

Between Surface and Summit: the Process of Mound Construction at Feltus

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ABSTRACT Geophysical methods that explore depths more than 1 m below the surface were employed at Feltus (22Je500), a Coles Creek period (AD 700–1200) mound-and-plaza group in southwestern Mississippi, USA. It is difficult to assess the internal structure of large platform mounds such as those at Feltus using excavation and traditional geophysical techniques alone. As a result, such investigations often focus only on activities that took place during and after the final stage(s) of construction. Our 2012 research at Feltus utilized electrical resistivity tomography and downhole magnetic susceptibility to examine the internal structure of two platform mounds at depths beyond those commonly targeted by shallow techniques. These methods revealed mound stages, prepared floors, midden and pit features, and construction attributes within the fill episodes. By refocusing our attention on the process of mound building rather than the final use of the mound summits, this research broadened our view of the role of monuments in creating and strengthening community ties. Copyright © 2014 John Wiley & Sons, Ltd.

Key words: electrical resistivity tomography; downhole magnetic susceptibility; monument construction; stratigraphy; earthen platform mounds; eastern North America

Introduction

Historically, studies of mounds in the USA have emphasized their post-construction use (as either activity platforms or burial locations) through analysis of the cultural remains from mound tops and plazas (Sherwood and Kidder, 2011). Such studies have tended to focus on mounds as static structures rather than mound *building* as a dynamic process (Pauketat and Alt, 2003; Sherwood and Kidder, 2011; Ortmann and Kidder, 2013). Here we discuss the use of geophysical techniques that explore depths beyond those commonly targeted in shallow geophysics, that is, more than 1 m below surface, to provide a more

dynamic view of mound construction and use at the Feltus site in southwestern Mississippi, USA.

We used two geophysical techniques, electrical resistivity tomography and downhole magnetic susceptibility, with two goals in mind: (i) to relocate and map the extent of subsurface archaeological features that had previously been encountered at the site (e.g. clay floors, burned features, and middens); and (ii) to further assess the nature of mound construction through an investigation of stratigraphy (Henry and Johnson, 2012). In addition to locating and tracing the extent of mound surfaces, our research revealed previously unknown midden deposits and feasting pits, and deepened our understanding of the techniques and cadence of mound construction. By refocusing our attention on the process of mound building rather than the final use of the mound summits, this research broadened our view of the social relationships that may have been created, negotiated and enacted during the site's use. A more dynamic view of mound building emphasizes the

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variety of functions that platform mounds may have served throughout their lives and moves us away from the assumption that all platform mounds served primarily elite functions.

The Feltus mounds

Coles Creek culture flourished in the southern part of the Lower Mississippi River Valley from AD 700 to 1200. Coles Creek sites are best known for a distinctive pottery style and flat-topped mounds arranged around plazas (Steponaitis, 1986, p. 385; Kidder, 2002, p. 85). Due in large part to the presence of these platform-mound-and-plaza complexes, archaeologists often look to Coles Creek for early evidence of sociopolitical hierarchy and other defining characteristics of later Mississippian societies. Although some Mississippian traits do have their roots in Coles Creek developments, Coles Creek also represents a continuation of many earlier patterns. Gaining a better understanding of the nature of Coles Creek society relies on gathering detailed knowledge about the variety of activities that took place on and around the mounds.

The Feltus mound group (22Je500) is a well-preserved Coles Creek site in southwestern Mississippi (Figure 1). It is situated on the edge of 30-m-high loess bluffs

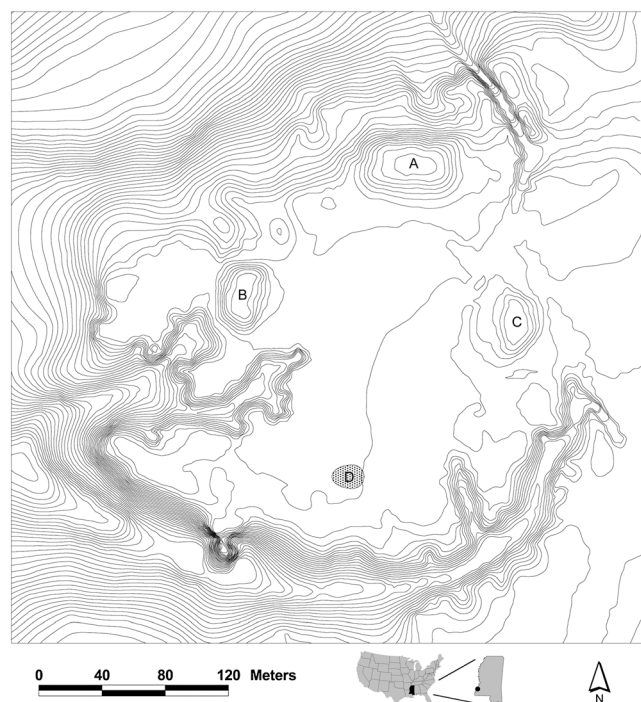


Figure 1. Topographic map of the Feltus Mounds in southwestern Mississippi. Contour interval, 1 m. Note that Mound D no longer exists, and only its former location is shown with stippling.

