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## MISSISSIPPI PERIOD OCCUPATIONAL AND POLITICAL HISTORY OF THE MIDDLE SAVANNAH RIVER VALLEY

Keith Stephenson

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ABSTRACT OF DISSERTATION

Keith Stephenson

The Graduate School  
University of Kentucky

2011

MISSISSIPPI PERIOD OCCUPATIONAL AND POLITICAL HISTORY  
OF THE MIDDLE SAVANNAH RIVER VALLEY

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ABSTRACT OF DISSERTATION

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A dissertation submitted in partial fulfillment of the  
requirements for the degree of Doctor of Philosophy in the  
College of Arts and Sciences  
at the University of Kentucky

By  
Keith Stephenson

Lexington, Kentucky

Director: Dr. Richard W. Jefferies, Professor of Anthropology

Lexington, Kentucky

2011

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## ABSTRACT OF DISSERTATION

### MISSISSIPPI PERIOD OCCUPATIONAL AND POLITICAL HISTORY OF THE MIDDLE SAVANNAH RIVER VALLEY

Research focusing on the political economy of Mississippian mound centers in the middle Savannah River valley has prompted a reevaluation of current interpretations regarding societal complexity. I conclude the clearest expression of classic Mississippian riverine-adaptation is evident at centers immediately below the Fall Line with their political ties to chiefdom centers in the Piedmont, and especially Etowah. By contrast, those centers on the interior Coastal Plain were politically autonomous with minimal signatures in social ranking. The scale of appropriated labor and resulting level of surplus production, necessitated by upland settlement on the Aiken Plateau, fostered social contradictions making communally-oriented and decentralized societies more sustainable than hierarchical forms.

KEYWORDS: Chiefdom Society, Middle Mississippi Period, Savannah River Valley,  
Political Economy

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Keith Stephenson  
Student's Signature

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April 29, 2011

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MISSISSIPPI PERIOD OCCUPATIONAL AND POLITICAL HISTORY  
OF THE MIDDLE SAVANNAH RIVER VALLEY

By

Keith Stephenson

Dr. Richard W. Jefferies

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Director of Dissertation

Dr. Richard W. Jefferies

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Director of Graduate Studies

April 29, 2011

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DISSERTATION

Keith Stephenson

THE GRADUATE SCHOOL  
UNIVERSITY OF KENTUCKY

2011

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*Dedicated to the memory of my father,  
Donald Priestly Stephenson (1935-1985)  
“Though like the wanderer, the sun gone down,  
Darkness be over me, my rest a stone”  
--Sarah Flower Adams (1841)*

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arcane aspects of southeastern archaeology that she surely endured. And finally I thank my outside reader Richard Schein of the geography department who informatively and with humble grace noted the contradiction embedded in my political economy and my environmental determinism. I am grateful to Richard for his participation as a committee member during my dissertation defense.

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And by matter of course, there is Karl Marx and Friedrich Engels who raised our level of collective consciousness regarding the history of class struggle for so many, and the contradiction of economic monopoly by so few. Theirs was an ideology of social equality, a “simple plan” wholly distorted by the political aspiration of even fewer.

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## Chapter 1

### Introduction and Problem Orientation

By all appearances, the extant earthen mounds of the Mississippi period (ca. A.D. 1000 to 1600) found across the southeastern and lower mid-western regions of North America stand as symbolic monuments to hierarchically stratified polities and, by metaphorical extension, incipient forms of socio-political domination. Anthropological inquiry into these kinship-based, regional polities with social ranking, recast in neo-evolutionary terms as “chiefdoms” (*sensu* Service 1962; Sahlins 1963; Fried 1967), often has focused on political economies involving elite aggrandizement or the opposing forces of commoner defiance whether passively or agency oriented. The extent to which domination—via institutionally based power (Mills 1956; Mann 1986, 1993) or ideological hegemony (rule by persuasion and consent [Gramsci 1994])—and resistance are manipulated in the socio-political arena often is regarded as a measure of social complexity. The dialectical aspect of social complexity involves the level of contradiction embedded in *socio-economic intensification*, or those processes involving the intent—strategies and tactics—of aspiring elites (i.e., Speilmann 2002:195), and *social integration*, or those processes that allow people excluded from restricted ownership to feel they actually are benefiting in society (i.e., Lindauer and Blitz 1997:185).

The means of production of capital (i.e., social surplus in resources and labor) is central to the evolution of complex political economies. Social complexity is a direct historical consequence of the Neolithic Revolution (ca. 13,000 to 10,000 B.P.), which, as

delineated by V. Gordon Childe (1951), primarily involved the domestication of natural plant and animal resources. These artificial processes on biological selection eventually gave rise to substantial surplus production rapidly leading to the division of labor, craft specialization, social hierarchies, urbanization, and ultimately state-level institutions (Diamond 2002; Purugganan and Fuller 2009:843). To be sure, social differentiation appeared in some societies dependant not on horticulture but rather surpluses attained from naturally available resources, usually in coastal estuarine or interior-riverine habitats productive in either saline or freshwater fish and shellfish resources (for examples of complex hunter-gatherer societies in the Southeast see Marquardt 1988; Sassaman 2006). However, it was generally in those societies that produced horticultural or agricultural surpluses where social complexity, integration, and differentiation developed.

Social inequality was concomitant to increasing organizational complexity. Paynter defines the concept of complexity as the degree of internal differentiation and intricacy of social relations within a political system (1989:369). In Marxian terms, Paynter notes that inequality exists when individuals or groups are restricted from access to strategic resources, and this differentiation allows those with access to ability to dictate the actions of others (1989:369-370). These conditions are typical for societies with an established state-level administration, but incipient for traditional societies defined anthropologically as *chiefdoms*. In these “middle-range” societies, so-called because they exist at an evolutionary juncture between egalitarian (in a socio-economic sense) hunter-gatherers and bureaucratic states, people must be persuaded, rather than coerced, to commit themselves to cooperative participation in communal labor efforts that provide

advantages to only a few while denying hardly any social benefits to the many. What compels the majority of individuals in society to surrender their house-hold independence and community autonomy to domination by a minority elite? Attempting an answer to this foremost of sociological questions, anthropological archaeology turned to the “mid-range-” or chiefdom-level society, where a kin-based organizational system (i.e., mode of production) remained completely intact while dialectically supplanted by incipient forms of social inequality. So here I cross the Rubicon of Marxian political economy, broadly defined as the distribution of social wealth, with regard to the late prehistoric, Mississippi period polities in the southeastern U.S.

### **Mississippi Period Chiefdoms: An Archaeological Delusion?**

One such delusion, a whopper in fact, is encapsulated by the idea of the chiefdom...Social evolutionary thought, I argue, emasculates an archaeology of complexity in general. A comparative and historical reconsideration of eastern North America, I think, makes sense.

Pauketat 2007:3-4

Anthropological explanation regarding the evolution of complexity in society led to the definitional use of the “chiefdom” level of social organization as an ideal type to the precursor of bureaucratic, state-level governance. Ethnologists advanced the notion of chiefdoms in their discourse, and processualist archaeology extended the concept to perceived cultural formations in prehistory. As Patterson (2003:112) succinctly recounts, Elman Service (1962, 1975) pioneered the idea of chiefdoms, and Robert Carneiro (1981, 1991) became its leading materialist advocate. Moreover, Colin Renfrew (1973) first applied the idea of chiefdoms to interpret the archaeological record, and University of Michigan archeologists in the late 1970s explored the implications and limitations of the



concept in their attempt to refine its utility regarding late prehistoric society in the southeastern U.S. (Patterson 2003:112; see also Pauketat 2007:20-22 for discussion of Michigan school). The chiefdom label has been defined anthropologically as “a regional polity with institutional governance and some social stratification organizing a population of a few thousand to tens of thousands of people” (Carneiro 1981; Earle 1987). Chiefdoms are intermediate-level (small-scale) polities, bridging the “evolutionary gap” between sedentary, village-based communities and bureaucratic states (Johnson and Earle 1987). Although chiefdoms generally are recognized as variable social formations, characteristically the organization at this evolutionary scale requires a political hierarchy, or an overlapping series of hierarchies, for coordination and decision making (Johnson 1982) in which the advantages gained by a few within these political-economic systems result in a measure of social stratification (Sahlins 1958). As Earle (1997:14) notes, archaeologists often have used the distribution of monumental, public-works construction coupled with the presence of prestige goods as evidence of the evolution of chiefly societies (e.g., Renfrew 1973, 1974; Peebles and Kus 1977; Creamer and Haas 1985; Earle 1987).

It was Julian Steward (1948) who prompted use of the chiefdom label by describing the circum-Caribbean societies as headed by a “chief.” Oberg Kalervo (1955) defined the chiefdom as a regional consolidation of politically-autonomous communities, and followed Steward’s lead by describing the circum-Caribbean societies as chiefdoms. In turn, Marshal Sahlins (1958) recognized the practical application of the chiefdom concept in his ethnography of Polynesian social hierarchy. Advancing Sahlins’ research, Elman Service (1962, 1975) formalized the chiefdom concept by developing the notion

of surplus (re)allocation as a central feature of chiefly function. In his tribute-redistributive economy, surplus resources were paid in tribute to the political center, which in turn redistributed to areas where surplus was scarce or specific resources were unavailable. Foodstuffs and gifts were regularly redistributed at scheduled feasts and public gatherings. Further, as a “great many of the ethnologically known chiefdoms exist in habitats that consist of several ecological zones differentiated by climate, soil, rainfall, and natural products” (Service 1962:145), the redistributive network served to integrate communities located in diverse ecological settings. This system allowed chiefs to mobilize and pool excess natural and cultural goods specific to various communities or regions and mutually reapportion these goods. This system also insured against surplus shortfalls in natural resources for specific areas. Eventually, forthcoming critiques of Service’s functionalist model questioned his definition of the redistribution of commandeered surplus goods by chiefly elites as a means of provisioning society at large (Earle 1977; Peebles and Kus 1977; Carneiro 1981). The main critique, and one of the most intriguing as Wright (1984:45) points out, noted that “while food and goods are extracted as tribute from producers, actual distribution is characteristically to the lesser figures within the chiefly class, rather than to the whole populace.”

Further refinements of the chiefdom concept continued with that of Colin Renfrew (1974) who made the preliminary distinction between “group-oriented” and “individualizing” chiefdoms. He defines group-oriented chiefdoms as those “societies where personal wealth in terms of valuable possessions is not impressively documented, but where the solidarity of the social unit was expressed most effectively in communal or group activities,” and individualizing chiefdoms as those “societies where a marked

disparity in personal possessions and other material indications of prestige appears to document a salient personal ranking yet often without evidence of large communal meetings or activities” (1974:74). Terence d’Altroy and Timothy Earle (1985) elaborated on Renfrew’s distinction and described the differences in economic terms of “staple finance” and “wealth finance.” Blanton and colleagues (1996) advancing Renfrew’s (1974) and d’Altroy and Earle’s (1985) distinction, offered the concept of “corporate” and “network” where the approaches in corporate polity are more inclusive and emphasize the importance of the social group in opposition to individual wealth and social status. Chiefdoms structured through a network strategy would exhibit differences in individual wealth and prestige and individual leaders are likely to be highly visible as they aggrandize themselves through available mobilized surplus resources and labor. Steponaitis (1978) proposed a distinction between “simple” and “complex” chiefdoms, and this dichotomy has had the largest impact on Mississippi period research in the southeastern U.S. over the past 30 years.

Both Pauketat (2007:20-22) and Patterson (2003:116) credit the Michigan school for advancing the concept of chiefdom in the Southeast in the late 1970s and early 1980s. The research focus of the Michigan school can be credited to a seminal article by Christopher Peebles and Susan Kus (1977) discussing the social and ecological correlates of ranked societies or “chiefdoms” that can be applied as archaeological correlates to define these societies from prehistoric evidence. Peebles (1971:87-88) was the first to consider socio-political organization in the late prehistoric Southeast as chiefdoms when he evaluated archaeological data from the Moundville site in central Alabama in light of the “ranked society” as defined by (Fried 1960; 1967), and also the “chiefdom stage of

socio-culture evolution” as defined by Service (1962). Actual formal models of Mississippian society and settlement systems were first offered in Smith’s (1978) edited volume following his approach based on the determining environmental variables of the Mississippi River floodplain. By the mid-1980s, archaeologists had integrated the social model of Peebles and Kus (1977) and the ecological model of Smith (1978) to explain how ranked societies reliant on the floodplains of major drainages for agriculture in complement to wild resources developed the means of surplus production (Ferguson and Green 1984). Since this time, most models of Mississippian chiefdoms developed over the last 25 years incorporate aspects of these composite perspectives. Although most archaeologists currently acknowledge that chiefdoms are highly variable social formations, Pauketat (2007) recently has challenged the “chiefdom” paradigm as a delusion of “neo-evolutionary baggage,” especially for late prehistoric, Mississippi period societies. He argues for “others ways around the definitional impasses and evolutionary dead ends” with emphases on political structures and institutions that would bring a better understanding to social complexity specifically with regard to a more complete picture of regional history and agency.

Pauketat’s primary contention is that the chiefdom label obscures the variation within this complex social formation. It is with this understanding that my argument in this study is based on the variation that I find in the Mississippi period polities of the middle Savannah River valley. With this in mind, my research focusing on the political economy of Mississippian mound centers in the middle Savannah River valley has prompted a reevaluation of current interpretations regarding societal complexity. I conclude the clearest expression of classic Mississippian riverine-adaptation is evident at

centers immediately below the Fall Line with their political ties to Etowah and the central Mississippi River valley. By contrast, those centers on the interior Coastal Plain were politically autonomous with minimal signatures in social ranking. The scale of appropriated labor and resulting level of surplus production, necessitated by settlement in the uplands of the Aiken Plateau, fostered social contradictions making communally-oriented and decentralized societies more sustainable than hierarchical forms.

### **Chieftdom Models of Mississippi Period Society**

Is it possible that some men lord over others by making them believe in chimeras and that we're dumb enough to believe in all their talk?

—an artisan memoir in 18th-century France  
Jacques-Louis Ménétra (trans. 1986:171)

Initial studies of Mississippi period social formations followed normative criteria that characterized chieftdom-level societies as patterned structures with only slight dissimilarities in cross-regional organization. More recent discussions in the literature of Mississippian “chieftdoms” revolve around the notion of social complexity—herein defined as the degree of social inequality measured by the intensity of exploited communal labor ultimately resulting in the accumulation of social capital (Mississippian elites never exerted control over the means of production as societal customs remained embedded in a kinship system historically structured on a domestic-or household-based economy)—with a focus on such cultural constructs as polity scale, landscape settlement, labor organization, ritual-ceremony, ideology, tribute, communal feasting, and a primary emphasis on the local histories of particular regions (cf. Cobb 2003; Blitz 2009). Supplemental research into these basic sociological dimensions by way of the material

record has promoted a more sophisticated perspective of regional variation in Mississippi period social complexity (Cobb 2003:32). Consequently, alternative explanatory models have been offered to interpret dissimilarities in the organizational complexity of these late prehistoric social formations.

Numerous researchers view Mississippian chiefdoms as centralized, hierarchical social formations, and configure their models of these societies on information gleaned primarily from the largest, multi-mound sites in the Southeast. Others regard this approach to the study of Mississippian society as a “Top-down” perspective that does not accurately account for the occurrence of hundreds of smaller communities with only one or two mounds scattered throughout the southeastern region (e.g., Hammerstadt 2005a; Lornez 1996). A few (e.g. Cobb 2003; Muller 1997) further contend that, rather than linked into centralized hierarchies, these numerous, small mound centers are independent polities that have not completely broken with the communal aspect of kinship-ties, which forms the basis of small-scale society (*sensu* Sahlins 1972). Their position is predicated on the logic that if a preponderance of small mound centers can be considered the norm, then a low incidence of large, multi-mound sites can only represent aberrant social configurations. These objectionists to the “Top-down” model approach view the structure of Mississippian society as non-hierarchical, decentralized political entities. This latter position is based on the notion that no one was actually alienated from the means and resources of production in Mississippian society, and that it was only through the exploitation of surplus resources and labor via ideological manipulations of ritual ceremony that elite status in these societies was maintained and reproduced. I argue this viewpoint in my study of mound centers in the middle Savannah River valley, especially

with regard to the decentralized nature of these local formations as autonomous, small polities without hierarchical ties or connections in an axis of regional domination.

In general, all academic discussion of Mississippian social organization revolves around a debate as to whether these late-prehistoric societies are *centralized* or *decentralized* political formations. The foremost scenario regarding Mississippian social complexity rests entirely on aspects of a centralized, settlement-system hierarchy. Accordingly, chiefdoms are identified as either “simple” or “complex” based on a hierarchical arrangement of primary and secondary mound centers. Transformation in the political system stems from a pattern of alternation between lower-and higher-order administrative configurations (Blitz 1999:577). This simple-complex chiefdom cycle model is advanced by Anderson (1994) especially with regard to his research domain, the cycling—integration and disintegration—of chiefdoms in the Savannah River valley.

Closely affiliated with the simple-complex paradigm is that of Hally’s (1993, 1996) paramount chiefdom model involving spatial size, patterned regional distribution, and the temporal duration of centralized polities predicated on the extent of mound construction and use. Blitz succinctly describes the paramount chiefdom phenomenon as a set of ever-shifting alliance networks among relatively independent polities “perpetuated not by a fixed administrative order, but by threat, warfare, and temporary extortion inflicted on the weak by the powerful” (1993:15-16; cited in 1999:580). Archaeologically speaking, the paramount chiefdom classification is problematical because as an ephemeral, multi-ethnic social formation it has no obvious settlement pattern or material-culture correlates (Blitz 1999:580), and is only defined on the basis of ethno-historic records that specifically promotes the 16th-century Coosa province

stretching from present-day eastern-central Tennessee, northern Georgia, into northeastern-central Alabama as the premier paramount chiefdom (*sensu* Hudson et al. 1985). A final model based on settlement organization is that of Williams and Shapiro (1990, 1996) for the Oconee River valley of Georgia. On the basis of defined ceramic sequences, these researchers have documented “paired” mound centers separated by short distances of 8 to 16 km (5 to 10 mi.) that were alternately occupied every other century or so, and represent individual, simple polities that may have been allied into a larger, paramount chiefdom. This pattern of alternating settlement between mounds centers is motivated by the depletion and eventual renewal of localized environmental resources as well as the social processes involving ascribed status and chiefly succession. Of particular relevance to my research is that of Williams and Shapiro (1990:164) who further specified the presence of “paired mounds” for certain sites on the Chattahoochee, Ocmulgee, and Savannah rivers including those mound sites under consideration in this study, namely Hollywood and Mason’s Plantation—sometimes referred to in the literature as “Silver Bluff” prior to publication of Anderson’s *The Savannah River Chiefdoms* (1994)—as well as Lawton and Red Lake.

Additional models have been offered that promote chiefdom organizational variability from the perspective of kinship groups as dynamic political units. Blitz (1999:583) describes chiefdom variation as the result of fission-fusion processes whereby small and large chiefdoms formed by the aggregation or dispersal of minimal or basic political (i.e., kinship) units that had been defined historically. In this scenario, a multiple mound center may have formed through the process of relocation and fusion of the antecedent chiefdoms and their constituent political units, with the opposite process



occurring when these multiple mound chiefdoms fission. Thus, instead of complex chiefdoms, multi-mound centers appear to represent a different form of political organization where all mounds affiliated with the chiefdom existed at a single site in an hierarchically ordered arrangement (Blitz 1999:586). The premise of this explanatory model is Knight's (1998) description of the multi-mound site at Moundville as a planned community based on a ranked social order and reflected by distinct political units (kin groupings) spatially arranged in a sociogram of paired mounds. Knight further noted that Moundville's layout "mirrored the ranked arrangement of sub-clan structures in a historic Chickasaw camp square" (cited in Blitz 1999:586).

Closely aligned to Blitz's organizational structure of Mississippian chiefdoms is that of Ensor's (2002) kinship-demographic model. Ensor employed ethnohistoric data from the Omaha tribe of Nebraska, which indicate that marriage practices favored the demographic growth of ceremonially prominent clans, to account for the formation of large multi-mound sites composing the stratified polities in the Mississippi period Southeast. Subsequent fissioning resulted in new settlements and the reformation of large mound sites composed of multiple kin groups (Ensor 2002:309).

Two final prominent models that address chiefdom organizational variability do so from the perspective of their administrative structures. Blanton et al. (1996) offer a dual-processual model based on so-named corporate or network strategies. In this scenario, political strategies structured through a network approach are likely to emphasize differences in individual wealth and prestige, with individual leaders being highly visible through surplus mobilization and aggrandizement in access to prestige goods. The corporate approach to political strategies would be more inclusive by de-

emphasizing individual wealth and status to the relevance of the community at large. In effect, prestige goods would be important only to communal identity, and surplus labor mobilized in the formation of community as group-solidarity enhancing activities at central places.

Working from the concept of regional hierarchy, Beck (2003:641) proposes his apical-constituent model chiefdom variation can be distinguished by the manner in which chiefly authority is negotiated between an apical or regional leader and constituent, local-level elite. Constituent hierarchies are characterized by solidarity-building strategies that promote persuasive aggregation such as nucleated towns, communal labor projects, and corporate mortuary facilities. Apical hierarchies usually arise when regional consolidation is pursued through coercive expansion and legitimized by group-distancing strategies and activities including restricted access to the sacred center and specific iconographic goods, increased surplus production, and control of secondary centers to manage dispersed local communities (Beck 2003:656).

In sum, most of the models described herein are applicable only to sub-regional areas to describe and explain chiefdom variability in formation, organization, and complexity. And, even these remain vague and difficult to test from either a comparative or historical perspective. For these reasons, I frame my research within the conceptual framework of historical materialism with particular emphasis on the ideational elements expressed through the social relations of production (*sensu* McGuire 1992) but also the infrastructural aspects regarding the mode of production (*sensu* Muller 1997) in Mississippian society. From an analytical perspective, I focus specifically on the socio-political dimensions of labor patterns, surplus production, and the structure of mound

centers to explore the emergence and organization of chiefly polities in the middle Savannah River valley. The current models of chiefdom-level hierarchy versus polity autonomy are considered and evaluated according to data generated from the analysis of Mississippian period settlement in the middle Savannah River valley. In the final instance, I argue that the history and setting of the region selected against the formation of hierarchically structured chiefdoms.

### **Problem Overview**

In particular, Anderson (1994) and Blitz (1999) have applied their models specifically to portions of the Savannah River valley in an attempt to understand and interpret the processes of chiefdom organization in this region. However, in both instances, they lack archaeological information derived from site-specific investigations with which to fully evaluate the viability of their models. Also, their models are mound-site centric thereby omitting aspects of dispersed population and settlement information. Without knowledge of the culture history for each mound site, that of construction, function, and use of mounds and other features of the built environment, and the contemporary outlying settlement hierarchy, these models, no matter how conceptually sophisticated, cannot be utilized effectively or to their highest potential. Thus, after several years of investigations at the five mound sites in the middle Savannah River valley, I apply my intentionally constructed dataset to evaluate the efficacy of the models of chiefdom variation briefly discussed above, and particularly those of Anderson (1994)

and Blitz (1999), for the middle Savannah River area. My fieldwork was designed for the most part around a structured series of interrelated research questions as follows:

What is known of the historical trajectory that led to the emergence of the earliest mound centers in the middle Savannah River valley at ca. A.D. 1250? Does Mississippian occupation in the region indicate a dispersed or aggregated settlement system? Were these inhabitants strongly tied to a particular center and elite, or were they able to maintain flexible political alliances? Was social surplus extracted from households in the regional area? Was it extracted equally? Were some households resistant to chiefly control? What type of incentives or coercive powers did a chief use to assure political allegiance and economic participation? Do mortuary patterns show any evidence of social ranking? And finally, do these polities tend toward a centralized or decentralized political organization?

An original, site-specific synthesis of the middle Savannah River valley generated from these queries can be applied to evaluate these competing models of chiefly organization and complexity.

### **A Primer on Chiefdoms in the Savannah River Valley**

The primary research and synthesis on Mississippi period chiefdom emergence and decline in the Savannah River valley is that of David Anderson (1990a, 1990b, 1990c, 1991, 1994; 1996a; 1996b), whose foremost theoretical objective was advancing the simple-complex chiefdom model first defined by Steponaitis (1978) and Wright

(1984). His authoritative and detailed account provides a base-line chronological case-study for the fluctuation, or “cycling process”—simple chiefdom to complex chiefdom to simple chiefdom—of late prehistoric mound centers throughout the valley between ca. A.D. 1100 and 1600 (Figure 1.1). He defines “cycling” as “the recurrent process of the emergence, expansion, and fragmentation of complex chiefdoms amid a regional backdrop of simple chiefdoms” (1994:9). As summarized from his work, the earliest Mississippian “political and ceremonial” centers appear in the basin sometime between ca. A.D. 1100 and 1150 with earthen mound construction beginning at Tugalo and Chauga in the extreme northern part of the valley. At the opposite end of the valley near the river mouth, local groups constructed the Haven Home burial mound as well as a small burial mound at Irene. Between A.D. 1150 and 1200 at least eight centers emerged throughout the basin including Tate, Beaverdam, Lawton, Red Lake, Irene, Rembert, Mason’s Plantation, and Hollywood. At A.D. 1250 the situation was essentially the same, although multi-mound centers may have begun to emerge at Rembert and Mason’s Plantation, if they had not before this time. Sometime between A.D. 1300 and 1350, the polities centered at Irene, Lawton, and Red Lake appear to have “collapsed,” whereas those at Hollywood and Mason’s Plantation seem to have existed to as late as A.D. 1350 to 1400 (Anderson 1996:170-171). Thus, by A.D. 1350, the political landscape had changed with the petty mound centers abandoned leaving only the two major centers Rembert and Mason’s Plantation present. Then at ca. A.D. 1450 only the Rembert and Tugalo mound centers were (re)occupied, along with the Estatoe mound being constructed and site-occupied for the first time. By A.D. 1540 only these northernmost mound centers were inhabited, with the central and lower portions of the valley

completely abandoned as witnessed by the de Soto entrada and evidenced by a complete absence of archaeological material from this time period. Archaeological information, coupled with historical documentation, indicate that the central and lower portions of the Savannah River valley were for the most part depopulated, and its mound centers unoccupied, until the mid-seventeenth century, when various historic groups migrated into these regions (DePratter 2003).

### **The Mississippi Period Context for the Middle Savannah River Valley**

During the late Victorian period (A.D. 1870 to 1901), the presence of five prehistoric mound sites was documented for the middle Savannah River valley, or that area from the Fall Line zone at Augusta, Georgia downstream to the Brier Creek confluence in Screven County, Georgia (Figure 1.2). These still remain the only recorded Mississippi period mound sites in the region and are currently recognized as “Mason’s Plantation” (SC site no. 38AK15) (Jones (1999 [1873]; Moore 1998:265-266 [1898:167-168]), “Hollywood” (GA site no. 9RI1) (Thomas 1985 [1894]), “Lawton” (SC site no. 38AL11) (Moore 1998:269-270 [1898:171-172]), “Spring Lake” (GA site no. 9SN215) (Moore 1998:269 [1898:171]), and “Red Lake” (GA site no. 9SN4) (Moore 1998:269 [1898:171]). With the exception of Spring Lake—site moniker designated by Wood (2009)—which has only one mound, the others are multi-mound sites that appear to have co-existed as paired centers with each located opposite one another on the Georgia and South Carolina river margins. Although there are local reports of other mounds in the middle Savannah River vicinity, these have yet to be documented archaeologically. Of

the five known mound centers, only four have received some level of archaeological attention. Mason's Plantation, probably the largest of the five centers with a reported six mounds, suffered heavy alluvial sedimentation (up to 3 m of deposits) plus severe site erosion from strong river currents during the 19th century before any archaeological investigations were conducted (cf. Anderson 1994); that is, prior to the research initiated for this study.

Presented below are brief descriptions of each mound center in order of their spatial occurrence downstream from the lower Piedmont shoals (defined as the physiographic Fall Line zone), located directly above the floodplain setting of historic Augusta, Georgia (Figure 1.3). All five mound centers are located in the floodplain of the Savannah River. Mason's Plantation and Hollywood are situated about 20 km (12 mi.) directly below the Fall Line. The three other mound sites, Lawton, Spring Lake, and Red Lake cluster in an area approximately 80 km (50 mi.) directly below the Fall Line.

Mason's Plantation was possibly the largest of all eleven identified Mississippian mound centers in the entire Savannah River basin (Anderson 1994:193). With six mounds reportedly present at one time (Jones 1999 [1873]:152; also see Anderson 1994:338), these either were eroded into the river by strong currents or plowed-down and eventually covered to a depth of several meters with Piedmont-derived alluvium by the end of the 19th century.

William Bartram, an 18th-century naturalist touring the region, was first to remark on the presence of the site's mounds, which were later documented in detail along with the river's devastation by the southern antiquarian Col. Charles Colcock Jones, Jr. in 1873. Finally in 1898, Victorian archaeologist Clarence Bloomfield Moore noted and

lamented the site's natural, and seemingly total, destruction. A reconnaissance of the Mason's Plantation tract by David G. Anderson in 1990 failed to locate any mound remnants suggesting these had indeed washed away, although he noted that portions of the site, possibly including the smaller mounds, might be preserved under at least 3 m of alluvial sediment deposited during historic period flooding events. A surface collection of ceramics by Anderson (1990a:321; 1994:194) from river sandbars at and just below the presumed area of the site is dominated by Hollywood-phase pottery, thus strongly indicating a Hollywood-phase occupation (ca. A.D. 1250 to 1350) for the Mason's Plantation mound group.

The Hollywood site consists of two mounds and a domestic occupation area situated on a broad levee in the floodplain of the Savannah River in Georgia. The site was first documented after excavation into the smaller mound by Henry L. Reynolds of the Bureau of Ethnology Mound Division (Thomas 1985 [1894]:317-326). This investigation recovered artifacts of the Southeastern Ceremonial Complex. These materials originated from interments in an initial stage of mound construction and included copper plates, painted and engraved bottles with sun circle and cross, serpent and human hand motifs, elaborate pipes, shell beads, and earspools (Anderson et al. 1986:33). Excavation into the larger mound in 1965 by Clemens de Baillou of the Augusta Museum yielded a pottery assemblage distinct enough to merit recognition as the Hollywood phase of the Savannah period. Anderson and colleagues (1986:41; see also Hally and Rudolph 1986:62) note that the ceramic complex of the Hollywood phase closely resembles that of the Pee Dee phase Town Creek site in North Carolina as demonstrated in a comparative study by Reid (1965). These researchers cross-date the



Hollywood phase to between A.D. 1250 and 1350 on the basis of a radiocarbon series published by Dickens (1976:198) for Town Creek. Primary Hollywood ceramic types are Savannah Check Stamped, Savannah Plain and Burnished Plain, and Savannah Complicated Stamped dominated by variations of the filfot-cross motifs and other related designs. Additional characteristics include cane punctations and large riveted nodes impressed with cane punctations on unthickened jar rims (Anderson 1994:370; Anderson et al. 1986:40-41; Hally and Rudolph 1986:62-63). Three radiocarbon dates obtained recently from sooted sherds in the de Baillou collection produced one sigma calibration ranges that fall between A.D. 1220 and 1410 thereby substantiating the Hollywood phase designation for the site.

Lawton is a double-mound site situated in the floodplain of the Savannah River in Allendale County, South Carolina. Based on radiometric dates, mound construction occurred between ca. A.D. 1250 and 1350, or during the Hollywood phase. First documented by C. B. Moore in 1898, recent investigations have revealed much about site structure and layout. The South Mound is a three-meter high edifice constructed in several episodes with a final multi-level summit, and most likely supported an elite residence. In contrast, the North Mound is an approximately two and one-half-meter high platform also built in several episodes over a previous sub-mound structure. A fortification ditch and palisade enclosed the site, which included a plaza and small residential area.

The Red Lake mound site is situated on a relict levee adjacent to a river meander channel (today an in-filled oxbow lake) in the floodplain of the Savannah River in Screven County, Georgia, and downstream from the Lawton site. In 1898, C. B. Moore

trenched the largest mound (Mound A) and finding nothing of museum quality, apparently moved his investigation to another mound about 1.61 km (1 mi.) to the northeast, which is currently known as the Spring Lake site and recently characterized by Wood (2009) as a single mound center with a residential domestic population. In 1987, the Red Lake site was archaeologically documented by Georgia archaeologists Fred Cook and Mark Williams (Anderson 1994:187). Williams topographically recorded two mounds and their immediate environmental vicinity while Cook conducted limited test unit excavations at the site. Based on analysis of the ceramic assemblage recovered from the flank of Mound A, Cook reasonably concluded that Red Lake had a short occupational history within the century-long Hollywood phase.

Anderson (1994:237-240) charts the formation and fragmentation of Lawton and Red Lake to between ca. A.D. 1200 and 1350. He comments that that these emerging polities may have been the foci of complex chiefdoms given the presence of multiple mounds at each site. Noting the proximity of Lawton to Red Lake, Anderson ponders whether each was actually a discrete, simple chiefdom or rather formed a paired-mound relationship within a larger, complex polity; however, he admits the lack of fine-grained archaeological data precludes his addressing either situation. Referring to basin-wide historical events, Anderson states that "...between 1250 and 1350, the political situation changed dramatically in the Savannah River valley, although, unfortunately, our chronological controls are not sufficiently refined to delimit precisely when and in what order events occurred" (1994:240). He does conclude that both the Red Lake and Lawton mound centers were abandoned sometime between A.D. 1300 and 1350. In line with the collapse of these centers, broader settlement trends show a decline in the number

of outlying sites during this same period (n=14), which occur with less than half the frequency of Early Mississippian components (n=33) for the area (Anderson 1994:249).

### **Non-Mound Mississippian Site Distribution in the Coastal Plain Uplands**

Since 1973, archaeological research has been conducted on the U. S. Department of Energy's Savannah River Plant (SRP; see Figure 1.2). The SRP is an 803 km<sup>2</sup> (310 mi<sup>2</sup>) facility that stretches from the floodplain of the Savannah River to the Sandhill uplands of the Aiken Plateau in east-central South Carolina. In a 1990 publication, Sassaman and colleagues synthesized the prehistory of the SRP region using data collected from 17 years of Cultural Resource Management archaeology. Since that time, archaeological research has continued on the Aiken Plateau and the following section summarizes the current understanding of how this landscape was used from the Middle Woodland through Late Mississippian periods. What emerges is a unique history characterized by population fluctuations, ethnic diversity, and sometimes dramatic social change, all played out against the backdrop of a fairly consistent use of the natural landscape during the prehistoric and historic time periods.

With a chronological framework in place (Table 1.1), it is possible to discuss Mississippian non-mound, domestic site settlement in the uplands and understand how it may have articulated with the histories of mound centers in the middle Savannah River floodplain. This section focuses first on the current understanding of the distribution and dating of non-mound settlements across the SRP. It is important to understand that I am working essentially with primary site file data. These sites are documented based on

surveys that include some combination of surface recovery and subsurface testing. As a result, the artifact assemblages often are small as are the numbers of diagnostics available to accurately date the sites.

Out of the approximately 1,800 archaeological sites currently recorded for the SRP, 240 can be assigned to the Late Woodland and Mississippian periods (Savannah I through Silver Bluff phases). Of these sites, 100 date to the Mississippian period based solely on the presence of complicated stamped sherds. Moreover, only 51 of these sites have been assigned phase designations due to the lack of identifiable diagnostic attributes on ceramics for the remaining site assemblages. Mississippian sites appear to be distributed across all drainages, but also seem to be more frequent in the uplands than along the major terrace of the Savannah River. It is difficult to define patterns in settlement for these distributions because the impact of sampling bias currently cannot be fully assessed. It can be said that the absence of sites in the Savannah River floodplain is most likely the result of sampling because very little survey has been done in the floodplain.

Starting with the Middle Woodland Deptford period occupations, which are identified by check stamped, linear check stamped, and simple stamped pottery (Figure 1.4). Deptford sites are the most abundant across the entire installation for any time period on the SRP with 350 sites recorded on the SRP. The Deptford phase spans some ten centuries (ca. 600 B.C. to A.D. 600) and is followed by an apparent temporal gap of several centuries, indicating possible abandonment of the region, prior to the beginning of the Savannah I and Sleepy Hollow phases at ca. A.D. 900.

The Savannah I phase (ca. A.D. 900 to 1200), which temporally straddles the Late Woodland to Mississippian periods, is distinguished by the almost exclusive use of cord marked pottery (Figure 1.5). A total of 140 sites can be assigned to the Savannah I phase. These appear to be distributed fairly even across the SRP and between upland and terrace settings (Figure 1.6).

Roughly contemporary with the Savannah I phase is the Sleepy Hollow phase (ca. A.D. 900 to 1100; Brummitt 2007) represented by 24 sites on the SRP. It is recognized by pottery assemblages containing rectilinear complicated stamped type designs almost identical to those identified by Dickens (1976:172-183) for the Pisgah cultural area in western North Carolina and northern South Carolina (Figure 1.7 and Figure 1.8). Compared to sites of previous phases, Sleepy Hollow sites are comparatively rare but still found across the SRP (Figure 1.9).

Yet another phase, the Lawton phase (A.D. 1100 to 1250; Anderson 1994:370) also falls in this same general Early Mississippian period. Lawton phase assemblages are distinguished from others by the presence of complicated stamped motifs in the Etowah tradition of northern Georgia and the type Etowah Corncob Marked (Figure 1.10). Lawton phase sites are quite rare on the SRP represented by only six sites, but are found in both riverine terrace and upland settings (Figure 1.11).

The Middle Mississippian occupation of the SRP area is represented by Hollywood phase sites (ca. A.D. 1250 to 1350; Anderson 1994:370; Anderson et al. 1986:40-41; Hally and Rudolph 1986:62-63), which has as its key diagnostics complicated stamped pottery exhibiting primarily the filfot scroll or filfot cross motifs as well as check stamped, cord marked and corncob marked ceramics (Figure 1.12 through

Figure 1.15). The number of recorded Hollywood phase sites on the SRP is very low—with only three documented (Figure 1.16).

Late Mississippian occupation of the SRP is represented by 19 sites assigned to the Silver Bluff phase (ca. A.D. 1350 to 1450; Anderson 1994:370). Silver Bluff phase assemblages are characterized by complicated stamped vessels (jar forms) with “finger-pinched”, notched appliqué, or reed punctuated rims, and incised ceramics (bowl forms) (Figure 1.17). Silver Bluff phase sites are more common than sites of earlier Mississippian phases and occur across the SRP area (Figure 1.18).

Currently, no aboriginal occupations have been identified on the SRP that date to post-A.D. 1450. This tends to support Anderson’s (1994) contention that by the sixteenth century the Savannah River valley was largely abandoned and unoccupied from the central Piedmont to the coastal river estuary.

As mentioned above, of the 100 sites with pottery identified as Mississippian complicated stamped sherds, only 51 could be assigned to one of the four Mississippian phases (Table 1.2). This is in part due to the often small pottery samples coupled with the difficulty of distinguishing Hollywood from Silver Bluff phase assemblages where the same complicated stamped designs (i.e., filfot cross or filfot scroll motifs) can occur. However, when the numbers of sites dating to each phase are considered a trend emerges. The highest number occurs during the Sleepy Hollow phase, which is the earliest recognized Mississippi period component on the SRP. After the Sleepy Hollow phase, Mississippian sites decline in number during the Lawton phase, but tend to increase from the Hollywood through the Silver Bluff phases.

There is some evidence that most of the Hollywood/Silver Bluff sites actually date to the latter Silver Bluff phase. This is because check stamping is a very common surface treatment in the Hollywood phase and none of the sites in the Hollywood/Silver Bluff category contained check stamped sherds in their assemblages. If this is the case, then site numbers remain low through the Hollywood phase, and actually increase during the Silver Bluff phase.

### **Population and Habitation on the SRP**

In this section I discuss aspects of Woodland and Mississippian population history and landscape use assessed through survey data collected on the SRP. Figure 1.20 shows the number of Mississippian and Woodland sites, by archaeological phase, identified on the SRP. The pattern in these raw numbers shows a steady decrease in the number of sites from the Middle Woodland through the Middle Mississippian periods, with only a slight rebound during the Late Mississippian period.

When adjusted for the length of time by 100 year phase intervals as quantified by archaeological period (Table 1.3) and represented by archaeological phase (Figure 1.21), these data are used to derive a gross estimate of relative changes in broad demographic trends on the landscape. In this way, a slight increase is detected in the use of the SRP from Middle to Late Woodland/Early Mississippian, and a dramatic decrease with the advent of the Middle Mississippian period. As noted above, use of the area seems to rebound somewhat during the Late Mississippian period. While there may be ecological

reasons to explain population decrease in the Middle Mississippian, I offer what seems to be a reasonable sociological explanation below.

### *Landscape Use*

One of the key issues of interest concerns how people used the landscape during the Late Woodland and Mississippi periods. In the wider Southeast, it was during the Woodland period that horticulture became an increasingly important part of subsistence systems, while the Mississippi period is often thought of as a time when maize horticulturalists occupied the landscape. Given this, it is reasonable to investigate the degree to which gardening impacted the use of the SRP landscape. This brings up two related questions. Did people use the SRP upland landscape, as opposed to the floodplain, throughout the year or only on a seasonal basis? And did this use include horticulture?

Concerning the first question, available data on the function of individual sites is very thin. However, there is some tenuous evidence that at least some sites do represent year-round, household occupations. That evidence comes in the form of preliminary data from large-scale excavations conducted at several sites on the SRP by Sassaman and colleagues (1990) as well as the current study regarding settlement distributions. As long-term work continues with the collections from these sites, this will enable the formulation and development of site assemblage models that will aid in distinguishing temporary from more permanent site residence. At present, evidence suggests that the



upland region of the SRP was occupied on an annual basis with seasonal aggregation at specific riverine terrace sites during the Middle and Late Woodland periods, and at mound center precincts located in the floodplain during the middle Mississippi period.

What can be said about the subsistence mix practiced by people during the Late Woodland and Mississippi periods? First, it is important to understand the SRP environment and its potential for horticultural production. In this area, neither the Savannah River floodplain nor those of smaller drainages are particularly well-suited for large-scale gardening. Most of the Savannah River floodplain and that of its tributaries on the SRP is seasonally inundated, and the primary drainages are small and sometimes given to high-energy, flash flooding (Bowers et al. 1998). Given this, gardening is expected to be small-scale, and practiced on the lower, Savannah River terraces and in the uplands as part of a household-level shifting horticultural system. It also is important to keep in mind that primarily sandy soils of the SRP are typical of the Atlantic Coastal Plain in being well-drained and low in organics. Given this, it is also possible that inhabitants of the SRP area practiced a more generalized subsistence strategy that included some maize horticulture heavily mixed with hunting and gathering.

This subsistence economy may be compared to that of the early historic populations on the Georgia coast where the sandy coastal soil is marginally fertile (Larson 1980:206-209). According to Crook (1986:17-28), these groups, known collectively as the Guale, planted corn, beans, and squash in swidden plots scattered throughout highland areas of the coast where small pockets of fertile soils occurred. Swidden gardens were planted in early spring and harvested in mid-summer, which afterward was accompanied by a period of feasting in which the scattered households

aggregated at a single location where surplus produce supplied the feast and additionally replenished the chief's granary as tribute (Larson 1980:207; Crook 1986:19).

Throughout the summer season, the Guale remained nucleated and sedentary at their principle towns, after which they dispersed primarily to gather nut mast and pursue deer hunting into the late fall season. Historic sources indicate that these dispersed groups aggregated several times during the fall season to participate in feasting ceremonies.

In contradistinction to Guale horticulture practices, is that of the Historic period Creek populations of the lower Chattahoochee river valley in the Georgia and Alabama Coastal Plain. As discussed by Ethridge (2003:140-157), the Creeks practiced swidden and hoe agriculture of corn, beans, and squash in the active, alluvial swamp floodplain. Hudson points out that alluvial floodplain soils were often covered with canebrakes, "making it noteworthy that corn and cane [both being grasses] thrive on the same kinds of soil" (197:291).

The degree to which people actually gardened on the SRP is difficult to assess, especially with regard to determining whether cultivation occurred in upland or riverine swidden plots. Organic materials rarely preserve in the sandy soils, so the only evidence for food production comes indirectly from corncob-impressed pottery, which appears in the Lawton and Hollywood phase ceramic assemblages and not before. Another way of getting at the importance of gardening and other productive activities is by looking at the subsistence potential associated with site locations. As a means of doing that, the quality of soil types within 200 m of each site were considered with the idea being that if gardening was an important part of the economy, it would be reflected in the choice of site locations.

Table 1.4 was created by calculating the percentage of sites near soils classified as either fair or good for woodland habitat, wetlands, and croplands from modern soil charts. The first column includes the number and relative frequency of sites that scored fair or good for all three, the second for wetlands, the third only for woodland habitat and croplands, and finally upland habitat. The columns represent site locations that decrease in the resource diversity from left to right.

As points of comparison for the Woodland and Mississippian site locations, soil characterizations were included from three different kinds of locations on the SRP. First is the location of Colonial period sites, whose inhabitants were subsistence farmers. Second is the location of Early Archaic settlements, whose inhabitants were hunter-gatherers. The third kind of location consists of 50 randomly chosen points on the SRP landscape.

Invariably, Colonial period sites are located on good or very good cropland, revealing the importance of farming to their subsistence economy. Those sites also are without exception located near wetlands and good wildlife habitat. It is clear that Colonial settlers were keying in both on good cropland and also locations with the greatest diversity of habitats and therefore wild resources. While a slim majority of Early Archaic sites also are located on the most diverse patches, they also are found in less diverse settings. This suggests a more diversified subsistence strategy where a greater number of different settings and resources are exploited. The random points should reflect the kinds and relative abundance of different kinds of soils found on the SRP landscape. The random locations are fairly even distributed across the categories created,

and the overall pattern is different enough to provide some confidence that the patterns in cultural site location are the result of non-random cultural choices.

The Woodland and Mississippian sites show some different associations. Generally, the same strategy of maximizing the diversity of resources near sites was applied. However, only half to two-thirds of the sites were located near good cropland. There still seems to be the focus on maximizing the diversity of resources, but there are a greater variety of less diverse settings also used. This suggests a broader range of subsistence activities and therefore a broader based subsistence system. It still may have included some gardening, but it would seem that any gardening was accompanied by a variety of other activities.

As discussed above, archaeological survey has revealed the presence of numerous, small Mississippi period sites in the interfluvial upland areas of the SRP. Interpreted as the locations of Mississippian farmsteads, these are most often situated along the upper portions of small tributaries or headwater streams, typically of the first and second Strahler orders, within the general dendritic drainage pattern of the SRP stream system. The Strahler ranking method involves the classification of rivers into a hierarchical arrangement based on the connectivity of contributing tributaries (Strahler 1952, 1957). Notably, first order streams on the SRP are usually intermittent or recurring, but may be headed by natural springs. The upper reaches of these small drainages are typical fluvial bottomland environments that often sustain patches of native river cane (*Arundinaria gigantea*) the presence of which is a useful indicator of the suitability of soils for corn cultivation as river cane, like corn, is a grass (Hudson 1997:154). Based on the slope and aspect of the side margins of drainage heads, these

locations are often microhabitats supporting exotic plants that can be used as herbal medicines. It is certainly significant to mention with regard Bruce Smith's (1974, 1975, 1978) model of Middle Mississippian subsistence strategies, that the smaller streams of the upland, interriverine areas had a higher density of deer and nut masts as opposed to the bottomlands of streams with a Strahler ranking of 3 or higher where aquatic resources such as fish and turtles along with nocturnal animals like raccoons and opossums tended to be abundant as noted for South Carolina (House and Ballenger 1976:84-86). Regarding nut masts, Gardiner (1997:171-172) suggests that nuts were of more importance as a stored commodity in the winter and spring rather than as a fresh food in the fall, which, as a conserved surplus resource, has implications for the mound centers of the middle Savannah River valley (see discussion below of site seasonality in paleoethnobotanical analysis from the Lawton mound site).

Overall, data on the use of the landscape are pretty thin and largely circumstantial. Still, based on these data it appears that the SRP landscape was used fairly consistently from the Late Woodland through Mississippi periods. The use seems to have included year-round habitations and a generalized subsistence strategy that included a heavy reliance on hunting and gathering. Interriverine occupation of upland areas on the SRP during the Mississippi period appears to have been a continuation of a historical pattern of settlement since the development of the modern floodplain during the Late Archaic.

## **Floodplain Cemeteries**

Another significant aspect of regional settlement involves communal cemeteries located in the middle Savannah River floodplain. In fact, the only place that large numbers of burials have been encountered are on a series of lower river terraces and relict sand ridges located at various points in the middle Savannah River floodplain. As Brooks and colleagues (1990:46) explain, many relict sand ridges in the floodplain are actually point-bar remnants, formerly part of the alluvial terraces of the Savannah River that have been segmented through the down-cutting and lateral migration of the river to its present position on the modern floodplain. Generally, these relict sand ridges are of unknown age, but most formed prior to development of the modern floodplain at ca. 4000 B.P. After this time, as Brooks and colleagues (1990:46) conclude, humans exploited the terrestrial resources of these floodplain “islands” as well as have ready access to the surrounding swamp resources. Due to seasonal flooding, the low-lying bottomlands would not have been conducive to habitation. Floodplain sand ridges would have provided sufficient protection from flood water to have been suitable residences at least part of the year. Because of seasonal flooding, relict sand ridges probably were occupied only as short-term hunting and extraction camps. However, due to their elevation above periodic floodplain inundations, these locations, along with the lower floodplain terrace, were often utilized on a permanent basis as a riverine-setting for cemetery interments involving urn-burial deposits. All the currently identified and documented Mississippi period cemetery locations in the middle Savannah River floodplain are shown in Figure 1.21.

Regrettably, little archaeological work has been conducted at these floodplain cemeteries, and most have been badly looted over the past several decades. Additionally, looter's descriptions of these urn-burial cemetery sites in the floodplain all sound the same. These relict sand ridges, which are visible as prominent floodplain landforms, appear to have been utilized as community-centered cemeteries where the most prevalent burial types encountered are those of cremated (and non-cremated mostly sub-adults) skeletal remains that were placed in a pottery vessel, usually a utilitarian jar, that was covered over with a second vessel, typically an ordinary, domestic bowl, and as such converted to a "burial urn." Most importantly, these community cemeteries show little evidence of social differentiation in mortuary treatment, either indicating that these were undifferentiated societies or at least that social ranking was not expressed in mortuary treatment.

Unfortunately, few prescribed investigations of the distribution and internal structure of these lower terrace and relict sand-ridge cemeteries have been conducted. Any systematic field work at these sites has been limited and usually in response to looter destruction. For instance, in the early 1990s, Chester DePratter was informed of severe collector activity on the Groton Plantation property, an area renowned in the Late Archaic period literature for the earliest dates on fiber-tempered pottery in the eastern U. S. (Stoltman 1974). DePratter (1993) conducted salvage recovery at the badly looted sand-ridge cemetery, which he designated Ware Creek Ridge (38HA148), by mapping and recording the locations of 251 potholes from which they collected nearly 3,000 sherds and 800 pieces of flaked stone. Looter's backdirt was screened from 10 potholes to recover all exposed cremated remains, which resulted in the identification of a minimum

of 18 individuals. Based on surface decoration of identified sherd types, DePratter concluded that burials were placed at this cemetery location (many in pottery urns) during the Savannah II (A.D. 1275-1325) and early Irene periods (A.D. 1325-1425) or sequences used on the north Georgia coast, which are roughly equivalent to the interior Hollywood (A.D. 1250-1350) and Silver Bluff phases (A.D. 1350-1450) as established by Anderson (1994:370) and Hally and Rudolph (1986).

Just upriver from Groton Plantation at Fennel Hill Landing a sand ridge site (38AL50) was investigated in the mid-1960s by Georgia archaeologist Fred Cook (n.d.). He conducted limited excavations at this cemetery site, which that was being bulldozed for fill dirt to construct logging roads in the surrounding low-lying, bottomland swamp. On the highest point of the sand ridge he discovered cremations and several flexed burials, which he dated to the Savannah period. In particular, he notes that a “cremation in a Savannah burnished [carinated] bowl covered with a Savannah burnished bowl were found at a depth of about one foot.” Based on the presence of the two burnished bowls and their mortuary-related context, the cemetery is quite likely Hollywood phase (A.D. 1250-1350) in time.

At the Topper site (38AL23), a location renowned in the Paleoindian-period domain from Albert C. Goodyear’s and David G. Anderson’s research projects, a complicated stamped vessel (probably a filfot motif) used as a burial urn was found in the upper layers of the site. I obtained an AMS radiometric date on soot recovered from the exterior surface of the vessel, which yielded a two-sigma calibrated radiocarbon age of A.D. 1260 and 1380 (Beta-169420). This date range almost mirrors that established for



the Middle Mississippi period Hollywood phase at A.D. 1250 to 1350 (Anderson et al. 1986; Hally and Rudolph 1986).

During a reconnaissance survey of the middle Savannah River valley by Leland Ferguson (n.d.) in the early 1970s, local informants provided information regarding a sand ridge cemetery from which at least 50 burial urns were looted in the 1960s. Ferguson conducted limited excavations into the sand ridge where he encountered non-cremated remains as well as postmold features from what he surmised may have been a mortuary structure. He temporally assigned the cemetery to the Savannah period, which for the most part is the equivalent of the Hollywood phase.

In the early 1980s, a cultural resource management excavation on the SRP of an Early Archaic site encountered two intrusive features dating to the Mississippi period (Sassaman et al. 2002:33-34, 37). The first (Feature 3) was a large pit, which was almost certainly a mortuary feature although no human remains were preserved, contained a small cazuela-like bowl measuring 6.5-cm tall, 20-cm diameter at the shoulder (at the widest point), and with an orifice diameter of 17.7 cm. The second, Feature 59, contained a pair of ceramic vessels, one inverted over the other, with human cremated remains. Both vessels had plain exterior surfaces, and although they could not be dated securely on the basis of surface treatment, their shapes and overall treatment are consistent with other Mississippi period urn burials in the region as noted by Sassaman et al. (2002:37).

The final archaeologically documented location with Hollywood phase urn burials is the smaller of the two mounds, Mound B, at the Hollywood site (Thomas 1985 [1894]:317-326; see also Anderson 1994:189-193, 343-354). The lower mound strata

consisted of two horizons with seven and five adult extended burials, respectively. Also, in the upper horizon of the mound, four sets of two vessels each were found and these appear to represent urn burials as each consisted of a large jar with a smaller pot or bowl covering. These scattered sets of vessels are possibly intrusive into the mound, and, as Anderson (1994:192) notes, may be somewhat later than the extended burials.

The practice of burial urn interments during the Mississippi period at floodplain sites in the middle Savannah River valley appears to have an historical precedent during the Late Woodland period. At the Rabbit Mount sand ridge site (38AL15) on the Groton Plantation property a cord-marked vessel that Stoltman (1974:60) identified as the pottery type Wilmington was used as a burial urn for cremated human remains. A cord-marked vessel used as an burial urn found at the Topper site (38AL23) contained soot on its exterior surface that yielded an AMS calibrated radiocarbon age range of between A.D. 530 and 650 at the two sigma range (Beta-169420). And finally, Cook (n.d.) records excavating a cord-marked burial urn that contained cremated human remains.

In sum, based on the information gleaned from these studies, I conclude that the ascendant social elite residing at the mound centers co-opted the ritual of death involving body preparation and cremation, which evidence seems to show was an historical practice in the region, as a means to the acquisition of symbolic capital as I discuss below.

Table 1.1. Chronology for the Middle Savannah River Valley.

Period	Phase	Dates
Early Mississippian	Savannah I	900-1200
Early Mississippian	Sleepy Hollow	900-1100
Early Mississippian	Lawton	1100-1250
Middle Mississippian	Hollywood	1250-1350
Middle Mississippian	Silver Bluff	1350-1450

Table 1.2. Non-Mound Mississippian Sites on SRP by Archaeological Phase.

Phase	# Sites
Sleepy Hollow	24
Lawton	6
Hollywood	3
Hollywood/Silver Bluff	10
Silver Bluff	8

Table 1.3. Incidence of Sites on the SRP per 100 Year Intervals by Period.

Period	Date Range	# Sites	Centuries	Sites/Century
Middle Woodland	300 BC to AD 500	396	8	50
L Woodland/E Miss	AD 900 to 1200	170	3	57
Middle Mississippi	AD 1250 to 1350	3	1	3
Late Mississippi	AD 1350 to 1450	18	1	18

Table 1.4. Habitat Subsistence Potential for Archaeological Sites by Period.

Diversity	Habitat				Total n (%)
	Greatest Wetland/ Cropland	Wetland	Cropland	Least Upland	
Cultural Resource					
Early Archaic	58 (52)	30 (27)	9 (8)	15 (13)	112 (100)
Deptford	47 (51)	31 (34)	6 (7)	7 (8)	91 (100)
Savannah I	78 (56)	39 (28)	9 (6)	14 (10)	140 (100)
Sleepy Hollow	10 (42)	10 (42)	-	4 (16)	24 (100)
Mississippian CS	15 (56)	6 (22)	-	6 (22)	27 (100)
Colonial	10 (100)	-	-	-	10 (100)
Random	14 (28)	11 (22)	16 (38)	6 (12)	50 (100)

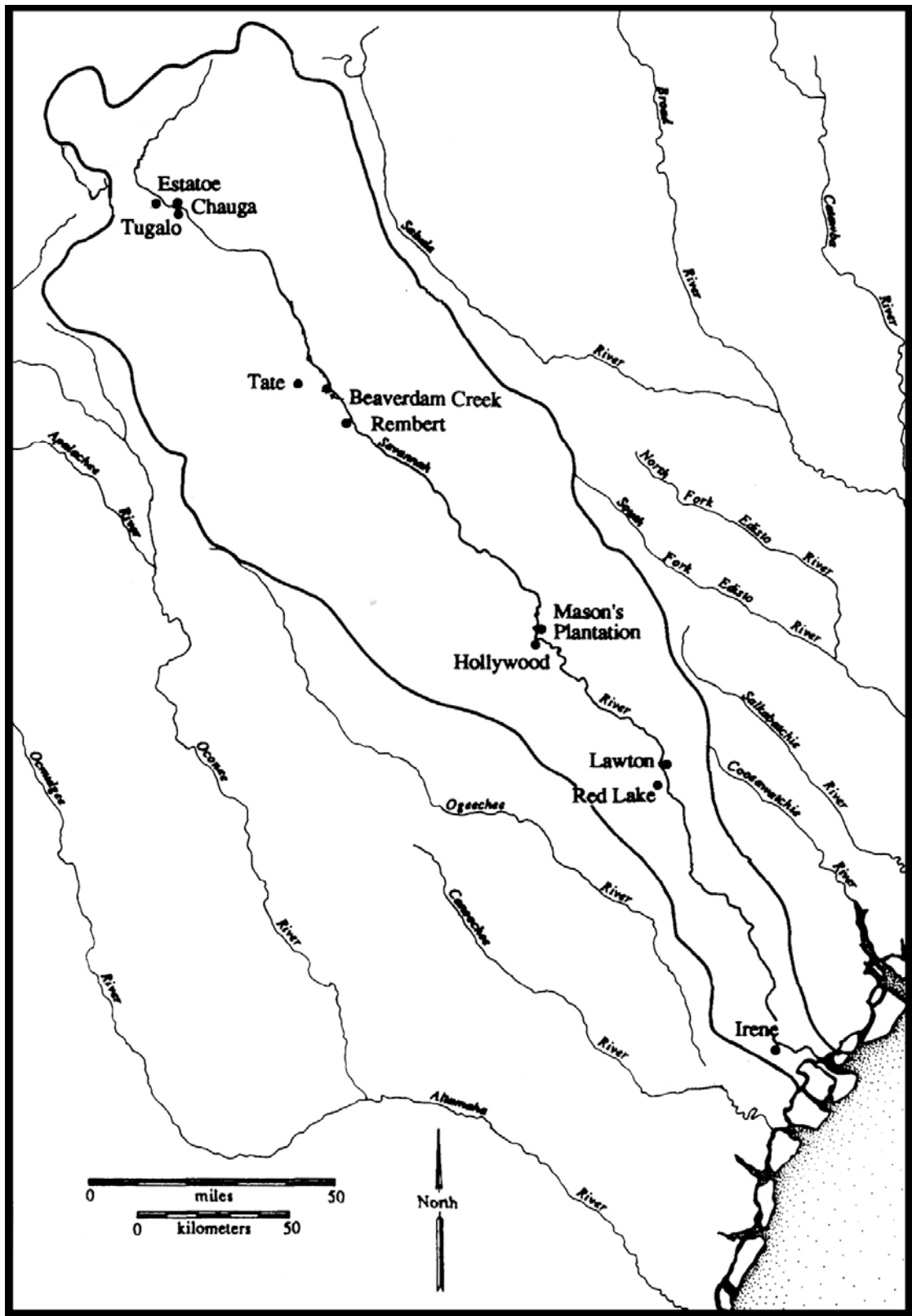


Figure 1.1. Mississippi period mound sites in the Savannah River basin (modified from Anderson 1994: Figure 17).

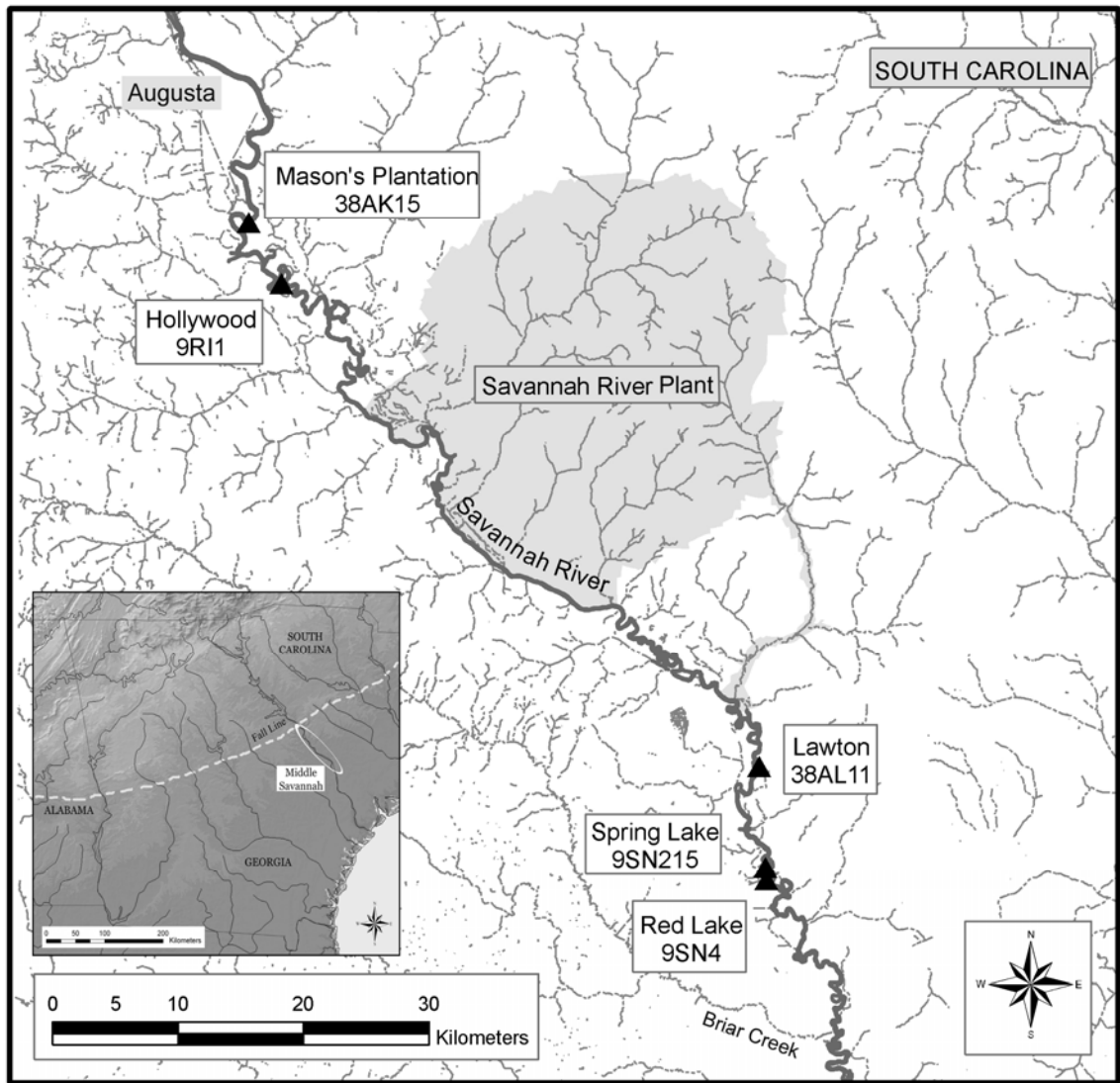


Figure 1.2. Documented Mississippi period mound sites in the middle Savannah River valley.

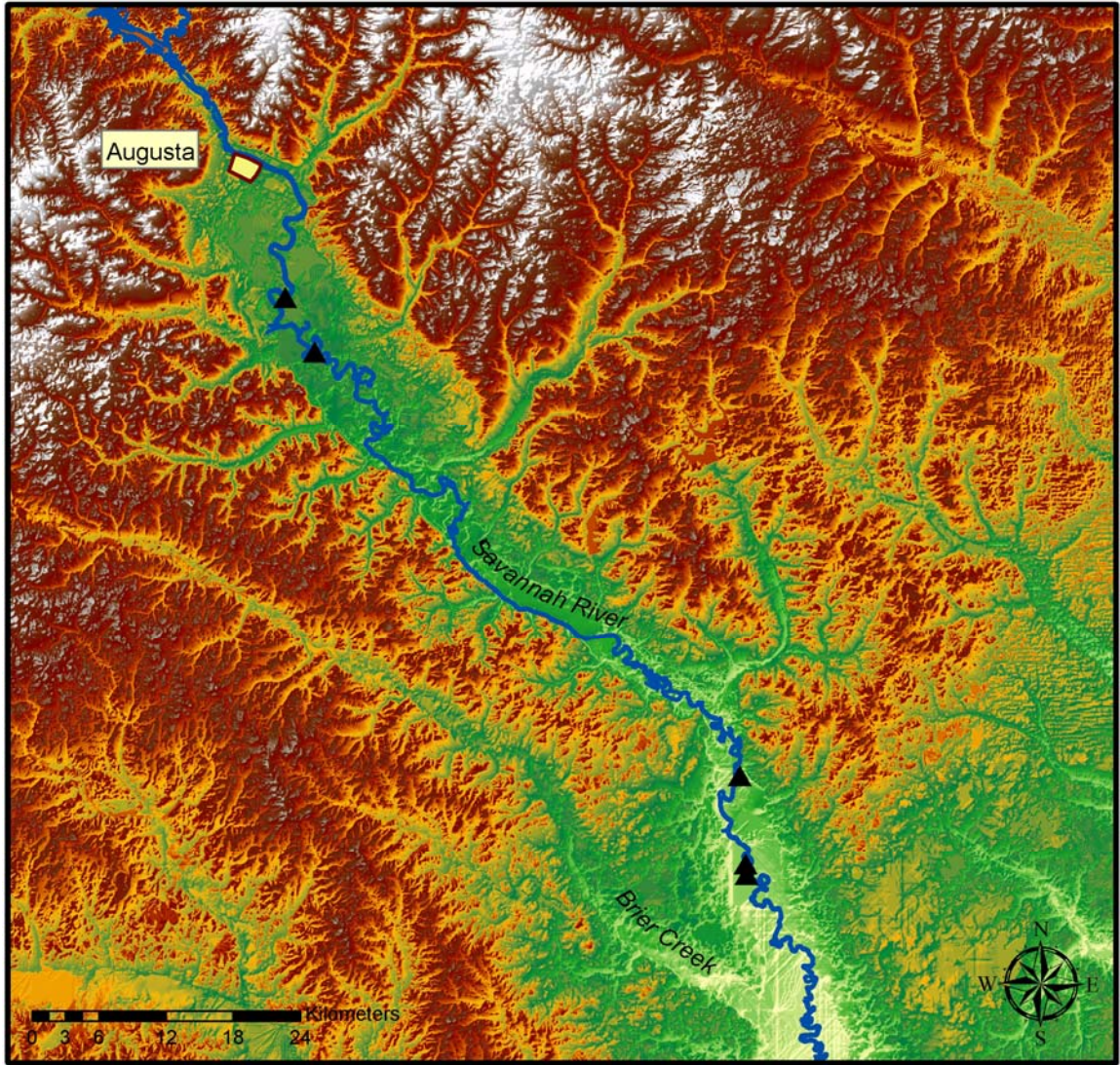


Figure 1.3. Distribution of mound centers in the middle Savannah River valley floodplain.



Figure 1.4. Deptford period pottery types Deptford Check Stamped and Deptford Linear Check Stamped.



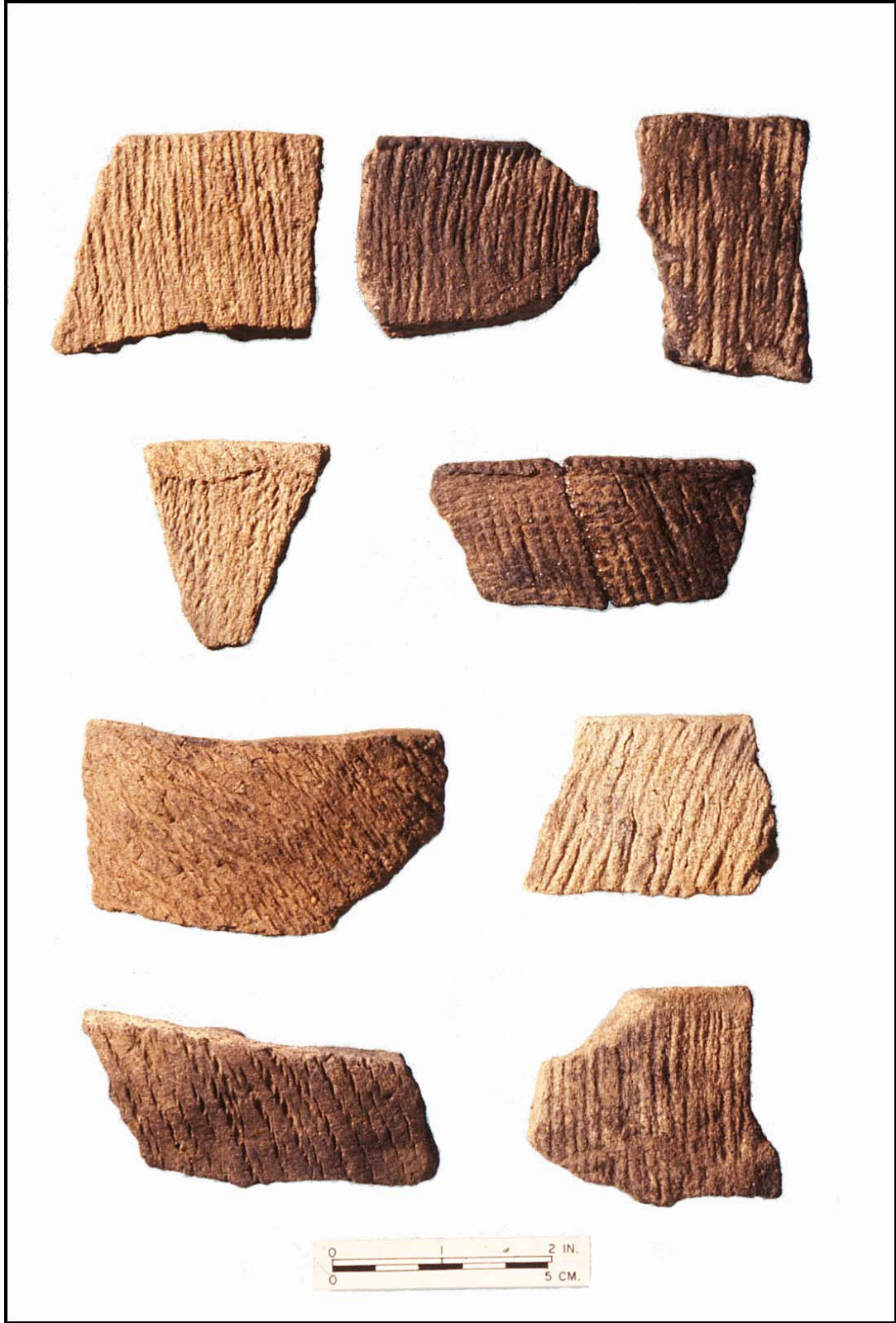


Figure 1.5. Savannah I phase pottery type Savannah Cord Marked sherds recovered on the SRP (38AK228).

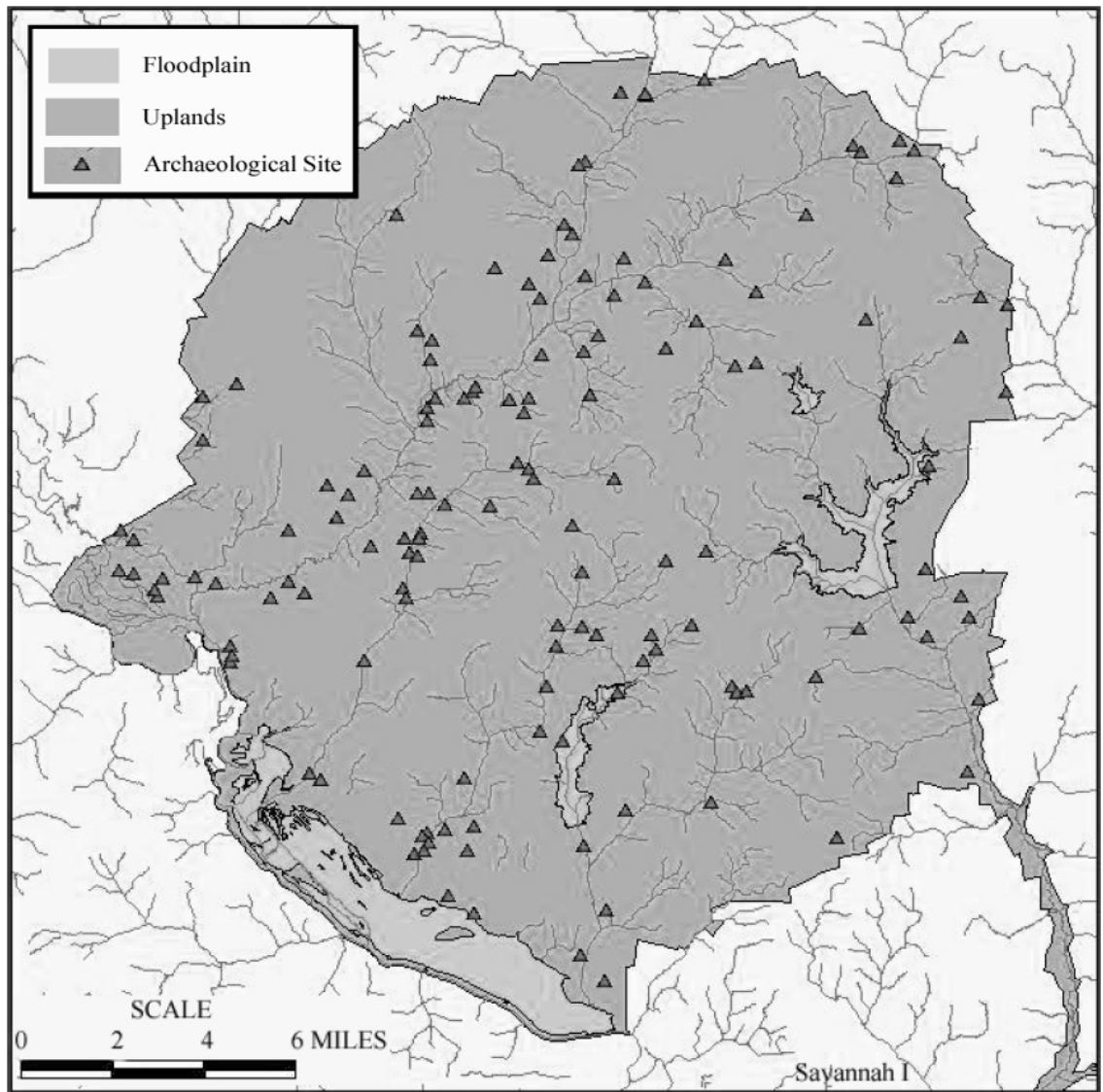


Figure 1.6. Distribution of sites with Savannah I phase ceramic types.

