Archaeological Report No. 32

The 1996 Excavations at the Batesville Mounds

A Woodland Period Platform Mound Complex in Northwest Mississippi

Jay K. Johnson, Gena M. Aleo, Rodney T. Stuart,
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Acknowledgments

After several months of volunteering as field crew at the Austin site excavations—often it was only him and John Connaway—Howard Mize built a water screen frame in his backyard and processed all the feature fill from the site. It would be difficult to estimate the amount of dirt he washed, but it was several hundred pounds. Howard was just as important to the success of the Batesville project. In addition to saving the site from development, serving as liaison between us and the city, pulling our truck out of the mud when we were foolish enough to try transporting dirt across a rain-soaked field on the way to the water screen, and arranging to have city workers backfill the excavations, he and his rat terrier, Boo, came to visit us every day at lunch. He would sit on an overturned washtub in the shade on top of Mound B and talk about archaeology and everything else. It was Howard who patiently listened to Johnson's evolving interpretation of the profiles, always gracious enough not to mention that the current theory often seemed unrelated to the one from the day before. The success of this project is, in no small measure, a direct result of Howard's enthusiasm for the archaeology of Mississippi.

John Connaway at the Mississippi Department of Archives and History also contributed a great deal to the Batesville research. He visited the site nearly as often as Howard, and he served as a sounding board during the excavation and analysis. In particular, the pioneering work on Early Woodland ceramics he and Sam McGahey had done at the Boyd site provided a starting point for our own analysis. Finally, Connaway and Ken P'Pool, also with MDAH, helped in securing the grant from the Mississippi Department of Transportation.

Two people at the Mississippi Department of Transportation went beyond the call of duty in shepherding an archaeology project through a bureaucracy geared for road construction. There were difficulties in getting the project started, and Doyce Tucker worked hard at securing approval. And there were difficulties in getting it finished. Billy Key spent a lot of time making it possible for our accountants and their accountants to understand one another so that the final payments could be made. Quite literally, this report would not have come to print without Mr. Key's efforts. P'Pool and Elbert Hilliard, director of MDAH, also had a hand in the success of the final negotiations. Glenn Brown at North Delta Planning was instrumental in the administration of the contract. Kathy Cummins did the editing and layout with the help of frequent discussions with Jason Catlin, MDAH, about the wonders of PageMaker. It was a real pleasure to work with them both, and this volume is ample testimony to Kathy's skill as a copyeditor and her new talents in transforming a manuscript into a publication.

Janet Ford made the exotic lithics from the South Village field school excavations available to Gena Aleo for her thesis project, served on Mimi Holland's and Rodney Stuart's thesis committees, and helped us figure out where we were on the site. She is always willing to talk about Tchula and Marksville. Sam McGahey and Evan Peacock read and commented on various sections of the report, as did Thurman Allen and Doug Frink. Although we did not always follow the advice of our colleagues, they forced us to present our arguments more carefully. Allen and Joe Saunders visited the site and were essential to our understanding of the stratigraphy of Mound B.

Jay Johnson served as field director and was assisted by John Sullivan. The field crew consisted of Gena Aleo, Leslie Bettenhousen, Sanford Carson, Colby Devereux, Louis Kasanovich, Seth Martin, Chad McKenzie, Bayard Morgan, Ann Roy, Corey St. John, Jennifer Soper, and Rodney Stuart. The crew endured heat, mud, mosquitoes, and early-morning start times with good cheer and enthusiasm. Of course, the fact that the archaeology was so interesting made the whole thing a lot more fun.

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Introduction

It was the summer of 1987, and Howard Mize, a local businessman with a longtime interest in archaeology, was driving along the blacktop that skirts the east boundary of the Batesville Mounds. He knew there were mounds there; he had visited the crew at the McCarter Mound just to the north during the excavation of that site in 1968. When he glanced over to the west, he saw a bulldozer on Mound A. He turned around, and drove out across the pasture to find out what was going on. The city had acquired the mounds as part of an industrial park and was preparing the land for development. Having lived in Batesville for the past forty years, Mize knew the dozer operator and felt comfortable telling him that he could not level an Indian mound and suggesting that he check with the city's lawyers before he continued. He did, and the bulldozer was removed.

In the meantime, Mize contacted John Connaway at the Clarksdale office of the Mississippi Department of Archives and History, who arranged to have the site designated a Mississippi Landmark under provisions in the Mississippi Antiquities Law. This designation ensured the preservation of the site. The industrial authority formed a committee to decide what to do with the site now that it could not be covered in factories. This committee decided that a park would be the best use of the land and contracted with Jay Johnson at the Center for Archaeological Research at the University of Mississippi to conduct baseline data collection. It was this work that revealed the site to be a Woodland period platform mound complex (Holland 1992, 1994).

Although this preliminary work and several seasons of field school run by Janet Ford (1996a) at the University of Mississippi had recovered exclusively Woodland period material, precise dates and structural data from Mound B, the best preserved of the platform mounds, were lacking. So, when Connaway found out about a federal highway program that funded transportation enhancement projects through state highway departments, he contacted Mize, who contacted the planning committee and Ole Miss. A proposal emphasizing the development of the site as a park and its importance "in an extensive prehistoric trade network involving the transportation of material from as far away as St. Louis" was submitted and funded. The following is a report of the fieldwork that resulted.

Site Description

Depending on how you define it, the Batesville Mounds site consists of five or six mounds and two or three middens. The first map of the site shows Mounds A through E (Brown 1926:fig. 23) (Figure 1.1). Ford (1993, 1996a) and Holland-Lilly (Holland 1994; Holland-Lilly 1996a) have made the argument that the McCarter Mound, a small burial mound completely excavated in the late 1960s and located only a few hundred feet to the north (G. Johnson 1969), should be considered part of the Batesville Mounds site. Certainly the ceramics suggest that the sites were contemporaneous

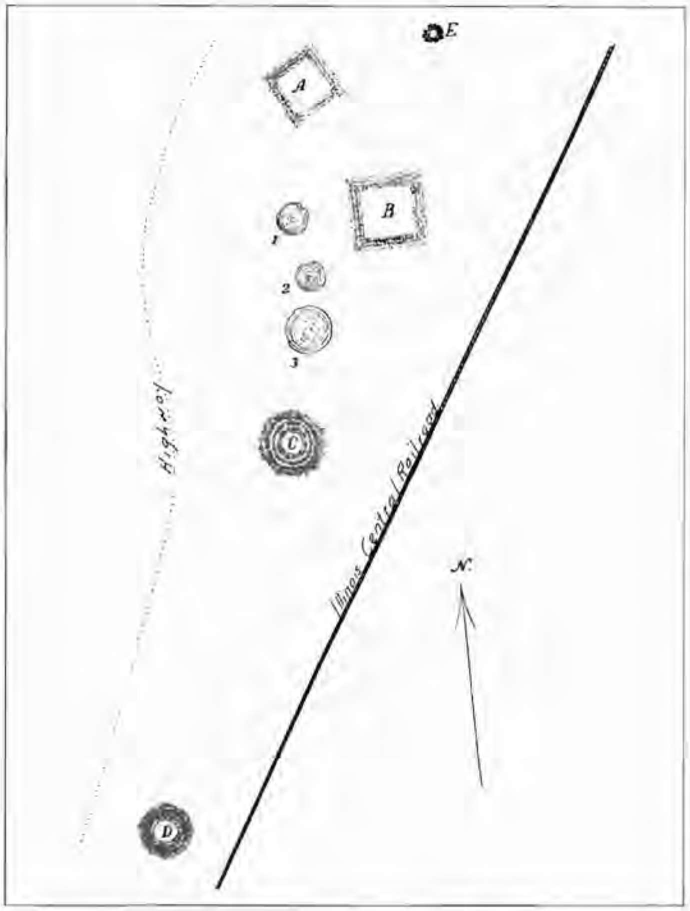

Figure 1.1. First map of the Batesville Mounds, after Brown (1926:fig. 23).

(Ford 1990). The fact that the McCarter Mound is separated from the rest of the mounds by a section line and coinciding property line has likely contributed to the artificial separation of the two sites.

Haag's 1950 site card for the Batesville Mounds includes a sketch map that shows the same five mounds that Brown mapped. Haag also noted the location of two midden deposits, which he labeled the North and South Village areas. There is also a midden deposit dating to approximately the same period as the Batesville Mounds located immediately to the north of the section line that marks the north boundary of what was the Harmon property (Ford 1996b). This midden is situated between the North Village and the McCarter Mound.

Although Haag failed to mention them, Brown (1926:115) describes three borrow areas to the west and southwest of Mound B. The pits are still evident in the current contour map of the site (Figure 1.2). In addition, the map shows a substantial notch in the terrace edge immediately to the west of Mound C. Since there is no drainage in the area that could explain this in terms of erosion, it is likely that the large amount of dirt needed to construct Mound C was borrowed from this area.

All of the mounds have suffered from vandalism, cultivation, and erosion; the best preserved of the lot is Mound C (Figure 1.3). It is 130 feet in diameter and its current elevation of 21 feet above the surrounding landscape exactly matches the 20- to 21-foot estimate provided by Brown (1926:114). The mound is clearly conical in shape. Likewise, Mound B, measuring 150 by 160 feet at the base, is relatively well preserved. The sides have been tattered by pot holes and tree falls and the base of the mound appears to have been spread by plowing. Brown (1926:114) describes it as slightly higher than Mound A (7 feet). However, our excavations revealed 9 feet of construction. Mound A has not done so well, as only 4 feet of artificial fill remain. If Brown (1926:113) had not described it as a platform mound, there would be no way of determining its original shape from what remains. Mound D is likewise reduced; Brown (1926:115) records a general elevation of 6.5 feet above the surrounding field with a maximum height of 8 feet under a small clump of bushes at the crest of the mound. The field school trench uncovered about 5 feet of fill. Mound E and McCarter are in the worst shape of all. All that remains of Mound E is a slight rise that can only be seen when the grass is newly mowed. It was the landowner's intention to use the McCarter Mound to make a pond levee that prompted its excavation in the first place. There is no discernable trace of the mound today.

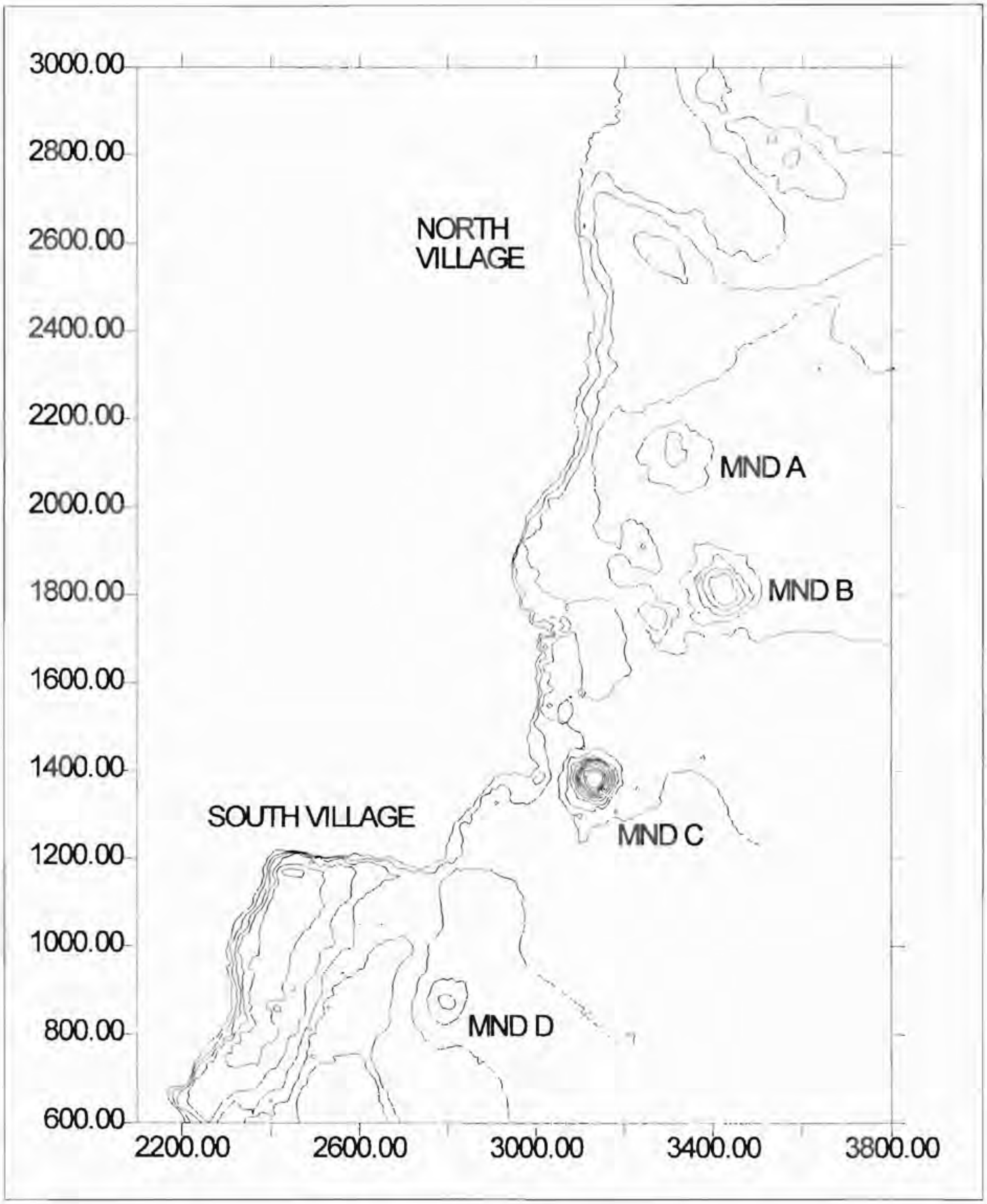

Figure 1.2. Contour map of the Batesville Mounds site, after Holland (1994:fig. 1).

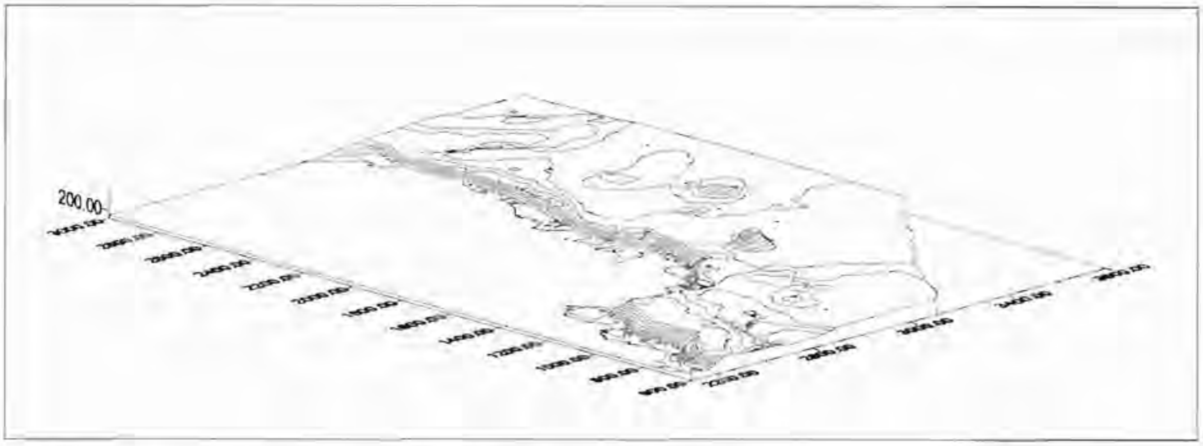

Figure 1.3. Perspective view of Batesville Mounds, from the southwest.

Site Setting

The Batesville Mounds site is located at the edge of a well-developed terrace on the south side of the Tallahatchie River at the point where two oxbows lay up against the terrace edge (Figure 1.4). Oxbow and swamp extend to the west from the site up to the current channel of the Tallahatchie River about 1500 feet from the terrace edge at the South Village location. The current channel of the river flows up against the terrace edge just to the north of the site. In fact, there is a Mississippian period site at this location that is being undercut by the river (Johnson 1980). This serves to underscore the active meander program of the river. It would be difficult to determine whether the channel remnants to the west of the site were abandoned at the time of occupation and mound construction. There is a rather steep 15- to 20-foot difference in elevation between the terrace and the floodplain in the region of the site.

The terrace is relatively flat with only a slight rise to the south and east where it joins the bluffs of the Tallahatchie River approximately 2000 feet from the South Village portion of the site. These bluffs rise nearly 100 feet above the terrace surface. The site is situated at the point where the Tallahatchie River bottom begins to broaden just before the river flows into the Mississippi alluvial valley.

Terrace soils consist primarily of Grenada and Calloway silt loams. The soils are subdivided by relative slope (Galbery 1963). In fact, Mound A is distinguished from the surrounding Calloway soils as having a 2 to 5 percent slope (Figure 1.5). None of the other mounds were given separate soil classifications, presumably because they were covered in trees at the time the soils survey was conducted. Both soils are derived from the loess deposits in the surrounding uplands and both are old enough to have developed fragipans.

Loess deposits are characteristic of the eastern edge of the Mississippi alluvial valley in Mississippi and are the defining characteristic of the Loess Hills physiographic zone. This zone varies in width from 5 to 30 miles and runs two-thirds of the length of the state. It is about 14 miles wide at the point where the Tallahatchie River cuts through it (Vestal 1956). The Batesville Mounds are located about 3 miles from the eastern edge of the zone. The Loess Hills were forested in oaks and hickories (Kuchler 1964) and were a favorite location for prehistoric habitation, particularly during the Woodland period (Johnson 1997).

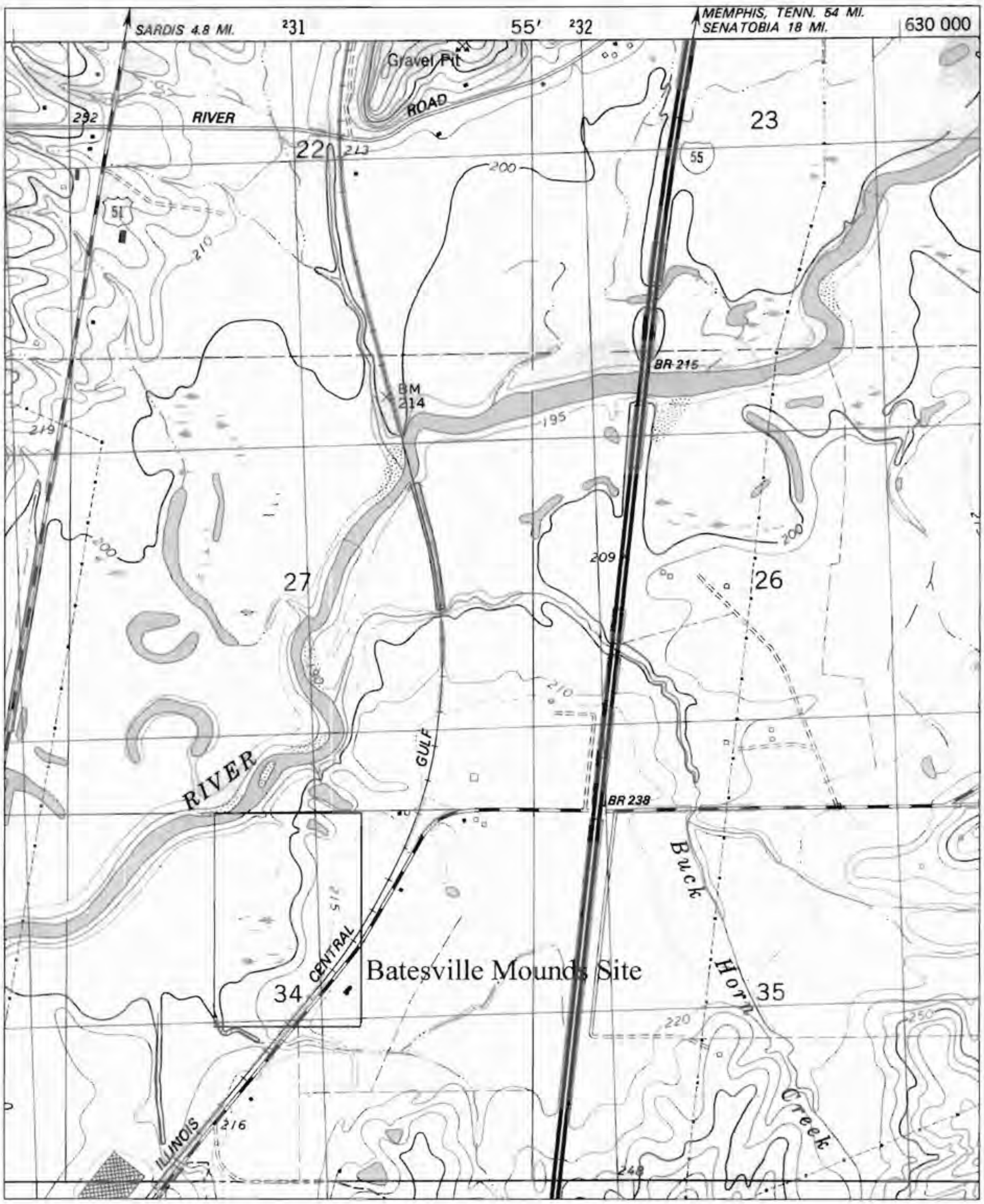

Figure 1.4. Portion of Batesville quad sheet showing location of mapped area.

Figure 1.5. Portion of Panola County Soil Map showing Batesville Mounds (Galberry 1963:sheet 69).

The loess consists of wind-borne silts and loams deposited over much older marine sediments during the Pleistocene (Snowden and Priddy 1968). The Citronelle formation is sandwiched between the bottom of the loess and the top of the Eocene sands and clays. This formation has not received much attention from geologists because the only material of economic importance that it contains is the chert gravels. The Batesville quad map shows a gravel pit on the bluff line just to the north of the Batesville Mounds site. These gravels were tremendously important as raw material for tool production to the prehistoric inhabitants of Mississippi, a state with relatively few chert deposits (Johnson 1989). The geologic map of Panola County (Vestal 1956:plate 1) shows the Citronelle formation to outcrop all along the base of the bluffs of the Tallahatchie bottoms. All of the streams that drain across the terrace upon which the site is located carry gravels and there are substantial gravel bars in the Tallahatchie River. The Batesville Mounds site is located in one of the prime lithic source areas in the state.

The site is also located on one of the major rivers draining the uplands of north Mississippi. Moreover, it is situated in the Loess Hills less than 5 miles from the edge of the Mississippi alluvial valley, which makes up the Delta physiographic zone. Both zones were rich in biotic resources important to the prehistoric inhabitants and both were heavily occupied. It is a convenient location for a ceremonial center.