overlooking the Mississippi alluvial valley. The site originally consisted of four platform mounds symmetrically arranged around a plaza. Three mounds (A, B and C) stand today, but the smallest (D), at the south end of the plaza, was destroyed sometime between 1935 and 1947. From 2006 to 2011, we excavated in each of the three extant mounds and in the south plaza near the former location of Mound D. These excavations revealed a great deal about the constructional history and use of the mounds (Steponaitis *et al.*, 2007, 2010, 2012; O'Hear *et al.*, 2009).

Mound A, on the north side of the plaza, is 7 m tall. Initial investigations showed that the mound was built in three stages: an original construction 2 m high, capped by two massive fill deposits that raised the mound an additional 5 m. The mound was built atop an extremely rich, dense, and well-preserved midden resulting from one or more rapid dumping episodes, probably associated with feasting (Kassabaum, 2013). However, unlike many other Coles Creek mounds, Mound A at Feltus yielded no evidence of wooden buildings or occupational debris on its summits. This indicates either that its primary use was not as a foundation for a building, or that all evidence of such use was carefully removed prior to the next phase of mound construction.

Mound B is 6 m tall and was found to have an internal structure different from that of Mound A, with five stages of construction clearly evident. Each stage was veneered with a thin clay cap, and some of the surfaces showed evidence of postholes and fire-reddened floors, suggestive of burned wooden buildings.

Mound C, 4 m tall, was excavated by Warren King Moorehead in 1924 (Moorehead, 1932). He found disarticulated human remains and bundle burials with virtually no grave goods — a typical Coles Creek pattern (Kassabaum, 2011). A flank trench excavated in 2006 exposed two stages of construction and coring near the summit revealed at least one more. Moorehead's burials were all associated with the final stage and their inclusion may represent a decommissioning event. Moorehead also excavated Mound D, at the south end of the plaza, and found several bundle burials suggesting that it was similar in form and function to Mound C.

Our excavations thus revealed dramatic structural and functional differences among the mounds. Mound A showed little evidence of surfaces and no evidence of buildings; Mound B showed multiple, clearly defined surfaces with prepared floors and buildings; and Mounds C and D were connected with mortuary activities. These dramatic differences in mound function speak to the importance of determining rather

than assuming the purpose and meaning of platform mounds within Coles Creek society. That said, due largely to the limitations that time and budget put on the extent and scope of excavation, many aspects of the mounds' constructional histories and functions remained unclear.

Geophysical methods

Recently, archaeologists have begun to go beyond using geophysical technologies as mere prospection tools focused on finding targets for excavation. Geophysical datasets are now used in the creation and testing of archaeological and anthropological hypotheses (Kvamme, 2003; McKinnon, 2009; Conyers and Leckebusch, 2010; Monaghan and Peebles, 2010; Thompson and Pluckhahn, 2010; Henry, 2011; King *et al.*, 2011; Thompson *et al.*, 2011; see also contributors to this issue). Our research at Feltus demonstrates how the geophysical examination of depths beyond those commonly targeted by shallow techniques can aid in the assessment of site structure and organization in monumental earthen constructions, when interpreted within the context of an established site stratigraphy.

Electrical resistivity tomography (ERT) is a method that measures the ability of the Earth's subsurface to resist an introduced electrical current. Electrical resistivity (ρ), a material's resistance to the flow of electric current, is affected by a wide range of geological variables, including but not limited to, porosity, degree of saturation, pore-water resistivity and clay content. Although not commonly used in archaeological contexts, ERT has been successfully applied across Europe to explore the internal structure of burial mounds, buried buildings and barrows (Tonkov and Loke, 2006; Astin *et al.*, 2007; Nuzzo *et al.*, 2009.). The ERT data at Feltus were collected with the Advanced Geosciences SuperSting R8 IP eight-channel memory earthen resistivity and IP meter (56 probe). Resistivity data were collected in both dipole–dipole and inverse Schlumberger arrays with an electrode spacing of 50 cm in four roll-along surveys (generated by moving sections of probes along the profile to create longer pseudosections). Apparent resistivity data collected with the SuperSting were processed using the Advanced Geosciences EarthImager two-dimensional software package. We inverted our pseudosections using the smooth model inversion method. This suitably inverted our results from apparent resistivity to the presented resistivity values in Ohm-m, while maintaining root mean square values below 3% and L_2 norm values below 1. Thus, we feel our inverted

pseudosections do not include any unnecessary filtering or overprocessing that sometimes can affect the outcome of inversion processes.