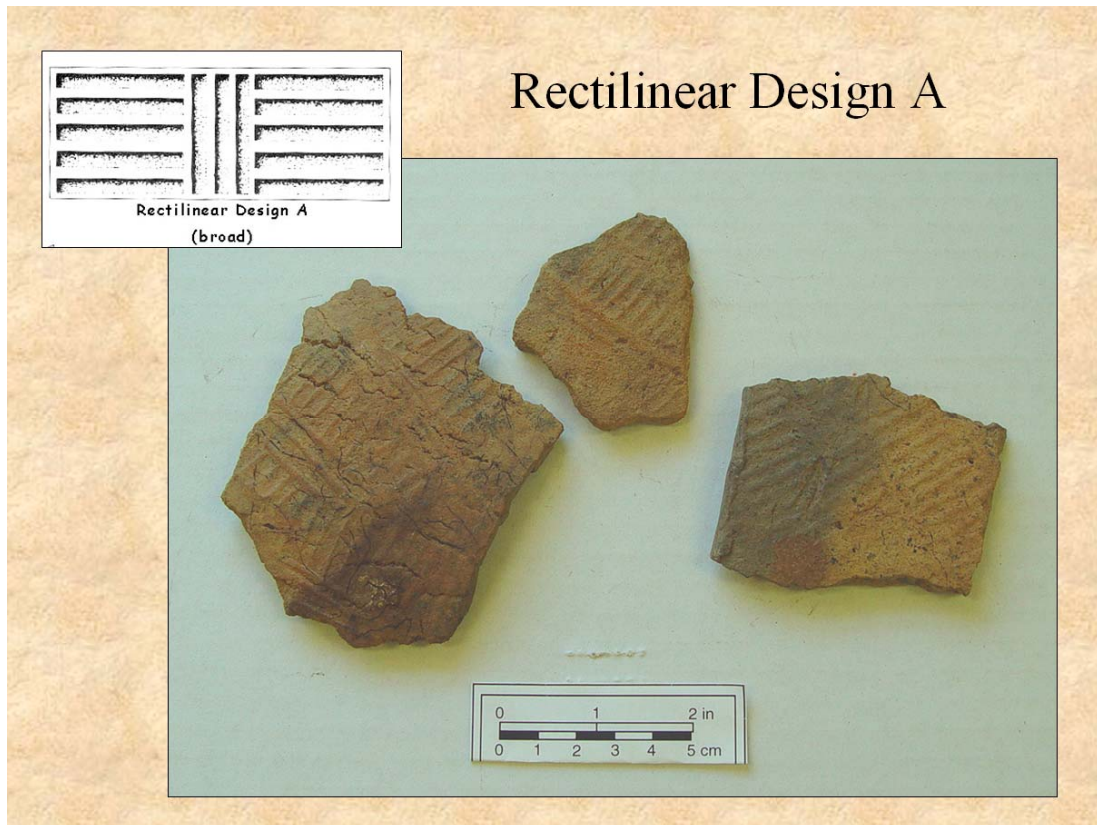


Figure 1.7. Sleepy Hollow phase complicated stamped ceramics with Rectliner Design A motif (38AK546).



Figure 1.8. Sleepy Hollow phase complicated stamped ceramic rims with Rectilinear Design A motif (38AK546). Rims are unmodified except for lower middle sherd with segmented notching along rim base.

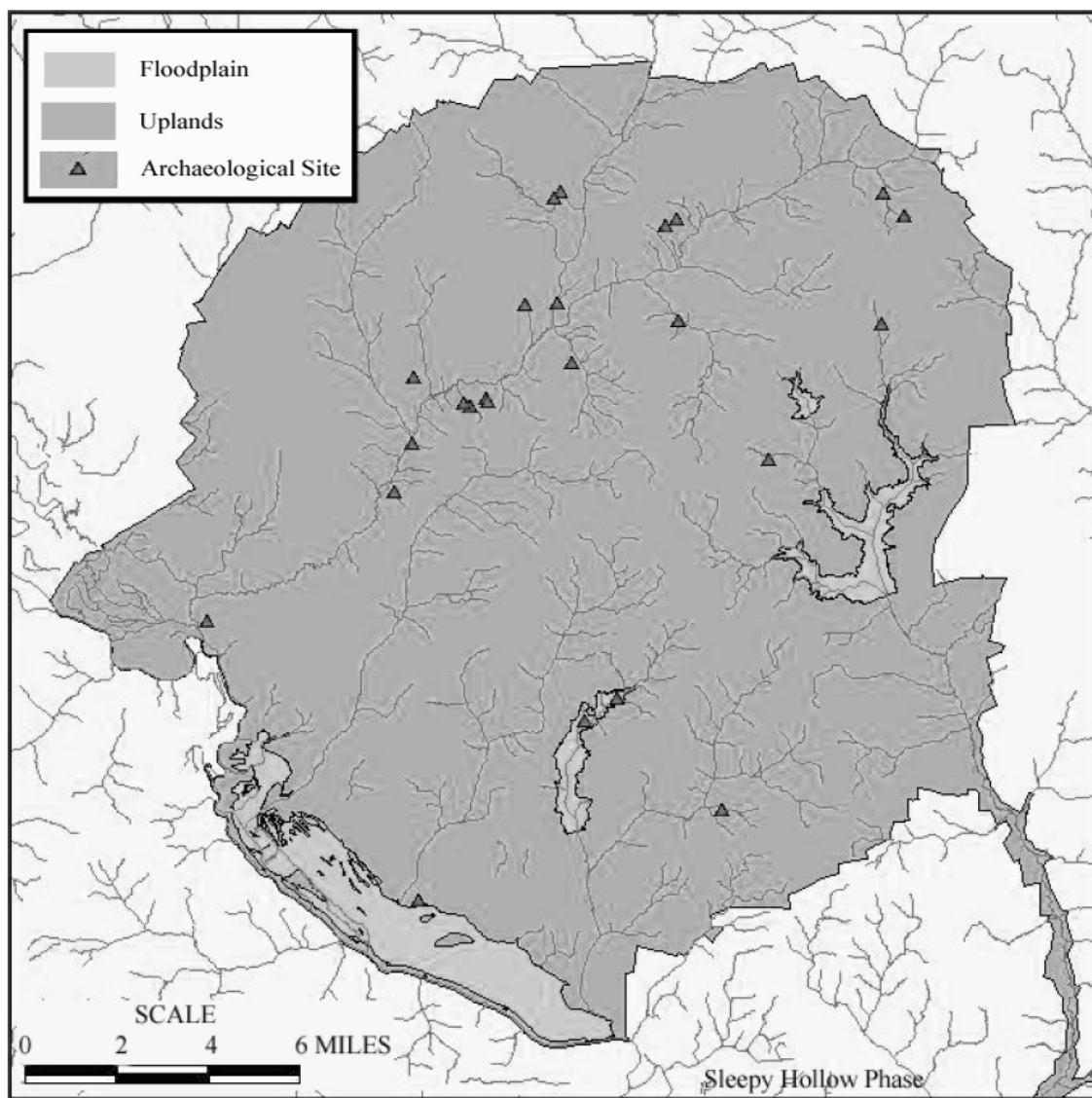


Figure 1.9. Distribution of sites with Sleepy Hollow phase ceramic types.



Figure 1.10. Lawton phase pottery types and modes (38BR666 and 38BR667): a, b, Savannah Complicated Stamped, concentric circle and cross motif; c, d, Etowah Corncob Marked rim sherds; e, f, Etowah Complicated Stamped, rectilinear diamond motif.



Figure 1.11. Distribution of sites with Lawton phase ceramic types.

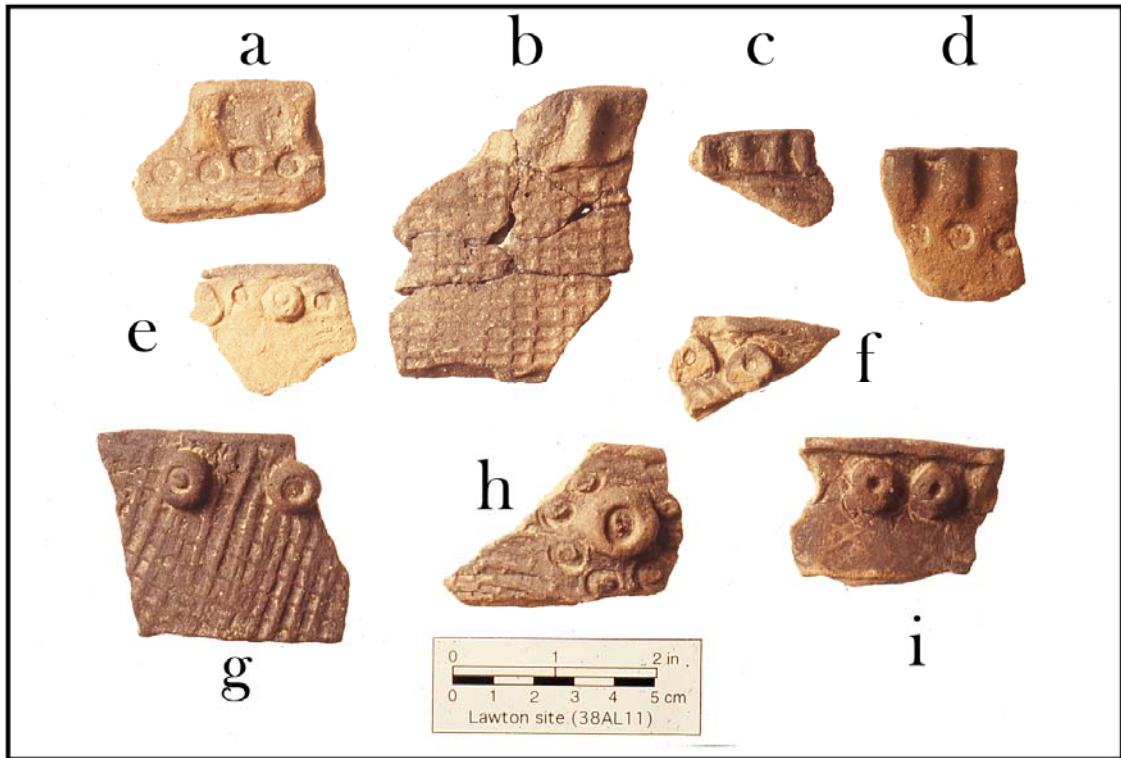


Figure 1.12. Hollywood phase pottery types and modes (38AL11): a-d, jar rims with notched “finger-pinched” appliqué strip (a and d with separate reed punctations); f, i, jar rims with point punctated rosettes; g, jar rim with reed punctated rosettes; e, jar rim with rosettes and separate reed punctations; h, jar rim with punctuated node and separate reed punctations; b, g, h, i, Savannah Check Stamped; e, f, Savannah Complicated Stamped; a, c, d, eroded.



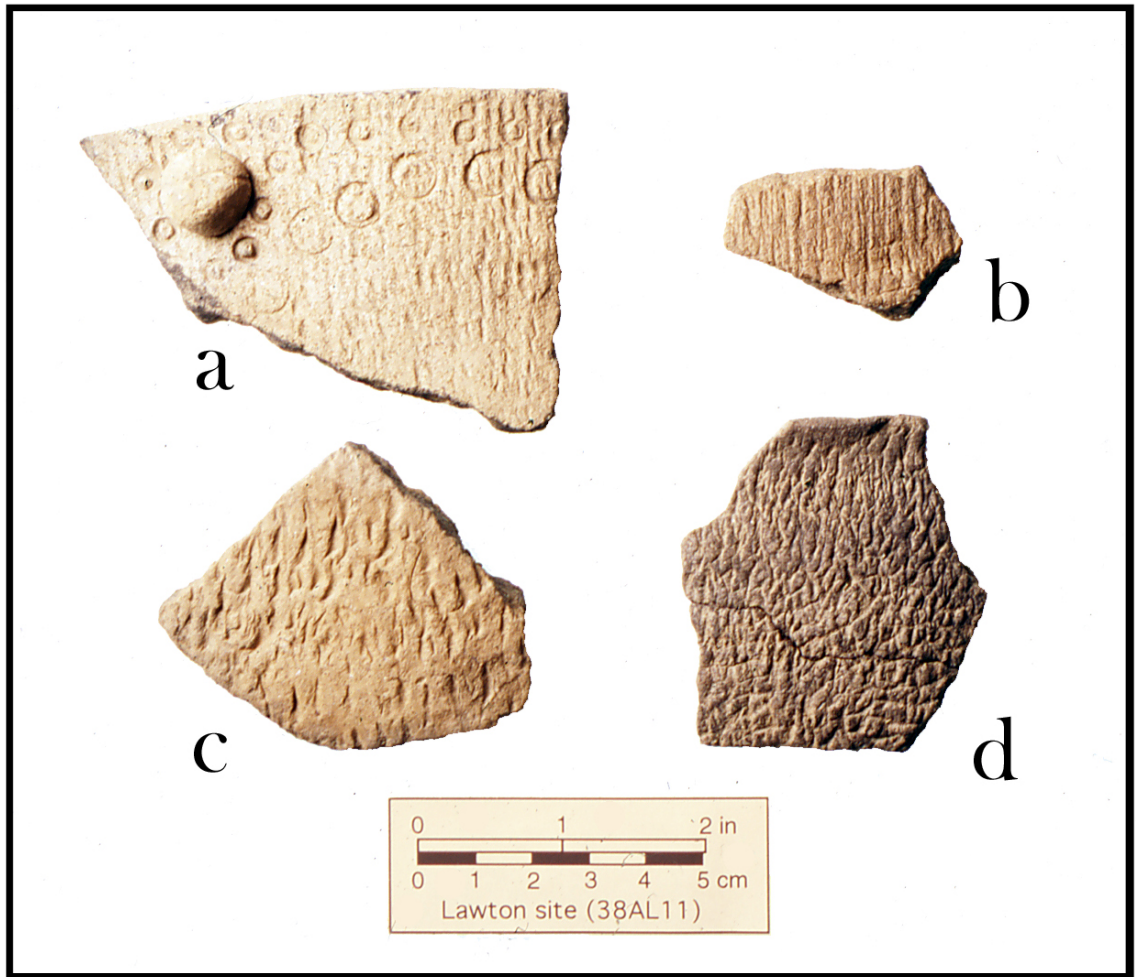


Figure 1.13. Hollywood phase pottery types and modes (38AL11) continued: a, Savannah Cord Marked rim sherd with node and separate reed punctations; b, Savannah Cord Marked body sherd; c, Etowah Corncob Marked body sherd; d, Etowah Corncob Marked unmodified rim sherd.



Figure 1.14. Hollywood phase ceramic jar form (38AL11): plain folded or collard rim with punctated node, separate reed punctations, and filfot scoll design motif.



Figure 1.15. Hollywood phase ceramic jar form (38AL11): plain rim and body sherd with punctated node, separate reed punctations, and multiple line cross and concentric circle design motif.



Figure 1.16. Distribution of sites with Hollywood phase ceramic types.



Figure 1.17. Silver Bluff phase pottery types and modes (38BR666 and 38BR667): upper left, jar rim with notched appliqué rim strip; upper right, jar rim with reed punctated appliqué rim strip; lower left, jar rim with “finger-pinched” appliqué rim strip; lower middle, rim with reed punctated rosettes and underlying separate reed punctations; lower right, bowl rim with incised lines.

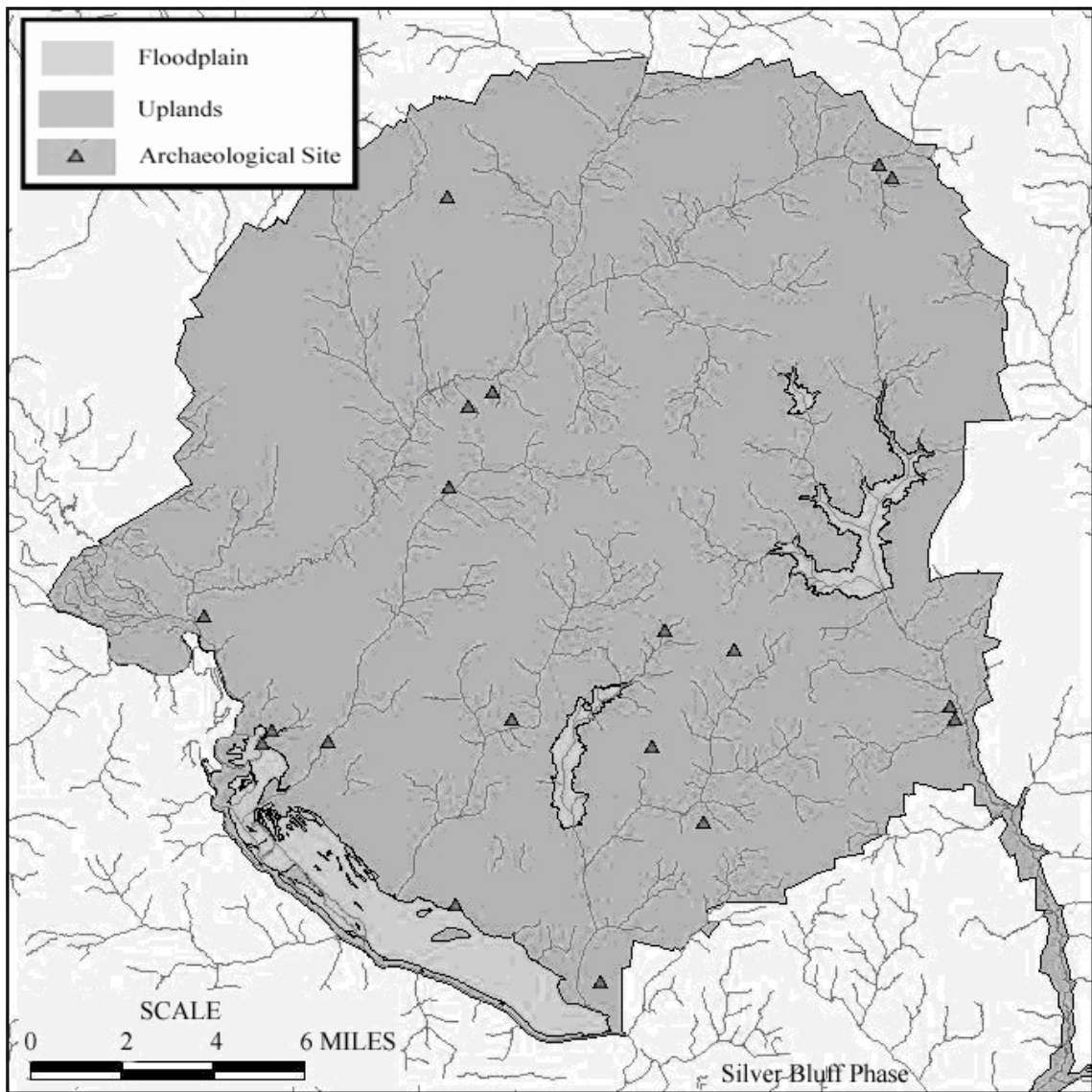


Figure 1.18. Distribution of sites with Silver Bluff phase ceramic types.

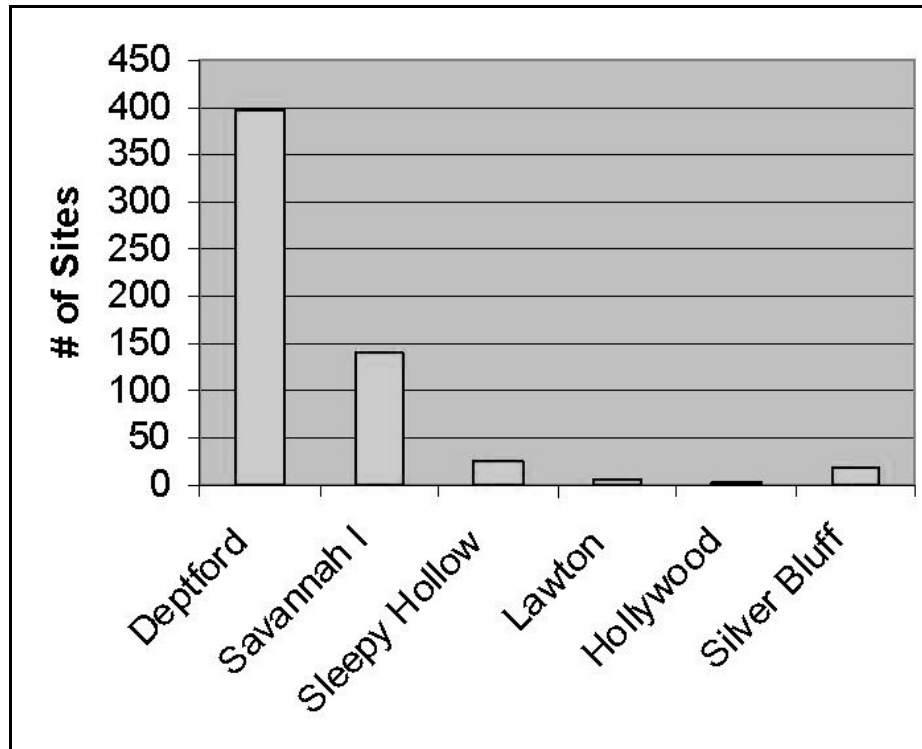


Figure 1.19. Frequency of Woodland and Mississippi period sites on the SRP by archaeological phase.

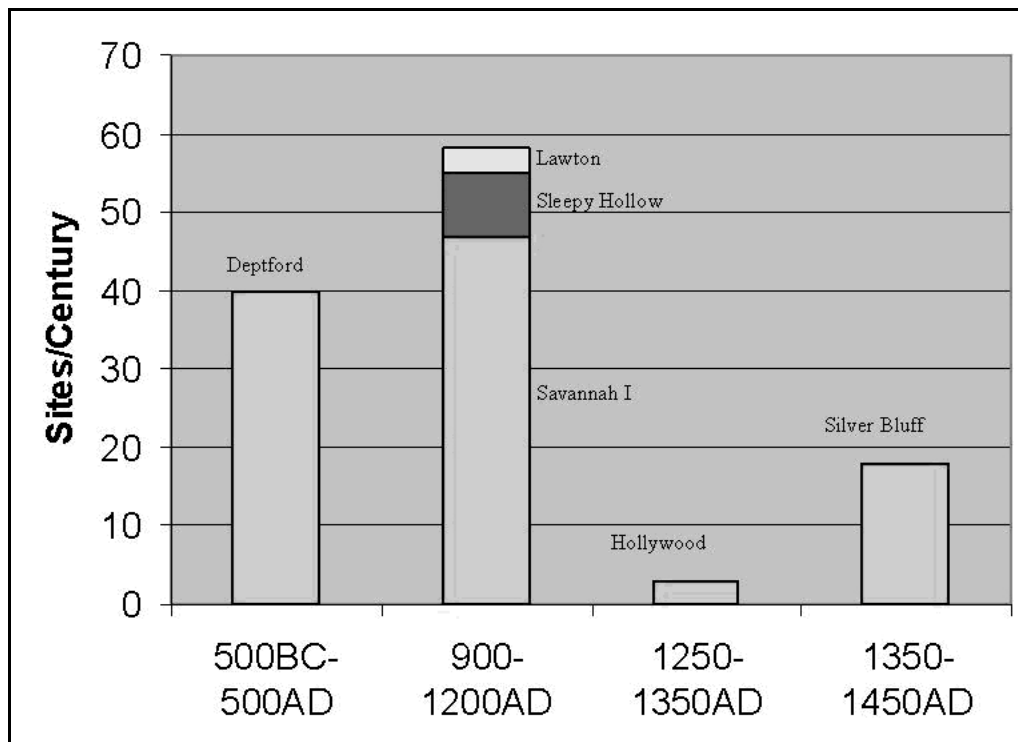


Figure 1.20. Incidence of sites on the SRP per 100 year interval by phase.

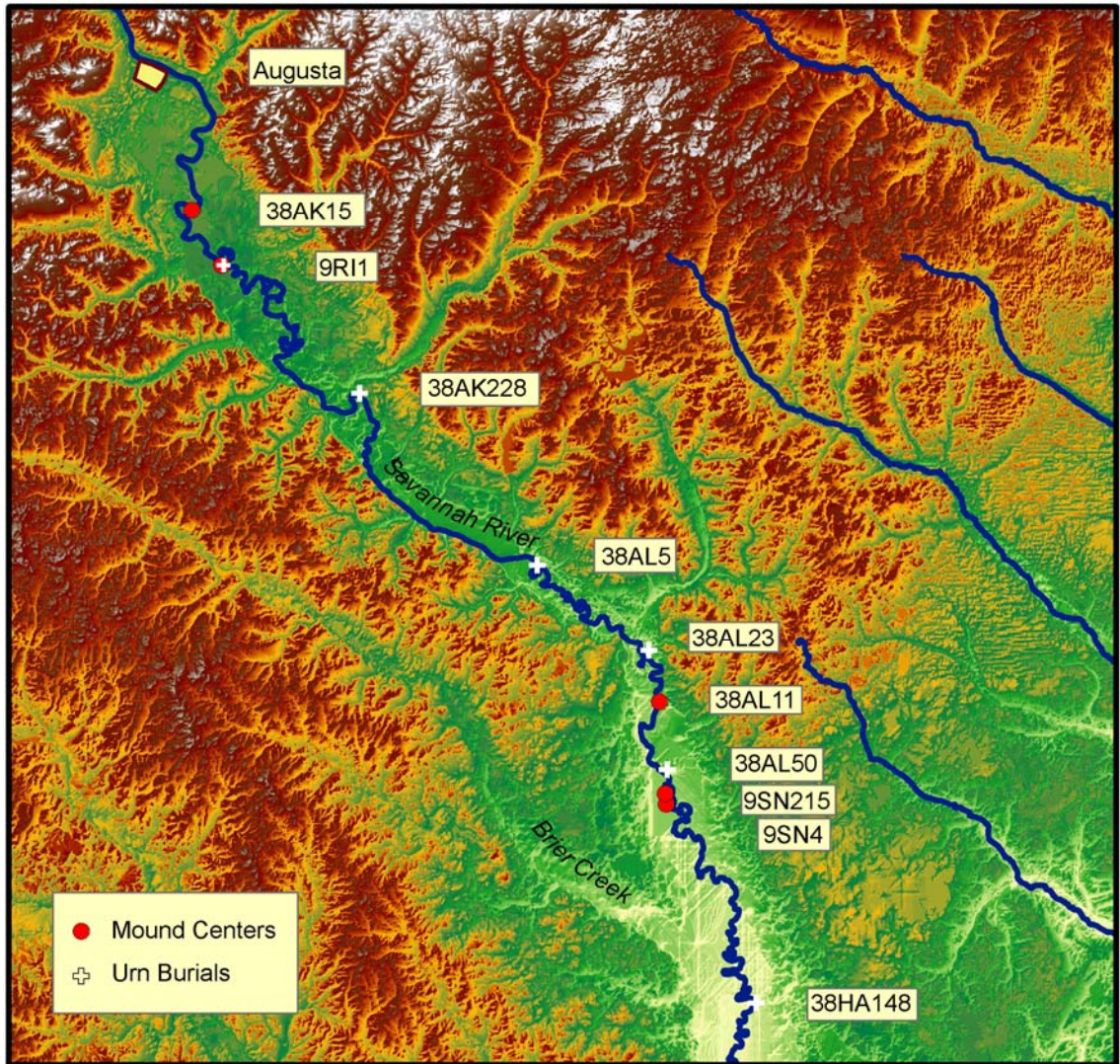


Figure 1.21. Mound centers and cemeteries in the middle Savannah River valley.

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## Chapter 2

### Theoretical Perspective

This study is undertaken primarily from a materialist stance, namely that of political economy, to evaluate the sociological aspects involved in the political and economic organization of the prehistoric, traditional societies of the interior Coastal Plain of South Carolina and Georgia from approximately A.D. 900 to 1400. This lengthy period of time witnessed a transformation in the sociopolitical complexity of an indigenous population that has been defined anthropologically as egalitarian, kin-centered social configurations generally referred to as “tribes” to more hierarchical, kin-ranked societies frequently labeled as “chiefdoms.” These groups achieved a certain degree of cultural complexity often determined archaeologically through monumental architecture, exotic materials accompanying burials, and the preserved food remains of large communal feasts. This apparent escalation in social inequality terminated around A.D. 1400 followed by the depopulation and possibly total abandonment of the middle Savannah River valley. Admittedly, my theoretical focus emphasizes the social relations of production (*sensu* McGuire 1992; Ollman 1976) as opposed to the mode of production (*sensu* Muller 1997) as discussed below (Figure 2.1).

### Class Redux<sup>1</sup>

As Karl Popper, a fierce opponent of Marxism, has claimed ‘all modern writers are indebted to Marx, even if they do not know it.’

Barry Burke (2000)

Just as Darwin discovered the law of evolution in organic nature, so Marx discovered the law of evolution in human history...

Frederick Engels at Marx’s graveside (1973:39)

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<sup>1</sup> With acknowledgement to Charlie Cobb (2000:22) from whom I’ve borrowed the term and spirit of Class Redux.

In presenting the funeral oration for Karl Marx, Frederick Engels paralleled the accomplishments of his lifetime friend, collaborator, and benefactor with the achievements of Darwin (Engles 1973; Harris 1968:217; Mehring 1935:555). Although Marxist scholars would certainly concur with Engels' estimate, debate continues regarding the applicability of Marxian ideas to studies of social evolution, especially regarding traditional, pre-industrial societies where stratified, class formations never occurred. Marvin Harris, commenting on the debate, noted that Marx's theories are surrounded by a polemic which in Darwin's case no longer exists; however, the continuation of this polemic serves testimony to the power of Marx's notions in contrast to other nineteenth-century intellectuals (1968:217).

Marx's fundamental interest, and concern, involved the economic consequences of Capitalism, and its effects on the contemporary proletariat of industrial society. Thus, it is no surprise that a consensus exists among many of today's anthropologists as to the relevancy of Marx and Engels to the history and theory of anthropology (Harris 1968:228). One can understand how this argument might be defended, for as several anthropologists and historians have pointed out, Marx, at least in his early years, appears ignorant of the "primitive" in his evolutionary scheme (Donham 1990; Fleischer 1969; Harris 1968). Moreover, as Harris (1968:227) remarks, Marx's treatment of prefeudal society in *The Critique of Political Economy* (1970 [1859]) does appear superficial and disorganized.

The concept of materialism has been defined as a perspective "that gives greater causal weight to a society's behavior than to its thoughts, reflections, or justifications for its behavior" (Marquardt 1983:1, 1992). Archaeology, as a material science, is well suited for making inferences of behavior in the past based on the patterned recognition of material culture remains at occupation sites (i.e., Schiffer 1975). The additional use of analogy from ethnographic sources, when appropriately applied, can augment the explanation of prehistoric human behavior (i.e., Binford 1967). The theoretical

perspective of historical materialism when applied to these ethnoarchaeological data sets emphasizes the following aspects (Marquardt 1983:2, 1992):

1. the immanence of change
2. a conflictual rather than a consensual theory of society
3. the importance of superstructural variables (beliefs can have causal roles)
4. sociohistorical and political factors are as important as techno-environmental factors in explaining social change

The underlying methodology of historical materialism is dialectical reasoning (Engels 1964; Ollman 1976; 1993, 2003). The dialectical critique allows for the discovery of sociocultural change through internal social relationships as opposed to external causative factors. Historical materialists agree that the physical environment has a determining effect on society, but they believe that social scientists must understand the circumstances in which people collectively make, and re-make, choices that relate to the environment. In this way, humans are seen apart from nature because they project social relations onto the natural environment, and then interact with that “cognized” environment (Marquardt 1983, 1992).

Dialectical reasoning expands upon environmental reductionist explanations by including the realm of social relations. The dialectic process is expressed in two ways (Marquardt 1983:2, 1992). First, dialectical inquiry and exposition takes the apparent world to be false and contradictory, and seeks to reveal these contradictions within sociocultural existence. Second, it is assumed that humans receive their reality in sociohistorical contexts and that relations among humans are masked by such abstractions as society and economy in such a way that contradictions and conflicts are destined to exist among human groups. In this manner, concrete historical movements can occur as the resolution of conflicts.

Historical materialism as it is defined here differs from two dominant analytical materialist approaches within anthropology, that of cultural materialism originated by

Marvin Harris (1979) and cultural ecology developed by Julian Steward (1955). Both Harris and Steward claimed a Marxian basis to their approaches (although Steward never did explicitly probably due to the McCarthyism of his time), but most scholars disagree with this assessment referring instead to their theories as “vulgar materialism” (Friedman 1974). This critique of cultural materialism is substantiated when considering the methodological approach of Harris. In dismissing the dialectic as the permanent “Hegelian monkey on Marx’s back” (Harris 1968:529), Harris instead embraces a positivistic scheme that stresses empiricism, logic, induction/deduction, and replicability of findings (Marquardt 1983). Additionally, his scheme is functional in that priority is given to etic explanations (from the point of view of the observer’s perception) of cultural institutions (Marquardt 1983, 1992). He does, however, emphasize basic economic relations in his explanations of the origins of taboos, belief systems, and other cultural esoterica (Trigger 1989a:292). In his search for origins, he is not overtly concerned with delineating evolutionary sequences. Finally, for Harris the infrastructural variables (the mode of production and reproduction) are thought to be the primary causal factors of change as opposed to the orthodox Marxian perspective of the economic base (domestic economy or political economy) as dominant over the superstructural (juridico-political and ideological) variables.

Steward, by contrast, placed emphasis on the multilinear evolution of social forms. He differentiates this perspective from unilinear and universal evolution (the idea that all societies pass through similar stages toward systems of increasing complexity) on the basis of special historical trends and cultural ecological adaptations to particular environments, which are excluded as irrelevant in former evolutionary frameworks (1955:16). Multilinear evolution involves the notion that specific modes of production appropriate to particular environments will result in multiple developmental sequences even though similar core features (i.e., technology and societal integration) are present (1955:19-22). Thus, change is driven by “creative” adaptations to environmental

circumstances. Additionally, societal change may also be the result of particular cultural-historical trajectories. Steward (1955:42) posits that “strong historical influences, such as diffused ideology...may supplant one [cultural] type for another.” These two theoretical approaches in particular view human behavior as basically formed by non-human constraints. This is contrary to Marxist thought, which rests on the idea that humanly arranged relations of production in the economic base determines social change (Trigger 1989a:292).

These previous ecological-economic, functional analyses have provided inadequate causal explanations regarding cultural phenomenon because they are overly deterministic. The primary reason for this lies in the idea that people are passive regulators in a scheme where social forms and social change are predicated on the nature of the environment (McGuire 1992:179). This scenario relegates human societies to biological units thereby overlooking the aspect that sociocultural entities attempt to reproduce themselves as societies. Thus, in a Marxian scheme, they contain the seeds of their own destruction, or given the immense flexibility within human societies, of evolutionary transformation (Bender 1989:93). Researchers, therefore, must look to the internal social relations and the inherent contradictions in these systems if they are to ever fully discern the mechanisms of societal reproduction and change.

Critics have questioned the applicability of Marxian analyses to pre-capitalist, traditional societies. However, anthropological research has demonstrated the presence of conflicting “interest groups” among egalitarian populations, thus opening these societies to a Marxist critique (McGuire 1992:179). The following review will briefly examine the developing role of Marxist thought in anthropology. In this way, it will be shown how the French school of neo-Marxian, or structuralist anthropology, can be credited with extending the study of class relations to nonstate societies. It is within this neo-Marxian framework that I will examine the prehistoric cultural manifestation and eventual transformation of sociopolitical and economic relations in the Eastern U.S.

## Toward a Structuralist Archaeology

Structural Marxists see a complicated causality between material conditions, social structure, and ideology. Thus a traditional society may use kinship and kingship as ideologies to guarantee social reproduction...

Timothy Earl (1997:9)

Classical Marxists emphasize modes and relations of production as elemental to explanation of political evolution, while Structural Marxists place primary emphasis on social structure, social reproduction, and the role of ideology as an active force in fostering political change.

Steadman Upham (1990:14)

Toward the end of his life, Marx began reading extensively in anthropology capitalizing on the opportunity furnished by the publication of Lewis Henry Morgan's *Ancient Society* to redress his neglect of the "primitive" (Donham 1990:4; Harris 1968:229; Patterson 2009). Apparently Marx recognized that anthropology could promote his activist cause for communism as revealed in his published notebooks compiled between 1880 and 1882 from his anthropological readings (Krader 1972). As Maurice Bloch (1985) noted, Marx employed anthropological materials in two revolutionary ways to foster his agenda that "the history of all existing society is a history of class struggle." First, in his goal to reconstruct the outlines of history leading to capitalism, Marx attempted "to show how capitalism and its institutions have been produced by history and how it will therefore be destroyed by history." Second, his concern for ethnographic material involved a more political aim—namely that early anthropologists provided Marx with the means to undermine the contemporary assumption that capitalism offered the only possible way for humans to live (Bloch 1985:27; Donham 1990:4).

As Donham (1990:5) explains, the incorporation of anthropology finally led to Marx's idea of primitive communism. When Engels published *The Origin of the Family, Private Property, and the State* in 1884, the year after Marx's death, he argued that the

technologically simplest societies were classless and without contradictions—“primitive communists”—in Engels’ terminology, and a concept that Lee (1988) later borrowed for his discussion of hunter gatherer political economy. As Bloch points out, “When Engels postulated a pre-class stage when there were no conflicting principles and everything was sweetness and light, he had no Marxist way by which to explain historical change” (1985:54). Additionally, this situation inhibited Marxist approaches by anthropologists to traditional, classless societies until the mid-20th century.

Maurice Bloch was first in crediting the French neo-Marxist with revitalizing Marxist analysis of traditional societies by extending changes in class societies to nonstate cultures (1985:162-163; Gilman 1989:32; McGuire 1992:180; Trigger 1989a:343-344). The importance of the French approach is the way it allows nonstate societies to be studied from a Marxist perspective. French structuralists have discovered classes in the social relations between age, sex, and descent groups. McGuire (1992:180) states that this concept of class is developed from Marx’s distinction between “classes in themselves and classes for themselves.” Class consciousness, or “classes for themselves,” is rare in pre-class societies because the groups are products of kinship, not exploitation. McGuire warns that the danger in this perspective is the reduction of kinship to a euphemism for class (1992:180).

Some scholars, such as Leacock (1972) and Wolf (1982) promote an approach that allows a Marxist analysis of traditional societies without reducing kinship to class. In this sense, class analysis is employed to investigate contradiction, social relations, and legitimation in kinship structures (cf. Gilman 1984). This has led some researchers to speak of prehistoric “interest groups” that equate to, and can be studied as, classes. Thus, in traditional societies, “interest groups” consisting of young and old, men and women, or members of different clans or lineages, struggle in much the same manner as classes do in state level societies (Pearson 1984; Trigger 1989a:344). McGuire explains that “Kinship creates groups with differential control of the means of production but exercises this

control primarily through reproduction and ideology, not control of coercive force...” (1992:181). Fundamental to this approach, is the important fact that in traditional societies, individual or group prestige is acquired and maintained through the redistribution and generosity rather than by the acquisition or hoarding of material wealth (Trigger 1989a:344; Sahlins 1968). Additionally, the important idea of social debts has been used by anthropologists to demonstrate how unequal access to ritual knowledge and marriage could be used in kin-based societies by some “interest groups” to control others (Bender 1985a; 1985b). Social debt then becomes a source of power and inequality (McGuire 1992:183).

Closely tied to these concepts of kinship structures as class, is the Marxist view of ideology as a factor masking unequal social relations and applied by the social elite to diffuse social conflict, otherwise termed by the social philosopher Antonio Gramsci as “ideological hegemony.” Indeed, conflicts between different “interest groups” to control the production and allocation of goods and services are considered by most Marxists to be the major stimulus to social transformation as opposed external, environmental stimuli. This is probably the most important Marxian aspect in anthropology (Trigger 1989b:32). It is only within the last quarter-century that these views have been applied to understanding the “evolution” of prehistoric societies. To be sure, archaeologists that disavow Darwinian selectionist, cultural ecology, or cultural materialist perspectives adhere to the notion that class relations must have its roots in the social dynamics of kinship groupings (McGuire 1992:183).

### **Marxism and Archaeology**

According to one historian of archaeological developments, the origins of Marxist archaeology occurred in the Soviet Union beginning in 1929. This resulted from a state-



directed effort to bring scholarship in the social sciences into line with the views of the Communist Party (Trigger 1984:59). By 1945, a distinctive Soviet archaeology had emerged along the social-evolutionary typology of Stalinism (McGuire 1992:56). In his publication *Dialectical and Historical Materialism*, Stalin (1938:34) formalized the notion of a fixed, unilineal stage of societal development as follows: primitive communal, slave, feudal, capitalist, and socialist. Stalin's scheme dropped the Asiatic mode of production that figured so prominently in Marx's work and furthermore, Stalin forbid it to be discussed in scholarly debate (McGuire 1992:58). Despite these constraints, archaeologists were able to carry on original studies within these bounds and as a result wrote prehistories emphasizing internal social dynamics. The knowledge they produced on Russian prehistory was different from that of Western archaeologists who focused on typologies and external, diffusionist perspectives relating to culture change (McGuire 1992:52; Trigger 1989a:227). Despite the dictated political agenda of Soviet archaeology, it has influenced the development of archaeological research throughout the world, particularly through the works of V. Gordon Childe (McGuire 1992:69; Trigger 1984:59; 1989a:256-260).

V. Gordon Childe was influenced by the Soviet archaeology after a visit to the Soviet Union in 1935 (Trigger 1989a:254). Eventually, Childe turned from Soviet archaeology because of perceived biases under Stalinist domination, and developed his own Marxist theory based upon the relations of production. Childe's primary interest concerned the evolution and functioning of prehistoric technology, which he claimed could only be understood after the social context in which it operated had been reconstructed (Trigger 1989a:263). The dilemma he faced in this endeavor was how to

effectively use empirical evidence to infer sociopolitical systems. Childe felt that independent and verifiable means must be employed to test Marxist theories concerning social organization from archaeological data (Trigger 1989a:263). He eventually concluded that archaeologists can learn about the technology of the past, but not the social and ritual aspects. Because of this view, Childe never developed an effective technique for studying prehistoric social and political systems (McGuire 1992:71).

Despite the efforts of Childe, Marxist archaeology in the western hemisphere developed slowly. The recent trend of interest in Marxian ideas in archaeology is attributed to political concerns since the Vietnam War and the relaxation of political controls in the expanded university systems during the 1960s and 1970s (Gilman 1989; McGuire 1992). Possibly, of greater consequence for the emergence of a Marxist archaeology was the reaction to perceived deficiencies of the New or Processual Archaeology. The revolutionary New Archaeology of the late 1960s and early 1970s was defined and promoted by Lewis Binford and colleagues (Binford 1964, Binford and Binford 1968) as a more scientific archaeology framed within a positivist philosophy. This New Archaeology developed as a reaction to the previous culture-historical paradigm of the first half of the twentieth century, which Binford claimed had contributed nothing toward the explanation of human behavioral processes.

As originally defined, the New Archaeology consisted of four basic characteristics: “cultural-evolutionary theory, a systemic view of culture and of culture and the environment, an emphasis on cultural variability and its control through statistical sampling, and a general scientific approach” (Willey and Sabloff 1993:224). The ultimate goal of the New Archaeology was to generate nomothetic laws of culture.

Accompanying this paradigmatic development was much debate and the evaluation of success of the New Archaeology still continues today. Even so, many archaeologists, particularly of the younger generation during the 1960s and 1970s, embraced the scientific tenets of the new paradigm and applied them to their research.

Although an underlying aspect of the New Archaeology is Marxian-like materialism, its approach can be considered adaptationist ecology. As Gilman states, “The New Archaeology seeks an ecological explanation for the variability of the archaeological record [and] human cultures are viewed as extrasomatic means of adaptation” (1989:65). Since cultures are seen as functionally integrated systems of homeostatic regulation by New Archaeologists, social organization and ideology are generally interpreted as maintaining that integration (Gilman 1989:65). According to Hill (1977:64), change only occurs when the homeostatic mechanisms fail to work adequately. The stress that results in social change is believed to be external to the cultural system. Moreover, this external stress is the product of pressure resulting from the imbalance between a population and its resource base (Gilman 1989:65).

A primary criticism of the New Archaeology is the lack of attention to social relations. With so much emphasis placed on finding patterned human behavior in the archaeological record, New Archaeologists have lost sight of the conflicts and tensions that must have abounded amongst prehistoric populations just as they occur in our contemporary society. Trigger explains that the dialectical perspective of Marxist archaeologist, which is itself the antithesis of ecological determinism of the New Archaeology, places humans at the center of social change, thereby replacing non-

Marxist efforts to lessen the rigidity of ecological determinism by broadening the range of external factors that determine human behavior (1989b:32).

### **Political Ecology and Archaeology**

Environmental and ecological approaches have held a dominant position in Americanist archaeology since the introduction of the “New Archaeology” of the 1960s. A central element concerning both Marxist and ecological approaches is the aspect of social change or transformation. What becomes apparent through familiarity with these differing schemes is the approach that each takes in explaining the causal factors of change. Turner (1991:139), in summarizing this dichotomy, states that although Marxian theory may be too dependent on internally generated sources of innovation and change, ecological theory also invokes an equally mysterious source of change with its emphasis on the environment. Simply stated, ecological theory posits an external origin of change. As presented in Hawley’s model, a system can only be disrupted by outside forces to develop new evolutionary levels of structural complexity (Turner 1991:139, 142). Furthermore, the homeostatic functionalist approach views social organization as facilitating techno-environmental practice or resulting from it (Gilman 1989:67). These paradigms stand in stark opposition to the dialectical program of historical-materialism as put forth by Marx.

In practice, the application of the dialectic is what differentiates Marxian social theory from the more traditional cause-and-effect relationships evoked by most functionalist sociologists (Ritzer 1992:147) and anthropologists who are concerned with

sociocultural transformation. Social scientists, and in particular anthropologists, have often relied on primary causal factors as explanations for social change. The reliance on external circumstances for explanations of social change lends itself to tautology reasoning. As a case in point, archaeologists have often taken a Malthusian perspective in developing their population pressure theories when accounting for cultural change. For instance, the Neolithic revolution resulted from the environmental stress of increasing population on limited food resources. The result, predictably enough, was agriculturally based societies. The fundamental flaw with this cause-and-effect relationship is that earlier hunter-gatherer groups had effective means of population control (e.g., infanticide, lengthy lactation periods that promoted the spacing of child-birth), so what instigated initial population increase? The logic suddenly becomes circular.

It is therefore apparent that primary causal explanations are not always adequate, and this is why the Marxian dialectic is so pertinent to understanding the dynamics of social systems. Marx searched for internal causes relating to social relationships and change. Not being especially preoccupied with prehistorical or historical evolutionary trajectories as are contemporary social scientists, Marx, as a dialectician, takes into account the impact of past, present, and future conditions upon modern social relationships (see Ritzer 1992:Fig. 5.1). For Marx, class conflict is the driving force of history. Thus, the Marxian dialectic serves as a means of defining and understanding the oppositions and contradictions inherent in these social relations of conflict. Marx referred to this analytical approach as dialectical materialism and employed it as an effective means of recognizing the internal processes contributing to social structure and social transformation.

It would thus appear that Marxist applications to cultural systems are incompatible with ecological theories and methodologies. However, to the contrary, Steward's cultural ecological approach to societies without social classes as previously outlined is fully compatible with a classical Marxist orientation (Gilman 1989:67). Moreover, cultural ecology holds an implicit Marxist perspective with its emphasis on technology and subsistence economies as the material basis for cultural adaptation. Marx himself seems to have laid the groundwork for cultural ecology when he penned the following reflections:

Once men finally settle down, the way in which to a smaller degree this original community is modified, will depend on various external, climatic, geographical, physical, etc. conditions as well as on their special natural make-up - their tribal character ... The earth is the great laboratory, the arsenal which provides both the means and the materials of labor, and also the location, the *basis* of the community (Marx 1965[1857-8]:68-69; italics in original).

However, just as Marx went on to emphasize internal structural conflicts over external factors when addressing social evolution, so do Marxist archaeologists working within a framework consist with cultural ecology. As Gilman 1989:67 points out, efforts on the part of archaeologists to understand the changes that kinship-based societies underwent prior to the emergence of social classes, most Marxist archaeologists have devoted a greater sensitivity to inherent social tensions. For example, where ecological functionalists see the development of specialized production and exchange networks during the transition from a hunting and gathering economy to that of agriculture in the

Near East as a result of the increasing importance of surplus accumulation in cultural adaptive strategies (Flannery 1965), Marxist-oriented researchers view exchange and competition as antecedent to agriculture and extensive surplus banking (Gilman 1989:67; Kohl and Wright 1977). Although synthesis of the cultural ecological and Marxist perspectives has been achieved, it is clear that Marxist adherents maintain a theoretical hegemony.

Recently, efforts within anthropology to more fully integrate political economy and human ecology has resulted in a picture of cause-and-effect relations between localized adaptation regarding subsistence practices and the broader sphere of global economic factors. This approach, termed political ecology (Greenburg and Park 1994), tends toward linear linkages at a macro-level of analysis. This implies a Wallersteinian (1974) model of the modern world system in which the core, or economically dominant states subjugate the peripheral, or Third World countries. Eric Wolf (1982) continues this line of thought, but from a different perspective: that of the indigenous or native populations. Wolf (1982:23) argues that Wallerstein's principle aim was to understand how the core subjected the periphery, and not to study the reactions of the micro-populations investigated by anthropologists. Thus, Wolf posits that consideration of the larger economy must be integrated with the specific historical trajectory of the particular region under study. Cased in this view, political ecology has close ties with developmental studies in anthropology. However, this scheme also holds implications for the other sub-fields of anthropology, including archaeology.

As Sassaman (1994) points out, since the 1960s, anthropologists have amassed a large corpus of data concerning the adaptive behavior of contemporary hunter-gatherers,

and much of this material is used to reconstruct and interpret the material record of prehistoric hunter-gatherers. For the most part, the applications of modern data to archaeological contexts are ecological in perspective, thereby emphasizing the relationships between human behavior and the environment.

Recently, however, debates have arisen regarding the application of ecological models for understanding the effects of local histories and global interconnections on hunter-gatherer lifeways (Sassaman 1994). Revisionist perspectives concerning these groups suggests that many of the cultural aspects attributed to ecological adaptation to specific (usually marginal) environments, are the result of long-term contacts with state-level societies. This begs the question of how to interpret prehistory if contemporary hunter-gatherer populations bear little similarity to their prehistoric counterparts? A political ecological approach opens this situation to an informed examination. By taking into account factors of the modern world system, one must first investigate the economic global effects on these societies. With this awareness, one can then begin to critically apply analogies regarding such variables as habitat, descent, levels of mobility, and food sharing.

As mentioned above, political ecology presupposes a broad linear linkage of cause-and-effect. Within the linkage are numerous variables such as those just enumerated. In general, these variables are subsumed under people's interaction with the environment. This interaction is often discussed in terms of modes of production. Wolf (1982:75) defines a mode of production as "a specific, historically occurring set of social relations through which labor is deployed to wrest energy from nature by means of tools, skills, organization, and knowledge." According to Collins (1989), a mode(s) of



production provide the links between social organization of labor, or the organization of production and environmental scarcity. This scenario presents nature as the victim of human use rather than the causal agent of change. This in turn involves aspects of land and labor management (i.e., ownership or access to social and physical resources). In other words, the objective is to understand how labor and organization of labor is structured. The basis for this can be found in Steward's (1955) three part methodology integrating technology, organization, and production.

Gleaning from the discussion thus far, it is apparent that political ecology, as it stands, is deficit in its consideration of micro-level social factors that determine the causes of environmental exploitation. For this we must return once again to developments in human ecology. The intellectual bridge linking cultural ecology from the 1950s and 1960s to present day perspectives can be found in the human ecology of John Bennett (1976, 1993). Bennett endeavored to define and extend the concept of adaptation to cope with the purposes, goals, and desires of individuals. It appears that this idea stems from the influence of actor-based models which have received much attention of late in social theory. Bennett defines human ecology as "the human proclivity to expand the use of physical substances and to convert these substances into resources - to transform Nature into Culture, for better or worse" (1993:13). Following from this, Bennett introduces the processual concept of the socionatural system which consists "of any ongoing relationship between human activities and environmental phenomena in which the humans provide the goals and means and the environment the wherewithal" (1993:13).

Through his concern with the individual's adaptation and interaction with the environment, Bennett is attempting to rectify what he perceives as a problem stemming from the Culture/Nature dichotomy. What he offers instead is a Nature into Culture perspective: “since the appearance of Homo sapiens [there has been] a growing absorption of the physical environment into the cognitively defined world of human events and action...” (1976:4). Bennett realizes that human survival is dependent upon environmental exploitation. Hence, humans are constantly employing and converting natural phenomena into cultural objects and reinterpreting them with cultural ideas (1976:4). However, as this process of Nature into Culture continues, a transition begins in relation to hierarchies of status: “the accumulation of substances and objects for social purposes unrelated to biological survival” (1976:6). Resources then become economic goods and move toward private ownership and as such humans began to exploit and abuse the environment toward these ends thereby creating future problems for themselves and the environment (1976:9-11).

Bennett’s model incorporates both time and adaptation to project social change and eventual environmental degradation. Thus, socionatural systems are carried forward by looking at adaptations. Adaptations in this sense involve the idea of individual human anticipation of achieving desired goals. By realizing these goals, humans maintain choice and freedom of action as well as survival. This perspective best follows the microeconomic model of agency theory described by Orlove (1980:248). The unintended consequences of this choice making where actors exploit scarce resources to a hierarchical series of ends of goals is degradation of the environment.

Bennett's (1976:13) work dovetails well with that of more recent agency-model approaches which present perspectives based on the centrality of domination. As Ortner (1984:157) posits, to best understand the workings of any given system, one will do well if they penetrate the workings of asymmetrical social relations. This hierarchy of social relations, as Flanagan (1989:249) maintains, exists between individuals belonging to all societal types. Following this, anthropologists can examine the recurring resource exploitation behavior of individuals of different social strata to understand how and why the actions of individuals in society result in certain consequences for the resources they occasionally or habitually exploit (Nyerges 1992). This then introduces the theory of practice, or a sociocentric approach, into ecological and political economic models. As Nyerges (1992) explains, a sociocentric approach in ecology is one that focuses on conflict and power relations among groups and individuals of asymmetrical relations in society, which he terms an "ecology of practice."

The theory of practice takes into account the fact that people are not completely passive within their cultural or ecological systems. Individuals are actors in a system by the fact that they are involved in carrying-out and reproducing cultural norms, but they are at the same time agents of systemic changes by way of making decisions from various alternative choices. As Giddens (1979) explains, "individuals are active operators in creating or shaping the social and cultural contexts that simultaneously frame or constrain their actions and decisions." Incorporated into an ecology of practice, this perspective assumes certain methodological procedures which enable researchers "to distinguish actors according to social status, to examine access to and control over the means of production, and to show how conflict over control has consequences for the exploitation

and management of specific resources as they are incorporated into individual social lives" (Nyerges 1992). In summarizing this approach, Nyerges maintains that an ecology of practice rejects the ecosystems ecology position of viewing humans as passive regulators of their environment; that the individual actor exploiting resources is the crucial methodological starting point; that the sociocultural contexts of asymmetrical relations are analytically privileged; and that natural resources too have a "social life" and as such are incorporated into the social lives of individuals who exploit them. The opportunity of applying such theory to studies of human-environment relationships will contribute to our understanding of structural relations and the impact of individuals on those structures (Palm 1990).

In conclusion, this discussion has incorporated two distinctive (and often opposing) approaches in anthropology, that of neo-Marxism and social ecology, under the concept of political ecology. A central focus of both theoretical positions is that of social evolution and development. However, each views the structural factors contributing to sociocultural change as emanating from different sources. For Marxists, change is the result of internal dialectal tensions inherent in all social relations of production. Social ecologists emphasize exogenous sources of change. This comes about as either the result of ecosystem exposure to the ecumenic environment as in Amos Hawley's human ecology or the tech-environmental adaptationism of Julian Steward. A fully "mature" integration of these approaches is problematic given that one always assumes dominancy. True synthesis can only be achieved when micro-level theory is infused. A primary aspect of anthropological work lies in understanding the interaction of social and environmental systems. Thus, investigations of the asymmetrical social

relations among individuals or aggregates in relation to their environment provides a means for interpreting reciprocal effects and the consequences that ultimately may lead to sociocultural evolution and development. In this way, a more sophisticated and multicausal approach can be derived that views human agency in a dialectic with the environment.

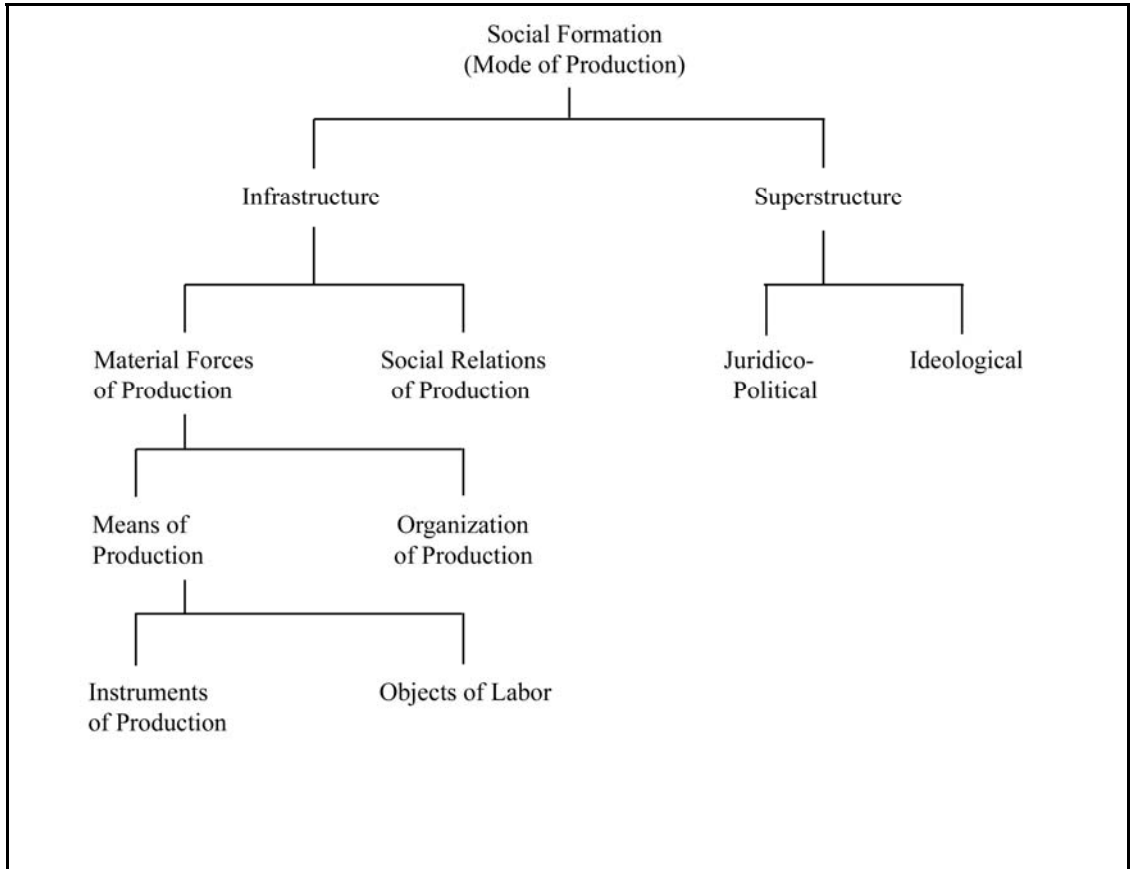


Figure 2.1. Analytical Categories in the Concept of Social Formation (modified from Freidman 1998:46).

## **Chapter 3**

### **Natural Environment of the South Atlantic Interior Coastal Plain**

Prehistoric societies, despite their level of socio-political and technological complexity, were subject to the natural parameters of the physical environments in which they existed (Brooks et al. 1990:19). That being said, the theoretical basis of my study considers the natural environment primarily as a medium of human labor, and to that end manipulated for the purposes of biological and social production and reproduction. Social labor is the central basis of economic production and consumption in which people work together to transform the material environment into forms they can exploit. In order to establish the material conditions within which past human populations produced their subsistence economies and by so doing reproduced their socio-political systems in the research domain under consideration here, I provide the following environmental context.

The physiographic region of concern in this study is a portion of the greater South Atlantic Coastal Plain, the boundary of which has been variously defined but altogether composes the coastal regions of southeastern Virginia, North Carolina, South Carolina, Georgia, southwestern Alabama and Florida. This vast area consists of a series of ancient marine terraces formed by ancient shorelines of sea levels dating to the Tertiary and Quaternary ages (Cooke 1936; Colquhoun and Johnson 1968). Geographers divide the South Atlantic Coastal Plain into three general physiographic provinces—Upper, Middle, and Lower—which I summarize here for South Carolina (Figure 3.1).

The Upper Coastal Plain, beginning at the Sandhills sector, interfaces with the Piedmont at the Fall Line zone, a wave-cut scarp or ridge (ancient shoreline) dating to ca. 100 million years before present, and continues seaward to the Orangeburg Scarp, a 2 million year old shoreline that intersects with the Middle Coastal Plain. This physiographic province lies between about 168 m (550 ft.) in maximum elevation at the Fall Line and approximately 76 m (250 ft.) in minimum elevation at the Orangeburg Scarp. The sandy deposits that compose the Upper Coastal Plain Sandhills formation originated ca. 86 to 84 million years ago, when receding sea level exposed earlier sea floors and southwest prevailing winds shaped them into shifting sand dunes, where eventually vegetation took hold maintaining these dunes as stationary Sandhills to the present (Murphy 1995:92-94; Stewart and Roberson 2007:210-211). Both Middle and Lower Coastal Plain terraces intrude into the Upper Coastal Plain along major river valleys (Colquhoun 1969:2-3).

The Middle Coastal Plain is situated between about 76.2 m (250 ft) in maximum elevation and approximately 30.5 m (100 ft) in minimum elevation seaward at the Surry Scarp where it contacts the Lower Coastal Plain. At least two ancient marine terraces, the Coharie (215 ft.) and Sunderland (170 ft.), which lie in belts roughly paralleling the Atlantic shoreline, compose the Middle Coastal Plain (Colquhoun 1969:3-4). The Lower Coastal Plain sector lies between about 30.5 m (100 ft.) in maximum elevation and 2.4 m (8 ft.) in minimum elevation at the coastline where landforms such as the barrier island chain and marsh inlets are found. Six marine terraces including the Wicomico (100 ft.), Penholoway (70 ft.), Talbot (40 ft.), Pamlico (25 ft.), Princess Anne (17 ft.) and Silver



Bluff (8 ft.) have been recognized roughly paralleling the Atlantic shoreline on the Lower Coastal Plain (Colquhoun 1969:4).

As much of the archaeological settlement data for this study is derived from inventory site files as well as survey that I have conducted at the Savannah River Plant (SRP), a federal installation of the U.S. Department of Energy, this area is discussed in a regional environmental framework. The SRP is a 777 km<sup>2</sup> (300 mi.<sup>2</sup>) nuclear production facility along the Savannah River in western-central South Carolina. As shown in Figure 1.2, the SRP is situated in the Upper Coastal Plain some 240 km (149 mi.) upriver from the Atlantic Ocean and 30-40 km (19-25 mi.) below the Fall Line, and encompasses approximately 78,000 ha (192,322 ac.) of land in portions of Aiken, Barnwell, and Allendale counties (Sassaman et al. 1990:1). Ranging in elevation from 24-122 m (80-400 ft.) above mean sea level (amsl), the physiography of the SRP comprises two major components: the Aiken Plateau (Cooke 1936) and a series of Pleistocene marine terraces (Figure 3.2). The Aiken Plateau is characterized as an expansive, sandy plain with broad, interfluvial areas dissected by narrow, steep-sided valleys and located between the Savannah and Congaree rivers on the Upper Coastal Plain of South Carolina (Cooke 1936:2). Its sandy sediments dominate the SRP landscape and range in elevation from 76-122 m (250-400 ft.) amsl. Once a relatively smooth, gently sloping area (with a regional slope to the southeast), the Aiken Plateau has been deeply eroded by numerous drainage tributaries. Those interstream areas underlain exclusively by Cretaceous period (63 to 135 mya) sediments are characterized by gently rolling hills and very few undrained areas. In contrast, those interstream areas underlain by a thin cover of Tertiary period (25 to 63 mya) sediments are characterized by plateaus with steep ravines and

numerous undrained upland wetlands and Carolina bays (Langley and Marter 1973:18-19).

The Pleistocene coastal (marine) terraces roughly parallel the Savannah River forming the southwestern margin of the SRP. Three contiguous terraces, the Brandywine, Sunderland, and Wicomico, represent the successive recessions in sea level during the glacial epoch of one million to 10,000 years before present. The Brandywine marine terrace is the highest and oldest adjoining the Aiken Plateau and paralleling the river at elevations between 82 m and 50 m (269 ft. and 164 ft.) amsl. The Sunderland terrace is the second oldest and highest lying between 50 m and 30 m (164 ft. and 98 ft.) amsl. The Wicomico terrace, lowest and youngest, comprises the modern floodplain between the current river channel and 30 m (98 ft.) amsl. Locales on the Brandywine and Sunderland terraces with suitable soils and drainage for agriculture were used extensively during the historic period (Workman and McLeod 1990:7).

The riverine–alluvial landform features of the Savannah River may be grouped into a series of terraces produced through the down-cutting and lateral migration of the river to its present position as shown in Figure 3.3 (Brooks et al. 1990:30-31). The terraces are geologically younger at successively lower elevations with proximity to the present course of the river. These terraces occur below the 76 m (249 ft.) elevation level. The onset of the active (modern) floodplain occurred at ca. 4,000 years before present (Stevenson 1982). The first terrace above the active floodplain has been subdivided into Terrace 1a (T<sub>1a</sub>) and Terrace 1b (T<sub>1b</sub>) by the presence of a fairly well-defined escarpment ranging from 43 to 37 m (140 to 120 ft.) amsl in an upstream to downstream direction on the SRP. Initially, T<sub>1a</sub> was thought to have formed during the early to mid-Holocene

between ca. 10,500 and 4,500 years before present in response to the rapid rise in sea level for that time (Brooks et al. 1990:30). More current geological research has revised the age of T<sub>1a</sub> development to around 16,000 years before present. (Mark Brooks personal communication 2010). Although, the dates of origin for T<sub>1b</sub> and T<sub>2</sub> remain undetermined, they are certainly much older geologically than T<sub>1a</sub>.

Specific topography of the SRP is the combined result of ancient marine processes and more recent fluvial dissection. The major channels of tributaries follow fault lines and marine features, but their numerous feeder streams in unconsolidated sediments lend a great deal of topographic relief to the upland Sandhill sector (of which the Aiken Plateau is a part) of the Upper Coastal Plain. Such formations in the Aiken Plateau are particularly sharp along the margins of Upper Three Runs and Lower Three Runs creeks, the area's two largest tributaries. Exposures of quartz cobbles, orthoquartzite, and low-grade chert are found in the steep cut banks of these streams.

The interfluvial ridges of the Aiken Plateau are characterized by relatively xeric (i.e., drought-tolerant) vegetation dominated by pine (Shelford 1963:86-87). This xeric ecological system (the Atlantic Coastal Plain Fall Line Sandhills Longleaf Pine Woodland) is found on upland topography in the Sandhill region extending from central North Carolina to Central Georgia. Soils are well- to excessively drained and longleaf pine is the dominant tree species, often with a scrub oak understory and a herbaceous layer dominated by legumes and grasses, including wiregrass. This regime is maintained by frequent, low-intensity wildland fires (Evans and Schafale 2006). More mesic (i.e., requiring moisture) communities with oak tree species are found on terminal ridge noses and slopes adjacent to active tributary streams (Barry 1980:97-116). This mesic

ecological system (the Atlantic Coastal Plain dry-mesic Oak Forest) encompasses oak-dominated hardwoods forests on dry to moderately dry soils and extend from southeastern Virginia to southeastern Georgia. These forests are commonly found along the slopes and bluffs of rivers and streams, and are somewhat protected from wildland fires by a combination of steep topography, relative landscape isolation, and limited flammability of vegetation (Evans and Schafale 2009). Major tributary streams in the Aiken Plateau, such as Upper Three Runs, have formed broad floodplains that support hydric flora (bottomland hardwoods [Wharton 1978:40] or “mixed hardwood swamps” [Monk 1968; cited in Wharton 1978:40]) in areas that are regularly flooded, as well as diverse mesic communities along floodplain margins and terraces. Thus, the topographic gradients of the Aiken Plateau created by tributary dissection support vegetative gradients comprised of xeric, mesic, and hydric communities (Hanson et al. 1981:28-36; Langley and Marter 1973; Whipple 1978; Whipple et al. 1981).

In the Aiken Plateau, paleoenvironmental indications show increased resource productivity in the uplands by 2000 B.C. Fluvial responses to mid-Holocene sea level rise served as a stimulus to increased upland resource potential (Brooks and Hanson 1987). The onset of modern floodplain development in the Upper Coastal Plain of the Savannah River valley at ca. 2000 B.C. (Stevenson 1982) established the local fluvial base level that led to subsequent hydrologic changes in upland tributaries (Brooks and Hanson 1987). This resource potential for prehistoric subsistence depended on the degree of fluvial dissection. Beginning with spring-fed tributary stems that dissect the Sandhills, and moving downslope, resource potential improves with the gradient increase in moisture and soil productivity. Within this zone of dissection, oak mast is especially

dense and productive. This resource, particularly the red oak group, was competitively important to both deer and humans populations. Noting this, Hanson proposed that the Sandhills was targeted by Archaic period humans for exploitation during the late fall and early winter, the seasons which deer and acorns were most available (Hanson et al. 1981:42). Because water was the primary limiting factor over much of this zone, Hanson predicted that residential sites were positioned on the mesic terraces of tributaries, locations from which upland procurement trips were launched. This perennial use of the uplands appears to have continued throughout the Woodland period. By the Mississippian period, during which time there is a clear reliance on maize horticulture, small sites are recorded scattered across the uplands at the head of tributaries suggesting a continued use of upland areas most likely for permanent habitations.

At this point, I turn from the Upland Sandhill sector to the natural environment of the Savannah River floodplain and its potential for resource productivity and prehistoric human exploitation. Comprehensive discussions of the Savannah River floodplain environment are provided in recent syntheses of archaeological investigations on the SRS (e.g., Sassaman et al. 1990). This review is not intended to replicate these works, but rather to provide a specific context for evaluating use of floodplain resources by late prehistoric populations. The bulk of the follow summary follows from Brooks and colleagues (1990:19-66).

The Savannah River is a major watershed of the South Atlantic Slope with a drainage basin that covers 27,394 km<sup>2</sup> (10,577 mi.<sup>2</sup>) (Seabrook 2006). Like other rivers of the South Atlantic Slope, the Savannah River, an alluvial stream, traverses three major physiographic provinces as it flows perpendicular through the Piedmont and Coastal

Plain to the Atlantic Ocean. Although the tributary headwaters of the Savannah drainage originate in the Blue Ridge, the Savannah River itself begins on the Piedmont at the confluence of the Seneca and Tugaloo rivers, which also form Lake Hartwell. Compared to adjacent watersheds, the Savannah is relatively narrow. Large tributaries enter the Savannah along the upper two thirds of the drainage, but the largest run roughly parallel to the main channel due to the constricted physiography of the basin. Dendritic tributary systems running perpendicular to the Savannah River are common in the Coastal Plain portion of the basin (Brooks et al. 1990).

Although the actual total length of the river channel is considerably longer due to meanders especially in the Coastal Plain, the Savannah River valley is roughly 504 km (313 mi.) in length, and may be divided into three sections, upper, middle, and lower, based on topographic and geologic characteristics (Seabrook 2006). The upper Savannah River extends from the source of the river to the Fall Line zone at Augusta, Georgia, covering approximately 309 km (192 mi.) across the metamorphic and crystalline rock substrate of the Piedmont. The middle Savannah River valley is the physiographic section under consideration in this study (see Figure 1.3). This section of the river flows from the Piedmont Fall Line zone across the Upper Coastal Plain, or the Fall Line Sandhill region, to the confluence of Brier Creek (the only major tributary of the Savannah River in Georgia Coastal Plain) in Screven County, Georgia. This middle river section comprises some 95 km (59 mi.) of the total length of the valley. The Lower Savannah River making up the remaining 100 km (62 mi.) of the Savannah River valley where it empties into the Atlantic Ocean 21 km (13 mi.) downstream from the city of Savannah. Based on the U.S. Geological Survey river gauge near Clyo, in Effingham

County, Georgia, the Savannah River's average annual flow is 12,040 cubic ft. per second (one cubic ft. equals about 7.4 gallons), making the Savannah one of the largest discharges of freshwater from any river in the Southeast. Given that the Savannah River is as a tenth order stream according to the Strahler waterway classification method, this volume of freshwater discharge is not unusual (by comparison the Mississippi River also is a tenth order stream, and the Amazon is a twelfth order stream, the highest order in the Strahler stream classification [Briney 2009]). The gauge at Clyo is farthest position downstream where river discharges are recorded because below this point the Savannah is tidally influenced making conventional river-flow measurement unreliable. Approximately 45 km (28 mi.) upstream from where the Savannah enters the Atlantic Ocean, saltwater begins mixing with the river's freshwater to form an intertidal estuary, which eventually becomes a system of deltaic channels (Seabrook 2006).

In the Coastal Plain, the Savannah River terraces and swamp comprise an irregular floodplain that has varied relief due to lateral channel movements and associated geological formation processes. Throughout the swamp are a series of elevated, relict sand ridges that parallel the river and form seasonal dry land. Swamp topography, rather than being uniform as suggested by the topographic maps of the area, consists of ridges and swales (Brooks et al. 1990).

Generally, the upper surface sediments of the swamp areas (swales) are predominantly silts and very fine sands, which are depositional in origin (Stevenson 1982). Ridge soils are sandy and moderately well drained. The dominate Coastal Plain soils of the Savannah River floodplain are of the Chastain-Tawcaw-Shellbluff association along with the minor Toccoa and Chewacla soils for South Carolina (Rogers 1990:5;

Eppinette 1993:10-11), and are of the Riverview-Chewacla-Chastain association for Georgia (Paulk 1981:7). These floodplain soils are nearly level with low relief although some are low lying and poorly drained with others higher lying and better drained. Chastain clay loam is the lowest lying, most poorly drained of the floodplain series, is clayey to a depth of about 102 cm (40 in), and forms in fluvial sediments primarily in drainageways and shallow depression such as old river meander scars (Rogers 1990:5,14; Eppinette 1993:39, 68-69). Tawcaw silty clay loam is only a few centimeters higher on the landscape than Chastain soils. Formed in fluvial sediments, it is somewhat poorly drained, clayey in the upper part and loamy in the lower part (Rogers 1990:5, 30-31; Eppinette 1993:39, 81-82). Shellbluff silty clay loam is slightly higher on the landscape than either Chastain or Tawcaw soils. Formed in fluvial ancient marine and Piedmont sediments, it is grayish in color, and is well drained and loamy to a depth of 102 cm (40 in) (Rogers 1990:5, 29). Toccoa loam is in the same landscape position as the Shellbluff soils but has less silt and clay content, is a moderately well drained sandy loam to a depth of 165.1 cm (65 in). It is formed in fluvial sediments on slight ridges near the edges of the floodplain and adjacent to stream channels (Rogers 1990:5, 31). Riverview soils are well drained, brown silt loam with mica flakes throughout to a depth of about 266.7 cm (105 in). Riverview silt loam forms on natural levees adjacent to stream channels, and is the only soil of the series well suited to farming as flooding is infrequent during the agricultural season (Paulk 1981:7, 27). Chewacla loam forms on lower lying areas of the landscape than, but is usually in association with, Riverview soils, and is somewhat poorly drained but more so than Chastain soils (Paulk 1981:14-15; Rogers 1990:16).