Regional Research Overview

What follows is a review of the archaeological investigation that has been done in north Mississippi with specific reference to research that is relevant to interpreting the Batesville Mounds data. It is possible that the Batesville Mounds were first mentioned in the initial volume of the Smithsonian Institution's Contribution to Knowledge series. Ephraim Squier and Edwin Davis's *Ancient Monuments of the Mississippi Valley* (1848) brought together most of what was known about prehistoric earthworks at the time. Although they visited and mapped many sites themselves, they also relied on information supplied by local authorities. Rev. R. Morris provided descriptions of several mound sites in north Mississippi. Among these is a set of earthworks "situated three miles east of Panola, Mississippi, and closely resembl[ing] No. 3, Plate XXXVIII. It is accompanied by several remarkable mounds" (Squier and Davis 1848:113). Calvin Brown (1926:116) notes that Panola was the name for the original settlement in the vicinity of Batesville and concludes that these were the Batesville Mounds. However, the most important characteristic of the site map that Squier and Davis describe as similar to the mounds near Panola is a large, empty, rectangular embankment. There has never been the suggestion that an embankment existed at the Batesville Mounds site.

The next major work on mounds in the eastern United States was also published by the Smithsonian Institution. Using survey data, excavations, and local reports, Cyrus Thomas (1894) clearly established that the mounds of the Southeast were built by the Native Americans. Although the Batesville Mounds are not mentioned, he does describe excavation in the Ingomar Mounds that was conducted by Gerard Fowke (Thomas 1894:267–78). These mounds are located in Union County, about 50 miles to the east of the Batesville Mounds and subsequent research, based on a reanalysis of Fowke's material and additional excavations, has shown Ingomar to be a site that is likely related to the Batesville Mounds in terms of architecture and chronology (Rafferty 1983, 1987, 1990). Likewise, Charles Peabody's (1904) two seasons of excavations in the vicinity of Clarksdale, Mississippi, provide comparative data in terms of material recovered from the Dorr site.

Calvin Brown's *Archeology of Mississippi* (1926), the first and only comprehensive summary of Mississippi prehistory, is a largely descriptive account of mounds and artifacts from all over the state. However, since Brown was on the faculty at the University of Mississippi, his coverage of north Mississippi is more detailed than that of the rest of the state. In fact, he visited the Batesville Mounds at least twice, once in 1906 and again in 1918 (Brown 1926:113–14). He appears to have used a compass and tape in mapping the site (Brown 1926:fig. 23) for the relative positions of Mounds A, B, and C as well as the three borrow pits are quite accurate. Mound D, however, is 150 feet farther to the north than shown on Brown's map. When our map and his are displayed at the same scale and matched, his north arrow is very close to the 3 degrees east of true north declination for this area. This accuracy lends confidence to his observations about mound orientation, shape, and height. Mound A was "an irregular rectangle" 7 feet high that was entirely in cultivation on his first visit and partially cultivated on his last visit (Brown 1926:113). Mound B is described as "slightly larger and higher [than Mound A] and has suffered less from the ravages of time and cultivation" (Brown

1926:114). "Mound C is a fine conical mound . . . 20 to 21 feet high," he reports (Brown 1926:114) and Mound D was also a conical mound and all but the crown was under cultivation at the time of Brown's visit. It was 8 feet high at the time of his visit (Brown 1926:115). Brown also describes and maps three possible borrow areas and a fifth mound, E. The borrow areas are still evident and can be seen on the current site map. Mound E is suggested only by a slight rise located approximately 90 feet north-northeast of the location where he maps it.

Brown's work at the Batesville Mounds is important for a number of reasons. It is the first unequivocal reference to the site. It provides elevational data that allow us to gauge the amount of destruction that the mounds have suffered in the intervening eighty years. In fact, Mounds A and D are so thoroughly degraded that we must rely on Brown's description to assign mound type. He also noted and correctly interpreted three of five possible borrow areas. However, in keeping with the emphasis of the time, he failed to note the locations of the midden area, observing simply,

> About these mounds fragments of flint abound and a perfect arrow-head may be found occasionally. Fragments of pottery are still seen, tho they are not so numerous as the flint fragments. (Brown 1926:115)

The following era in American archaeology is characterized by an emphasis on establishing chronology and was funded in large part by the federal relief programs of the Depression. Baseline chronologies were established in northeastern Mississippi as the result of work done in preparation for the construction of the Natchez Trace Parkway. Jesse Jennings (1941, 1944) defined the Miller sequence in order to measure chronological change in the ceramics of the Woodland period for the upper Tombigbee River drainage. Miller I, the Early Woodland phase, was characterized by sand-tempered plain and fabric-impressed pottery and associated decorated wares. Miller II, the equivalent of Middle Woodland, was defined on the basis of a shift from fabric-marked to cord-marked pottery. Cord marking continues into Miller III, but the tempering changes from sand to grog. Although there have been several refinements of the scheme (Cotter and Corbett 1951; Bohannon 1972; Jenkins 1981), it has endured because it accurately describes the major chronological trends during the Woodland period and allows phase assignment for even small collections of pottery.

Major chronological trends in the region immediately to the west of the Batesville Mounds were first delineated as a result of the Lower Mississippi Survey, conducted by Philip Phillips, James Ford, and James Griffin (1951). The fieldwork focused on the Mississippi River alluvial valley between the junction of the Mississippi and Ohio rivers in the north and the town of Vicksburg, Mississippi, in the south and was conducted from 1940 to 1947. Two major divisions of the Woodland period were defined. The earlier is the Tchula period, which is roughly coeval with Miller I to the east. This is followed by the Baytown period, which Phillips, Ford, and Griffin (1951:436–45) subdivide into early, middle, and late. Early Baytown is comparable to the Middle Woodland, Marksville period of the Lower Mississippi Valley and contains ceramics that are similar to those found in the Miller II assemblages of eastern Mississippi. This sequence was later refined by further work in the Yazoo Basin of northwestern Mississippi (Ford, Phillips, and Haag 1955; Phillips 1970; Williams and Brain 1983).

Archaeologists working in the portion of north Mississippi that falls between the Yazoo Basin and the Tombigbee drainage have had to decide whether the material they recover better fits in the Miller sequence or the Yazoo Basin sequence (Koehler 1966; Ford 1977, 1980, 1981). The general conclusion (Ford 1981; Johnson 1988) is that the Miller phases are not applicable in this region. The problem is that the distinctions between Miller I, II, and III are based on two things happening in a specific sequence. First, the predominant surface finish changes from fabric marked to cord marked (Miller I to Miller II). Then temper changes from sand to grog (Miller II to Miller III). Although both sand- and grog-tempered ceramics are found in the Yazoo Basin, grog temper appears to have been introduced much earlier there than in the upper Tombigbee drainage. The fact that there is a grog-tempered variety of Withers Fabric Marked in the Yazoo Basin, but not in the Miller area, is a succinct statement of the primary difference between the two sequences. Stratigraphic data from a small number of sites (Ford 1981) and an analysis of several small surface collections (Johnson 1988) indicate that the western boundary of the Miller traditions roughly coincides with the western edge of the Tombigbee drainage. That is, although the shift from fabric-marked to cord-marked surface finish does occur at about the same time in this region as it does in the Yazoo Basin and upper Tombigbee, both grog- and sand-tempered sherds appear to occur throughout the sequence in the intervening area.

William Haag, one of the pioneers in southeastern archaeology during the time when chronology was the primary concern (e.g., Haag 1939), taught at the University of Mississippi during the early 1950s. He was a sometime collaborator with the Lower Mississippi Survey (Ford, Phillips, and Haag 1955). In fact, he used their Jeep during the off-season. Haag visited the Batesville Mounds twice in the winter of 1949–1950 and filled out a site card. The card provides a sketch map of what he saw as "Pyramidal mounds (4) and village areas." The site description reads as follows:

> Four large earth mounds of varying dimensions. Only the second from South end of the site seems to now be intact. It is flat-topped and appears to be pyramidal although Brown called it conical at time (1906 and 1918) of his visits. Midden material may be found scattered near each mound as the soil used in the construction contained some midden and subsequent wear from ploughing, etc., has brought this to light around the margins. Two areas show a concentration of midden: one of these is to south end and other is at north end of the group of mounds. The largest mound, still intact, has very steep sides. The approximate dimensions of these mounds are indicated on the other side.

Haag's observations are notable in his identification of the South and North Village areas, which were presumably in cultivation at the time of his visit. He failed to note the borrow areas, but did record mound elevations, which, judging from his estimate of 20 feet for Mound C and 10 feet for Mound B, appear to be accurate. If so, Mound D (5 feet) and Mound A (8 feet) were considerably higher than they are today. It is also interesting that the artifacts found near the mounds were interpreted to have been derived from mound fill as the result of plowing. That is, there were no midden areas in the vicinity of the mounds. How Haag was able to interpret Mound C as pyramidal is a mystery. Even without the contour map to confirm Brown's assessment, the mound is clearly not rectangular in plan view. Haag also changed the name of the site to Harmon, after the current landowner. We have chosen to use the earlier name for the site.

The Early and Middle Woodland sites in north Mississippi that were excavated during the second half of this century have mostly been burial mounds. The sparse data recovered in these excavations have been summarized by Janet Ford (1988, 1990) in her definition of an eastward expansion of the Tchula period ceramics into the uplands of north Mississippi. These sites were later labeled the Tidwell phase by Richard Weinstein (1991). This phase includes the McCarter Mound, a low, conical mound about 4.5 feet high and 35 feet in diameter when it was excavated by a group of local amateurs in 1968 (G. Johnson 1969). The site is located less than 800 feet north of the North Village of the Batesville Mounds and, as Ford (1993, 1996a) and Holland-Lilly (Holland 1994; Holland-Lilly 1996a) have suggested, this mound should probably be considered part of the Batesville Mounds site. This assignment is reinforced by the similarities between the ceramics recovered from both burials and mound fill at McCarter and those found in Mound B during the summer of 1996. McCarter is also notable for having contained a set of copper-covered panpipes.

In contrast, the three Tchula period phases that have been defined for the adjacent portion of the Delta in northwestern Mississippi (Connaway and McGahey 1971; Phillips 1970; Weinstein 1991) are based primarily on surface collections and a few test pits from habitation sites. The Boyd site in Tunica County, Mississippi, is a significant exception. Substantial excavations at that location exposed a Tchula period occupation overlain by a stratum of sterile sand and a subsequent Marksville period midden. This led John Connaway and Sam McGahey (1971) to define the Boyd phase, an Early Woodland ceramic complex made up of fabric-marked wares with early punctated, cord-impressed, and incised types. As will be seen, there are some close parallels between the Mound B ceramics at the Batesville Mounds and Zone I at Boyd. Zone II at the Boyd site contained predominantly cord-marked sherds with associated broad-lined incised types of the Marksville period. These ceramics are similar to those we recovered from the South Village at the Batesville Mounds site.

There are, however, some differences in the interpretation of the Boyd stratigraphy. Arguing primarily on the presence of three crude cross-hatched rim sherds, some Twin Lakes Punctated sherds, and some stamped and incised minority types, Alan Toth (1988) assigns Zone I to the Marksville period, Dorr phase. Twin Lakes Punctated is thought to date to the Marksville period because of its occurrence at the Twin Lakes site and other components of the Twin Lakes phase. However, as Sam Brookes (1988; Brookes and Taylor 1986) and Janet Ford (1988) have argued, the Twin Lakes phase is not a particularly strong construct. Upon closer examination, most of the supposed Marksville diagnostics of this phase appear to date to the Tchula period. This includes Twin Lakes Punctated and crude cross-hatched rims. Of the more than 100 Twin Lakes Punctated sherds recovered during our 1996 excavations of the Batesville Mounds, all but three came from Mounds A and B. All of the cross-hatched rims came from Mound B, which contained no Marksville Incised or Stamped sherds. The Mound B assemblage confirms the likelihood that crude cross-hatched rims and Twin Lakes Punctated are Tchula rather than Marksville types.

Still, Toth's (1988) dissertation provides a comprehensive overview of the work that has been done on Marksville period sites in the Lower Mississippi Valley. His synthesis begins with the work of the Lower Mississippi Survey (Phillips, Ford, and Griffin 1951; Phillips 1970), using many of the same collections upon which the earlier constructs were based. Other than Boyd, only two Marksville period sites in the portion of the Mississippi alluvial valley adjacent to the Batesville Mounds have been excavated. The first of these was the Dorr site, which was located within the city limits of Clarksdale and excavated by Charles Peabody (1904) at the turn of the century. A small number of Marksville period ceramics were recovered from this mound. The second site was the group of mounds at Helena, just across the river from Mississippi in Arkansas. Two of these mounds were excavated by James Ford (1963) in 1960. The mounds contained log tombs, copper-covered panpipes, ear spools, and exotic cherts, as well as both Tchula and Marksville ceramics.

Three Woodland mound sites located in the upper Tombigbee drainage have been excavated. The first of these is the Miller site, excavated by Jennings (1941) as part of his Natchez Trace research. The village appears to have been occupied during the Middle and Late Woodland period. Two mounds were excavated, which contained many burials but relatively little in the way of grave goods. A shell cup, a limestone pipe, a cord-marked pot, and a few fragments of copper were found. Only the sand-tempered vessel provides much in the way of chronological information, implying a Middle Woodland time of construction.

The Bynum site, located alongside the Natchez Trace several miles to the south of the Miller site, was excavated by John Cotter and John Corbett (1951) as part of a continuation of the Park Service research on the Trace. In addition to a good deal of structural data, the mounds contained copper ear spools, greenstone celts, fragments of seashell, well-made bifaces, and galena. The village deposit contained both Miller I and Miller II material as well as a large piece of a Marksville Incised vessel and a few other Marksville sherds. Cotter and Corbett (1951:20) tentatively equate the Marksville ceramics to the Miller II occupation of the site.

The Pharr Mounds were also excavated by the Park Service, under the direction of Charles Bohannon (1972). The site is located near the Natchez Trace to the north of both the Bynum and Miller sites. Ceramics from general mound fill and the small amount of midden deposit that was found are generally comparable to those found at Bynum. That is, they are primarily sand tempered and mostly fabric impressed with a little cord marking. The mounds produced a good deal of exotic material including a greenstone platform pipe, silver-covered ear spools and panpipes, and Marksville Incised ceramics.

A recent report by Richard Walling, Robert Mainfort, and James Atkinson (1991) summarizes these mounds and details a series of ten radiocarbon dates. These dates are internally consistent and conform to what the ceramic data suggest. That is, Bynum appears to be older than Pharr with a calibrated range of dates falling around 200 B.C. Pharr appears to date to A.D. 100. Miller is the latest of the three, dating to around A.D. 300.

The one excavated Middle Woodland site outside of Mississippi that has the greatest relevance to the Batesville Mounds is the Pinson Mounds site in southwestern Tennessee. Although archaeological investigations at this substantial mound site date back to the beginning of this century, it was not until the 1970s that it began to become clear that the primary period of mound construction dates to the Woodland period (Mainfort 1980). This is significant because there are a number of platform mounds at the site, some of which are quite large. Robert Mainfort (1988) summarized the radiocarbon data from Pinson in a 1984 paper at the Midsouth Archaeological Conference. Although there was an Early Woodland occupation at the site comparable to Miller I in the upper Tombigbee drainage, mound construction appears to have begun at about the time when the shift from fabric marking to cord marking took place. What little direct evidence of Marksville contact there is seems to have occurred prior to mound construction. Mounds, both burial and platform, were built from about A.D. 1 to about A.D. 200. In addition to the substantial amount of mound building that took place at the site, ceramics and a limited number of artifacts made from exotic material indicate contact with contemporaneous cultures throughout the Southeast (Mainfort 1986).

It was the secure Woodland date for the platform mounds at Pinson that made the data from the Ingomar Mounds in north-central Mississippi much easier to interpret. Janet Rafferty's (1983, 1987, 1990) study of collections recovered from the site in the nineteenth century and a limited amount of test excavation have demonstrated this to be another example of a Woodland period platform mound.

Recent Research at the Batesville Mounds

Archaeologists from the Mississippi Department of Archives and History visited the Batesville Mounds site during the summer of 1988 in order to collect data for a National Register of Historic

Places nomination. The form was completed and submitted in October of the same year. Kenneth P'Pool of the MDAH notified the city of Batesville that the nomination had been accepted in January 1989. The nomination form relies heavily on data collected during the previous visits by Calvin Brown and William Haag. No collections were made at the time of the site visit because the entire site was grown over and ground visibility was limited. On the basis of "mound characteristics (size and shape)" the site was determined to date to the Woodland period. This is a bit puzzling since both Brown and Haag clearly indicate that Mounds A and B are platform mounds. And, although Mound A today is so thoroughly worn down by cultivation that its original shape is indistinguishable, Mound B is obviously flat topped, even though heavily wooded. There is no mention of the possibility that the site is a Woodland platform mound group comparable to Pinson or Ingomar. Still, the nomination to the Register was critical in preserving the site. And no one can fault the argument that the site should be nominated on the basis of the potential contribution to our knowledge of the prehistory of the state.

Jay Johnson at the Center for Archaeological Research at the University of Mississippi was contacted in the fall of 1990 and asked to design a program of fieldwork that would provide planning data to the Panola County Industrial Authority, the current site owners. The primary goal was to delineate the horizontal extent of the subsurface deposits of cultural material. Because the entire site was covered in woods or pasture, a coring program was proposed. The project was funded with support for a graduate student, undergraduate assistants, gasoline for the truck and the power auger, and field supplies. It was scheduled to run for a year, beginning in November 1990.

Mimi Holland was looking for a thesis project and was willing to commit to the considerable amount of work involved in setting a site grid over a large and mostly wooded area and then dragging a gas-powered posthole digger along grid lines in a search for small and mostly eroded sherds and flakes. Fortunately, the Batesville Mounds are an easy commute from Oxford so that Holland could use a number of willing University of Mississippi students to help her in the fieldwork.

The grid was established during the winter of 1990–1991 in order to take advantage of the visibility that would be lost as soon as the leaves emerged in the spring. We decided to use feet rather than meters in the grid so that the resulting data would be more accessible to the Industrial Authority. Besides, one of us (Johnson) grew up digging 10-foot by 10-foot squares and is generally more comfortable on a site gridded that way. The grid began with a north-to-south baseline originating at the northwest corner of the Industrial Authority's property, which coincides with the northwest corner of the northeast quarter of section 34. This point was given the arbitrary designation of 3000R3000. Property boundaries were clearly marked with fence lines and, after moving several feet to the east to avoid the big trees in the fence line, we followed the fence south using a venerable optical transit and metal tape. Wooden stakes were driven at fixed intervals and lines were run off the baseline to the east in order to tie in the North Village, Mounds A and B, and Mound D. The South Village was connected to the grid by a line to the west.

The research design called for auger testing on 50-foot centers in 500-foot-square blocks surrounding each mound. Similar intensive testing was scheduled for the two known village areas. We were ready with a posthole digger late in May 1991. Johnson spent just enough time in the field to recall his experience with a similar machine on a survey in western Tennessee and to remember that he had important duties back in his office. Holland and her crew continued cutting lines and digging 6-inch postholes. She was helped by field school "volunteers" graciously provided by Janet Ford when she began testing the North Village using the Ole Miss field school in June. Holland and her crew dug a total of 398 auger holes to a maximum depth of 18 inches or until fragipan made deeper excavation impossible. All the resultant dirt was dry screened through ¼-inch hardware cloth. Fewer than half (157) of the postholes yielded artifacts. A total of 1046 prehistoric artifacts were recovered, 134 of which are flakes, 374 are thermal shatter, and most of the rest are sherds.

The department acquired a laser transit in 1991, and we once again took advantage of the winter visibility to recover elevations to use in producing a contour map. The only disadvantage to winter mapping in north Mississippi is that the borrow areas were filled with very cold water, making readings in the deep spots very uncomfortable for the rod man. In all, 1166 elevations were recorded and entered by hand into the Surfer mapping software in order to generate the contour maps and perspective views reproduced in this and earlier reports. Even without a data recorder, the laser transit made mapping the site a much more manageable task.

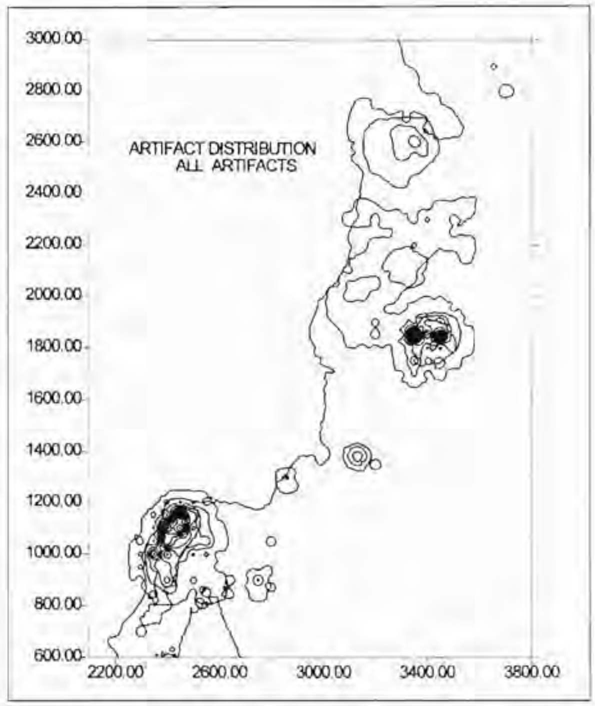

Figure1.6. Contour map of all artifacts.

A final report was submitted to the Panola County Industrial Authority in May 1992 (Holland 1992). Holland finished her master's thesis and graduated two years later (Holland 1994). The results of this work are also included in a recent article (Holland-Lilly 1996a). In addition to the artifacts from the auger tests, the thesis included an analysis of the artifacts recovered during the 1991 field school excavations in the North Village. This added 484 flakes, 734 pieces of thermal shatter, and 1400 sherds. In both analyses, sherds smaller than ¼ inch were labeled sherdlets and were not assigned to type categories.

The first and most remarkable result of this first phase of research is that of all the sherds recovered in both the auger tests and field school excavations, none were shell tempered. The Batesville Mounds were documented to be another example of a Woodland period site with platform mounds. Ceramics from both recovery procedures include cord-marked as well as fabric-marked sherds along with a small number of Churupa Punctated and Marksville Incised types. Although there appeared to be both a Tchula and Marksville occupation at the site, the majority of the material that could be assigned appears to date to the later period of occupation. The ceramics and the fact that the two nearest known Woodland platform mound sites, Pinson and Ingomar, date to the Middle Woodland period prompted a tentative Marksville assignment for the platform mounds at Batesville (Holland 1994; Holland-Lilly 1996a, 1996b).