Downhole magnetic susceptibility (DMS) is one of the newer geophysical instruments developed specifically for archaeology (Dalan, 2001). This instrument consists of a small sensor that is lowered into core-holes removed with an Oakfield-like, push-tube soil corer. The DMS technique measures volume magnetic susceptibility (κ) to a maximum depth of 3 m below surface (Dalan, 2006, p. 162). The system was set to measure volume susceptibility at a resolution of 1×10^{-5} SI units (Dalan, 2006, p. 170). The same induced magnetic features that can be detected with the in-phase component of a common electromagnetic induction instrument (i.e. burned surfaces, midden pits, mound stages, enriched living surfaces, and buried A-horizon soils) are ideal for vertical exploration with the downhole system. At Feltus, DMS data were collected with the Bartington MS2H downhole sensor. Readings were obtained every 2 cm at depths ranging from 10 to 300 cm below the surface. Data collected with the MS2 system were visualized as both scatter-plot core lines and interpolated multicore profiles in Golden Software's Voxler software. The profiles received minimal processing with a smoothing filter selected in that program.

Results

The purpose of the 2012 investigations included testing the reliability of hypotheses of mound stratigraphy developed from excavations undertaken from 2006 to 2011. We hoped to determine if strata identified in previously excavated trenches extend more broadly, and also to identify heretofore-unrecognized mound surfaces and other important features. Ground-truthing excavations were undertaken after the geophysical work, the results of which will be subsequently presented. Both ERT and DMS were used on Mound B, while DMS alone was used on Mound A.

Mound B

Geophysical investigation of Mound B consisted of four ERT transects (three oriented east–west and one oriented north–south) and one transect of DMS cores extending across the east flank (Figure 2). The corresponding ERT pseudosections each show a lateral band of moderate resistivity near the surface of the mound at an elevation of approximately 72.8 m (above mean sea level), as well as another below it at approximately

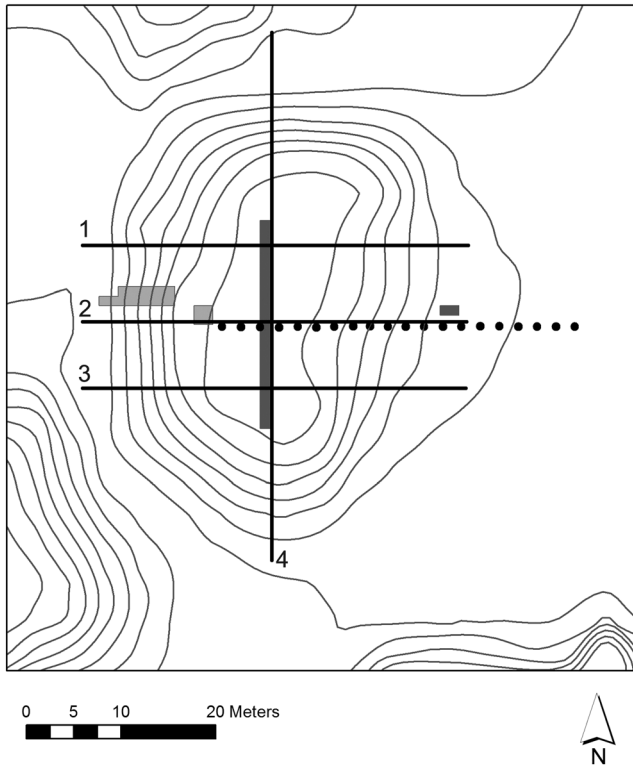


Figure 2. Map of Mound B at Feltus, showing ERT transects (solid lines), DMS transect (dotted line), 2006–2011 excavations (light gray units), and 2012 ground-truthing excavations (dark gray units).

71.8 m exhibiting low resistivity (Figure 3). High-resistivity anomalies are consistently present below the lateral low-resistivity anomaly. In the centre of pseudosection 3, a roughly trapezoidal, low-resistivity anomaly is visible near the N396 grid coordinate (Figure 3c). At either end of pseudosection 4, additional low-resistivity anomalies angle downward following the slope of the mound (Figure 3d). The southernmost of these angling anomalies closely matches the position of the trapezoidal anomaly in pseudosection 3.

A transect of DMS cores was situated to coincide with ERT pseudosection 2. Results from these cores indicate a linear area of high susceptibility beneath the low-lying apron that extends east of Mound B at an approximate elevation of 68.8 m (Figure 4). Additionally, four lateral anomalies of high susceptibility are present inside the mound at regularly spaced intervals (at approximately 72.8 m, 71.8 m, 70.8 m and 69.7 m).

When the position of the horizontal anomalies identified by these two different techniques is compared to the known positions of internal mound features, we can gain a more accurate depiction of the geophysical results, thus adding to our understanding of the process of monumental construction at Mound B.