These soils all originate in loamy and clayey sediment eroded from the uplands of the Southern Piedmont (Trimble 1974), and are frequently flooded periodically during the winter and early spring months usually from December to April (Paulk 1981:14). Today, seasonal winter/spring flooding cycles are regulated (reduced) through a series of dam and reservoirs constructed on the upper Savannah River during the early and mid-20th century (1990:35, 36). Even so, soil scientists note that these soils are poorly suited to row crops as a result of seasonal inundation and the high water table of around 30.5 cm (12 in) of the surface during winter and spring.

For Mississippian-period farmers concerned with surplus food production, the most critical resource would have been arable soils with periodic nutrient replenishment and the best agricultural lands for this were those with fine sand and silt loams that form on natural levees (Larson 1972:389). Larson explains that “this very resource...was severely restricted everywhere in the southeastern region. For example...in the lower valley of the Mississippi River and along those larger rivers that cross the coastal plain, the sandy loams are confined to the natural levees and are restricted in extent. Along the smaller drainage systems of the coastal plain they are almost absent because of the poor development of natural levees” (1972:389). Although Larson’s discussion here is in the context of Mississippian warfare for territorial gain over restricted resources, I am placing emphasis on his point that natural levees rarely form in the smaller drainage systems of the Coastal Plain. As a consequence, these Coastal Plain floodplain soils, although high in nutrients, are low-lying with a high water table and are seasonally inundated each year making surplus agricultural production ineffective.

Annually, the Savannah River swamp is partially flooded by modern stream and river flow. Prior to dam construction in the upper Savannah River, flooding was a recurring seasonal event that inundated the entire swamp-floodplain. Due to the problem of flooding, the low-lying areas of the swamp would not have been conducive to prehistoric human habitation. During times of flooding, floodplain “island” landforms (i.e., relict sand ridges—previous point bars—that formed as a result of lateral migration of the river channel), would have afforded adequate protection from flood water to have been suitable residences (Brooks et al. 1990:46). Evidence from Stave Island, a large point-bar remnant in the swamp, suggests occupation during the Late Archaic and possibly the Woodland periods (Hanson et al. 1981).

Barry (1980) characterizes the dominant vegetation system of the Savannah River swamp swales as cypress-tupelo, with bald cypress and water-tupelo in a setting with alluvial deposits and open water circulation. Other common species in the cypress-tupelo association are water ash, black willow, water elm, red bay, sweet bay magnolia, and American elm. On the relict sand ridges, which are rarely subjected to continuous inundation by flood waters, oaks similar to those found in the mesic terrace zone are common, as well as longleaf and loblolly pines. The fact that the relict sand ridges are usually long and narrow with little dry surface area diminishes their importance as oak mast procurement areas for humans; however, the oaks are capable of supporting moderately high whitetail deer populations during the fall.

When available, deer were certainly an important resource procured from the swamp. Additional terrestrial mammals such as bear, rabbit, raccoon, squirrel, muskrat, and beaver are common. Although migratory bird density is low relative to the

floodplain, a high density of wood ducks would have provided some food value. Aquatic resources including freshwater mussels, resident and anadromous fish, and turtles are very common in the river and swamp. Exploitation of these species would have been a relatively low-cost undertaking. The netting of fish and other aquatic fauna is a very economical activity that can produce extremely high food yields for labor expended (Limp and Reidhead 1979). A review of the food resource data from the Rabbit Mount site at Groton Plantation (Stoltman 1974) supports the extensive use of swamp resources during the Late Archaic and Mississippi periods. Faunal remains from the Lewis-West site (38AK228-W) also demonstrate intense floodplain resource exploitation by Middle and Late Woodland populations in the Savannah River terraces of the SRS area (Reitz and Frank 1987).

Overall, resources of the Savannah floodplain would have been available during most of the year, but procurement would not always have been equally economical. Flooding would have rendered focused net fishing difficult as fish would have been dispersed throughout most of the swamp. Rather, fishing would have been best in summer when water levels were lower and the swales became small lakes or sloughs. Terrestrial and aquatic mammal exploitation could have been quite good when access to the resources was not inhibited by flood waters. Generally, floodplain would have been an excellent source of fish, mussels, vegetal foods, and mammals (Brooks et al. 1990:46).

No microzones of potential significance to prehistoric settlement-subsistence variability have been identified within the floodplain, but places of potential archaeological importance include relict sand ridges, stream confluences with the Savannah River, the ridge and swale (swamp channel/levee) complex, and possibly lithic

outcrops. The relict sand ridges (e.g., Stave Island) are of unknown age, but seemingly formed prior to floodplain development at ca. 2000 B.C. These elevated floodplain landforms would have provided terrestrial resources and ready access to swamp resources after ca. 2000 B.C. Due to seasonal flooding, the sand ridges would likely have been used only for short-term hunting and extraction camps during this time. However, prior to 2000 B.C., use of the sand ridges may have been more substantial, possibly in a manner like that of lower Savannah River terrace (Brooks et al. 1990:46).

The tributary stream confluences with the Savannah River and ridge and swale areas of the swamp were loci of particularly high ecological diversity, and subsistence resource productivity. Short-term extraction sites could have been located on the levees. Presumably, because of flooding, the exploitation of the swamp/channel resources associated with these places was seasonal. While limited access due to seasonal flooding could have been offset by appropriate technology (e.g., watercraft), aquatic fauna, tend to disperse under flood-stage conditions, making their procurement less than efficient (Brooks et al 1990:47).

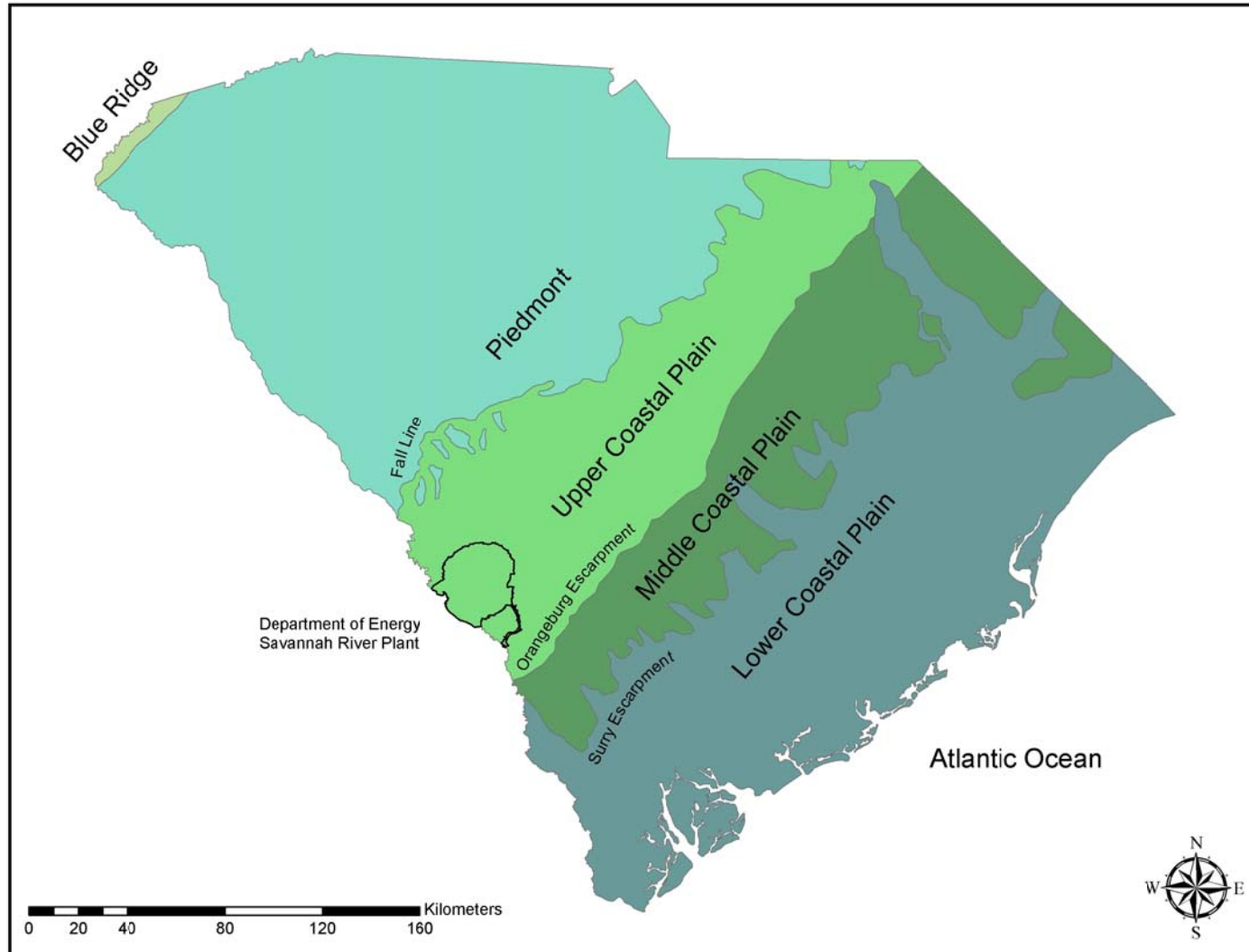


Figure 3.1. General landform physiography of South Carolina.

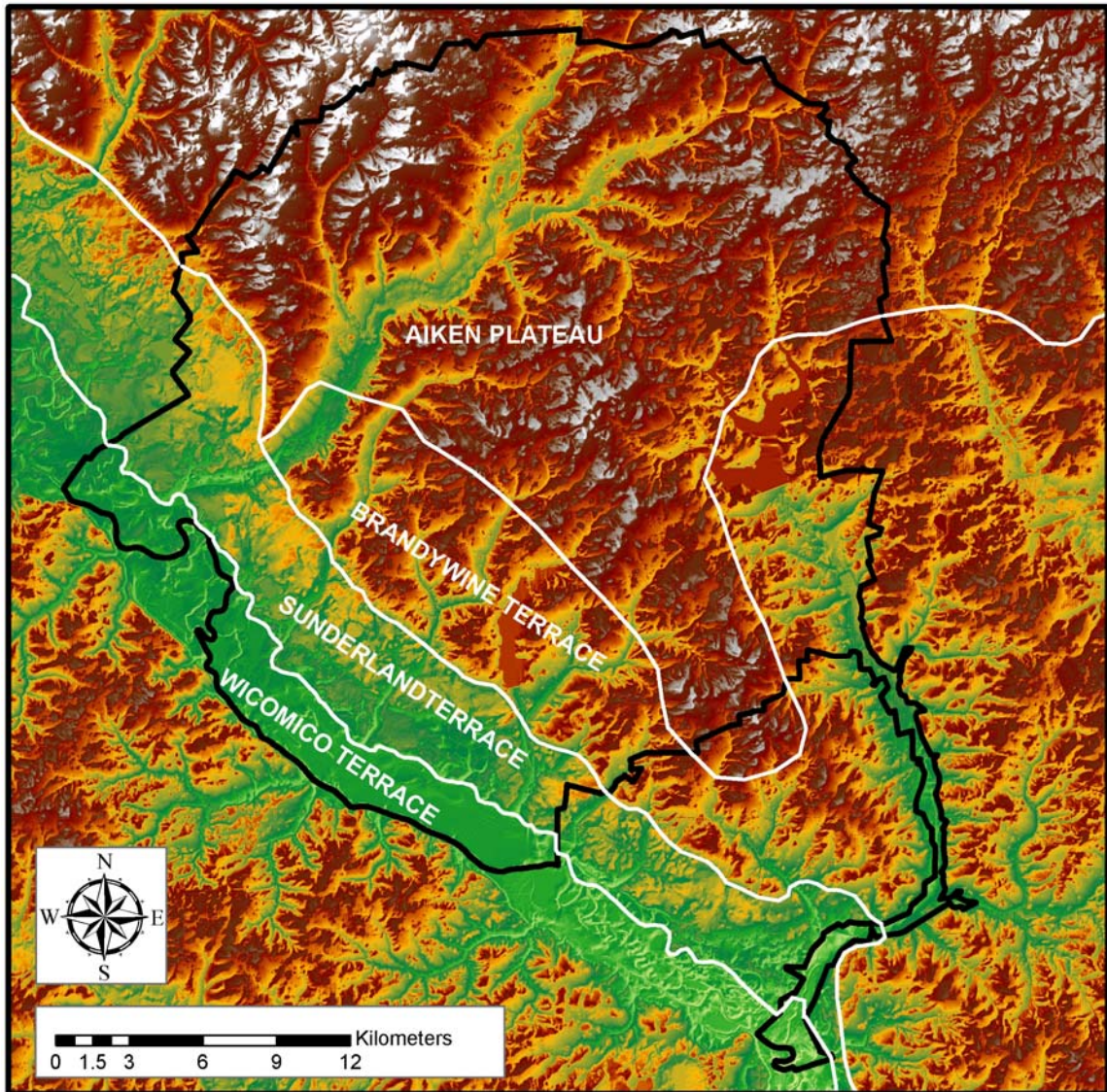


Figure 3.2. Location of the Pleistocene marine physiographic terraces on the SRP (modified from Langley and Marter 1973: Figure 5).

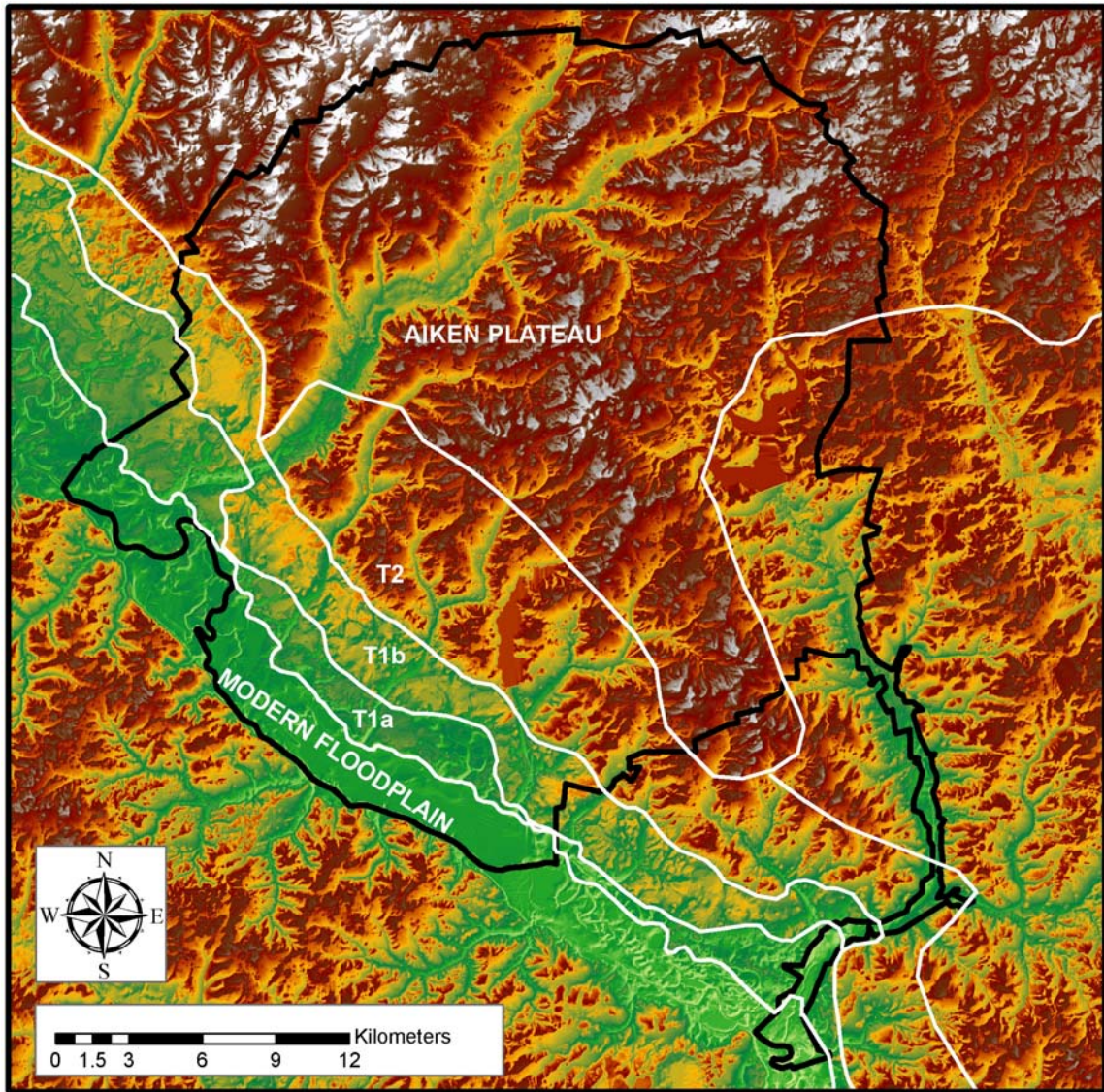


Figure 3.3. Location of riverine-alluvial terraces and modern floodplain on the SRP (modified from Brooks et al. 1990: Figure 5).

## Chapter 4

### Space and Time: The Culture Historical Setting

One of the various lines of inquiry that researchers of the Mississippi period in the middle Savannah River valley have pursued since the publication of Sassaman and colleagues' (1990) synthesis for this region is that of chronology building. Ongoing survey and excavation as well as a concerted effort to bolster cultural sequences with radiometric dates have helped to refine the Mississippian chronological foundation constructed primarily by Anderson (1990a; 1990b; 1994; see also Anderson et al. 1986; Sassaman et al. 1990) for this region. This study synthesizes various recent archaeological investigations, including my own, conducted at four of the five documented regional mound centers in an attempt to refine and clarify the internal chronology of each site, and by extension the regional chronology of mound construction and use during the century-long Hollywood phase (ca. A.D. 1250 to 1350) in the middle Savannah River valley.

At present, it is second nature for archaeologists to turn to absolute dating techniques, such as radiometric ( $^{14}\text{C}$  or AMS) or thermoluminescence (TL), as means to resolve matters concerning temporal aspects of prehistoric site occupation. However, these typically produce measured results on the order of 100-year intervals even within a one-standard deviation calibration range, which only affords a 67-percent probability that the actual date falls within the specified range. A more conservative application of the radiometric method should consider a two-standard deviation calibration for a 95-percent probability that the date actually falls within that interval; but then the date range



becomes much greater thereby compounding the problem for refining specific periods of site occupation. Consequently, calibrated date ranges are as lengthy as the established phase designation based on a particular ceramic typology for a particular region, which in turn only allows one to ascertain that site occupation occurs within that phase designation, which is often on the order of a century or slightly less. This intuitive measure does not allow for the sorting of fine-grained chronological relationships within the assumed century-long span such as the Hollywood phase of the middle Savannah River region. This then becomes a critical factor in my study, as I suspect on the basis of previous qualitative and anecdotal discussion, that most of the regional mound centers have short-lived occupations possibly on the order of only a generation. No one has yet attempted to quantitatively measure occupational sequences at the sub-phase level for these regional mound centers in the extant literature.

Researchers of the Mississippi period have raised general concerns regarding the potential inaccuracy of estimated times spans used to delineate settlement patterns and measure the duration of site occupation and even mound use (e.g., Blitz and Livingood 2004; Schroedl 1998). The uncritical acceptance of equating all sites within a phase as contemporaneous seems to be the core of this matter, and, in fact, the reliance on radiometric data to determine historical phase lengths may be the culprit. For this I cite Blitz and Livingood who state that “In the American Southeast, prehistoric archaeological phase intervals of less than 100 years are uncommon. Two-hundred year phases are common, however, perhaps partly because of the standard error ranges of radiocarbon assays” (2004:295). Schroedl (1998) addresses his concerns more directly to the use of settlement data regarding the distribution of mound and non-mound sites. He

reasons that lengthy Mississippian period phases obfuscates settlement patterns in that sites assigned to the same archaeological phase may indeed be sequentially occupied settlements possible reused by the same populations as opposed to contemporary sites. With these caveats, I turn to a discussion of my revised chronology of the Hollywood phase of the middle Savannah River valley.

### **Middle Savannah River Valley Phase Chronology and Pottery Types**

Anderson's (1994:370) original Mississippian period sequence for the middle Savannah River valley included three phases: Lawton (provisional phase designation) ca. A.D 1100 to 1250, Hollywood ca. A.D. 1250 to 1350, and Silver Bluff (provisional phase designation) ca. A.D. 1350 to 1450. Of the three, the Hollywood phase ceramic complex was first defined through the efforts of Hally and Rudolph (1986:62, see also Anderson et al. 1986:40-41) based on the pottery assemblages recovered at the type site by de Baillou (1965). The Hollywood phase is the primary temporal period of focus in this study because all identified regional mound centers date to within this time designation based on recovered pottery assemblages from each site, and which appear to be stylistically similar. Generally speaking, the Hollywood phase ceramic complex is characterized by Anderson as a transitional Pee Dee/Irene and Savannah (Early/Middle Mississippian) assemblage distinguished by the presence of the following formal types:

Etowah Complicated Stamped (Wauchope 1966:64-69).

Etowah Corncob Marked {typically jar form} (Wauchope 1966:71).

Savannah Check Stamped {typically jar form} (Caldwell and McCann 1941:44-45; Caldwell and Waring 1968:130; DePratter 1991:186-187).

Savannah Plain {typically bowl form} (DePratter 1991:187-188).

Savannah Burnished Plain {typically bowl form} (Caldwell and McCann 1941:45-46; Caldwell and Waring 1968:125-126; DePratter 1991:186).

Savannah Complicated Stamped {typically jar form; for notable exception see Holmes 1992 [1903:Plate CXV]}; (Caldwell and McCann 1941:45; Caldwell and Waring 1968:130-133; DePratter 1991:188-189; Wauchope 1966:77-79).

Savannah Cord Marked {typically jar form} (Caldwell and McCann 1941:43-44; DePratter 1991:183-186).

Irene Complicated Stamped {typically jar form} (Caldwell and McCann 1941:46-47; DePratter 1991:191-192).

The complicated stamped pottery of the Hollywood phase is dominated by variations on the filfot motif (the filfot scroll and filfot cross) along with other related designs such as the concentric circle, cross-in-circle, and figure 8. Additional characteristics include cane punctations and sizeable riveted nodes or rosettes impressed with cane punctations on unthickened jar rims (Anderson 1994:370). I might add that there are typically no more than four large nodes or four sizeable cane-punctuated rosettes riveted onto Hollywood phase vessel jars as opposed to the later Irene period decorative trait of a continuous series of impressed cane-punctuated rosettes that encircle the rim below the lip (see examples in Caldwell and McCann 1941:Plate XVII, vessels 39 and 116).

The finest type descriptions of a decorated Hollywood phase vessel are those of Reid (1965:12, 21) and Holmes (1992 [1903]:136) where each characterize the classic “burial urn” jar recovered by Henry Reynolds during the 1891 Bureau of American Ethnology excavation of Mound B at the Hollywood site (Figure 4.1; for republished vessel illustrations see Thomas 1985 [1894]: Plate XIX; Holmes 1992 [1903]: Plate

CXV; Caldwell 1952: Figure 174; Reid 1965:20, Plate VIII; Anderson 1994: Figure 69).

The following is a précis of Reid's (1965) depiction in his own words:

Hollywood complicated stamped sherds [as well as check stamped and cord marked] exhibit a flared rim ranging from slight to moderate (p.21) [and] the decorative application of nodes and punctuations to the rim (p.12). This vessel, Thomas' pot 6, has a flared rim, unrestricted neck and a nearly vertical shoulder tapering to a round base [with] the application of nodes and punctuations and the filfot stamped design (p. 21). Specifically, this treatment consists of nodes riveted to the vessel with a reed impression in the center. One or two rows of punctuations circle the node and continue along the rim below the lip linking all nodes in a decorative band. Punctuations are made by solid and hollow reeds, and in [the] Hollywood [site] sample they appear on vessels treated with the filfot cross and the check stamp (p. 12).

Holmes' (1992 [1903]:136) description of the vessel's attributes complements that of Reid's as follows:

The large vessel is blackened by use over fire, and it not unlikely served the humble purpose of preparing food messes for the family...It is nearly symmetric, is 16 inches in height and the same in diameter, and has a capacity of about 15 gallons. The paddle-stamp has been carefully used...The rim is decorated with two encircling lines of annular indentations and four small nodes indented in the center, placed at equal intervals about the exterior. From the same mound...several other similar vessels were obtained, two of them being larger than the one illustrated. Some fine, large bowls from the same

mound have the entire exterior surface decorated with the usual compound fillet stamp.

Anderson (1994:370) also provides descriptive characteristics for the provisional phases he termed Lawton and Silver Bluff based on ceramic attributes. Preliminary identifications of small pottery assemblages from the Lawton mound site provided the basis for a provisional Lawton-phase designation for components of this period (A.D. 1100-1250) that are equivalent to the Savannah I-III phases along the lower Savannah River and the Jarrett/Beaverdam phases in the central Piedmont differing only in the incidence of certain pottery types (Anderson 1994:370; Sassaman et al. 1990:207). Clemens de Baillou (1965:6, Table 1) develops a baseline quantitative measure of ceramic types for Hollywood phase components from an aggregated assemblage at the Hollywood type site. His relative frequencies of types allows for assemblage comparisons across time and space within the Hollywood phase as well as against components of other temporal phases. He reports the frequency distribution of ceramic types and surface treatments in his sample as:

Savannah Checked Stamped 41.10 percent

Savannah Plain 38.15 percent

Savannah Complicated Stamped 13.91 percent

Roughened [probably non-burnish plain] 3.58 percent

Fabric impressed [probably Savannah Cord Marked] 1.22 percent

Reed decorated 1.02 percent

Savannah Cord Marked 0.39 percent

The remaining minority types are recorded as:

Scratched line 0.16 percent

Lineblock [probably Etowah Line Block motif (Wauchope 1966:65-66)] 0.14 percent

Etowah [probably Etowah Complicated Stamped] 0.12 percent

Fingernail [probably Etowah Corncob marked] 0.09 percent

Simple stamped 0.08 percent

Liner check stamped [probably Deptford Linear Checked Stamped] 0.04 percent

Anderson describes the provisional Early Mississippian Lawton phase (A.D. 100-1250) ceramic complex as follows: “Diagnostic indicators include Savannah Complicated Stamped, Plain, Burnished Plain, Fine Cordmarked, and Check Stamped. The Savannah series materials typically have plain, unmodified rims lacking punctuations, rosettes, or nodes. Other finishes that may occur include plain (nonburnished) and, as a minority, cross V-shaped simple stamping (Santee Simple Stamped, *var. Santee*). The Savannah Check Stamped, Cordmarked, and Burnished Plain types may occur earlier than Savannah Complicated Stamped. Concentric circle motifs dominate the complicated stamped assemblages, with one- and two-bar diamond (Etowah motifs) less common” (1994:370). I note here, that subsequent fieldwork and analysis for this study has demonstrated that the single Mississippian component at the Lawton site actually dates to the Hollywood phase rather than the Lawton phase as Anderson has characterized it.

Anderson depicts the Middle Mississippian provisional Silver Bluff phase (A.D. 1350 to 1450) “as a mixture of attributes from the Irene I phase at the mouth of the basin and the Rembert phase in the central Piedmont” (1994:370). He notes that “diagnostic indicators include Pee Dee/Irene and Lamar Complicated Stamped pottery, characterized by modified rims with punctuations, rosettes, nodes, and less commonly, folded rims or

applied rim strips (see Caldwell and McCann 1941 for explanation of these ceramic attributes). Rectilinear line blocks and fillet scrolls and crosses dominate complicated stamped assemblages...other finishes present include burnished plain and check stamping, the latter in low incidence. As at the mouth of the river, incising of any kind is rare, occurring as simple one- to three-line designs below the rim of bowls and sometimes, in conjunction with rim modifications, on folds" (1994:370).

Following the Silver Bluff phase, the middle and lower Savannah River valley apparently is depopulated following the collapse of the local polities, and remains unoccupied until the middle 17th-century arrival of the Westo (DePratter 2003:18-19). As Anderson (1994:371) points out, no ceramic assemblages dating to the Late Mississippian middle and late Lamar periods (A.D. 1450 to 1650) are currently reported for the middle Savannah River valley. The chronicles of Hernando de Soto's march through the Southeast serve as testimony to the lengthy period of abandonment by the indigenous population of the Savannah River basin. In April 1540, as the de Soto army crossed a vast uninhabited wilderness between the Oconee River in Georgia and the Wateree River in South Carolina, they almost starved in a regional environment that 150 years earlier supported the populace of thriving chiefdom-level societies (Hudson 1997:165-172).

### **Radiometric Dating**

Since Anderson's work, these cultural sequences have been modified and enhanced through a series of excavation projects and ongoing efforts to obtain radiometric dates on materials associated with the recognized phases listed in (Table 1.1).

The Late Woodland and Early Mississippian periods are by far the most complex and in many ways the least understood. There appear to be three contemporaneous phases on the SRS, each associated with different ceramic assemblages that date to the period between A.D. 900 and 1200. The first, the Savannah I phase, is associated primarily with cord marked pottery. While this is often considered a Late Woodland manifestation, a series of recent dates consistently show the temporal phase range as A.D. 900 to 1200.

Apparently appearing at about the same time is a ceramic complex that has as its main diagnostic a complicated stamped type bearing motifs commonly found in the Pisgah phase first defined in North Carolina by Dickens (1976). This unique ceramic series has been provisionally named the Sleepy Hollow phase after a late 19th-century rural community "Township," where the assemblages seem to concentrate (Brummitt 2007). Political townships were a Reconstruction subdivision of counties laid out under the South Carolina State Constitution of 1868, and these were used as federal census districts from 1870 until sometime after the mid-twentieth century (Edger 1981, 1998:411; Vandervelde 1999:298). This phase is considered provisional because it is defined on the basis of preliminary analyses of only one large collection from a single site. A series of dates on material from this site indicate that the temporal span of the Sleepy Hollow phase is ca. A. D. 900 to 1100 (Brummitt 2007).

Slightly later in time but overlapping with the Savannah I and Sleepy Hollow phases is the Lawton phase ceramic complex characterized by curvilinear and rectilinear complicated stamped motifs, including the concentric diamond, and the type corncob marked. Again, an understanding of the pottery assemblage associated with the Lawton phase is based primarily on one site, 38AK753, on the SRS. Recently, Brockington and



Associates, Inc. conducted excavations at the Riverfront site near Augusta, which appears to be a Lawton phase village floodplain site. The small number of radiocarbon dates associated with the Lawton phase range between A.D. 1100 and 1250.

The Middle Mississippian Hollywood phase, named for the pottery assemblage from the Hollywood mound type site located near Augusta, Georgia, is well defined in the literature. The radiocarbon date sequence obtained for the Hollywood phase places it firmly between A.D. 1250 and 1350. Also during the Middle Mississippian period, only one phase is recognized for the SRS and it seems to date to the early end of the period. Based on the limited assemblage information available, the Silver Bluff phase primarily has the hallmarks of Irene I (early Lamar period) assemblage on the lower Savannah river. The two dates returned on what are believed to be Silver Bluff phase contexts overlap to an extent with the Hollywood series dates.

One of the more controversial aspects of Anderson's (1994:242) study is that the Savannah basin from the central Piedmont to the river mouth was essentially devoid of substantial population after A.D. 1450. Anderson's conclusion fits both with the historical information provided by the de Soto chroniclers (cf. Hudson 1997:165-172), and the archaeological data available to him showing an absence of middle and late Lamar pottery assemblages (1994:362-377). From the ongoing survey and excavations in the middle Savannah River valley no evidence has surfaced to contradict this inference. Also, as I will discuss, one final piece of evidence supporting Anderson's line of reasoning for depopulation and even abandonment of the central and lower Savannah valley at ca. A.D. 1450 rests on the fact that no radiometric or TL date range from any of the five mound sites show a termination date of later than ca. A.D. 1400 even at two

standard deviations, which indicates that regional depopulation occurred shortly after the beginning of the 15th century.

The primary focus of this study concerns the five mound centers that all appear in the floodplain of the middle Savannah River during the century-long Hollywood phase (ca. A.D. 1250 to 1350). As discussed above, the average distance of the two mounds sites, Hollywood in Georgia and Mason's Plantation in South Carolina is 17.7 km (11 mi.) directly south of the Fall Line zone, with Hollywood situated 5.5 km (3.4 mi.) directly downstream from Mason's Plantation as shown in Figure 4.2 [note that these sites are 11.3 km (7 mi.) apart by water travel via the current river channel]. The average distance of the three mounds sites, Lawton, Red Lake, and Spring Lake, is 77.05 km (47.1 mi.) directly below the Fall Line zone, and these sites cluster within 11.3 km (7 mi.) straight line distance (Figure 4.3). The spatial proximity of Hollywood and Mason's Plantation, as well as that of Lawton, Red Lake, and Spring Lake solicits the question of their social and political relationship to one another. Do these centers form polities that conform to chiefdom models of simple and complex political and settlement hierarchies? Are Hollywood and Mason's Plantation paired centers within a chiefdom that are sequentially occupied, as well as Lawton and Red Lake or Spring Lake? Or do these mound centers possibly represent non-contemporaneous, independent and autonomous polities within the Hollywood phase? As these questions suggest, before any attempt at explanation of models of settlement or political organization and hierarchy between and among these mound centers, the subject of space-time systematics is essential and must be explored and defined.

The two most viable techniques for determining time in southeastern prehistory are either by absolute radiometric dates or the indirect means of dating artifact assemblages through frequency seriation, which is discussed in the following section. These quantitative methods are by no means exclusive, and actually can provide more nuanced results when applied in tandem where one can inform on the other. The initial introduction of radiocarbon dating to archaeology by Willard F. Libby and colleagues revolutionized material cultural studies for prehistorians (Arnold and Libby 1949; Faure 1986a; Libby et al. 1949.) Continued innovations in radiocarbon technology have provided higher levels of dating accuracy (i.e., how close is a date to the actual age of death of the organism?) as well as precision through refined standard deviations (i.e., how well can a radiometric date be reproduced at the laboratory? And what is the probability that the actual age is known?). Also, improved calibration methods allow for a reliable means of converting measured radiocarbon years to calendrical years, ultimately permitting comparability among results on materials as diverse as marine shell, charred maize, or wood charcoal. The need to calibrate radiocarbon years is based on fluctuations in the concentration of atmospheric  $^{14}\text{C}$  over time. Consequently, a laboratory date, which is measured in radiocarbon years before present, must be “corrected” to reflect actual calendar years. Dendrochronology, or the dating of growth ring patterns in trees by assigning a single calendar year to a single ring, has produced an annual chronology extending for millennia into the past. Thus, dendrochronology, with its sequence of exact dates, provided the ideal basis from which to convert radiocarbon to calendar years with a high degree of accuracy. When an extended calendar timescale is provided through a dendrochronological reconstruction, clusters of ten or twenty tree

rings are radiometrically dated thereby providing a correlation between known calendar age ranges and radiocarbon years. With these advancements in conversion methods, calibration programs, such as CALIB and OxCal, have been devised to provide tree-ring corrected calendrical age ranges for archaeologists and others (Bowman 1990:43-47; Thomas 1998:189-190)

Currently, there are two radiometric means of detecting  $^{14}\text{C}$  particles: either by the conventional radiocarbon method, which indirectly counts one of the  $^{14}\text{C}$  decay elements over the course of a timed interval, namely beta particles, or by the accelerator mass spectrometry (AMS) technique developed in the late 1970s, which directly measures the frequency of  $^{14}\text{C}$  atoms relative to  $^{12}\text{C}$  or  $^{13}\text{C}$  isotopes in the sample submitted for dating. Even though conventional radiocarbon and AMS dating methods are fundamentally different, both yield radiocarbon results that can be interpreted in the same manner (Bowman 1990:31). As Taylor (2000:56-66) points out, dates estimated with AMS are no more or less accurate or precise than those from conventional decay counting, but this recent approach provides a way to measure samples with extremely minute amounts of carbon. The AMS method has a secondary advantage of being able to directly date ceramic vessels with organic material adhering to the exterior surface (soot residue) or interior surface (food deposits).

Soot deposits form on vessel exteriors as a result of the by products of incomplete wood combustion (Taylor and Berger 1968:363). Moreover, Hally's (1983) research on soot formation on vessel exteriors shows that this residue consists of solid carbon and oxidized wood resins, and most often forms on the shoulder and rim of a vessel, well above the level of cooking fires. From empirical observation of soapstone vessels,

Sassaman (1997:3) comments that soot residue on prehistoric ceramics is tenacious due to its carbon-resin nature, and strongly adheres to the surface even after washing or scrubbing.

When the two methods of radiometric dating are evaluated for their utility in Coastal Plain settings, the shortcomings of beta decay counting for obtaining radiocarbon dates become obvious. In a region where cultural features typically remain intact only under specific conditions (i.e., beneath thick anthropomorphically-formed midden or artificially-constructed earthen mounds) and otherwise do not preserve well, if at all, under highly acidic soil conditions, and where organic materials rapidly leach through permeable soils, the chance of recovering multigram-sized samples of charred organics required for conventional dating is minimal. Added to this is the potential for vertical artifact displacement in loosely-consolidated sandy sediments, contextual contamination of organic samples, and other pre-and post-excavation factors that may result in spurious dates.

For these reasons, ten of the radiometric dates reported in this study were from soot residue adhering to the exterior surfaces of pottery sherds and were obtained using the AMS technique through Beta Analytic, Inc. The remaining three dates reported herein are standard radiocarbon measures also obtained through Beta Analytic, Inc. Additionally, a total of 12 dates reported in Wood (2009:260; Table 6.21) for the Spring Lake, Red Lake, and Lawton sites were obtained using the AMS technique through the University of Georgia Center for Applied Isotopic Studies (Wood 2009:243). Specifically for this study, several dates were acquired on burned daub from structural features at the Lawton site using the thermoluminescence (TL) method through James

Feathers, Luminescence Dating Laboratory, University of Washington. Altogether, there are 25 radiometric dates and two TL dates from all five mound sites in the study region (Table 4.1). I will discuss the merit and reliability of each of these according to their associated site and provenience contexts.

For the Lawton site, there are a total of nine radiometric dates and two TL dates. This series includes eight AMS dates on sooted sherds and one standard radiocarbon dates. Four of the AMS dates are on charcoal samples recovered during Wood's (2009:76-80) excavation of a shell and refuse midden immediately adjacent to and beneath the western edge of the North Mound. All of the AMS dates fall within the Hollywood phase as established formally by Anderson and colleagues (1986; see also Hally and Rudolph 1986) and are considered reliable. Of the four sherds, three are Savannah Complicated Stamped exhibiting a filfot scroll motif (Beta-145502), curvilinear stamping (Beta-132944), a pinched rim (Beta-145500), and the remaining sherd has punctuated nodes (Beta-1310990). One radiocarbon date (Beta-131100) was obtained on charcoal and yielded a modern date of indiscernible age. This sample was originally deemed a portion of a charred palisade post underlying a layer of burned daub in a shovel test pit, but instead appears to be a recently burned tree root. Of Wood's (2009:260) four AMS dates, three (UGA-R01261, UGA-R01262, UGA-R01282) fall within the Hollywood phase range and are acceptable and complement the reliable AMS dates obtained for this study. The fourth (UGA-R01263) is slightly early actually falling within the Lawton phase range; however, there is no evidence based on ceramic assemblage types for a Lawton component at the Lawton mound site. For this reason, the date is considered an outlier in the series and is discounted in this analysis. It is possible

that differential leaching of ancient carbonates from shell in the midden-feature context contaminated this soot sample.

The consistency of radiometric dates also can be determined quantitatively. The calibration program CALIB (Stuiver and Reimer 1993) computes a probability distribution for each radiometric date calibrated. Employing this distribution, CALIB 4.0 provides a chi square test for consistency in a selected series of dates. For Lawton, a chi square test for consistency shows that the eight dates (precluding the modern assay Beta-131100) are significantly different when the early date (UGA-R01263) is included in the series. If this outlier is omitted from the series, then the remaining seven samples are statistically the same at the 95 percent level, and as such can be combined. When averaged, the weighted mean for the Lawton series is  $680 \pm 16$  radiocarbon years before present, which, in turn, provides a calibrated age range of A.D. 1281 – 1376 at one standard deviation and A.D. 1277 – 1383 at two standard deviations. On the basis of these measures, a moderate estimate for the occupation of Lawton would fall somewhere between A.D. 1275 and 1380.

In addition to the series of radiometric dates, two samples of burned daub were submitted for TL dating. One daub sample (UW564) was recovered during excavation of the palisade feature, and the second sample (UW565) was recovered from a wall-trench summit structure on the South Mound. TL dating of sample UW564 yielded a calendrical age range of A.D. 1250 to 1382; however, TL analysis detected a second burning event during the interval A.D. 1412 to 1530. Regarding these dissimilar derived ages, Feathers (2001) explains that “the best interpretation is that burning of the palisade and mound structure occurred around A.D. 1300, during or shortly after the occupation of

the site, perhaps at the time of abandonment. A second, lower temperature burning of the palisade are may have occurred some 150 years later.” Perhaps the second event occurred during a wildfire thereby burning the exposed daub and resetting the TL “clock,” for as Feathers also notes “the [earliest] dating event of the TL analysis is when these structures last burned.” Daub sample UW565 from a South Mound summit structure produced a calendrical age range of A.D. 1203 to 1343. Excluding the second date range for sample UW564, both of the TL dates are in line with and complement the occupational range for the Lawton site as established through radiometric dating means.

For the Red Lake site there are a total of eight radiometric dates. This series includes one AMS date (Beta-144167) on soot from the exterior of a Savannah Plain sherd as well as two standard radiocarbon dates on shell samples from the Cook (1987) excavation inventory curated at the Georgia Archaeological Site Files, University of Georgia. The remaining dates include four AMS dates reported by Wood (2009:260) recovered during his excavation of a shell and refuse midden underlying a portion of Mound A, and from the sub-mound midden of Mound B (Wood 2009:94-100). Of these eight dates, only three fall (Beta-144167, UGA R01265, UGA-R01653) within the Hollywood phase range as established arbitrarily by Anderson and colleagues (1986; see also Hally and Rudolph 1986) and are considered reliable. Two date results (Beta-144168, Beta-144169) were from separate shell samples selected from the Cook (1987) excavation inventory; however, these were slightly early with one being Late Woodland in age and the other falling within the Lawton phase range. All investigations conducted at Red Lake have revealed no evidence for either Late Woodland or Lawton phase occupations. More likely, the problem lies in the dated material itself. Freshwater



mussels tend to absorb ancient carbon from limestone shoals in the river-bed, a process that can render freshwater mussel shell unreliable for dating (cf. Faure 1986b:496-499). This reasoning may also explain the spurious dates (UGA-R01653) obtained by Wood (1990:260) from a sooted sherd recovered from the sub-mound shell layer of Mound A, which is contamination from differential leaching of ancient carbonates within the shell-midden feature context. Curiously, this sample was subjected to AMS dating a second time (UGA-R01653 b-repeat), which produced a Middle Woodland period date.

A chi square test for consistency using CALIB 4.0 shows that the eight samples are significantly different when the early dates are included in the series. If the outliers are omitted from the series, then the remaining three samples are statistically the same at the 95 percent level, and as such can be combined. When averaged, the weighted mean for the Red Lake series is 672 $\pm$ 21 radiocarbon years before present, which provides a calibrated age range of A.D. 1283 – 1380 at one standard deviation and A.D. 1278 – 1387 at two standard deviations. On the basis of these measures, a moderate estimate for the occupation of Red Lake would fall somewhere between A.D. 1280 and 1385.

For the Spring Lake site, Wood (2009:260) reported three AMS dates on soot from sherds recovered in the sub-mound midden of an excavation trench into the single mound present at the site (Wood 2009:85-90). Although one date (UGA-R01572) tends later than the others, they all overlap in time and fall within the Hollywood phase range. A chi square test for consistency using CALIB 4.0 shows that the three samples are significantly different when the later date is included in the series. If this outlier is omitted from the series, then the remaining samples are statistically the same at the 95 percent level, and as such can be combined. When averaged, the weighted mean for the

two Spring Lake dates is 716 $\pm$ 28 radiocarbon years before present, which provides a calibrated age range of A.D. 1269 – 1389 at one standard deviation and A.D. 1254 – 1394 at two standard deviations. On the basis of these measures, a moderate estimate for the occupation of Spring Lake would fall somewhere between A.D. 1255 and 1390.

For the Mason's Plantation site there are two AMS dates on soot residue from the exterior of sherds. These two sherds were recovered from the Savannah River by underwater archaeologists from the South Carolina Institute of Archaeology and Anthropology (Thornock 2008). Both dates seem reliable as they fall within the Hollywood phase range. A chi square test for consistency using CALIB 4.0 shows that the two samples are statistically the same at the 95 percent level, and as such can be combined. When averaged, the weighted mean for the Mason's Plantation dates is 660 $\pm$ 28 radiocarbon years before present, which provides a calibrated age range of A.D. 1285 – 1385 at one standard deviation and A.D. 1278 – 1391 at two standard deviations. On the basis of these measures, a moderate estimate for the occupation of Mason's Plantation would fall between A.D. 1280 and 1390.

For the Hollywood site there are three AMS dates on soot residue from the exterior of sherds selected from the de Baillou (1965) excavation inventory curated at the South Carolina Institute of Archaeology and Anthropology. The sherd types include two Savannah Check Stamped (Beta-134794, Beta-145333) and a Savannah Complicated Stamped bearing a cross-in-circle motif (Beta-144165). Within the one sigma interval, some portion of each date falls within the Hollywood phase range; however, none of the dates overlap one another. Instead, the dates closely follow each other in a temporal order beginning with Beta-144165 (A.D 1235 – 1280) to Beta-145333 (1280 – 1300) and

finally Beta-134794 (A.D. 1310-1410). The earliest date (Beta-144165) is from a complicated stamped vessel with a circle-in-cross motif, a classic Savannah period motif and one not typically found in Hollywood phase assemblages, which consist primarily of the variations on the filfot design. The other dates are from Savannah Check Stamped sherds, which besides Savannah Plain, is the majority type in Hollywood phase assemblages.

A chi square test for consistency using CALIB 4.0 shows all three samples as significantly different. If Beta-134794 is omitted from the series, then Beta-144165 and Beta-145333 are statistically the same at the 95 percent level, and as such can be averaged. When combined, the weighted mean for the Hollywood dates is 730 $\pm$ 28 radiocarbon years before present, which provides a calibrated age range of A.D. 1264 – 1285 at one standard deviation and A.D. 1226 – 1295 at two standard deviations. Based on these measures, a moderate estimate for the occupation of Hollywood would fall somewhere between A.D. 1225 – 1295.

On the other hand, if Beta-144165 is omitted from the series as an outlier, then Beta-134794 and Beta-145333 are statistically the same at the 95 percent level, and as such can be averaged. When combined, the weighted mean for the Hollywood dates is 656 $\pm$ 33 radiocarbon years before present, which provides a calibrated age range of A.D. 1285 – 1386 at one standard deviation and A.D. 1277 – 1394 at two standard deviations. On the basis of these measures, a moderate estimate for the occupation of Hollywood would fall somewhere between A.D. 1275 – 1395. If the overlap between A.D. 1225 and 1395 for these averaged date ranges is any indicator, then a general estimate of the Hollywood occupation span would be A.D. 1225 and 1395.

That these three dates can be statistically pooled in two different combinations indicates that Hollywood may have had a more extended duration of occupation than the other four mound centers of the region. Supporting this is the presence of Southeastern Ceremonial Complex material along with extended burials in both the lower and upper horizons of Mound B (Thomas 1985 [1894]:317-326) along with four sets of two pottery urn burials, a typical Hollywood phase mortuary trait for the middle Savannah River valley, scattered in the upper mound horizon that “may be somewhat later than the extended burials, which otherwise resemble the earlier interments [in the lower mound horizon]” (Anderson 1994:191-192). See section below for further discussion on the dating of the Southeastern Ceremonial Complex materials from Mound B at Hollywood.

Thus, when all of the calculated radiometric date ranges for the five mound centers are considered together, it appears at first glance that all centers may be contemporaneous on the landscape during the Hollywood phase (Table 4.2). Even with this likelihood, there remain subtle hints at the possibility of non-contemporaneity for some of the mound centers. For instance, the date range for Spring Lake begins slightly earlier (ca. A.D. 1269) by some 30 years than that of the other centers, with the possible exception of Hollywood. No matter how it is sliced, discerning temporal differences between Lawton and Red Lake or for that matter Hollywood and Mason’s Plantation is extremely difficult with the radiometric data at hand. If, as the radiometric dates seem to indicate, all the mound centers are contemporaneous rather than occupied sequentially within a 100 or so year phase, then all pottery types should be the same in relative frequencies for each site, and they are not as I discuss in the next section. Blitz and Livingood (2004:295) note the difficulties encountered when attempting to correlate

regional chronologies with broad time frames constructed from radiometric data and relative chronologies based on ceramic seriation. I suggest, however, that if a phase is 100 years (such as the Hollywood phase) and I have all site assemblages within the phase aligned to meet the required conditions of the seriation model for duration and popularity (see discussion below) to demonstrate change through time, then each site assemblage should contain less time than the phase to which they have been assigned. In other words, if there are intervals of short duration of occupation then one should be able to detect these through frequency seriation within the span of the entire phase interval. One final observation when considering all of the statistically consistent radiometric and TL dates at a broader scale is that no date range from any of the five mound sites show a termination date of later than ca. A.D. 1400 even at two standard deviations. This fact certainly lends further support to Anderson's (1994:242; 362-377) contention that the Savannah basin from the central Piedmont to the river mouth was abandoned no later than ca. A.D. 1450.

### **Frequency Seriation**

[As] a means of tracking occupational history through time...radiometric methods are at present insufficient to provide fine-grained occupational tracking...radiocarbon dates are useful to establish phase parameters but not the passage of time within phases...[where instead]...extensive samples of temporally sensitive pottery [are most effective].

Timothy R. Pauketat (2003:45)

Contrary to Pauketat's opinion on the limitations of radiometric dating for tracking brief episodes in occupational history, many Mississippianists genuinely believe, and contend, that if temporal phases have been paired down to intervals of 100—or even

50—years, then these are of short enough duration to encompass contemporary communities and are of high enough resolution to identify accurate spatial patterning in regional chiefdom settlement. This is due in part to the idea that most Mississippian chiefdom cycles were 100 years or less (*sensu* Hally 2006:27), which, in fact, may be an fair assessment. Alternatively, one can logically intuit from archaeological data the possibility that specified chiefdoms may have thrived for only a generation due to the inability of elites to maintain exploitation of surplus production and labor. One particular method for exploring this alternative to century-long chiefdom duration involves the calculation of relative percentages (i.e., frequency seriation) of identifiable ceramic pottery types by site assemblage provenience.

Traditionally, frequency seriation was one of the preferred techniques for the chronological ordering of assemblages and sites prior to the advent of radiocarbon dating; however, frequency seriation has seen little application since the advent of radiometric dating, almost to the point of abandonment by the processualists' attempt to discard anything that smacks of culture history. When contrasted with radiometric methods, the greatest advantage of frequency seriation is that it allows a continuous ordering of assemblages with a high degree of temporal resolution. In particular, as Marquardt notes, seriation implies the continuous arrangement of events, assemblages, objects, or attributes "such that the position of each unit reflects its similarity to other units in the series" (1982:408). Frequency seriation is a method that utilizes patterning in the percentages of artifact types by columns so as to arrange assemblages by rows in a sequence (O'Brien and Lyman 1999). The method is based on a model of artifact-type change so that each type should display a unimodal frequency distribution when

assemblages are arranged in a sequence. In frequency seriation, the direction of time must be determined from independent evidence such as stratigraphic sequences or radiocarbon dates that support the proposed sequence.

Frequency seriation of ceramic assemblages requires the use of historical pottery types, or types whose distributions are unimodally distributed through time. It is the historical nature of certain pottery types—popularity peaks—that enables the ordering of multiple assemblages. The likelihood that the final order is a chronology increases when several pottery types display unimodal distributions throughout a given sequence. The guiding tenant of frequency seriation is known today as the popularity principle (O'Brien and Lyman 1999). It holds that the relative frequencies of pottery types through time should exhibit smooth and continuous changes that approximate a normal curve. The rate of change must be gradual with no abrupt breaks in the sequence resulting in the classic battleship-shaped, or unimodal frequency, distribution.

As O'Brien and Lyman (1999:117-119) have discussed, three conditions must be met for a seriation to be a chronology. Each of these requirements of frequency seriation serves to minimize other sources of variation that may confound temporal trends among the data. First, all assemblages used must be of similar duration. Second, assemblages must be from the same cultural tradition. Third, assemblages must be from the same local area. These last two conditions are attempts to ensure that the variation being measured is only that of time. On the basis of these conditions, the following discussion posits a temporal continuity (i.e., chronology) for the mound centers in the study region.

For comparative purposes, a frequency seriation was constructed for sites in the upper Coastal Plain and middle Piedmont of the Savannah River valley based on the

surface decoration of ceramic types as defined above. The Beaverdam phase type site, Beaverdam Creek, (A.D. 1150-1250) as well as two identified Lawton phase (A.D. 1100 to 1250) sites (38AK753 and Riverfront Village), and one Silver Bluff phase (A.D. 1350 to 1450) site (38AK757) are included in the seriation to provide a temporal ordering of the Hollywood phase (A.D. 1250-1350) mound centers. The ceramic frequencies from which the seriation is derived are provided in Table 4.3. A frequency seriation for the mound centers is shown Figure 4.4. Pottery samples from all proveniences at each site were aggregated and arranged in increasing or decreasing frequency around the mode, or maximum point of occurrence. The assumption here, as Blitz and Lorenz (2006:62) note, is “that the highest frequency of a ceramic type corresponds to a time when the ceramic type achieved maximum popularity of use.” The frequency seriation chart reveals a relative order in ceramic types for the 10 sites that does not violate the conditions established for a seriation to be an actual chronology. First, there is not much difference in spatial variation as all of the sites are in a local region defined specifically by geological and environmental parameters. Second, there is little functional variation within each of these communities (all are farmsteads, villages, or mound centers in an extensive agriculturally-based Mississippian political economy). Therefore, the only variation being measured through the frequency seriation is that of time. In effect, what this allows in a more nuanced chronology of mound center settlement within the 100 or so year long Hollywood phase. The fact that different percentages of pottery types occur at each site indicates a progressive ordering, otherwise a lack in temporal variation, or contemporaneity, would be obvious by the presence of the same frequencies for each site.



Based on the seriation, occupation of the habitation sites and mound centers begins with that at 38AK753 (cal. age A.D. 1092 – 1168); Riverfront Village (cal. age A.D. 1025 – 1151; Whitley 2009:Figure 4); then seemingly a temporal gap between ca. A.D. 1170 – 1225; Beaverdam Creek (cal. age A.D. 1226 – 1279; Rudolph and Hally 1985:Table 110); Spring Lake (cal. age A.D. 1269 – 1389); Red Lake (cal. age A.D. 1283 – 1380); Hollywood (cal. age A.D. 1225 – 1295 and cal. age A.D. 1285 – 1386, but this temporal designation may be problematic given the SECC material in Mound B and a possible earlier occupation as discussed below); Lawton (cal. age A.D. 1281 – 1376); Mason's Plantation (cal. age 1285 – 1385); Topper (cal. age A.D. 1263 – 1379), and 38AK757 (cal. age A.D. 1299 – 1398). These averaged date ranges (at the one sigma level) were determined with the CALIB calibration program (Stuiver and Reimer 1998, Stuiver et al. 2005), and the resulting analytical manipulations, illustrated in Figure 4.5, were developed with the OxCal v. 4.1.1 calibration program (Bronk Ramsey 2001; 2009) from the radiometric data discussed above.. The date ranges for each phase designated in Table 4.2 are only close approximations to the actual time of site occupation. These designations are applied in this instance as a heuristic demonstrating a temporal dimension to the chronological ordering of sites in the seriation sequence established here for the region (Table 1.1).

Prior to this study, a diachronic perspective of mound center polities in the middle Savannah River valley based on a traditional, culture-historical seriation of ceramic types has never been attempted to evaluate the coarse-grained chronology proposed previously for the region. This finer-temporal distinction allows for a better understanding of

regional settlement, and by extension a more accurate assessment of previous models put forth to account for the organizational variation of middle Savannah River valley polities.

Obviously, my argument that regional mound centers were not contemporaneous, but rather sequential, will be bolstered by additional collections as needed to increase the sample units for seriation analysis. Finally, as a more nuanced chronology is achieved through seriation, this information can be lined up against decadal climate data as offered by Anderson and colleagues (1995) regarding mid-fourteenth drought conditions to determine how regional environmental factors, in tandem with social dynamics, affected the transformation of the middle Savannah River valley polities.

### **The Hollywood Site Southeastern Ceremonial Complex Materials**

Additional support for the position of the Hollywood site in the frequency seriation as constructed above can be derived from Southeastern Ceremonial Complex (SECC) objects at Hollywood. Consideration of the temporal aspects of the SECC material recovered from the smaller of the two mounds at Hollywood (Thomas 1985 [1894]:317-326) provides insight on the micro-seriation of the mound sites in the middle Savannah River valley within the century-long Hollywood phase. Exotic items such as those described or illustrated in Brain and Phillips (1996:191-193) from several grave lots include two companion piece engraved ceramic beakers (labeled as Ga-Ri-H2 and Ga-Ri-H11, pp. 191-192) [photographed here in Figure 4.6], fragments of a repoussé copper plate (labeled as Ga-Ri-H1, p. 191) [a frontal facing forked-eye feline or “Piasa” photographed here in Figure 4.7], a ceramic bottle with tripod supports modeled in the

form of human heads (labeled as Ga-Ri-H8, p. 192) [photographed here in Figure 4.8], negative-painted and plain carafe-style ceramic bottles (labeled as Ga-Ri-H9, p. 192) [photographed here in Figure 4.9 and Figure 4.10], various ceramic and steatite pipes (labeled as Ga-Ri-H3 through Ga-Ri-H7, p. 192-193) [a “bowl giver” pipe photographed here in Figure 4.11], two copper axes, mica, a quartz discoidal, and decomposed shell, possibly from a gorget.

Certain of the burial goods in this assemblage can be assigned to specific SECC “styles” or types, or exhibit stylistic similarity to SECC items from datable contexts at other sites in the Southeast. For instance, the two companion ceramic beakers exhibit a complex interweaving of snake images, which is a typical iconographic representation common during the fourteenth century, and is associated with the late Braden school (Brown 2007:236, 239, 242). Interestingly, Rielly and Garber (2007:3-4) emphasize that those motifs and symbols that were carried on exotics—stone, copper, and marine shell—migrate to the medium of clay vessels or gorgets produced from easily obtainable riverine shell during this period (ca. A.D. 1300-1400). The Negative Painted ceramic bottle (Ga-Ri-H9) from the Hollywood mound, exhibiting a “cross in circle and sunburst” motif design, is stylistically similar to the Negative Painted ceramic bottle (labeled as Ga-Brt-E55 in Brain and Phillips 1996:143; see also Moorehead 1979: Figure 33c) from a Late Wilbanks context (ca. A.D. 1325 to 1375) at Etowah Mound C (King 2007:119).

The embossed copper plate from Hollywood depicts a rare frontal facing forked-eye feline or “Piasa,” and as Brain and Phillips (1996:155, 191-192) note, is essentially identical—given a difference in media—to the remains of a feather and copper symbol-badge headdress ornament (labeled as Ga-Brt-194, p. 155) found with the Burial 48 at

Etowah Mound C. The final mantle Burial 48 dates to the Late Wilbanks phase, or ca. A.D. 1325 to 1375 (King 2001:74; 2003:149-151; 2007:119). Lastly, one ceramic smoking pipe in particular from the Hollywood mound assemblage (Ga-Ri-H3) depicting a humpbacked human effigy holding a bowl-shaped vessel and recognized iconographically as the “Bowl Giver,” is very similar to pipe specimens from Burial 44 at Etowah Mound C (labeled as Ga-Brt-53, P. 153) and the Greenwood site (labeled as Tenn-Ws-G1, pp. 254-255) in Tennessee (Brain and Phillips 1996:192). The Bowl-Giver effigy pipe from Etowah was recovered from a Late Wilbanks context (A. King personal communication 2010). In sum, a temporal consideration of the exotic and SECC artifacts from Hollywood shows relationship to the Late Braden style and associated chronological assignment to the Late Wilbanks phase in North Georgia. This in turn, and at the very least, implies mid-fourteen century burial deposition and mound construction for the Hollywood site, thus slightly post-dating the downstream Lawton and Red Lake polity centers.

Additional endorsement regarding the use of SECC artifacts as a basis to define diachronic trends in the Savannah River valley, comes from the Beaverdam Creek mound site in the middle Piedmont area (Rudolph and Hally 1985). Although Beaverdam Creek is the type site for the defined sub-regional Beaverdam phase (ca. A.D. 1150 to 1250), the ceramic assemblage coupled with radiocarbon dating supported assignment of actual site occupation to the latter portion of the phase (ca. A.D. 1200 to 1250). A single mound site, Beaverdam Creek is nonetheless impressive in that pre-mound construction showed two earth-embanked structures with a final tally of 37 elite mound and pre-mound burials as compared to 10 nonelite village burials recovered from extensive excavations in the

residential area. Two of the mound burials contained three shell gorgets – one Hixon style, one Bennett-like crib, and one unidentified bird style – associated with the pre-mound midden and the earliest stage of the mound construction (Hally 2007:195-196). Hally (2007:195-196) states that “the Beaverdam Creek site provides the earliest, reliably dated, stratigraphic context for shell gorgets” and further notes that two sites in eastern Tennessee produced Bennett style gorgets, which also appear to be quite early. In Hally’s (2007:195:Fig. 10.3) chronology, the Bennett style takes precedence as the earliest gorget style in his SECC sequence at the beginning of the thirteenth century. Brain and Phillips (1996, cited in Hally 2007:190, Fig.10.2) assign the “Crib” style to the earliest gorget style in their chronology (which is not in sequence with Hally’s series, and herein sparks an old debate renewed, see King 2007:12-14). Regardless, the Beaverdam Creek site has been radiocarbon dated to the later half of the thirteenth century and the SECC gorget styles present in a defined context directly affirm this temporal assignment. In fact, Rudolph (1984:40) writes: “At the Hollywood site, 113 km southeast of Beaverdam Creek and within the Coastal Plain, pottery from the lowest levels of the site’s two mounds suggest contemporaneity with the Beaverdam Creek site.” Thus, the Hollywood site may have been occupied and its mounds constructed during the early portion of the Hollywood phase, around A.D. 1235 - 1285 as the radiometric date indicates. If so, it would have overlapped slightly with the terminal occupation of the Beaverdam Creek mound site at about ca. A.D. 1250 as contended by Rudolph and Hally (1986).

Table 4.1. Radiocarbon, AMS, and TL Dates for the Middle Savannah River Valley.

Radiocarbon and AMS Dates		Sample No.	Method	Material	Measured Age (RCYBP)	<sup>13</sup> C/ <sup>12</sup> C Ratio	Conventional Age (RCYBP)	Calibrated Date (1 sigma)	Reference
9SN4	Red Lake	Beta-144167	AMS	soot	700±30	-24.2	720±30	AD 1275 to 1290	this report
9SN4	Red Lake	Beta-144168	14C	shell	850±60	-10.6	1080±60	AD 895 to 1010	this report
9SN4	Red Lake	Beta-144169	14C	shell	670±60	-11.2	900±60	AD 1035 to 1210	this report
9SN4	Red Lake	UGA-R01264	AMS	soot	928±49	-26.05	911±49	AD 1141 to 1168	Wood 2009:260
9SN4	Red Lake	UGA-R01265	AMS	soot	622±42	-24.69	627±42	AD 1295 to 1392	Wood 2009:260
9SN4	Red Lake	UGA-R01266	AMS	soot	622±42	-27.4	624±42	AD 1296 to 1392	Wood 2009:260
9SN4	Red Lake	UGA-R01653	AMS	soot	1053±60	-27.57	1033±60	AD 898 to 1042	Wood 2009:260
9SN4	Red Lake	UGA-R01653-b repeat	AMS	soot	1693±58	-27.44	1674±58	AD 259 to 427	Wood 2009:260
9SN215	Spring Lake	UGA-R01571	AMS	soot	717±40	-26.2	707±40	AD 1264 to 1380	Wood 2009:260
9SN215	Spring Lake	UGA-R01572	AMS	soot	582±37	-26.01	574±37	AD 1316 to 1411	Wood 2009:260
9SN215	Spring Lake	UGA-R01573	AMS	soot	736±40	-26.4	725±40	AD 1255 to 1375	Wood 2009:260
38AL11	Lawton	Beta-131099	AMS	soot	650±50	-25.5	640±50	AD 1290 to 1390	this report
38AL11	Lawton	Beta-131100	14C	charcoal	101.1±0.7 %	-27.1	101.6±0.7 %	modern	this report
38AL11	Lawton	Beta-132944	AMS	soot	680±40	-26.4	660±40	AD 1290 to 1385	this report
38AL11	Lawton	Beta-145500	AMS	soot	710±40	-25.4	700±40	AD 1280 to 1300	this report
38AL11	Lawton	Beta-145502	AMS	soot	650±40	-24.6	660±40	AD 1290 to 1390	this report
38AL11	Lawton	UGA-R01261	AMS	soot	759±45	-26.12	741±45	AD 1227 to 1288	Wood 2009:260
38AL11	Lawton	UGA-R01262	AMS	soot	712±43	-26.28	691±43	AD 1271 to 1384	Wood 2009:260
38AL11	Lawton	UGA-R01263	AMS	soot	898±57	-24.74	903±57	AD 1043 to 1205	Wood 2009:260
38AL11	Lawton	UGA-R01282	AMS	charcoal	681±43	-26.84	666±43	AD 1280 to 1387	Wood 2009:260
9R11	Hollywood	Beta-134794	AMS	soot	550±40	-23.1	580±60	AD 1310 to 1410	this report
9R11	Hollywood	Beta-144165	AMS	soot	770±40	-25.0	770±40	AD 1235 to 1280	this report
9R11	Hollywood	Beta-145333	AMS	soot	690±40	-25.0	690±40	AD 1280 to 1300	this report
38AK15	Mason's Plantation	Beta-248330	AMS	soot	640±40	-22.8	680±40	AD 1280 to 1380	this report
38AK15	Mason's Plantation	Beta-248331	AMS	soot	600±40	-22.8	640±40	AD 1290 to 1390	this report
<b>Thermoluminescence Dates</b>					Age (years AD)			Calendar Date (1 sigma)	
Site No.	Name	Sample Number							
38AL11	Lawton	UW564					1316±66	AD 1250 to 1382	this report
							and 1471±59	AD 1412 to 1530	this report
38AL11	Lawton	UW565					1273±70	AD 1203 to 1343	this report

Table 4.2. Radiometrically Dated Sites in the Savannah River Valley  
(All Age Ranges Calibrated at one Sigma; Coastal Plain Mound Sites in Bold).

Period Designation	Phase Designation	Site Designation	Calibrated Age Range
Early Mississippian	Lawton	Riverfront Village	A.D. 1025-1151
Early Mississippian	Lawton	38AK753	A.D. 1092-1168
Middle Mississippian	Beaverdam (Piedmont)	Beaverdam Creek	A.D. 1226-1279
Middle Mississippian	Hollywood	<b>Hollywood</b>	A.D. 1225-1386
Middle Mississippian	Hollywood	<b>Spring Lake</b>	A.D. 1269-1389
Middle Mississippian	Hollywood	<b>Red Lake</b>	A.D. 1283-1380
Middle Mississippian	Hollywood	<b>Lawton</b>	A.D. 1281-1376
Middle Mississippian	Hollywood	<b>Mason's Plantation</b>	A.D. 1285-1385
Middle Mississippian	Hollywood	Topper	A.D. 1263-1379
Middle Mississippian	Hollywood	38AK757	A.D. 1299-1398

Table 4.3. Ceramic Sherd Frequencies from Sites in the Middle Savannah River Valley.

Counts	Etowah Comp. Stamped	Etowah Corncob Marked	Savannah Check Stamped	Savannah / Irene Comp. Stamped	Savannah Cord Marked	Total
38AK757	0	0	3	365	40	408
Topper	0	1	61	53	22	137
Mason's Plantation	0	0	122	108	6	236
Lawton	0	140	2530	1512	174	4356
Hollywood	13	5	2212	804	87	3121
Red Lake	0	40	1883	197	14	2134
Spring Lake	0	261	1284	229	8	1782
Beaverdam	112	409	1276	117	0	1914
Riverfront Village	3059	6591	5132	0	0	14782
38AK753	88	29	7	0	0	124



Figure 4.1 .Hollywood phase ceramic vessel from the upper layer, lower division of the Hollywood Mound B (from Thomas 1985/1894: Plate XIX).



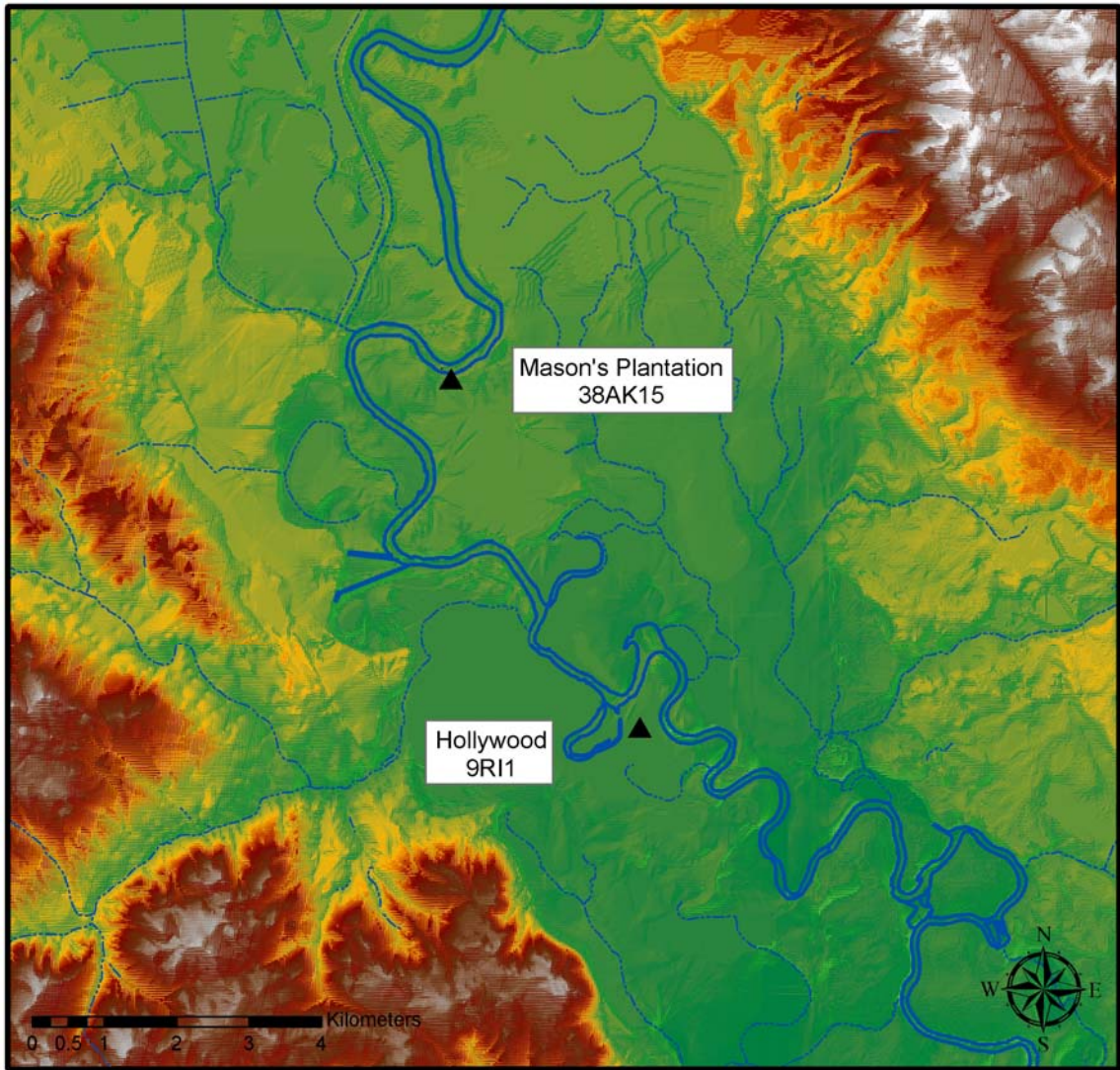


Figure 4.2. Floodplain location of Mason's Plantation relative to Hollywood.

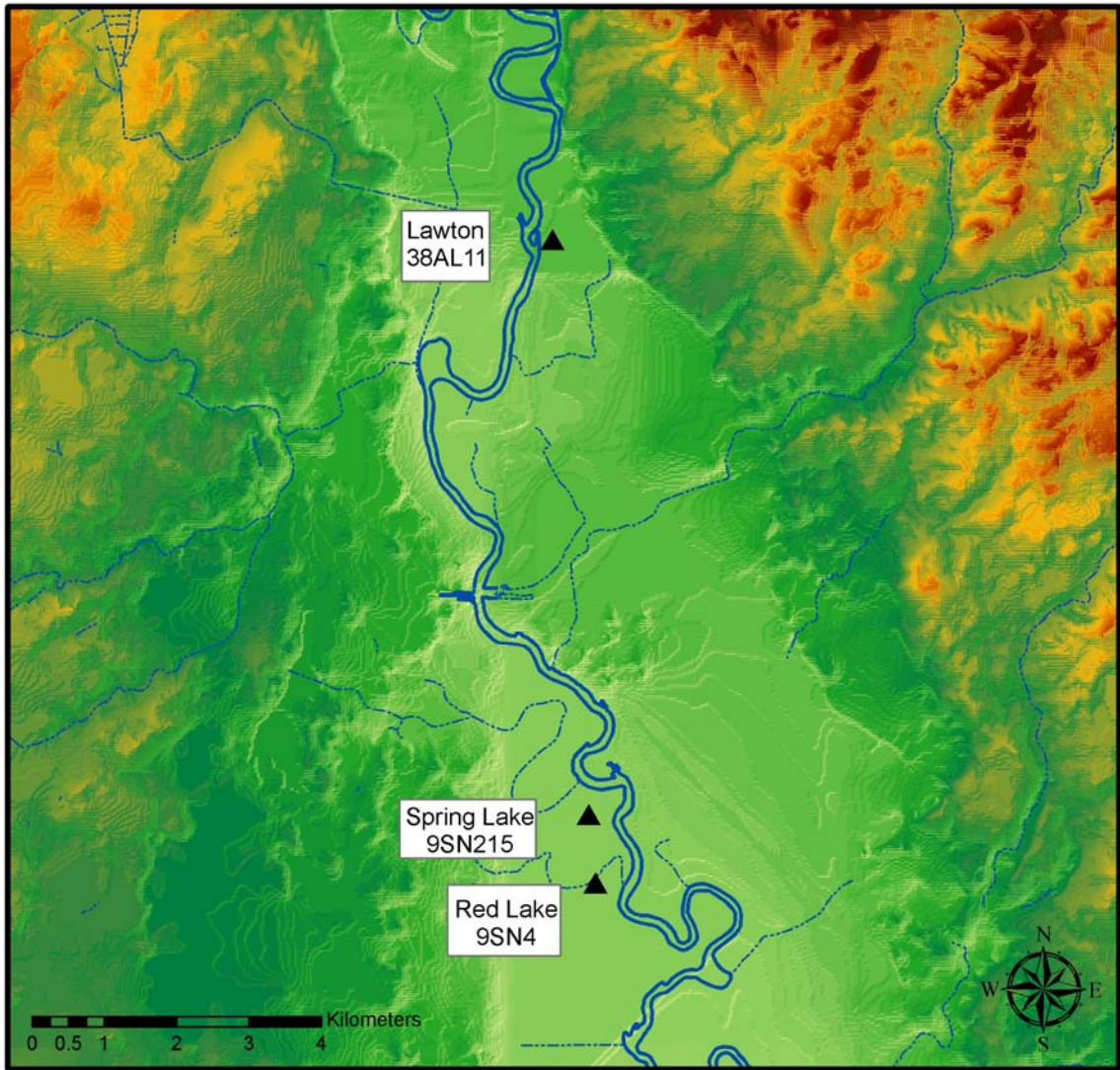


Figure 4.3. Floodplain location of Lawton relative to Spring Lake and Red Lake.

