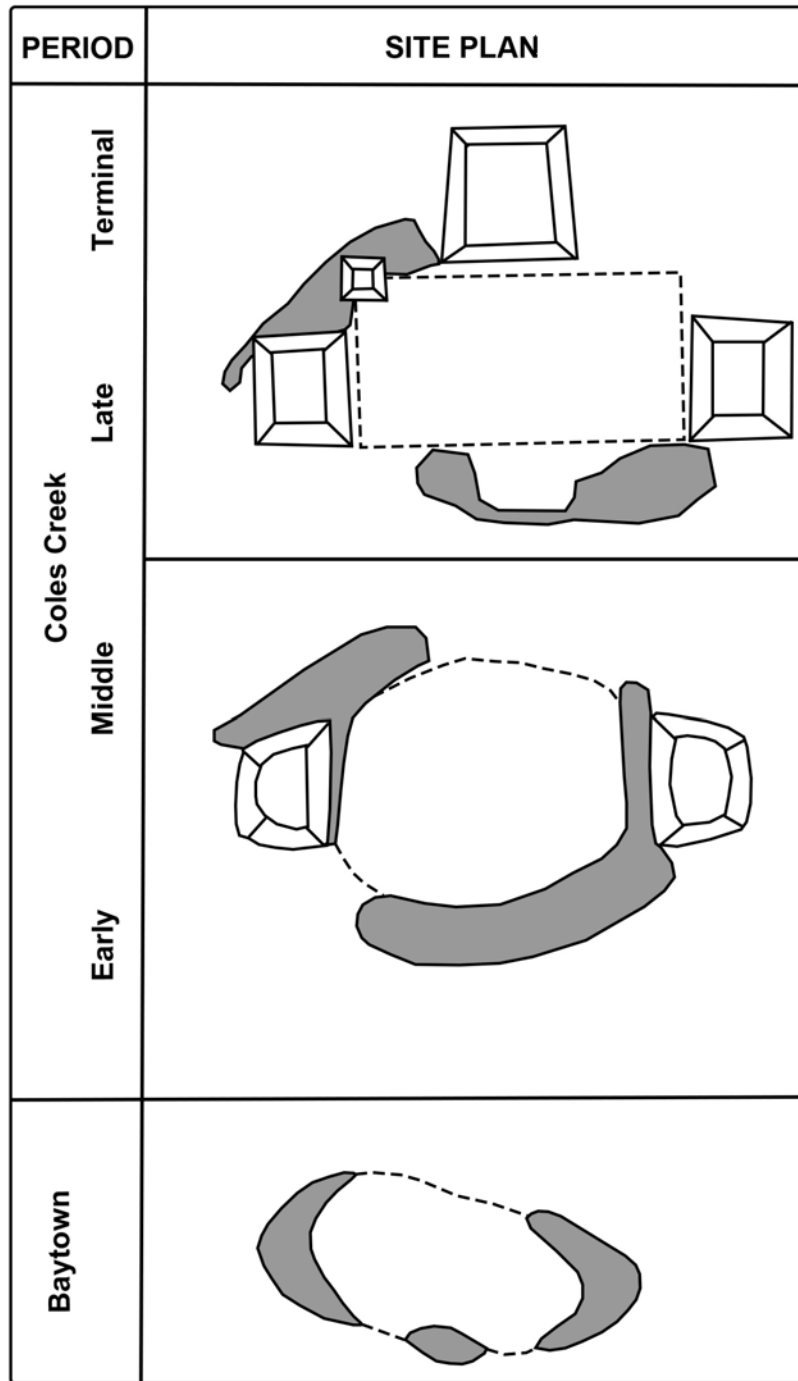


Figure 2. Phase sequence at Greenhouse showing development of the Black River site plan (after Belmont 1967:28–29). Gray areas represent concentrations of midden; dashed line outlines the hypothesized plaza.