The upper linear high in the DMS data and the upper low-resistivity anomaly correspond well with the top-most surface identified in previous excavations (B.S4). The next surface down (B.S3) corresponds with the lower portion of the linear, low-resistivity anomaly in the ERT and the second high in the DMS. The buried A-horizon (B.S0) beneath the mound is visible only in the DMS data, where it shows up strongly. From the flank trench excavated on the western slope during 2006 and 2007, we know that there are two additional surfaces between B.S0 and B.S3 but their exact elevations are not known on the eastern side of the mound. The additional linear bands evident in the DMS data probably mark these two additional surfaces (B.S1, B.S2). Thus, the DMS technique more reliably identified surfaces in Mound B when compared to results of the ERT. Our ability to see B.S1 and B.S2 further suggests that DMS may be able to identify previously unidentified surfaces in other mounds.

Following geophysical examination of Mound B, ground-truthing excavations were undertaken to determine the nature of the uppermost surface and to investigate the sloping, low-resistivity anomaly at the south end of the mound. A large flank midden originating from the southernmost edge of B.S4 matches the position of both the trapezoidal anomaly in pseudosection 3 and the southern sloping anomaly in pseudosection 4 (Figure 5). The trapezoidal appearance of the anomaly may suggest that the midden deposit is not spread evenly across the entire southern flank, but that there was a single dumping location from the top of the mound. Furthermore, the presence of an almost identical anomaly at the northern end of pseudosection 4 may indicate a flank-midden deposit there as well, which unfortunately fell just beyond the limits of our 2012 ground-truthing excavations.

Our investigations on Mound B largely confirmed and added supporting evidence for our previous interpretations of the mound's construction sequence and function. The identification of flank-midden deposits provided additional information regarding the use of Mound B. Moreover, the broader image of the three confidently identified surfaces and confirmation of two additional surfaces on the mound's eastern slope verified that this portion of Mound B was built in a typical Coles Creek fashion, with construction episodes increasing the height of the mound without increasing its footprint (cf. Ford, 1951, p. 33, 38; Belmont, 1967, p. 29). This construction method contrasts with later, Mississippian mound building, which is characterized by the addition of mantles that increase both the height and the footprint of the mound (Belmont, 1967; Jefferies, 1994). In this case, the excavated stratigraphy and ERT pseudosection 4