The primary objective of the research was to map the distribution of archaeological deposits on the site, and the auger hole data were quite effective in delineating concentrations. As expected, the major deposits were the South and North Village areas (Figure 1.6). The concentration of artifacts around Mound B came as a bit of a surprise particularly in that the Mound B density exceeds the North Village density. However, when this pattern is examined in detail, some interesting differences between the mound areas and village areas emerge. The areas around Mounds A and B show a heavy concentration of thermal shatter, an artifact category that is almost entirely missing in the two village

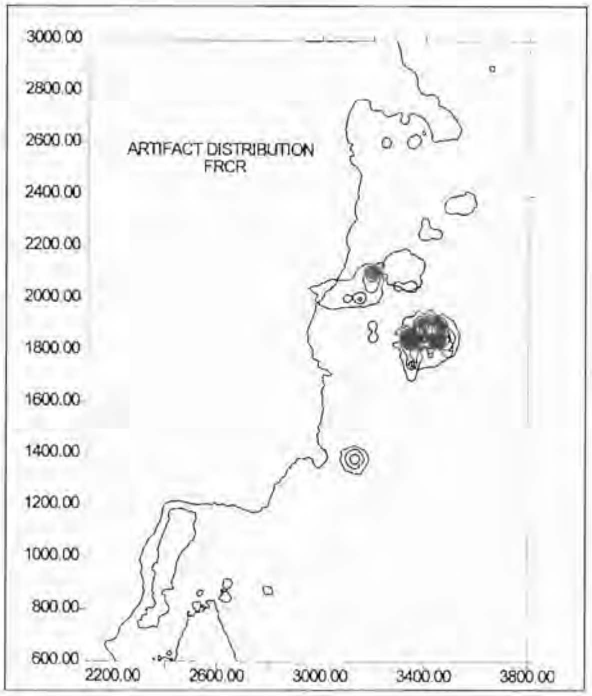

Figure 1.7. Contour map of fire-cracked rock.

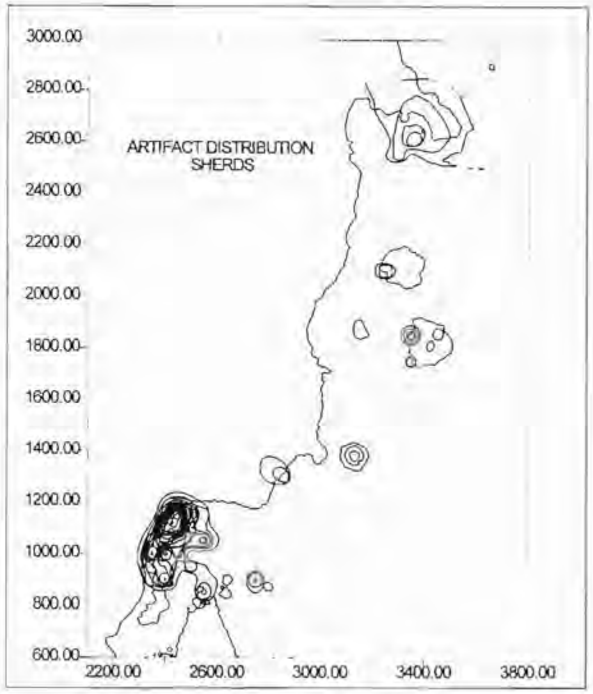

Figure 1.8. Contour map of sherds.

areas (Figure 1.7). Sherds, on the other hand, are much more common away from the mounds (Figure 1.8). The area around Mound C is conspicuous in the absence of artifacts of any kind. These distributional patterns suggest three different activity areas on the site: habitation areas, platform mound areas, and conical mound areas.

The 1991 field school also excavated a 5 by 10-foot trench at the apparent location of Mound E. The spot was marked by a low rise in the general area indicated by the Brown (1926:fig. 23) map. Although a fair number of artifacts were found, the profile showed nothing that could be interpreted as mound construction. If this is the Mound E location, it has been completely obliterated by years of cultivation. Likewise, the field school excavations in the North Village found the deposit to be thin and thoroughly disturbed.

Consequently, when Ford returned to the site with the field school in June 1993, she moved the focus of the excavations to the South Village. While the North Village area is currently in pasture and appears to have been cultivated in the recent past, large trees cover most of the South Village. The field school spent three seasons testing the South Village (1993, 1994, 1995), uncovering a generally thin, but relatively rich, deposit of Early and Middle Woodland material. Deeper deposits were exposed under a nearly sterile overburden during the 1995 season. In addition to the Marksville sherds that were recovered from the South Village, the field school excavations also produced a small number of blades made from exotic, apparently Midwestern chert.

While continuing the South Village test excavations, Ford put a crew on Mound B during the 1993 field season. Three 5 by 10-foot squares were located on top of the mound and excavated to between 20 and 32 inches. Relatively little material was found and no charcoal samples, the primary objective of the excavations, were recovered. No floors or other structural data were evident in the profiles. We began our 1996 excavations by opening up two of the field school excavations (1805R3425 and 1820R3440), and, as it turns out, the earlier excavations had stopped just short of the top of

Stage III. Stage IV, the last construction stage at the mound, contained relatively few artifacts in all of our excavations.

A nearly continuous trench 5 feet wide and 35 feet long was excavated through the center of Mound D during the 1994 and 1995 seasons. Very little was recovered in terms of artifacts or structural data. A preliminary account of these excavations including a review of the McCarter Mound data has been published (Ford 1996a).

Research Design

The 1996 excavations at the Batesville Mounds had two primary goals. The first was to confirm the Woodland construction date for the platform mounds. Toward that end, major excavations were planned for Mound B. Test excavations were scheduled for Mound A. We had hoped to reopen Mound D as well. The second objective of the research was to understand the timing and nature of the trade in exotic raw material at the site.

We began our excavations in Mound B, and it soon became evident that the first two stages of mound construction contained a relatively unusual collection of artifacts; the sherds were almost exclusively Tchula period artifacts, and the major lithic type was fire-cracked rock. What is more, all of the lithic artifacts are made from local material. None of the Illinois and Indiana cherts found in the South Village excavations were turning up in the screen.

Consequently, we abandoned our plans to excavate Mound D and decided to put a trench in the north end of the South Village. This would allow us to examine three aspects of the site that came to be of interest as the fieldwork progressed. First, we hoped to increase our sample of exotic blades and debitage in order to answer questions about the nature of the imported material. Also, the buried deposits that Ford had uncovered in the South Village were known to contain Marksville ceramics. We needed this material in order to understand the earlier, Mound B ceramics. Finally, the South Village excavations would allow us to examine the spatial pattern that had become evident in the distribution of the material recovered in the auger tests. That is, the contrast between the South Village and the Mound B area in terms of the relative concentration of thermal fracture could be studied.

2
Excavations

After the usual paperwork and delays, we began fieldwork on May 21, 1996. The last day of fieldwork was August 9. We lost only three and a half days to rain although we did get wet a few times, and we did get the truck stuck. We took July 4 and 5 off. Other than that, we worked five days a week, eight hours a day, starting at 7:00 A.M. We moved the start time back to 6:00 A.M. later in the summer in order to cut short the time spent in the afternoon heat. That meant that we got up and went to bed before nearly everyone else in Oxford. Toward the end it seemed that the only people we saw were each other, and the only thing we did was dig and fall asleep in front of the television at night. It is a good thing that it was an interesting excavation.

Our first objective was to reestablish the grid. It had been more than five years since Mimi Holland and her crew had cut the baselines. Most of the original stakes and flags were gone. The job was made more difficult by the ice storm of 1994. What had been mature hardwood forest with relatively little undergrowth was now a tangle of tree falls, broken limbs, and vines. Fortunately, the field school pits on the top of Mound B, although backfilled, still had most of their corner stakes in place. We used these stakes to reshoot an east-west line of stakes across the top of the mound. The test pit on Mound A was located by extending the Mound B grid through a gap in the trees into the open field between the two mounds. The trench in the South Village was established by tying into the field school test pits. All of this was done using a transit and tape.

Of course, since the original grid was in feet, our excavation units were either 5 by 5 feet or 5 by 10 feet in size. The decision of whether to use the smaller or the larger unit depended on how deep the square needed to go before sterile deposits were reached. Three feet is about the practical depth for a 5 by 5 unit if excavation is being done with a shovel. In some cases, in order to take advantage of extra field crew, squares were begun as 5 by 5 units and expanded to 5 by 10 when needed. All squares were named after the grid coordinate of their southeast corner. Six-inch levels were used unless a detectable zone change was encountered before the bottom of the level. Each distinct provenience unit, whether it was a level, a feature, profile cleaning, or surface find, was assigned a sequential bag number in the field that ultimately served as a catalog number in the lab. All excavated material was water screened through 1/8-inch hardware cloth.

The crew varied in size from five to eight graduate and undergraduate students from Ole Miss. During June, a couple of students worked with the field school in the morning and on our project in the afternoon. The maximum work force occurred one day in August when seventeen sixth graders attending a science day camp sponsored by the University Museum were put to work troweling the plowzone in four units in the South Village. Fortunately, they were able to find enough artifacts to keep them interested, and, when things got slow, we could always rotate them to the water screen.

No introduction to the 1996 excavations would be complete without a discussion of the water pump. In a real way, this sometimes recalcitrant piece of equipment determined the fate of the project. When it would not start, the backlog of dirt at the water screens grew at what seemed an exponential rate. And maybe it was, for while we puzzled over the silent pump, the water screen crew would be digging, adding even more to the pile of bags waiting to be screened. When the pump was running well, dirt washed through the screens, artifacts filled the bags, and everyone, or at least the project director, was happy.

We started out with a two-cycle pump that was essentially a big chain saw engine. It was left over from a previous project and was, in fact, older than some of the crew. We should have known better. It was replaced with a Honda four-cycle pump that we bought used from a rental agency in Oxford. After we figured out the arcane art of priming, leveling, and monitoring the oil in the crank case, this pump ran seven hours a day, five days a week, for two months. We should have done a testimonial.

We had intended to water screen the Mound B excavations in the borrow pit just to the southwest of the mound. Having only seen it in the winter when it held 3 feet of water, Johnson assumed that it would be the same in the summer. It was empty. We shifted the water screen to the pond at the edge of the North Village, 300 yards away (Figure 2.1). This required that we transport the dirt in the back of our field van.

A system of packaging, moving, and stockpiling dirt evolved over the course of the summer. We shoveled the dirt from the pit into washtubs lined with plastic lawn bags. A bag was considered full after about 10 to 15 gallons of dirt—much more than that and it would burst in transport. A strip of flagging tape with the square number, level, and bag number was placed inside the bag. A similar tag was tied up in the knot that closed the bag. The washtub and bag were then loaded onto wheelbarrows and transported down the mound to the van where up to ten tubs could be placed in the back and on the tailgate. Once at the water screen, the bags were dumped from the washtubs into a different pile for each provenience unit. Meanwhile, another set of tubs was being filled back at the mound. The

Figure 2.1 Water screen setup in the North Village.

size and number of piles of black plastic bags at the edge of the pond gave a quick idea of how far behind we were in screening. When the pump was working, a three-person water screen crew could keep up with three two-person excavation crews. We rotated the assignment.

Other than the fact that we sometimes bought out all the best kinds of lawn bags at both the Batesville and the Oxford Wal-Mart stores, the only real drawback in the arrangement was back fill. We had thought that we could capture the dirt from the water screens in a filter cloth enclosure, which we would shovel out periodically, stockpiling the dirt until the end of the dig. The enclosure filled at a remarkable rate, and shoveling wet loess is not humanly possible. It sticks to the shovel. Luckily, Howard Mize came through again by arranging with the city of Batesville to provide a back hoe, crew, and dump truck of dirt to fill our excavations. This also allowed us to dig at least one extra week that would have otherwise been spent in backfilling. In retrospect, it was a good thing that the borrow pit was dry. We would have been obliged to remove the water screen dirt from a cultural feature.

Mound B

Mound B was the primary focus of the 1996 excavations. It is the only platform mound at the site that is still intact enough to contain a significant amount of structural data. We also hoped to recover cultural material and carbon samples that would allow us to confirm the Woodland period date for construction. Our results exceeded our expectations. Not only did we end up with clear evidence for a Woodland assignment, but also intriguing architectural and functional data were recovered in addition to a nearly pure Early Woodland ceramic assemblage. But not before we had moved a lot of dirt.

Work on Mound B began with clearing the entire top of the platform. Although the mound is completely grown over in mature hardwoods, the ice storm had opened up gaps in the canopy that resulted in a thick foliage that made the orientation and shape of the mound difficult to see. Eventually we also cleared a portion of the northern slope. In all this we were careful to leave the large trees in order to preserve the mound and for the shade they would provide.

We began the excavation by shoveling out the backfill in two of the three 5 by 10 units that the field school had dug in 1993. Square 1805R3425 is situated near the center of the top of the mound and had been excavated to a maximum depth of 34 inches by the field school crew. The northwest corner of square 1820R3440 is located about five feet from the northern edge of the top of the mound. At the end of the field school season, John Connaway and Jay Johnson had joined Janet Ford in placing an auger test started from the deepest point in the bottom of this square (about 32 inches below surface) in hopes of detecting construction stages (Ford 1996a). Although we recorded basket loading, we missed the construction stages that became evident once the complete profiles were exposed.

We cleared a portion of the north slope of the mound while excavation began in the two field school pits. The site grid runs catty-cornered across the mound, and we wanted a trench that sliced through the side of the mound at a right angle (Figure 2.2). The transit was set up over the 1835R3430 stake and rotated 32.5 degrees to the east of grid north to establish a new grid. This same point was designated 500R500 in the Mound B grid and a 5 by 10 unit was opened near what we thought was the base of the slope. This square, 515R505, was the beginning of the 505 trench (Figure 2.3). Structural data were evident in the first level. Incidentally, levels were maintained by measuring down from all four corners and establishing a floor that was flat, but not horizontal. That is, the slope of the floor coincided with the slope of the surface. We hoped that the artificial levels would therefore correspond with the construction stages. As it turned out, the construction stage boundaries, even on the mound slope, were generally horizontal so the levels crosscut stages. This problem was immedi-

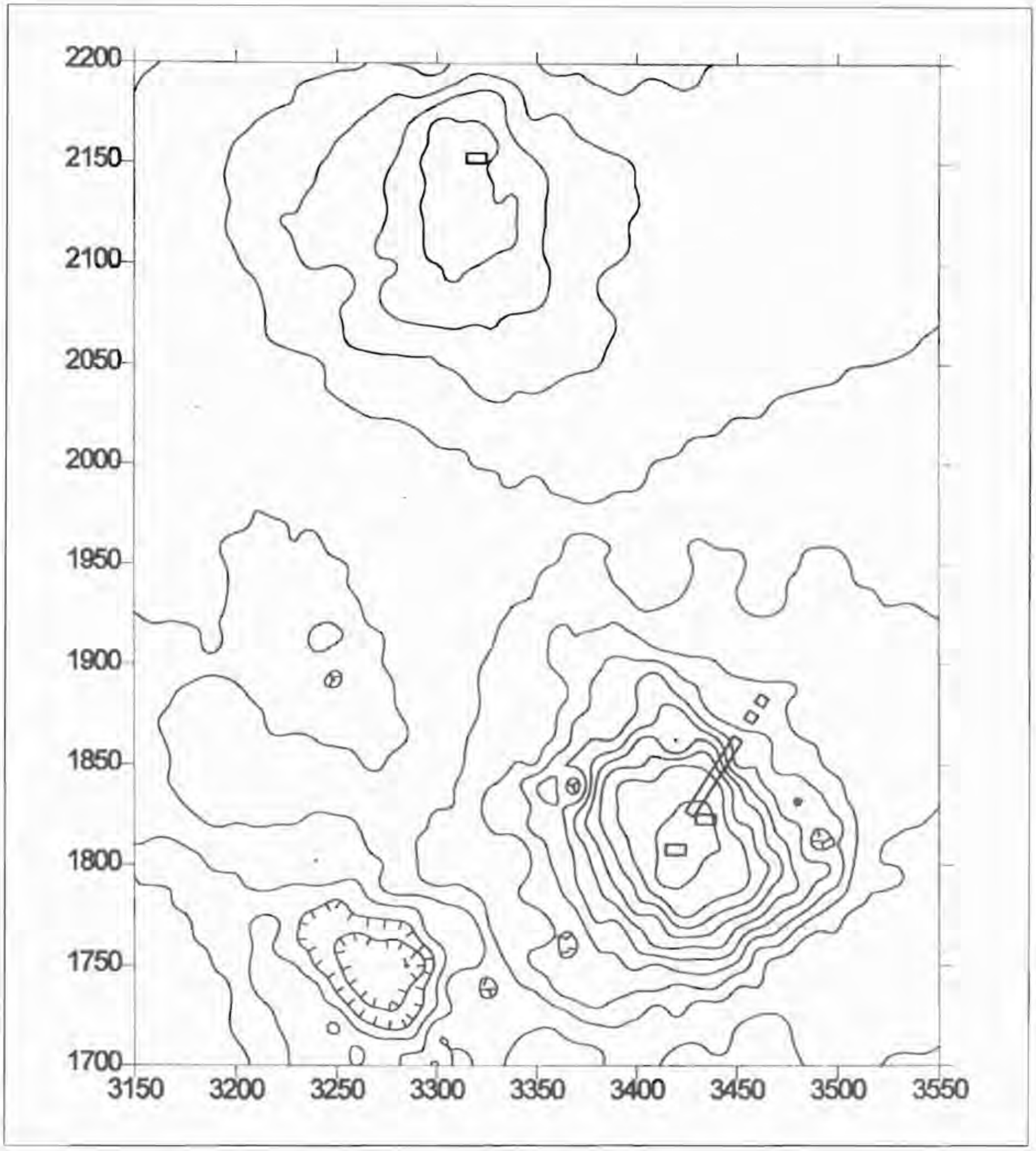

Figure 2.2. Map locating Mound A and B excavation units.

ately evident in Level 1 of 515R505. The northern third (down slope end) of the level consisted of dark grayish brown fill with an abundance of thermal shatter and a good many sherds. The southern two-thirds were made up of lighter brown soil with very few artifacts. This deposit was similar to the material being excavated from the pit at the top of the mound. Therefore, Level 2 was taken out in two units, Zone 1 for the upper portion and Zone 2 for the lower.

Just two days later, we hit the top of Zone 2 in the 1820R3440 and 1805R3425 pits in the top of the mound. When we shot elevations on the Zone 1/2 boundary in all three pits, they were nearly identical. In cleaning the profiles for mapping in the 1820R3440 pit, we discovered that it was possible to distinguish two construction stages within what we had already labeled Zone 1. The top 30 to 33 inches consists of a dark yellowish brown silt loam. A lighter, irregular band of soil 3 to 4 inches thick separates this zone from a brown silty clay loam. This lower zone is equivalent to what we had labeled Zone 1 in the slope trench and is easily distinguished on the basis of the higher clay content. Therefore, we ended up with a Zone 1a designation for the last construction stage on the mound and Zone 1b for the second-to-last stage. These zones were evident in the profile of the trench once it had been extended south into the mound as well as in the other mound-top unit.

We continued the excavation of the mound-top units down into the Zone 2 deposits, finding the same artifact density as was coming out of Zone 2 in the trench. It soon became necessary to use 5-gallon plastic buckets to pass the dirt out of the pits. It also became necessary to buy an aluminum ladder. Normally leaning a ladder against a profile is asking for a profile collapse. However, the loess-derived soils of Mound B are remarkably stable. The profiles at the head of the trench were ultimately 10 feet high with no sign of a slump. Other than the fact that it has to be water screened, loess is an ideal soil for archaeology. Even so, it became increasingly difficult to get the excavated dirt out of the mound-top pits as we progressed into Zone 2. Finally, both pits were abandoned, 1805R3425 at 88 inches below surface and 1820R3440 at 86 inches below surface.

Meanwhile, we began a 5 by 10 unit that would ultimately form the southernmost limit of the 505 trench. This square, 490R505, was located entirely on the top of the mound at the edge of the slope. We also opened a 5 by 5 unit at grid coordinate 505R505, leaving a 5-foot balk between the two new excavation units and another 5-foot balk between the 5 by 5 unit and the initial trench unit, 515R505. These gaps in the trench made it easier to keep the samples separate and allowed us to watch the east-west profiles as we took the trench down. Once the construction stages were clearly defined, these east-west profiles made it easy to remove the deposits by zone, following the boundaries in from the profiles. The trench was eventually extended to a total length of 45 feet by skipping squares and coming back to remove them. The intervening squares were also used as steps to help in removing dirt from the deep end of the trench (Figure 2.4). For example, the 500R505 5 by 5 unit was taken down to the bottom of Zone 1a at a depth of 39 inches, where it served as a bench to stand on while passing the buckets out of the 490 unit as we approached the final levels of that square.

A fourth construction stage, Zone 3, was recognized fairly early in the excavation although it is similar to Zone 2 in terms of construction and content. Basket loading is pronounced, and sherds and fire-cracked rock are common. However, a clear break with an apparent weathered surface divides the two zones. This boundary could only be detected consistently in profile. The practice of initiating excavation from the east-west profiles whenever possible made the Zone 2/3 distinction much more secure. The fact that this zone boundary, like all the others, is horizontal and nearly level also made zone designation possible during the excavation.

In many cases we were able to use zone changes to terminate a level and begin the next level with the top of the underlying zone. This was relatively easy in the case of the 1a/1b boundary, which was marked by a soil texture change, and the 1b/2 boundary, which the excavator could actually hear as the shovel started hitting fire-cracked rock, but it was also possible in the case of the other boundaries. Therefore we feel comfortable in using the zone distinctions in exploring potential patterning in the distribution of artifacts in the mound. Whenever a level was begun at the top of a zone, it was

Figure 2.3. Beginning the trench on Mound B.

Figure 2.4. Mound B trench nearing completion.

measured down from the zone boundary rather than the top of the pit. Sometimes pedestals were left in the four corners to maintain the 6-inch depth.

Zone 3 turned out to be the first of the mound construction stages. It lies on top of a well-developed A horizon that contains a fair amount of artifacts. This Zone 4 is distinguishable from the underlying parent material by organic staining. It grades into the subsoil, which we labeled Zone 5.

The north profile of the trench in what began as the 530R505 square made it clear that we had not found the edge of the mound. Both Zone 2 and 3 were evident, amounting to about 2.5 feet of mound construction. Consequently, we opened square 555R505, a 5 by 5 unit located 20 feet from the end of the trench. This was affectionately known as the sun square since whoever worked there did not have to worry about the shade from the trees on the mound ever reaching them. Artifacts, including the usual concentration of fire-cracked rock, were found in upper levels. The subsoil, Zone 5, was encountered at about 1.8 feet below surface. However, other than a poorly defined plowzone, zones above the subsoil were impossible to distinguish. Even the buried A horizon, which is relatively clear in the mound trench, was invisible. Although the artifacts, the elevation, and the soil texture and color suggested that we were digging in Zone 3, it was impossible to see any evidence of the basket loading that was so obvious in that zone in the trench.