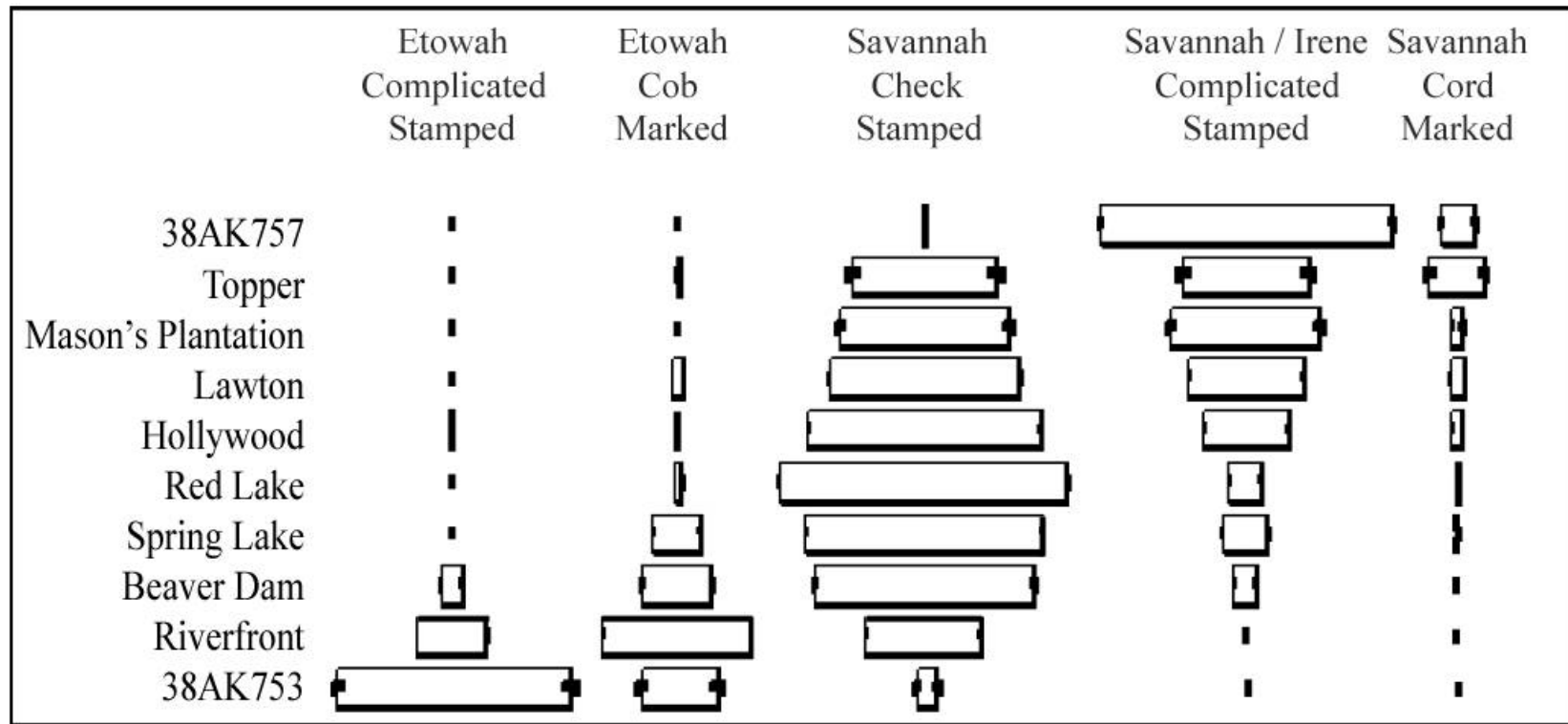


Figure 4.4. Frequency seriation of diagnostic pottery types for select Mississippian mound and non-mound sites in the Savannah River valley.

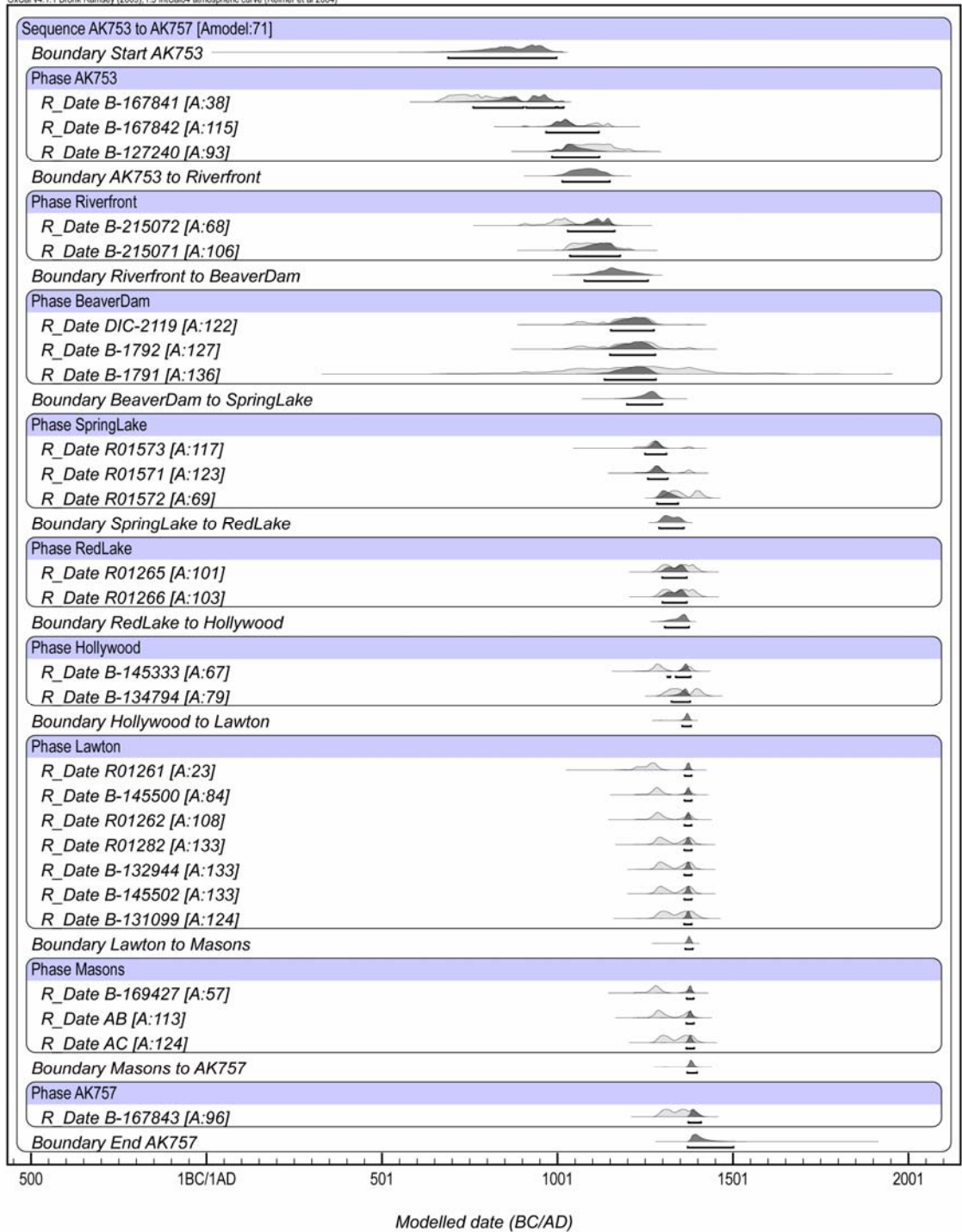


Figure 4.5. Radiocarbon dates graphed for select Mississippian mound and non-mound sites in the Savannah River valley.



Figure 4.6. Two companion engraved cups that exhibit Late Braden style and are from the eastern Tennessee area.



Figure 4.7. Copper plate presents frontal image of a feline.



Figure 4.8. Carafe-style ceramic bottle with tripodal supports modeled in the form of human heads



Figure 4.9. Negative painted bottle is an example of Avenue Polychrome from the Central Mississippi Valley.

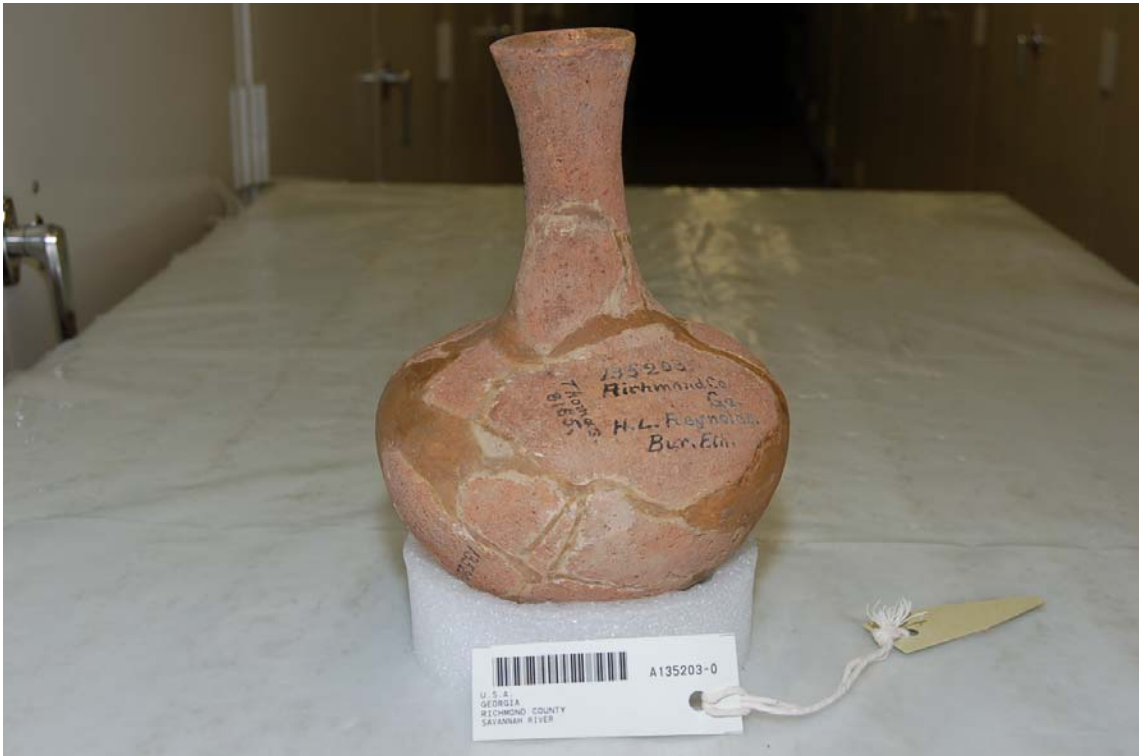


Figure 4.10. Shell-tempered carafe-style bottle form from the Central Mississippi Valley.



Figure 4.11. Effigy pipe presents a human figure holding a pottery vessel.



## Chapter 5

### Data Collection and Analysis

For this research study, I have conducted, or been closely involved with, all aspects involving topographic mapping, systematic shovel testing, remote sensing, and excavations at both the Red Lake and Lawton mound sites, and additionally the survey testing of the Mason's Plantation mound site location, as well as the Smithsonian Institution archival research of the Hollywood burial mound artifacts. My fieldwork dovetailed with that of graduate students Michael Nelson (2005) and Emily Dale (2007) of the University of South Carolina as well as Jared Wood (2009) at the University of Georgia. The research of Nelson entailed block excavation at the Lawton site in an attempt to discern off-mound, residential architecture, and that of Dale to delineate the extent and internal structure of the Red Lake site. Wood's dissertation research was undertaken from an historical ecology perspective involving primarily a comparative approach to the political hierarchy and ecological dimensions of the Spring Lake, Red Lake, and Lawton sites. Additionally, I initiated fieldwork at the presumed location of the Mason's Plantation site (following Anderson 1990a; 1994), and continued as a consultant during fieldwork at the site by graduate student Christopher Thornock (2008) of the University of South Carolina. In the following sections, I review and discuss the results of these projects. I incorporate the results of these studies into my analysis, which is undertaken from an historical materialist perspective that integrates the regional settlement patterns and the political hierarchy of all identified mound centers in the middle Savannah River valley.

### **The Mason's Plantation Site (38AK15)**

The Mason's Plantation site is located 14.9 km (9.3 mi.) directly downstream from the Fall Line on the Savannah River floodplain in Aiken County, South Carolina (Figure 5.1). The site is situated on a broad landform (actually a ridge and swale topography formed through river meander) within the floodplain (Figure 5.2). At this point, the floodplain is 8.1 km (5 mi.) wide. Mason's Plantation formed the largest multiple-mound site of all centers in the entire Savannah River valley with six mounds reported in an historic period account (Jones 1999 [1873]:148-157; also see Anderson 1994:338-343 for an annotation of Jones's description). William Bartram, a naturalist of botany, was first to note the presence of this mound group while traveling through the area in May 1775 (Harper 1943:176; Van Doren 1955:258-259; Waselkov and Holland Braund 1995:72, 272-273; also see Anderson 1994:337 for an annotation of Bartram's description). Almost a century later, C. C. Jones (1999 [1873]:148-157) reported their condition as severely eroded due to strong river currents during seasonal freshets. Continued episodic flooding during the final decades of the 19th-century apparently completed the total destruction of the mound complex (Moore 1998 [1898]:167-168).

More specifically, a series of 19th-century documents and river navigation charts record the erosion of mounds at Mason's Plantation. An 1853 survey of the stream channel from Augusta to Savannah by Capt. J. F. Gilmer, U. S. Corps of Engineers shows the arrangement of three mounds at Mason's Plantation, the smaller of which is illustrated as partially eroded into the river (Figure 5.3). Twenty years later, C. C. Jones

(1999 [1873]) published a scaled drawing of the site following visits in the 1860s and early 1870s that showed the larger two mounds slumping into the river at that time (Figure 5.4). Even in this degraded condition, Jones' calculations of the height and size for the two mounds indicate they were large, with the smaller mound's summit at 4.6 m (15 ft.) above ground surface, and the larger mound's summit, with an east-west diameter of 17.7 m (58 ft.), at 11.3 m (37 ft.) above ground surface (see Anderson 1994:340), marking this as the tallest recorded mound in the Savannah River valley. In 1889, Lieut. O. M. Carter of the Corps of Engineers-Savannah District remapped the Savannah River channel in response to the "torrential freshets of 1887 and 1888 caused by snowmelt in the mountains and heavy rainfall in the Piedmont" (Carter 1889:1237, 1285). The Carter map labels only "Open Fields" on the river bend cut-bank where the mounds were located on the Gilmer and Jones maps (Figure 5.5).

The most recent investigation regarding the Mason's Plantation site location consisted of systematic, deep-coring with a hand-held, telescoping bucket auger through three meters of modern alluvial sedimentation deposited during major flooding during the 19th and early 20th centuries. I participated in initiating this field research in 2003, which continued in 2005 under the auspices of graduate student Christopher Thornock (King and Stephenson 2003; 2005; Thornock 2005). These investigations recovered mostly small, fragmented prehistoric sherds just below the three meter deposit of alluvium, indicating the presence of a midden deposit that quite likely defined the location of the Mason's Plantation site. Thornock (2008) also noted numerous artifacts eroding at this depth from the river bank into the stream bed. Eventually, an underwater reconnaissance by the Maritime Research Division of the South Carolina Institute of

Archaeology and Anthropology was undertaken to more fully explore the dimension and extent of erosional processes to the buried site midden.

*Underwater Explorations of the Mason's Plantation Site*

Underwater archaeological investigations were conducted in the summer of 2008 by Thornock (2008) at the location of Mason's Plantation site as identified previously by Anderson (1994). This survey was modeled along the lines of an underwater project conducted at the location of the multi-mound Rembert site, now lying below the containment reservoir of the Walter F. George dam constructed in the late 1950s (Anderson, Amer, and Elliott 1994:62-74). The Mason's Plantation underwater survey documented an extensive prehistoric artifact scatter from which a sizable sample was recovered. Subsequent analysis revealed that this assemblage included Hollywood-phase ceramic types along with some Woodland period materials. In line with Anderson and colleagues' (1994) noted results concerning their Rembert mound investigation, vital information was obtained from the underwater endeavor at Mason's Plantation especially with regard to verifying its actual location and documenting aspects of its culture history.

In 2008, underwater archaeologists from the SCIAA/Maritime Research Division collected data at the Middle Mississippian site of Mason's Plantation. The following description is summarized from Thornock (2008). After having conducted intermittent terrestrial research at the site in 2004 and 2005 (Thornock 2005), Thornock received a grant from the Archaeological Society of South Carolina to conduct research on the underwater portion of the site (i.e., those portions of the site midden that were eroding

into the river), and contracted with the Maritime Research Division under the direction of Chris Amer, South Carolina State Underwater Archaeologist. The research objectives were to establish the underwater boundaries of site erosion, to collect sonar data from underwater erosional deposits, to assess the quality and provenience of the site's underwater artifacts, and to more accurately date the Mississippian component at the site by recovering sherd types that could be classified according to their prehistoric component, and recover sherds with exterior surface soot deposits that could be dated with the AMS technique.

Based on the site boundaries established from previous terrestrial work (Thornock 2005), continuous sonar data was collected in concert with GPS data from the entire underwater portion of the site, along with adjacent portions of the river both upstream and downstream from the site. The SCIAA boat was anchored at five different GPS-point locations along the river's edge where teams of divers explored the site and collected all the prehistoric artifacts lying at the bottom of the river. A total of 210 prehistoric sherds was collected from the river bed, with only a few sherds documented either upstream or downstream of the site's designated terrestrial boundaries, indicating that artifacts were eroding out of the buried midden at the river's edge rather than originating and washing down stream from possible upstream site locations. Twenty two percent of the sherds were complicated paddle stamped (Number = 47), 16 percent were check stamped (Number = 33), five of the sherds had punctuated rims, and only one sherd was incised. This is similar to the pottery collections made on land and is consistent with what one would expect to find at Middle Mississippian sites in the middle Savannah River valley.

Exterior soot deposits present on the surface of two different complicated stamped sherds recovered during the underwater survey were sampled and submitted for AMS radiometric dating. Analysis revealed that both of the sherds date to between A.D. 1270 and 1400 indicating that these vessels were manufactured and used during the Middle Mississippi period (Table 4.1). The results of this project are the best evidence to date sustaining the location of Mason's Plantation as claimed by Anderson (1994), and where historical sources report six mounds that may have all eroded into the river during the late 19th century. This archaeological evidence supports the prehistoric occupation of Mason's Plantation during the Hollywood phase as were the other four known mound centers (Hollywood, Lawton, Red Lake, and Spring Lake) of the middle Savannah River valley.

### **The Hollywood Mound Site (9RI1)**

Hollywood is a double mound Mississippi period site located 20.5 km (12.75 mi.) directly below the Fall Line on the Savannah River floodplain in Richmond County, Georgia (Figure 5.6). At this point, the floodplain is 8.1 km (5 mi.) wide. Hollywood is situated on a broad landform (actually a ridge and swale topography formed through river meander) within the floodplain (Figure 5.7). The site was referred to as the "Meyers Mounds" on a 1908 Richmond County plat map (surveyed by C. L. Whaley, Eng., drafted by M. B. Mathewson, published by the Hudgins Co., Atlanta, Georgia). As with other Mississippian mound sites, Hollywood became famous after it was investigated by one of Cyrus Thomas' field assistants, Henry Reynolds, during the

Bureau of American Ethnology's "Mound Builders" project (Thomas 1985 [1894]). Reynolds' excavations in Mound B at the site revealed an impressive collection of elaborate pots, embossed copper, stone, copper celts, and pipes in a series of graves (see above section "The Hollywood Site Southeastern Ceremonial Complex Materials" for artifact photographs). Those objects figured prominently in the definition of a widespread set of art styles and ritual themes collectively called the Southeastern Ceremonial Complex or Southern Cult (Muller 1989; Waring and Holder 1945).

Clemens de Baillou (1965) of the Augusta Museum conducted additional investigations at the site when his crew excavated a trench into the flank of Mound A and two test units on the edges of Mound B (Figure 5.8). The profile of Mound A shows two construction stages, each overlain with mound soil erosion, or slump, and overlying all was a 3 m deposit of modern clay alluvium (Figure 5.9). De Baillou excavated two 10-foot square blocks on the remnant of Mound B. These units confirmed that intact Mound B deposits were still present. His excavations also detected and sampled midden deposits that predated Mound B.

#### *Reynold's Excavations at Mound B*

Reynolds claimed to have completely excavated Mound B, the smaller of the two mounds present at the site. He described Mound B as conical in form, 10 feet high, 70 feet in diameter, and located 280 feet due north of the large mound (Mound A as labeled by de Baillou) (Thomas 1894:317-326). Reynolds noted that atop this mound were the remains of a cattle-barn that had been destroyed during recent flooding of the Savannah

River. He initiated his excavation with two trenches, each 10 feet wide, crosswise through the center in cardinal directions and down to the base of the mound. The resulting mound quadrants were then entirely excavated. These efforts revealed the mound as stratified, consisting of an upper stratum about 3 feet thick and composed of a sandy micaceous loam (most likely an accumulation of floodplain alluvium) containing historic period (ca. A.D. 1800) artifacts, and a lower stratum some 7 feet thick and composed of compact, silty-clay sediments containing human burials and accompanying grave goods. The burials within the lower stratum were grouped into two layers with the upper burial group between 1 and 2 feet below the top of the stratum and the lower group at the base of the mound within the initial 1.5 feet of fill. These superimposed burial groups were separated by 3.5 feet of non-differentiated mound fill. Both series of interments are collectively arranged around a central area of “burnt earth and ashes,” which Reynolds noted for the upper layer was about 2 feet thick and some 5 feet square, and apparently of similar dimensions in the lower layer of interments. Reynolds further observed that the burials were not intrusive into the mound, noting that the soil above them showed no indication of disturbance.

Reynolds’ drawings of these separate interment groups show them to be, for the most part, a superimposed, symmetrical image of one another, with the upper group containing the extended burials of three individuals oriented to the west and a single individual facing south. The lower group contained the extended burials of six individuals oriented to the east and a single individual facing north (Figure 5.10). This patterned symmetry of interment is also reflected in the artifact assemblage series in each burial layer. As noted, Reynolds’ excavation recovered artifacts of the SECC. These



materials originated in association with the interments in the initial stage of mound construction (the lower burial group), and included copper plates, a painted bottle with sun circle and cross motif, two cups engraved with serpent and human hand motifs, elaborate pipes, shell beads, and earspools (Anderson et al. 1986:33). The upper level interment series was devoid of SECC materials (with the exception of the decayed remnants of a repoussé-figured copper plate) and contained only nine jar and bowl covered burial urns.

Excavation of the larger mound de Baillou yielded a pottery assemblage distinct enough to merit recognition as the Hollywood phase of the Savannah period. Anderson and colleagues (1986:41; see also Hally and Rudolph 1986:62) note that the ceramic complex of the Hollywood phase closely resembles that of the Pee Dee phase Town Creek site in North Carolina as demonstrated in a comparative study by Reid (1965). These researchers cross-date the Hollywood phase to between A.D. 1250 and 1350 on the basis of a radiocarbon series published by Dickens (1976:198) for Town Creek. Primary Hollywood ceramic types are Savannah Check Stamped, Savannah Plain and Burnished Plain, and Savannah Complicated Stamped dominated by variations of the filfot-cross motifs and other related designs. Additional characteristics include cane punctations and large riveted nodes impressed with cane punctations on unthickened jar rims (Anderson 1994:370; Anderson et al. 1986:40-41; Hally and Rudolph 1986:62-63). Three recently obtained radiocarbon dates from sooted sherds in the de Baillou collection that produced one sigma calibration ranges between A.D. 1225 and 1295, thereby substantiating the Hollywood phase designation for the site.

### **The Lawton Site (38AL11)**

Lawton, with its two mounds, fortification ditch/embankment, and borrow-pit, is approximately 1.6-ha (3.9 ac.) in extent (Figure 5.11). Based on radiocarbon dates and identifiable ceramic types, site occupation is estimated to have occurred sometime between A.D. 1250 and 1350. The site is situated on a remnant (point-bar/alluvial) river-terrace in the floodplain along the bank of a relict stream channel about 250 m (820 ft.) east of the Savannah River in Allendale County, South Carolina (Figure 5.12 and Figure 5.13). At this point, the floodplain is about 2.9 km (1.8 mi.) wide. This terrace landform, which joins the uplands to the east, sits 21 m (70 ft.) amsl, has a general 4-degree slope north to south, and is capped with levee overburden consisting of fluvial deposits of silt and clay deposited during periodic river-levee overflow. This topographic elevation is high enough to avoid prolonged flooding, if any, during most years allowing the floodplain terrace to support a bottomland hardwood forest. Nelson (1998:2.5) reports that typical canopy species for bottomland forests include water oak, laurel oak, sweetgum, elms, red maple and yellow poplar, with holly, redbay, sweet bay, hackberry, and ironwood common in the subcanopy and understory. Additionally, greenbriers, grapes, and other vines are common in the shrub and groundcover layers while herbaceous plants are less common due to the more dense shading.

The floodplain terrace rises about 3 m (10 ft.) above the adjacent backwater swamp—a geomorphological mosaic of clay-bottomed swales, sandy ridges (ancient levees), oxbow lakes, and backwater sloughs. This primarily low-lying area is subject to prolonged inundation during one or several periods of the year (usually later winter and

early spring), and as such supports a swamp forest typically dominated by bald cypress and water tupelo, which can withstand very long periods of flooding without damage. Other water-tolerant bottomland hardwoods, such as water ash and red ash, may occur, but vines and understory vegetation are generally sparse in the swamp forest (Nelson 1998:2.5; Whipple et al. 1981:2).

The most visibly prominent cultural features preserved at Lawton are two platform mounds (referred to as the North and South mounds), a surrounding fortification ditch with an earthen embankment along its outer perimeter, and a borrow pit for mound fill adjacent to the exterior northeastern edge of the ditch (Figure 5.14). The mounds are set about 30 m apart and aligned some 45 degrees off one another so that the North Mound is oriented to the four cardinal directions and the South Mound to the intermediary ordinal points. The fortification ditch is approximately 5 m across and 1 m deep (originally about 2 m in depth) and bounds the site on the north, east, and south. Linear portions of an earthen embankment constructed of ditch backfill remain intact along the outer-ditch perimeter. Although ditch/embankment features were present at southeastern Mississippian mound sites, in most cases they were destroyed through historic period agricultural activities further demonstrating that Lawton was not subjected to historic or recent farming practices. Additionally, a borrow pit situated directly along the northeast outer margin of the ditch/embankment was hand-mined for approximately 865 m<sup>3</sup> of basket-loaded fill used in mound construction.

Aside from any expected natural degradation processes of the site environment over the last 700 years, recent human enterprise has adversely affected the archaeological context with seemingly minimal impact. Early 20th-century logging industry in the

floodplain involved the construction of secondary roads through the site for timber removal of bottom land and swamp loblolly pine and cypress. Later 20th-century local collector activity resulted in repeated episodes of site looting documented by the presence of 156 “potholes” across the site (Figure 5.15). Although the site and mounds have suffered irreversible contextual damage as a result of collector pillage, most of the destruction has had a negligible effect on overall subsurface content and integrity. Moreover, these unauthorized visits appear to have subsided completely as none of the potholes are recent to within the past several decades. Overall, the Lawton site is undoubtedly the finest conserved mound center in the state, if not one of few remaining intact mound sites in the Southeast.

Previous archaeological research has been minimal at Lawton prior to recent investigations beginning in 1999. The intrepid Clarence B. Moore and his field crew visited the site on the morning of March 5, 1898 digging trenches through the northernmost mound (Moore 1898). Recovering nothing of museum quality, they apparently backfilled and departed that afternoon. Lawton received no further archaeological attention until 1970 when archaeologists from the South Carolina Institute of Archaeology and Anthropology spent three days producing the first plan map of visible features at the site. These researchers referred to the mounds at Lawton as the North Mound and the South Mound, and these designations are retained in the following discussion of current investigations at the site.

Current research for this study began with intensive shovel testing on a 10 m-interval grid across the area of the site enclosed within the ditch. An additional five transects of shovel test pits were excavated outside of the ditch and extended to the north,

east, and south, and a series of shovel tests were excavated in the bottom of the ditch as well as along the site's western edge at the base of the terrace, all at 10-m intervals. And finally, test unit and block excavations have been excavated at various locations across the site.

These efforts confirmed the existence of a daub concentration surrounding the site that has been interpreted as a burned and collapsed palisade wall. Additional testing has identified a residential zone signified by dense midden deposits and feature concentrations as well as a plaza area recognized by the absence of features and midden debris. Surprisingly, daub was virtually absent across the interior of the site, leading to the possibility that no daubed structures were constructed within the residential zone, or at least none burned. Mound testing confirmed that both mounds were constructed in multiple stages with the final construction stage of the South Mound forming a two-tiered summit.

In 2003, Michael Nelson (2005) excavated a 6 x 8 m block to the east of the North Mound and a smaller block south of the South Mound. In the larger block, Nelson uncovered an arc of posts that may represent a structure built at Lawton. No daub was associated with the possible building and no associated hearth was uncovered in the portion excavated. In those excavations, Nelson also recovered botanical evidence suggesting that the area tested may have been used only during the late summer and fall seasons.

### *C. B. Moore Excavations*

The Lawton site was first reported in 1898 by Clarence B. Moore who explored the northernmost of the two mounds present (Moore 1998 [1898]:171-172; Anderson 1994:187-189, 336- 337). Moore calculated the mound's basal diameter at 68 ft. (21 m), the summit plateau diameter at 36 ft. (11 m), and its height to be 5 ft. 4 in. (1.6 m), although he noted that when observed from a northerly direction, and accounting for the height of the terrace, the mound's "altitude" appears greater. His fieldwork consisted of "Trenches, aggregating 45 feet [14 m] in length and from 3 to 4 feet [0.9 to 1.2 m] wide and from 5 to 6 feet [1.5 to 1.8 m] deep, were dug into the summit plateau. About 5 feet down there seemed to be a black basal line indicating the original surface. The mound was of unstratified clay with occasional fire-places, perhaps in use during its construction. Three or four sherds were met with, and 5 feet- [1.5 m] from the surface was a deposit of small fragments of calcined bones, some of which were undoubtedly human" (1998 [1899]:172).

Finding no burials with elaborate grave goods, Moore suspended his investigations. Although not mentioned, he apparently backfilled his excavations (see Knight 1996:9 for comments on Moore's post-excavation backfilling at Moundville) as no surface evidence of his trenches are discernible on the mound flanks or summit. Signatures of Moore's trenches were detected during current fieldwork for this study (see North Mound Excavation section below), and this information is crucial to the modification of future mound excavation to avoid reinvestigation of Moore's backfill.

The only modern information concerning Lawton, prior to current investigations for this study and described below, was obtained over several days in December 1970 by E. Thomas Hemmings and Richard Polhemus, staff archaeologists with the then recently established South Carolina Institute of Archaeology and Anthropology (SCIAA, founded 1963 as research department of the University of South Carolina, S.C. Code of Laws 60-13-210). They did not produce a technical report of their findings, but David Anderson reconstructed an account of their fieldwork in his dissertation (1990:664-665) and a summarized version in his book (1994), both of which included their detailed plan map of the site produced with a plane table and alidade (Figure 5.16). Anderson notes that they made scaled drawings of soil profiles from several recent “potholes” within the general site area as well as on both mounds; however, these profiles were not reproduced in either of his manuscripts. In 1989, Anderson (1990:665-666) revisited Lawton accompanied by several SCIAA archaeologists to assess the site’s condition and found that looting activity had ceased given the absence of fresh “potholes.”

On the basis of limited sherd collections from old looter’s backdirt piles recovered in 1970 and 1989, Anderson estimated Lawton’s occupation at sometime between ca. A.D. 1100 and 1300 during the Early Mississippian Savannah II and III phases. He eventually refined his chronological assessment and proposed a “provisional” Lawton-phase designation for this regional component dating from ca. A.D. 1100 to 1250 (Anderson 1994:370). However, as recently obtained radiocarbon dates coupled with revised ceramic analyses for this study show, the Lawton site was constructed and

occupied a century later than originally thought. These data indicate site occupation between ca. A.D. 1250 and 1350, or during the Hollywood phase as defined by Hally and Rudolph (1986:62-63; see also Anderson 1994:370; Anderson et al. 1986:40-41).

### **Current Investigations**

A total area of 84.5 m<sup>2</sup> was excavated at nine locations to characterize the internal site structure and determine the exact period of occupation (Figure 5.17). Test unit and block excavations were placed to investigate particular visible features as well as high artifact density subsurface areas detected during intensive shovel testing of the site. Additionally, remote sensing techniques were employed to inspect portions of the site at a broader scale than could be undertaken with traditional excavation methods and personnel. The following sections describe all aspects of fieldwork conducted and detail the results of these investigations.

#### *Shovel Test Pit Excavations*

Primary site survey enhanced the results of previous investigations as described above regarding internal site structure and refinement of the temporal placement of occupation. An initial sampling strategy involved the systematic excavation of 122 close interval shovel test pits (STPs) on a 10-meter grid within the site area enclosed by the fortification ditch (Figure 5.18). Additionally, 35 STPs were excavated at 10-meter intervals along five transects to investigate areas beyond the ditch/embankment



enclosure. Each of these additional five transects radiated in cardinal directions from grid coordinate points immediately outside the ditch/embankment (two transects to the north and south following the terrace edge, and three to the east). As discussed below, significant artifact recovery occurred in STPs along the north and south transects adjacent to the terrace edge, and only immediately east of the ditch/embankment indicating that this area was not used for residential-domestic purposes, but instead likely reserved as a commons for the cultivation of communal agricultural fields. Finally, 45 STPs were excavated along the base of the terrace edge and directly within the fortification ditch to detect the presence and density of any refuse deposits in these locations.

Covering the entire site is a 25 to 30 cm-thick layer of silty-clay alluvium resulting from historic period agricultural practices—particularly during the 19th and early 20th centuries—and heavy topsoil erosion in the Piedmont that eventually was re-deposited onto the lower Savannah River floodplain during periods of inundation from river flooding. Within the enclosed site area, STP results showed high artifact density to the north, east, and south of the mounds thereby pinpointing the residential-domestic zone. Another area of noted artifact density occurs behind, or to the west of the mounds along the terrace edge. This terrace edge midden, with its proximity to the mounds, probably represents trash disposal resulting from pre-mound and eventual mound-summit ritual activities. The lowest artifact density occurs between the mounds indicating nonresidential activity and refuse deposits in this area. Quite likely, the low density of artifacts in this central locale is a result of the intentional cleaning or sweeping of cultural debris indicative of a designated communal area, which is archaeologically recognized as a central plaza area. And finally, STP excavations revealed a subsurface deposit of

burned clay-daub that is concentrated along the interior perimeter of the terrace and the fortification ditch. This feature is suggestive of a burned mud-daubed, wooden-post palisade. Artifact density plots from this testing are shown in Figure 5.19 through Figure 5.32. These plots reveal substantial refuse debris presumably from residential, domestic activities.

The results of limited subsurface testing allow reconstruction of a spatial schematic of the planned community at Lawton (Figure 5.33). In addition to the two mounds and fortification ditch with an earthen embankment on its outer edge, is a residential zone encompassing that area to the north, east, and south of the mounds. Within the inner perimeter of the ditch was a clay-daubed post palisade. The virtual absence of artifacts in the area between the mounds suggests a communal plaza area approximately 25 by 30 meters in extent.

### *Remote Sensing*

Chester P. Walker of Archaeo-Geophysical Associates, LLC in Austin, Texas was contracted to conduct remote sensing surveys at both the Lawton (38AL11) and Red Lake (9SN4) mound sites (for discussion of Red Lake survey results see section below). The goal was to determine whether remote sensing techniques could provide more information on the internal structure of these mound sites. The following brief introduction to remote sensing technology is summarized in detail from Walker's (2007) report of fieldwork for this project.

As Walker explains, remote sensing includes a series of various kinds of non-destructive, geophysical prospecting techniques. These were developed for a range of applications, typically for geological purposes, which have been adapted for use in archaeology through specific field collection techniques and unique data processing programs developed exclusively for archeo-geophysics. During survey for this project, use of the magnetometer was the only technique applied because of the heavily-wooded condition of the local.

Magnetometer survey is a non-invasive, passive means of measuring variations in the magnetic properties of soil. A magnetometer is the primary tool for archaeo-geophysicists at prehistoric archaeological sites because data are collected and processed rapidly and efficiently. Whenever soil conditions are optimal due to the properties of specific soil types, magnetometers have proven useful in locating “negative” features such as pits and post holes as well as thermally-altered features such as fire hearths and burned structures.

Magnetometers record the fluctuations that sediments and objects exert on the earth’s magnetic field. This condition is identified as “induced magnetism,” as the object does not maintain its own magnetic field. If the effects of this induced magnetism are strong enough when compared to the surrounding soil matrix, then subsurface features or post holes are identified or resolved in the geophysical data. A second type of magnetism, “remnant magnetism,” is created when an object maintains its own magnetic field. In prehistoric archeology, this occurs when objects are thermally altered, thus creating a magnetic state called “thermoremanent magnetism” (Kvamme 2006:207). The

specific magnetometer used in the current field work was Bartington Grad 601-2 dual sensor fluxgate gradiometer (Bartington and Chaman 2004).

In general, geophysical data are collected in a series of grids measuring 20 x 20 m in size. At Lawton and Red Lake, collection grids were laid out using a total data station. After corner grids were in place, stakes were placed every 2 m on the north and south sides of each grid collected. Magnetic data was collected using a 1 m traverse interval (except for one grid at the Lawton site, which was collected at a 0.5 m traverse interval) and a 0.125 m (8 readings per meter) sample interval. Data were collected in a bi-directional pattern.

It is typical practice to process remote sensing data after it has been collected in the field. The goal of data processing is to lessen the effects of background “noise” and to enhance the quality of the “signal” or “target” in the geophysical data. In field geophysics in general, and archeogeophysics in particular, the term noise is used to discuss any return that is not a direct result of the object under investigation, this being referred to as the “target” or “signal.” Hence, in some cases what is discussed as noise can in another case become the signal or target (Milsom 2005:13-14). Accuracy of the geophysical readings are not as important for resolving targets in the geophysical data as is the contrast between the target and its surrounding matrix.

Magnetometer data from the Lawton and Red Lake sites were both processed using ArchaeoSurveyor 2.0 by DW Consulting. The data sets were first de-stripped. Destriping is a process used to equalize the underlying differences between grids caused by instrument drift, inconsistencies during setup, delays between surveying adjacent

grids, and heading error from magnetic instruments. The Median of each traverse was subtracted from the values in each traverse.

The work done at Lawton has revealed a reasonable amount of information in general regarding site structure. However, detailed hand-excavation in the large block at Lawton (Nelson 2005) raised some questions about the nature of the residential zone at the site. The possible “domestic structure” in the midden block excavation (see subsection discussion below) appears to be somewhat informal or even temporary, and the botanical evidence collected suggests that the site was occupied only seasonally. These data, along with the absence of daub in the interior of the site, raise questions about the nature of the architecture present in the residential zone.

The goal of the magnetometer surveys was to explore the nature of that residential zone, particularly to look for buildings and the spatial distribution. Because of the density of the vegetative cover at Lawton, it was not possible to survey the entire site. As a result, data was collected from ten 20-m collection units (Figure 5.34). In those collection units, the daub concentration interpreted to be a palisade wall collapse was identified on the southern, eastern, and northern sides of the site. Excavation units, looter’s potholes, logging roads and the South Mound are all visible in the data collected (Figure 5.35). However, no clear anomaly patterns (highly magnetic burned daub or hearths, or low magnetic house basins or post-mold patterns) suggestive of buildings were found. There are a large number of anomalies in the data, but no clear patterns suggestive of identifiable architecture.

The magnetometer surveys at Lawton did not produce the kinds of resulting data as expected for most Mississippi period mound centers. Despite the fact that no clear

patterns in architectural distributions were detected, some important aspects of internal site structure were ascertained. At Lawton the magnetometer survey data essentially show the same things that were inferred from testing and excavations—there are very few if any, substantial burned buildings in the area enclosed by the fortification ditch. Nelson's (2005) data confirm that there may have been less substantial buildings in this area. These data lead to the inference that the area inside the ditch at Lawton (the mound precinct) saw only seasonal occupation where temporary buildings were used.

Clearly, the results call for supplementary work. There are additional site areas to be surveyed with the magnetometer, and the broader view provided through this technique may bring subsurface feature patterns that are currently unrecognized into better focus. In addition, exploring identified anomalies at Lawton through limited excavations may reveal patterns that are not now obvious. Ultimately, with the possible absence of burned structural features, it may be that the only way to understand the internal site-plan and distribution of architecture at Lawton is through traditional, time-tested hand excavation.

### *Test Unit Excavations*

To assess subsurface integrity and feature preservation, seven test units were excavated at various locations across the site. To obtain a representative sample of pottery, one unit was excavated along the northern edge of the site in a high artifact density area, probably representing a refuse disposal area. Several units were excavated in areas where features and dense midden were noted in shovel tests. Also, one unit was

placed in the area between mounds to investigate the possibility of a plaza in this location. Other than several crumb sherds, no other artifacts were recovered in this unit, thereby verifying an intentionally cleaned area, which most likely served as the community's central plaza. Another unit was placed along the terrace edge in a location of high daub density to investigate the probable palisade location. Excavation revealed the remains of fired daub resulting from a burned and collapsed wooden-post palisade. Additionally, a wall trench and aligned postmolds were encountered immediately below the daub layer.

#### *North Mound Excavations*

Although the North Mound has been subjected to some degree of natural erosion, as well as vandalism, over time, it basically retains its original shape as a truncated pyramidal substructure oriented to the cardinal directions. In the overall formation of community at Lawton, this declination to cardinal points follows a ritual directionality stipulated for the feminine elements in traditional Muscogee Creek tribal worldview (e.g., Chaudhuri and Chaudhuri 2001:38). The mound measures approximately 25 m square at the base with a square summit area measuring about 11 m on a side. Mound-slope angle is calculated at 18 degrees above the horizontal, and from base to summit the mound stood 2 m in height above the surrounding ground surface at the time of site occupation (or 1.7 m in height above the modern alluvial surface). Based on these geometric measurements, the total volume of mound construction fill is calculated at 600 m<sup>3</sup>.

On the basis of results from my investigation, as well as those of C. B. Moore (1998 [1898]:269-270) and Wood (2009:75-80), coupled with ethnohistoric accounts of mound function and use, I interpret the North Mound as a temple/mortuary facility subject to periodic rebuilding and reuse. Episodes of mound rebuilding consisted of the various construction stages—earth mantles and their associated summit structures when present—that were added to the core mound during world renewal ceremonies (*sensu* Knight 1989) or upon death and succession of chiefs (*sensu* Hally 1996). The rebuilding was represented by a series of three superimposed construction phases or stages consisting of successive sand and silt mantles. The mound was built in a location where prior non-domestic, ritual and ceremonial use had occurred. This is evident by an adjacent extensive and dense, freshwater shell midden deposit also containing faunal and floral remains as yet unidentified as to species (Wood 2009), but which is most likely the result of communal feasting during world renewal or chiefly succession activities. At least one structure had occupied the site of the mound before its construction. This structure, because of its premound location, does not seem to have been a dwelling but rather a public building. Archaeologists have noted the presence of such public buildings in submound contexts, usually in the form of earthen-embanked structures (e.g., Boudreau 2005; Caldwell and McCann 1941; Coe 1995; Rudolph 1984; Rudolph and Hally 1985).

To preserve intact mound fill, a large pothunter's hole on the North Mound and cleaned-up and excavated (Figure 5.36). Disturbed soil, which was not screened, was encountered to a depth of almost 1.5 m. All undisturbed deposits were excavated in arbitrary 10-cm levels and screened for artifacts. As expected in mound fill, few artifacts



were recovered. At a depth of about 2.5 m below mound surface, a premound midden was encountered that contained much artifactual debris. Beneath the midden, a line of postmolds was revealed indicating the presence of a single-set post structure prior to midden accumulation. Along the wall and on the floor of this structure excavation exposed the bundled, calcined remains of skeletal material, which further analysis showed to contain human along with possible animal elements (see discussion of report below). In a discussion of cremated human remains and burial practices, DePratter (1993:73) notes that bundled, cremated human remains are common features in submound midden contexts in the Savannah River coastal region. He best describes this type of feature in context as follows:

Deposits of cremated bone were sometimes buried directly in the ground or in cloth or fiber bags that have long since deteriorated. These non-urn cremations consist of from one to many individuals and are *frequently associated with initial stages of mound construction* (Caldwell and McCann 1941; DePratter 1991; Larsen and Thomas 1986; Moore 1897, 1899a, 1899b; Waring 1968). In non-urn burial cremation deposits, both uncremated and cremated human remains are commonly found mixed in the same burial (Larsen and Thomas 1986; Moore 1897, 1899b). These mixed deposits are frequently found in the *centrally located features that represent the initial stage of mound construction*. (emphasis added)

The test unit wall profiles show that another single-set post building was constructed in the same location after the midden had formed. The walls of both structures were oriented to cardinal directions (Figure 5.37). This building eventually was torn down and covered by the first construction stage of the North Mound (Figure 5.38). A single postmold extending through the midden on the summit of this first stage indicates that it too supported a building. A second, and much smaller, construction stage was added to the mound later, and another midden accumulated on it. Presumably this

stage also supported a building, although no postmolds were encountered in the excavation. A plot of artifacts by excavated level indicate the occupation surfaces and show the highest density in the lowest mound layer (Figure 5.39).

### *University of Georgia Excavations*

Recent research was conducted by Wood (2009:75-80) at the Lawton site in an effort to reconstruct the historical ecology of the regional mound sites. His work involved limited coring and a small block excavation into the eastern flank of the North Mound where a dense, premound midden including a lens of freshwater mussel shell underlay and extended away from the mound. The sides of the mound were tested with a 1 in. diameter sleeve corer to in an attempt to locate stratified refuse deposits resulting from summit activities as have been found on mound flanks, specifically the northeastern corner, in the Oconee River valley of Georgia (Smith and Williams 1994). No stratified refuse deposits were detected from cores on the North Mound flanks; however, on the lower portion of the western mound edge a premound midden was identified as darker soil with small sherds and fragments of river mussel shell. Also, mussel shell was present on the exposed surface of a looter's backdirt pile from a large pothole on the western mound edge.

Based on this evidence, Wood established a grid point datum at 20 cm above the ground surface and began excavation within the looter's hole eventually cutting-back the irregular edges to expose mound strata in profile as well as leveling the base at 133 cm below datum, or roughly the bottom of the pothole. Finally, he expanded the block along

the southern edge of the pothole by excavating a series of 0.50 x 0.50 m units into intact fill of the mound flank to a basal depth of 174 cm below datum (Figure 5.40).

The resulting profile of the western mound flank revealed an internal stratigraphy consisting of three mound strata as well as a submound midden layer of compact river mussel shell underlain by sterile soil indicating the original ground surface (Figure 5.41). Excavation also confirmed no significant mound flank midden from summit activities within the mound strata. The only appreciable midden and artifact concentration was that in the sub-mound layer with mussel shell with a total of 412 potsherds, and these all dated to the Hollywood phase.

In addition to cleanup of the looter hole and excavation of the trench, a 1-inch diameter coring tool was used to determine the depth and horizontal extent of the shell midden underlying the mound. This midden underlay only the northwestern quadrant of the mound and extended well beyond its footprint, primarily to the north (Figure 5.42). It is possible that this feature was associated with a sub-mound structure discussed above. No features, other than the sub-mound shell midden, were encountered in this excavation. No features were visible in the floor. Finally, a 10-liter soil sample was collected for flotation from each intact stratum encountered in each 50 cm square during the mound flank excavations, but these remain to be processed.

### *South Mound Excavations*

Much like the North Mound, the South Mound has been subjected to some degree of natural erosion, as well as vandalism, over time. Overall, it is a rectangular-shaped,

truncated substructure oriented to nearly 40 degrees east of magnetic north. I do not consider this as a random declination in the formation of community at Lawton as the mound's orientation closely approximates the ordinal directionality for ritual masculine elements in traditional Muscogee Creek tribal worldview (e.g., Chaudhuri and Chaudhuri 2001:39). The mound measures approximately 31.5 m x 26 m at the base with a summit area measuring about 15 m x 11.5 m on a side. Mound-slope angle is calculated at 20 degrees above the horizontal, and from base to summit stood some 2.75 m above the surrounding ground surface at the time of site occupation (or 2.45 m in height above the modern alluvial surface). On the basis of these measurement dimensions, the total volume of mound construction fill is calculated at 960 m<sup>3</sup>. The final mound stage formed a multi-terraced edifice with the southern tier slightly higher—perhaps by as much as 0.50 to 1.0 m—than the northern summit as depicted in the topographic site map (Figure 5.11) as well as the Hemmings and Polhemus plan map (Figure 5.29). Anderson (1990:664) notes that a “squared area in the southern half of the summit was elevated ca. one foot [30 cm] above the northern end, suggesting the presence of a structure foundation, or at least some formal partitioning of space atop the mound during its last period of use” (1990:664). Multi-tiered Mississippian mounds commonly occur elsewhere in the South Appalachian province including the Dyer (Smith 1994) and Scull Shoals (Williams 1990:34) sites in the Oconee River valley, as well as the 64-ft. tall Mound A at Etowah in northwestern Georgia (King 2003), with the largest and most representative being the 100 ft. tall, four-to-seven tiered, Monks Mound at Cahokia in the lower Midwest (Pauketat 2007).

Two test units were excavated on the summit of the South Mound: Provenience 129 on the second (highest) tier and Proveniences 134/135 on the first tier (Figure 5.17). Provenience 129 was excavated to the base of the mound to reveal the entire construction sequence. In an effort to prevent further disturbance to the mound, a large pothole that was about 220 cm deep was selected on the upper tier for excavation and profiling (Figure 5.43). Provenience 129, a 1.50 x 1.50 m unit, was situated in the pothole so that the North, South, and West profiles of intact mound fill would be exposed from the mound's summit to its base. The eastern portion of the pothole formed the other half of disturbed looter's fill in the pothole sectioned by the test unit. All looter's backdirt in the test unit was removed down to 190 cmbs where intact mound fill was encountered. The pothole tapered downwards another 30 cm where a "cache" of three Pepsi bottles (ca. 1970) was encountered *in situ* at its base. Systematic excavation in arbitrary 10-cm levels began at 190 cm below the mound's surface (cmbs), and continued into sterile soil just below the base of the mound at 310 cmbs.

The resulting profiles show the mound to be slightly less than three meters in height (Figure 5.44). Mound stratigraphy reveals three separate construction stages of basket-loaded fill with a single occupation level at the mound summit. The base of the mound is level and overlies sterile subsoil indicating the lack of intensive site occupation prior to mound construction. From the base of the mound to about 60 cmbs is a thick mottled gray-brown soil layer overlain by a thick yellow-red mottled soil layer with no buried occupation surfaces in either layer. At 60 cmbs, the transition from yellow to brown soil is marked with a well defined, uniformly flat break, which slopes slightly to the north. This sharp break represents the original mound surface on which a 40-

centimeter thick second tier was constructed. This information suggests a multiple-event construction episode for the mound. A plot of artifacts by excavated level indicate the occupation surfaces and show the highest density in the lowest mound layer (Figure 5.45).

The second test-unit excavation, Proveniences 134/135 consisting of two adjoining 1 x 1 m squares, on the mound's first (lower) tier, revealed the shallow remains of a burned daub-and-wall-trench structure between 10 and 20 cmbs on the northern end of the South Mound (Figure 5.46).

#### *Palisade Excavation*

Fieldwork at Lawton focused on the material remnants of a burned and collapsed palisade feature surrounding the site. Timbered-log wall fortifications coated with mud plaster were common features at Mississippian village and mound centers, presumably for defensive purposes against outsider hostility (Hally 2008; Larson 1972; Milner 1999; 2000; Schroeder 2006). The presence of a burned-palisade enclosure initially was detected through subsurface survey where concentrations of fired daub were encountered along the interior perimeter of the fortification ditch as well as the terrace landform edge during systematic shovel test pit excavations (Figure 5.29). Additionally, remote sensing survey by Chet Walker of Archaeo-Geophysical Associates, LLC revealed clear anomaly patterns on the southern, eastern, and northern interior margins of the fortification ditch. These highly magnetic burned-daub concentrations indicate the presence of a clay-plastered, palisade wall collapse (Figure 5.35).

Investigation of the palisade feature at Lawton consisted of a 2 x 4-m block excavation adjacent to the terrace edge where a high density of burned daub was recovered during systematic shovel test pit excavations. My objective was to confirm the presence of a palisade line underlying the daub concentration by confirming the presence of patterned and aligned post molds as has been documented at numerous Mississippi period village and mound sites (Anderson and Schuldenrein 1985; Black 1967; Coe 1995; Caldwell and McCann 1941; Hally 2008; Knight and Steponaitis 1998; Larson 1972; King 2003; Milner 1999; 2000; Schnell et al. 1981; Schroeder 2006). Typically, archaeologists recognize the presence of defensive architecture on the basis of post molds in a sequence surrounding a site rather than the presence of burned daub as seemingly few sites show evidence of burned clay-daubed palisades (Milner 1999).

In general, the soil matrix consists of silt and clay alluvium, a result of overbank flooding, which directly overlies midden deposits. Excavation data show little evidence of damage to the Mississippian component at Lawton due to these fluvial processes and, in fact, this alluvial layer apparently has acted indirectly as a preservation layer to all artifact and feature contexts at the site. Characterized stratigraphically, the uppermost soil stratum is represented by a 20-cm thick layer of silty-clay alluvium resulting from Historic period agricultural practices and subsequent erosion in the Piedmont. Substantial concentrations of burned daub were present in the lower zone of this alluvial deposit. The underlying midden consists of two strata: a 10-cm layer of lighter colored mottled sandy-silt overlying a homogenous darker colored layer of sandy-silt extending into the base of the block excavation at 40 cmbs.

The block excavation consisted of eight contiguous 1 x 1-m units (Proveniences 132, 133, 188, 205, 206, 207, 208, and 209) dug in five arbitrarily defined levels, with A – C as 10-cm levels, D and E as 5-cm levels. All soil was shifted through ¼-in. wire mesh, except for the upper portion of the alluvial layer due to its redeposition from an upstream source. The excavation of Level A proceeded with the removal of the upper 10 cm of clay alluvium. The lower 10 cm of clay alluvium (Level B) contained concentrations of fired daub, which were exposed and recorded in plan with scaled drawings. Midden deposits lay directly below the daub concentration. As noted, the midden was a 20-cm thick layer (Levels C, D, and E). Removal of this layer revealed a palisade-trench feature 30 to 40 cm in width running the length of the excavation block (Figure 5.47). Post molds were somewhat difficult to discern in the palisade trench, but when perceptible were noted as small-circular brown stains (Figure 5.48). The palisade trench was evident as a tan-colored soil feature in a surrounding dark brown-colored midden matrix (Figure 5.49). The absence of charcoal in the post molds indicates that the wall posts did not burn completely to the ground surface.

To better understand the nature of palisade-trench construction, a 70-cm wide slot-trench was excavated along the south block profile. Eventually, the slot trench was extended 1.5 m northward across the block unit in an attempt to more fully expose the post molds in plan. In profile, the wall trench extended approximately 80 cm into the subsoil from the base of the alluvial layer. At this depth, the wall trench narrowed from a width of 40 cm to about 20 cm, where it continued into the base of the slot-trench excavation (Figure 5.50 and Figure 5.51).



At the base of the slot-trench excavation (115 cmbs), five post molds were exposed in plan, and were identifiable only as splotchy white-colored soil stains devoid of organic material in a tan soil matrix (Figure 5.52). These were 20 to 30 cm in diameter, which in actuality may be post “holes” rather than post “molds” with their organic signature having leached through the sandy substrate. These post molds (or post holes) were spaced 15 to 25 cm apart and extended to a depth of 20 cm from the base of the wall trench (Figure 5.53). It is noteworthy that the wall trench cuts through the midden, rather than the midden having formed after the palisade was erected. Evidence for this assumption lies in the fact that the midden on the interior side of the palisade had two layers, one consisting of mottled soil with artifacts overlying a more homogenous dark brown midden. The upper layer appears to be midden and subsoil excavated from the wall trench at the time of its construction. If the palisade had been planned and built at the time Lawton was first occupied, then the substrate backfill of the wall trench should be found below a homogenous artifact-laden and organic-rich midden. In other words, refuse debris should have accumulated to form a midden over the palisade trench. This then indicates palisade construction after initial occupation and use of the site, perhaps in response to perceived threats from elsewhere within or outside the river basin.

Finally, when extrapolated from the five palisade postmolds documented through excavation with an average of 2.5 posts per meter, there would have been about 1,032 posts used in construction of the 413 m-long enclosure at Lawton given a single post construction pattern for the entire log wall. So if post were buried one quarter of their length, which in the case of Lawton would be about 1 m or 3.28 ft., then the post would extend to a height of 3 m or 9.84 ft. above the ground surface. A total of 205 kilograms

of fired daub, or 452 pounds, was recovered from the block excavation. Most of the larger fragments had cane and wood sapling as well as split-wood impressions indicating the type of building materials and construction processing used in palisade manufacture. Time estimates of the labor involved, based on various experimental archaeological projects, for excavating the wall-trench by hand with a digging stick (Erasmus 1977) as well as cutting, transporting, and erecting wooden posts (Hammerstedt 2005:227-228) indicate that the entire palisade would have required 715 five-hour person-days to install, or about two weeks if 50 individuals contributed straight five-hours days. Procuring and applying the clay or mud plaster, however, involves a much greater investment of time and labor than the actual installation of posts in a wall-trench. Using approximations from experimental archaeological projects (Blanton and Gresham 2007:41-42) it would take 64 metric tons (70 tons) of daub mixture to cover the estimated 413 meters of wooden palisade at Lawton. Given this quantity of needed plaster, it would consume 10,368 person days to cover the Lawton palisade. But if 50 people worked straight five-hour days, it would require about 6 weeks to completely daub-over the Lawton palisade, while not taking into consideration the time to procure and transport the clay material if it was directly available in the immediate floodplain. Even so, when considering two weeks to install the palisade and six weeks to plaster it based on the labor of 50 individuals, there is not a great amount of labor costs involved in palisade construction if the site was occupied for 20 years, or especially 50 years, or even a decade.

A sample of burned daub recovered during the palisade excavation was submitted to James Feathers, Luminescence Dating Laboratory, University of Washington, Seattle for thermoluminescence (TL) dating. Feathers (2001) reported that the sample showed

no evidence of anomalous fading and that suggesting that the daub was not fired to a particularly high temperature. TL dating of sample UW564 yielded a calendrical age range of A.D. 1250 to 1382; however, TL analysis detected a second burning event during the interval A.D. 1412 to 1530. Regarding these dissimilar derived ages, Feathers (2001) explains that “the best interpretation is that burning of the palisade and mound structure occurred around A.D. 1300, during or shortly after the occupation of the site, perhaps at the time of abandonment. A second, lower temperature burning of the palisade are may have occurred some 150 years later.” Perhaps the second event occurred during a wildfire thereby burning the exposed daub and resetting the TL “clock,” for as Feathers contends, “the [earliest] dating event of the TL analysis is when these structures last burned.”

In sum, daub concentrations that encircled the Lawton mound site on the interior edge of the fortification ditch were detected through systematic shovel testing and magnetometer survey. The dense concentrations of daub were indicative of a constructed log palisade plastered with clay, which eventually burned. Recent excavations confirmed the presence of a palisade evidenced by postmolds or postholes set within a wall trench. Most important is the fact that the wall trench appears to have been built after the site had been occupied for some time. By extension, the fortification ditch may also have been constructed after initial occupation of the site. A possible explanation for the post-occupation construction of the palisade, and possibly the fortification ditch, may have been an impending threat of warfare throughout the Savannah valley. Additional evidence suggesting the possibility of conflict in the Savannah valley after ca. A.D. 1300 comes from the Piedmont. David Anderson (1994:219-225) remarks that of the two

temporally and spatially distinct village occupations at the Rucker's Bottom site, the later community, occupied during the Rembert phase (ca. A.D. 1350 to 1450) was fortified with a ditch and stockade enclosure, whereas the earlier Beaverdam phase (ca. A.D. 1200 to 1300) village remained unfortified throughout its occupation, presumably during a time when rival chiefly conflict or violence was minimal.

Finally, all of this discussion begs the question why was the Lawton palisade constructed in the first instance, and why was it eventually so completely burned? Did this wall indeed function as a stockade for protection against enemy attack, or rather a symbolic partition separating the chiefly and religious elite at a small ceremonial and administrative center from the secular and profane? On these matters I can only offer suggestions, but there are precedents for my speculations. First, an absolute date on a sample of the burned daub recovered during excavation was submitted for thermoluminescence dating and yielded an age range of A.D. 1250 to 1380. This dates the burning of the palisade to within the estimated occupation of the Lawton site. During this time period, Anderson (1994) notes the fortification of the village site at Beaverdam in the central Piedmont as well as the Irene site near Savannah. He contends it may have been warring factions within, or even from outside the Savannah River valley, such as the developing Oconee chiefdom polity to the west or the Wateree River valley basin to the east, that were responsible for potential threats against the Savannah River mound centers at this time. So it may be that the inhabitants of Lawton constructed fortification defenses against these potential chiefly rivals. It also may be that Lawton eventually was overtaken, the palisade burned as was an elite residence on the South Mound, and the temple mortuary sacked and desecrated. These types of events have been recorded in the

De Soto chronicles as well as determined archaeologically such as at the Etowah site where the palisade was breeched and the temple house desecrated with the ancestral remains of the chiefly elite pillaged and strewn down the steps of the temple mound (Dye 2006:106-112; Dye and King 2007).

### *Ethnohistoric Construction and Function of Palisades*

Historic period accounts of native southeastern populations describe the presence of well-fortified, bastioned-palisades as well as moats and earthen embankments.

Anderson (1994:223) cites Henry Woodward's observation in 1674 of a palisaded native village north of Augusta, Georgia along the Savannah River. Woodward noted that the palisade consisted of a single line of posts along the riverbank and double defensive lines to the inland. The earliest observers of such fortification constructions were chroniclers of the De Soto expedition in the mid-16th century. One account describes a typical town as "very well palisaded, with towers on the walls, and with a ditch roundabout, and most of it filled with water, which enters through [a channel] that flows from the river"

(Rangel 1993:329-334). As this chronicler further notes, these palisades were constructed of "thick poles, tall and straight, next to one another; they weave them with some long sticks, and daub them within and without [with clay]...and at a distance they appear to be...very excellent...and such walls are very strong" (Rangel 1993:288).

Another chronicler, Garcilaso de la Vega, describes the town of Mauvila, located in present day Alabama, "as surrounded by a wall as high as three men and constructed of thick wooden beams. These were driven into the ground adjacent to one another and across them on both the outside and inside were laid additional pieces, not so thick but

longer, which were bound together with strips of cane and strong ropes. Plastered over all of this was a mixture of thick mud tamped down with straw that filled in all the crevices in the wood and its fastenings, so that the wall appeared to be coated with a hard finish as one might apply with a mason's trowel" (1980:353-354).

These palisaded villages and mound towns observed by De Soto actually had a history going back at least five centuries prior to the arrival of the Spaniards. At present, many large, earthen mounds can still be seen at archaeological sites across the Southeast; however, their accompanying palisades and fortification ditches or moats are no longer perceptible due to historic agricultural practices. As such, these prehistoric, large-scale features, once so visible on the landscape, can only be detected and interpreted archaeologically.

Archaeologist George Milner of Penn State University has collected data on the excavated remains of 45 palisades that surrounded Mississippian settlements in the southeastern United States (1999:118; 2000:56). Based on patterns in his data, Milner notes that "The [wooden] posts that made up the palisades stood some distance from one another. Rarely were they placed close enough to form continuous walls of upright posts, and the spaces between the posts were often wide enough for people to slip through them. Branches woven amongst the vertical posts would have strengthened the walls... Occasionally prehistoric palisades were plastered with clay, as indicated by great amounts of [burned] daub. These wattle-and-daub walls were encountered by De Soto's expedition...[throughout] the Southeast" (2000:54-55). James Griffin (1990:8) noted that "village and towns were palisaded for defense with posts 12 to 14 ft. (3.6 to 4.2 m) tall, bastions at regular intervals, and a walkway attached to the inner wall." Griffin's

estimations of palisade height is most likely derives from the calculations of Lewis Larsen (1972:387) from excavations at the Etowah site. Larsen described the Etowah palisade as located just on the inner edge of the large fortification ditch, and constructed in a wall-trench about 18 in. (45.7 cm) wide utilizing posts 12 to 14 in. (30.5-35.6 cm) in diameter and set vertically at intervals of approximately 1 ft. (30.5 cm). The trench to receive the posts was originally some 3 ft. (0.9144 m or 91.44 cm) deep and the posts themselves were set individually dug holes that extended about 1 ft. (30.5 cm) below the base of the trench. Larsen concludes that it is not unreasonable that the posts were probably buried no more than one-quarter of their total length, which would have resulted in a palisade height of 12 ft.

Milner notes that walls can be separated into those that met defensive needs, such as the Etowah palisade and fortification ditch, and those that demarcated spaces underscoring social and political distinctions within the community. One such site at which these large-scale features occur is Irene on the Georgia coast in Savannah. Joseph Caldwell and Katherine McCann (1941:33-37), who reported on the site excavations in 1941, observed that one of the most striking aspects of the site was the large number of walls and enclosures, many of them well-built and extensive. The former position of the palisades was marked by wall-trenches and alignments of postmolds. Most of them were closely set rows of posts but a number are known to have been constructed of wattle and daub. For example, the site plan during the Savannah period, as depicted in this slide, shows an extensive curved wall skirting the western edges of the large mound and burial mound and terminates to the southeast into another palisade running parallel to the riverbank with a number of branching walls and enclosures. To the southeastern portion

of the site is another set of walls and enclosures. During the subsequent Irene period, the site layout and possible function has changed as shown in this slide with an evident relationship between the large mound, a rotunda, and the substantial connecting walls constructed of wattle and daub. Caldwell and McCann note a resemblance between this mound-rotunda-walled arrangement and that of the relation between the rotunda council house of the historic Creek ceremonial square ground surrounded by earthen terraces or banks. These researchers conclude that one wall, the curved palisade of the Savannah period, may have been erected for defensive purposes, but none of the walls have to have had much strategic value. The most likely explanation is that they served a ceremonial or political function. As Milner points out, walls that snaked their way through settlements obviously set apart certain sections for highly ranked people or special purposes, and the walls or fences around the bases or summits of earthen mounds certainly screened and hid socially or ritually significant places associated with important people (2000:51).

### *Plaza-Area Testing*

Ethnohistoric accounts of mound communities describe the presence of public areas designated for purposes of civic gatherings and communal activities. These locations, generally referred to as community plazas, are centrally placed relative to other planned features of the community. Typically, one or more mounds border the plaza, which in turn are surrounded by the residential-domestic area. At the larger, multi-mound centers such as at the Cahokia, Moundville, Etowah, or Toqua (Pauketat 2007;



King 2002, Polhemous 1985) sites, subsets of plaza-and-domestic units, or “plazuela,” are present in the community at large. The term plazuela, or “small plaza,” refers to a set of residential structures built around and enclosing a smaller, secondary square or patio (Walker 2000). Archaeologists now recognize that within the formation of community, mound centers as well as non-mound villages (eg., Hally 2008) are designed and constructed in a concentric fashion to reflect the metaphysical cosmos. In this scenario, the central portion of the plaza is perceived as an *axis mundi*—the world’s center—where a single wooden pole or set of poles is usually erected. The image of a central pole expresses a point of connectivity between sky and earth, the higher and lower realms, where the four cardinal directions intersect (Hudson 1976). Plazas are planned architectural features often prepared as clay-plastered, ground-level platforms that serve as playing fields for games and sports, ceremonial areas of public display, and the community commons (Hudson 1976:78; Kidder 2004). Centrally positioned, the plaza provides complete viewing access to all social events by residential elite and commoners alike—thus effectively functioning as a “theater in the round.”

On the basis of this ethnographic and archaeological information, I surmised that the Lawton site plaza was located between the North and South mound on the basis of an absence of artifact recovery in shovel test survey. To better evaluate this assumption, a 1 x 2 m test unit was excavated in the presumed plaza area. Although no direct evidence of an intentionally constructed plaza could be determined (Figure 5.54), such as a prepared leveled or raised and clay-plastered platform, indirect evidence such as the low density of recovered artifacts suggests the presence of an deliberately cleaned area suggestive of a plaza location. On the basis of negative shovel test pits coupled with the opposing

directionality of the two mounds, the plaza could have been oriented in either of two directions as shown in Figure 5.55.

### *Midden Block Excavation*

A large, block unit was excavated to find intact, architectural evidence of domestic structures in the residential area. The following summary is summarized from Nelson (2005), then a graduate student at the University of South Carolina. A total of 39 m<sup>2</sup> was excavated in 1 x 1-m units in four 10-cm levels. Figure 5.56 represents a typical section of the resulting soil profile. A total of 42 possible features were exposed in the block excavation, all of which were sectioned in profile. Eleven of these were determined to be postmolds, although no formally arranged, post-patterned alignments were discerned (Figure 5.57).

Due to the 20-25 cm layer of modern alluvium that covered the site midden, it was decided that Level A, the first 10-15 cm of each unit, was to be excavated without being screened. This expedited the excavation process as the clay alluvium was difficult to process through the screen and, because of its recent origin, contained few if any cultural artifacts. Level A was a dark humic soil, consisting of recently deposited alluvial sedimentation, primarily consisting of clay and secondarily silt. Levels B and C were excavated in arbitrary 10-cm levels, and encompassed the sheet midden present at the site. The average maximum depth obtained in the units was 35 cm below ground surface. Excavation was stopped at sterile subsoil, composed of light brown silty sand. Features,

both cultural and natural were defined by a change in soil color and texture, were encountered within and particularly beneath the midden in the lighter, sterile subsoil.

As soil stains were uncovered in the course of excavation, they were given a feature number designation regardless of whether they were natural or cultural features. Feature excavation allowed the differentiation of natural features such as, tree roots, from cultural features, such as postmolds. A total of 19 identifiable postmolds were encountered, and these tended to cluster in the northwestern corner of the block. The average depth of the postmolds was 42.3 cm, but postmolds ranged from 11 to 66 cm in depth. The pattern of postmolds does not form a definitive shape in terms of corners and wall outlines. However, the lack of a decisive pattern of postmolds does not indicate that a house structure was not present -- only that the structure is not formally, well-defined on the basis of set and aligned architectural postmold patterns. If the excavation block was extended and the entirety of the structure uncovered, it could be expected that the floor area to be roughly oval in shape and cover approximately 30 m<sup>2</sup> (Figure 5.58). This is a relatively small size for a residential structure, and the pattern at Lawton is poorly defined. However, given the diversity in domestic architecture in the region, the post pattern at Lawton fits within the low end of the regional range of variation.

No fragments of burned clay house daub was recovered in the block excavation, either in the midden or the features. The lack of daub does not necessarily negate the presence of a daub structure, but does indicate that any structures did not burn. Although daub can be a valuable indicator of structures, the lack of daub does not mean a structure did not exist.

The pattern of postmolds uncovered during the course of the block excavation did not form a straightforward and concise outline of a house structure. Nevertheless, the pattern present in the northwestern corner of the block is quite likely indicative of a structure. This would be considered an ephemeral structure in that there is no wall trench or individually set postmolds in straight alignments, no internal hearth features, and not burned daub (in the event that the structure did burn).

In comparison, Rudolph and Hally (1985) recorded hundreds of cultural features at the Beaverdam Creek site in the central Piedmont, but could not identify any postmold alignments or patterns indicative of formal structures or buildings with absolute certainty. More closely aligned to the possible postmold pattern in the Lawton block excavation, is that at site 38BK235 in the South Carolina lower Coastal Plain where researchers discerned oval postmold patterns that resemble ephemeral residential structures (Brooks and Cannouts 1984). Figure 5.59 and Figure 5.60 do not show straightforward house structures with definite edges of neatly patterned and aligned postmold, but was deemed a residential structure based on the presence of a hearth, as well as the indistinct postmold pattern (Brooks and Cannouts 1984:40).

### **North Mound Osteological Analysis**

This section is summarized in detail from a report prepared by Abel and Wolf (2004) following identification analysis of the osteological remains recovered from midden deposits directly underlying the North Mound at Lawton (Provenience 169,

Feature 1). Their analysis was conducted according to conventional osteological methods, which included an inventory of all skeletal elements present in the sample; a dental inventory; aging data, based on epiphyseal fusion and dental eruption (for subadults) and deterioration of the pubic symphysis and sternal end of ribs (for adults); stature and other metric data; ancestry; non-metric traits; pathology; and identified cultural modifications (Buikstra and Ubelaker 1994; Bass 2005). The osteological material analyzed for this study was recovered partially during sifting through 0.25-in. wire mesh in the field, and primarily by means of standardized water-floatation procedure as established by Wagner (1982, 1988). This material was submitted for examination as Field Lots I and II.

*Lot 1. Heavy float sample; 10.5 liters (dry measure)*

Lot 1 contains 520 grams of mostly unidentifiable bone fragments. This bone fragmentation coupled with post-mortem deformation preclude in-depth inventory of faunal species represented. Characteristics such as cortical thickness, relative bone weight, and trabeculation (i.e., new bone formation in response to disease or stress) are the only clues that allow tentative classification as possible human or non-human mammal. Several fragments in the sample are identified as human including an unerupted right lateral permanent maxillary incisor aged 4 years  $\pm$  12 months according to standards established by Ubelaker (1989). The mesial and distal lingual margins are elevated (“shovel-shaped incisor” or “shovelling”) indicating an Asian or Native American ancestral affinity (Mizoguchi 1985).

Other human remains include highly fragmented cranial, diaphyseal, vertebral and rib elements. Specifically, probable human remains include one left zygomatic bone (cheekbone) fragment, although metrics (maximum length and width) are not measurable. One left patella is also present with a maximum width of 28 mm and maximum length of 34 mm. Overall dimensions and morphology of these two fragments are indicative of a subadult or petite female, but not necessarily from the same individual. Finally, there is a left scapular spine fragment, a possible calcaneus fragment and a left humeral trochlea. All remains are calcined, warped, and striated with horizontal cracks, which suggest they were burned; however, whether the source was by cremation or extensive sun bleaching is unknown.