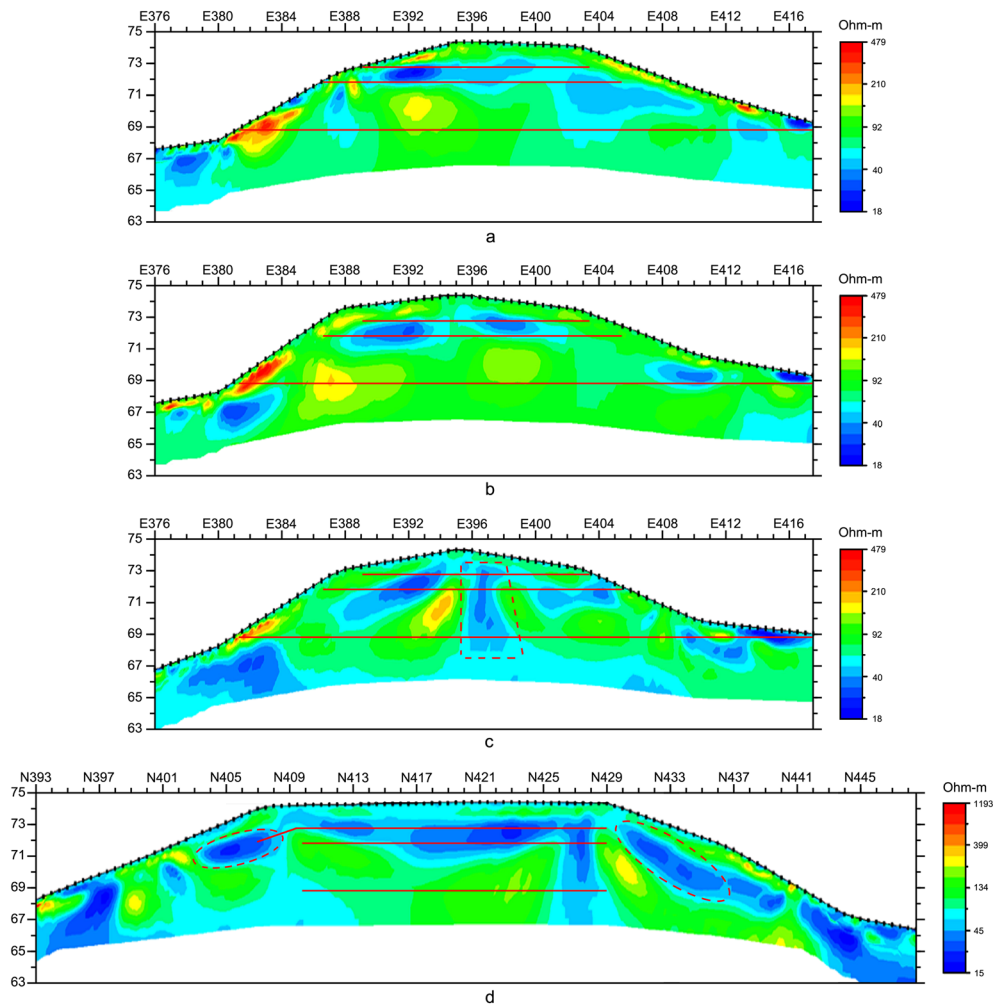


Figure 3. The ERT pseudosections of Mound B: (a) east-west transect 1, (b) east-west transect 2, (c) east-west transect 3; (d) north-south transect 4. Solid lines indicate elevations of surfaces encountered during excavations: (from bottom) B.S0, B.S3 and B.S4. Dashed lines surround confirmed and possible flank middens. Elevations (above mean sea level) and horizontal grid coordinates are denoted in metres. This figure is available in colour online at wileyonlinelibrary.com/journal/arp

show that the final stage, covering the flank midden, was built more in line with Mississippian practice, as the mound's footprint was significantly enlarged on the south and (probably) north flanks. This final mantle was among the latest contexts at Feltus. This stage is

contemporary with Mississippian cultures elsewhere and may indicate a shift to Mississippian-like construction methods and patterns of mound-use. Although not yet completed, analysis of the materials recovered from the flank midden may shed light on whether the elite

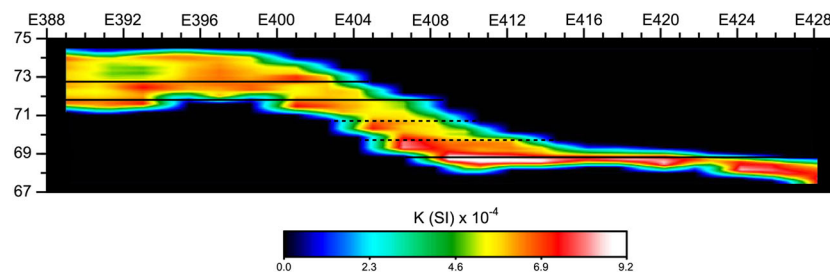


Figure 4. The DMS profile on east flank of Mound B. Solid lines indicate elevations of surfaces encountered during excavations: (from bottom) B.S0, B.S3 and B.S4. Dotted lines indicate elevations of surfaces inferred from the DMS profile: (from bottom) B.S1 and B.S2. Elevations and horizontal grid coordinates are denoted in metres. This figure is available in colour online at wileyonlinelibrary.com/journal/arp

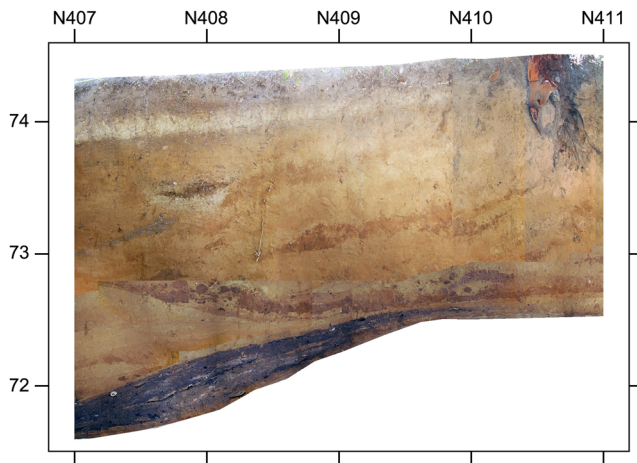


Figure 5. Photomosaic profile of the southern end of the 2012 ground-truthing trench on the summit of Mound B. The dark, sloping flank midden associated with surface B.S4 is clearly visible at the bottom of the profile. This sloping midden also appears clearly in the ERT pseudosections (see Figure 3a and d). Elevations and horizontal grid coordinates are denoted in metres. This figure is available in colour online at wileyonlinelibrary.com/journal/arp

functions of platform mounds also became more explicit during this time.