In an effort to rediscover the zone boundaries, we moved 10 feet to the south, back toward the mound, and opened the 545R505 square. Again, about 2 feet of cultural deposit was uncovered. However, the profiles of this pit were much more revealing than those in the previous square. The south profile showed a clear Zone 2/3 boundary with traces of basket loading, particularly in Zone 3.

The north profile looked a great deal like all the profiles in the adjacent 555R505 pit. That is, nothing was clear except the top of the subsoil. This square is located just at the edge of the cultivated field. It appears that years of agriculture had accelerated the weathering of the soil in the lower squares so that basket loading and zone boundaries were obliterated.

Levels 19 and 20 in the 490R505 pit at the deep end of the 505 trench were completed on July 23 while the rest of the crew cleaned profiles for the last time. The trench provided a section through the slope of the mound 45 feet long and 10 feet deep at the south end tapering to 3 feet deep at the other end. In addition to covering a considerable expanse, the construction stages were easy to see and map, revealing considerable detail of the making of the mound. We were pleased to show off our trench to Joe Saunders, Bob Neuman, Thurman Allen, and Reca Jones, a group of archaeologists and a soil scientist who have been studying soil genesis and mound construction in Louisiana. They arrived on July 24 and contributed a great deal toward our understanding of the mound construction sequence. We were even able to convince Allen to describe the profile and take soil samples with Saunders's assistance (Figure 2.5). After the soil and OCR (oxidizable carbon ratio) samples were taken, we hand-excavated 14 bulk samples, confining the samples to single basket loads in Zones 2 and 3. Incidentally, a basket load amounts to between 8 and 15 gallons of dirt. By the end of the following day, the profile looked pretty ragged, but we had recovered a good deal of data.

Figure 2.5. Thurman Allen and Joe Saunders recording Mound B profile.

Mound A

Early in July, while we were still finishing the trench in Mound B, we began excavating a single 5 by 10 pit with its long axis running east to west near the crest of Mound A. This unit, 2150R3325 in the original site grid, was situated between the small clump of trees on the crest of the mound and the tree line that runs across the northern third of what is left of the mound (Figure 2.2). Because the mound is so thoroughly flattened by years of plowing that its original shape can no longer be distinguished, our objectives were limited. We hoped only to determine how much of the mound remained and recover enough artifacts so that we could assign a probable date of construction.

Because the mounds are within shouting distance of one another, we were able to divide up the washtubs and share the truck to haul the dirt to the same water screen location. The difference between the two mounds became painfully evident once we started water screening the Mound A material. Each of the levels within the mound contained an almost incredible amount of buckshot-size concretions. The Mound A borrow pit must have been located on a different soil type than the borrow pits for Mound B. There were also considerably fewer artifacts in the Mound A test.

Even though only a remnant of the mound remains, a fair amount of construction detail was evident in the profiles of the pit. Basket loading is clear in the top 4 feet, and this lies above an easily distinguished buried A horizon. This is underlain by a subsoil similar to that uncovered in the Mound B trench. There were no obvious construction stages although there is what may be the edge of a low mound in the southwest corner of the unit. This was also built up by basket loading and began on the original land surface. The portion that we revealed was about 1.6 feet high, extending 2.4 feet along the south profile and the complete 5 feet of the west wall, disappearing into the profile with a height of about 0.5 feet. If it is the edge of a first construction stage, the mound would not have centered on the same location as the current elevation. There appears to have been an elapse of time between the two stages because water-lain deposits lie on top of the lower slopes of the first stage and extend to the east to separate the original land surface from subsequent construction. However, the first stage must not have been exposed for too long because there is no evidence for the development of a humus and the laminae are distinct. It looks like the kind of erosion that could have happened during a single intense thunderstorm.

Our excavation revealed the amount of recent destruction that Mound A has suffered in two ways. The 4 feet of construction evident in the profile of the pit are considerably less than the 7-foot estimate of the height of Mound A noted by Brown (1926:114). Also, basket loading is clearly evident all the way to the top of the profile. There is no evidence for the weathering that homogenized the soil in the top 1.8 feet of deposit in the northernmost of the Mound B squares. This weathering was apparently restricted to those portions of the mound that had been intensively cultivated. The Mound A excavation was located in the same cultivated field as the northern Mound B pits. The lack of weathering suggests that the upper portion of Mound A was removed relatively recently. In fact, Haag's site card notes an estimated height for Mound A of 8 feet. Haag visited the site in 1949 and again in 1950.

South Village

There were advantages and disadvantages in moving the focus of our fieldwork to the South Village. Every square was in the shade, but that meant every square was convenient to the mosquitoes living in the back swamp at the edge of the bluff, and profiles were difficult to photograph on cloudy days (Figure 2.6). The screen could be located near enough to the excavations that we could use wheelbarrows rather than the van to transport the dirt. That was just as well since we had to park the van in the pasture a couple of hundred yards to the east of the South Village

Figure 2.6. Working the South Village trench.

and walk in. The screen was located at the edge of the bluff, and the pump was situated next to a cypress knee at the base (Figure 2.7). Pumping water up the 20-foot slope was a bit tricky in terms of keeping prime. Hauling the pump up that same slope at the end of the day was an even bigger challenge. However, we knew we were blessed upon revisiting the site after the end of the field season in late August, when we found the oxbow we had been using for water to be completely dry. All in all, the results were worth the effort. We recovered a sizeable sample of Middle Woodland ceramics that are appreciably different from those in the Mound B sample. We also found blades made from exotic chert as well as an interesting sample of other lithic artifacts that contrasts with the Mound B sample in some ways, but not in others.

Excavation at the South Village began on July 26. Janet Ford had dug in the South Village for three summers using the field school, and, as a result, we had a pretty good idea where to dig. Most of the deposit is shallow and had been plowed at some time in the past. However, during her last season, Ford began to expose an apparently undisturbed deposit at the north end of the South Village, right where the bluff line makes a turn to the east, running almost east to west. This deposit is covered by nearly 2 feet of mostly sterile overburden. Moreover, the field school excavations had recovered several Marksville sherds and a few blades of exotic chert at this location: exactly what we were looking for.

We had only two weeks left in the season and decided to concentrate our efforts on this northern portion of the site. Two squares that had been begun by the field school, but backfilled after Level 1 when the term ran out, were opened first. These squares, 1170R2460 and 1165R2460, were extended to the south an additional 15 feet and to the north another 5 feet, forming a trench 5 feet wide and

Figure 2.7. Pump for South Village screens.

30 feet long that ran perpendicular to the bluff line (Figure 2.8). The northern 5 feet sliced through the beginning of the down slope.

In addition to producing a good sample of material, the trench provided a clear picture of the deposit. Starting in the 1150R2460 square at the south end of the trench, the first foot or so of deposit is an anthropic A horizon, rich in cultural material. This layer rests upon an obvious subsoil. This arrangement characterizes the profile for the southern 15 feet of the trench. The midden deposit was labeled Zone 2 and the subsoil Zone 3.

At about the 1163R2460 stake, the gradual rise to the north increases appreciably so that there is what appears to be a low embankment or ridge along the edge of the terrace at this point in the South Village. The midden, Zone 2, continues at about the same elevation and is covered by a layer of overburden that becomes progressively thicker from the south to the north (Figure 2.9). Color and

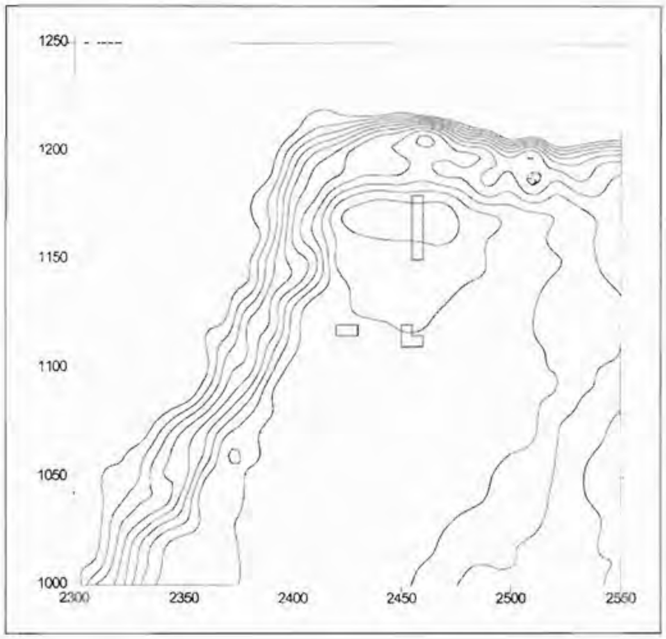

Figure 2.8. Map locating South Village excavation units.

Figure 2.9. West profile of South Village trench.

Figure 2.10. Cleaning the profile in Feature 11

texture suggest that the overburden was derived from the subsoil. The crest of this deposit, differentiated into Zone 1a and Zone 1b on the basis of a poorly formed A horizon, occurs at the 1175R2460 stake where it reaches a maximum depth of 1.8 feet. The trench at this point was about 3.8 feet deep, with the bottom two levels dug into Zone 3.

Six features were recorded where pits extended down from Zone 2 into the subsoil. Most were small, no more than 6 or 10 inches in diameter and less than that deep. However, on the second-to-last day, while taking out Level 4 of 1155R2460, a large, irregular dark stain was exposed. This became known as Feature 11, a nearly vertically walled pit extending 5.4 feet below the surface with a relatively flat bottom (Figure 2.10). It was filled with bone, stone, and sherds. Among the ceramic artifacts were several fragments of an elbow pipe. A substantial radiocarbon sample was also recovered.

The cord-marked and Marksville Incised pottery coming up in the screens was clearly different from the fabric-marked and punctated sherds found in Mound B—and that was our hope, to get sufficiently different ceramic assemblages from undisturbed contexts in order to provide the contrast necessary to define each. However, Ford had found a few fabric-marked sherds in her field school excavations of the South Village. Most seem to have been recovered during the first season when the excavations were located in the middle and south portions of the village. Consequently we opened five squares in that area, in hopes of finding a deposit comparable to the Mound B material. This area came to be called South Village South in the lab and during the analysis in order to distinguish it from the trench, South Village North. These squares, 1110R2455, 1110R2460, 1115R2425, 1115R2430, and 1115R2455, were quite similar in profile. The first 6 inches or so contained a good deal of humic material and a fair number of artifacts. This disturbed anthropic A horizon lies on top of a sterile subsoil, and it contains a fair amount of material. However, we missed the earlier deposits. None of the material recovered from these squares was comparable to Mound B ceramics.

3

Stratigraphic and Chronometric Data

The coverage in the various sections of this chapter is uneven. Mound B received the majority of our attention, and the 505 trench in that mound revealed a good deal of architectural data. More than that, one of the major goals of the project was to date this mound and relate it to a cultural period. Finally, Thurman Allen and Joe Saunders helped in recording the Mound B profile, providing an expertise in soils that shows clearly in the following discussion. Mound B is also in much better condition than Mound A. So, Mound B data include soils descriptions, grain size data, oxidizable carbon ratio (OCR) data, and several radiocarbon dates.

Fortunately, the Mound A stratigraphy is much simpler than that at Mound B. This fact, and the relatively few artifacts found in the Mound A test, prompted us to run only one radiocarbon date. Similarly, the South Village profile is fairly straightforward, although it would have been nice if the trench had been open when Allen and Saunders visited us. There are still some questions about the nature and origin of the overburden, Zones 1a and 1b. We did run three radiocarbon dates and an OCR column from that deposit, and have a pretty good idea of the date of the cultural material.

Physical Stratigraphy

Mound B

Thurman Allen and Joe Saunders's description of the Mound B profile is based on observations made adjacent to a column sample for OCR and particle size analyses that was located on the east wall of the 505 trench at the 493R505 stake. These data are summarized in Table 3.1. Grain size data are presented in Table 3.2. The zone designations used in the field to recognize the several construction stages are noted in both tables and on the profile drawing (Figure 3.1). Soil horizons follow conventional nomenclature. Allen's (1986) review of the soils in the vicinity of the Poverty Point site in Louisiana is a useful reference for the following discussion. Not only does he define soil designations in terms that an archaeologist can understand, but also Poverty Point is situated on a loess deposit quite similar to that which underlies the Batesville Mounds site. Therefore an understanding of the parent material for mound construction is possible.

Zone 5 is the bottommost of the deposits, and was clearly recognized in the field as a premound subsoil and subsurface. This conclusion was based on soil color, soil texture, the lack of artifacts, and the dendritic pattern that was evident on the floor of the levels in this zone. That is, during the

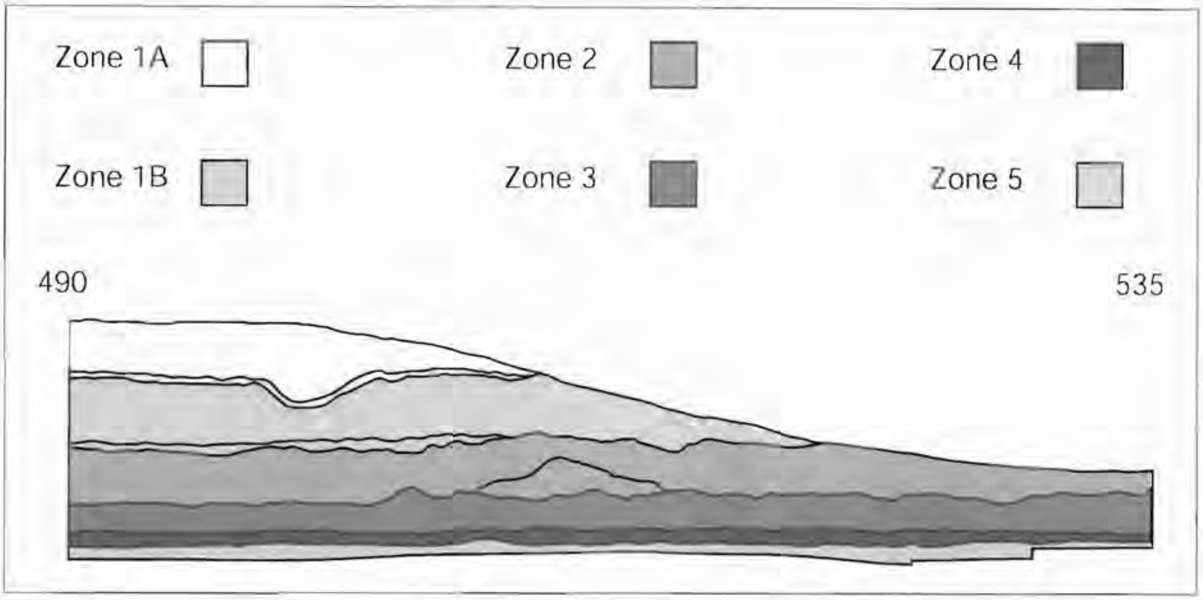

Figure 3.1. West profile drawing, Mound B trench.

weathering process polygonal blocks formed in the subsoil. Allen and Saunders divided the zone into two units. The lowest, 4Btb, is an argillic horizon resulting from the downward migration of fine-grained material from overlying deposits. The upper unit is labeled 4Eb, indicating the albic nature of this material. That is, this horizon is somewhat lighter in color because clays and irons have been removed to the underlying argillic horizon (Tables 3.1, 3.2). These processes, known as eluviation and illuviation, require a good deal of time and are, therefore, generally not evident in mound fill. Recently, a few very old, Archaic period mounds in Louisiana have been found to show this degree of soil development (Saunders and Allen 1994; Saunders, Allen, and Saucier 1994). Zone 5 was recognizable in all the Mound B and A excavations.

Zone 4 is the old humus-enriched surface horizon (4Ab) that was buried by the construction of Mound B. It is very nearly horizontal and evident throughout the profile in the 505 trench. It appears that little effort was made to prepare the surface before mound construction. The boundary between this zone, and the overlying mound deposits is quite obvious (Figure 3.2). This buried A horizon contained a fair amount of cultural material including sherds, flakes, and thermal shatter. Some sort of cultural activity predated the mound construction in this portion of the site.

Zone 3 (Stage I) is the first of the construction stages and is obviously artificial with clearly defined basket loading throughout the zone. Individual basket loads vary in the amount of organic stain and cultural material, but most contain a good deal of both. Basket loads averaged about 1.5 feet in width and 0.5 feet in height as cross sectioned by the profile. The bottom of each basket load conformed to the surface on which it was deposited. The top was generally rounded. We excavated several individual basket loads for bulk samples, and they ranged in volume from about 8 to 15 gallons. The bottom boundary of Stage I is relatively flat and horizontal, defined by the top of the premound surface. The top boundary is irregular, following the tops of individual basket loads, but generally horizontal. It is defined by a continuous deposit of darker, coarser material, which is generally less than 0.25 inch thick. The origin of this deposit is uncertain, but it does suggest that some small amount of time elapsed between the completion of Stage I and the beginning of

Table 3.1. Mound B Soils Description

Label	Depth (cm)	Description
		Zone 1a
Al	0 to 12	Dark grayish brown (10YR 4/2) silt loam; weak fine granular structure; friable; clear smooth boundary
A2	12 to 25	Brown (10YR 4/3) silt loam; weak fine granular structure; friable; clear smooth boundary
Bw	25 to 42	Dark yellowish-brown (10YR 4/4) silt loam; weak medium subangular blocky structure; friable; clear smooth boundary
Bw & E	42 to 64	Dark yellowish-brown (10YR 4/4) and brown (10YR 5/3) silt loam; weak medium subangular blocky structure; friable; clear wavy boundary
E	64 to 73	Brown (10YR 5/3) silt loam; weak medium subangular blocky structure; friable; few soft black (manganese) masses
		Zone 1b
C1	73 to 102	Brown (7.5YR 4/4) silty clay loam; moderate medium subangular blocky structure; firm; few soft black (Mn) masses; few silt coats on ped surfaces; clear smooth boundary
C2	102 to 127	Dark yellowish brown (10YR 4/6) silty clay loam; moderate medium subangular blocky structure; firm; common silt coats on ped surfaces; clear smooth boundary
C3	127 to 153	Strong brown (7.5YR 4/6) silty clay loam; common medium distinct pale brown (10YR 6/3) mottles; common silt coats on ped surfaces; abrupt smooth boundary
E or 2C	153 to 162	Light yellowish brown (10YR 6/4) silt loam; lamella and bodies or mottles of dark grayish brown (10YR 4/2) and dark yellowish brown (10YR 4/4); weak medium subangular blocky to massive structure; few soft black (Mn) masses; abrupt wavy boundary
		Zone 2
2C1	162 to 204	Dark grayish brown (10YR 4/2) and brown (10YR 5/3) silt loam [easily recognizable loaded sediments in 2C1, 2C2, and 3C]; weak medium subangular blocky to massive structure; friable; few silt coats on ped surfaces; few soft black (Mn) masses; abrupt wavy boundary
2C2	204 to 235	Very dark grayish brown (10YR 3/2) and brown (10YR 5/3) silt loam; weak medium subangular blocky structure; friable; few silt coats on ped surfaces; few soft black (Mn) masses; abrupt smooth boundary
		Zone 3
3C	235 to 269	Brown (10YR 4/3), very dark grayish brown (10YR 3/2), and pale brown (10YR 6/3) silt loam; weak medium subangular blocky to massive structure; friable in upper and firm in lower part of this horizon (base of mound); few soft black (Mn) masses; abrupt smooth boundary [3C is a cultural horizon]
		Zone 4
4Ab	269 to 282	Very dark grayish brown (10YR 3/2) and brown (10YR 5/3) silt loam; mottles; weak medium subangular blocky structure; friable; clear smooth boundary
		Zone 5
4Eb	282 to 291	Pale brown (10YR 6/3) silt loam; common medium distinct yellowish brown (10YR 5/6) mottles; weak medium subangular blocky structure; friable; few small concretions; clear smooth boundary
4Btb	291 to 300	Yellowish brown (10YR 5/4 & 5/6) silty clay loam; few medium distinct strong brown (7.5YR 4/6) mottles; moderate medium subangular blocky structure; firm

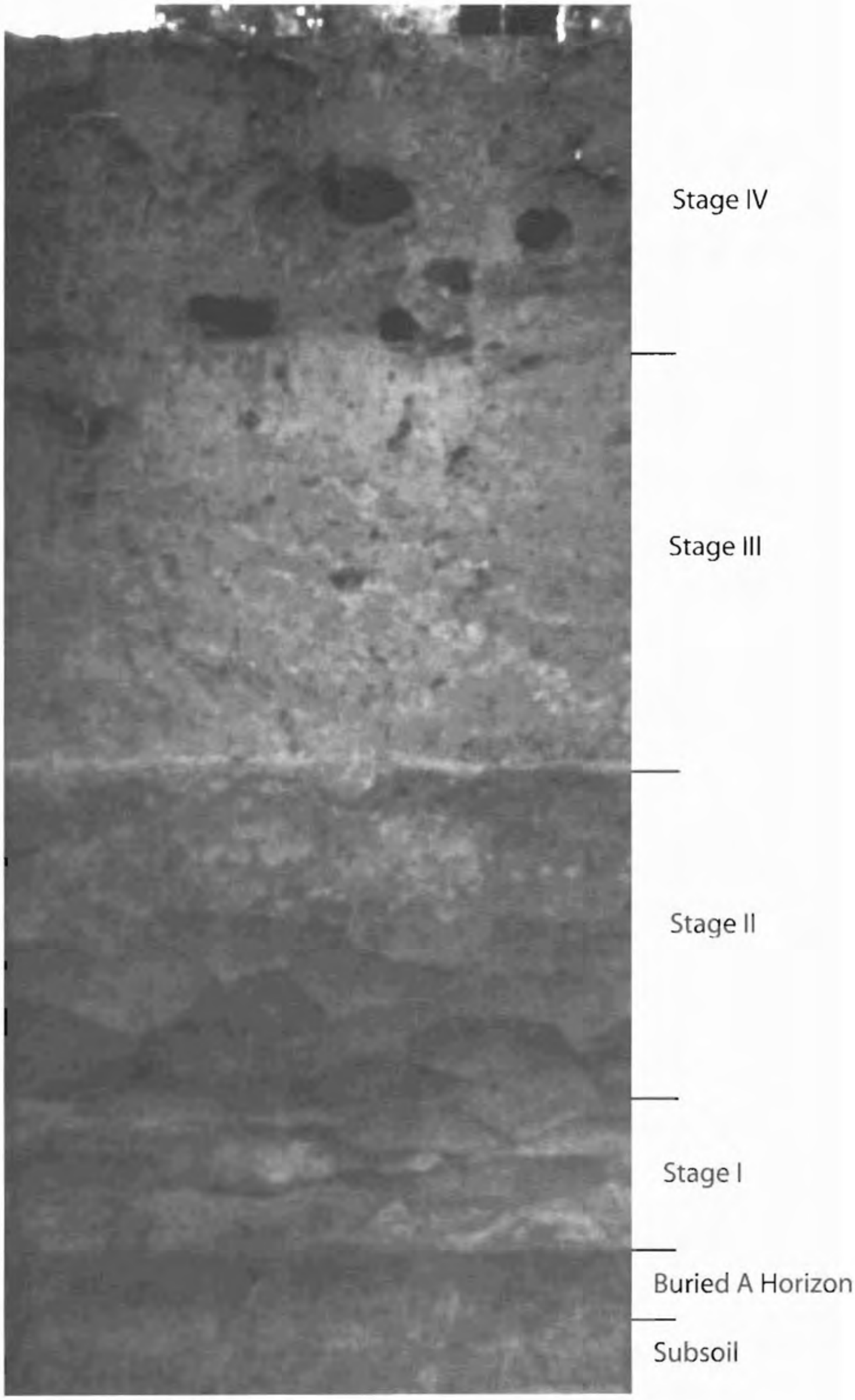

Figure 3.2. Southern profile of Mound B trench.