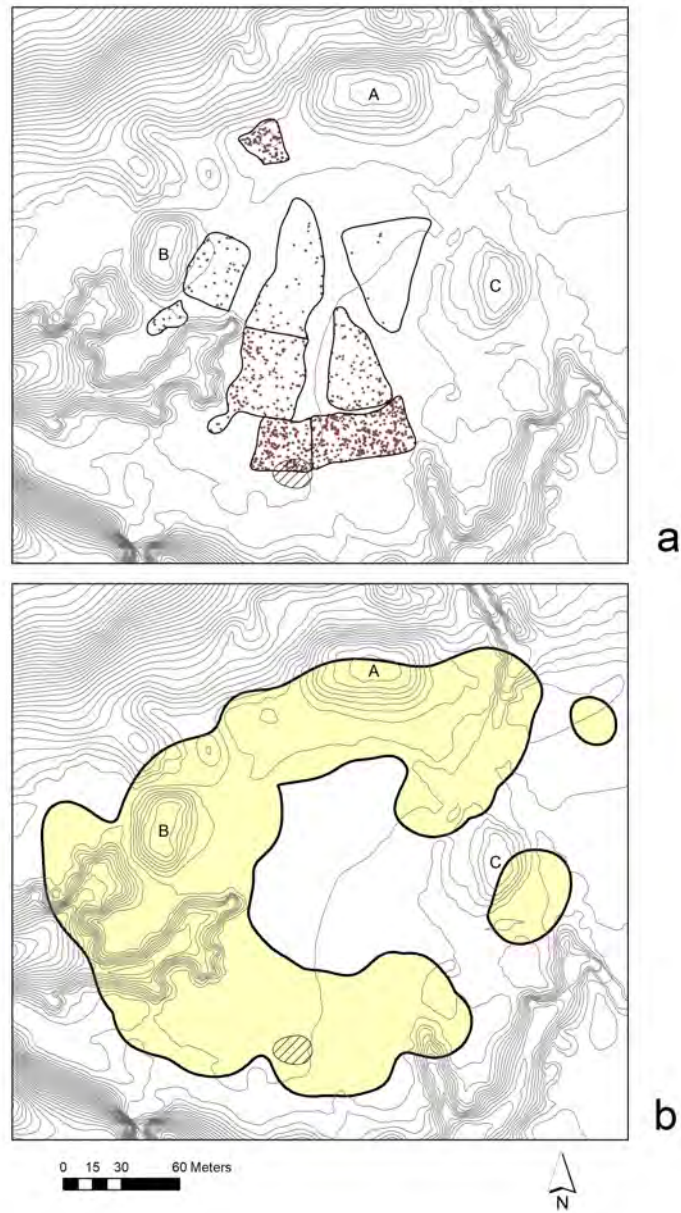


Figure 3. Pottery densities at Feltus. (a) Dot-density map showing the relative abundance of pottery in our initial surface-collection areas. (b) The ring midden (shaded), based on isopleth map of high pottery densities recovered in a grid of shovel test pits. Discontinuities in the eastern portion of the ring may be more apparent than real, perhaps due to recent road-building and erosion. Only Mounds A–C still survive. The former location of Mound D is indicated with a shaded oval. Contour interval is 1 m.

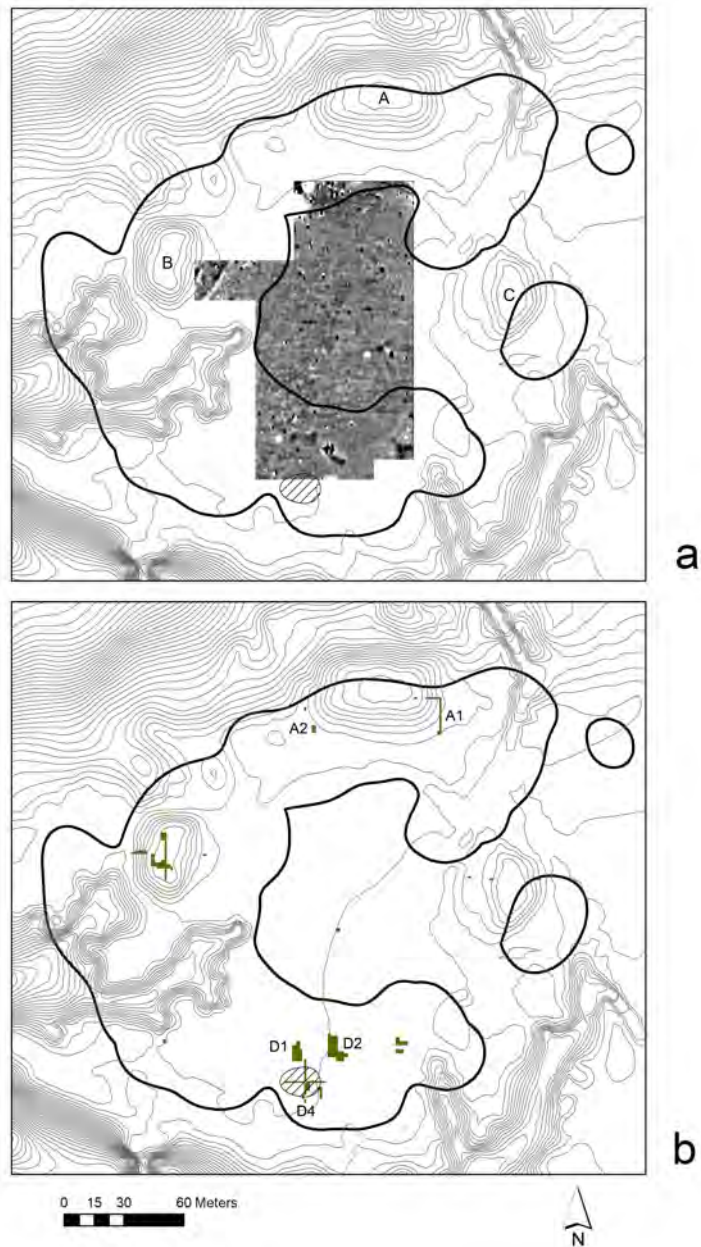


Figure 4. Gradiometer survey and excavated areas at Feltus, with the ring midden outlined for comparison. (a) Gradiometer results showing magnetic anomalies as dark patches (after Haley and Johnson 2008); note that the large anomalies occur only within the ring midden, while the plaza is relatively clear. (b) Extent of the 2006–2019 excavations; note that the largest sampling of the ring midden comes from the localities near Mounds A and D. Blocks D1 and D4 were areas of post ritual dating to the Sundown and Ballina phases, with no evidence of domestic structures. D2 contained three large, silo-shaped pits dating to Sundown times, later covered by feasting refuse dating to the Ballina phase. A1 yielded an area of possible domestic structures, later covered by feasting debris and ritual posts, all dating to the Ballina phase. A2 contained feasting refuse related to mound use in late Ballina times, but no ritual posts or domestic structures.