*Lot 2. Lower 5 cm of Level R Excavation (0.25-in. screen)*

Lot 2 contains 240 g of diaphyseal, cranial, rib, and phalangeal bone fragments, which include several bone fragments that are possibly human. There is one tooth root measuring 10.13 mm in maximum length and probably represents a deciduous canine. One diaphyseal fragment from an unidentifiable element exhibits generalized periostitis, or in this case, spongy reactive bone located superficial to the intact cortex. Periostitis is a lesion that forms secondary to disease processes, direct trauma, or infection. What caused the lesion on this fragment is unknown. Sharp force trauma in the form of small cut marks is evident on three unidentifiable diaphyseal (the main or mid section (shaft) of a long bone) fragments described separately as follows:

*Specimen 1.* This cortical fragment exhibits four parallel cut marks roughly perpendicular to the long axis. One mark completely transects the fragment for 8.34 mm. The defect remains consistently wide at 0.5 mm, indicating the beginning or end of the cut is not present on the fragment. The remaining three defects are approximately 0.5 mm wide and taper to fine points, representing terminal ends of each mark. These defects are 6.92 mm, 7.53 mm, and 4.21 mm long. All grooves appear "V" shaped and are uniform in depth suggesting consistent force was applied with a sharp instrument. Moreover, these markings do not appear to be taphonomic in origin.

*Specimen 2.* This bone fragment is very dry and weathered. Two parallel defects run perpendicular to the long axis of bone and measure 8.34 mm long by 1.67 mm wide by 2.25 mm deep, and 5.49 mm long by 1.04 mm wide by 0.5 mm deep, respectively.

*Specimen 3.* This bone fragment is dry and weathered with cortical sloughing. Based on cortical thickness, it is probably non-human mammal. One cut mark transects approximately 75 percent of the diaphysis.

#### *Minimum Number of Individuals*

The MNI is computed by identifying and sorting skeletal elements according to class, order, and species, and finally counting repeated elements. Few bones were positively identified as human making this computation extremely difficult as well as relatively unreliable. Probable human components appear to come from two broad categories: subadult and adult. Based on these categories, the most reliable human MNI is two.

*Age.* Two broad age categories could be reasonably discerned in the samples: subadult—established by dental development of the unerupted right lateral maxillary incisor and the deciduous canine tooth root, and adult—based primarily on cortical thickness and robusticity of cranial and postcranial fragments.

*Sex.* The sex of the identifiable human skeletal remains can not be made with any degree of reliability. The recovered zygomatic bone and patella are noticeably small in dimension, which suggest they are from a female; however, burned or sun-bleached bone may shrink up to 25 percent, making bones appear smaller than they were originally.

*Ancestry.* Analyses assessing ancestry are based on metric data and morphological characteristics. The only element available with evidence suggesting ancestry is the shoveled lateral incisor. Although shoveled central and lateral incisors have a high frequency in Asian and Native American populations (Mizoguchi 1985), their presence is not completely reliable for a confident identification of a dentition as Asian or Native American.

### **Paleoethnobotanical Analysis**

This section is summarized in detail from a report prepared by Bonhage-Freund (2004) who analyzed samples of the paleoethnobotanical remains recovered from the Lawton block excavation. The research aim was to determine as accurately as possible from paleosubsistence materials whether Lawton was occupied on an annual, semi-annual, or even a seasonal basis. Seemingly a straightforward objective, there are possible biases involved in assessing time of site occupation based on macroplant remains



as Bonhage-Freund cautions in her report. A primary impediment is that durable plant foodstuffs often were stored for later consumption out-of-season. Secondly, such studies could involve plants that produce seeds and fruits over a period of months or across seasons. And finally, there may be incidental subsurface intrusions resulting in vertical and horizontal displacement through human, animal, or geo-physical forces unrelated to primary site-formation processes.

Notwithstanding these possible conditions, a total of 142 flotation samples were collected from the block excavation including 80 standardized 10-liter samples from the top and base of the midden layer (Excavation Levels B and C), 11 control samples from the alluvial overburden (Level A) in every fourth 1-x-1 m unit, and 51 samples varying in volume from 0.5 to 25.0 liters from cultural and natural features (see Nelson 2006:67-70 for discussion of sample collection and flotation recovery procedures). Of these, 25 were selected at random for botanical identification including one control sample from the alluvial deposit, 18 samples from the midden, and six samples from cultural features. Bonhage-Freund examined both the heavy and light fractions for each sample, and she employed three basic measures in the final analyses: species density, diversity, and ubiquity.

The primary purpose of this investigation is to determine seasonality of occupation for the Lawton site. It is ordinarily difficult or impossible to determine site seasonality from macroplant remains because many plants can be stored for use outside their season of harvest; however, Lawton may be an exception to this rule. The results are summarized as follows. The samples contain few macroplant remains other than wood charcoal. The only taxa that appear with consistency are maize (*Zea mays*) kernels

(20 fragments), cob fragments and cupules (87), hickory shell (*Carya* spp. – 279 fragments) and acorn shell (*Quercus* spp. – 51 fragments). The overwhelming majority of taxa noted at the Lawton site by both count and ubiquity are maize, hickory and acorn. These taxa represent foods that can be stored for long periods of time and are frequently stockpiled for winter. A broad parameter for the harvest of these species is August through November, or late summer through autumn. There is only limited plant evidence of occupation during any other season. Maypops and maize place occupation of the site in late summer. Maypops was found only in association with maize kernels, cobs, or both. This is significant because maypops was most likely an encouraged species which favored maize fields (Gremillion 1989). These plump, juicy, egg-shaped fruits do not store well and so their presence suggests local agriculture.

Maypops produces fruits in late summer through autumn (August through October). The fact that cob count is prominent at the site strengthens the evidence that at least some of the maize was grown locally. People would have removed kernels from the cob before transporting to save weight and space. Hickory is the most abundant food remain and acorn shell is also significant. Nutshell signifies that the site was occupied in autumn, but might actually have been used in any season because they store well. The presence of nutshell indicates that the nuts were processed at the site. Hickory stores well in the shell and probably would not be processed until close to the time of use. Acorns might be roasted or otherwise processed into meal soon after harvest to avoid destruction by larvae. Thus acorns support a fall occupation, while this likely but not necessarily true of hickory.

The generally low levels of plant food remains in these samples suggest that the site was most heavily occupied in late summer through autumn. Moreover, the predominance of stored foods suggests a winter occupation. However, a small caretaker population would be required to in spring to plant maize plots, as well as to protect the crops and guard the stores throughout the summer. Saltbush, goosefoot, and arrow-wood may produce seeds or fruits as early as June, but also persist into September or October. No positively identified species produces seeds or fruits earlier than June. The few odd seeds that have less than 20% ubiquity may have been mixed with the harvest or may be incidental inclusions. Overall the assemblage implies that people were relying on stored foods.

Three uncharred taxa may be of archaeological significance and so are considered briefly. Grape (*Vitis* sp.), maypops, and peppervine (*Ampelopsis* sp.) are three hard-seeded annuals which are fairly common in both charred and degraded form in Mississippian archaeological deposits of the Southeast. Soft or otherwise degraded examples of these taxa, each lacking an embryo, were recovered at this site. When found in good context in historic deposits, such seeds are generally considered to be of archaeological significance. Since the Lawton site is on the cusp of being an historic site, these taxa may well be a valid part of the assemblage. Of these, only peppervine, a member of the grape family (*Vitaceae*) is a new addition. This genus produces seeds at the same time as grapes and so it supports the current interpretation of the site's seasonality. From these data, Bonhage-Freund (2004) draws the conclusion that based on macroplant remains, the Lawton site was occupied primarily in winter.

### **The Spring Lake Site (9SN215)**

Spring Lake is a single mound site located in the Savannah River floodplain of Screven County, Georgia (Figure 5.61 and Figure 5.62). The floodplain is about 5.6 km (3.5 mi) wide at this point. The site is located 0.95 km (0.59 mi.) north of the Red Lake site and 7.99 km (4.96 mi.) direct distance downstream from the Lawton site. The Spring Lake site is situated on the natural levee of a relict meander channel—a surface feature not depicted on the USGS topographic map of the local area. Archaeological investigations at the Spring Lake site were conducted in 2006 by Jared Wood of the University of Georgia who notes that this seasonal “oxbow lake” is typically dry except during periodic annual overbank flow from the Savannah River (2009:80).

The only previous site investigation was by C. B. Moore during a brief visit in 1898. He reports the mound’s location as “...about half a mile in a northwesterly direction from the other mound [Mound A at the Red Lake site], [and] apparently of the same type, though somewhat smaller. A small amount of trenching showed it to be of clay, but yielded no other result” (Moore 1998:269 [1898:171]). His two sentence account is typical for mounds producing nothing of museum quality.

Wood’s investigation of Spring Lake reveal that it is a single mound site about 2.2 ha. (5.4 ac.) in extent (Figure 5.63). A grid of shovel test on a 10-m interval across the site, along with three 2 x 2 m test units, revealed areas of residential debris, but no evidence of substantial, domestic structures (Figure 5.64). Testing of the mound revealed four cultural stata and a premound midden (Figure 5.65).

### **The Red Lake Site (9SN4)**

The Red Lake site is a three-mound complex that covers about 3.8 ha (9.5 ac) on (labeled erroneously as “Possum Eddy” on the 1978 1:24,000 scale USGS topographic quadrangle) in the floodplain of Screven County, Georgia (Figure 5.61 and Figure 5.62). The floodplain is about 5.6 km (3.5 mi.) wide at this point. The site is located 11.3 km (7 mi.) direct distance downstream from the Lawton site. Previous to the current research detailed in this study, Red Lake witnessed three archaeological investigations by C. B. Moore (1998 [1898]:269), F. Cook (1987), and Brockington and Associates, Inc. (Espenshade et al. 1994). Both David Anderson (1990:308; 1994:187) and Espenshade et al. (1994) summarize Cook’s (1987) fieldwork and results. At the time of their writing, only two mounds had been identified and mapped (Cook 1987), with heights estimated for Mound A at 3 m (9.84 ft.) and Mound B at 0.75 m (2.45 ft.).

In 1898, C. B. Moore visited the Red Lake site and reported only the presence of the larger mound. Moore’s (1998 [1898]:171) brief account of “The Mound Near Mills’ Landing” describes the mound with a circular base and truncated, circular summit, which “serves as a refuge for live-stock in times of freshet.” He reports mound dimensions to be 3.35 m (11 ft.) in height and 28.04 m (92 ft.) across the base, and that his excavation trench revealed a consistent clay fill with no evidence for mound layering and no human burial remains. Moore is silent regarding the position and dimensions of his trench into the mound, but an eroded depression visible on the eastern flank may have been his excavation—although Moore backfilled his trench excavations at Lawton, and the Mound A flank depression is similar to that at the Shoulderbone mound in the Oconee River

valley, Hancock County, Georgia, which either may be the result of a 19th-century borrow area or rather a looter's trench as Williams (1990a) suggests. As Espenshade and colleagues (1994:20) note, the location of Mills Landing appears on several historic period maps of the area including Brown's (1889) map of the Savannah River, Twitty's (1911) map of Screven County, and an 1897 plat map of the Mary Ann Hughes property. Most important, the latter of these shows the particular location of the large mound (Mound A) at Mills Landing one year prior to the arrival of Moore (Figure 5.66).

In 1987, Georgia archaeologists Mark Williams and Fred Cook produced the first topographic map of the site showing two mounds (Figure 5.67). Additionally, Cook excavated two test units, one "several meters up onto the larger mound's north edge" with the second "on nearly level ground several meters north of the mound slope" between the two mounds (1987:2). On the basis of pottery types present in his assemblage, he concluded that ceramics from the site compare percentage-wise with that expected for the Hollywood phase (ca. A.D. 1250 – 1350). But he then hedged his temporal estimate by noting that due to the lower frequency of complicated stamped pottery Red Lake could be slightly earlier, possibly A.D. 1200, thus making Red Lake contemporaneous with the Late Jarrett and Beaverdam phase sites of the Piedmont. This may have prompted Anderson (1994:187) to assign Red Lake to the Lawton phase (ca. A.D. 1100 – 1250). Cook also commented—and quite correctly as I argue in Chapter 4—that the ceramic assemblage was "uniform enough to suggest that the site has a brief occupation history" (1987:2).

During the summer of 1993, Brockington and Associates, Inc. completed an intensive cultural resources survey and evaluation of a 1,662 ha (4,107 ac.) tract in

Screven County, Georgia, which contained the Red Lake site, for the Corps of Engineers, Savannah District, as a wildlife mitigation area for the Russell Reservoir project (Espenshade et al. 1994). In reporting on their survey of Red Lake, they concluded that very little evidence of existing midden deposits was present at the site (Figure 5.68).

### *Site Excavations*

Based on work done by Dale (2007), the site has three mounds and is about 3 ha in extent (Figure 5.69). Testing at Red Lake followed a similar approach to the one used at Lawton. The entire site was shovel tested at 10-m interval grid, and test units were excavated at several locations on the site (Figure 5.70 and Figure 5.71). In addition, Wood (2009) excavated into the flank of Mound A and found a dense deposit of river mussel shell in the premound midden.

The shovel testing revealed three different sets of high artifact density areas, which correspond to what has been identified as the residential zone at Lawton. At Red Lake, there is a high density ring around the three mounds, similar to Lawton, but there are two other areas with high artifact concentrations to the northeast of the mound area. Most importantly, a third mound, labeled Mound C, was identified during systematic shovel testing (Figure 5.71). A 1 x 2 m test unit was excavated on the newly discovered Mound C to investigate its construction sequence. As illustrated in Figure 5.72, six distinct soil strata were revealed in the exposed profiles described as follows from initial construction to final mound summit: VI - submound midden with cultural features; V - construction stage; IV - initial mound occupation layer; III - construction stage; II - final

mound occupation layer; I – modern alluvial sediment from river flooding in the late-19th century. Altogether, six cultural features were encountered in the Mound C excavation: Stratum II contained a small refuse pit deposit of mussel shell; Stratum VI contained one refuse pit and four postmolds.

### *Remote Sensing*

As at Lawton, magnetometer survey was conducted at Red Lake by Walker (2007) to detect the presence of subsurface architecture, and to understand its distribution at the site (see sub-section above under Current Excavations at Lawton for methodology on remote sensing). Also, as at Lawton, the dense vegetative cover severely limited the area that could be inspected. Survey at Red Lake included a total of five 20-m survey blocks (Figure 5.73).

As summarized in detail from Walker (2007), the northernmost set of two contiguous blocks was located to explore the northernmost concentration of artifacts, while the southernmost set of three contiguous blocks were positioned to investigate the mound and associated plaza precinct. There are significant anomalies in both areas, but overall the data present no interpretable pattern of anomalies suggestive of substantial architecture (Figure 5.74). As was the case at Lawton, no high concentrations of daub or other burned material were found in the shovel tests and this lack of intensive burning is reflected in the magnetometer data. Without the block excavations available from Lawton, it is difficult to say what kinds of architectural patterns may be buried at Red



Lake. However, the magnetometer data indicate, that, at least in the areas investigated so far, there are no burned buildings or other features.

Clearly, the results call for supplementary work. There are additional site areas to be surveyed with the magnetometer, and the broader view provided through this technique may bring subsurface feature patterns that are currently unrecognized into better focus. In addition, exploring identified anomalies at Red Lake through limited excavations may reveal patterns that are not now obvious. Ultimately, with the possible absence of burned structural features, it may be that the only way to understand the internal site-plan and distribution of architecture at Red Lake is only through traditional, time-tested hand excavation.

### *Discussion*

The magnetometer surveys at Red Lake and Lawton did not produce the kinds of resulting data as expected. Despite the fact that no clear patterns in architectural distributions were detected, some important aspects of internal site structure were ascertained. At Lawton the magnetometer survey data essentially show the same things that were inferred from testing and excavations—there are very few if any, substantial burned buildings in the area enclosed by the ditch. Nelson's data confirm that there may have been less substantial buildings in this area. These data lead to the inference that the area inside the ditch at Lawton (the mound precinct) saw only seasonal occupation where temporary buildings were used.

The Red Lake data are not as readily interpreted. This is largely because the area surveyed was small and there are no block excavation data for comparison. Just as was noted at Lawton, the magnetometer survey blocks inside of Red Lake's mound precinct failed to reveal any evidence of substantial structures. The same can be said for the survey block completed in the northern artifact concentration at the site. This may be interpreted as an absence of substantial, burned structures in either survey location at Red Lake. Alternatively, this might be an indication that the magnetometer is not the appropriate tool for recognizing buried architecture in the specific setting of Red Lake.

Clearly, the results at both sites call for supplementary work. There is additional area at each site to be surveyed with the magnetometer, and the broader view provided via this technique may bring subsurface feature patterns that are currently unrecognized into better focus. In addition, exploring identified anomalies at each site through limited excavations may reveal patterns that are not now obvious. Ultimately, with the possible absence of burned structural features, it may be that the only way to understand the internal site-plan and distribution of architecture at Red Lake and Lawton is through traditional, time-tested hand excavation.

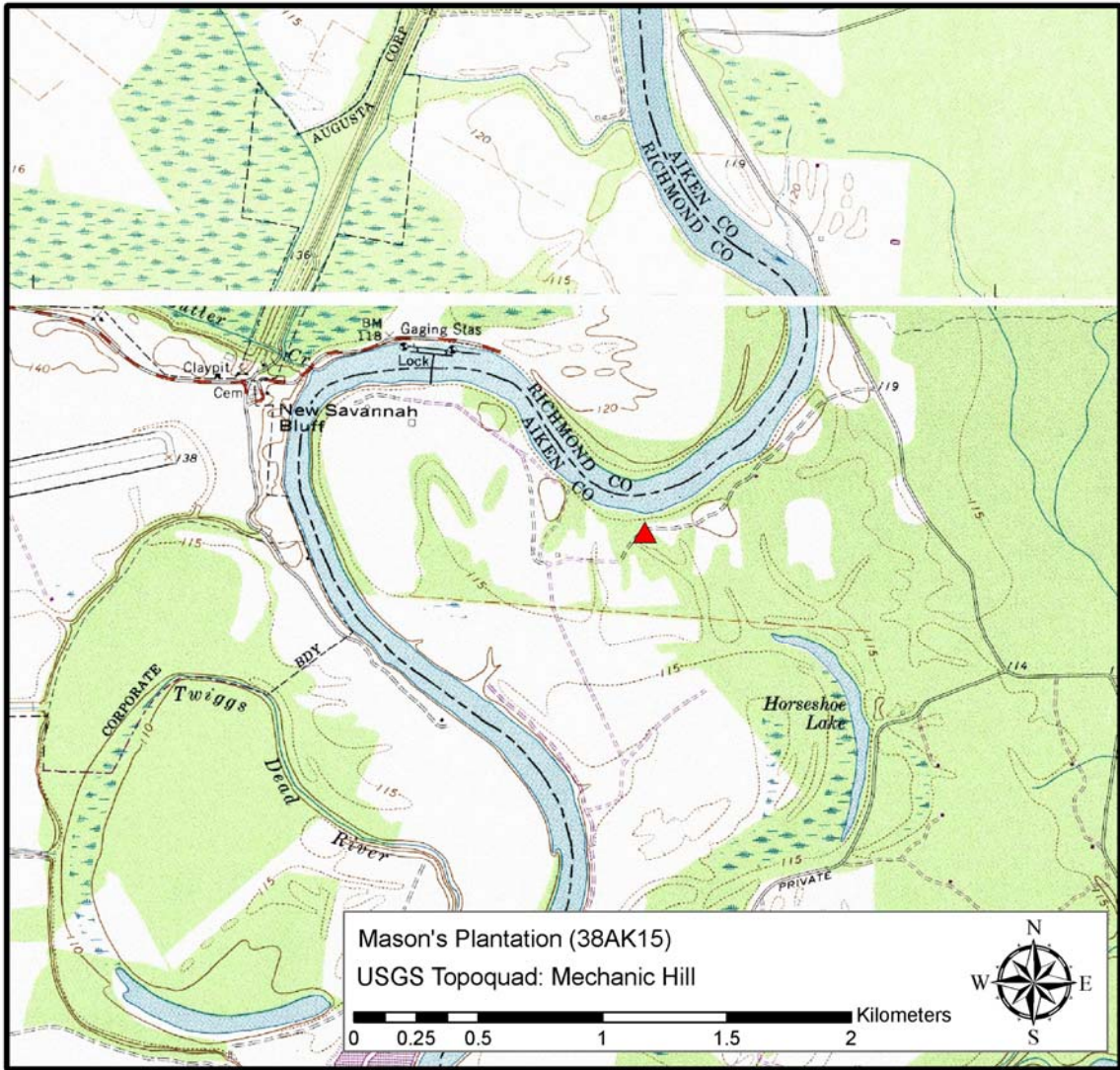


Figure 5.1. Topographic setting of the Mason's Plantation site.

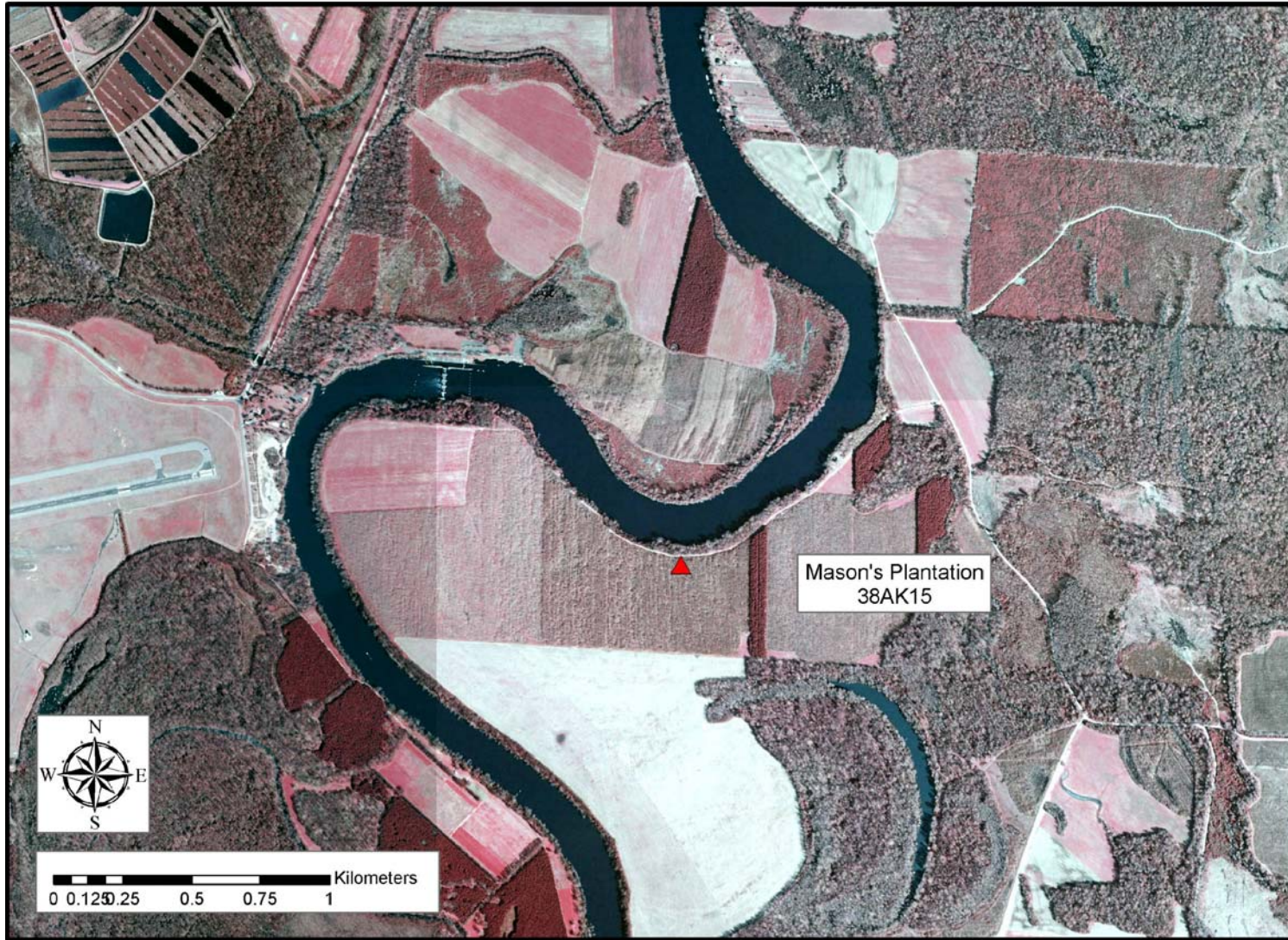


Figure 5.2. Floodplain setting of the Mason's Plantation site (2006 aerial photograph).

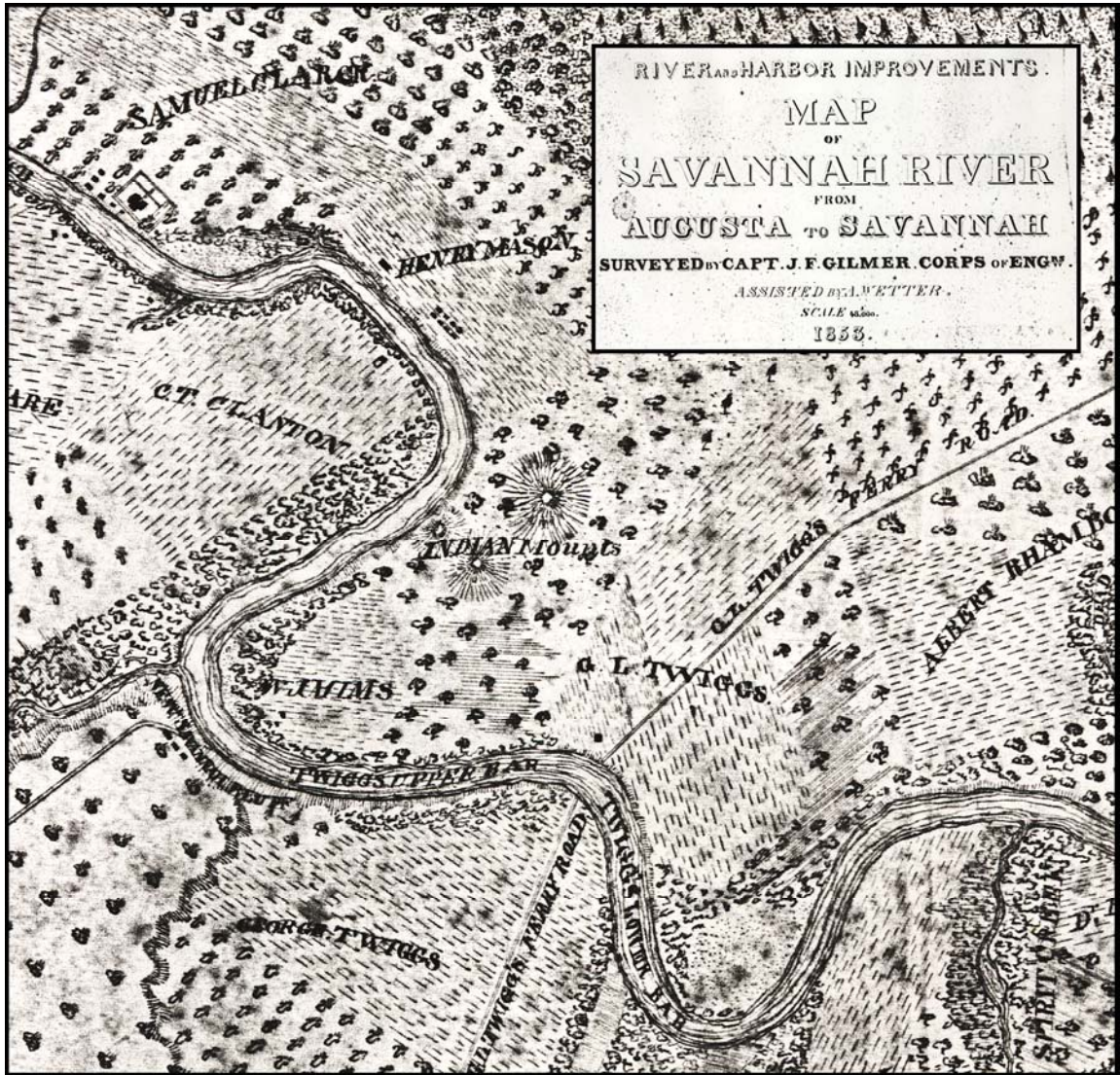


Figure 5.3. The Mason's Plantation site location showing "Indian Mounts" on the 1853 Gilmer Navigation Chart of the Savannah River from Augusta to Savannah (map courtesy of the Savannah District U.S. Army Corps of Engineers).

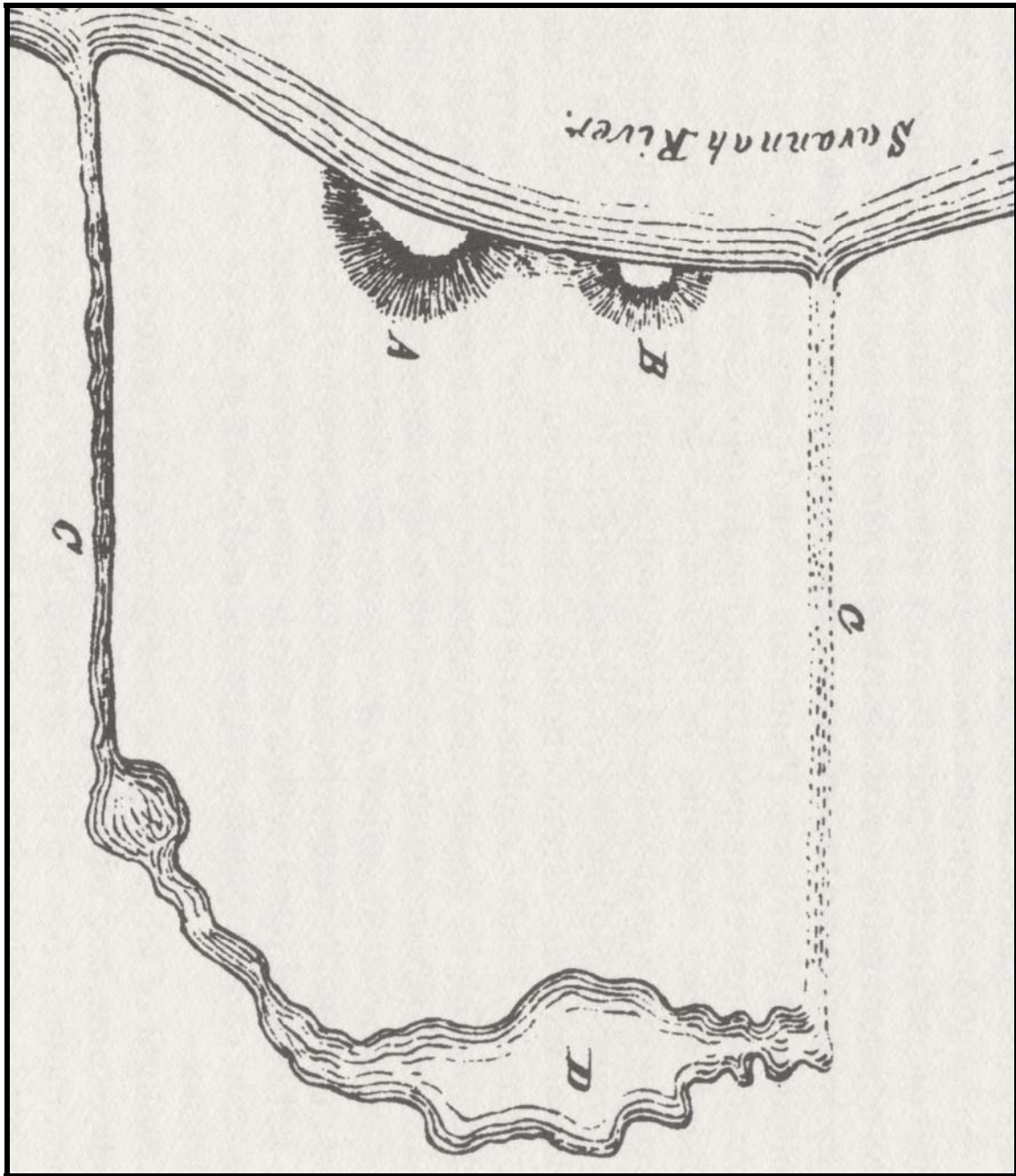


Figure 5.4. 1873 map of the Mason's Plantation mound and site (from Jones 1999 [1873]: Plate III). The letter C marks the two canals of a moat connecting the Savannah River with what Jones' called a "natural lagoon," highlighted by the letter D, which actually is a relict river meander scar.

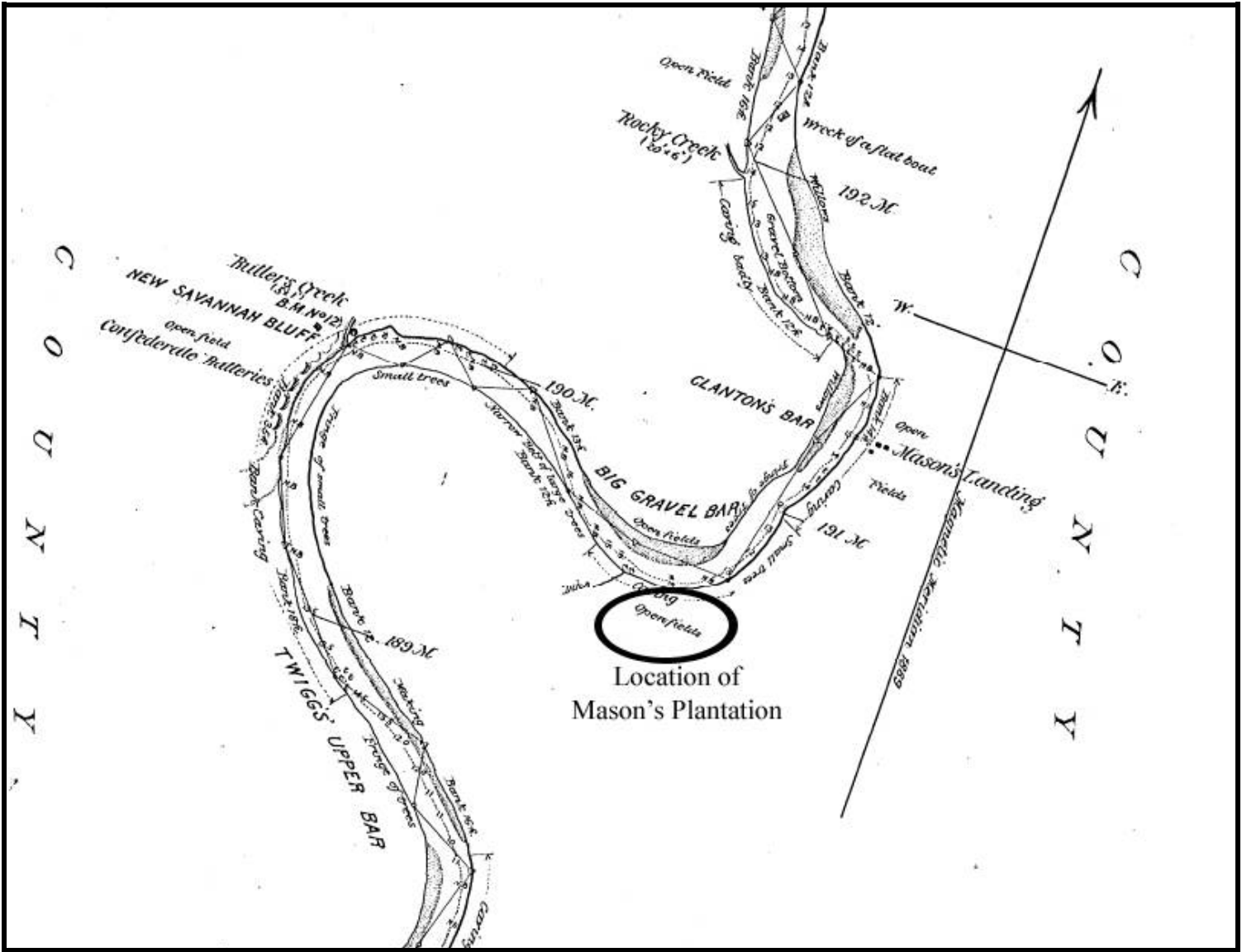


Figure 5.5. The Mason's Plantation site location showing "Open Fields" on the 1889 Carter Navigation Chart of the Savannah River from Augusta to Savannah (map courtesy of the Savannah District U. S. Army Corps of Engineers; circle and label added to clarify location of Mason's Plantation with mounds eroded away).



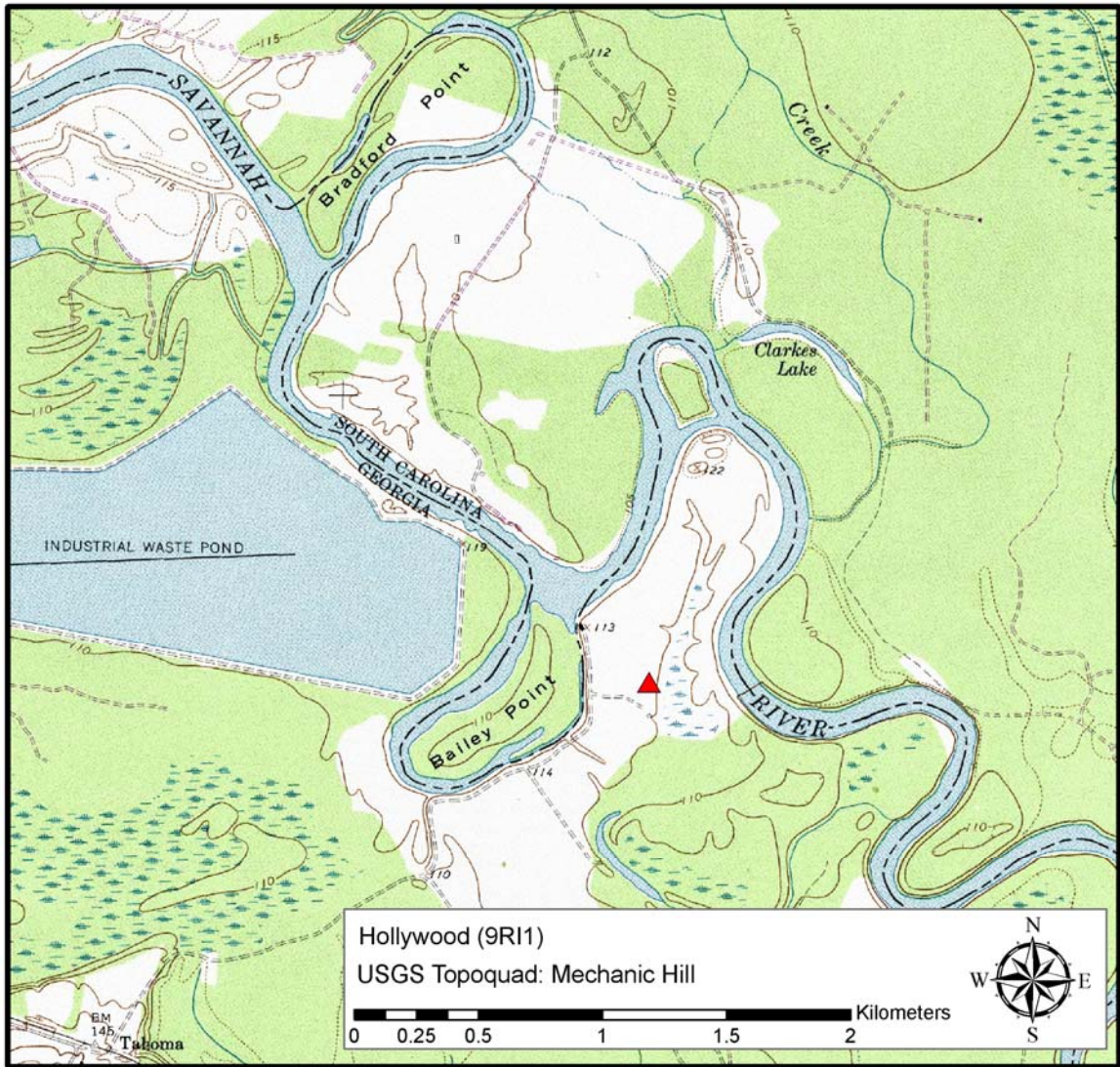


Figure 5.6. Topographic setting of the Hollywood site.



Figure 5.7. Floodplain setting of the Hollywood site (2006 aerial photograph).

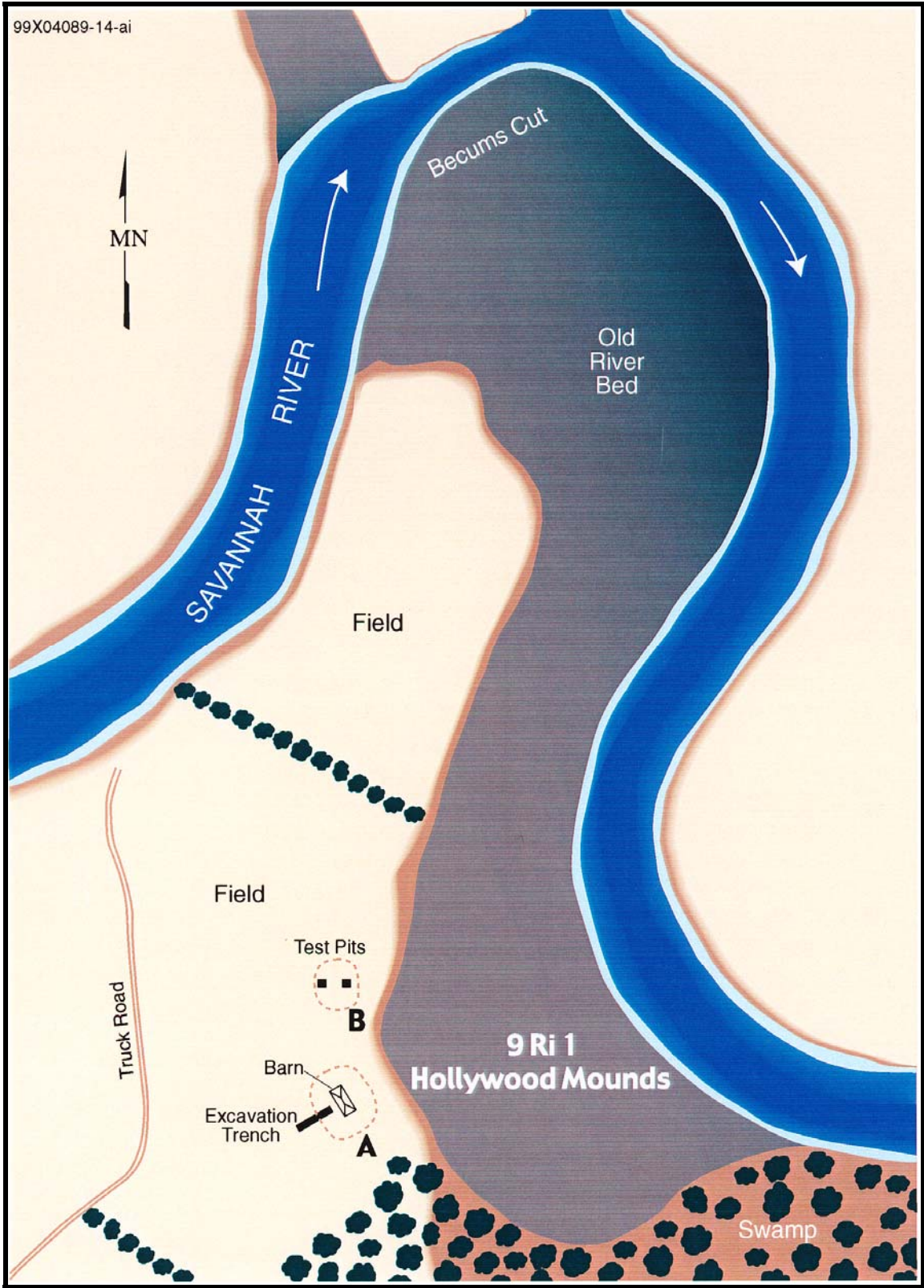


Figure 5.8. Map of the Hollywood site (from DeBaillou 1965: Figure 1).

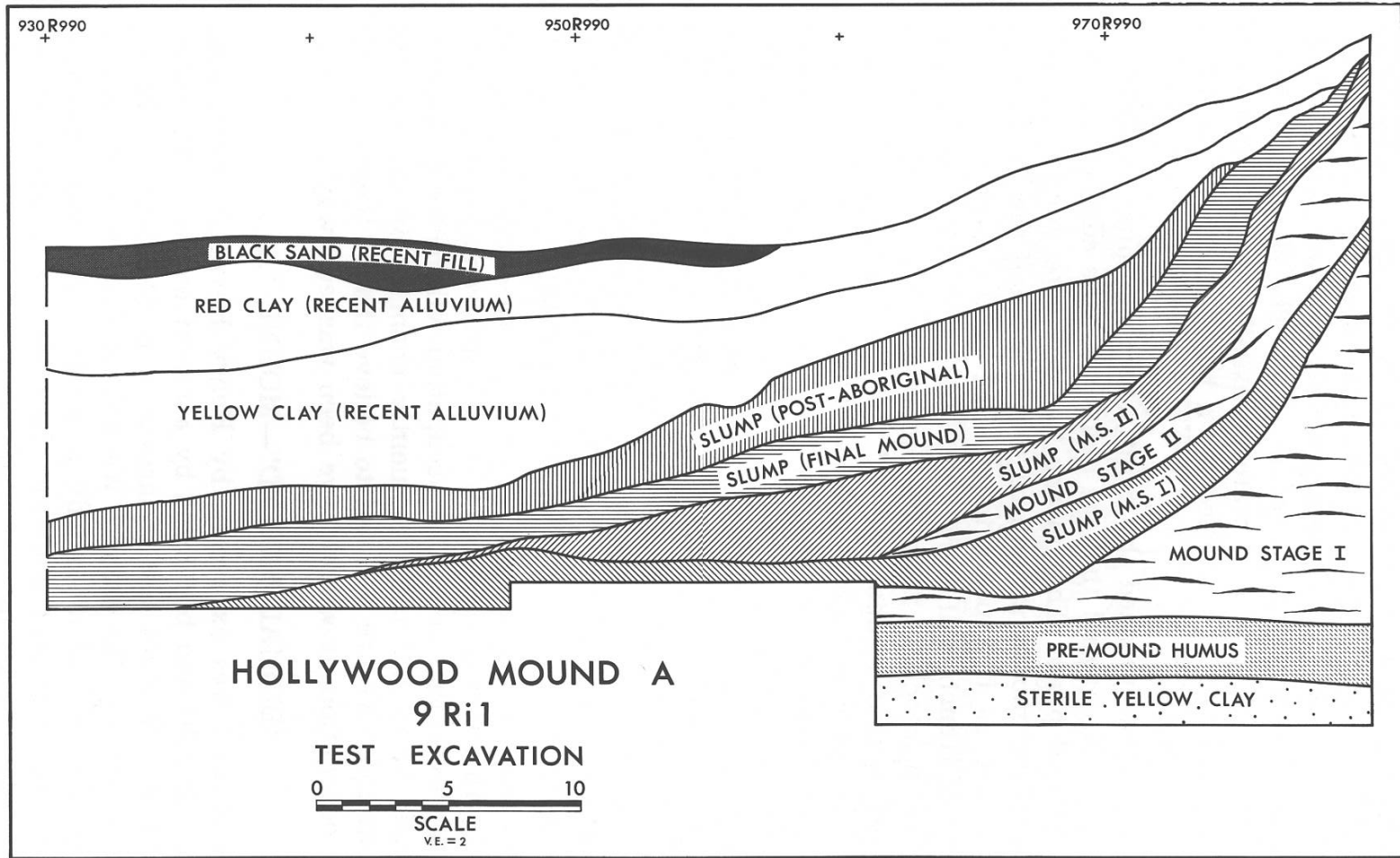


Figure 5.9. Profile of the trench excavation at Hollywood Mound A (from DeBaillou 1965: Figure 2).

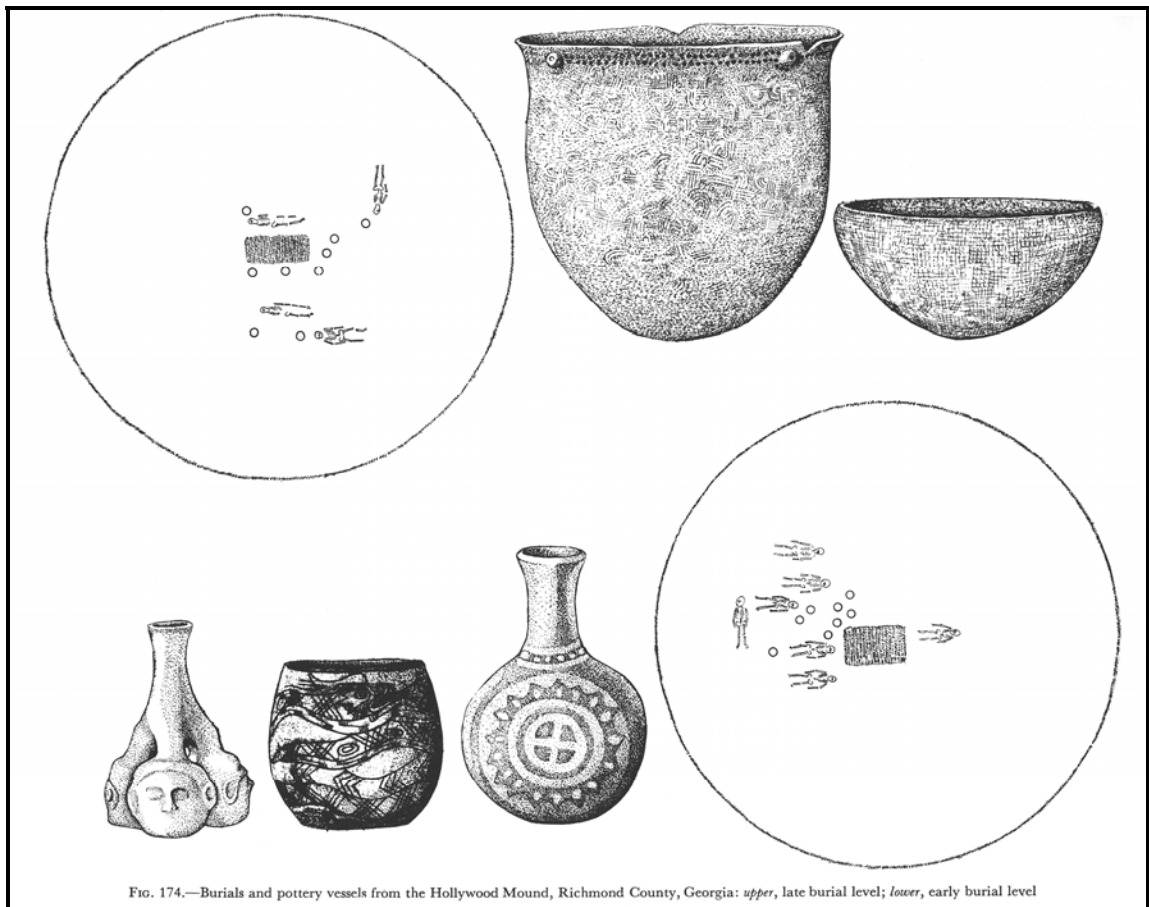


FIG. 174.—Burials and pottery vessels from the Hollywood Mound, Richmond County, Georgia: *upper*, late burial level; *lower*, early burial level

Figure 5.10. Representative ceramic vessels from Hollywood Mound B. Top Row: Hollywood phase burial-urn jar with bowl cover from upper layer of lower mound division; Bottom Row: SECC material from lower layer of lower mound division (Caldwell 1952: Figure 174).

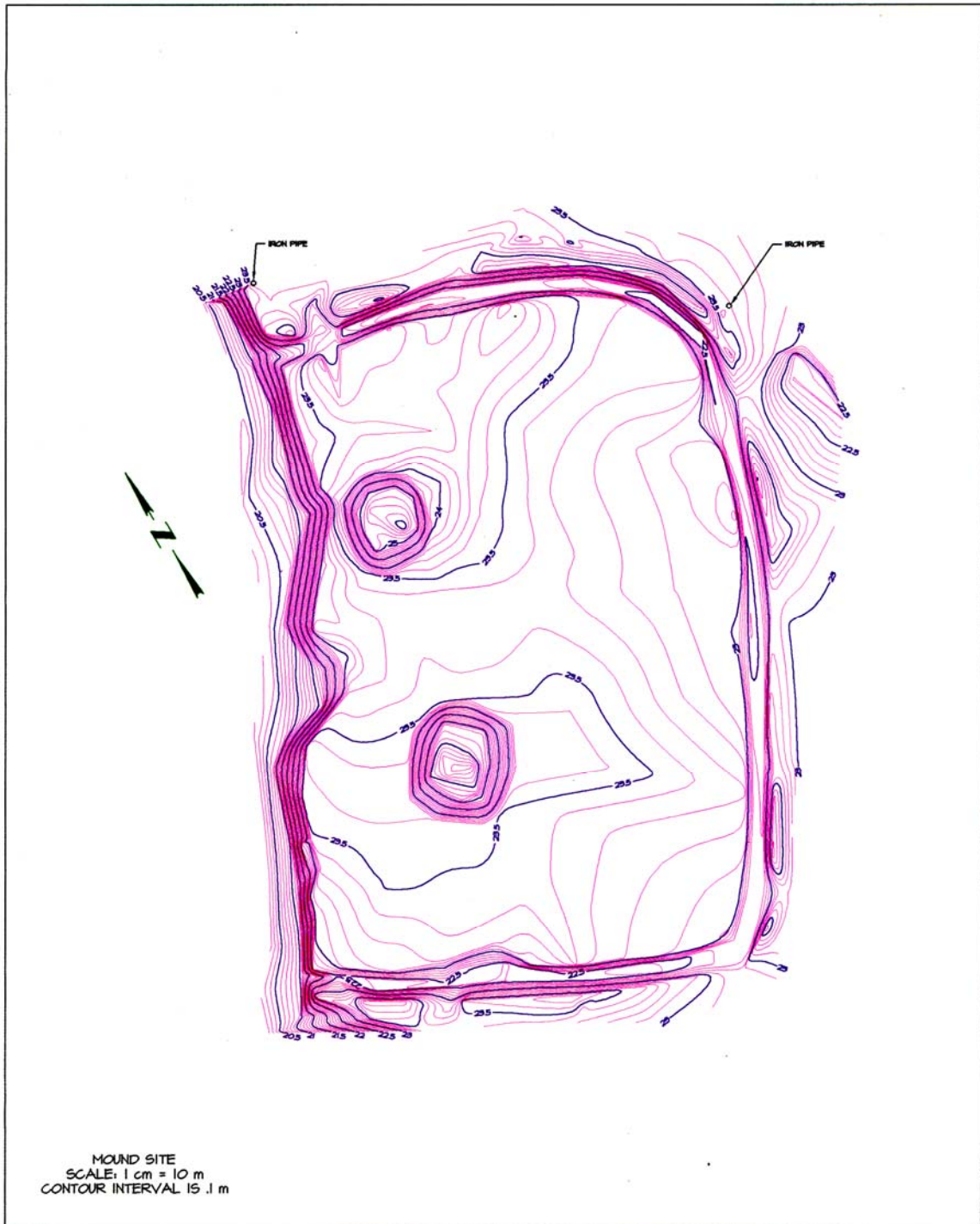


Figure 5.11. Topographic map of the Lawton site.



Figure 5.12. Topographic setting of the Lawton site.

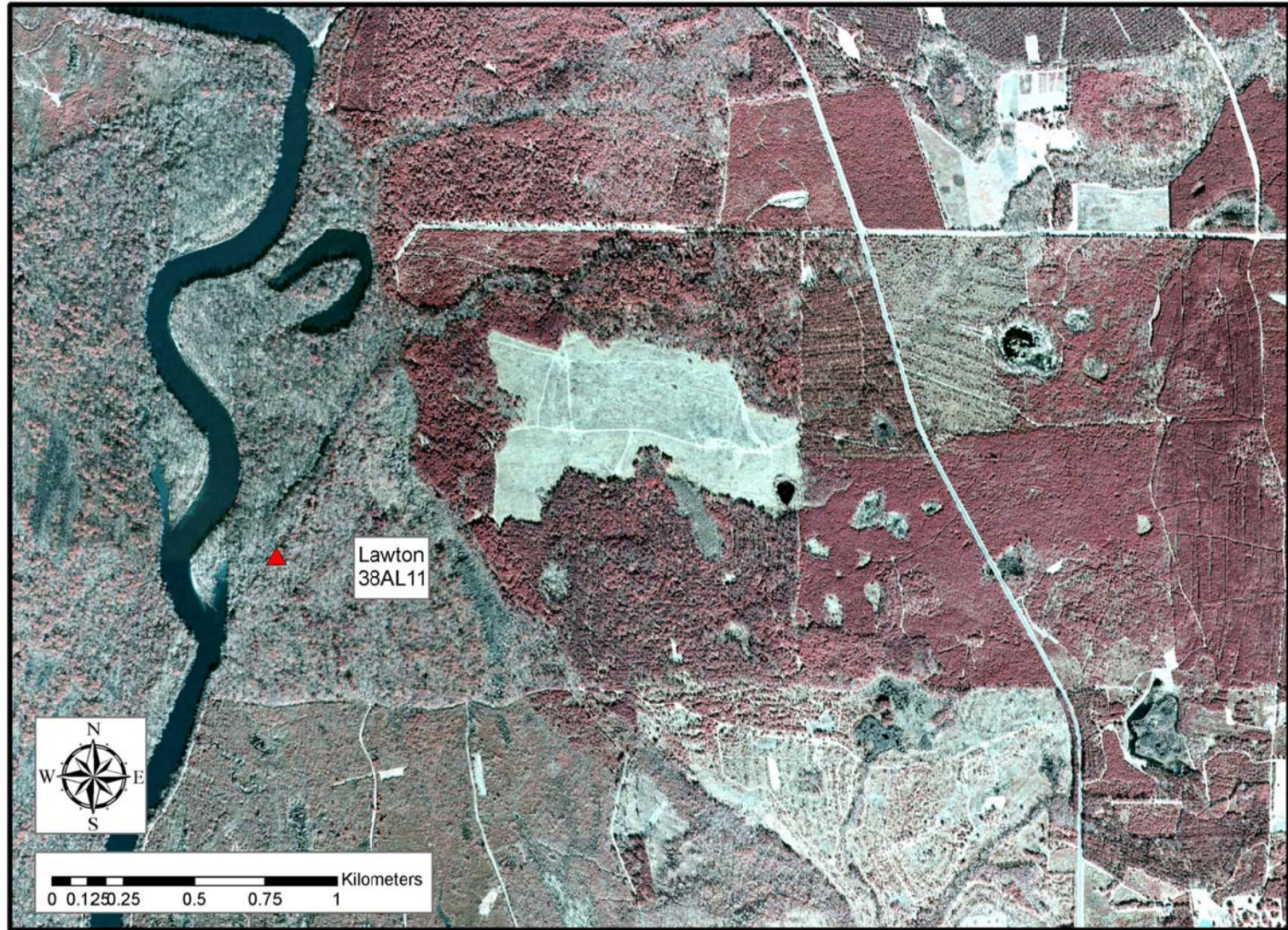


Figure 5.13. Floodplain setting of the Lawton site (2006 aerial photograph).



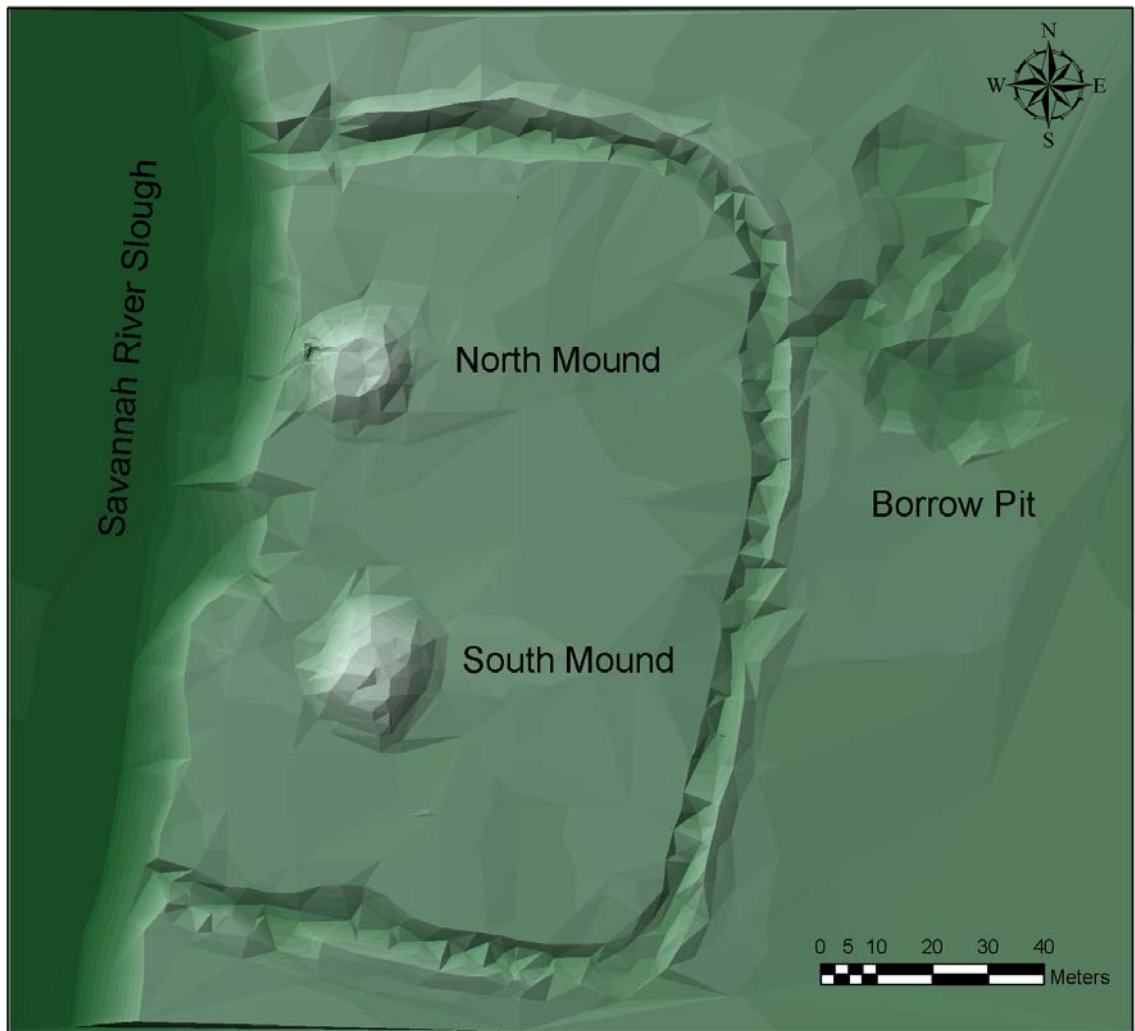


Figure 5.14. Isometric plan view of the Lawton site.

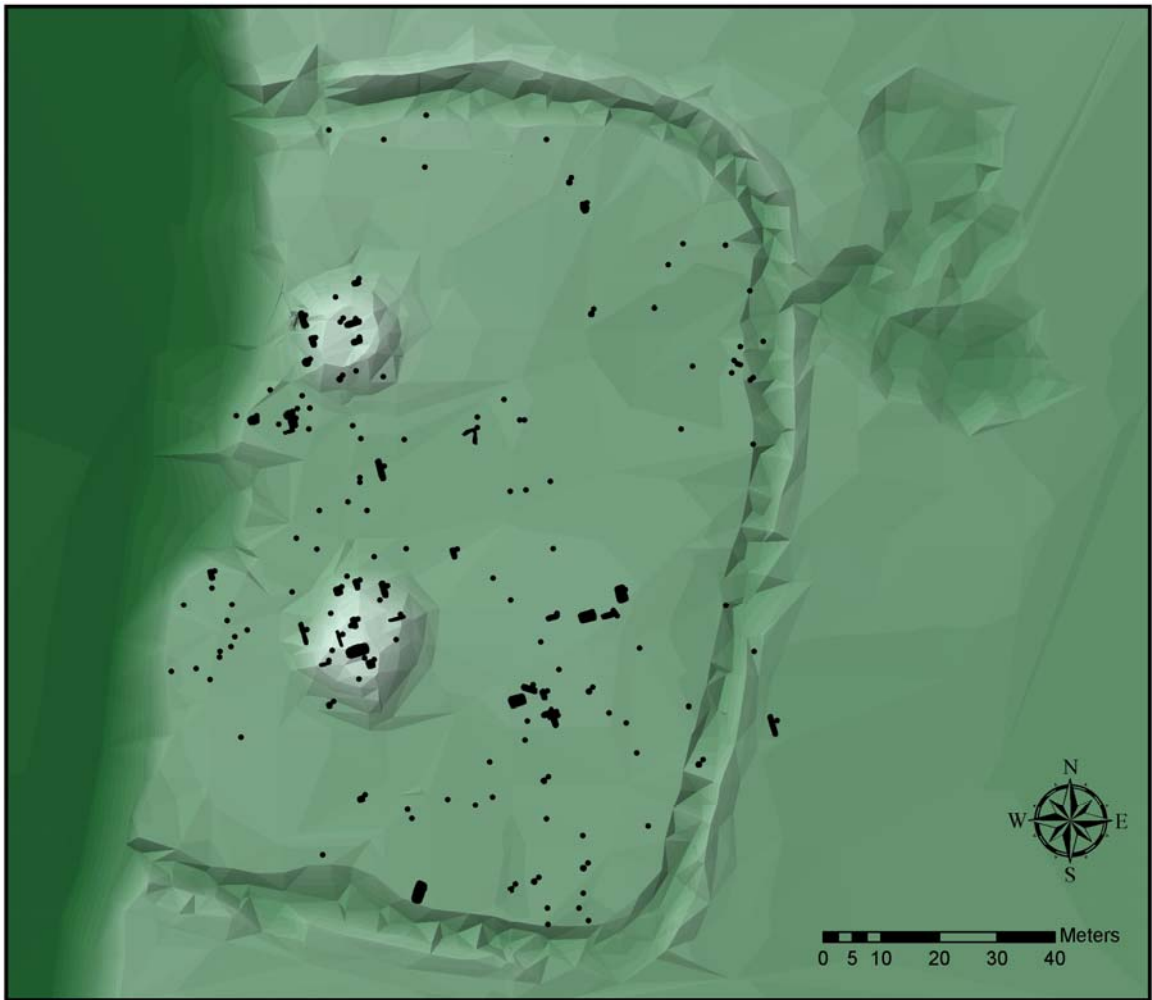


Figure 5.15. Satellite-based GPS locations of looted "potholes" at Lawton.

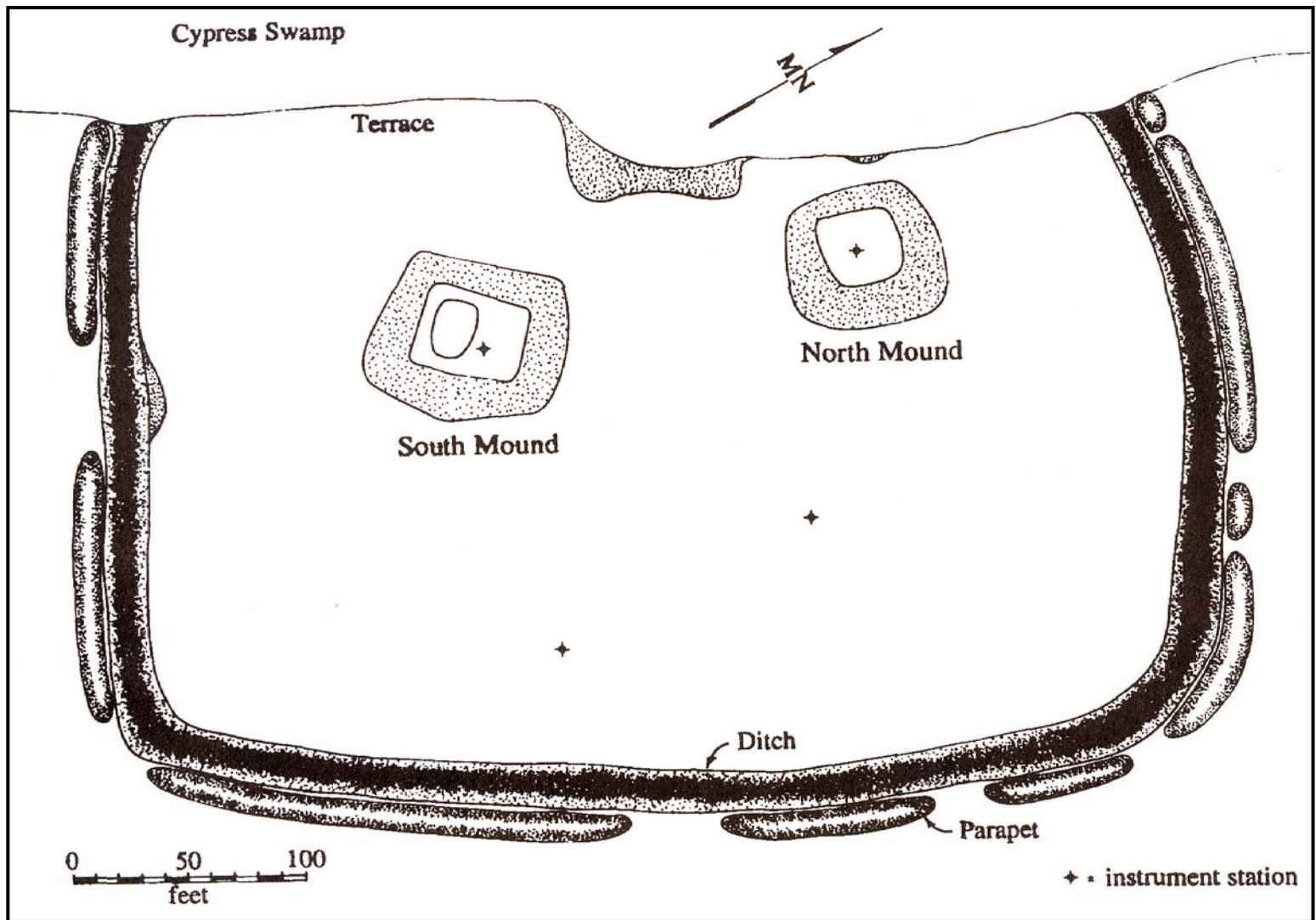


Figure 5.16. Plan map of the Lawton site by E. Thomas Hemmings and Richard Polhemus (from Anderson 1990: Figure 38).

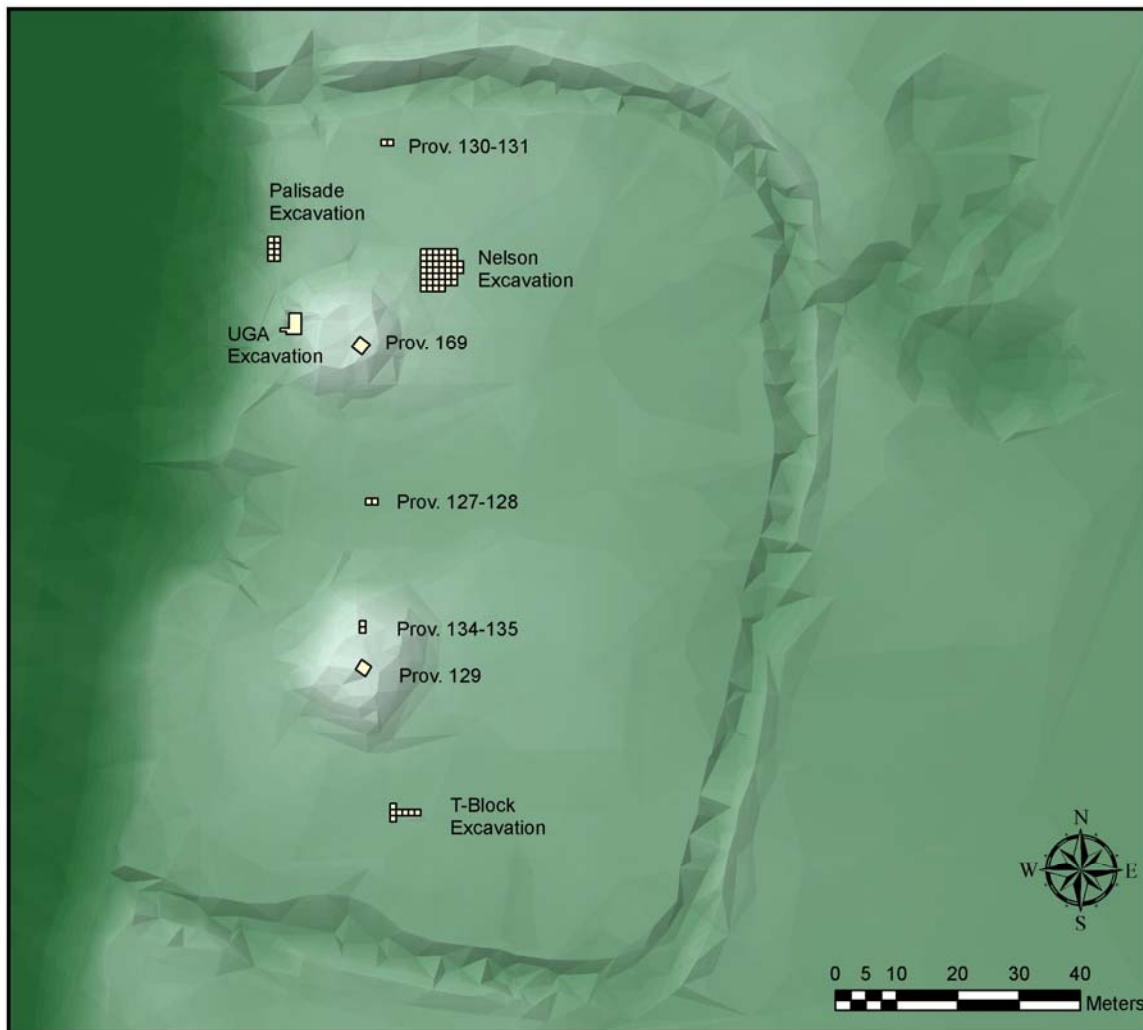


Figure 5.17. Lawton site showing excavation unit locations.