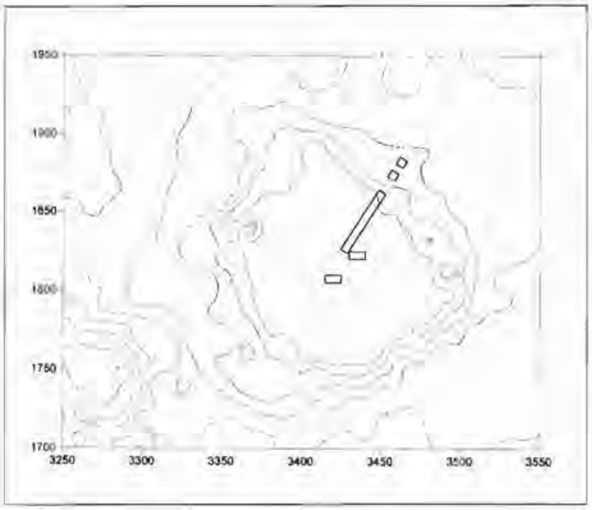

Figure 3.3. Contour map of first stage of Mound B construction.

Table 3.2. Mound B Soil Particle Size Analysis

Label	Depth (cm)	% Sand	% Silt	% Clay
Zone 1a				
A1	0 to 12	8.5	80.3	11.2
A2	12 to 25	7.7	76.7	15.6
Bw	25 to 42	7.4	74.6	18.1
Bw & E	42 to 64	2.0	81.3	16.7
E	64 to 73	4.1	81.1	14.8
Zone 1b				
C1	73 to 102	1.9	75.5	22.6
C2	102 to 127	0.6	75.3	24.1
C3	127 to 153	0.6	73.5	25.9
E or 2C	153 to 162	2.0	81.7	16.3
Zone 2				
2C1	162 to 204	4.9	81.8	13.4
2C2	204 to 235	9.3	76.1	14.6
Zone 3				
3C	235 to 269	7.1	81.3	11.6
Zone 4				
4Ab	269 to 282	4.6	82.6	12.8
Zone 5				
4Eb	282 to 291	3.0	82.4	14.6
4Btb	291 to 300	2.1	81.7	16.3

Stage II. There was not enough time, however, for an A horizon to form or for bioturbation to obliterate the basket loading at the top of this Stage I.

Stage I varies between 1.6 and 1.1 feet in thickness and is evident throughout the length of the 505 trench. It can also be seen in the south wall of the 545R505 square, and, although weathering makes zone differentiation impossible in the 555R505 square, the artifact content and the buried A horizon suggest that Stage I continued this far north. Using the arbitrary datum established to map the site, the original ground surface exposed in the walls of the 505 trench occurs at about 211.5 feet. If this surface is assumed to be relatively flat, and if the top of the mound is assumed to be as flat in the rest of the mound as it is in the profile of the trench, the Surfer mapping software makes it possible to compute the volume of fill in the mound between 211.5 and 213 feet, the elevations of the bottom and top of Stage I. A total of 52,430 cubic feet of soil make up this stage, covering slightly more than half an acre of land at the base of the mound. Of course, the original surface may not have been completely level, and the edges of the mound have likely been spread by cultivation. Still, it is instructive to examine the plan view of the shape of the mound at this stage (Figure 3.3). It is more a circle than a rectangle.

Stage II (Zone 2) is similar to Stage I in structure and content. It contained a good many artifacts, primarily fire-cracked rock, flakes, and sherds. Clearly defined basket loads are evident, particularly in the bottom half of the deposit. These basket loads conform to the undulations of the top of Stage I at the bottom of the zone. There is a large lens of light grey clay at the beginning of Stage II that shows up in both walls of the trench centering on the 511 stake and spreading about 4 feet on either side. Otherwise, the basket loads were similar in size and composition to the Stage I basket loads. However, individual basket loads become difficult to discern in the top half of the deposit. It seems likely, therefore, that a fair amount of time elapsed between the completion of Stage II and construction of Stage III, long enough so that bioturbation could have mixed the basket loading in the top foot of the zone.

The boundary between Stage II and Stage III is horizontal and regular, again suggesting that the top of the mound was exposed long enough to flatten the surface. Stage II does not cover the flanks of the Stage I structure. That is, soil was added to the top, but not the sides, of the previous structure. The mound was made higher, but no bigger in plan view. This makes it easy to visualize the shape of the structure at the end of Stage II. Although it was flat topped, it still was not rectangular. The mound contains a computed 33,097 cubic feet of fill between the 213- and 215-foot elevations.

Stage III is easily distinguished from Stages I and II on the basis of soil texture, color, and artifact content. This corresponds with Zone 1b in the stratigraphic sequence and has C1 through C2 and E or 2C soil designations. Relatively few artifacts came from this zone, and the elevated clay content made it difficult to excavate, but easy to recognize both in profile and as we came down on it in the individual excavation units. According to Allen, the color, texture, and clay films found on some ped surfaces suggest that these sediments are from "old weathered subsoils." The thin silt coats on the soil peds also indicate that ground water was moving into and through this horizon.

Stage III is fairly uniform throughout excepting a much lighter brown layer 3 to 4 inches thick that occurs at the very bottom of the zone. Allen thinks it likely that this is an E or albic horizon, one caused by the lateral movement of water as it hits the top of Stage II. This water would have removed iron, aluminum, and clays from the deposit, accounting for its lighter color and reduced clay content (Tables 3.1, 3.2).

The top of Stage III is relatively flat and, again, does not continue down the sides of the mound. There was a depression in the top of Stage III that shows up in the west profile of the trench centering on the 500R500 stake. This pit was about a foot deep and 4 feet wide on a north-to-south axis. It did not extend far enough to the east to be evident in the 505 profile. The mound grew by 3 feet in height during this construction phase with the addition of 23,764 cubic feet of dirt. For the first time, the mound took on a rectangular outline.

Mound construction concluded with Stage IV. This zone displays the most developed soil in the mound fill with an evident A horizon, cambic B horizon, and, at the boundary between Stages IV and III, an albic E horizon similar to that found at the bottom of Stage III. The soil particle size analysis supports these designations (Table 3.2). The indication is that the surface of Stage IV has been exposed to weathering for a relatively long time.

In addition to the lighter-colored band of soil that has been interpreted as an albic horizon, the boundary between Stages III and IV can be distinguished by the siltier texture and darker color of the Stage IV fill. Allen suggests that these sediments are likely from surface and subsurface soil horizons. Incidentally, the volume of the borrow pit directly to the southwest of Mound B is 6173 cubic feet, a number not much different from the volume of Stage IV (6261 cubic feet). However, the combined total of the remaining two borrow pits, 9507 cubic feet, does not come close to accounting for the volume of Stage III, the next smallest construction event evident in the 505 trench of Mound B. Stage IV was also distinguished by the number of ground squirrel burrows in the south wall of the 490R505 unit that were restricted to this zone. We know they were ground squirrel burrows because the squirrel would regularly stick its head out of the profile and fuss at us when we first opened the unit.

Mound A

The Mound A profile was relatively simple. This observation may be in part a result of the fact that we exposed a relatively small portion of the mound structure, that which is visible in the walls of a single 5 by 10 unit. It may also be the result of the destruction of the top layers of this mound during the twentieth century. Or it may be that this mound received less attention by the prehistoric engineers at the Batesville Mounds site.

At any rate, only one major construction phase is evident in the profile of the 2150R3325 pit (Figure 3.4). Four feet of basket-loaded fill sits on top of a well-developed and clearly defined A horizon. A single episode of what might be interpreted as a construction stage is evident in the southwest corner of the excavation unit where a 1.6-foot-high mound of dirt, placed on the old land surface, extended about 2 feet to the east and 4 feet to the north as evident in the profile. However, as noted in the discussion of the excavations, there is no indication for much in the way of elapsed time between the placement of the dirt making up the hump and the rest of the fill. Perhaps mound construction began with a series of small piles of dirt that were connected and filled in. Maybe a single small mound was built initially, and we only exposed the edge of it in our excavations. At any rate, there is little to distinguish the fill in this portion of the pit from the rest.

Notwithstanding the clear evidence of basket loading, Mound A contrasts with Mound B in a number of ways. Very few artifacts were recovered. The near absence of fire-cracked rock is especially noteworthy. This does not mean that our screens from this excavation came up empty, however. Large numbers of concretions were present in every one of the mound fill levels from the top down to the old land surface. The fill for Mound A must have come from a different locality than that for Mound B. The Batesville Mounds are located on Grenada silt loam and Calloway silt loam soils according to the Panola County soil survey (Galberry 1963). Both soils are reported to contain concretions, particularly in the E horizon, just above a fragipan. It may be that the dirt borrowed to build Mound A came from deeper in the natural soil profile than that used in building Mound B. It may be that it came from an area of the site that was poorly drained, a condition that leads to the formation of concretions. There are, however, no obvious borrow pits in the vicinity of Mound A.

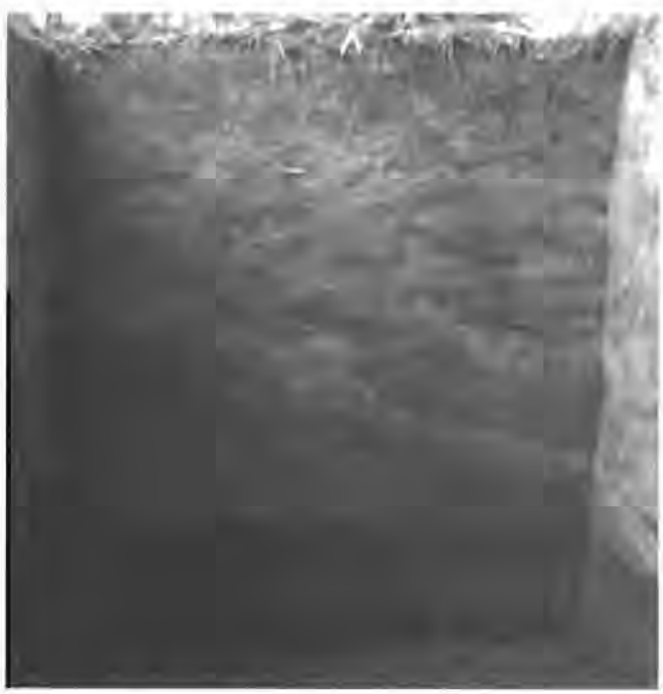

Figure 3.4. West profile of Mound A test pit.

South Village

The stratigraphy exposed in the South Village trench is also relatively simple. Cultural material is generally restricted to the first foot of the deposit, an anthropic A horizon (Zone 2), which rests upon undisturbed subsoil (Zone 3). This pattern was evident in the profiles of all the squares excavated in the southern portion of the area investigated and the southern 15 feet of the 2460 trench. At about 1165 north the surface of the site rises to form a low ridge just at the edge of the terrace. Zone 2 continues to the north at about the same elevation for the remaining 15 feet of the trench (Figure 3.5).

The ridge is formed by what appears to be artificial fill (Zones 1a and 1b), which reaches a maximum depth of 2 feet at 1175 north. However, relatively few artifacts were recovered from this zone, and it is difficult to explain its purpose either in terms of prehistoric or historic activity. A stump was uncovered at the head of the trench in the north profile that was only partially decomposed. The top had been buried by the fill, and the tree grew out of the Zone 2 surface. This suggested that the overburden was deposited historically. The aerial photograph on which the soil map is based shows the South Village portion of the site to have been in cultivation in 1962. Perhaps this fill was placed along the edge of the terrace to redirect runoff and avoid erosion down the face of the terrace.

Radiocarbon Dates

As the chapter on ceramic analysis will demonstrate, Stages I and II of Mound B contained one of the clearest examples of an Early Woodland, Tchula assemblage yet to be found in north Mississippi. A number of authors (Connaway and McGahey 1971; Mainfort 1986; Phillips 1970; Weinstein 1991) agree on a general chronological assignment for Tchula and Tchula-like ceramics. This material was common between 500 and 100 B.C. One of the two radiocarbon dates from Stage II (Beta 104356) gave a calibrated intercept of 200 B.C., which falls into this period of time (Table 3.3). This is a bulk sample run on the residual carbon derived from the flotation of one of the basket loads excavated from the profile in the head of the 505 trench. However, Beta 104355, the other Stage II sample, is 500 years too late (A.D. 390). The sample for this date was a piece of charcoal from the general fill of Level 11 in the 505R505 square of the mound trench. The sample was small enough to require an AMS date. The third Mound B radiocarbon date came from Feature 1, a narrow, funnel-shaped pit

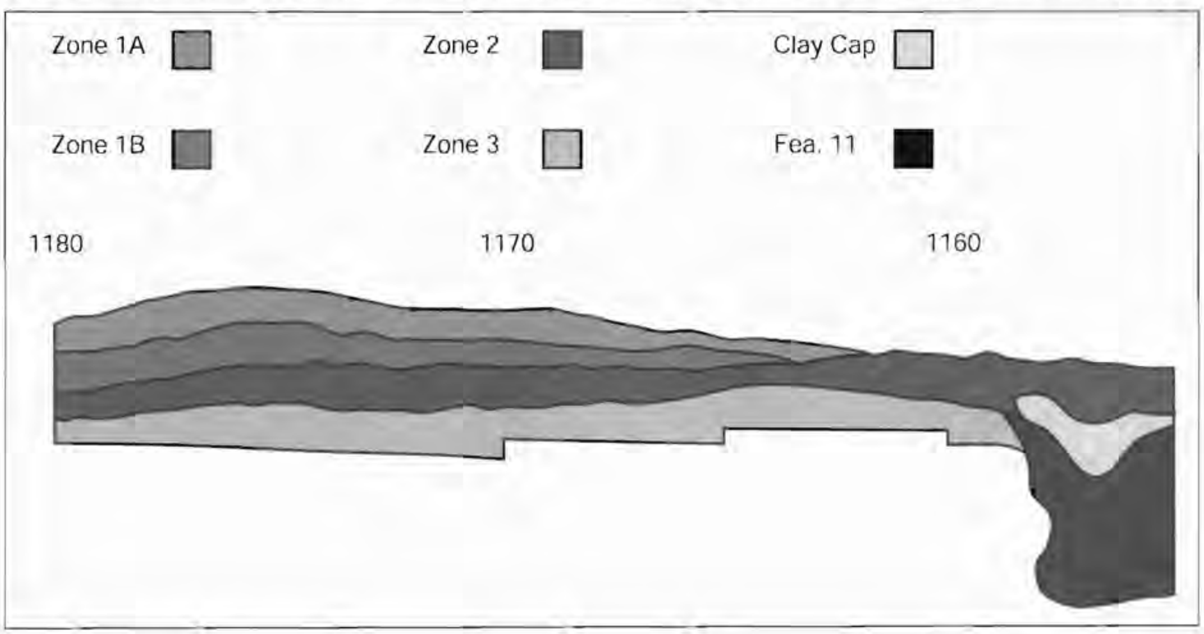

Figure 3.5. Drawing of east profile, South Village trench.

filled with sand and charcoal that began at the top of Stage III. The calibrated intercept for this sample is A.D. 530.

The physical stratigraphy and artifact content suggest that the Mound B stages can be grouped into two major construction events. Stages I and II contain the bulk of the Tchula sherds as well as most of the fire-cracked rock and other artifacts. The clear basket loading and the high organic content of both stages indicate that similar processes were involved in mound construction. The lack of evidence for pedogenesis at the top of Stage I and the clear indication of weathering at the top of Stage II document a short break in construction activity between Stages I and II and a much longer break between Stages II and III. The earlier date for Stage II fits nicely with this reconstruction of events, and the ceramic assemblage from this zone. If this were the only date run, we would feel comfortable in arguing that the first two stages of Mound B were built during the Tchula period. However, the younger Stage II date is based on a piece of charcoal located more than 1.5 feet below the top of this construction stage. This raises the possibility that Stages I and II were built well after the close of the Tchula period using fill that contained debris from that earlier occupation. However, if this were the case, all of the Tchula midden in the Mound B vicinity must have been gathered up and used in mound construction. Holland's (1994, 1996a) extensive auger tests in the Mound B and Mound A vicinity failed to locate any midden. Excepting the mound fill, the area is conspicuously clear of artifacts of any kind.

Table 3.3. Radiocarbon Dates from the Batesville Mounds Site

Beta Sample Number	Bag Number	Calibrated Intercept	Two-Sigma Range	Provenience
98190	11	A.D. 530	A.D. 370 to 640	Mound B, Feature 1 (Stage III)
104355	96	A.D. 390	A.D. 245 to 450	Mound B, charcoal in general fill of Stage II
104356	160	200 B.C.	395 to 20 B.C.	Mound B, residual carbon in flotation sample from Stage II
97798	146	A.D. 660	A.D. 590 to 775	Mound A, charcoal in general fill of Stage I
97800	224	A.D. 555	A.D. 405 to 655	South Village, Feature 11, Zone 3
104358	192	A.D. 425	A.D. 265 to 290	South Village, Feature 7, Zone 3
			A.D. 320 to 575	
104359	200	A.D. 535	A.D. 380 to 645	South Village, Feature 9, Zone 3

Stages III and IV contained considerably less cultural material than the lower two stages. The ceramics that were found are similar to those recovered from the rest of the mound. However, the Feature 1 date suggests that Stages III and IV were built during the Marksville period occupation of the site.

A single sample of charcoal from Mound A was submitted for analysis (Beta 97798). It was drawn from the north wall at a depth of 2.4 feet below the surface, well within the basket loaded, single construction phase evident in our test pit in that mound. Relatively few artifacts were recovered from Mound A, but those that were suggest that it should be a Tchula period structure. On the other hand, the radiocarbon date (A.D. 660) suggests that it was roughly contemporaneous with the occupation of the South Village instead (Table 3.3).

The South Village ceramics suggest a solid, Middle Woodland, Marksville period occupation. Three radiocarbon dates were run from the South Village, all from pit features extending down from the bottom of the occupation zone into the subsoil. All three (Beta 97800, 104358, and 104359) fall into the same general time range between A.D. 425 and 555. This is somewhat late, given the number of Marksville sherds found in the South Village midden. However, the complete absence of Withers Fabric Marked sherds and predominance of Mulberry Creek Cord Marked sherds in this deposit suggest a relatively late date within the Middle Woodland period.

OXIDIZABLE CARBON RATIO DATING

Archaeologists are learning more and more about soil formation and are exploring new applications of this understanding to interpret the past. Oxidizable carbon ratio (OCR) dating is one of the promising new techniques to result from this interest in soil development (Frink 1992, 1994). The technique is based on the premise that the carbon present in humates and charcoal is broken down during the process of pedogenesis. As a consequence, the ratio of total carbon to oxidizable carbon increases through time. What is more, once allowance is made for depth, temperature, moisture, reactivity, soil texture, and total amount of carbon, this process occurs at a constant rate (Frink 1992). The correlation between OCR dates and radiocarbon dates has been very good. The recent application of OCR analysis to 200 samples from Watson Brake, a Middle Archaic site in Louisiana (Frink 1996), has produced results that are consistent with other dating techniques. This success and the relatively modest cost of OCR analysis prompted us to run a series of eighty-two dates from two column samples, one in Mound B and one in the South Village.

The samples were taken at 5-centimeter intervals in the deepest part of the profile in the 505 and 2460 trenches. In Mound B, the column was located at the 492R505 stake and consisted of sixty samples, which were labeled by soil horizon and related to mound construction stages. The twenty-two samples from the South Village were taken at the 1175R2455 stake. All samples were air dried in the lab, rebagged, and shipped to the Archaeology Consulting Team lab in Vermont where the total carbon and oxidizable carbon amounts were measured and the OCR dates computed.

The OCR dates for Mound B show definite patterning. Major breaks in the sequence occur at or near the stage boundaries (Table 3.4). In an earlier draft of this chapter, the OCR dates for all the samples from each stage were averaged, and these values plus the standard deviation for each mean were used as a rough estimate of the OCR age for each construction event. Fortunately, Douglas Frink, one of the developers of the OCR dating technique, read through this draft and pointed out, in a gracious manner, that we had made all the classic mistakes in our interpretation. Since all soil samples are likely to contain older, residual carbons, OCR data must be interpreted contextually. That is, the entire column must be examined in terms of soil texture, pH, and total carbon as well as stratigraphic descriptions in order to identify original surfaces in which the organic processes involved in the growth of an A horizon could have reset the oxidizable carbon ratio. This would allow elapsed time can be measured. Still, there is the possibility that the OCR dates are older than the completion of any one construction stage because some residual carbon may remain.