Mound A

Geophysical investigation of Mound A consisted of two transects of DMS cores on the mound's east and south flanks (Figure 6). In this case, identifying heretofore-unrecognized mound surfaces or evidence of

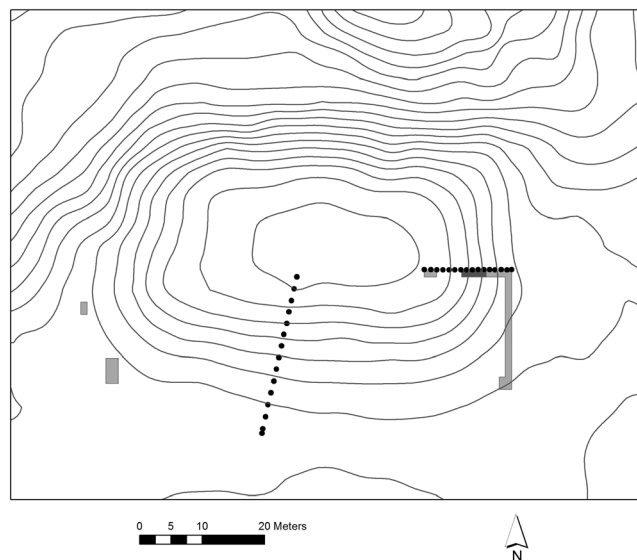


Figure 6. Map of Mound A at Feltus, showing DMS transects (dotted lines), 2006–2011 excavations (light gray units) and 2012 ground-truthing excavations (dark gray units).

summit use was the primary goal. The cores on the eastern flank were situated parallel to, and 20 cm north of, a flank trench that was initiated in 2006 and completed in 2012, after the geophysical work was undertaken. This DMS profile exhibits a linear area of high susceptibility across the mound profile at an elevation of 73.4 m (Figure 7). Just below this linear anomaly are two exceptionally high susceptibility readings near the E523 and E526 cores. Additionally, a hump of high susceptibility appears at approximately E533 between 70 and 71 m in elevation. This anomaly correlates closely in shape and location with an earthen berm constructed inside the mound, and identified in our 2006 excavation. A similarly located hump at the base of the south profile (at approximately N480 between 69.5 and 70.5 m) may indicate that a berm was also constructed there. Finally, a lateral band of high susceptibility is present just below this anomaly at approximately 69.6 m. An additional series of DMS cores was placed on the south flank of Mound A and this profile shows a linear area of high susceptibility corresponding in elevation with the linear enhancement on the eastern flank. Further, the high susceptibility near the base of the mound corresponds with the lowest band of high susceptibility on the eastern flank, both running roughly level at approximately 69.6 m in elevation. Finally, at least two

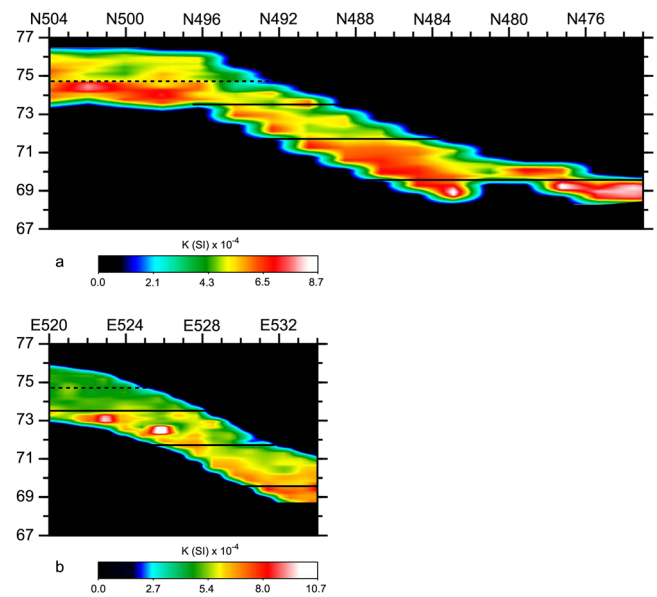


Figure 7. The DMS profiles of Mound A: (a) south flank and (b) east flank. Solid lines indicate elevations of surfaces encountered during excavations: (from bottom) A.S0, A.S1 and A.S2. Dotted line indicates the elevation of a surface inferred from the DMS profiles: A.S3. Elevations and horizontal grid coordinates are denoted in metres. This figure is available in colour online at wileyonlinelibrary.com/journal/arp

additional bands of high susceptibility readings are visible in the southern flank profile.

Previous excavations identified three surfaces in this mound: A.S2 at an elevation of 73.5 m; A.S1 at 71.7 m; and A.S0, a dense submound midden at 69.55 m. The highest of these surfaces can be seen in the DMS profiles of both the southern and eastern flanks, the middle surface can be seen only in the southern flank, and the submound midden is clearly present in both flanks (Figure 7). An additional strong lateral anomaly of high susceptibility is apparent in the southern flank profile at an elevation of 74.5 m (see Figure 7a). Oakfield push-tube soil cores removed from Mound A in advance of the DMS crossed this upper anomaly, and revealed an ashy layer with burned clay at approximately this level. While this burned feature was not encountered in our 2006 summit excavations, there was a subtle but continuous change in fill at roughly this elevation. The DMS data suggest that this could be a surface that is more distinct in some locations than others.