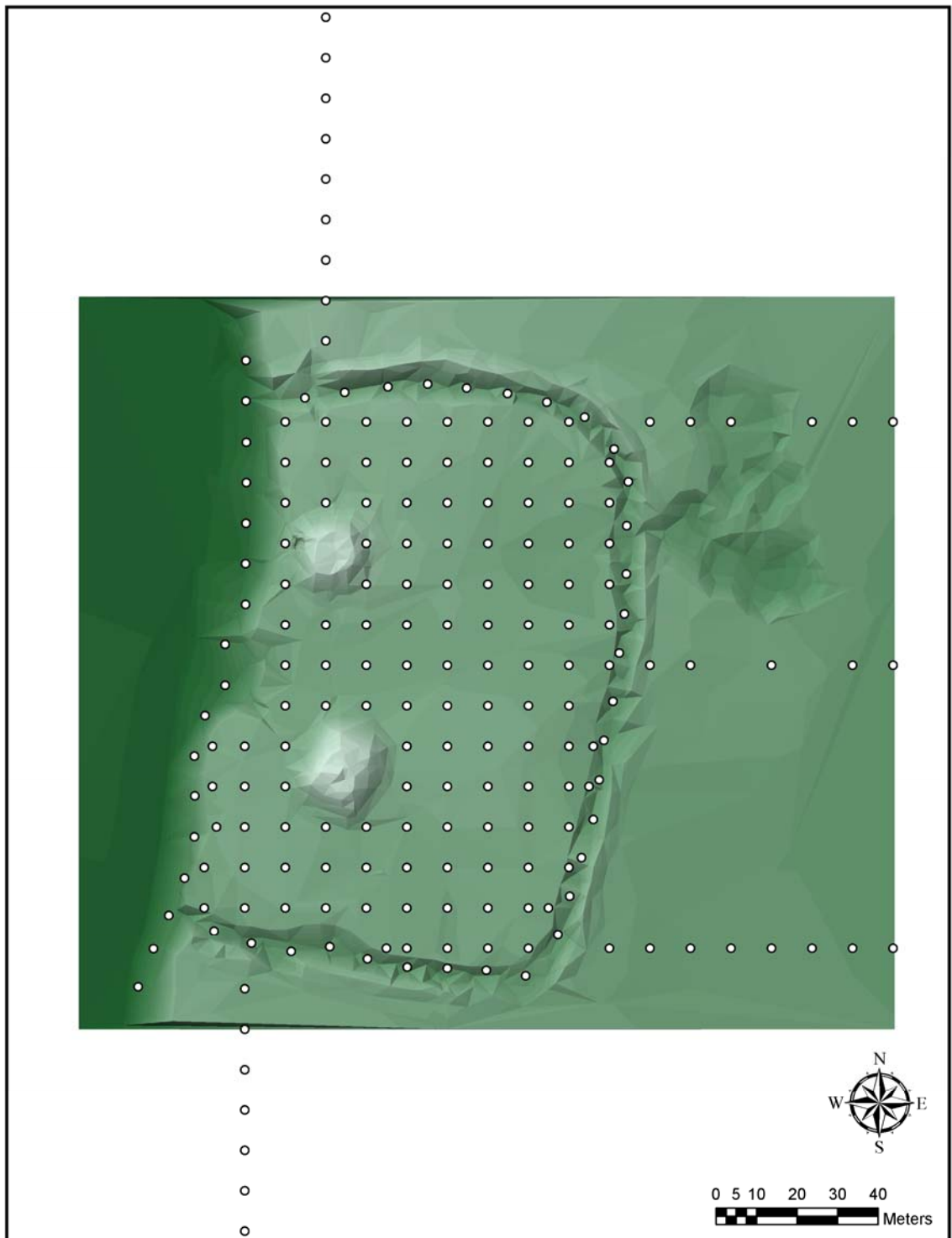


Figure 5.18. Lawton site showing shovel test pit locations.

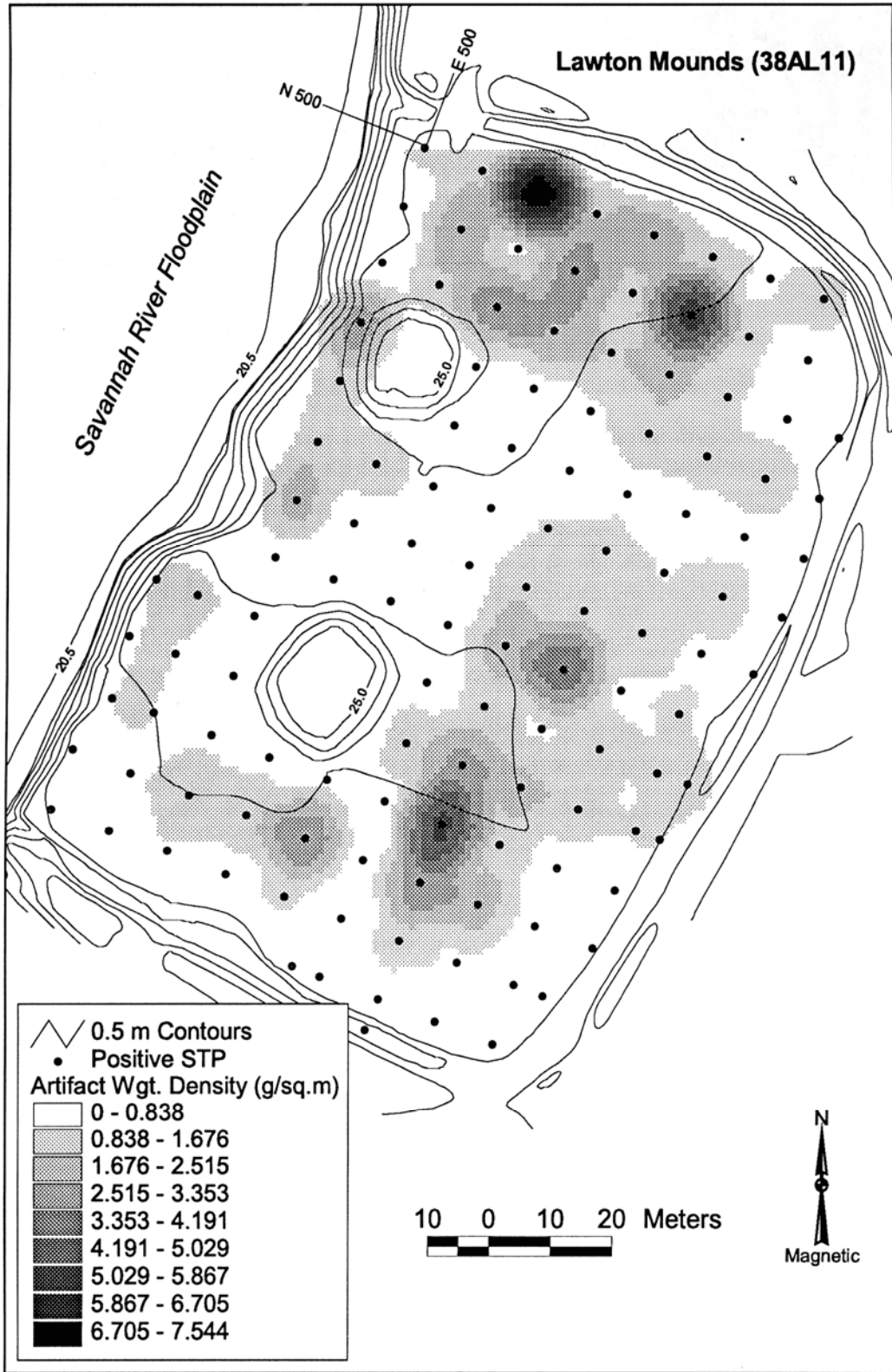


Figure 5.19. Density plot by weight of all artifacts from STP excavations in the central site area.

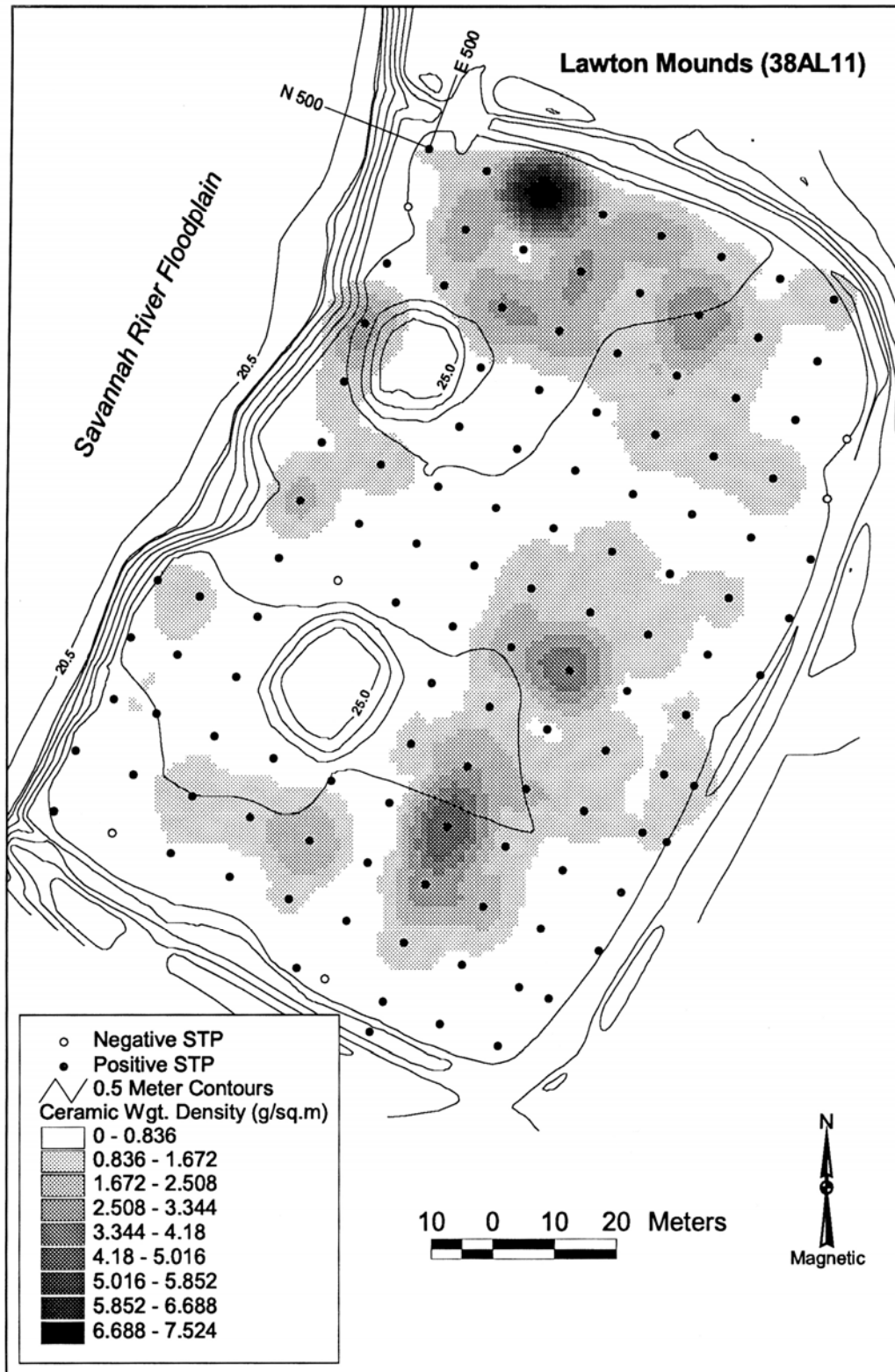


Figure 5.20. Density plot by weight of all ceramics from STP excavations in the central site area.

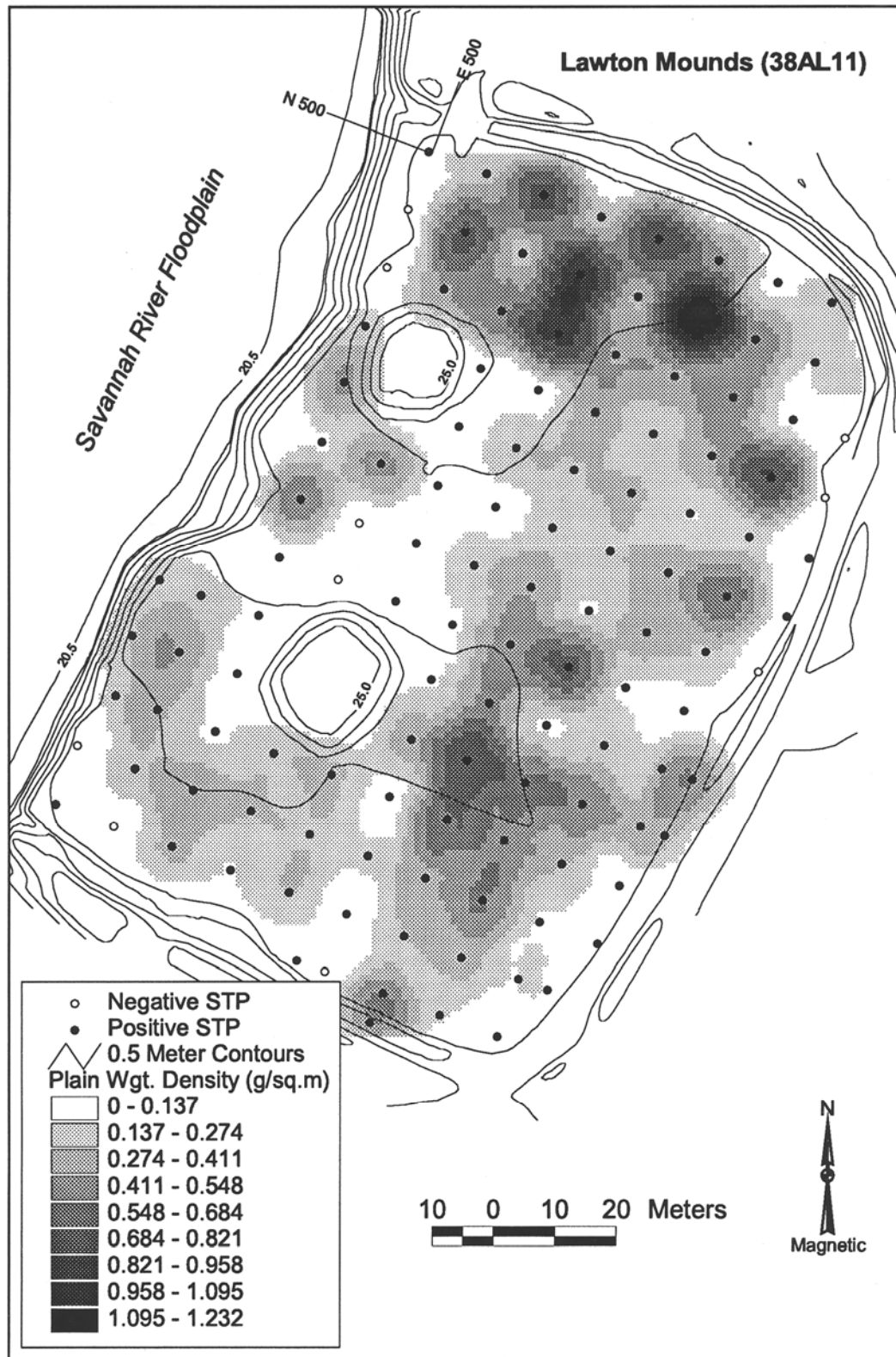


Figure 5.21. Density plot by weight of plain ceramics from STP excavations in the central site area.





Figure 5.22. Density plot by weight of burnished plain ceramics from STP excavations in the central site area.

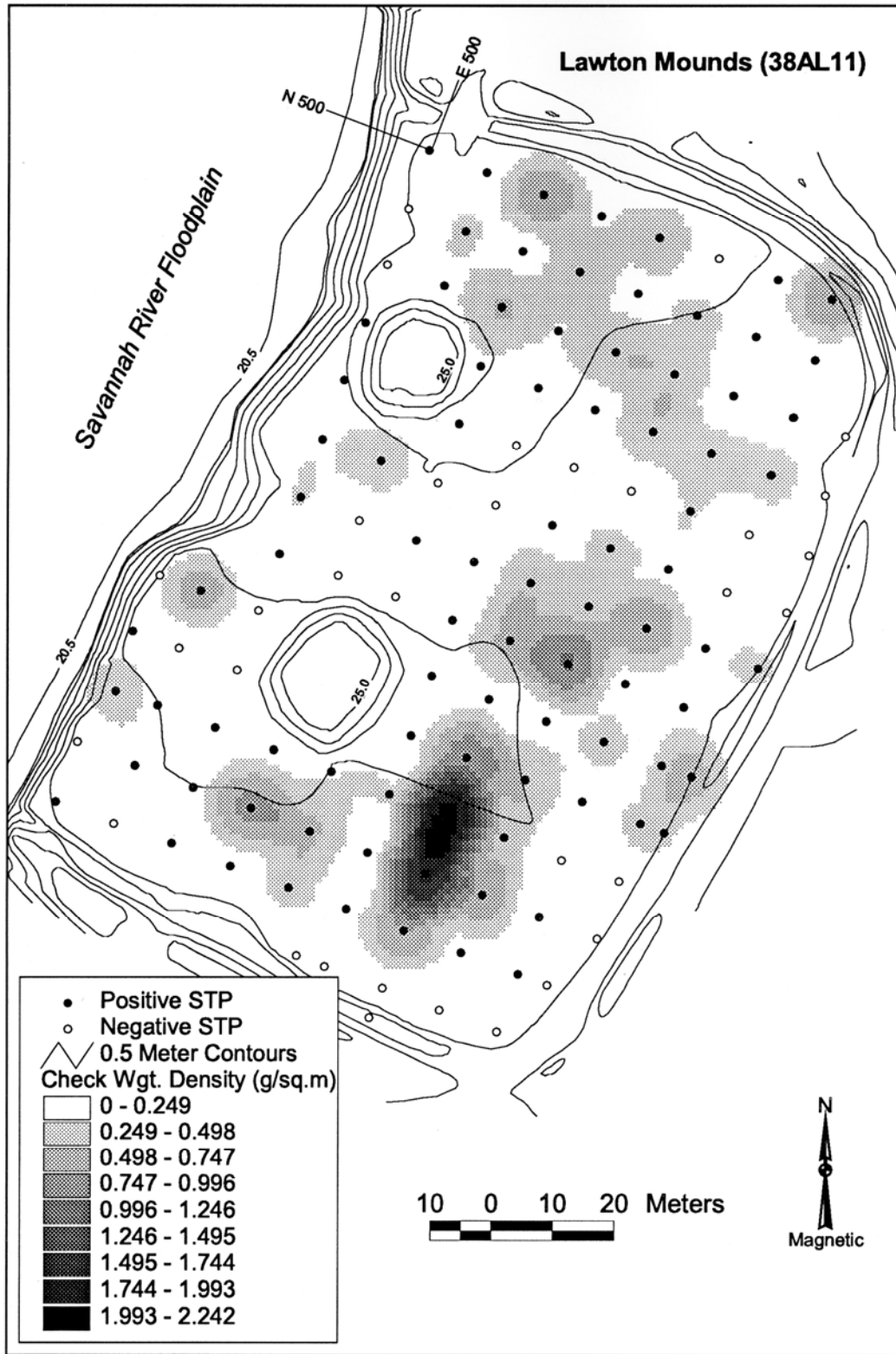


Figure 5.23. Density plot by weight of check stamped ceramics from STP excavations in the central site area.

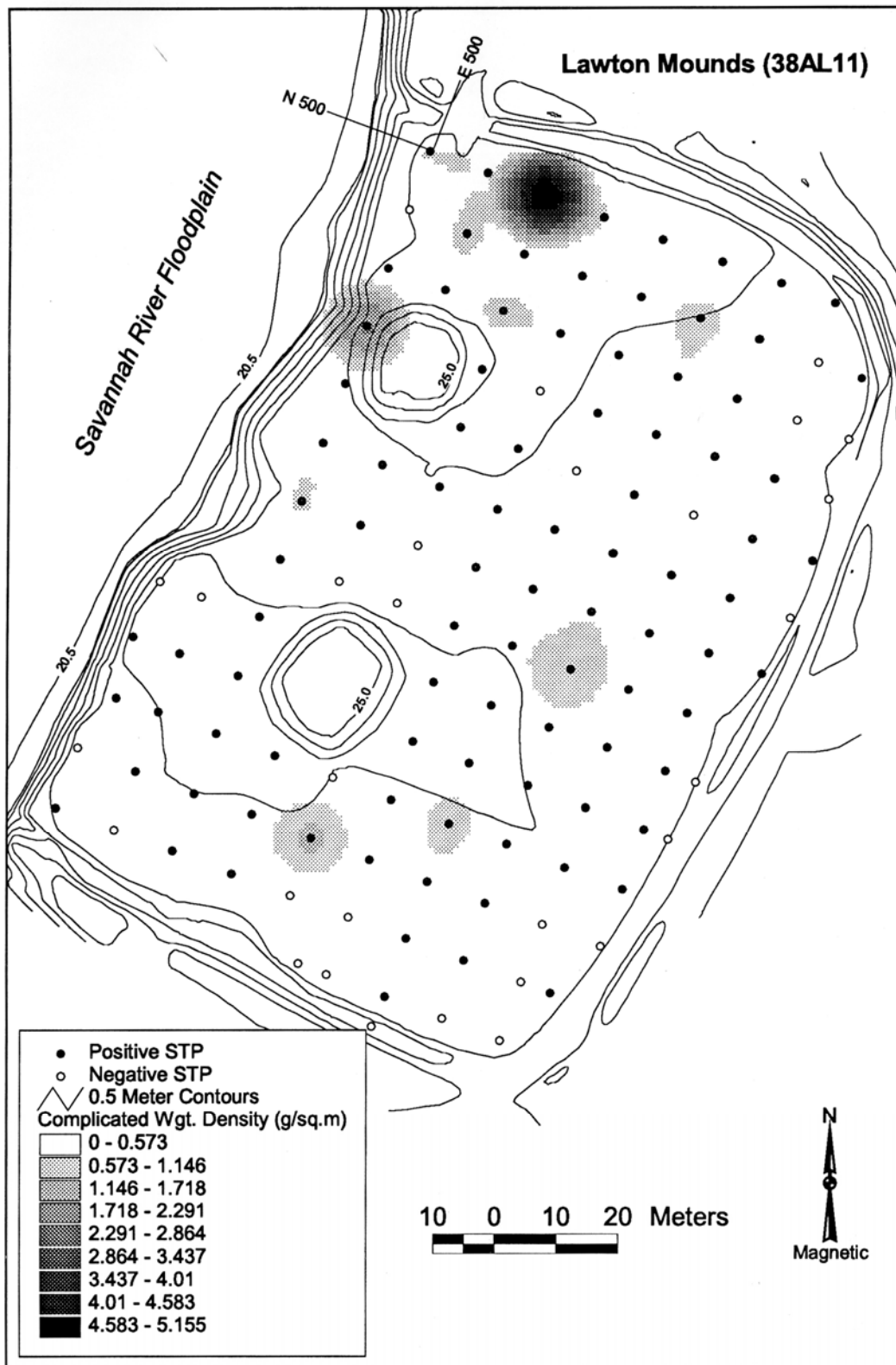


Figure 5.24. Density plot by weight of complicated stamped ceramics from STP excavations in the central site area.

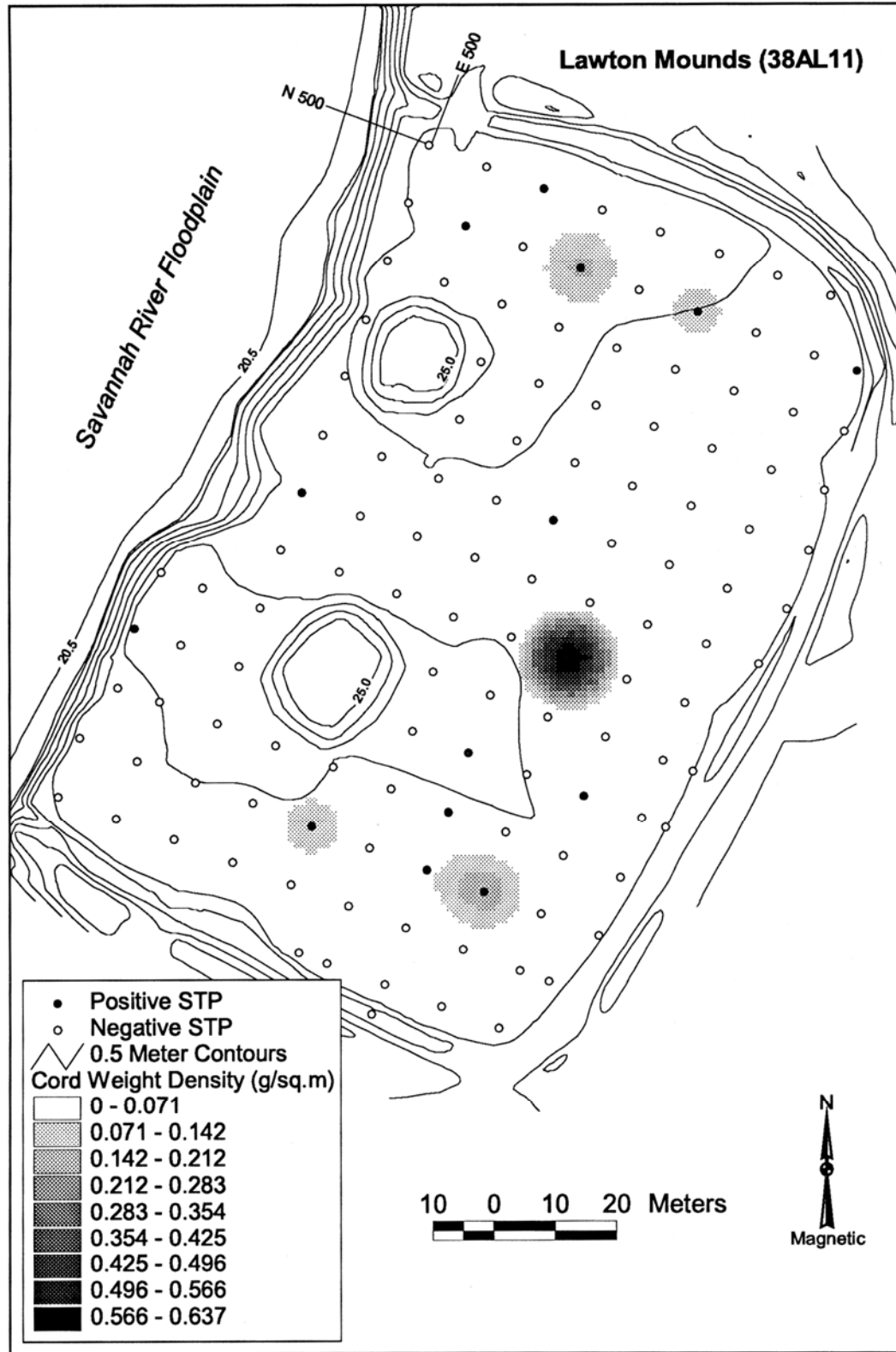


Figure 5.25. Density plot by weight of cord marked ceramics from STP excavations in the central site area.

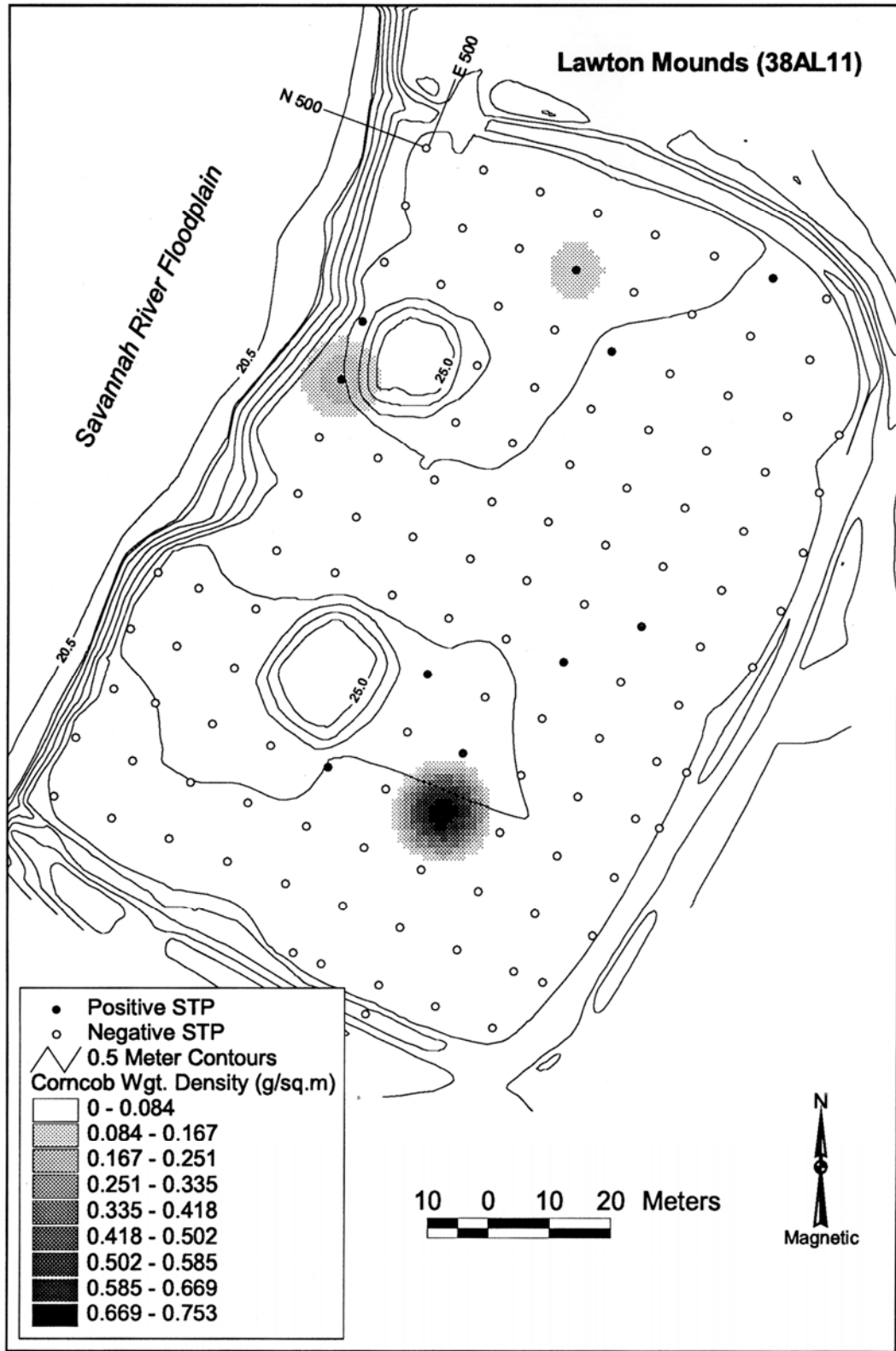


Figure 5.26. Density plot by weight of corn cob marked ceramics from STP excavations in the central site area.

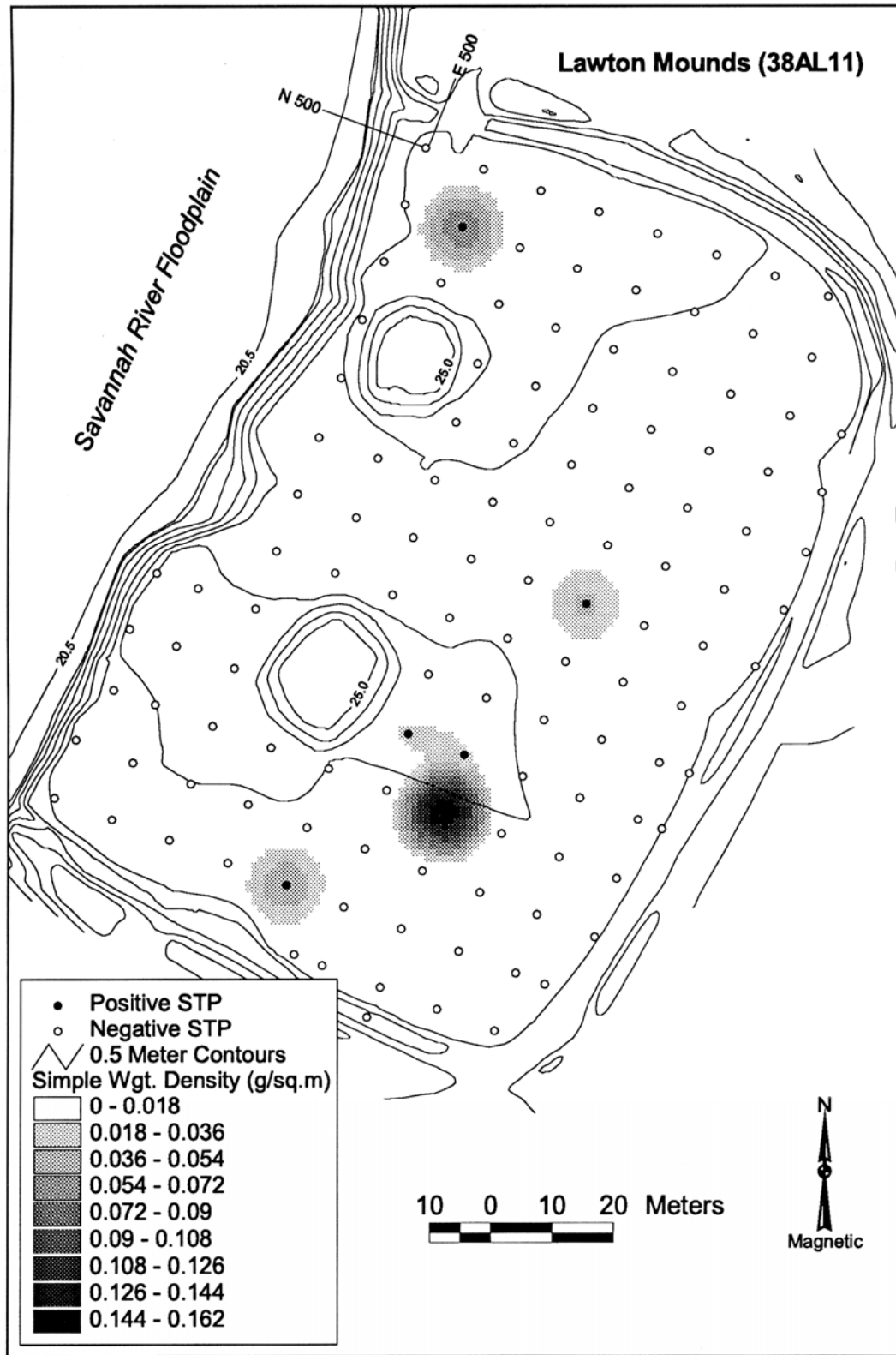


Figure 5.27. Density plot by weight of simple stamped ceramics from STP excavations in the central site area.

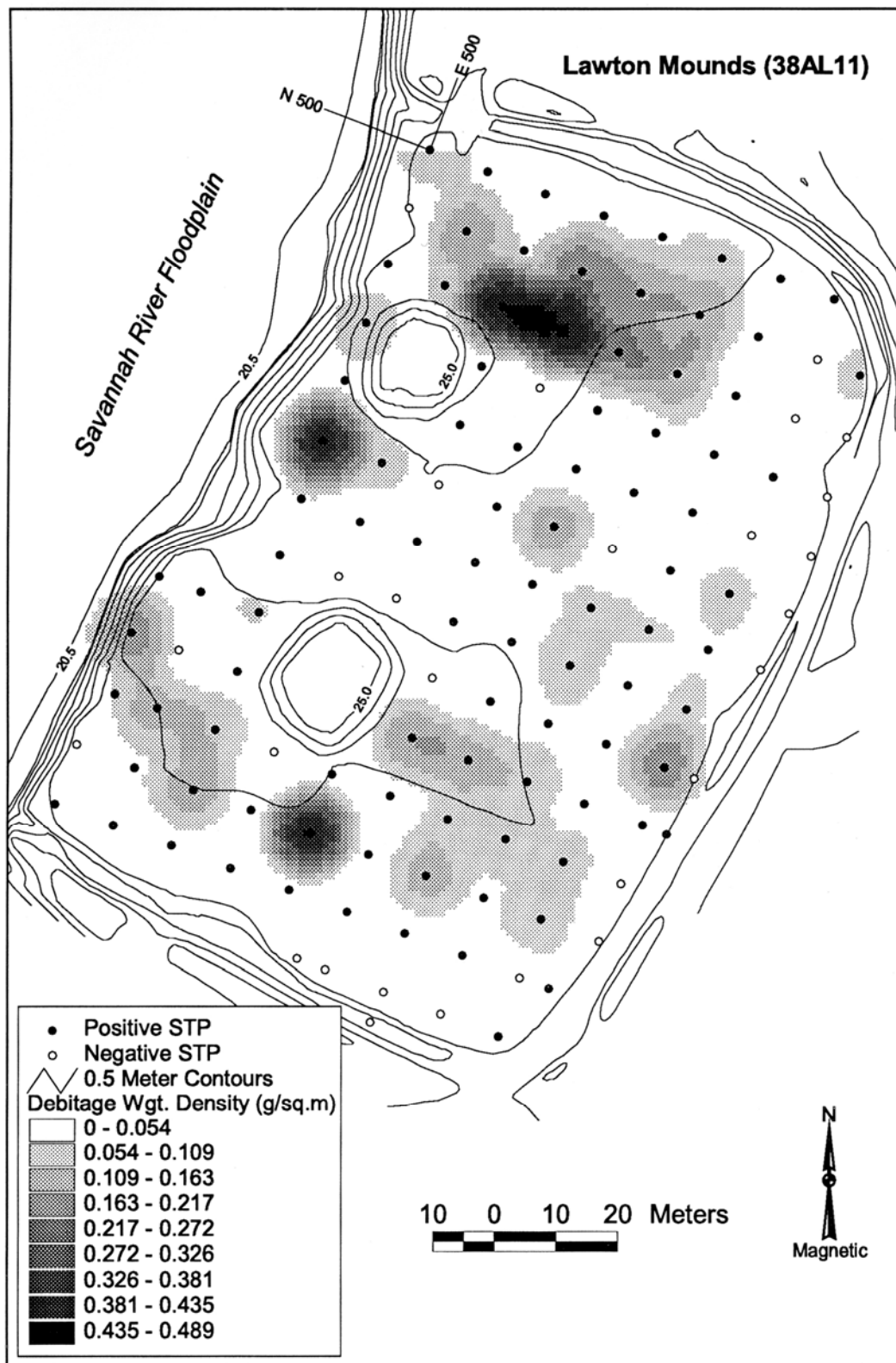


Figure 5.28. Density plot by weight of lithic debitage from STP excavations in the central site area.

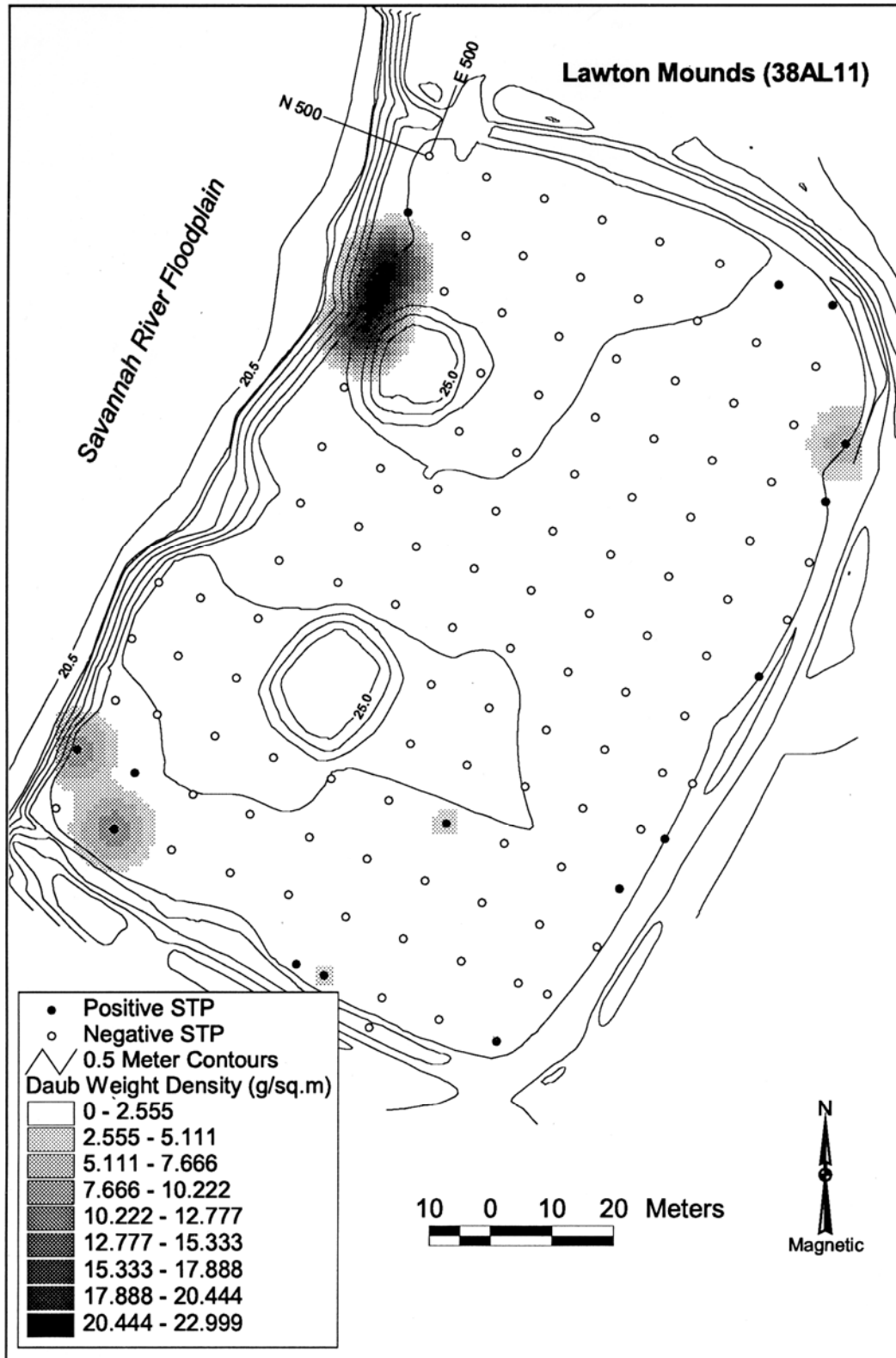


Figure 5.29. Density plot by weight of burned daub from STP excavations in the central site area.



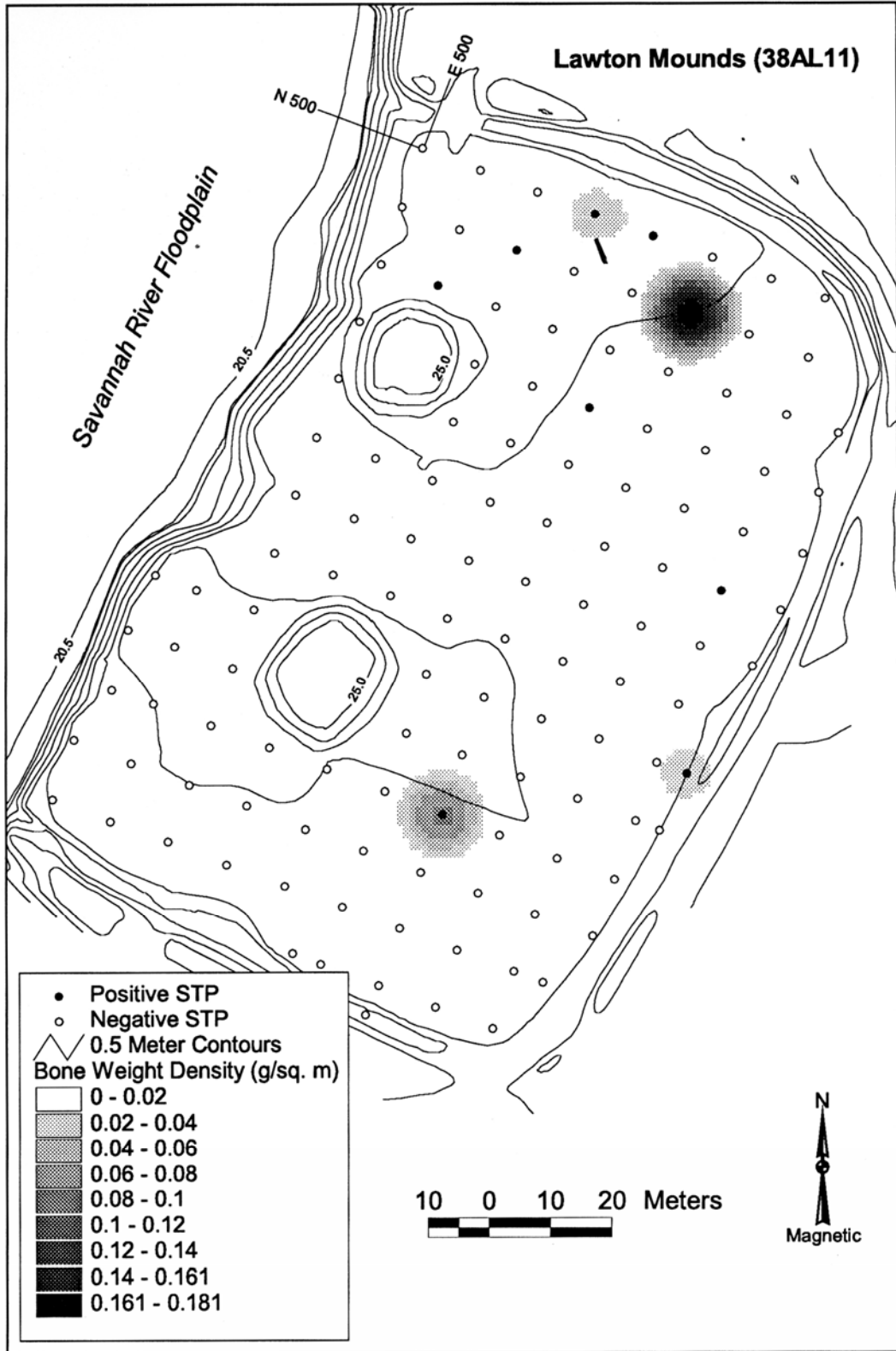


Figure 5.30. Density plot by weight of calcined bone by weight from STP excavations in the central site area.

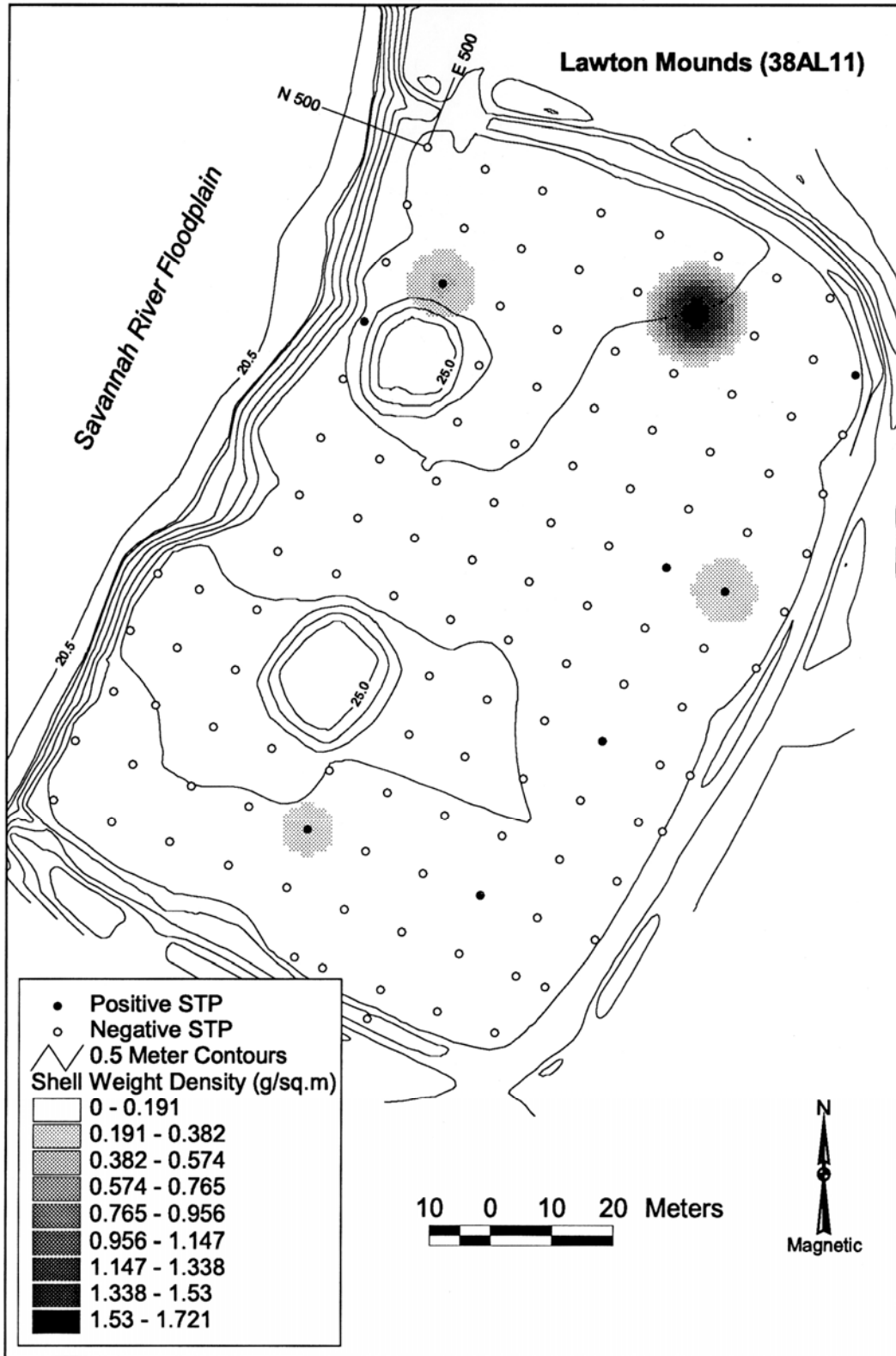


Figure 5.31. Density plot by weight of freshwater mussel shell from STP excavations in the central site area.

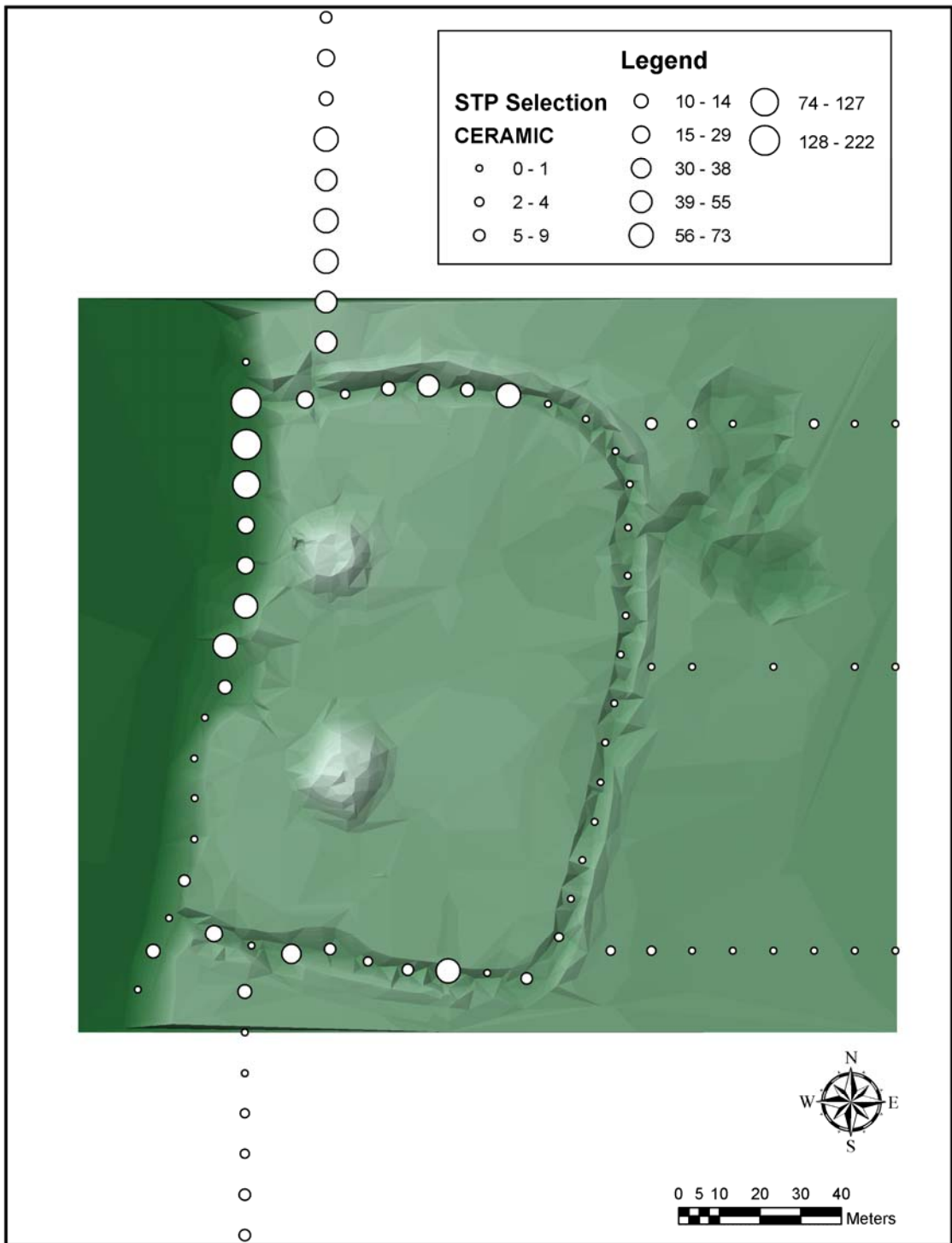


Figure 5.32. Density plot of all ceramics by count from shovel test pits in the peripheral site area.

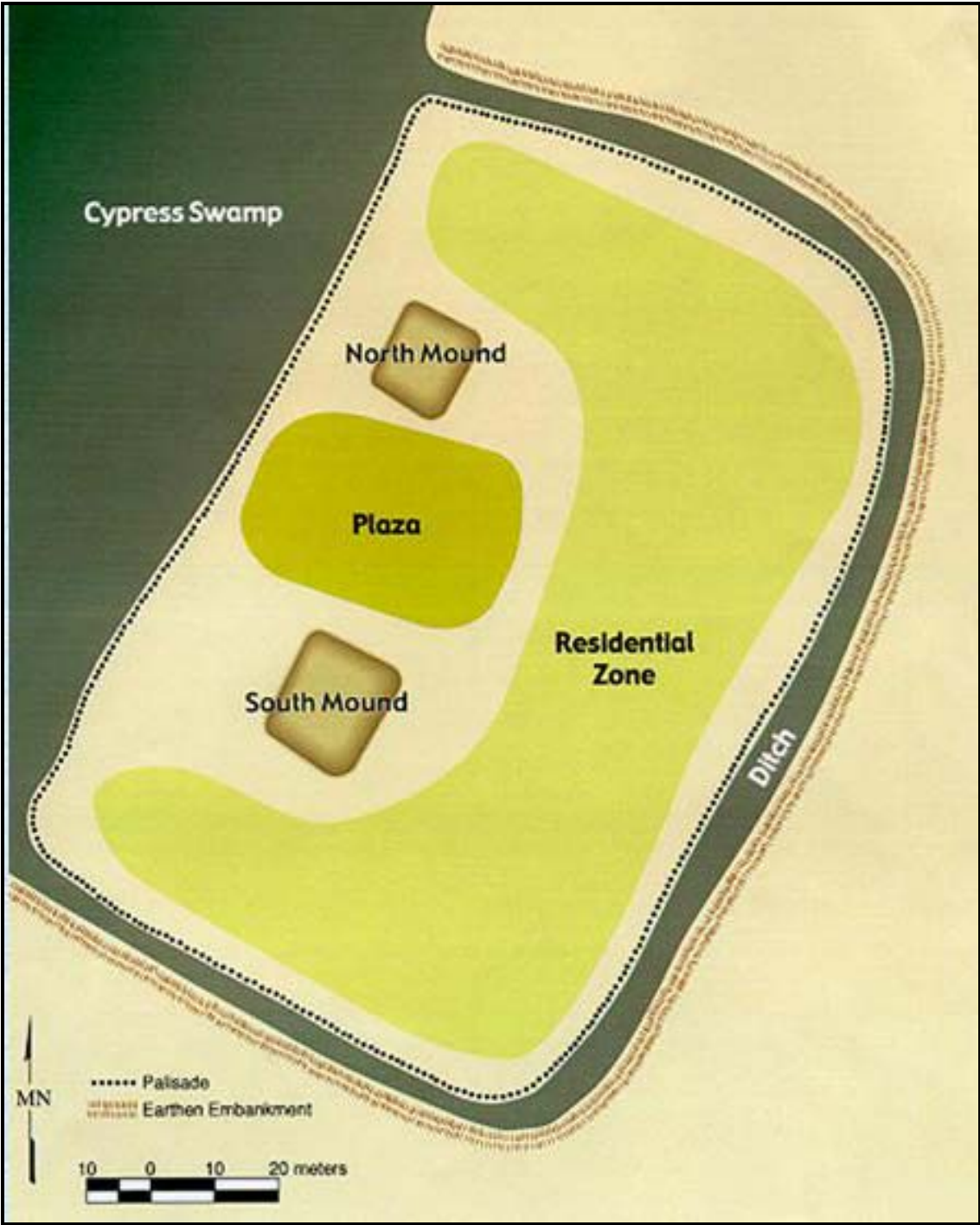


Figure 5.33. Schematic view of the internal structure at Lawton.

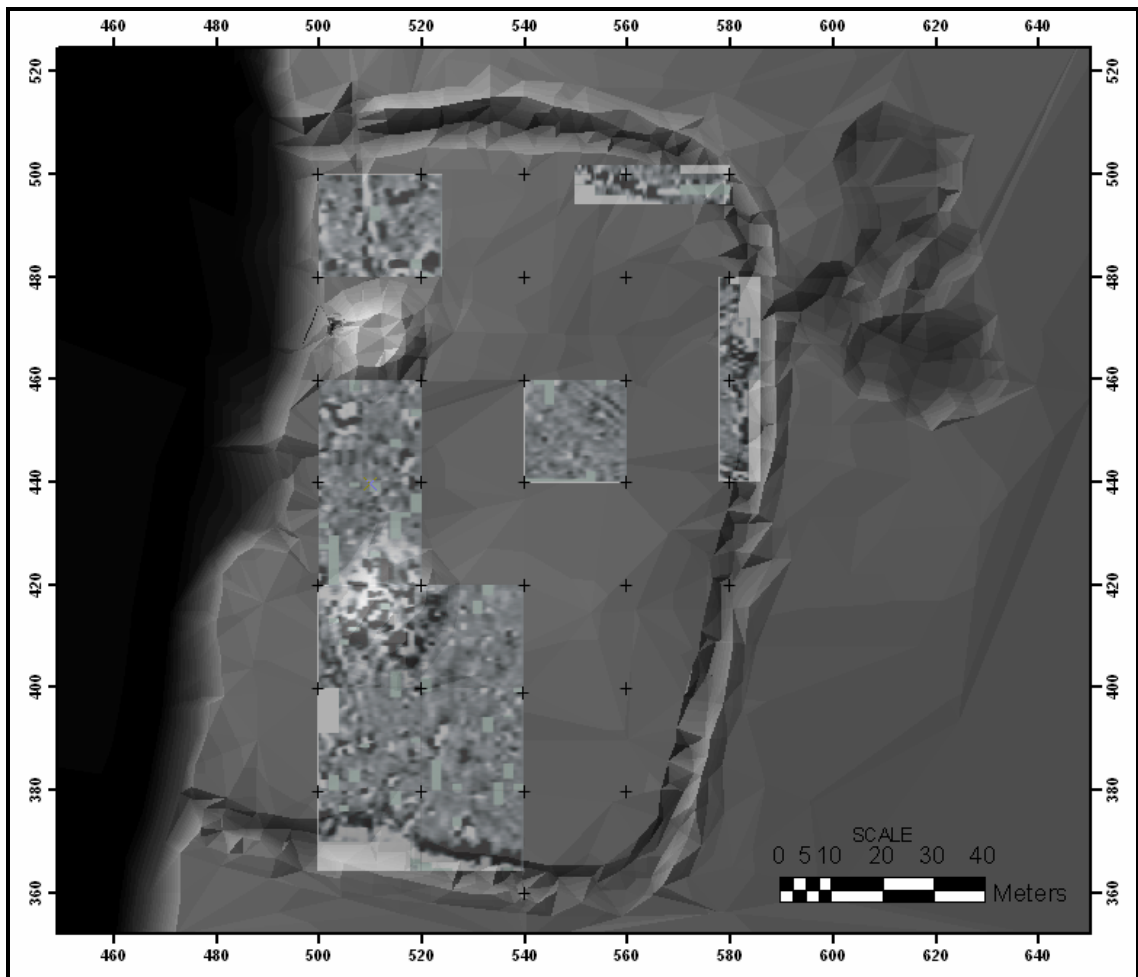


Figure 5.34. Magnetometer collection units at the Lawton site.

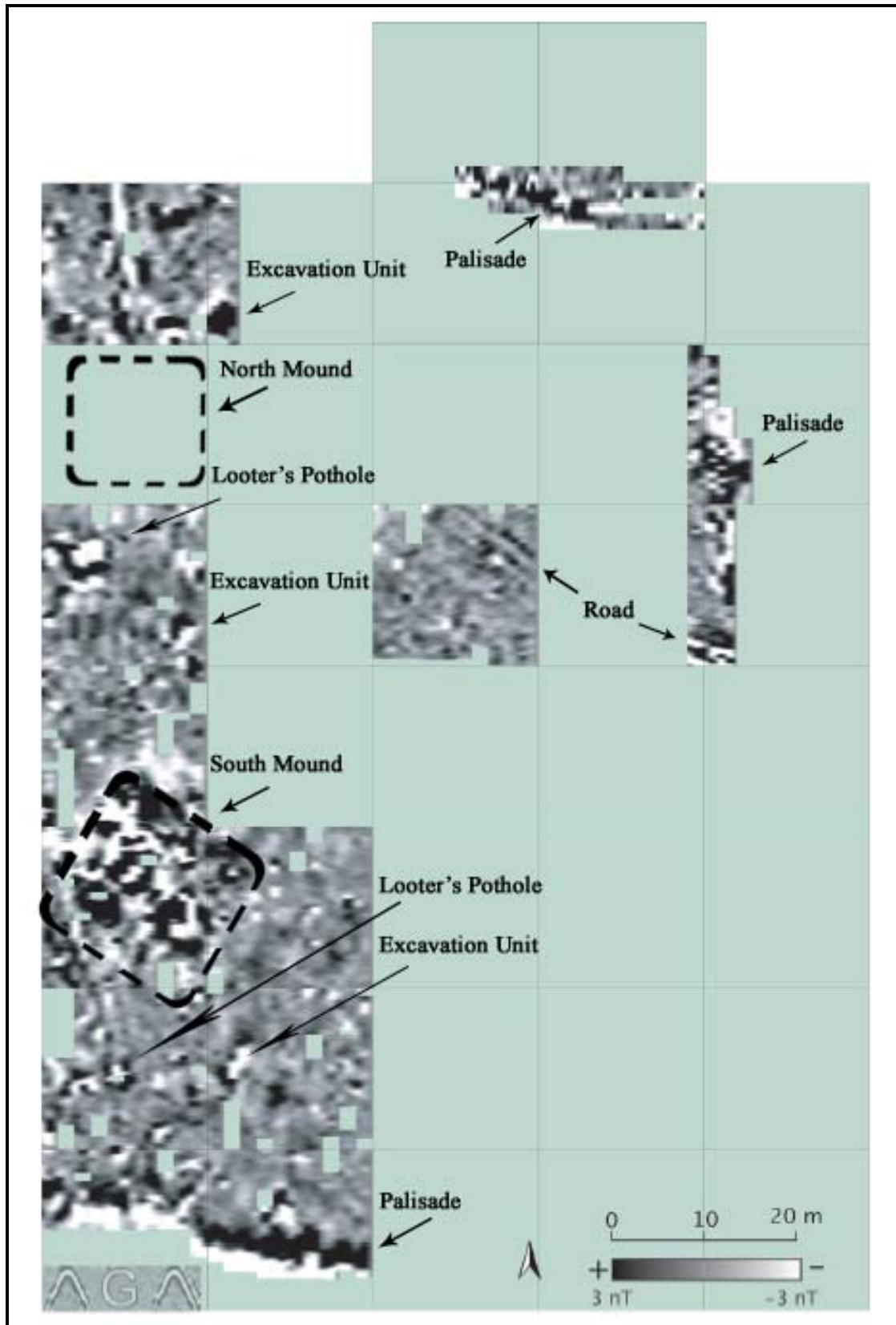


Figure 5.35. Interpretation of magnetometer data from the Lawton site (Walker 2007).

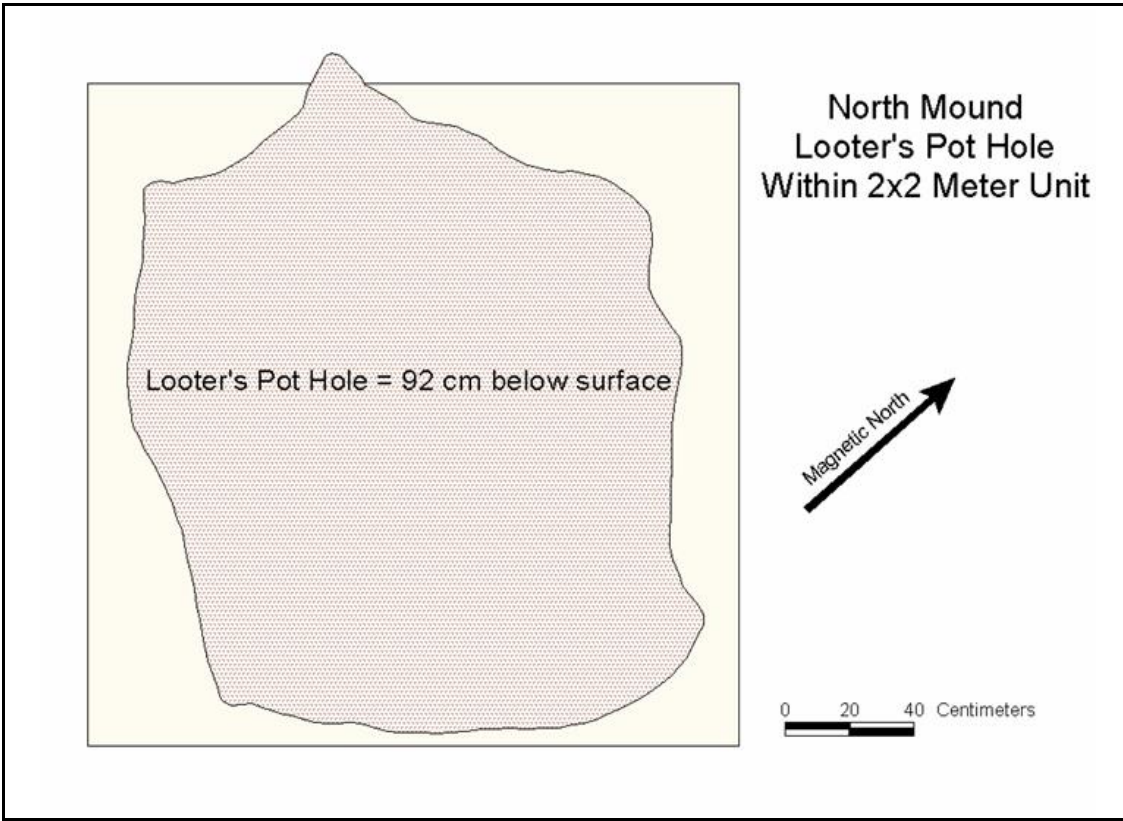


Figure 5.36. Excavation unit Provenience 129 on North Mound.

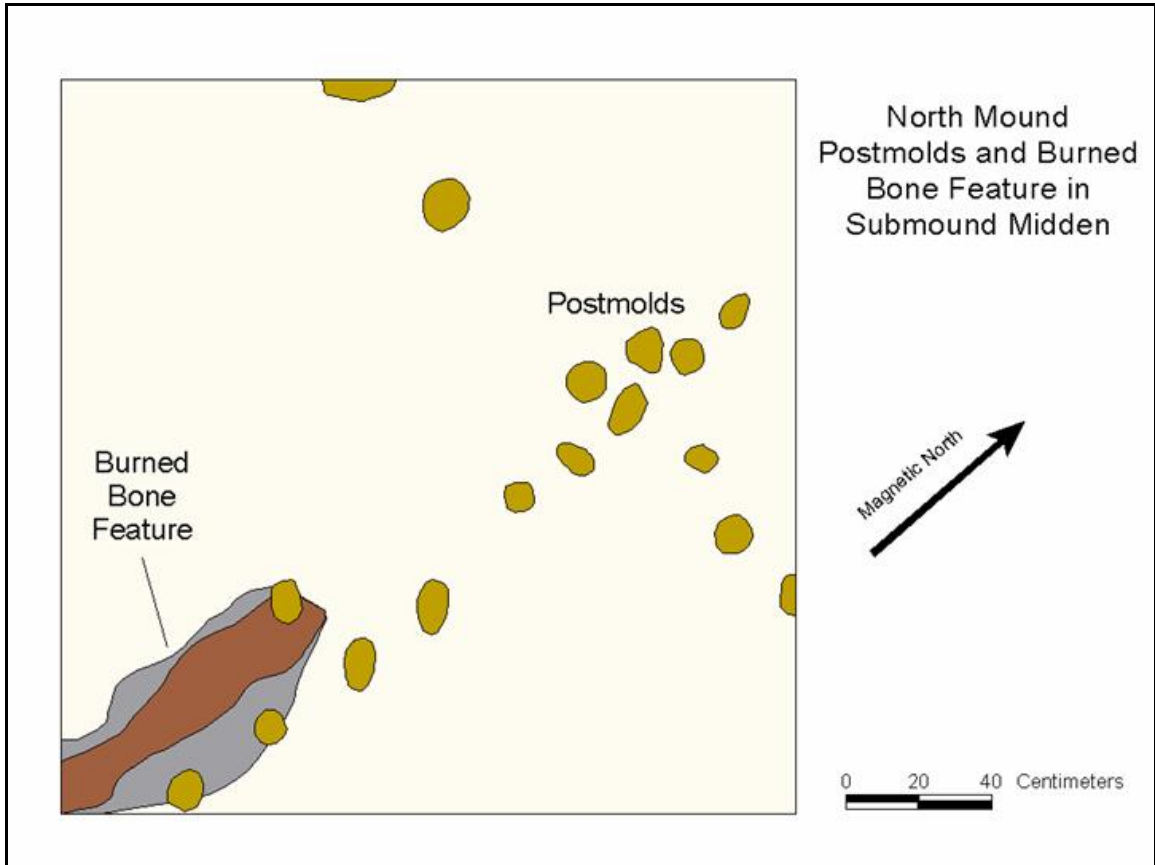


Figure 5.37. Excavation unit Provenience 129 submound structure.



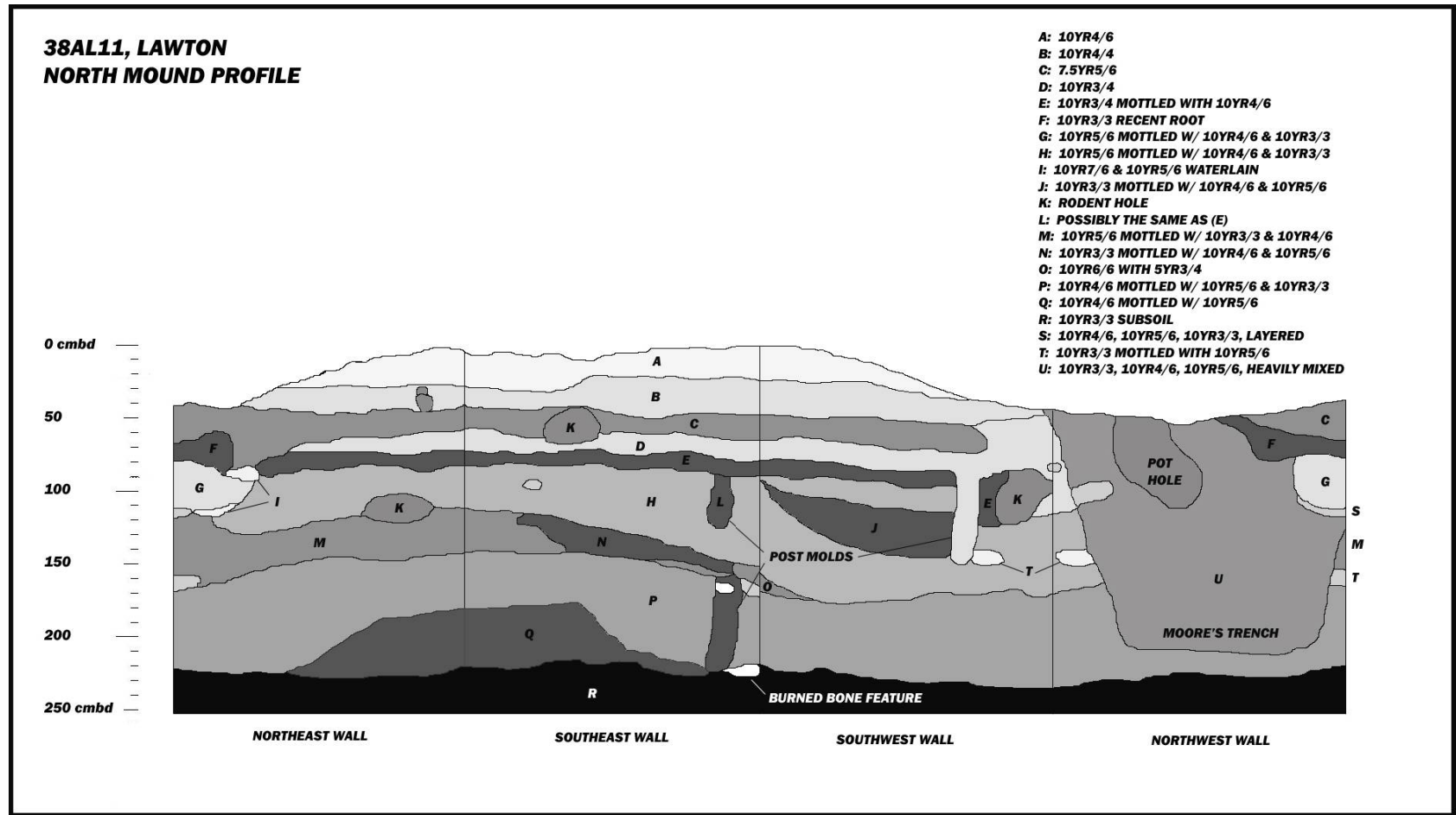


Figure 5.38. Excavation profiles and stratigraphy of the North Mound.

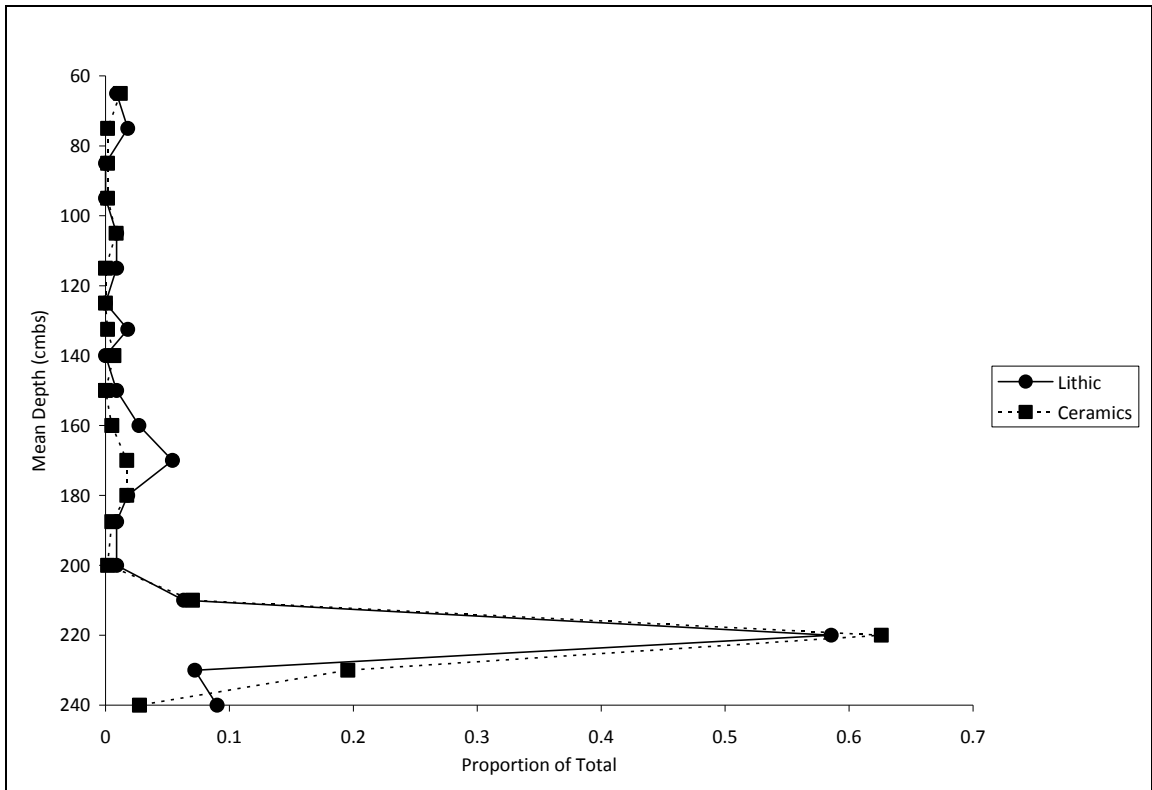


Figure 5.39. North Mound artifact occurrence by excavation level.