Doug e-mailed back his interpretation of the Mound B OCR data (Table 3.5). The dates are based on selected samples that appear to represent old surfaces that were stable for more or less time. For example, the best evidence for a stable surface in the OCR sequence occurs at the top of Stage II. This coincides with one of the clearest examples of pedogenesis in the profile. The top of Stage II showed a good deal of bioturbation, to the point that the basket loading was almost completely obliterated in the top foot or so of this stage. This date, 597 B.C., is also fairly close to the early end of the range of dates that have been associated with the Tchula ceramics found throughout the fill of the mound, but in greatest abundance in Stages I and II. The OCR date lends some support to the

Table 3.4. OCR dates from Mound B

ID	Depth (cm)	Stratum	OCR Date Years B.P.	
2295	0-05	A1	258	Stage IV
2294	05-10	A1	1094	
2293	10-15	A2	1406	
2292	15-20	A2	1462	
2291	20-25	BW	1400	
2290	25-30	BW	1544	
2289	30-35	BW	1495	
2288	35-40	BW	1618	
2287	40-45	B/E1	1589	
2286	45-50	B/E1	1611	
2285	50-55	B/E1	1645	
2284	55-60	B/E Bottom	1513	
2283	60-65	E1 top	1516	
2282	65-70	E1	2044	
2281	70-75	C1	2180	Stage III
2280	75-80	C1	2475	
2279	80-85	C1	2829	
2278	85-90	C1	1931	
2277	90-95	C1	2582	
2276	95-100	C1	2569	
2275	100-105	C2	2574	
2274	105-110	C2	2419	
2273	110-115	C2	2445	
2272	115-120	C3	2262	
2271	120-125	C2	2949	
2270	125-130	C3	2934	
2269	130-135	C3	2151	
2268	135-140	C3	2463	
2267	140-145	C3	2506	
2266	145-150	C3	2760	
2265	150-155	2C1/E1	2547	Stage II
2264	155-160	2C1	2998	
2263	160-165	2C1	3022	
2262	165-170	2C1	3168	
2261	170-175	2C1	2982	
2260	175-180	2C1	2901	
2259	180-185	2C1	2996	
2258	185-190	2C1	2959	
2257	190-195	2C1	2874	
2256	195-200	2C1/2C2	2920	
2255	200-205	2C2	2975	
2254	205-210	2C2	3013	
2253	210-215	2C2	2961	
2252	215-220	2C2	2894	
2251	220-225	2C2	3009	
2250	225-230	2C2	2735	
2249	230-235	2C2	2871	
2248	235-240	3C1	2918	Stage I
2247	240-245	3C1	2818	
2246	245-250	3C1	3091	
2245	250-255	3C1	2845	
2244	255-260	3C1	3000	
2243	260-265	3C1	2902	
2242	265-270	4A	3397	Buried A Horizon
2241	270-275	4A	4213	
2240	275-280	4A	6019	
2239	280-285	4A/E	10286	Subsoil
2238	285-290	4A/E	12766	
2237	290-295	4E	15393	
2236	295-300	4E	13768	

Table 3.5. Significant OCR Dates from Mound B

Stage	OCR/MRT	Event of Occupation	ID
IV	A.D. 856	Time after abandonment of mound and resumption of pedogenic growth of soil	2294
III	A.D. 434	Time prior to final use of mound, and time prior to burial of Stage III surface	2283
II	597 B.C.	Time prior to final use of mound, and time prior to burial of Stage II surface	2265
II		In situ pedogenic development in upper levels of Stage II. OCR data suggest stability of surface for 621± years	2265-2262
I	785 B.C.	Time prior to final use of mound, and time prior to burial of Stage I surface	2250
Buried A Horizon	998 B.C.	Time prior to burial of original surface	2243

MRT, *Mean residual time.*

Table 3.6. OCR Samples from the South Village

ID	Depth (cm)	Zone	OCR Date Years B.P.
2573	0-5	1A	218
2574	5-10	1A	1061
2575	10-15	1A	1399
2576	15-20	1A	2175
2577	20-25	1A	2536
2578	25-30	1A/1B	2955
2579	30-35	1B	3240
2580	35-40	1B	3343
2581	40-45	1B	3348
2582	45-50	1B	3768
2583	50-55	1B	3080

ID	Depth (cm)	Zone	OCR Date Years B.P.
2584	55-60	1B/2	2536
2585	60-65	2	2286
2586	65-70	2	2094
2587	70-75	2	1944
2588	75-80	2	2021
2589	80-85	2	2639
2590	85-90	3	4630
2591	90-95	3	5101
2592	95-100	3	6570
2593	100-105	3	6384
2594	105-108	3	6206

earlier of the Stage II radiocarbon dates, the Beta 104356 date of 200 B.C. The other Stage II date is considerably younger (Beta 104355, A.D. 390). There is, however, a rough correspondence between the OCR dates and the third Mound B radiocarbon date. Beta 98190 was run on a piece of charcoal recovered in a pit that originated from the top of Stage III. The A.D. 530 date is entirely possible given the suggested OCR date of A.D. 434 for the completion of Stage III.

The South Village OCR dates are much more difficult to interpret in terms of the cultural data, radiocarbon dates, and stratigraphy (Table 3.6). The OCR samples were taken in a column in the deepest part of the deposit, at a point where Zones 1a and 1b were nearly 2 feet deep. These zones represent a sterile overburden that seals the midden deposit in this portion of the site. At the time of the excavation we thought this overburden was likely to be fairly recent because the stump of a tree that grew out of the top of Zone 2 was uncovered in the north profile of the trench. This stump was not completely rotted. Therefore the OCR dates for Zone 1b came as a surprise. Even if the overburden is not as recent as we thought, it surely is not as old as the OCR data indicate. The abundant ceramics from Zone 2 are clearly Middle Woodland and the three radiocarbon samples from features originating from this zone range from A.D. 425 to 555 in corrected intersect dates (Table 3.3). Moreover, the OCR dates for Zone 2 are generally several hundred years younger than the overlying Zone 1b dates.

The problem in interpreting the differences between the OCR, radiocarbon, and ceramic data underscores the basic and perennial difficulty in using radiometric methods to date cultural events. The events and processes being measured must coincide. That is, the carbon samples measured in both the radiometric and OCR analyses need to have begun their aging processes at the same time the cultural deposits were being formed. If older carbons were incorporated in any of the samples, the resulting date will be irrelevant. It seems likely that this situation applies to some of the OCR dates and some of the radiocarbon dates from Mound B. It must apply to all of the OCR dates from the South Village. In particular, the inverted series of dates for Zones 1b and 2 points to the contamination of a younger deposit with older carbons.

4
Ceramics

One of the first things that became evident as our trench progressed into Mound B was the uniform nature of the ceramic assemblage. Surface treatment was primarily fabric marking with a fair amount of very distinctive punctated and cord-impressed types. This was not what we had expected. Earlier work by Holland (1992, 1994; Holland-Lilly 1996a) had demonstrated that the site contained no evidence of a Mississippian occupation, and Ford's (1996a) field school excavations had documented a substantial Middle Woodland occupation. We assumed that Mound B was another of the growing number of Middle Woodland flat-topped mounds that have been identified in the Southeast in recent years. The fact that it contains one of the purest Early Woodland components to be excavated in the region came as a surprise and made the analysis of the ceramics an important first step in understanding the site. Add to that the substantial sample of Middle Woodland ceramics we recovered from the South Village excavations, and you have the makings of a good thesis, one that Rodney Stuart agreed to write. This chapter is based substantially on his work (Stuart 1997). As it turns out, Stuart is a splitter, and Johnson is not. Since Johnson is the senior author, there will be some revision in the following discussion. However, it was Stuart who looked at each of the nearly 11,000 mostly plain, cord-marked, and fabric-marked sherds, more than once. Johnson just reanalyzed the decorated ones.

During the course of the excavation we opened twenty-four separate units, which were divided into a total of 183 levels. There are an additional forty-seven special proveniences such as features, profile cleaning, flotation, OCR, and radiocarbon samples. The ceramic and lithic analyses could begin with a tabulation of all artifacts by all provenience units, but this would be unnecessarily tedious and would mean far less than the tabulations that follow. The tables in chapters 4 and 5 show the distribution of artifacts within the zones that were defined in the preceding chapters on the basis of stratigraphic and pedological analyses. In several cases excavated levels cross cut zones. Whenever it was possible, the level was taken out in two units or terminated, and a new level begun so that zone assignment would be clear. Sometimes, particularly early in the fieldwork, this was not possible. Material from these levels is designated accordingly. Of course, detailed, provenience-level data are stored on disk at the University of Mississippi and are available for future analysis.

Classification

The starting point for any analysis of ceramics from western Mississippi is always Phillips's (1970) report on material collected by the Lower Mississippi Survey from the southern Yazoo Basin. In the report he summarizes major trends in the settlement and prehistory of most of the Lower Mississippi Valley as seen from west-central Mississippi. The primary emphasis is ceramics, and the typology is comprehensive, but, for obvious reasons, biased to the southern half of the Delta. As will become clear during the course of this chapter, ceramic types and phases are less secure in the north Delta. Still, Phillips's typology is fundamentally sound and applicable. Nearly all of the following types are derived from his work. Those that are not will be noted specifically.

Most of the sherds are relatively small. Excepting an elbow pipe, no fits were found in the collections from either the village or the mound. Consequently, information on vessel shape is hard to come by. Because we used 1/8-inch screen in the field, there are a good many very small sherds in the collection, too small to be of much use in classification. Therefore, the first step in the analysis was to place the sherds in a 1/4-inch screen. All the material that fell through was excluded from further analysis.

Although there is a good deal of variation in temper in the Batesville ceramic sample, the significance of that variation in terms of chronology is the point of some debate (Ford 1981, 1988; Peacock 1996). And, in fact, the Batesville Mounds ceramics show some patterning in temper, which can be brought to bear on the question of temper as a time marker in north Mississippi. Still, the major typological distinction in the sample is in terms of surface treatment, and that is the basis for the classification.

Plainware

A fairly large proportion of the plainware from Mounds A and B and the South Village of the Batesville Mounds site appears to be burnished. It is not clear whether or not the shiny surface is a direct result of an intentional effort of the makers. A total of 518 sherds from Mound B are burnished, representing nearly 19 percent of the total plainware there. At Mound A, the percentage is similar. Seven of the 48 plain sherds from this mound are burnished. The percentage of burnished plainware increases in South Village North. Six hundred eighty-three of the 2618 pieces of plainware have this surface finish. This is over 26 percent of the plain sherds. However, South Village South shows the opposite trend. Only 135 of the total of 1269 plainware pieces, fewer than 11 percent, are burnished. A few of the decorated pieces are also burnished. These sherds were all from the South Village and are either Marksville Incised or Marksville Stamped.

Baytown Plain, *var. Thomas* ***n = 1886***

In Phillips's (1970) reworking of the regional typology, Baytown Plain is the monster type that essentially includes all plain sherds that are not shell- or fiber-tempered. Sand temper is the distinguishing criterion for two varieties of Baytown Plain, *var. Bowie* and *var. Thomas*. Both are defined to include sherds with small amounts of grog temper in addition to the sand. *Var. Bowie* is described to have red and orange surface colors (Phillips 1970:49), a common characteristic of much of the sand-tempered material from Mound B. This, plus the fact that Phillips (1970:878) lists *var. Bowie* as a marker for the Turkey Ridge phase, a regional variety of the Early Woodland, makes it tempting to assign the sandy sherds from Mound B to that variety (Stuart 1997). However, orange and red sandy-paste sherds are just as common in the South Village sample where the decorated types indicate a late Middle Woodland occupation. *Var. Bowie* would not be an appropriate classification for those sherds. Furthermore, *var. Bowie* was defined on the basis of site collections from the extreme western part of the Delta (Phillips 1970:49). On the other hand, the distribution of *var. Thomas* is thought to center on the portion of the Delta just to the west of the Batesville Mounds site (Phillips, Ford, and Griffin 1951:142; Phillips 1970:55). In addition, *var. Thomas* has come to be used as a general catchall for plain sherds with sandy paste in western Mississippi. Therefore we have decided to call the plain sherds with sand or sand and a little bit of grog Baytown Plain, *var. Thomas*.

Most of the *var. Thomas* rims are plain, without folds or special features. However, eight sherds from the South Village have rims that are flattened with an overhang on both the interior and exterior. One of the sherds with a folded rim is extremely well made and appears to be part of a globular vessel with a restricted opening. There is also one sherd from an open bowl with a broadly scalloped edge.

Baytown Plain, *var. unspecified* *n = 4392*

The remainder of the grog-tempered plain sherds were placed in the category Baytown Plain, *var. unspecified.* This includes sherds with a good deal of grog and some sand as well as a few sherds from Mound B that have no sand at all in the paste. The only significant variation in these sherds is in terms of color, which ranges from nearly white, to red, to dark brown. Some sherds have black cores. It should be noted that a few pieces of plainware have the contorted or laminated appearance in cross section that is associated with Tchefuncte ceramics. Two sherds, one a rim, have exterior bosses.

Turkey Paw Plain, *var. unspecified* *n = 400*

Bone-tempered sherds were found in fair numbers in collections from the Gainesville Reservoir in western Alabama where Jenkins (1981:157) finds them to be a late Middle Woodland time marker. This temper reaches a peak frequency of about 7 percent in that area. Other sites have also produced a few bone-tempered sherds, including Pinson and Ingomar, where they have been considered to represent possible trade items or to have ceremonial significance (Mainfort 1986:46; Mainfort 1988:139; Rafferty 1990:93). Some of the bone-tempered sherds from the Batesville Mounds also contain grog and sand. Bone-tempered sherds, including fabric-marked examples, make up exactly 10 percent of the total collection from the South Village of the Batesville Mounds site. They are completely missing from the Mounds A and B samples.

Fabric Marked

Withers Fabric Marked, *var. Withers* *n = 576*

Figure 4.1, *a* and *b*

Of the two varieties of Withers Fabric Marked that were recovered during the Batesville Mounds excavations, the most common by far is *var. Withers.* Withers Fabric Marked is found primarily in the Tchula period, but continues into early Marksville (Phillips 1970:175; Toth 1988:233). *Var. Withers* has fabric or basketry impressions that tend to cover the entire vessel (Phillips 1970:174–75). Withers, *var. Withers,* includes all clay-tempered fabric-marked pottery in the sample. One paste characteristic shows up when you try to write provenience numbers on the backs of these sherds: all of the *var. Withers* sherds are softer than most of the cord-marked sherds. All of the Withers rim sherds from Batesville are plain, from large vessels with vertical sides.

Withers Fabric Marked, *var. Twin Lakes* *n = 6*

Withers Fabric Marked, *var. Twin Lakes* is distinguished from *var. Withers* on the basis of temper. This variety includes the sandy sherds and is essentially the equivalent of Baytown Plain, *var. Thomas.* And, as with Baytown Plain, the break between the two varieties of Withers is problematic. Questionable pieces are often placed into *var. Withers* (Phillips 1970:174–75), and this example has been followed in this analysis. Withers, *var. Twin Lakes,* appears to have the same temporal range as Withers, *var. Withers* (Phillips 1970:174–75).

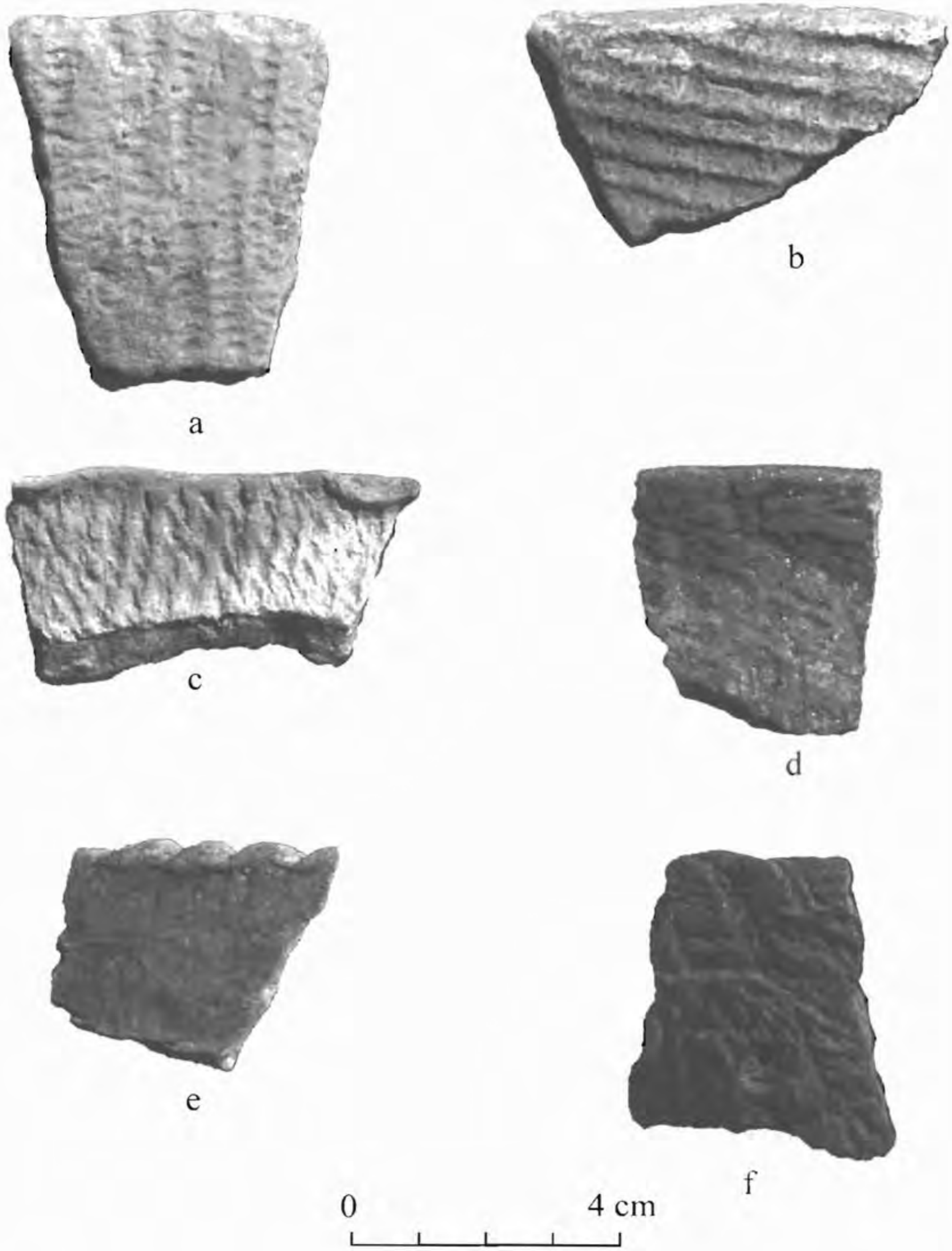

Figure 4.1. Withers Fabric Marked, *var. Withers*, a - b; Mulberry Creek Cord Marked, *var. Blue Lake*, c - f.

Cord Marked

As others have noted (Phillips 1970:136; Jenkins 1981:99), the type designation for cord-marked sherds in the Yazoo Basin, Mulberry Creek Cord Marked, has developed in a peculiar way. The type was named by Haag (1939) after a site in the Pickwick Basin in northwestern Alabama and adopted by Phillips, Ford, and Griffin (1951) in their analysis of ceramics from the Lower Mississippi Valley. At about the same time that Haag was studying the ceramics from the central Tennessee River Valley, Jennings (1941) was working in the Tombigbee River drainage just to the south in northeastern Mississippi. He named two cord-marked types, using Furrs for sand-tempered sherds and Tishomingo for grog-tempered sherds. It may have been a matter of priority that led Phillips and his coworkers to use Haag's type rather than Jennings's. And, with the advent of the type variety system of ceramic typology, Jenkins's (1981:99) renaming the Tombigbee grog-tempered type as Mulberry Creek Cord Marked, *var. Tishomingo,* is certainly reasonable. Why, then, did Jenkins (1981) maintain the Furrs Cord Marked type rather than making it a variety of Mulberry Creek? There is another sandy-paste variety of Mulberry Creek: *var. Blue Lake.* However, it is clear that temper variation within the cord-marked varieties of western Mississippi does not mean the same in terms of chronology as it does in eastern Mississippi. We follow the Lower Valley typology for cord-marked ceramics in our analysis.

Mulberry Creek Cord Marked, *var. Blue Lake* — *n = 1367*

Figure 4.1, *c* through *f*

Mulberry Creek Cord Marked, *var. Blue Lake,* dates to the Marksville and Baytown periods. It is distinguished from the other varieties on the basis of a sandy paste (Phillips 1970:136–38). Grog is still present as a minority nonplastic in the *Thomas*-like paste of some of the *var. Blue Lake* sherds. Most of the rims are plain, straight forms, but deep notching is a minor mode.

Mulberry Creek Cord Marked, *var. unspecified* — *n = 1539*

Mulberry Creek Cord Marked, *var. unspecified,* also includes sherds containing both sand and grog, but grog is clearly the majority tempering agent. Excepting temper, they are identical in appearance to the *var. Blue Lake* sherds. The small number of sherds (20) with grog but no appreciable sand are counted here.

Turkey Paw Cord Marked, *var. unspecified* — *n = 374*

Bone-tempered cord-marked pieces, which contain grog and/or sand inclusions, were classified as Turkey Paw Cord Marked, *var. unspecified.* The temporal range of this type has not been clearly established, but a late Middle Woodland assignment is suggested (Jenkins 1981:158).

Punctated

Here is where it gets kind of tricky. Mound B produced a large number of punctated sherds, some of which are quite distinctive. Excluding fingernail punctation, there are two main Woodland period punctated types for the region, Churupa and Twin Lakes. Each of these has a long and complicated history, and as a consequence there are some methodological difficulties in sorting Early Woodland punctated sherds into the appropriate varieties. In fact, the following classification differs from the one Rodney Stuart (1997) followed in his thesis.

In the original type definition, Twin Lakes Punctated was recognized as a rim treatment that was found only at the Norman and Twin Lakes sites in the northern Delta (Phillips, Ford, and Griffin

1951:76). It was defined on the basis of two or more rows of short wedge-shaped punctates arranged in a herringbone pattern and located immediately below the rim. A companion type, Crowder Punctated, was recognized at the same time. In this case, the punctates are round and located in parallel rows below the rim of the vessel. Both were thought to be Early Woodland types of relatively limited distribution (Phillips, Ford, and Griffin 1951:76). Significantly, neither type was found at the Jaketown site (Ford, Phillips, and Haag 1955), located in the southern Delta, apparently outside their distribution.

Phillips (1970:165–66) later combined the two types, recognizing their similarity in terms of location on the vessel and basic design, but preserving the distinction in terms of kind of punctation at the varietal level. Toth (1988:232) defined a third variety of Twin Lakes to account for sherds with *var. Twin Lakes*-like wedge-shaped punctations that are located in rows below the rim like classic Twin Lakes, but are not arranged in a herringbone fashion. Twin Lakes Punctated, *var. Hopson*, is found in the same area and at the same time as the other two varieties. Finally, Ford (1990) defined a Twin Lakes Punctated variety that is not primarily a rim treatment. Twin Lakes Punctated, *var. Tidwell*, was named in order to describe designs found on a number of whole vessels from a burial mound located in the North Central Hills to the east of the Batesville Mounds site. In this variety, punctations similar to those found on *var. Twin Lakes* and *var. Hopson* are used to fill in curvilinear and rectilinear zones on the body of the vessel.

Churupa Punctated was originally named to describe material from near the mouth of the Red River in Louisiana (Phillips, Ford, and Griffin 1951:95), but has been found at many sites in the southern portion of the Delta (Greengo 1964; Phillips 1970:67–68). The most distinctive characteristic of the type is the nature of the punctates. Described as hemiconical, they were made with a hollow tool that was pushed against the surface of the vessel at an oblique angle. These punctates are located in zones bounded by the broad, U-shaped lines typical of Marksville Incised and Stamped varieties. It is thought to be a Marksville and somewhat later type (Phillips 1970:698).