Ground-truthing excavations were undertaken on the eastern slope of Mound A in 2012 to investigate the nature of the previously identified A.S1 (which did not show up clearly on the eastern DMS profile) and to determine what caused exceptionally high susceptibility readings just below A.S2. The latter surface shows clearly in the excavation profiles as an

unburned floor veneered with a thin layer of white sediment (Figure 8b). We cannot confidently say why its signature is not stronger in the DMS data, but it indicates that veneering does not enhance induced magnetism to the levels that burning does.

Interestingly, the easternmost of the two high anomalies on the eastern flank of Mound A (see Figure 7a) corresponds with a large, bathtub-shaped fire pit (Figure 8a) — a type of feature believed to be used for cooking large animals (Ford, 1951, p. 104–105). The similar signature just to the west of this pit is almost certain to be a second such pit. The presence of these pits further supports a link between feasting and mound building at Feltus.

Discussion

The use of ERT and DMS techniques on Mounds A and B at Feltus allowed us to assess more completely the nature of mound construction and use through an investigation of internal stratigraphies that lie below the depths that commonly used geophysical instruments can see. We were able to: (i) relocate and map the extent of three previously identified surfaces; (ii) confirm the presence of, and record, three additional surfaces; (iii) trace the extent of pre-mound midden and buried A-horizon soils; (iv) identify previously

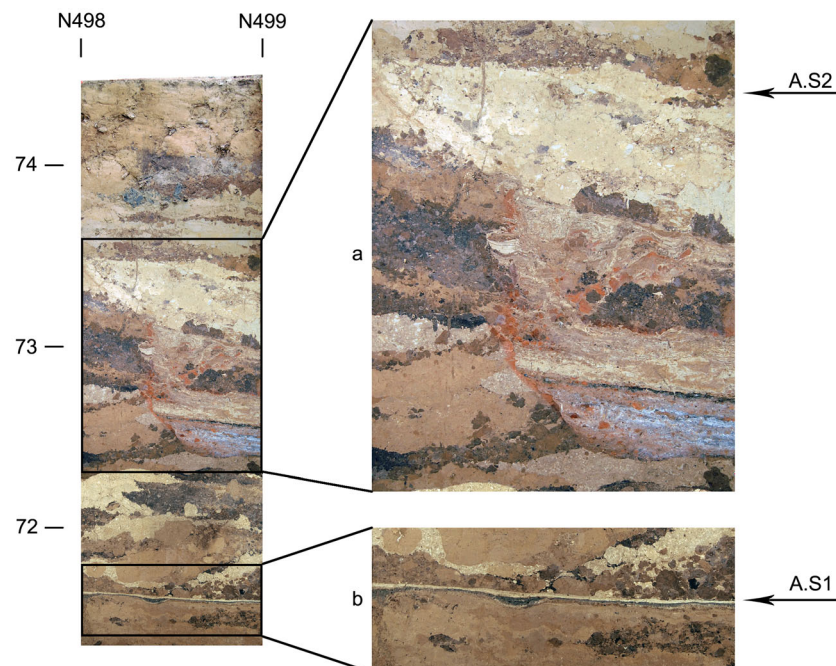


Figure 8. Features encountered in 2012 excavations on east flank of Mound A: (a) surface A.S2, with a bathtub-shaped fire pit below; (b) surface A.S1, floored with a white clay veneer. The profile shown is of the west end of a 1-m-wide trench; only the southern end of the fire pit appears in the profile. Elevations and horizontal grid coordinates are denoted in metres. This figure is available in colour online at wileyonlinelibrary.com/journal/arp

unknown features such as flank midden deposits and fired pits; and (v) record differential fill zones within mound construction episodes. Although our initial interpretations of the constructional history and function of Mound B were largely confirmed by the DMS data, the use of ERT was successful at identifying new midden features associated with the penultimate mound summit. The ERT allowed us to identify two flank-midden deposits and roughly determine their shape and extent, while ground-truthing excavations allowed us to determine the character and contents of the midden.

In the case of Mound A, the discovery of a previously unrecognized burned surface and two large cooking pits using DMS greatly changed our interpretation of the mound's function and history of use. By using geophysical methods to assess areas of earthen monuments between the surface and the summit, we feel that we have more completely evaluated these Coles Creek period mounds than we could have using either traditional excavation strategies or shallow geophysical techniques. For instance, the probable identification of a construction berm in the east slope profile (and possibly also in the south slope profile) reinforces the idea that DMS, as well as other geophysical techniques that explore further than 1 m below surface, may allow us to see interesting features *within* mound stages (Monaghan and Peebles, 2010; Henry *et al.*, 2014). Moreover, we were able to see evidence of mound use from earlier stages in Mound A's construction history.