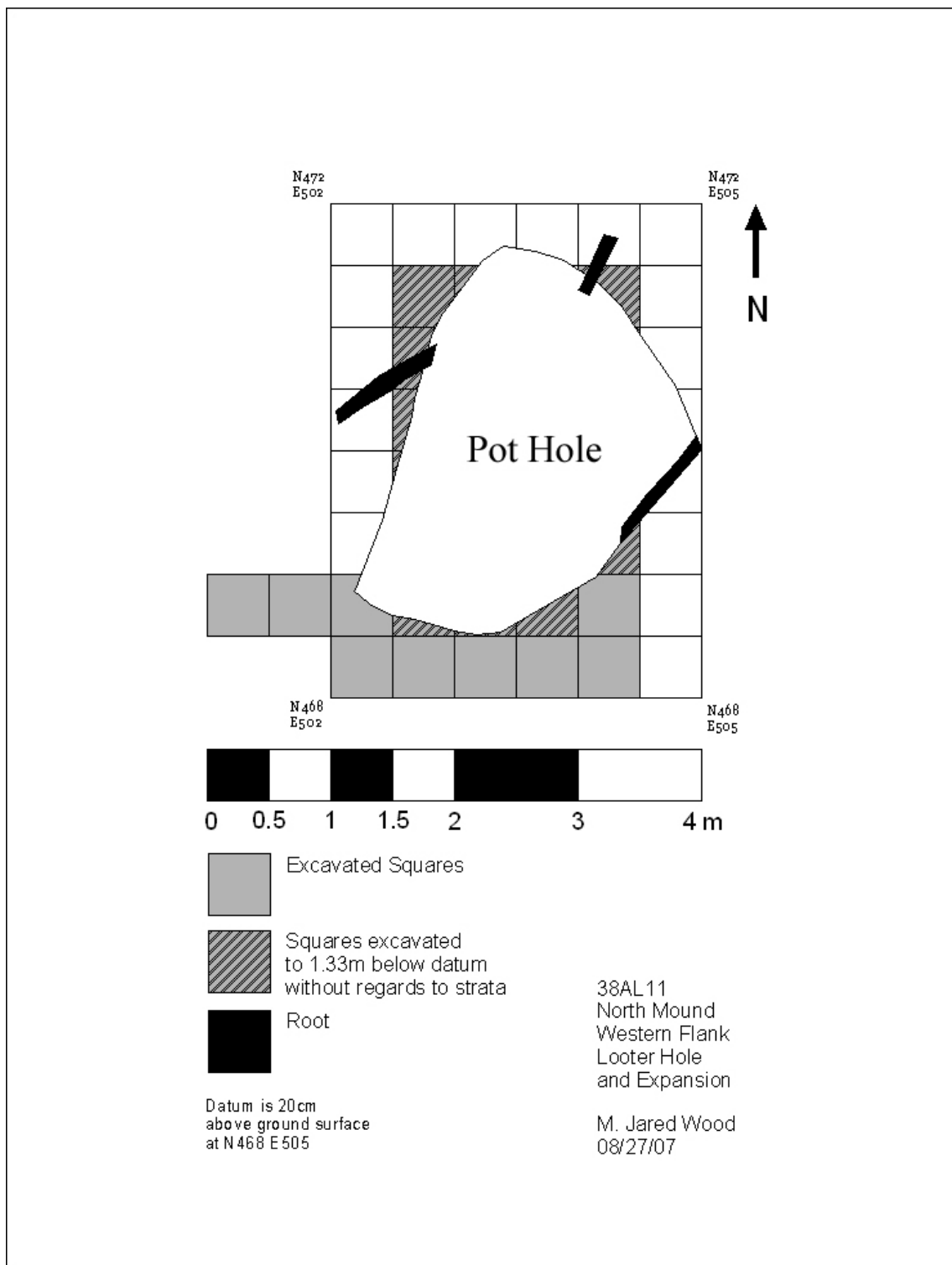


Figure 5.40. Location of UGA Block Excavation in relation to pothole on the western North Mound flank (from Wood 2009: Figure 4.7).

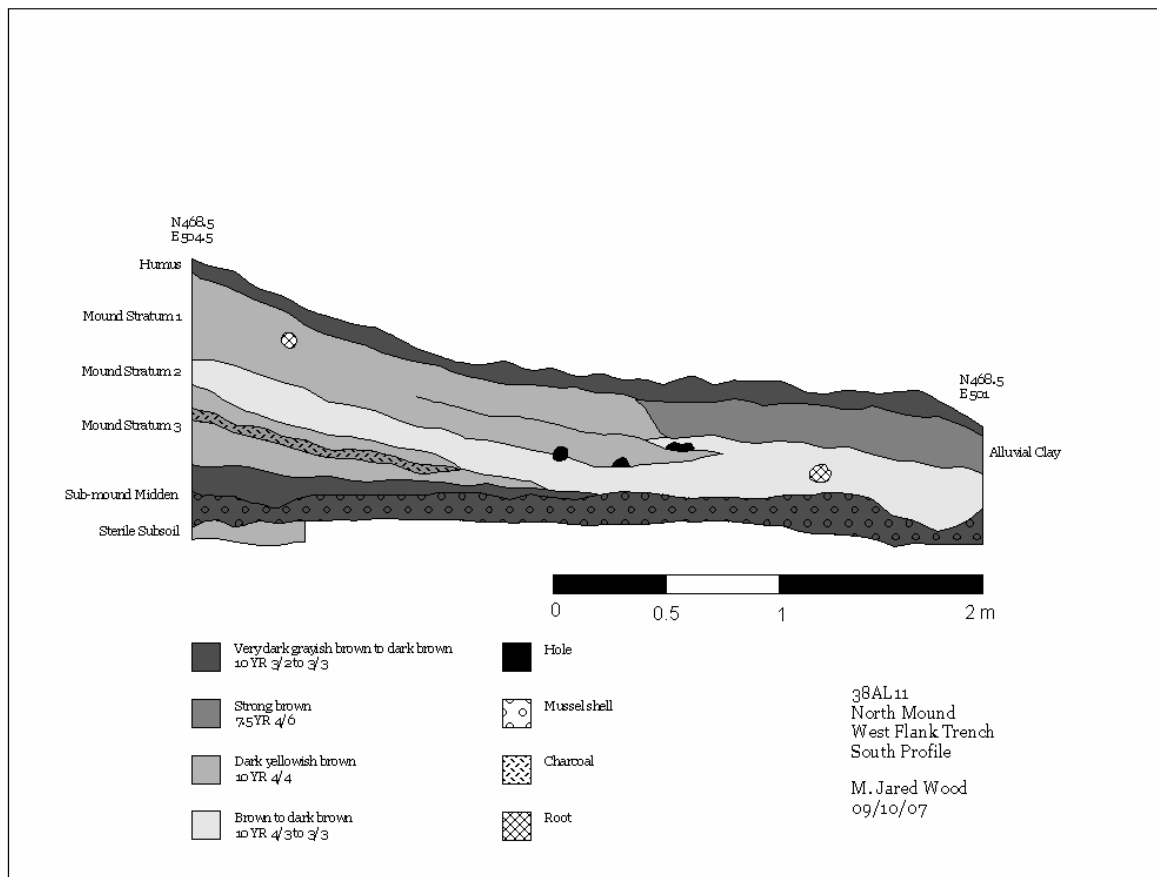


Figure 5.41. Profile of the North Mound western edge (from Wood 2009: Figure 4.10).

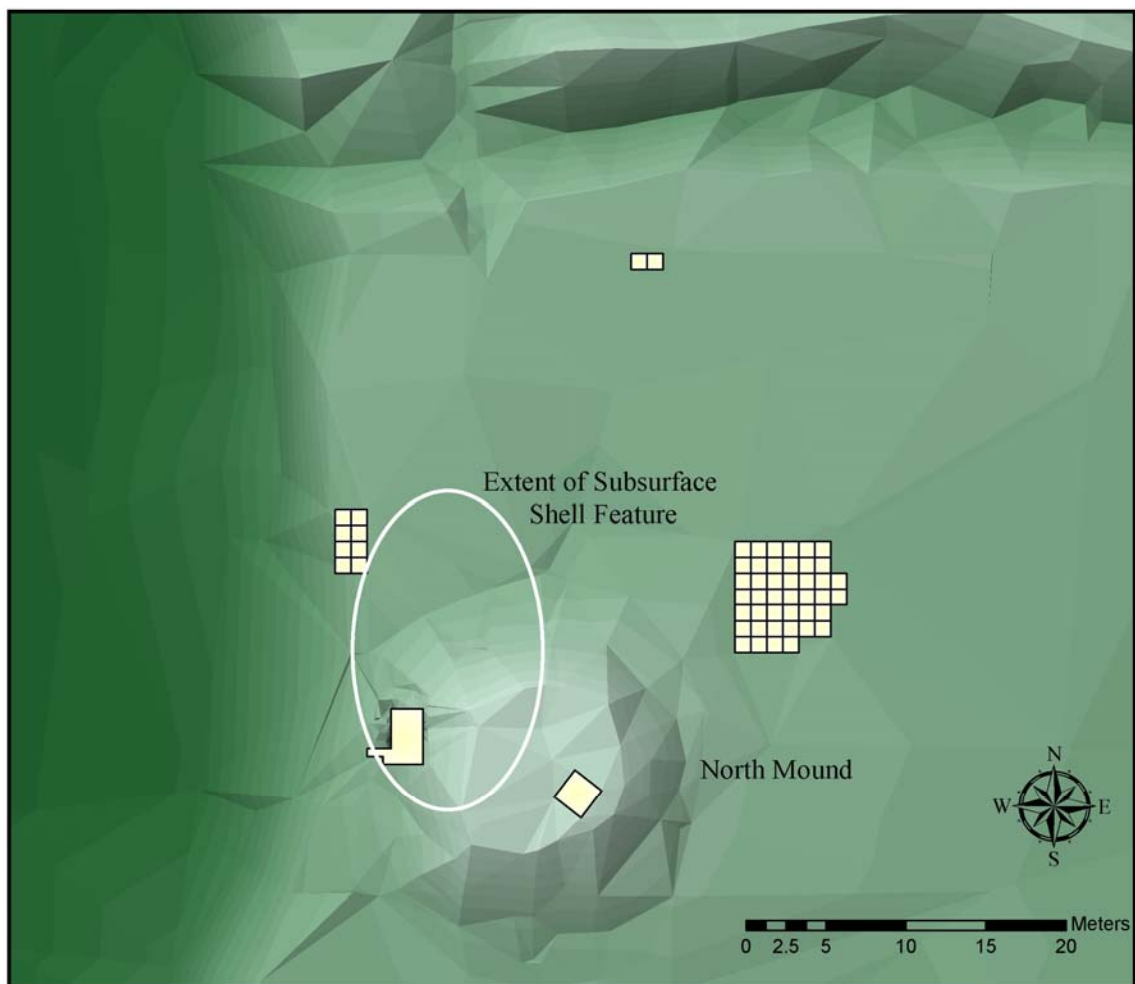


Figure 5.42. Location of UGA Block Excavation on the western North Mound flank and estimated extent of shell midden (modified from Wood 2009: Figure 4.15).

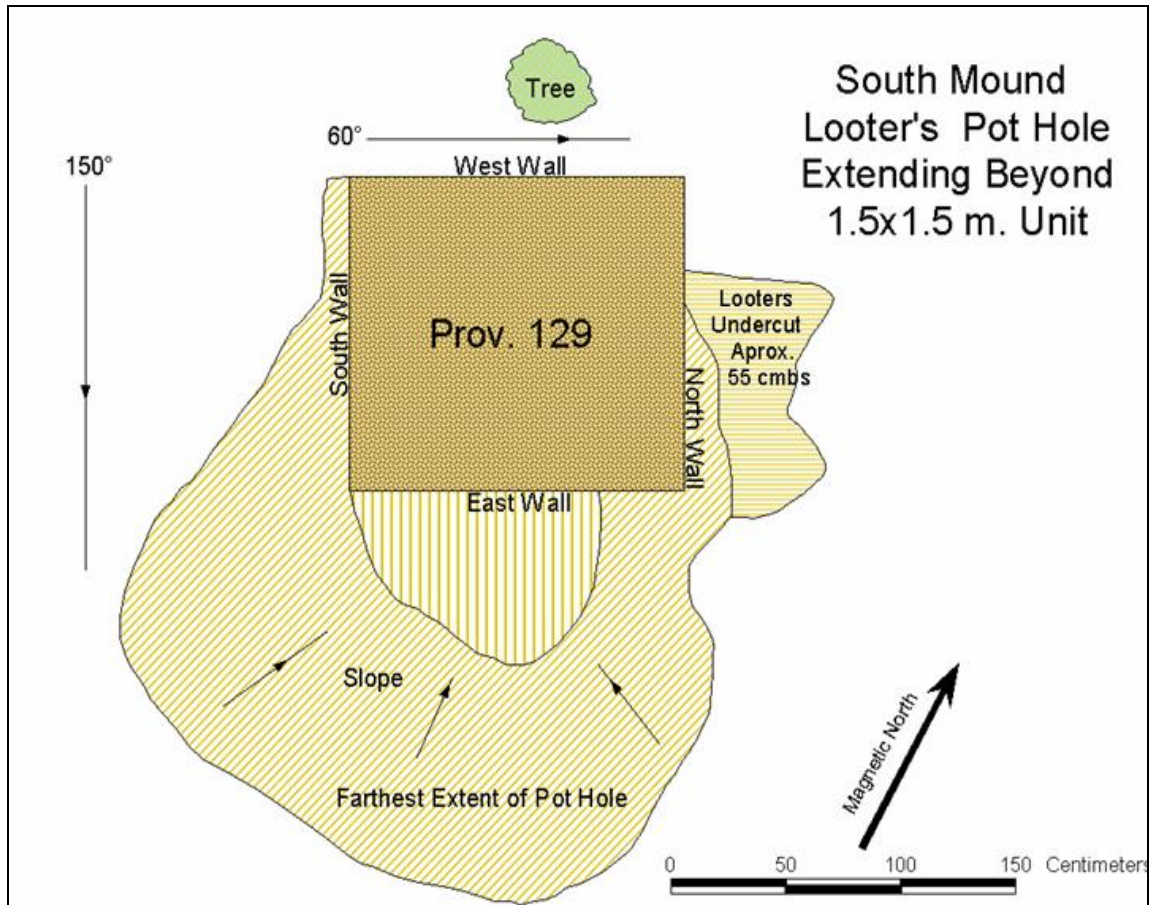


Figure 5.43. Location of Provenience 129 in relation to pothole on the South Mound.

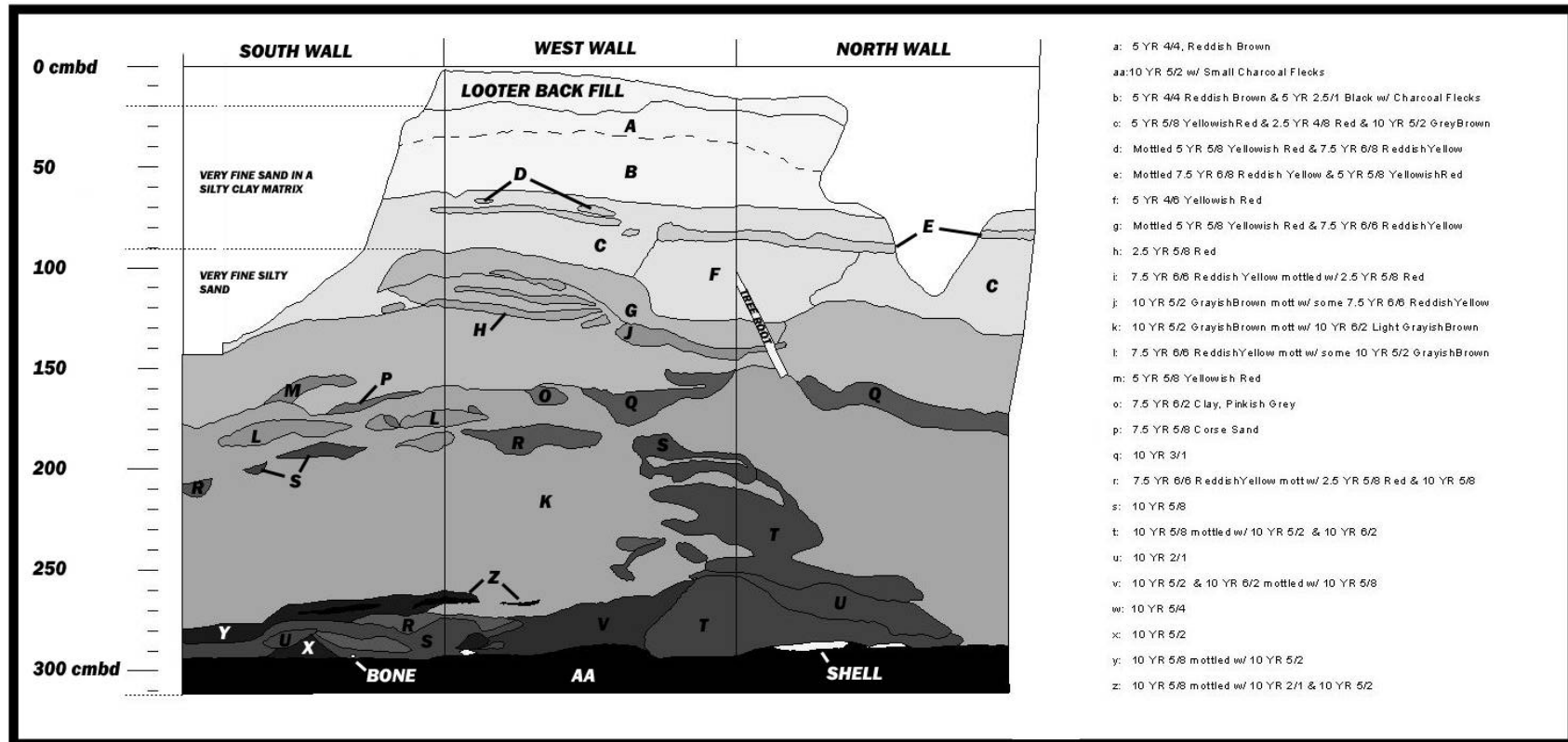


Figure 5.44. South Mound excavation profiles of Provenience 129.

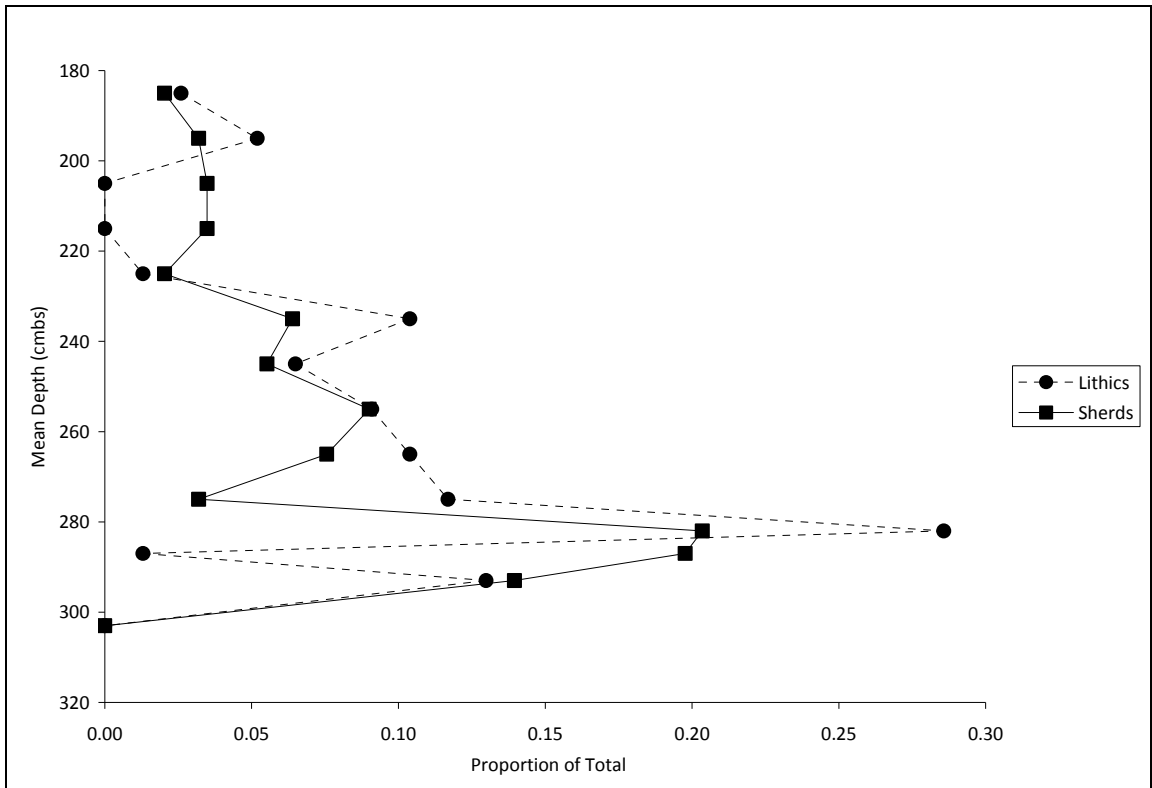


Figure 5.45. South Mound artifact occurrence by excavation level.





Figure 5.46. Wall trench and daub structure on lower summit of South Mound.



Figure 5.47. Exposed palisade trench feature at the Lawton site (view from the north).

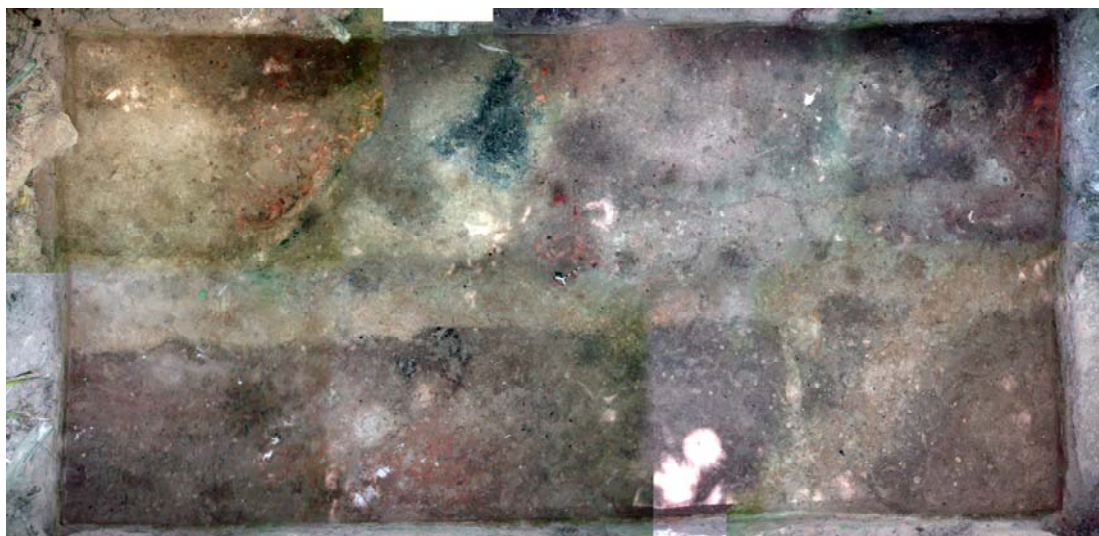


Figure 5.48. Plan view photograph of the palisade trench feature at the Lawton site.

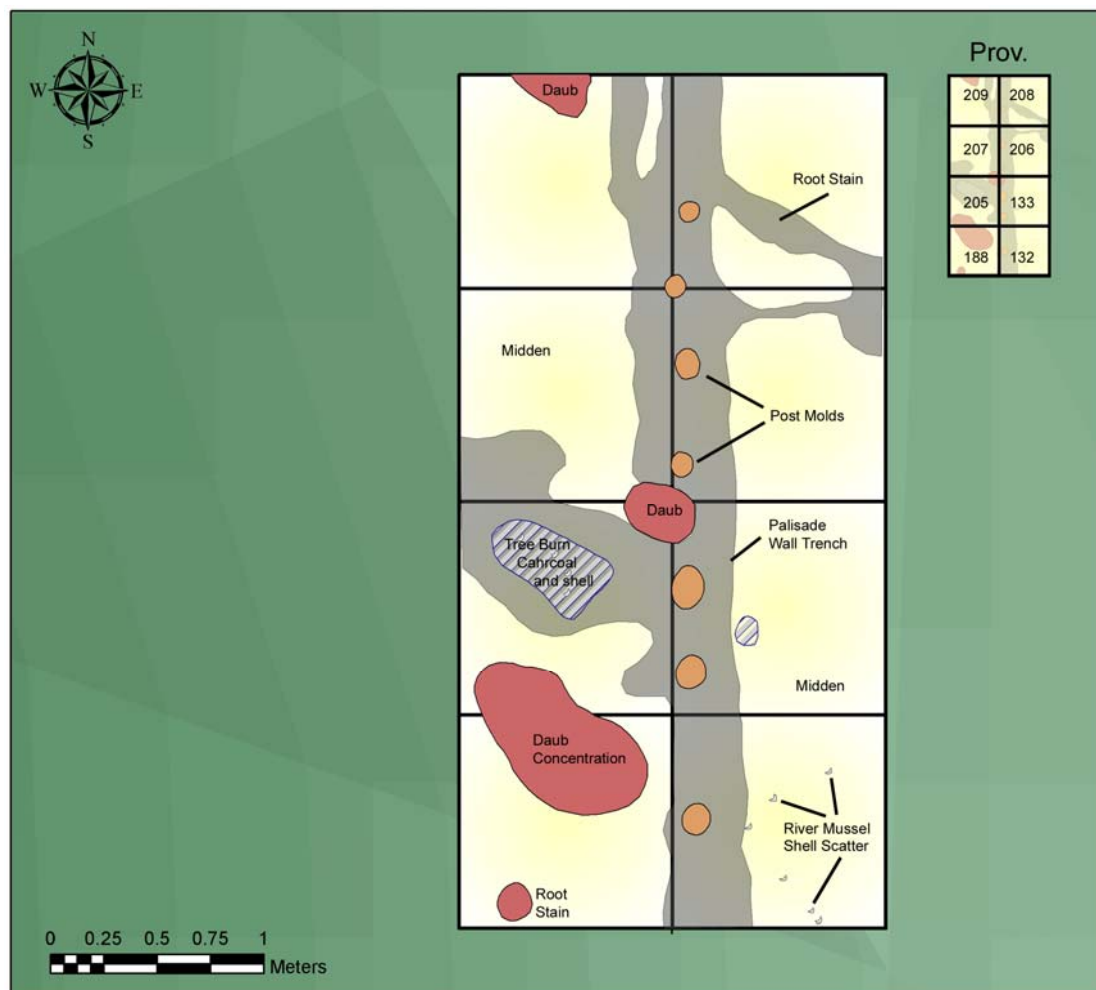


Figure 5.49. Plan view illustration of the palisade trench feature at the Lawton site.



Figure 5.50. Profile of palisade trench feature at the Lawton site.

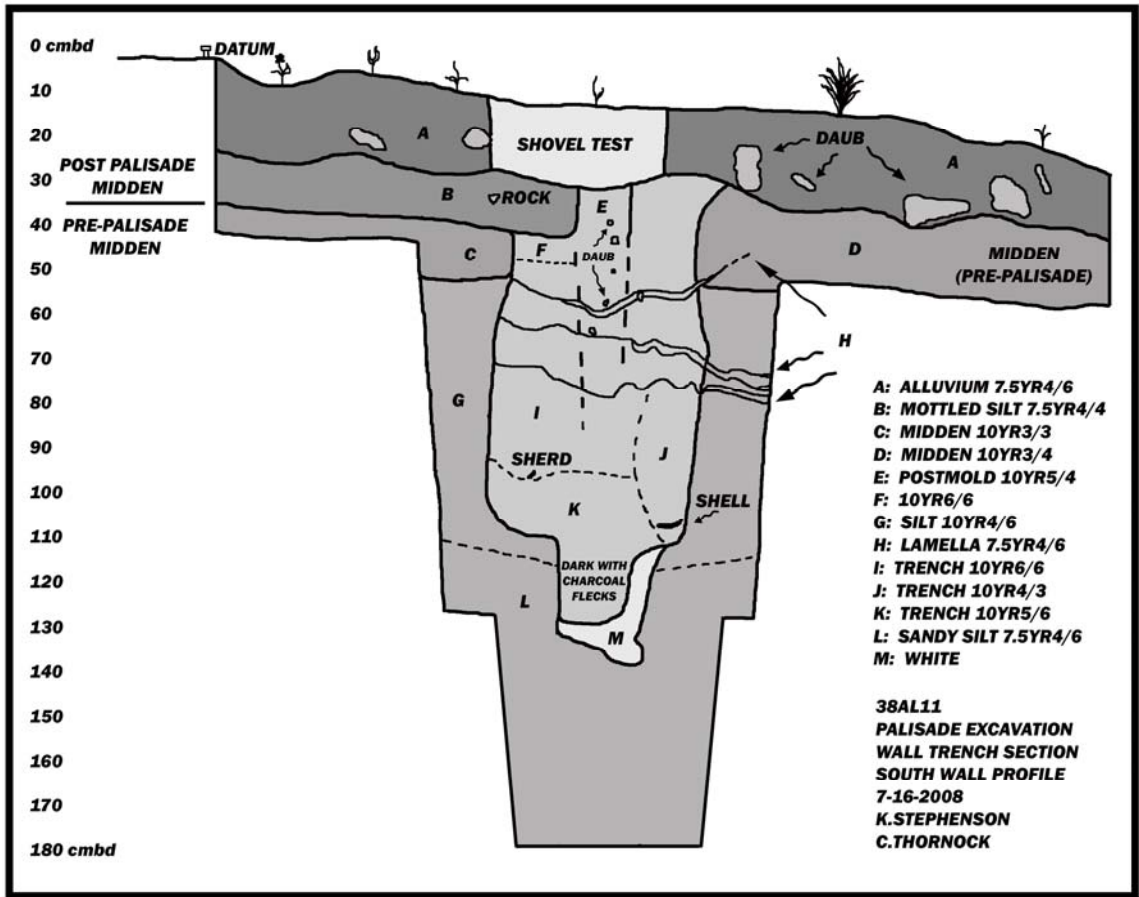


Figure 5.51. Profile illustration of palisade trench feature at the Lawton site.



Figure 5.52. Photograph of basal portion of palisade postholes at the Lawton site.

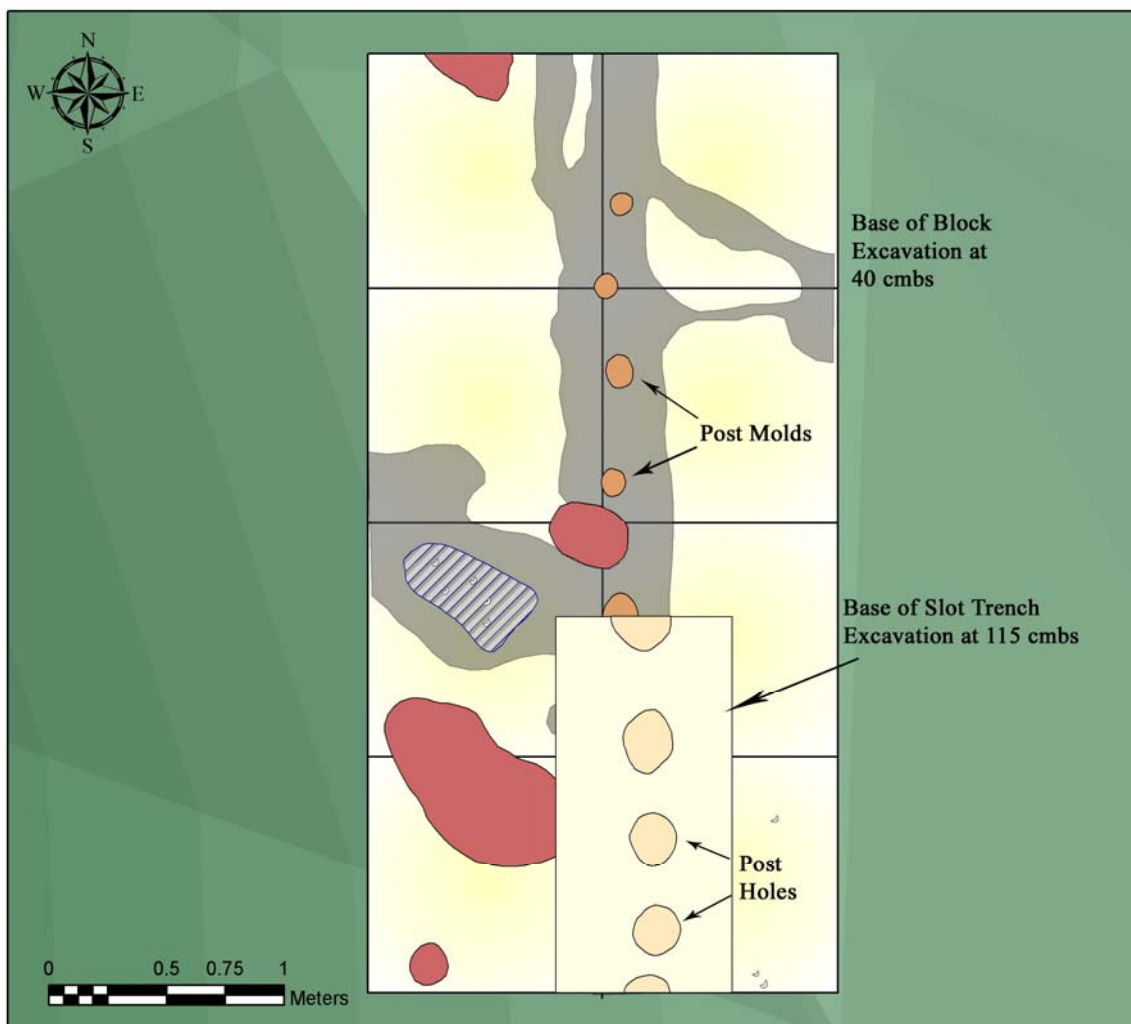


Figure 5.53. Plan view illustrations of basal portions of palisade postholes at the Lawton site.

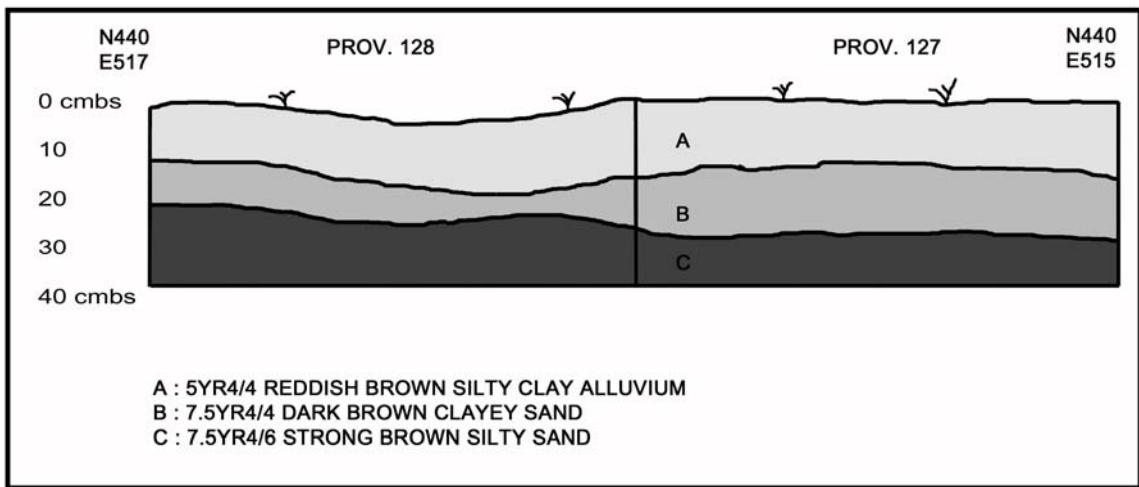


Figure 5.54. North profile of the test unit excavations in the Lawton site plaza area.



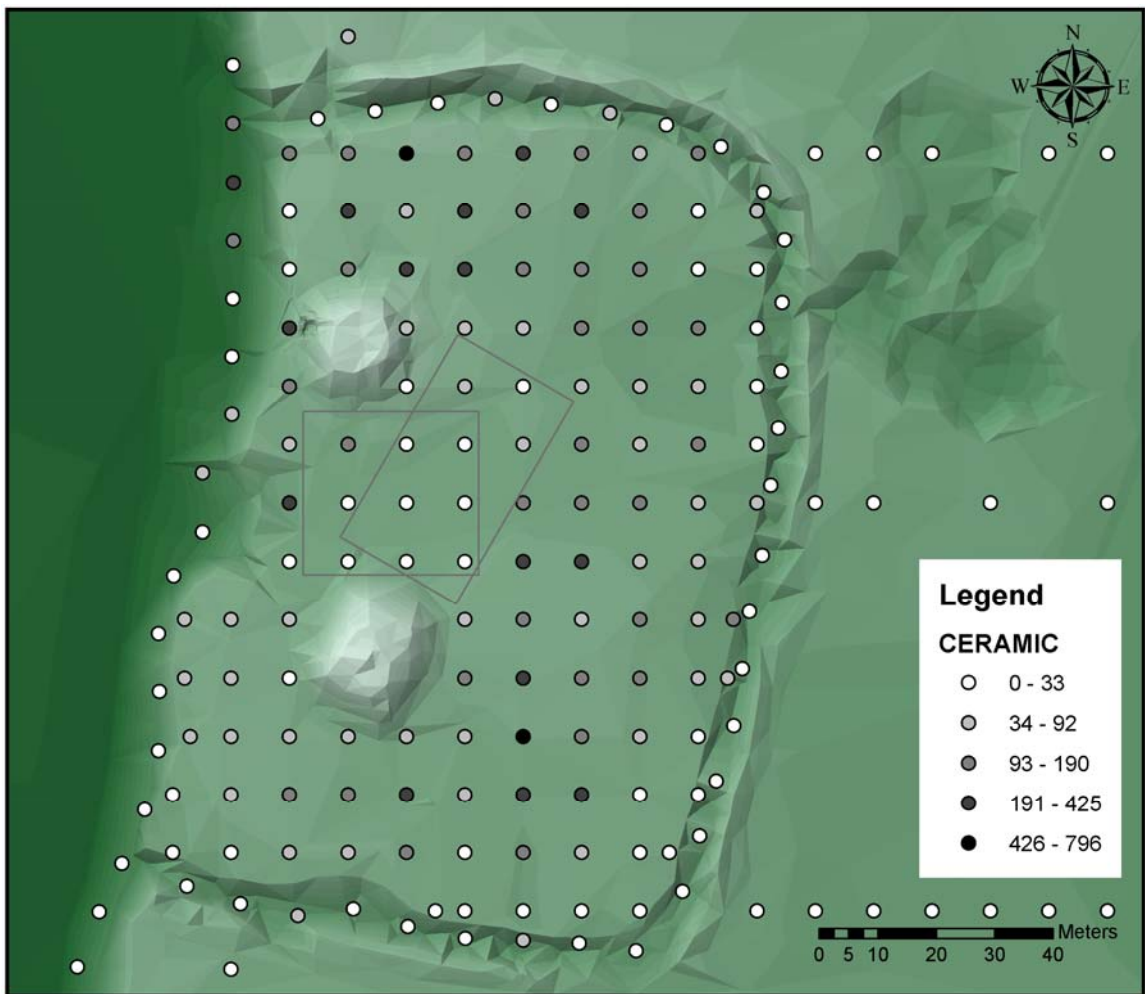


Figure 5.55. Projected locations and orientations of the Lawton site community plaza.

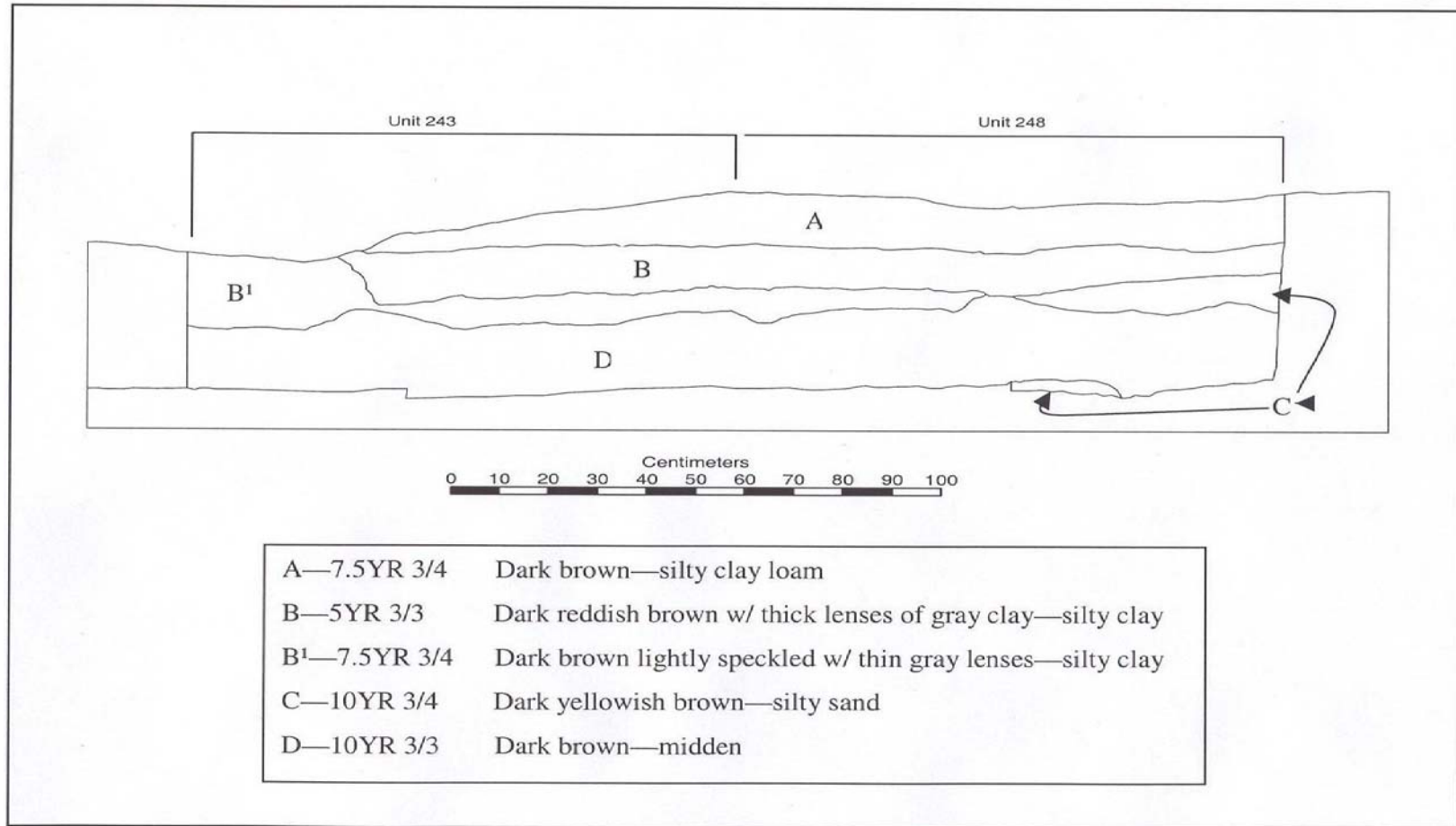


Figure 5.56. Typical profile section of the block excavation South Wall (Nelson 2005: Figure 7).

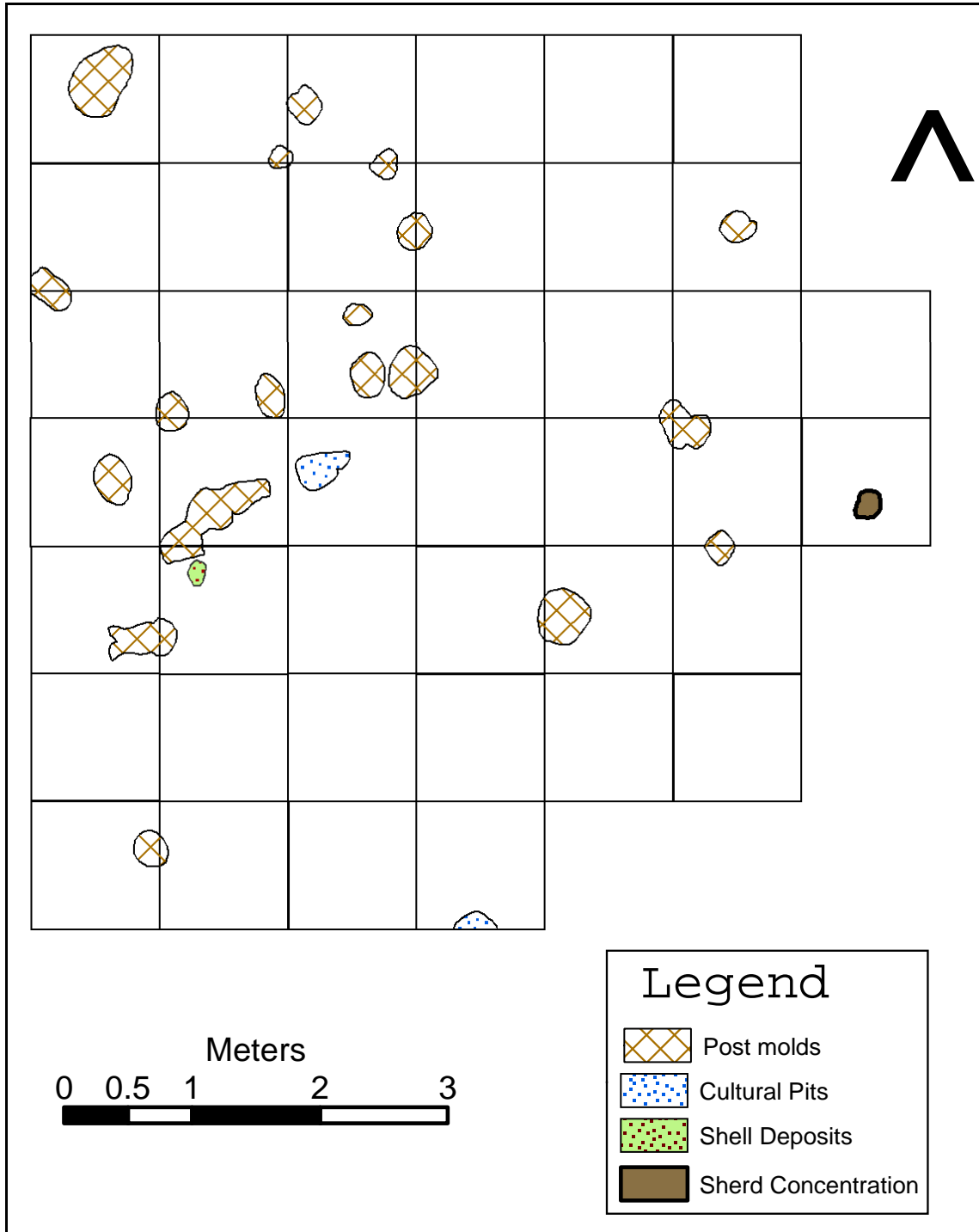


Figure 5.57. Plan view of block excavation plan view showing location of cultural features (Nelson 2005: Figure 13).

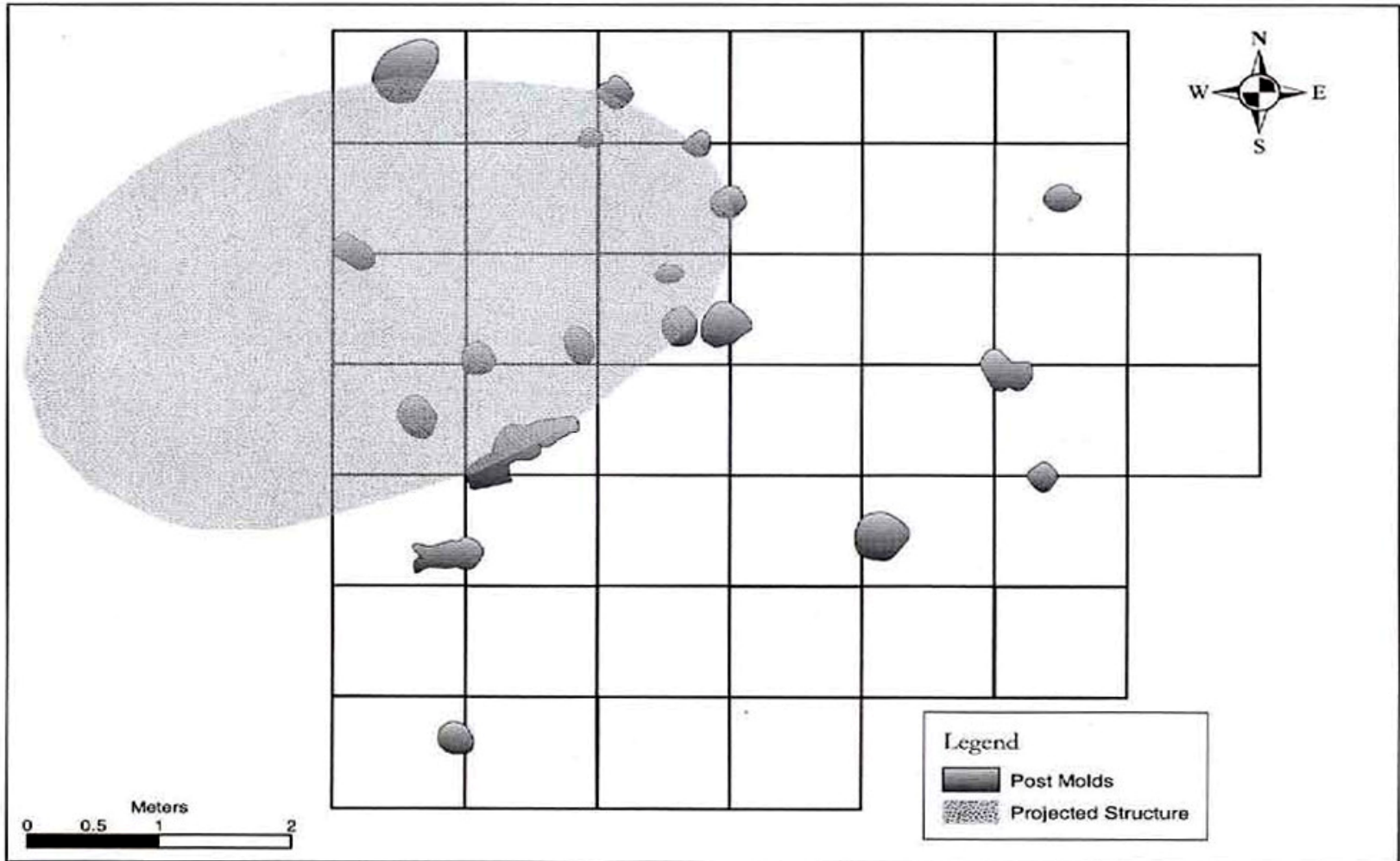


Figure 5.58. Project footprint of commoner residential structure at Lawton (Nelson 2005: Figure 15).

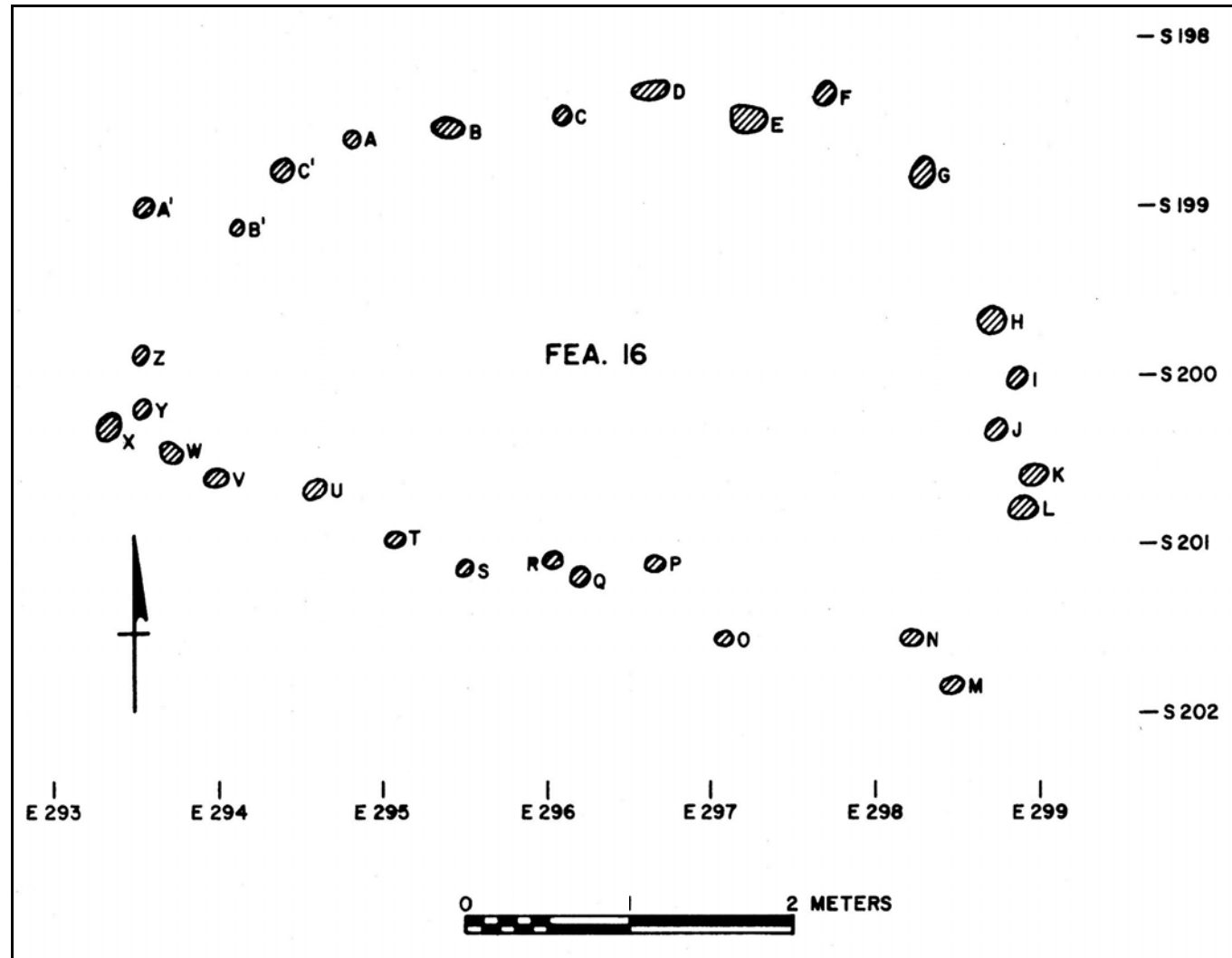


Figure 5.59. Plan view of domestic structure postmold pattern (Feature 16) at site 38BK235 (Brooks and Cabouts 1984: Figure 19).

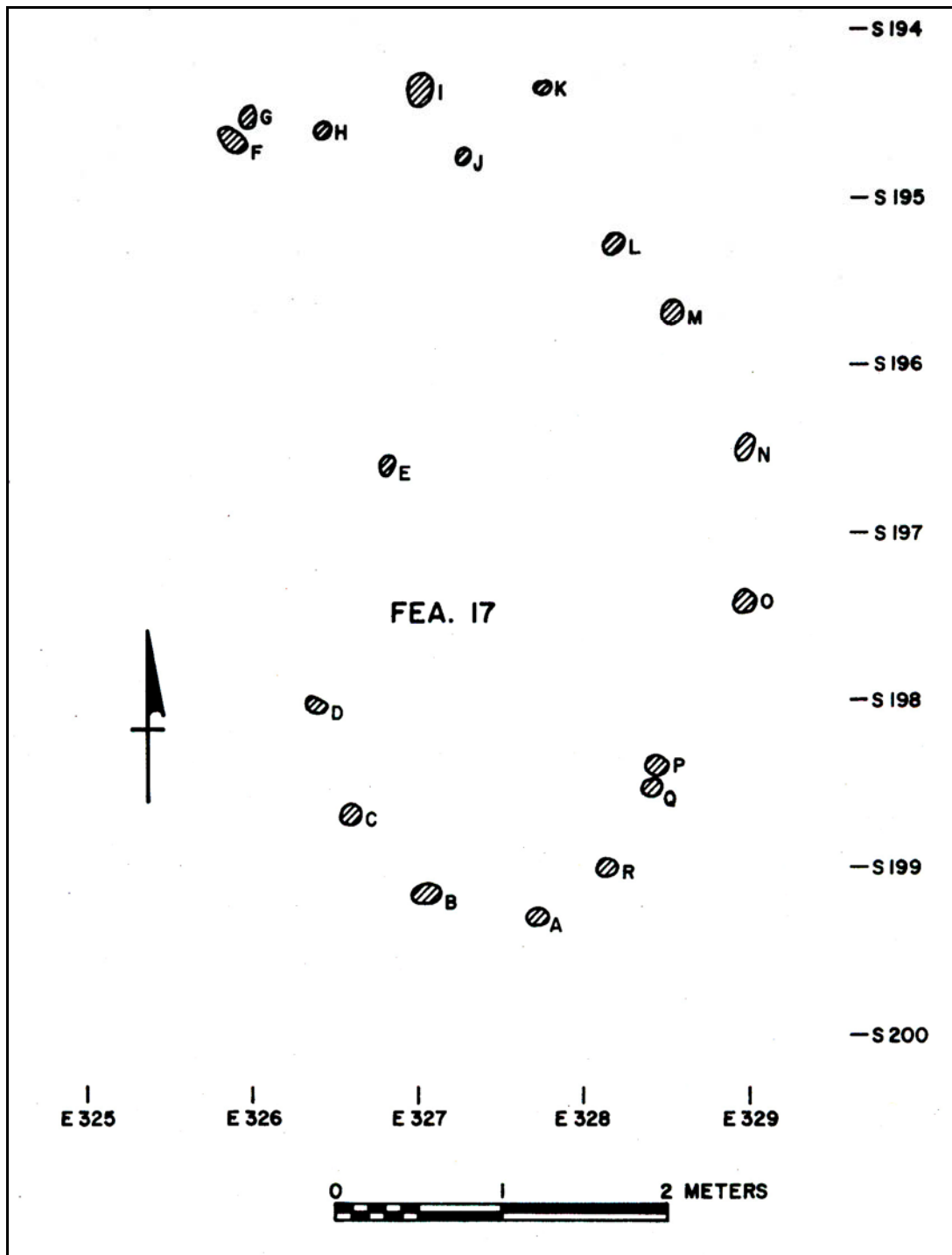


Figure 5.60. Plan view of domestic structure postmold pattern (Feature 17) at site 38BK235 Brooks and Cabouts 1984: Figure 20).

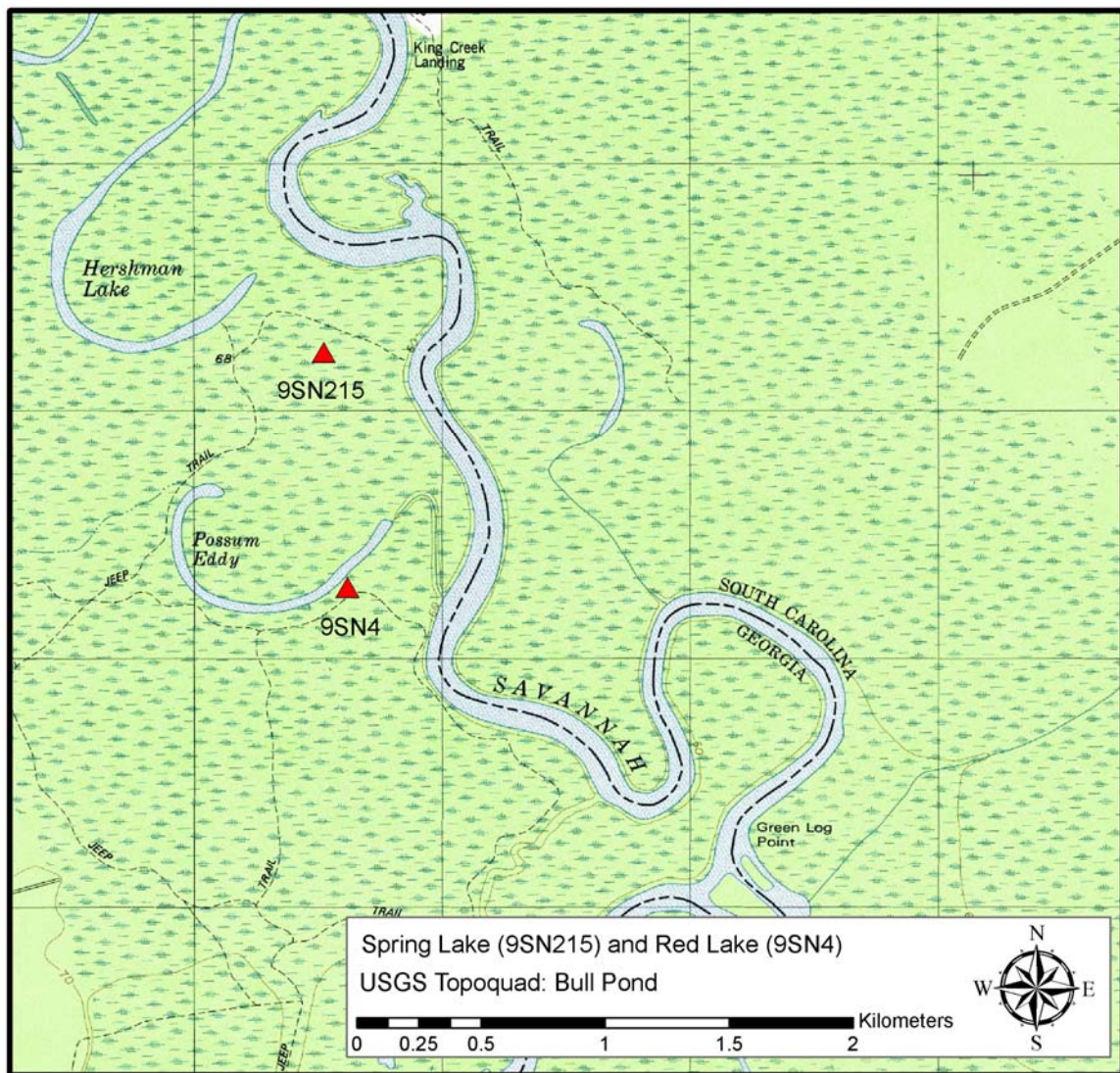


Figure 5.61. Topographic setting of the Spring Lake and Red Lake sites.

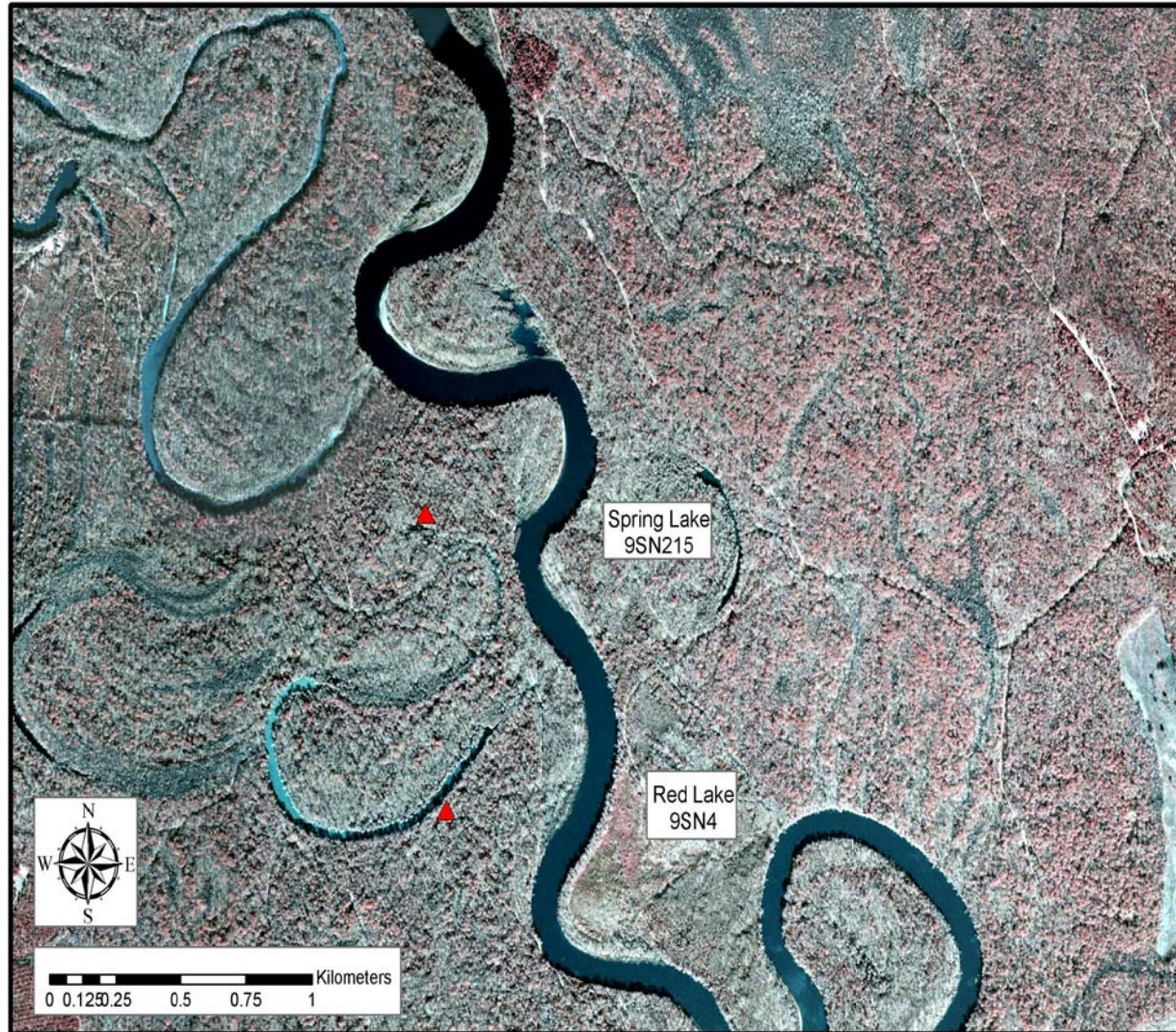


Figure 5.62. Floodplain setting of the Spring Lake and Red Lake sites (2006 aerial photograph).



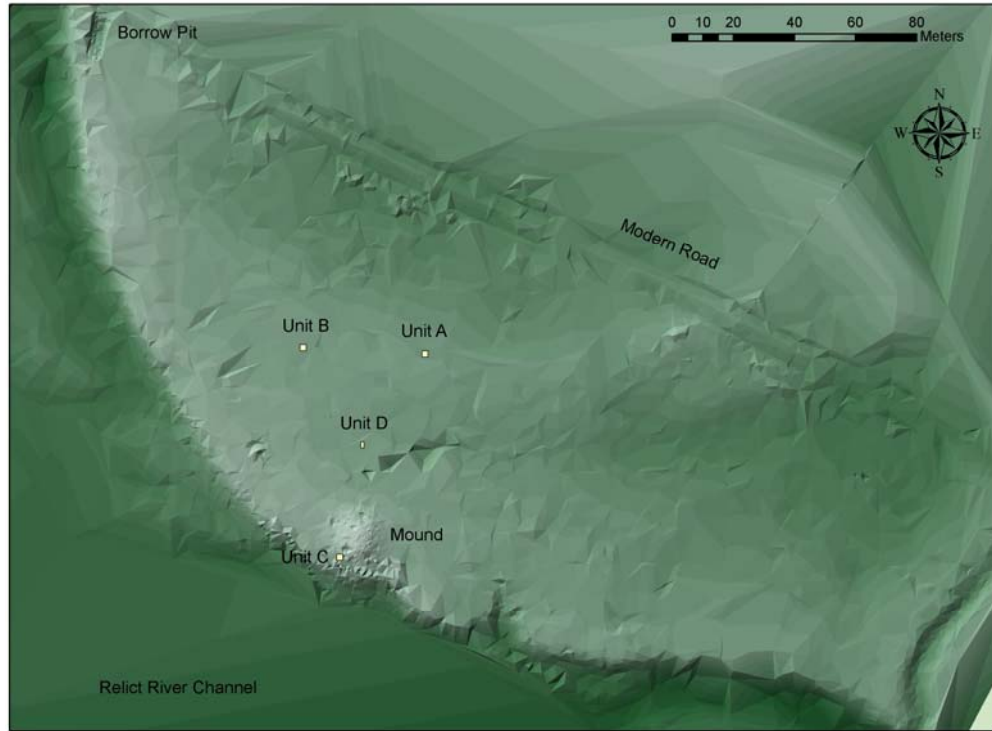


Figure 5.63. Isometric view of the Spring Lake site (adapted from Wood 2009: Figure 4.18).

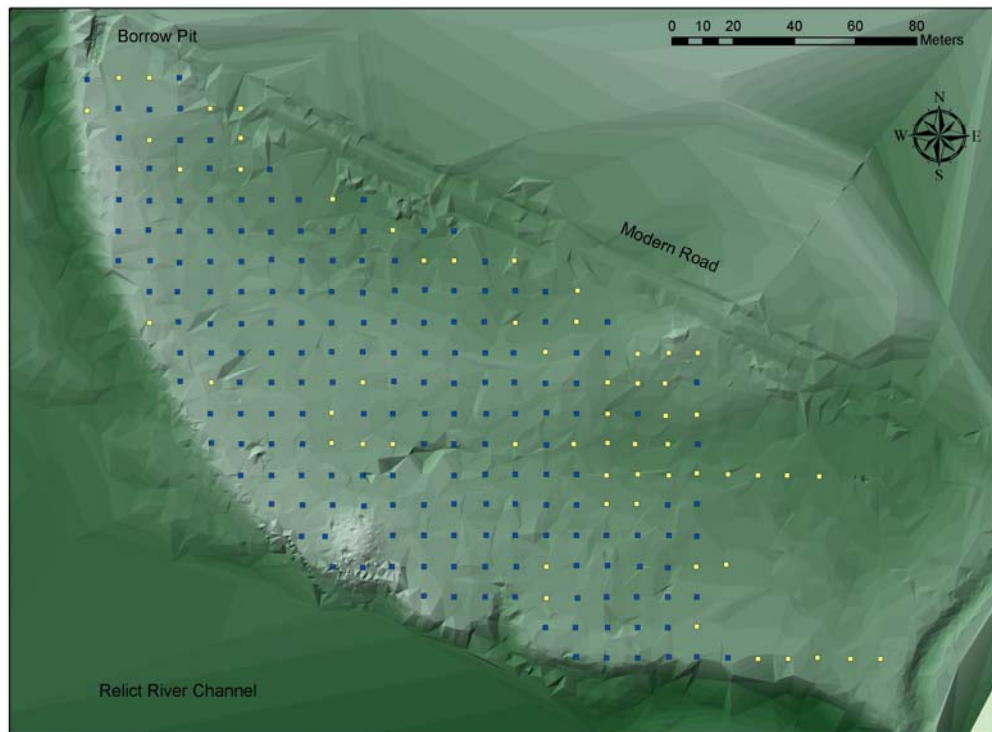


Figure 5.64. Spring Lake site showing shovel test pit locations (adapted from Wood 2009: Figure 4.20).

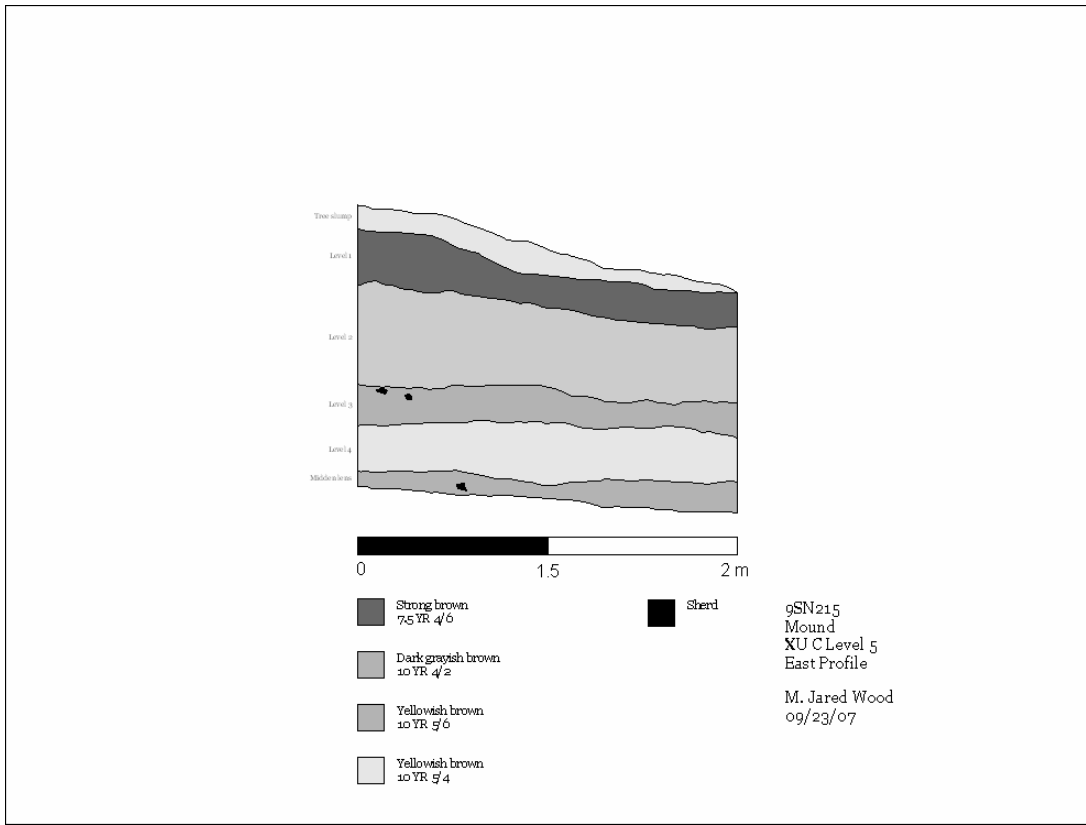
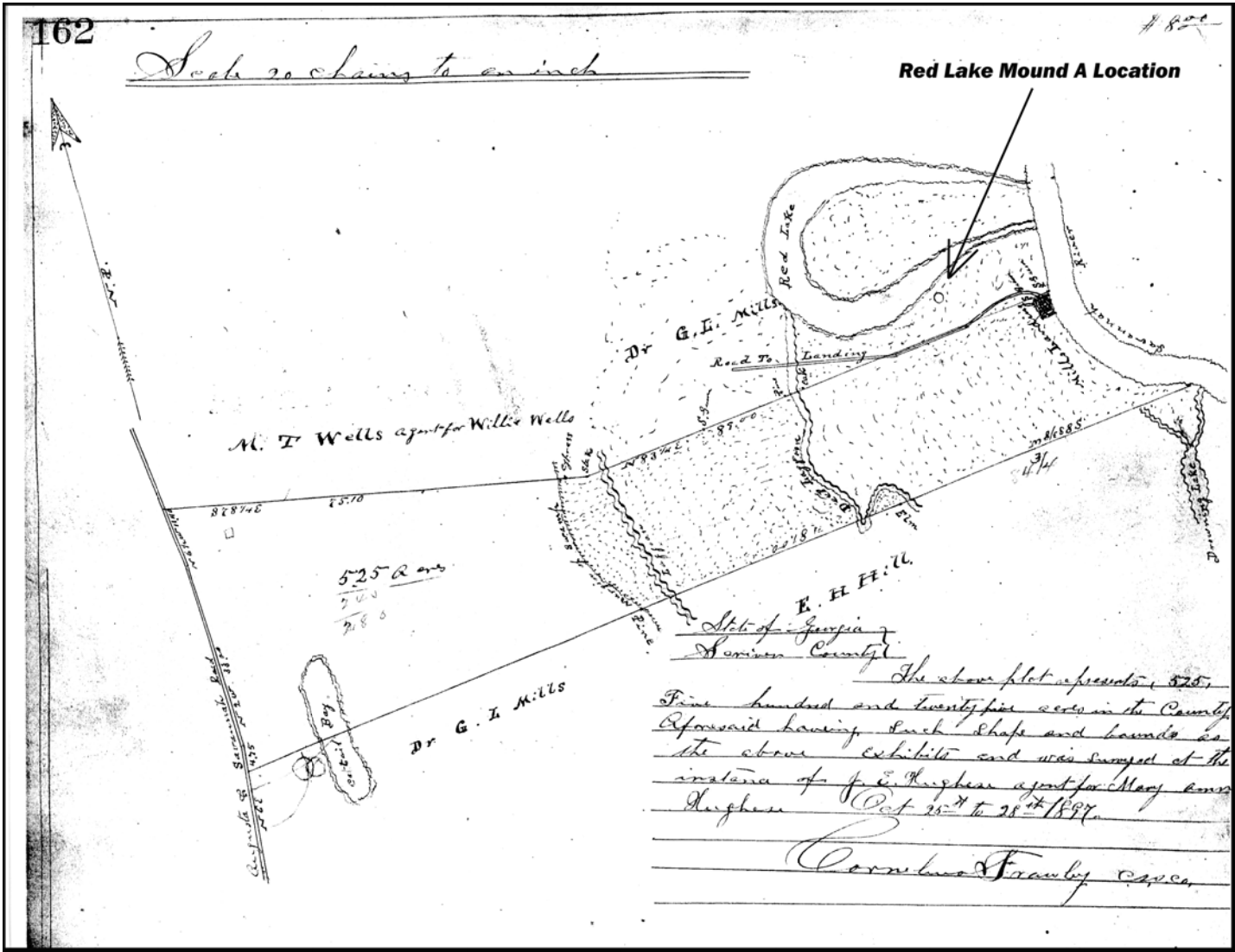


Figure 5.65. Profile of mound stratigraphy (from Wood 2009: Figure 4.30).