Excavations at the Boyd site in the western Delta led to the definition of another, earlier variety of Churupa Punctated. The lower zone at the site produced a number of diagnostic Early Woodland types including Withers Fabric Marked and Twin Lakes Punctated, *var. Twin Lakes*. The zoned punctated sherds from this level are like Churupa except that they show a variety of other types of punctations, and the incised lines bounding the punctations vary in width from broad to narrow (Connaway and McGahey 1971:24–25). Toth (1988:223) found this extension of the original type definition to be useful in his study of early Marksville sites in the Lower Mississippi Valley. He found Churupa Punctated, *var. Boyd*, to be restricted to sites in the northern portion of the Delta with strong Tchula components.

Following the established typology, we have sorted the punctated sherds from Batesville into rim treatments and body decorations. If the punctation is a rim treatment, the sherd was classified into one of three varieties of Twin Lakes Punctated. Sherds with round punctations arranged in lines near the rim were classified as Twin Lakes Punctated, *var. Crowder*. Those with wedge-shaped or oblong punctates arranged in a herringbone pattern were called Twin Lakes Punctated, *var. Twin Lakes*. Those with wedge-shaped or oblong punctates arranged in one or more rows parallel to the rim with the punctates oriented in the same direction fell into the Twin Lakes Punctated, *var. Hopson*, category.

Sherds on which the punctations are part of a zoned body decoration were all classified as Churupa Punctated, mostly *var. Boyd*. Only one showed the classic hemiconical punctations of *var. Churupa*. None showed the herringbone or linear pattern of punctation characteristic of the zoned decoration of Twin Lakes Punctated, *var. Tidwell*.

Churupa Punctated, *var. Churupa* *n* = *1*

Figure 4.2, *a*

A single sherd from the South Village shows the distinctive punctates characteristic of *var. Churupa,* but lacks incised lines delineating a zone. This is likely because it is so small. Although it should probably be placed in the unspecified punctated category, the punctates are so distinctive that we have designated it an example of the type variety.

Churupa Punctated, *var. Boyd* *n* = *15*

Figure 4.2 *b* through *g*

The punctates on the sherds identified as Churupa Punctated, *var. Boyd,* are generally small and round although a few are triangular, formed with a pointed tool pressed into the vessel at an oblique angle. The lines zoning these punctates are narrow and V-shaped. There are two sherds with punctations in zones that are not defined by incised lines. One sherd shows the zone of decoration angling down from the rim toward a pronounced and sharply angled shoulder. None of the sherds is large enough to give any idea of overall design, but all are bounded by straight rather than curved lines.

Twin Lakes Punctated, *var. Twin Lakes* *n* = *38*

Figure 4.3, *a* through *i*

As discussed, the primary sorting criterion for *var. Twin Lakes* is a herringbone design below the rim. This design is usually executed with wedge-shaped punctations, but they tend to be long and often appear to be incised rather than punctated. In two cases the lines are definitely incised. We could name a new type, Twin Lakes Incised, but we won't. In ten cases the design is located on a broad bevel on the outside of a thickened rim. One sherd has a rim with a square cross section with one-half of the herringbone design on the top and the other on the outside of the vessel. Two sherds show tick marks on the rim that appear to be continuations of the herringbone pattern on the adjacent exterior surface. Three sherds are red slipped.

Twin Lakes Punctated, *var. Crowder* *n* = *8*

Figure 4.4, *a* through *d*

Twin Lakes Punctated, *var. Crowder,* sherds show two or three rows of small round punctations located just below the rim on the outside of the vessel. If the punctates were elongated and vertical, we placed the sherd in the *var. Hopson* group.

Twin Lakes Punctated, *var. Hopson* *n* = *57*

Figure 4.4, *e* through *i*

Most of the *var. Hopson* sherds look like *var. Twin Lakes* with the herringbone pattern straightened out. In fifteen cases the design is located on an exterior bevel, and in two of these cases the shape is nearly identical to that found on some of the *var. Twin Lakes* sherds. The biggest difference from *var. Twin Lakes,* other than the arrangement of the punctates, is the tendency for *var. Hopson* sherds to show one or two incised lines below the punctations. Fourteen sherds display this feature. Like the rest of the Batesville ceramics, most of these sherds have a red or orange paste, but five are clearly red slipped.

Unspecified Punctated *n* = *3*

The unspecified class includes those sherds that are too small to determine whether the punctates are a rim treatment or body treatment. That is, they cannot be placed into either of the punctated types.

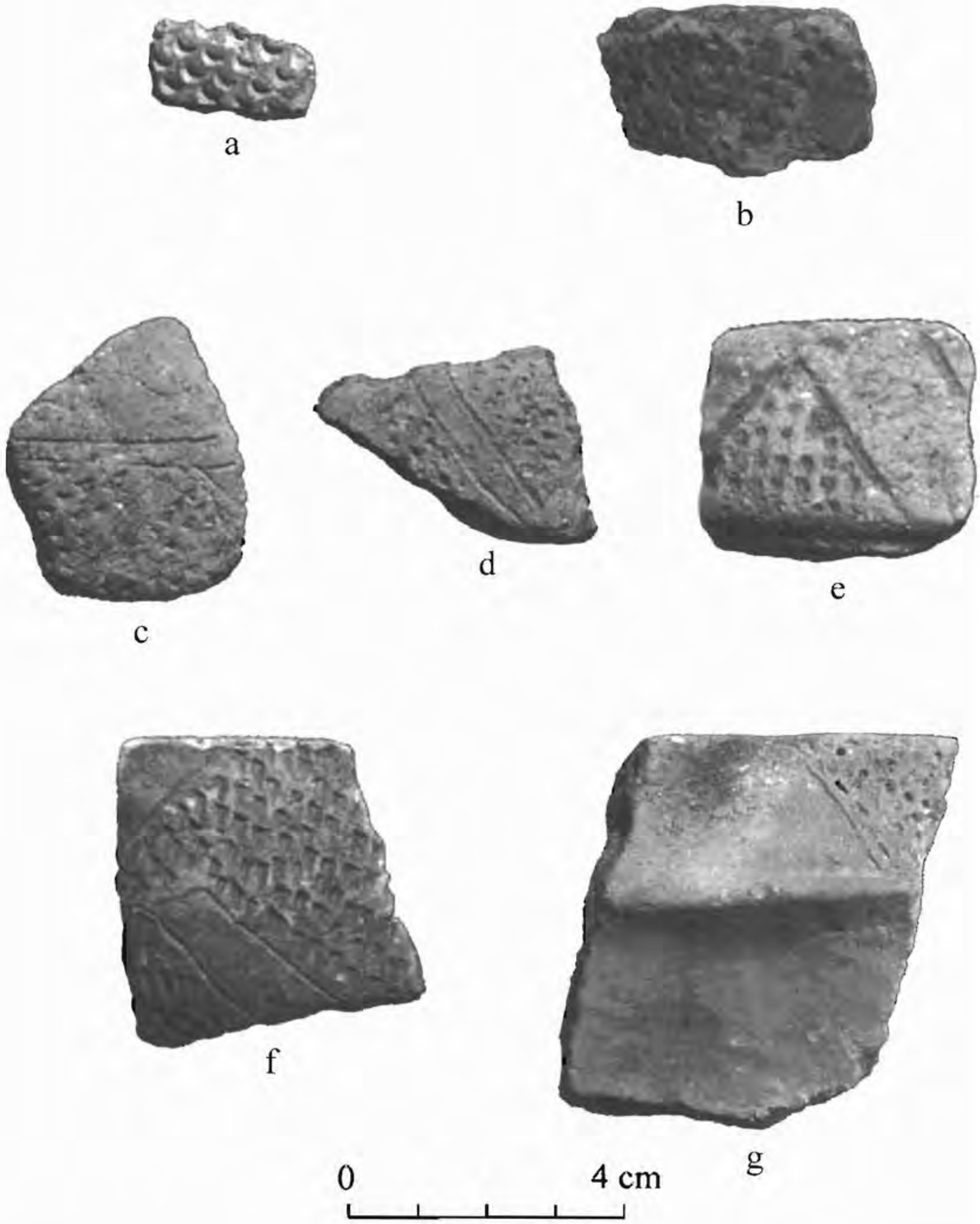

Figure 4.2. Churupa Punctated, *var. Churupa,* a; Churupa Punctated, *var. Boyd,* b - g.

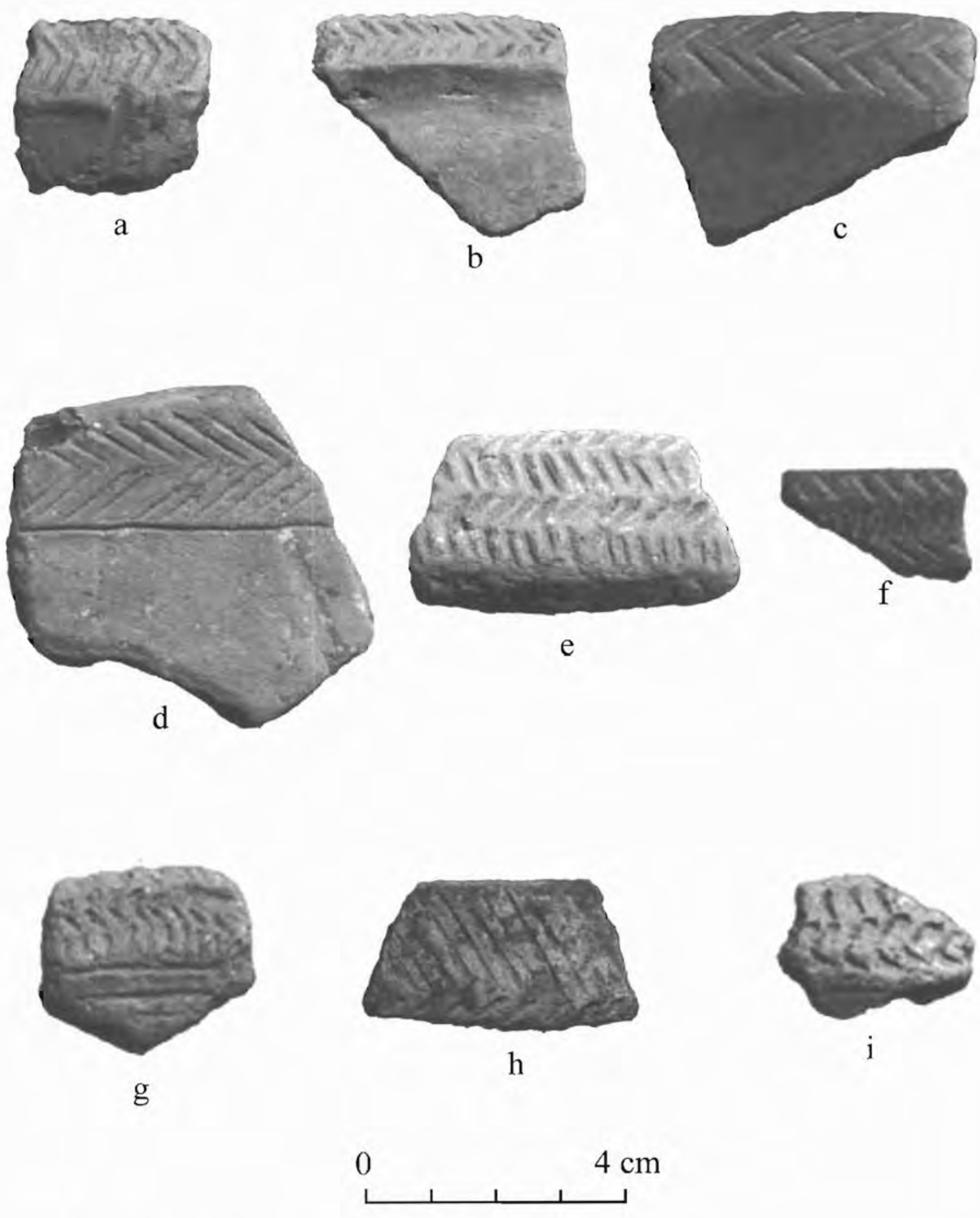

Figure 4.3. Twin Lakes Punctated, *var. Twin Lakes,* a - i.

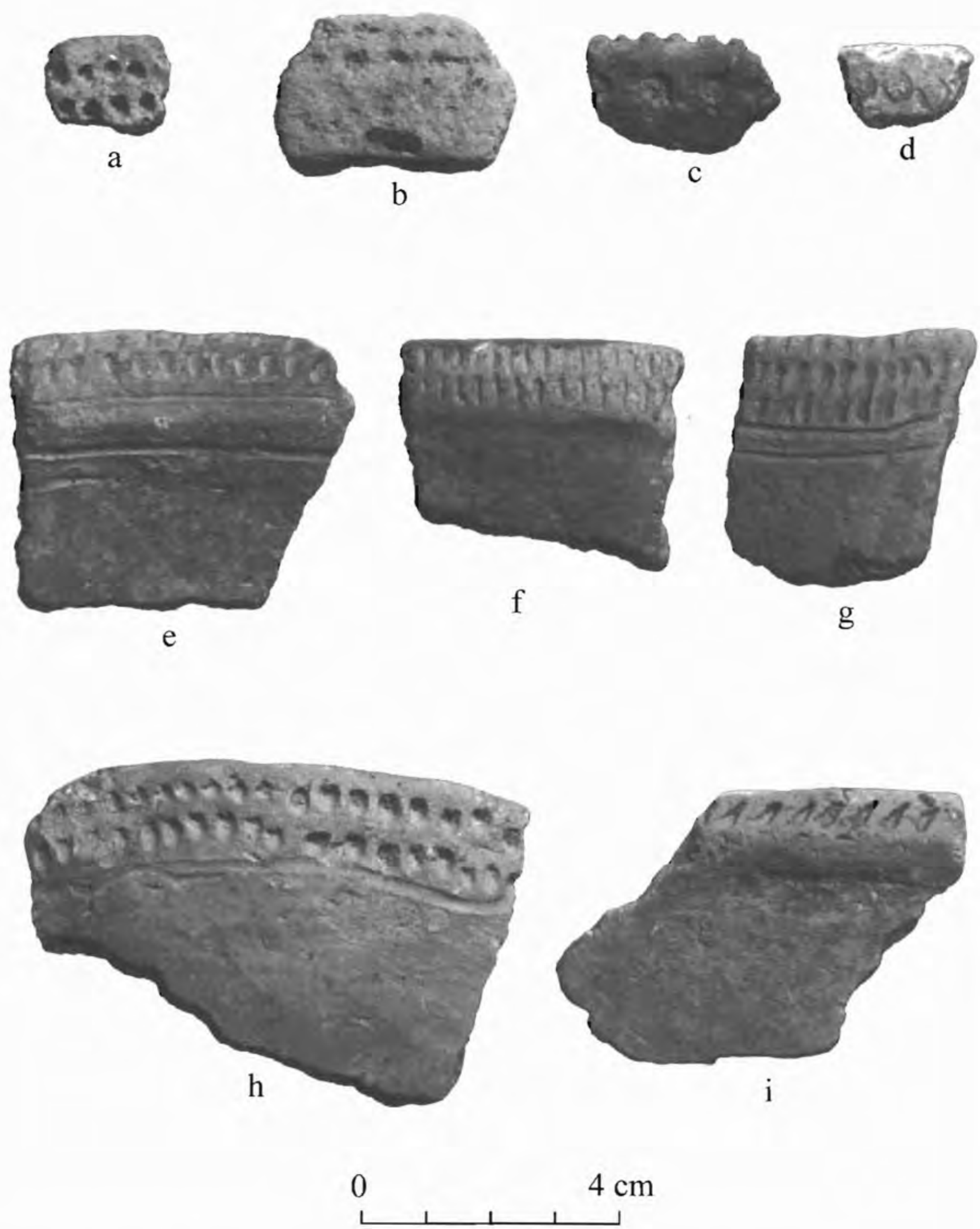

Figure 4.4. Twin Lakes Punctated, *var. Crowder*, a - d; Twin Lakes Punctated, *var. Hopson,* e - i.

Cord Impressed

Cormorant Cord Impressed, *var. Cormorant* *n = 11*

Figure 4.5 *a* through *c*

Cormorant Cord Impressed was originally defined by Phillips and his coauthors (1951:73) on the basis of material from the extreme northern portion of the Delta, just to the south of Memphis. The type has come to include any decoration on a Woodland period paste that was executed by pressing a single cord into the surface of the vessel (e.g., Ford 1990), but in the original definition the decoration is described as a rim treatment. In fact, most of the illustrated examples of the type are very similar to Twin Lakes Punctated, *var. Twin Lakes* and *var. Hopson*, in design and placement. The cord impressions on two of the Batesville sherds are located on an exterior bevel, which is characteristic of Twin Lakes sherds from the site. On another sherd two parallel cord impressions are located just below a break that appears to have occurred at the bevel, and a single row of punctates occurs below the cord impressions. This sherd is also red filmed. On one example, three horizontal rows of cord impressions were made by pressing a cord-wrapped dowel into the soft clay just below the rim. The effect is very similar to Twin Lakes Punctated, *var. Hopson*.

Unspecified Cord Impressed *n = 8*

The unspecified cord-impressed category includes all the body sherds with cord impressions. That is, it is not possible to determine whether the decoration is a rim treatment or not.

Incised

Cross-Hatched Rims *n = 19*

Figure 4.5, *d* through *i*

Cross-hatched rims have traditionally been considered a marker of early Marksville in the alluvial valley. In fact, their presence at the Twin Lakes site just to the west of the Batesville Mounds prompted the definition of an early Marksville, Twin Lakes phase (Phillips 1970:891), but not without some misgivings. Although the surface collection from that site contained 3663 sherds and 14 cross-hatched rims, no Marksville Stamped or Marksville Incised sherds were found. Marksville period cross-hatched rims are usually found on incised and stamped vessels. Phillips (1970:491) concluded that, in this case, cross hatching must be "strictly rim treatments on vessels otherwise undecorated."

Three similar cross-hatched rims were found at the Boyd site in the northern end of the Delta, a stratified site containing both a Tchula and a Marksville component. One was found in the earlier zone, one in the later, and one in a mixed context. Connaway and McGahey (1971:25) conclude that the similarities in paste and design indicate that these rims are part of the Zone I, Tchula ceramic assemblage at the site. However, on the basis of the cross-hatched rims in addition to Twin Lakes Punctated, Indian Bay Stamped, and one sherd of Marksville Incised from the general levels in Zone I, Toth (1988:118) concludes that there was a later, early Marksville component in Zone I. Connaway and McGahey (1971:20–21) consider the Indian Bay Stamped and Marksville Incised sherds to be intrusive from Zone II. In support of their argument, neither of these types was found in the Zone I pits (Connaway and McGahey 1971:table 3), but then neither were any of the cross-hatched rims. Brookes and Taylor (1986:26) follow Toth in his 1977 dissertation in assigning the cross-hatched rims from Boyd to the early Marksville period, but, upon reflection, Brookes (1988:xi) has concluded that

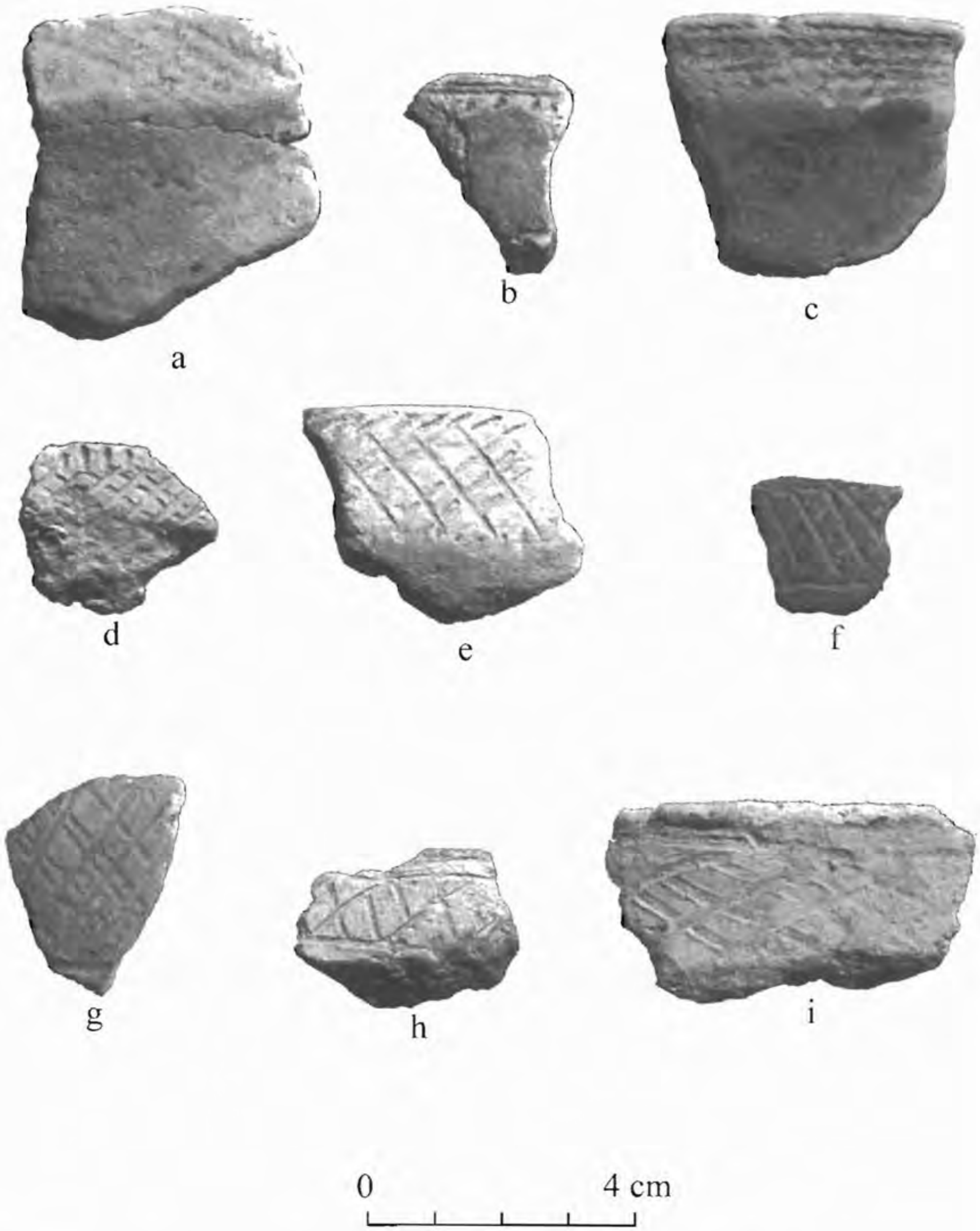

Figure 4.5. Cormorant Cord Impressed, *var. Cormorant*, a - c; cross-hatched rims, d - i.

the crude cross-hatched rims found at the Boyd site and on Twin Lakes phase sites to the southeast are Tchula rather than Marksville markers. Therefore, it is particularly interesting to note that all of the cross-hatched rims recovered from the Batesville Mounds site during the summer of 1996 were found in Mound B, along with several other Tchula period types.