These features indicate that feasting activity took place not only before the mound was built, but also during the multiple phases of its construction. The midden under Mound A is over 20 cm thick and full of broken pottery, charcoal and animal bones. Numerous lines of evidence suggest that the midden was deposited rapidly and that it was covered by mound fill immediately after its deposition. Thus, both the submound midden and the bathtub-shaped pits are directly associated with mound construction episodes and may indicate that feasting and mound building were linked as parts of a ritual cycle. Elsewhere, Kassabaum has argued that the nature of the material objects and substances included in this sequence suggest a ritual cycle that emphasizes the similarities and connections between the participating group rather than the differences among its members (Kassabaum and Nelson, 2014; Nelson and Kassabaum, 2014).

In his often-cited article, Trigger (1990, p. 119) states that monumental constructions have two principal defining features: (i) their scale and elaboration exceed the requirements of mere utilitarian function; and (ii) their

construction necessitates some organization of labour and resources beyond that of the household unit. He goes on to argue that because of their labour and surplus requirements, monumental constructions correlate with increasing stratification and differentiation within a society. This view has historically dominated interpretations of platform mounds, especially when combined with sixteenth and eighteenth century European accounts of the American South that connect chiefly status with mound-top residences. However, recent literature on mounds in this region has emphasized the importance of understanding the *variety* of roles that mounds might have played in past societies (Lindauer and Blitz, 1997; Pauketat and Alt, 2003; Milner, 2004; Pauketat, 2007; Kassabaum *et al.*, 2011).

It is particularly important to recognize the wide variety of mounds' potential functions and meanings in the Coles Creek case. Due to its position just before the rise of decidedly hierarchical Mississippian cultures in the region, Coles Creek social organization has been the focus of much recent research (Kidder, 1992; Kidder and Fritz, 1993; Wells, 1998; Barker, 1999; Schilling, 2004; Roe, 2010; Kassabaum, 2011). Like later Mississippian sites, Coles Creek mound sites are characterized by large platform mounds arranged around open plazas and this has commonly been taken as evidence for institutionalized status differentiation. However, Coles Creek sites lack other traits commonly associated with this type of organization. For example, Coles Creek sites lack evidence for large-scale consumption of crops (Kidder and Fritz, 1993; Fritz and Kidder, 2000; Roberts, 2006; Listi, 2008). Likewise, the Coles Creek mortuary programme looks egalitarian and there is no evidence for long-distance trade or accumulation of status items (Kassabaum, 2011). The material evidence for Coles Creek sociopolitical organization thus remains ambiguous, and it is important to consider the possibility that the Coles Creek platform mounds may not have served the same functions as their later Mississippian counterparts. Changes in mound construction practices from Coles Creek to Mississippian times may be indicative of these potential differences (Belmont, 1967; Jefferies, 1994).

Moreover, despite similarities in their final form, the mounds at Feltus show dramatic functional differences. Mound A was constructed rapidly in relatively few, large episodes. Its construction was associated with communal feasts and its summits show no evidence of buildings or regular, repeated use. Mound B was built more gradually and shows multiple, clearly defined floors with prepared surfaces and postholes. Its sequential summits show evidence of substantial summit use,

including at least some wooden constructions. Mounds C and D were connected with mortuary activities.

Finally, in order to fully acknowledge the variety of functions that platform mounds may have served, it is necessary to look at a mound's entire history. 'The question of mound function may be misplaced if by function we mean the end product and its use as a finished, unitary form after construction was complete ... [instead] it seems reasonable to infer the mound was a ritual feature whose significance lies, at least in part, in the act of its construction' (Ortmann and Kidder, 2013, p. 79). This focus on process is longstanding in the broader literature on monumental architecture (e.g. Tilley, 1994; Bender, 1998; Phear, 2007) and has been gaining wider acceptance within the USA (Knight, 1981, 1989; Pauketat and Alt, 2003; Sherwood and Kidder, 2011; Ortmann and Kidder, 2013). Given the necessary association between monumental constructions and communal building practices, it is likely that a large number of people would have played a part in the creation and interpretation of monuments during their construction (Bradley, 1991; Barrett, 1994; Brück, 2001; Pauketat and Alt, 2003; Ashmore, 2004; Pauketat, 2007). This communal production of meaning undoubtedly had the ability to expand the significance of monuments beyond the inscription of political power relationships as posited by Trigger (1990) and into the formation and negotiation of a group identity.

Innovations in geoarchaeological and geophysical techniques have greatly facilitated research on mound construction processes in North America (such as sediment selection, pace and duration of construction, specific construction techniques, and labour requirements) (Monaghan and Peebles, 2010; Sherwood and Kidder, 2011; Ortmann and Kidder, 2013). The use of geophysical techniques that target deep deposits allows access to deeply buried mound stages without the time and energy expenditure of traditional excavations. This access helps us to gain a more dynamic view of mound building, one that recognizes the role of communal building practices in maintaining social cohesion and creating group identities.

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