Scale 20 chains to an inch

# 800

**Red Lake Mound A Location**



The above plot represents 525  
 Five hundred and twenty five acres in the County  
 aforesaid having such shape and bounds as  
 the above exhibits and was surveyed at the  
 instance of J. H. Hughes agent for Mary Ann  
 Hughes Oct 25<sup>th</sup> to 28<sup>th</sup> 1897.

Cornelia Frauley ex'ca.

Figure 5.66. Plat of the Mary Ann Hughes property in 1897 showing Mills Landing and Mound A at the Red Lake site (Clerk of Courts Office Book, Screven Co., Surveyor's Record BB:162, Slide 1079; mound symbol in original, label and location arrow added).

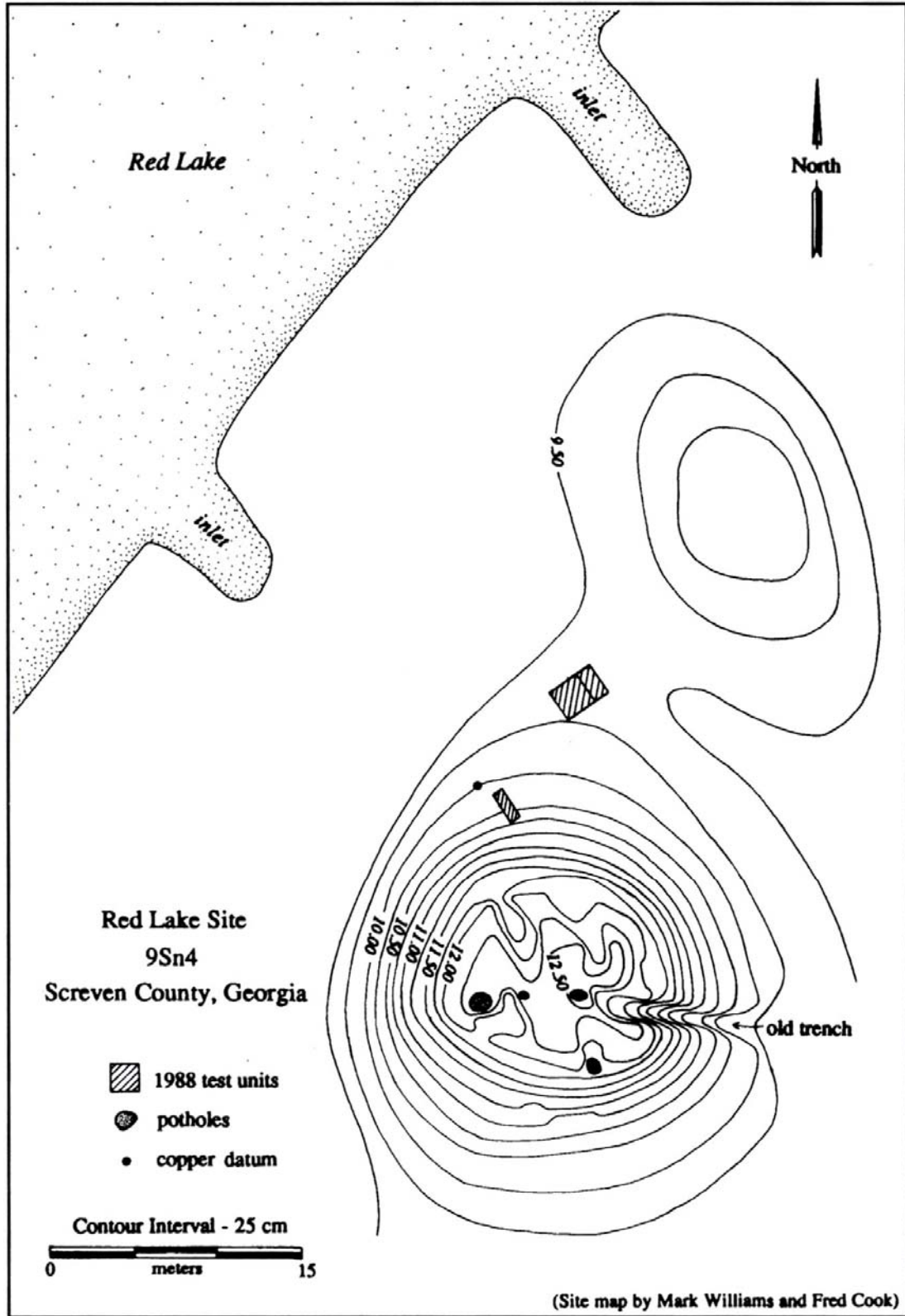


Figure 5.67. Topographic map of Red Lake mounds by M. Williams and F. Cook (Anderson 1994: Figure 25).

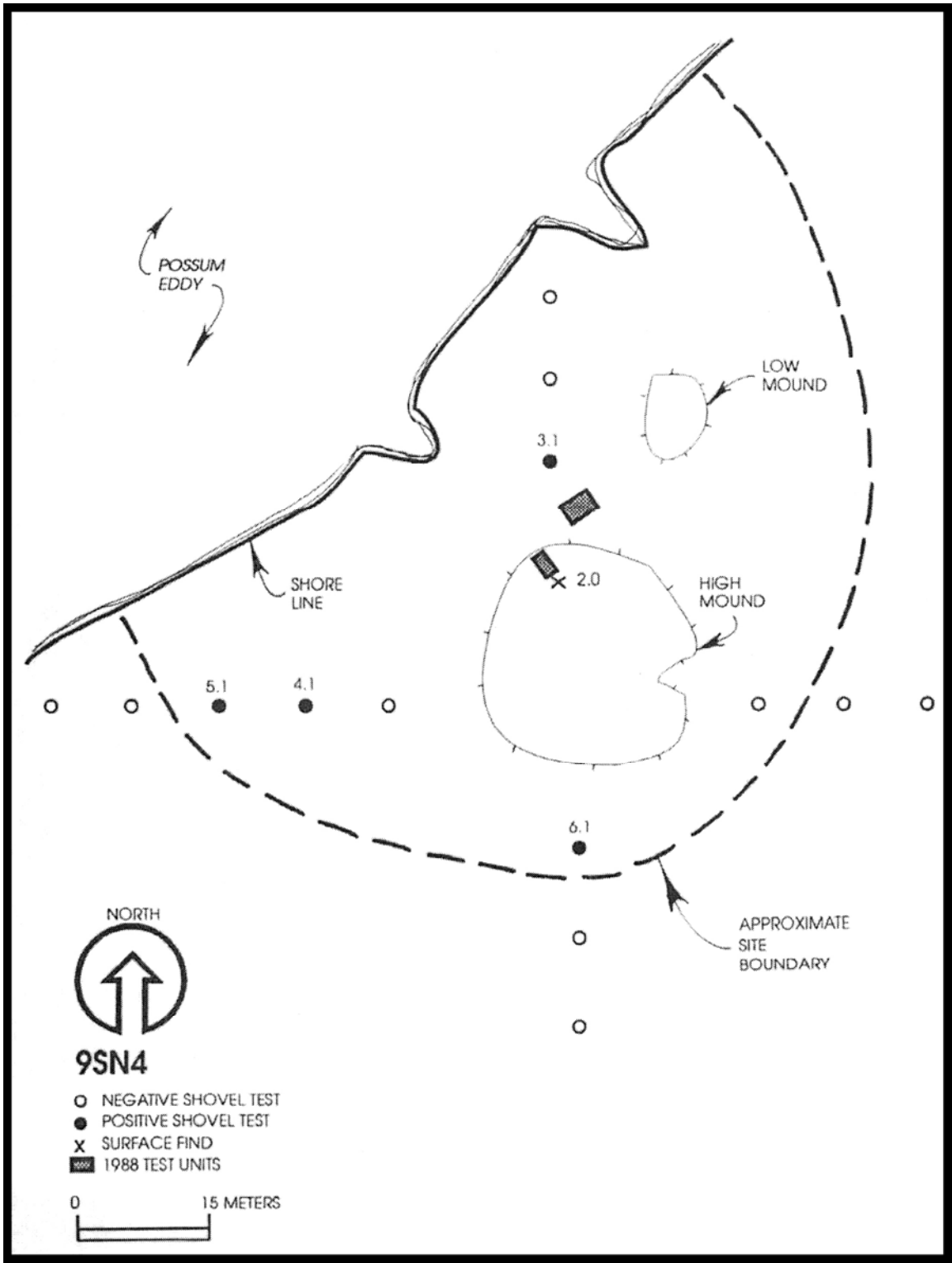


Figure 5.68. Site plan of Red Lake by Brockington and Associates, Inc. (Espenshade et al. 1994: Figure 10).

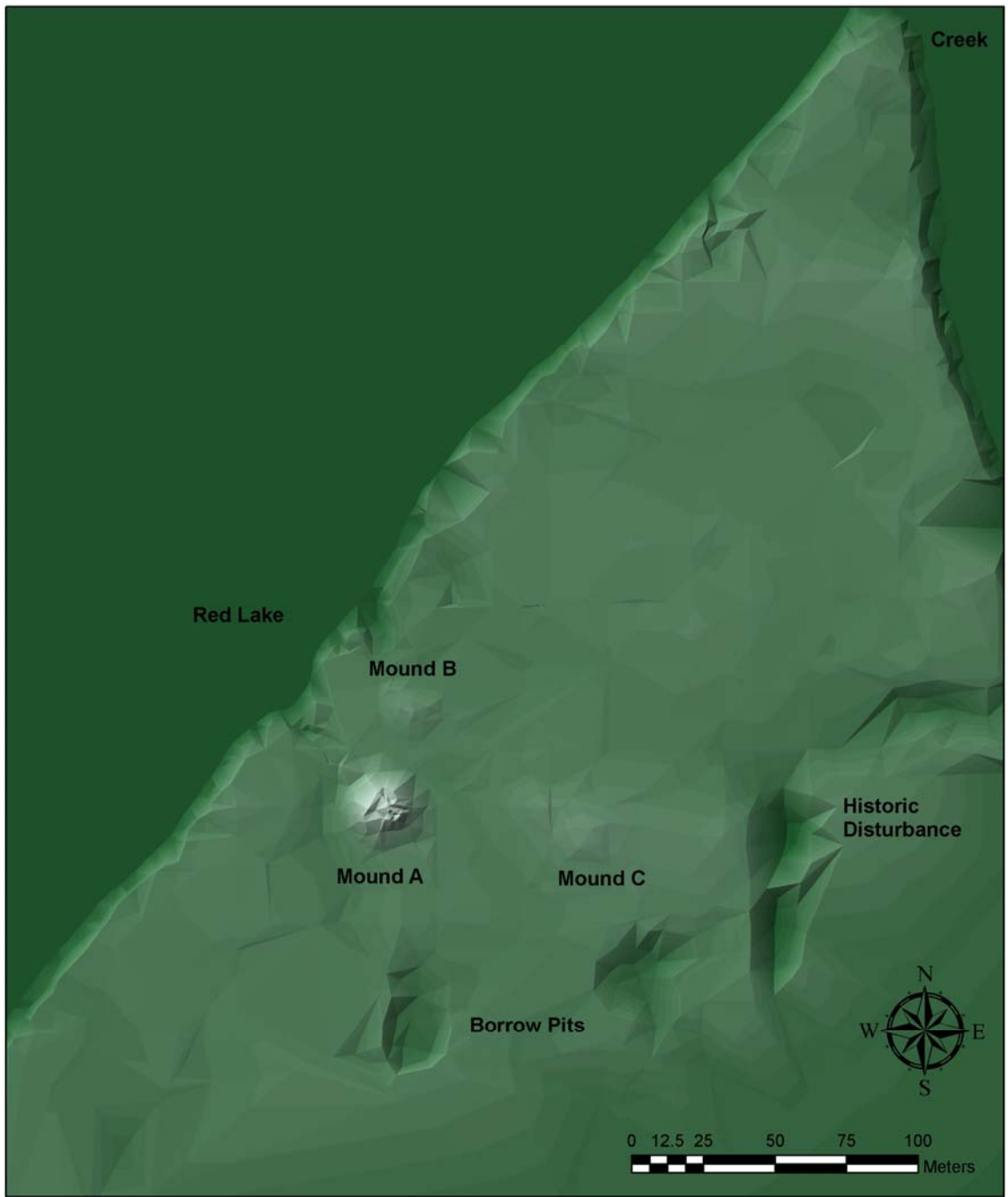


Figure 5.69. Isomorphic plan view of the Red Lake site.

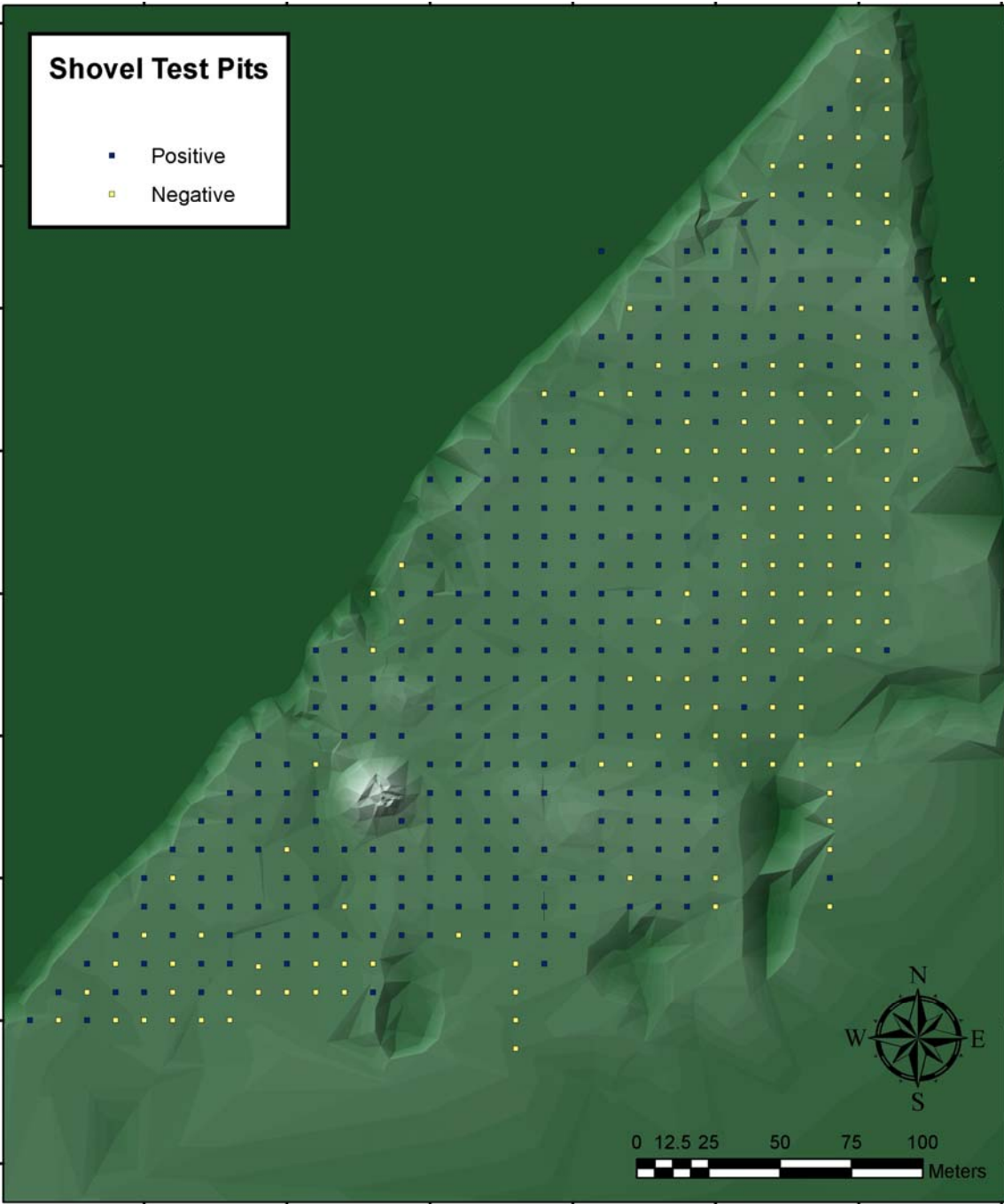


Figure 5.70. Red Lake site showing shovel test pit locations.



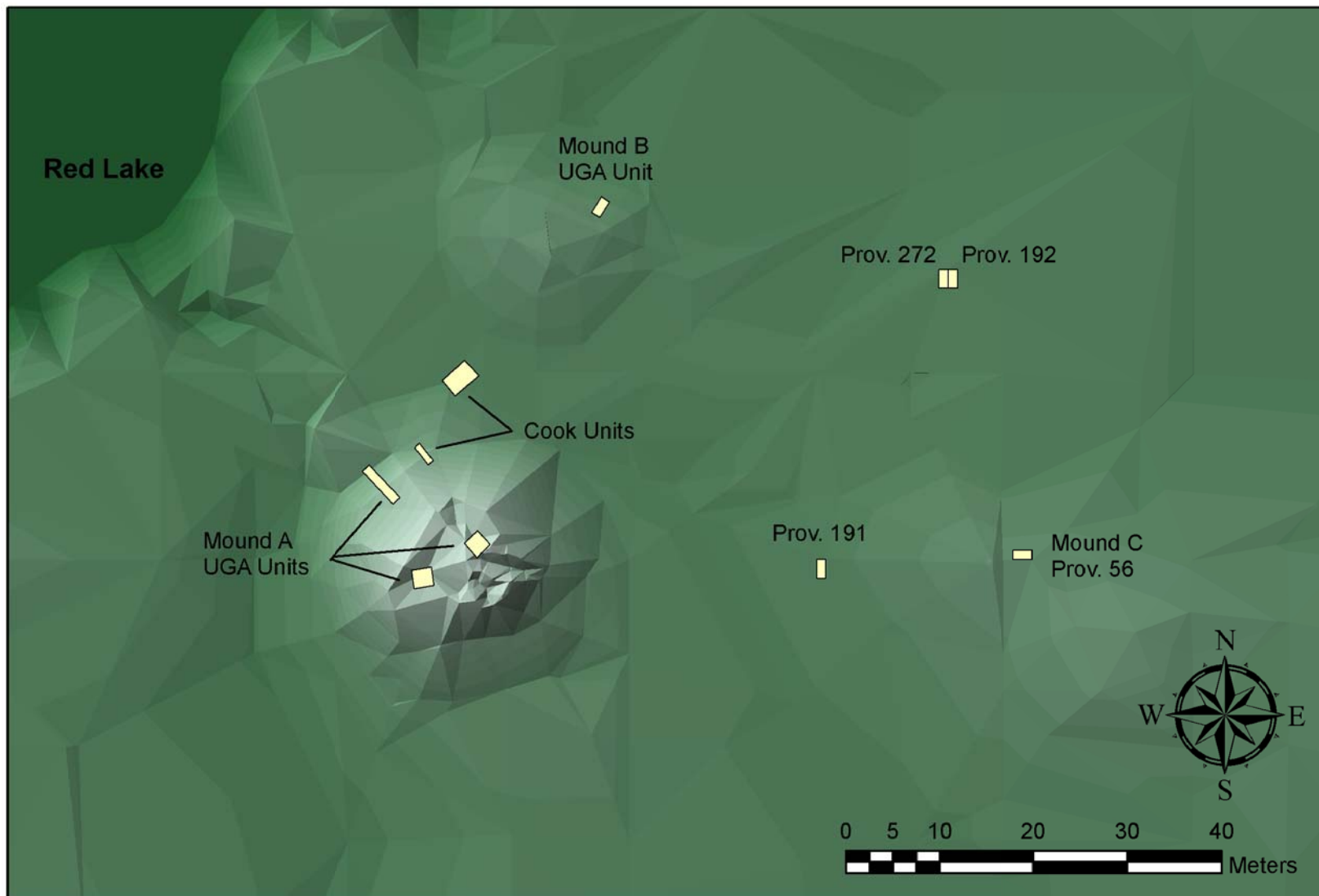


Figure 5.71. Red Lake site showing provience location of excavations.

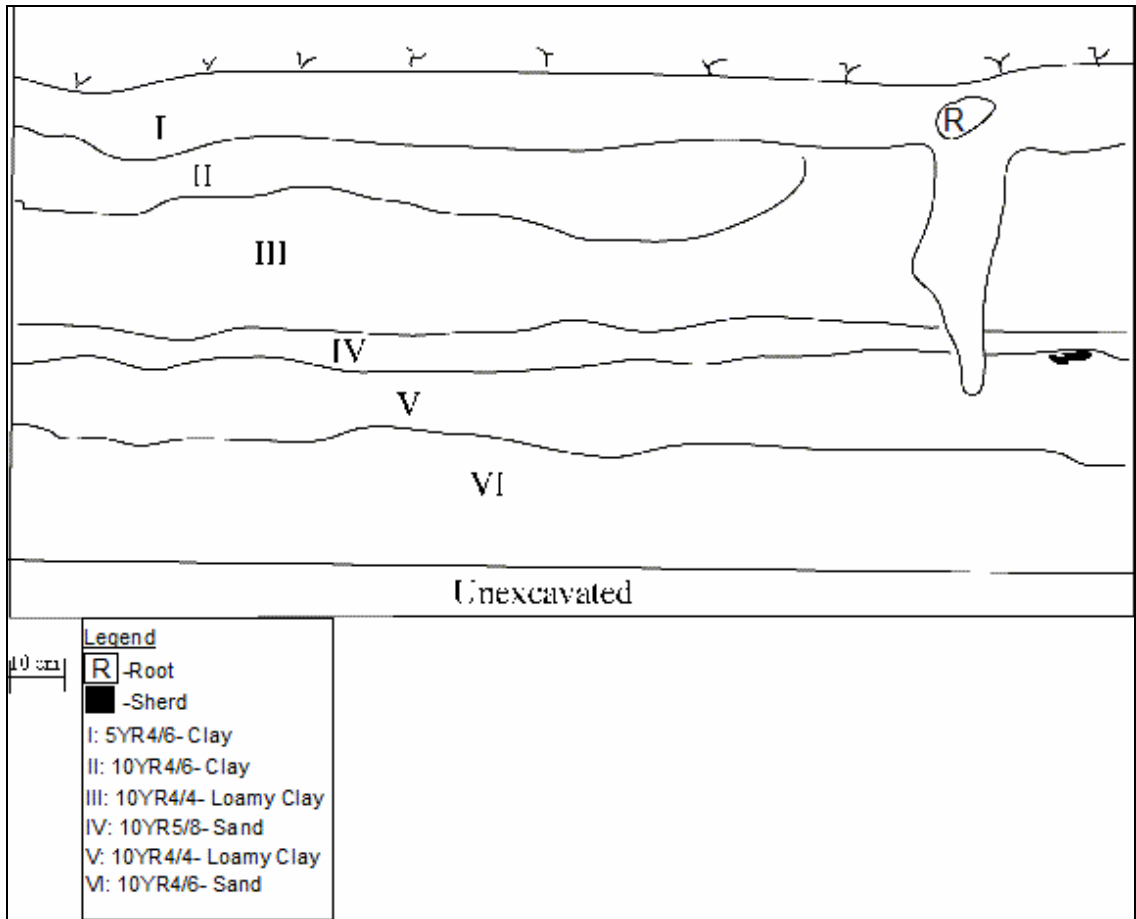


Figure 5.72. South Profile of Mound C at Red Lake, Test Unit 1 (Dale 2007: Figure 3.5).

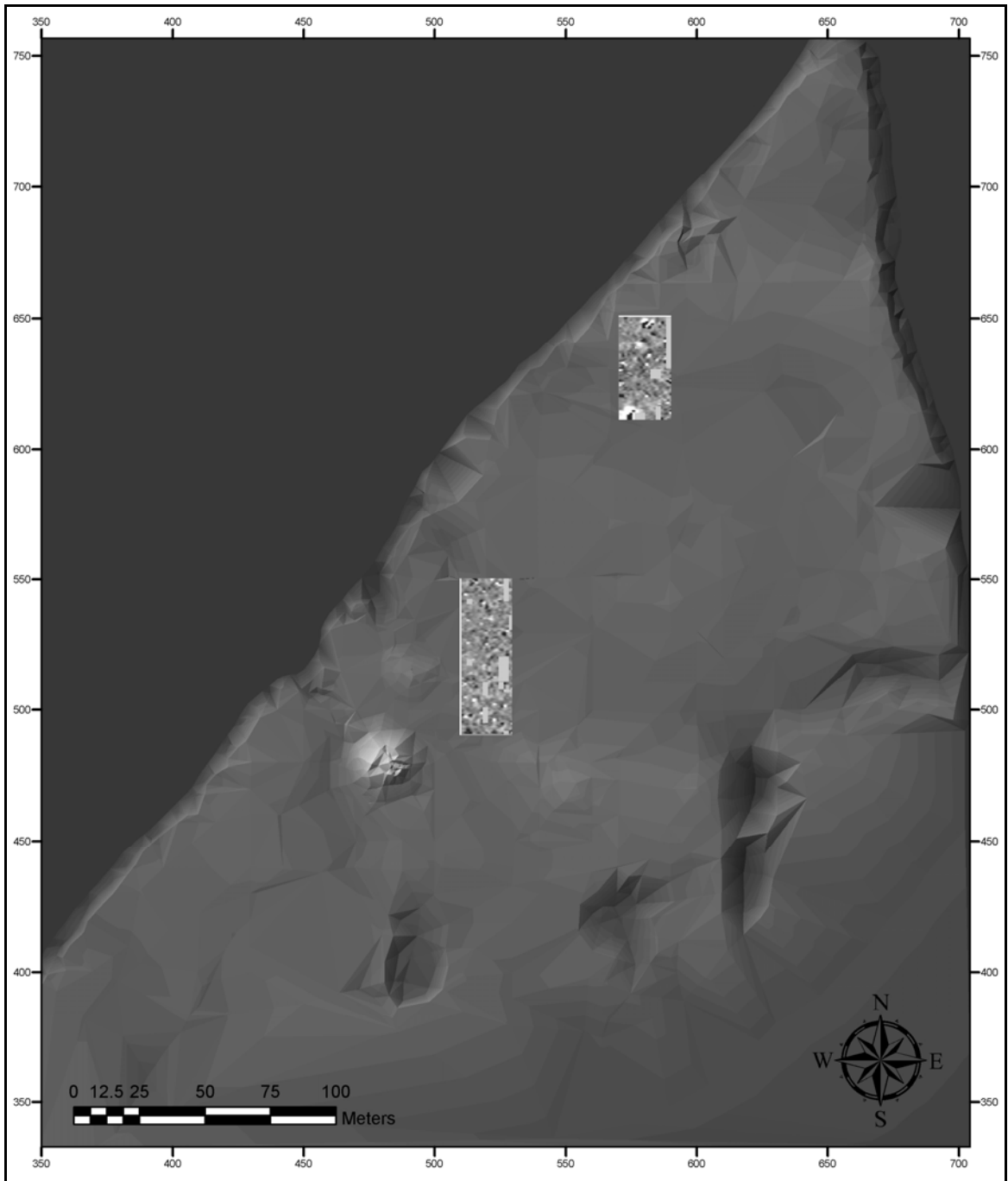


Figure 5.73. Magnetometer collection units at the Red Lake site.

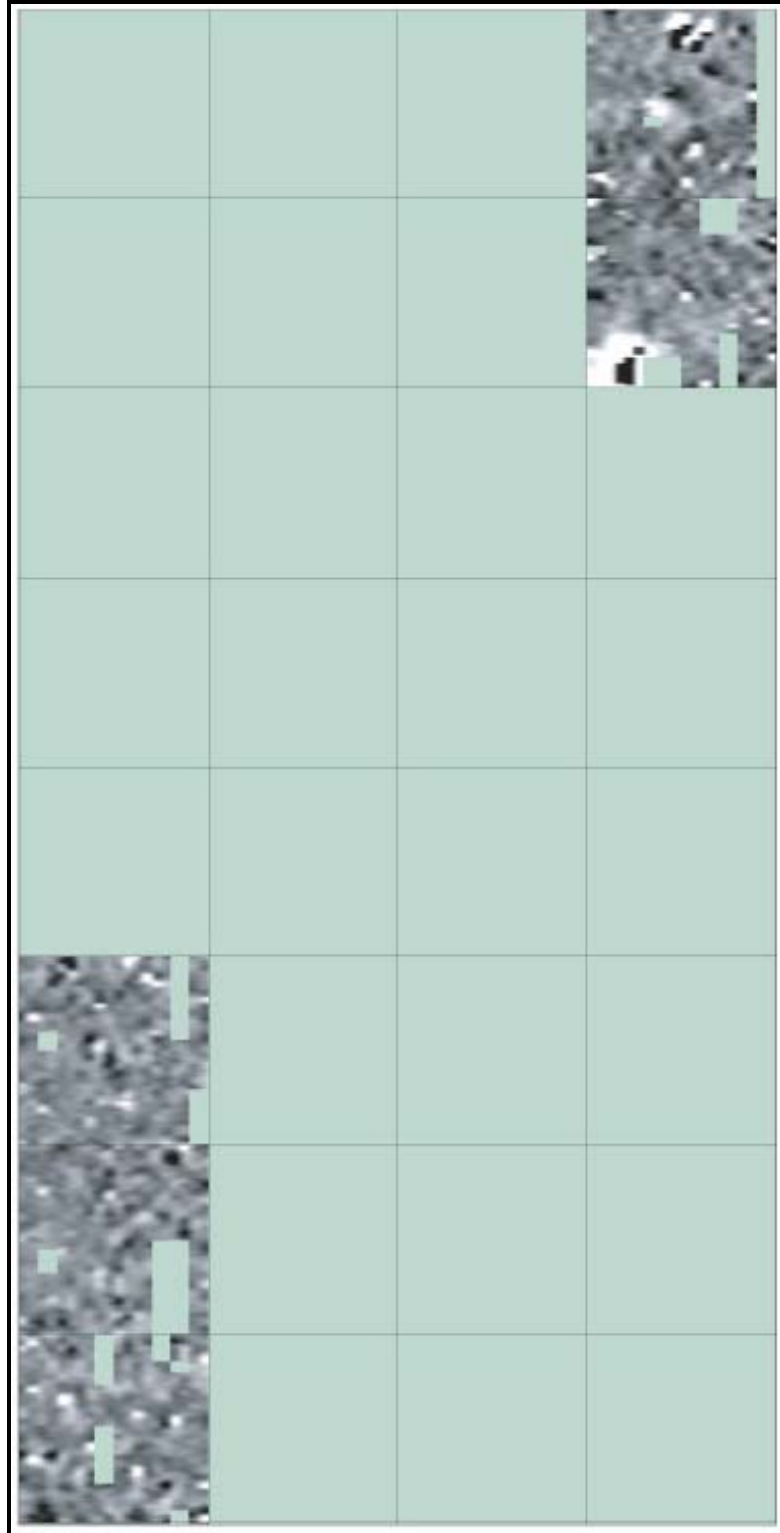


Figure 5.74. Interpretation of magnetometer data from the Red Lake site (Walker 2007).

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## Chapter 6

### Mound Community Scale, Structure, and Regional Settlement

When considering the mound-center polities of the middle Savannah River valley in light of the information obtained from this regional-based study, an improved understanding of variation and process emerges that dialectically contradicts and complements previous studies of the region. The synthesis that emerges is premised on the notion that the prestige-power basis of the chiefly elite was theocratic (i.e., ideological hegemony), rather than completely economic (they never gained full control of the means of production in a kinship-based society). The elite did maintain restricted access to ritual places, such as the mound centers of the middle Savannah River valley, and were able to appropriate some degree of surplus labor and resources for monumental construction, most likely through a coerced or compulsory system of *corvée* labor (cf., Muller 1997:296; 390), although seemingly on a limited basis for those mound centers, Spring Lake, Red Lake, and Lawton, situated within close proximity to one another on the floodplain in the interior Coastal Plain.

Regarding the two mound centers of the central Savannah River area, Hollywood may have been contemporaneous with the Beaverdam Creek mound site of the middle Piedmont, and also with Mason's Plantation, which may have been the final, independent, multi-mound center (with six mounds) in the valley at A.D. 1350 to 1400 possibly fortified in opposition to the multi-mound Rembert site (with five mounds) some 100 km upriver in the middle Piedmont. In my estimation, Hollywood and Mason's Plantation functioned as classic mound centers of the 12th and 13th centuries A.D. in

northern Georgia where there were trade connections to central Tennessee and the middle Mississippi River Valley in ritual and prestige goods of the Southeastern Ceremonial Complex as evidenced at Hollywood and its complementary mound site of Beaverdam Creek in the middle Savannah River Piedmont.

The mound centers of the interior Coastal Plain (Spring Lake, Red Lake, and Lawton) were small-scale polities with dispersed populations (i.e., traditionally classified as simple chiefdoms), that may have been sequentially occupied within the century-long Hollywood phase (ca. A.D. 1250 to 1350). A second scenario is that these were autonomous mound centers that were contemporaneous with their respective dispersed populations. In either case, a supporting population not residing at the mound center is problematic for attracting constituents or controlling surplus labor. On the basis of archaeological data, these centers did not appear to have permanent populations with regard to the apparent absence of substantial, wattle-and-mud daubed residential structures. Based on the presence of domestic artifact debris, they were occupied seasonally, with the exception of the elite and their retainers, during the aggregation of dispersed populations for feasting ceremonies that involved communal labor projects most likely sponsored by elites who controlled the mortuary ritual of cremation for burial in communal cemeteries on the lower river terraces or relict sand ridges in the floodplain. Additionally, there is little evidence for social differentiation at the Lawton, Red Lake, and Spring Lake mound centers (in contradistinction to Hollywood and probably Mason's Plantation), especially regarding the lack of evidence for the segregation of a subset of the community for special interment in platform mounds as would imply social ranking and differentiation (i.e., Peebles and Kus 1977), which is documented for the

Hollywood mound (Thomas 1985) Although taking into consideration that only limited excavations have been conducted at Lawton, Red Lake and Spring Lake, no status/wealth items (ritual display or prestige goods) have been recovered from these mounds centers as were those recovered at the Hollywood mound site (Thomas 1985).

Hally and Mainfort (2004:280) state that “Mound centers for societies with dispersed settlement systems may have had few permanent inhabitants, limited perhaps to the chief, his or her kinsmen, and retainers (M. Willimas 1995). Shoulderbone (S. Williams 1990), Lubbug Creek (Blitz 1993), and Moundville after A.D. 1300 (Steponaitis 1998) seem to conform to this pattern.” Given a dispersed settlement pattern of mound centers and dispersed farmsteads would indicate a weakly developed or authoritative chiefdom in that it would be difficult for the mound center elite to control or allocate social labor. Without a central population concentrated into mound towns as well as localized regional single mound or non-mound towns, the elite have little direct access to surplus labor and resources. Moreover, as recent labor-investment studies of Mississippian mound construction reveal, surplus-labor requirements—elite demands on constituent populations that divert attention from basic household subsistence production—for building pyramidal or rectangular earthen mounds with platform summits as locations for elite residences, temple structures, or community facilities, are reasonably low (see discussions in Milner 1998:146-147; Muller 1986:200-204; 1997:271-275); and by extension other public works involving fortification ditches and wattle-and clay-daubed, log palisade walls (Hammerstedt 2005b:45-65).

As Lindauer and Blitz (1997:189) note, detailed estimates that account for surplus labor construction at Mississippian mound centers, as well as non-mound, fortified

village communities (but see Hally 2008), rarely have been attempted. Muller estimated the “1000 workers could have erected all the mounds at the Kincaid site (volume 93,278m<sup>3</sup>) in 130 to 228 years with an annual community labor of only 4 days per household of five people.” Further, is Anderson’s (1994:Table 2) estimated average of 30 years between construction episodes is representative of most late platform mounds in the Southeast, then mound building was not a significant demand on the time or energy of most individuals, except perhaps in the case of the very largest mounds” (p. 189). With regard to the Lawton site public works projects, when applying formulas devised by Hammerstadt 2007, I calculate between 3,000 to 3,500 total person days to construct the entire site, mounds, palisade, and fortification ditch (Table 6.1). According to this total person hour range, a corvée labor force of 50 persons could have constructed the entire site of Lawton within 60 to 70 days. Moreover, a labor force of 100 persons could have constructed the site in a month. As Muller (1997) has argued, it did not take a great deal of labor to construct the mounds and other large, visible features on the Mississippi period landscape. I elaborate on these aspects of social labor in my concluding discussion.

### **Interpretation and Discussion**

In the middle Savannah River valley from ca. A.D. 800 to as late as 1250 small-scale, politically autonomous societies occupied the landscape. These groups utilized both upland and riverine settings, although it is unclear whether they moved seasonally or simply shifted habitation sites every few years or decades. During the initial 350 years of



this time period (ca. A.D. 900 to 1250), the landscape was occupied by populations manufacturing at least three different pottery type assemblages, namely Savannah I (Figure 1.5), Sleepy Hollow (Figure 1.8), and Lawton (Figure 1.10). If ethnicity can be equated with differing ceramic assemblages, and indeed this correlation is arguably somewhat controversial, then it appears that these assemblages, which rarely co-occur spatially, most likely represent different social groups that overlapped temporally in the middle Savannah River area.

By A.D. 1250, Lawton phase complicated stamped pottery types has given way to the Hollywood phase complicated stamped tradition (Figure 1.14 and Figure 1.15). More significantly, the region experienced significant social changes with at least five political centers with one or more mounds established in the area between (A.D. 1250 and 1350). Settlement data for the SRP, which is positioned between two sets of mound centers (Figure 1.2), indicates that permanent use of areas between the mound centers declined significantly. This seems to reflect a shift in settlement focus toward the areas around the mound centers as households are drawn to the ceremonies and activities at these important central locations. Unfortunately, I can only surmise this demographic trend as very little intensive survey has been conducted in either the floodplain or upland regions directly around the mound centers. My assumption that household groups resided in proximity to the centers during the Hollywood phase is based on the almost total absence of sites during this time period on the SRP (Figure 1.16). At least some level of archaeological testing was conducted at four of the five mound centers, and in all four cases the sites show evidence of only a single Mississippian occupation component dating to the Hollywood phase.

By the end of the fourteenth century, evidence suggests that all five mound centers had been abandoned. At that time, small, isolated settlements began to appear once again in the upland and riverine settings on the SRP. These settlement changes are interpreted as indicative of the collapse of the Hollywood polities centered on the mounds and a return to a more dispersed settlement approach. When Hernando de Soto's army crossed the Savannah River valley in April 1540 they nearly starved because there were no large settlements from which to take food and supplies or local native guides (Hudson 1997:166-168). An apparent abandonment of this part of the valley described in early historic documents is supported by the absence of Late Lamar period (ca. A.D. 1450 to 1600) material culture in the middle Savannah River valley.

There are several interesting issues that emerge from this summary of the Late Woodland and Mississippian periods in the middle Savannah River valley. For purposes herein, I focus on how small-scale chiefdom polities developed in the region and how they might have been structured. As the majority of fieldwork for this study was conducted at the Lawton and Red Lake mound sites, I focus on these in the following discussion.

### *The Emergence of Middle Savannah River Valley Chiefdoms*

The settlement system of the middle Savannah River valley during the thirteenth and fourteenth centuries hinges upon the built environment of elite-occupied mound centers represented by the exploitation of surplus labor that was put to a specific use. I hypothesize that the means of mobilizing that surplus and expending it came in the form

of a set of ideological beliefs revolving around mounds and their manipulation. Both the North Mound at Lawton and Mound A at Red Lake are preceded by submound refuse deposits containing mainly freshwater mussel shell and faunal remains (Wood 2009). The dense and localized nature of these middens as well as their proximity to the mounds suggests that they were produced through feasting activities. Around the world, feasting ceremony has been and continues to be used as a means of attracting and mobilizing or employing communal labor (Dietler and Herbich 2001). The close association between these middens and mounds further indicates that feasting activities are related to the construction and use of at least the initial stages of the associated mounds. Knight (1981, 1986, 1989, 2001) has reasoned convincingly from an ethnohistorical basis that mounds were earth symbols and their manipulation were efforts to purify or renew the world and human society. In so doing, the fertility and productivity of the earth also was guaranteed.

Those individuals or corporate groups that facilitated this renewal had the grounds to claim some material and social benefit for their efforts on behalf of all. I suspect that this opportunity to leverage social position and reformulate the structure of society in the favor of a few was a key factor in the rather sudden appearance of mounds in the middle Savannah River valley. Mounds had been present in the Southeastern U.S. for millennia, and although their function and use changed over time, there is little reason to doubt that people in the middle Savannah valley knew of them and their association with the earth. Furthermore, the manipulation of mounds and world renewal beliefs was a strategy that had been used by emerging elites throughout the southeastern U.S. since A.D. 1000. For instance, King (2003) has argued that the earliest chiefdom centered at Etowah was

created as competing corporate groups came together in a strategic alliance facilitated by the common need to renew the earth and society. Logically, there is no reason to think that inhabitants of the Savannah River region were unaware of social developments in northern Georgia or even central Georgia where Macon Plateau was located. The presence of pottery styles similar to that found in northern Georgia confirms the connection between the regions. I view the emergence of chiefdoms in the middle Savannah River valley as part of a calculated effort by individuals or specific corporate groups to use a prevailing belief system to mobilize, appropriate, and expend labor for their own material and social benefit. The prevailing ideology, which entitled the chiefly elite to mobilize surplus labor and co-opt the ritual of death through feasting and mortuary preparation of the deceased via cremation and pottery-vessel urn interment into the communal cemeteries along the lower river terraces and floodplain relict sand ridges, allowed those restricted from symbolic status to feel they too ultimately were benefiting in a society transformed by and for the privileged few.

#### *The Structure of Middle Savannah River Valley Polities*

As I have attempted to debate, the polities created do not necessarily look or function as existing models of Mississippian chiefdoms predict. True, these polities have central places with mounds and mound-top architecture, and seem to be associated with riverine-maize horticulture at some level. However, unlike the established contemporary notion of hierarchically structured, administrative chiefdoms of the South Appalachian Mississippian (e.g., Anderson 1994; Hally 1993, 1996, 1999; Hudson et al. 1985; King

2003; Welch 1996; Williams and Shapiro 1996), there is little material evidence for differential or institutionalized (i.e., ascribed or achieved) social ranking. At least that is the case when considering mortuary data. Here I am working largely with negative data or second hand accounts of looting. During my fieldwork at either at the Lawton and Red Lake sites, no formal burials suggesting elite status, were detected in any excavated area, and reports from the looter community indicate that there are no burials to be found at these sites. Although based on indirect information, enough looting has been done at Lawton so that if there were burials in the mounds or residential areas they would have been found and certainly pillaged.

In fact, the only place that large numbers of burials have been found are on a series of lower river terraces and relict sand ridges located at various points in the middle Savannah River floodplain (Figure 1.21). Additionally, looter's descriptions of these urn-burial cemetery sites in the middle Savannah River floodplain sound the same. All things considered, these relict sand ridges, which are visible as prominent floodplain landforms, appear to have been utilized as community-centered cemeteries where the cremated skeletal remains of the deceased were most often interred in ordinary, domestic pottery-vessels (i.e., large ceramic jars often exhibiting soot-residue from use as cooking vessels covered with ceramic bowls previously used as serving vessels) employed as burial urns. Most importantly, these community cemeteries show little evidence of social differentiation in mortuary treatment, either indicating that these were undifferentiated societies or at least that social ranking was not expressed in mortuary treatment. Furthermore, I propose that the social elite residing on the mound summits co-opted the

ritual of death involving body preparation and cremation as a means to the acquisition of symbolic capital.

The settlement patterns associated with these mound centers do not necessarily meet expectations of ranked social structure. My best evidence, which is not great, indicates that Red Lake and Lawton were surrounded by dispersed households and possibly small multiple household hamlets. Some would argue that this is the kind of settlement system associated with simple chiefdoms (Anderson 1994; Hally 1996; Wright 1984). However, as Hally (1993, 1996, 1999) and Blitz (1999) have argued independently regarding mound site spatial patterning, the short distances separating Lawton and Red Lake go against conventional ideas about the structure of Mississippian chiefdoms. Using the spacing of mound centers in northern Georgia, Hally (1999) has argued that close-spaced mound sites like Lawton and Red Lake should be primary and secondary centers in a complex chiefdom. However, as both Hally and Blitz have pointed out, it is difficult to see which of the two should be considered more important in a complex administrative structure.

One piece of evidence that may inform on the nature of the societies associated with Red Lake and Lawton is the structure of the mound centers themselves. A close comparison of the mound centers shows that they are very similar both in terms of scale and structure. Each site is comprised of a core area of two or more mounds arranged around an open space that I have interpreted to be plazas. Ringing that core is an area of midden representing an occupation zone. A schematic of Red Lake superimposed over that of Lawton reveals that these core areas and associated dense occupation zones are about the same size.

There are some apparent differences. First, the occupied area of Red Lake seems larger than that of Lawton. This is a product of the work done at each site. The fieldwork at Lawton focused almost exclusively on the area inside the fortification ditch. Preliminary testing outside the ditch indicates that Mississippian occupation continues along the slough edge in both directions. Additional work is needed to determine the actual extent of that occupation, but it is clearly determined to be associated with the Hollywood phase component of the core site area.

Another difference between the two sites is that the core area at Lawton is delineated by a ditch and daubed-log palisade. In one sense, Lawton is a sacred or ceremonial precinct surrounded by and separated from the rest of the community at large by a wall. Although there is no visible ditch at Red Lake, the fieldwork conducted to date has not informed on whether its sacred precinct is separated from the rest of the community by a wall.

Finally, it is clear that Lawton has only two mounds and Red Lake has three. At Lawton, it appears that the North Mound was part of periodically occurring events that may have included mortuary practices based on the bundled, cremated human remains encountered in the floor midden of the premound structure. The two-tiered summit of the South Mound may have served as platforms for a residential structure and that of a communal facility. Because the functions of the Red Lake mound are not as well understood, it is difficult to know if they, or the Red Lake site, served different purposes than Lawton and its mounds. The two-tiered summit South Mound at Lawton, which may have incorporated the function of two of the Red Lake mounds (possibility one a communal structure and the other an elite residence), if Lawton was occupied

shortly after Red Lake was abandoned as I have argued. Further, even if the two mound sites are not sequential, then the tiered mound at Lawton, may have served the same function as did two separate mounds at Red Lake. I emphasize this notion to counter arguments that if contemporaneous, Red Lake may have been the primary center over Lawton in an hierarchical authoritative system based on the number of mound present at a site.

Obviously there are many questions that remain to be addressed regarding these mound sites before their political place on the larger landscape is completely understood. However, the layout and distribution of the mound centers in this part of the Savannah River valley may provide some insights into those issues. The settlement system in the middle Savannah, as far as I understand it, is reminiscent of the *talwa* or town systems of the Creek Indians, particularly of the 17th and 18th centuries. Creek communities had a sacred core that included a winter council house, a square ground where summer councils and important ceremony took place, a ball pole and field, and sometimes one or more small mounds (Howard 1968; Knight 1994). This civic-ceremonial space was surrounded by households that often were situated throughout the major drainages on which the towns were located (Etheridge 2004; Knight 1994; Worth 2000). This is a classic dispersed settlement system. Following Bruce Smith's (1978) arguments for Mississippian settlement in the Mississippi River valley, the middle Savannah valley system makes ecological and social sense in the ridge and swale floodplain setting of the Coastal Plain.

In many instances, Creek town settlements were located on major drainages, sometimes close enough to one another that the scatter of households for one town



imposed on the households associated with a nearby town. Town affiliation was important among the Creeks, and although some towns were more important in ranking than others each had a great deal of autonomy (Knight 1994; Saunt 1999).

It is possible that what occurred in the middle Savannah River valley is a social system not unlike the Creeks of the 18th century. There was social ranking, but it was embedded within some kind of corporate kin group system and expressed in terms like “older brother” or as part of the Red and White symbolism of war and peace (King 2003). If there was a social segment that achieved a measure of prominence through its control over mound manipulation, that prominence did not translate into great material differences. In fact, it appears that it never succeeded in breaking out of the bounds of the nested and complimentary nature of corporate kin organization.

Just as in the Creek system, some communities were recognized as more important and there was a certain deference shown to their leaders. However, individual towns were largely politically independent (Knight 1994; Saunt 1999). I think it is fair to call these entities “chiefdoms” as King (1999) has argued for these independent societies. There were certainly social and political relationships among them, but there was no overarching hierarchy linking them all into one social system.

### *Discussion*

In this discourse, I have tried to apply what has been learned so far to formulate ideas on how Mississippian chiefdoms emerged and how they operated. I view the polities that formed in this region as small, non-stratified, politically independent, and

largely dominated by a series of corporate kin groups. Organizationally, this is not particularly different from the social stock (i.e., historical trajectory) out of which these chiefdoms formed. Efforts by particular social segments, or even individuals, to use world renewal and mound manipulation as a means of rewriting that social order met with only limited success. Ultimately, those more centralized social systems represented by the mound centers did not last, for by the time de Soto forded the Savannah River in the vicinity of Augusta, Georgia (Hudson et al. 1984:71; Hudson 1997:167-168; Swanton 1985:185 [1939]), these chiefly societies were gone, the mound centers having been abandoned by A. D. 1450 a century before the Spanish entrada appeared (Anderson 1994).

Anderson (1994) has placed at least some of the causation for this collapse on extended periods of lower than average rainfall. While gardening was certainly practiced in the middle Savannah River valley, available data suggest that it was likely heavily mixed with hunting and gathering. Given this, I sense the reason for the collapse of these polities may fall on social processes. Hierarchical forms of social ranking systems, like those often associated with classic Mississippian society, ran counter to a local tradition dominated by multiple, relatively undifferentiated corporate groups. The abandonment of the middle Savannah River valley mound centers may have been as much the result of the failure of would be elites to rewrite the social order and transcend that historical tradition.

## Summary and Conclusions

The results of research at the Lawton and Red Lake mound sites allow observations regarding the political relationship between these communities. Hally (1993, 1996) has argued that contemporary mound sites located less than 20 km from one another were in all likelihood political centers of a single chiefdom. In such instances, according to the simple/complex chiefdom model, one of the two centers is usually larger with multiple mounds and has evidence for a broader array of political and religious ideology, and therefore functioned as the primary center of the polity.

As Hally (1993, 1996) and Blitz (1999) have discussed for their mutually exclusive models of chiefdom organization, Lawton and Red Lake do not fit either's expectations. While the mound sites are located only a few kilometers apart, neither is larger nor has indications of serving more important political and religious functions. Therefore, there is no clear primary and secondary center in this relationship. Wood's (2009) rediscovery of a third, small single-mound center just one kilometer north of Red Lake, still further complicates the political scenario. The site, known as Spring Lake, also does not appear to have served any more important functions than its neighboring mound communities.

Blitz (1999) has suggested that archaeological examples like this one may represent a social form that is not hierarchically organized as Hally's model assumes. Instead, using ethnohistoric data on Creek communities, Blitz argues that closely spaced mound towns like Red Lake, Lawton, and Spring Lake may be independent kin-based political units aligned loosely through a confederacy so that there are no

hierarchical political relationships among the centers. However, Blitz's fission-fusion model further suggests that the political units at Lawton and Red Lake, identified by the number of known mounds, (and excluding that of Spring Lake as it was not documented at the time of Anderson's publication [1994]), as well as those at Hollywood eventually coalesced to form the Mason's Plantation polity with six mounds, also an unlikely scenario based on the results of this study.

When reconstructed from the work that has been conducted, the internal site structure of Lawton (Figure 6.1) and Red Lake (Figure 6.2) appears completely different from one another. Lawton has two mounds and a well-defined residential zone enclosed within a ditch and palisade wall. Red Lake has three small mounds, spread over a much larger area, and has no visible evidence for a ditch encircling the immediate vicinity of the mounds. However, a closer comparison shows that the mound centers are very similar both in terms of scale and structure. Each site is comprised of a core area of two or more mounds arranged around open spaces that I interpret as formal, designated plaza areas. Ringing the core is an area of midden that interpreted as the domestic or residential occupation zone. When the Red Lake plan is superimposed over that of Lawton (Figure 6.3), it becomes clear that the core areas and associated dense occupation zones are of about equal extent.

There are, however, at least two recognized dissimilarities, and these may be a consequence of the archaeology conducted at each site. First, the occupied area of Red Lake seems larger than that at Lawton. At Lawton fieldwork was focused almost completely on the area inside the fortification ditch. Limited shovel testing outside the confines of the fortification ditch demonstrated that Mississippian occupation

continues along the slough edge in both directions. Further testing is required to delineate the actual extent of that occupation, but shovel test results show that it is clearly of the Hollywood phase.

A second distinction between the two mound sites is that the core area at Lawton is set off from the larger community by a ditch and presumed palisade wall. In a sense, this may be a sacred precinct surrounded by and separated from the rest of the community. Although there is no visible ditch feature at Red Lake, more intensive work is required to determine if Red Lake too may be a sacred precinct separated from the rest of the community by a palisade and ditch.

Results of fieldwork at the nearby Spring Lake site indicate a similar structural arrangement and scale as that at Lawton and Red Lake. Although this site has only one mound, there is a small plaza surrounded by dense occupation debris that continues along the margin of the adjacent oxbow lake. The pottery assemblage recovered by Wood (2009) confirms that Spring Lake dates to the Hollywood phase. However, my frequency seriation of pottery type percentages for each of these mound centers strongly indicates that Spring Lake was occupied early in the century-long Hollywood phase.

These similarities in scale and structure raise questions about the political relationships among the three neighboring sites. Considering only scale and structure, the sites do not appear significantly different in size and landscape. Although recent archaeological fieldwork has verified that Red Lake has three mounds, Lawton has two mounds, and Spring Lake one mound, altogether suggesting potential a political hierarchy following the simple-complex chiefdom model, the configuration is

problematic. Based on the proximity of these three mound centers, if indeed they are contemporaneous during the century-long Hollywood phase, then their juxtaposition violates the very simple-complex model as advanced by Hally (1999) for the 20-km spacing of northern Georgia Piedmont chiefdom polities. Further, I assert, on the basis of my seriation chronology as discussed above, that these mound centers were most likely autonomous communities that were sequentially occupied by an established elite who maintained an ideological hegemony over of a dispersed constituent population residing in the upland regions. However, as it is not clear how each mound functioned, and although I have drawn conclusions for Lawton, it is not possible to understand whether the number of mounds translated in any way into religious or administrative differences that would be indicative of an administrative hierarchy. Evidence at Lawton demonstrates that each of the mounds had differing use histories and thus served different functions: one was residential for elites and the other mortuary/ceremonial possibly for its supporting constituency. Red Lake may have functioned in a similar manner, although detailed information is needed for a comparative analysis.

At Lawton, the civic-ceremonial core of the site is set apart by a palisade and fortification ditch. It is possible that the surplus labor invested in these cultural features suggests that Lawton's civic-ceremonial space had a greater importance than civic-ceremonial space at other sites. Again, it is likely that the mound and plaza cores of Red Lake and Spring Lake also are separated from the rest of the occupation. At this time, enough intensive work has not been done to evaluate that possibility.

The layout and distribution of the mound centers in the middle Savannah River valley provide some insight into the political relationships among these major sites.

The settlement system in this part of the middle Savannah River valley, as far as it is understood, is reminiscent of the *talwa*, or square ground town, of the Creek Indians, particularly of the 17th and 18th centuries. Creek communities had a sacred, central place that included a winter council house, a square ground where summer councils and important ceremonies took place, a ball pole and field, and sometimes one or more small mounds (Howard 1968; Knight 1994). This civic-ceremonial space was surrounded by households that often were strung up and down the major drainages on which the towns were located (Etheridge 2004; Knight 1994; Worth 2000). This is a classic dispersed settlement system.

In many instances, Creek towns—equated herein with the petty, autonomous mound centers of the Upper Coastal Plain in the middle Savannah River valley—were scattered up and down major drainages, sometimes close enough to one another that the scatter of households for one town almost encroached upon the households associated with a nearby town. Town affiliation was important among the Creeks, and although some towns were recognized as more important than others, each maintained a great deal of autonomy (Knight 1994; Saunt 1999). As King (2002:221-222) notes, the *talwa* was the most stable and permanent political decision-making entity in the Creek polities, and it was responsible for making local decision-making. Further, as the *talwa* operated independently of the polity, each could dissent or abstain from decisions made at the polity level (2002:221-222).

It is possible that the chiefdom polities in the middle Savannah River valley were organized into a social system not unlike the Creeks of the 18th century. There was social ranking, but it was embedded within the clan system and expressed in terms

as “older brother” or as part of the Red and White symbolism of war and peace (King 2003). In these systems, there were some communities that everyone acknowledged as more important, and there was a certain deference shown to those communities along with their leaders, but individual towns were largely politically independent (Knight 1994; Saunt 1999).

Following Bruce Smith’s (1978) arguments for Mississippian settlement in the Mississippi River Valley, the middle Savannah River valley makes ecological and social sense in the ridge and swale floodplain setting of the Atlantic Coastal Plain. Likewise, Smith’s (1978:490-491) summation regarding a dispersed Mississippian settlement patterning is apropos of occupation in the study area: “Individual family units living in dispersed homesteads would have visited the local center, where they may well have maintained a second, temporary, habitation structure, only in certain situations:

1. For scheduled seasonal ceremonies of renewal and cultural integration.
2. For burial, or other rites of passage ceremonies of kinsmen or high-status individuals.
3. For payment of labor-energy demands (corporate labor construction projects, primarily fortification construction and maintenance, and mound construction).
4. For mutual defense, during periods of short- or long-term hostility with neighboring populations.”

It is appropriate to refer to the middle Savannah River valley mound center polities as chiefdoms in as much as there were certainly social and political relationships of integration and differentiation within them; however, the archaeological evidence suggests no overarching settlement hierarchy linking them all



into one sociopolitical system. While some level of social hierarchy was present especially in Fall Line mound centers (Hollywood and Mason's Plantation), when it came to power relations in the lower middle Savannah mound centers (Lawton, Red Lake, and Spring Lake), this can be considered as weakly developed. These existed without the development of a clearly differentiated social hierarchy. As denoted by Cobb (2000:203), these centers can be differentiated as "shadow chiefdoms, where the vague trappings of larger polities may be assumed, but the scale, richness, and diversity fall far short in comparison." Therefore in conclusion, each mound center of the middle Savannah River valley can be considered an autonomous political entity within the century-long Hollywood phase. Rather than "Mound Town" urban communities, these mound centers served as residences for the established elite, and as periodic locations for the communal aggregation of upland, out-lying populations contributing to public-labor projects and feasting activities during periods of ideological ceremony involving the ritual of death and world renewal events.

Table 6.1. Estimated Surplus Labor for the Lawton Site  
(Calculated with 3D Analyst in ArcView GIS 9.2)

	Volume m <sup>3</sup>	Person Days	Percent	Percent
Borrow Pit (with basal points dropped 20 cm to compensate for recent alluvial infill)	865.03	332.69	0.11	0.09
Fortification Ditch (with basal points dropped 70 cm to compensate for erosional and recent alluvial infill)	3,508.17	1,349.23	0.44	0.38
Fortification Ditch Embankment (soil mounded immediately outside of ditch)	486.34	0.00	0.00	0.00
North Mound	601.09	189.62	0.06	0.05
South Mound	964.21	304.17	0.11	0.09
Palisade Trench (0.38 m <sup>3</sup> /m×413 m length of palisade)	156.94	60.38	0.02	0.02
Palisade Construction				
Cutting wood posts	0.00	76.08	0.02	0.02
Transporting wood posts	0.00	165.28	0.05	0.05
Set wood posts	0.00	413.20	0.13	0.12
Palisade Plaster				
Lawton clay daub volume	13.24 m tons	171.38	0.06	
<b>TOTALS</b>		<b>3,062.03</b>	<b>1.00</b>	
Blanton and Gresham (2007:42) clay daub volume	49 m tons	634.26		0.18
<b>TOTALS</b>		<b>3,524.91</b>		<b>1.00</b>

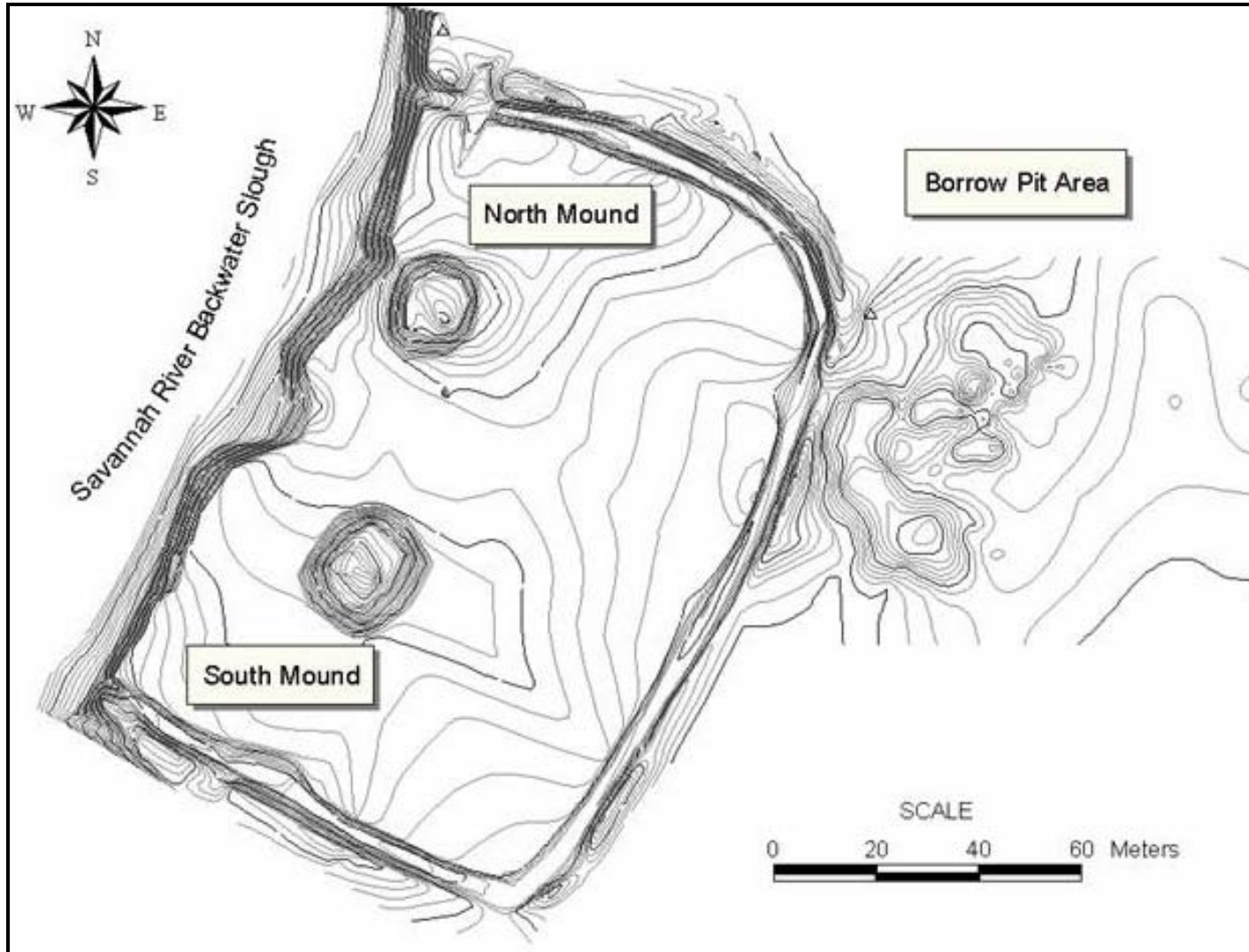


Figure 6.1. The Lawton site.

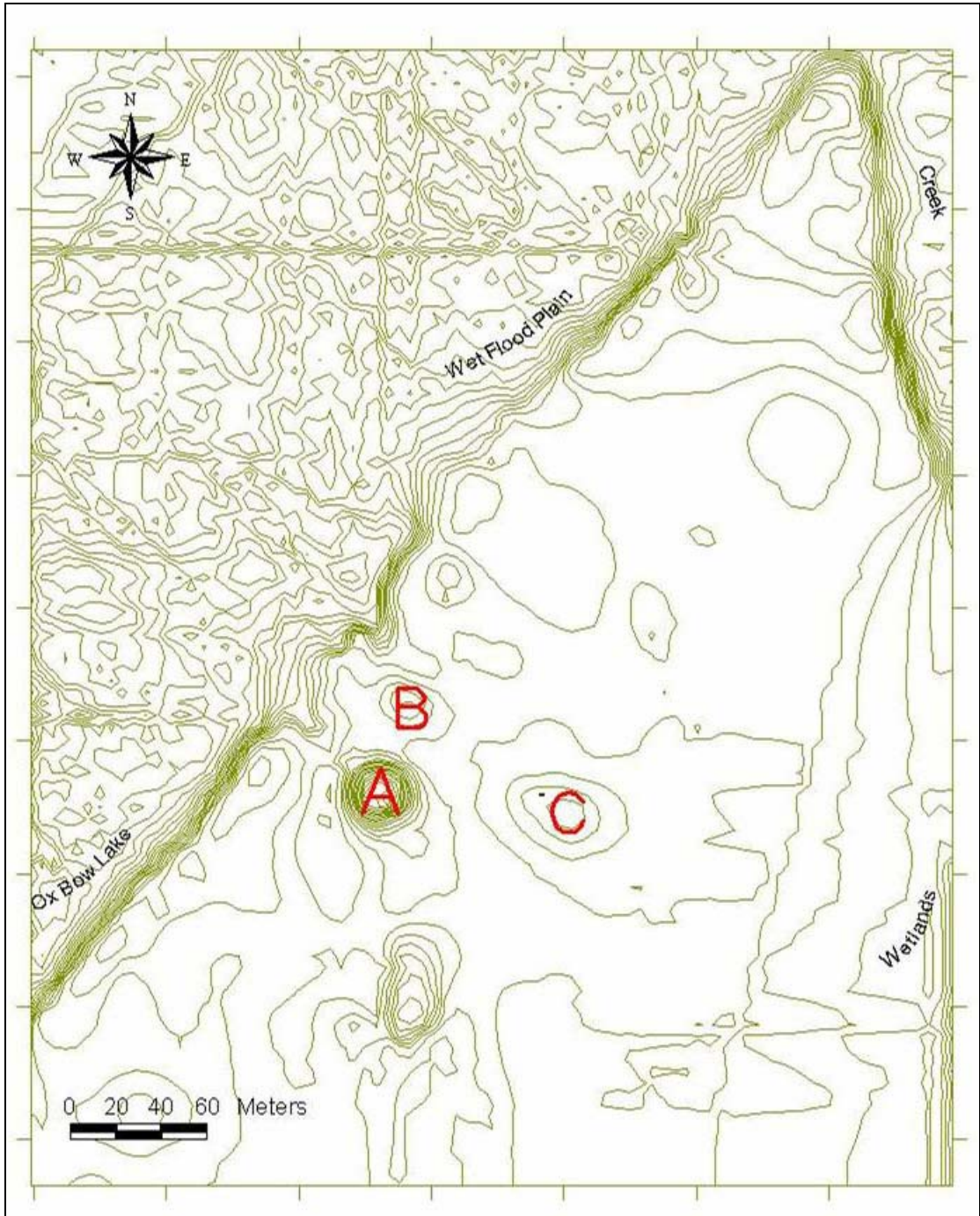


Figure 6.2. The Red Lake site.

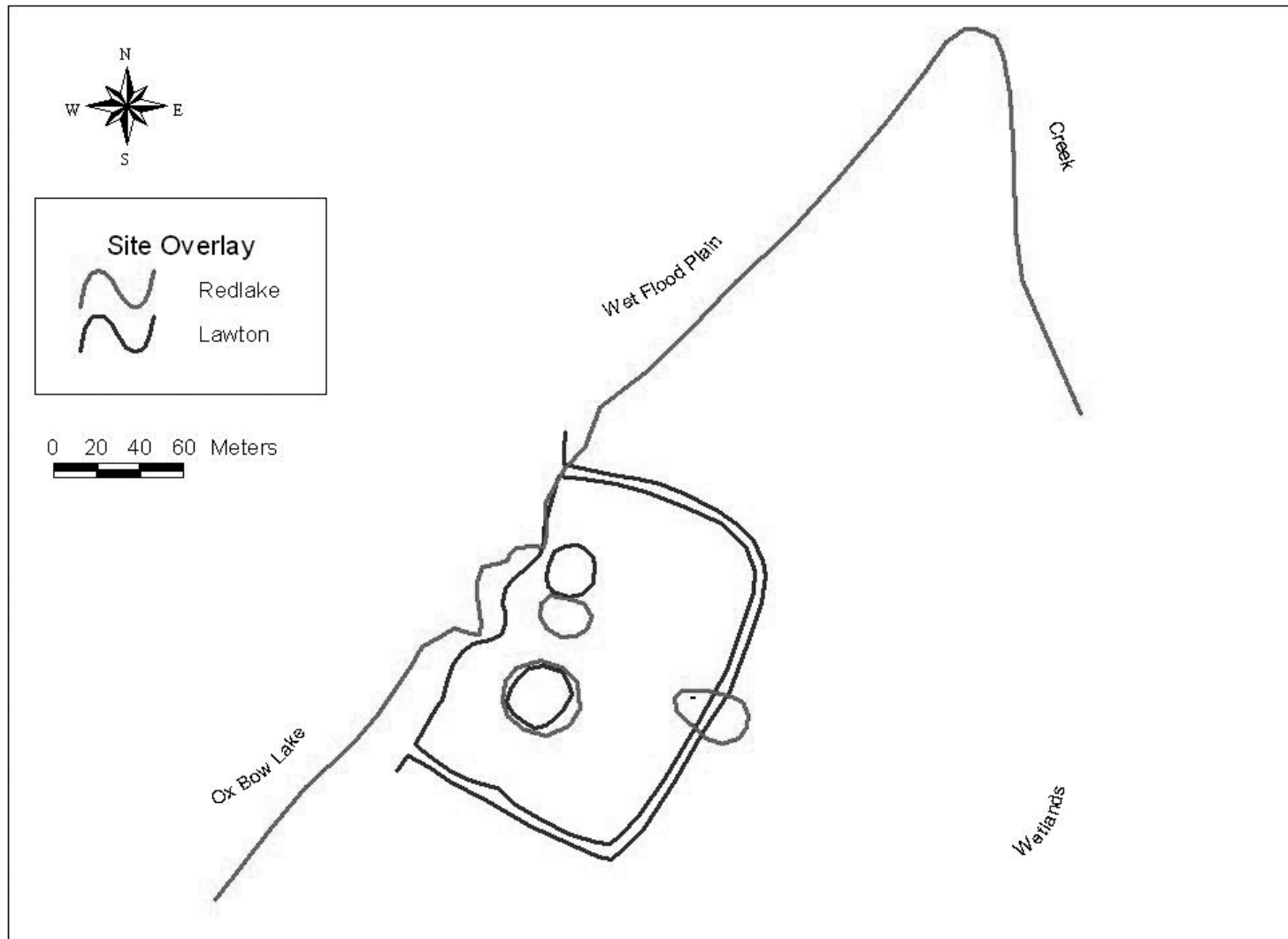


Figure 6.3. Overlay of the Lawton and Red Lake mound site structure.

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### Professional Positions Held

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| March 1998-<br>Present       | Coordinator of Cultural Resource Management Survey, Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina. M. J. Brooks, Program Manager.                |
| December 1997-<br>March 1998 | Project Archaeologist, Brockington and Associates, Inc., Charleston, South Carolina, Columbia. E. Poplin, Vice-President.   |
| Fall 1996-<br>Spring 1997    | Graduate Teaching Assistantship, Department of Anthropology, University of Kentucky.  |
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| April 1990-<br>December 1990 | Project Archaeologist, Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia. K. E. Sassaman, Director of Cultural Resource Management Survey. |
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## Select Publications and Reports

- 2007 Teardrops, Ladders, and Bull's Eyes: Swift Creek along the Georgia Coast (co-author with Keith Ashley and Frankie Snow). *Early Georgia* 35:3-28.
- 2005 Provenance of Lithic Artifacts from a Salvage Excavation at Wilson Pond (38AK942), Aiken County, South Carolina (co-author with Walt Kabilius). *South Carolina Antiquities* 37:83-102.
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- 1993 *Intensive Archaeological Survey of the Proposed Savannah River Ecology Laboratory Conference Center and Educational Facility, Savannah River Site, Aiken County, South Carolina* (with David C. Crass and Kenneth E. Sassaman). Savannah River Archaeological Research Program, Technical Report Series Number 17. Report submitted to the Savannah River Operations Office, U.S. Department of Energy.
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- 1990 A Savannah Period Mound in the Upper-Interior Coastal Plain of Georgia (with John E. Worth and Frankie Snow). *Early Georgia* 18:41-64.