The Batesville cross-hatched rims are relatively crudely executed with uneven spacing and irregular lines. One sherd shows a pronounced shoulder that marks the boundary between the rim decoration and the rest of the pot, an arrangement that is quite similar to the broad bevel that bears the punctations, incising, and cord impressions on several examples of Twin Lakes and Cormorant sherds from the site. In four cases the decoration is delimited by an incised line. Another sherd shows small tick marks along the lower edge of the decoration and longer tick marks above the cross hatching on the outside of the rim. Tick marks on the rim are found on a second sherd on which the lower boundary of the cross hatching is missing. Small circular punctations delimit the upper and lower boundaries of the cross-hatched zone on another sherd.

Marksville Incised, *var. unspecified* *n* = *11*

Figure 4.6, *a* through *d*

Like most of the types from the Lower Valley, Marksville Incised has a long and convoluted history. Phillips (1970:110–19) spends several pages describing the type and its varieties and explaining the rationale underlying his divisions. Sherds with broad-line, U-shaped incisions were originally placed into one type with closely spaced lines, Yokena, and one with broadly space lines, Marksville. Yokena was thought to be later. Consequently, all the broad-line incised sherds from late Middle Woodland sites in the southern portion of the Yazoo Basin were classified as Yokena Incised (Greengo 1964). However, both broadly and closely spaced designs were found at these sites. Phillips (1970:111) found it useful to classify all sherds with shallow, broad incising as a single type, Marksville Incised, which he subdivided into several varieties. *Yokena* is one of the varieties, but it is not the only variety with closely spaced incising.

Marksville-style incising is quite distinctive, making type identification easy. However, most of the attributes used in distinguishing varieties are difficult to see on small sherds. Therefore, we will take advantage of one of the major advantages of the type variety system of classification. If the investigator cannot divide the type into varieties on the basis of the sample, he or she does not have to. Most of the incised lines on the Marksville sherds in our collection are curved.

Unspecified Incised *n* = *22*

Several sherds were found on which the incising was too indistinct or the sherd too small to allow type assignment. All show straight, narrow lines that are often multiple and generally parallel, running at a diagonal to the rim of the vessel. One or two are reminiscent of Tchefuncte Incised, but the paste is wrong.

Stamped

Mabin Stamped, *var. Cassidy Bayou* *n* = *2*

Figure 4.6, *e*

Mabin Stamped was first named as a variety of Marksville Stamped (Phillips 1970:122). In Phillips's (1970:120) definition, Marksville Stamped includes "all Lower Mississippi zoned stamped pottery of

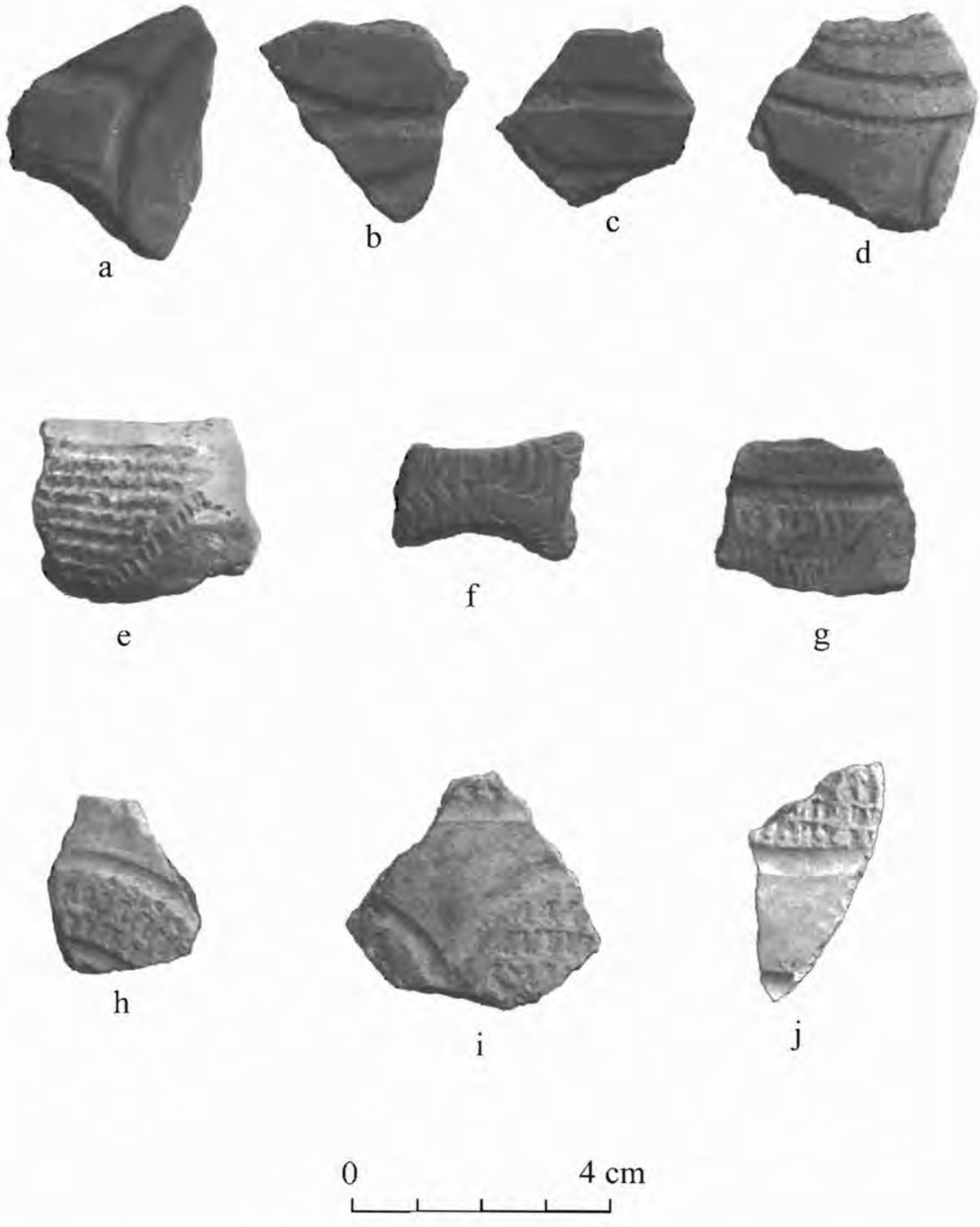

Figure 4.6. Marksville Incised, *var. unspecified*, a - d; Mabin Stamped, *var. Cassidy Bayou*, e; Marksville Stamped, *var. Troyville*, f - g; Marksville Stamped, *var. unspecified*, h - j.

the Marksville period." In the case of Mabin, the stamping is made with a dentate tool that is not rocked back and forth on the vessel but, instead, lifted and placed, forming parallel rows of dentations. Toth (1988:226) found it useful to subdivide this variety, so he elevated Mabin to a type and defined several varieties. *Var. Cassidy Bayou* includes sherds on which broad-line incision defines zones of drag-and-jab lines. On one of the *Cassidy Bayou* sherds from the Batesville Mounds the zone is bounded just below the rim by a broad incised line and on one side by a drag-and-jab line.

Although it is commonly associated with the Dorr and Twin Lakes phases, on stylistic grounds Toth (1988:227) has suggested that this variety of Mabin may be early, perhaps dating to the late Tchula period. Several varieties of Mabin were identified in Brookes and Taylor's (1986:25) reanalysis of the ceramics from Zone I, the Tchula component at the Boyd site. We found our Mabin sherds in Mound B along with many other Tchula ceramics.

Marksville Stamped, *var. Troyville* — *n* = *4*

Figure 4.6, *f* and *g*

Var. Troyville is another former type that was demoted to a variety of Marksville Stamped by Phillips (1970:126–27). It is distinguished from other varieties in that the rocker stamping is made with a plain rather than a dentate tool. Phillips (1970:127) considers it to be a middle to late Marksville type, but Toth (1974:119–20) found sherds with similar decoration in early Marksville contexts at the type site in Louisiana. However, Toth suspects that it should be possible to separate early varieties from late varieties on the basis of paste (Toth 1974:120). This is exactly what he does in his study of Marksville ceramics from throughout the Lower Valley. Sherds with zoned, plain rocker stamping on a chalky paste are classified as Marksville Stamped, *var. Old River* (Toth 1988:230), leaving the *Troyville* variety for a later, more compact paste. None of the nondentate rocker-stamped sherds from the Batesville Mounds have a chalky paste. Two sherds are too small to show the lines bounding the zone of rocker stamping and could be classified as Indian Bay Stamped. However, the stamping is identical to that on the other sherds that are zoned and much smaller than that which is normally associated with Indian Bay.

Marksville Stamped, *var. unspecified* — *n* = *8*

Figure 4.6, *h* through *j*

The Marksville Stamped, *var. unspecified,* category includes all the zoned, dentate rocker-stamped sherds in the collection on which the zone is bounded by broad, U-shaped lines. Varietal distinctions are difficult with small sherds like these.

Other Ceramic Artifacts

Clay Ball

A single clay ball was found at the site. It is well made, but fragmentary, consisting of slightly less than half of an oval spheroid. The temper is sand and grog. The surface is smoothed. The only complete measurement, width, is 29 millimeters. Clay balls are best known as a diagnostic of the Poverty Point period. However, they are also characteristic of the following Tchula period in the north Delta (Connaway and McGahey 1971:32). Our example came from Zone 3 in Mound B.

Clay Pipe

Figure 4.7

Several large fragments of a clay pipe were found in the bottom third of Feature 11, the large pit that was dug into the subsoil below the midden in the South Village North. We have enough pieces to reconstruct most of a crudely made elbow pipe. The paste is sandy with no other obvious additions. The interior is rough with a flaring, bowl-like opening on both arms. However, only one bowl shows fire blackening. The exterior is smoothed, and the end with the bowl that appears to have been used is decorated with a crude, irregular pattern of shallow incised lines. Most of the design is located near the rim, but at least three zigzag lines extend away from the rim toward the other end of the pipe.

Similar artifacts are fairly common in the Delta (Brain 1989:fig. 65; Ford 1951:fig. 42f; Ford, Phillips, and Haag 1955:fig. 38c; Williams and Brain 1983:fig. 6.3d). These pipes are often shell tempered and found in Mississippian contexts (Brain 1989:180; Williams and Brain 1983:214). However, they extend back into the Late Woodland, and Ford (1951:110) believed that elbow pipes replaced the characteristic Middle Woodland platform pipe as early as the Troyville period. He would not, however, push them back as far as Tchula times, the context for a clay grit-tempered elbow pipe from the Jaketown site (Ford, Phillips, and Haag 1955:103). He does note the similarity to stone elbow pipes from Copena sites in northern Alabama.

The Copena complex was defined on the basis of burial mounds excavated during the late 1930s in the reservoirs along the middle Tennessee River in northern Alabama, south-central Tennessee, and northeastern Mississippi (Webb and DeJarnette 1942; Webb 1939). It has subsequently been dated to the Middle Woodland, and, in fact, the flat-topped mound at the Walling site in northern Alabama is a Copena period construction (Knight 1990). Elbow pipes made from steatite and sandstone are a regular artifact in Copena burials, but Cole (1981) notes two made from limestone-tempered ceramics, one of which is illustrated by Walthall (1980:122). The ceramics and radiocarbon data from Feature 11, and the rest of the South Village deposit suggest a late Middle Woodland date for the pipe from the Batesville Mounds site.

Intrasite Distribution

The trench we dug into the side of Mound B exposed a sequence of construction stages that are distinct in terms of color, soil texture, and artifact density. This and the associated radiometric data discussed in chapter 3 suggest the possibility that there might be stratigraphic patterns in the distribution of ceramics in the mound. This is not the case.

As Table 4.1 shows, the ceramic assemblages from the various zones are about the same. Some of the minority types were found only or primarily in Zone 2, but more than two-thirds of the sherds from the mound came from that zone. In fact, the only difference between the zones evident in Table 4.1 is that some contained a good many more sherds than others. The pattern is even more evident when the sherd counts are adjusted for differences in the volume of dirt excavated from each of the zones. A rough measure of relative sherd density can be computed by eliminating the sherds from levels that crosscut the zones and using excavation volume estimates derived by computing the area of the zone in the trench and pit profiles and multiplying that by the width of the trench (Table 4.1). As anticipated on the basis of field observations, the Zone 2 density is highest, more than twice as great as any other zone. Zone 5, the subsoil beneath the mound, has the lowest density. It is interesting to

Figure 4.7. Clay pipe. side view, a; front view, b.

Table 4.1. Mound B Sherds Broken Down by Type and Zone

Type	Zone										
	1a	1a/1b	1b	1b/2	2	2/3	3	3/4	4	4/5	5
Baytown Plain											
var. Thomas	3	2	14	9	116	4	5	4	3	0	0
var. unspecified	98	16	189	80	1607	136	250	9	171	0	24
Churupa Punctated											
var. Boyd	0	0	0	2	6	0	1	0	3	0	0
var. Churupa	0	0	0	0	0	0	0	0	0	0	0
Cormorant Cord Impressed											
var. Cormorant	0	1	0	0	8	0	1	0	0	0	0
Mabin Stamped											
var. Cassidy Bayou	0	0	0	0	1	0	1	0	0	0	0
Mulberry Creek Cord Marked											
var. unspecified	0	0	0	0	4	1	0	0	0	0	0
Turkey Paw Plain											
var. unspecified	0	0	0	0	1	0	0	0	0	0	0
Twin Lakes Punctated											
var. Crowder	0	0	2	0	5	0	0	0	0	0	0
var. Hopson	0	0	2	4	41	1	6	1	1	0	0
var. Twin Lakes	1	1	1	1	22	0	9	0	1	0	0
Unspecified Cross Hatched	1	0	2	0	6	0	1	0	6	2	0
Unspecified Cord Impressed	0	0	0	0	1	0	0	0	0	0	0
Unspecified Eroded	6	0	11	4	21	4	8	3	0	0	0
Unspecified Incised	2	0	0	0	8	0	2	0	3	0	0
Unspecified Punctated	0	0	0	0	1	0	0	0	1	1	0
Withers Fabric Marked											
var. Twin Lakes	0	0	2	0	3	0	0	0	0	0	0
var. Withers	11	6	41	6	349	25	64	3	46	0	5
Totals	122	26	264	106	2200	171	348	20	235	3	29
Density (sherds/ft.^{3})	0.61		0.96		3.27		1.05		1.54		0.18

note the difference in density between Zone 4, the A horizon buried by mound construction, and the various zones within the mound. The processes that were involved in the construction of Zone 2, whatever they were, appear to have concentrated the artifact density.

All but eleven of the seventy-eight sherds recovered from the test pit in Mound A came from Zone 1, the undifferentiated mound fill. That and the small total number of sherds make stratigraphic analysis of this sample impossible.

The trench along the edge of the bluff line in the South Village was distinguished in the analysis from the test pits that we located to the south of the bluff line because we had hoped to recover material from an earlier component of the midden at that location. Earlier field school excavations had uncovered some Tchula period ceramics in that part of the site (Ford 1996a). The trench is called South Village North and the test pits South Village South. Neither location showed any patterning in the vertical distribution of ceramics other than differences in sherd density in the trench sample (Tables 4.2, 4.3). In particular, the overburden in the northern half of the trench, Zone 1b, contained substantially fewer sherds than the buried midden, Zone 2.

The real payoff in sorting all these small pieces of pottery comes when the horizontal distribution of the types and varieties is considered (Table 4.4). It is a pattern so distinct that we recognized it at the water screens and adjusted our research strategy to take advantage of the research potential of contrasting the Tchula ceramics we recovered from the mounds with the Marksville material we knew we would find if we dug at the northern edge of the South Village where the field school had tested. The two ceramic samples are almost completely complementary. The mound assemblage differs from the village assemblage in terms of surface treatment, decoration, rim form, and, to a lesser extent, temper.

Mounds A and B contain a nearly pure Early Woodland, Tchula assemblage. Major types and varieties include Churupa Punctated, *var. Boyd;* Cormorant Cord Impressed, *var. unspecified;* Twin Lakes Punctated, *vars. Crowder, Hopson,* and *Twin Lakes;* Mabin Stamped, *var. Cassidy Bayou;* Withers Fabric Marked, *vars. Twin Lakes* and *Withers;* and casually executed cross-hatched incising just below the rim. Not only are these types found almost exclusively in the mound assemblages (Table 4.4), but also the Cormorant and Twin Lakes varieties form a stylistically cohesive group. All the Batesville examples are rim treatments, with the decoration located in relatively narrow bands just below the lip on the exterior of the vessel. The designs generally consist of multiple rows of repeating elements often located on a distinctive broad, exterior bevel of a thickened rim. Varietal distinctions depend on the arrangement of the elements and method of execution. The fact that they are contemporaneous comes as no surprise. What is interesting is that it has taken archaeologists several decades to recognize that fact. Part of the problem is that most of the phase designations, and chronological assessment have been based on mixed surface collections. If the Batesville data had been available earlier, some confusion could have been avoided.

Churupa Punctated and Mabin Stamped are based on an entirely different plan, one that will become much more common in the following Marksville period. In both types the decoration is located on the body of the vessel and consists of zones defined by lines and filled with some kind of surface treatment. They are distinct from the later types in the kind of line and the way the zone is filled.

The predominance of fabric-marked sherds over cord-marked sherds in the mounds should also come as no surprise given the presence of the other Early Woodland ceramics. This sequence has been clearly demonstrated in stratigraphic studies in northeastern Mississippi going back to the late 1930s when Jennings (1941) developed the Miller ceramic sequence. The other major marker in that sequence is a change from sand temper to grog temper. This pattern has not been as clear in the

Type	Zone						
	1a	1a/1b	1b	2	2/3	3	Pit
Baytown Plain							
var. Thomas	34	12	79	623	66	192	113
var. unspecified	36	21	165	612	50	240	77
Churupa Punctated							
var. Boyd	0	0	0	0	0	2	0
var. Churupa	0	0	0	0	0	1	0
Marksville Incised							
var. unspecified	0	0	1	6	0	2	1
Marksville Stamped							
var. Troyville	0	0	1	1	1	0	1
var. unspecified	0	0	2	0	0	4	0
Mulberry Creek Cord Marked							
var. Blue Lake	19	2	55	512	106	194	190
var. unspecified	19	4	48	515	102	304	115
Turkey Paw Cord Marked							
var. unspecified	3	0	9	120	37	85	78
Turkey Paw Plain							
var. unspecified	2	2	25	141	19	75	38
Twin Lakes Punctated							
var. Twin Lakes	0	0	0	0	1	0	1
Unspecified Cord Impressed	0	0	0	0	0	7	0
Unspecified Eroded	3	0	5	47	12	25	16
Unspecified Incised	0	0	0	1	0	4	2
Withers Fabric Marked							
var. Twin Lakes	1	0	0	0	0	0	0
Totals	117	41	390	2578	394	1135	632
Density (sherds/ft.^{3})	1.95		7.09	20.22		8.41	

western portion of north Mississippi, and some (Ford 1981; Johnson 1988) have argued that there is no chronological patterning in temper in this region. Recently, others have argued otherwise (Peacock 1996, 1997; Fant 1996). The relative proportions of Baytown Plain, *var. Thomas,* in the mounds and village (Table 4.4) anticipate a point that will be made in more detail later. There does seem to be some change in temper through time. However, in terms of sand and grog, it is the reverse of what occurs to the east in the Miller sequence.

Certainly the almost exclusive occurrence of Turkey Paw Plain and Cord Marked in the village points to a temper distinction that is significant. Again looking to the east, these bone-tempered types are a late Middle Woodland minority ware in the upper Tombigbee drainage of Mississippi and Alabama (Jenkins 1981).

The importance of bone temper as a chronological marker in north Mississippi has, until now, been poorly understood. The same cannot be said for the Marksville types. Their exclusive occurrence in the South Village samples is the clearest documentation of the Middle Woodland date for this deposit. The fact that cord-marked sherds outnumber fabric-marked sherds 2900 to 1 suggests that the ceramic assemblage falls late in the Middle Woodland.

Type	Zone	
	2	3
Baytown Plain		
var. Thomas	492	115
var. unspecified	457	108
Marksville Incised		
var. unspecified	1	0
Marksville Stamped		
var. unspecified	2	0
Mulberry Creek Cord Marked		
var. Blue Lake	176	113
var. unspecified	297	129
Turkey Cord Marked		
var. unspecified	30	12
Turkey Paw Plain		
var. unspecified	67	30
Twin Lakes Punctated		
var. Crowder	0	1
Unspecified Eroded	16	2
Total	1538	510
Density (sherds/ft.^{3})	24.60	10.20

Phase Assignment

When archaeologists compare ceramic assemblages from different areas, the question is, are they different because they are separated in time or in space? Phase designation is an attempt to deal with spatial variation. All of the Tchula phases, for example, were designed to be roughly contemporaneous, and the differences between them due to differences in the popularity of different ways to decorate pottery in different parts of the region.

Although the basic chronology and most of the types used in describing the Batesville ceramics are described in the pioneering work of Phillips, Ford, and Griffin (1951), the first comprehensive definition of phases for the Delta is found in Phillips's (1970) follow-up. The more recent work focuses primarily on the southern half of the Delta and relies on material collected for the first report in discussing phases to the north. The northern phases are, therefore, more like hypotheses than conclusions (Phillips 1970:861–64), and they have been refined in the following years (Connaway and McGahey 1971; Ford 1990; Toth 1988; Weinstein 1991). Because they are relatively unmixed, the Batesville components offer the opportunity to evaluate Tchula and Marksville period phases for northwestern Mississippi.

Table 4.4. Sherds Broken Down by Type and Area

Type	Area				
	Mound B	Mound A	South Village North	South Village South	Total
Baytown Plain					
var. Thomas	160	0	1119	607	1886
var. unspecified	2580	48	1199	565	4392
Churupa Punctated					
var. Boyd	12	1	2	0	15
var. Churupa	0	0	1	0	1
Cormorant Cord Impressed					
var. unspecified	10	1	0	0	11
Mabin Stamped					
var. Cassidy Bayou	2	0	0	0	2
Marksville Incised					
var. unspecified	0	0	10	1	11
Marksville Stamped					
var. Troyville	0	0	4	0	4
var. unspecified	0	0	6	2	8
Mulberry Creek Cord Marked					
var. Blue Lake	0	0	1078	289	1367
var. unspecified	5	1	1107	426	1539
Turkey Paw Cord Marked					
var. unspecified	0	0	332	42	374
Turkey Paw Plain					
var. unspecified	1	0	302	97	100
Twin Lakes Punctated					
var. Crowder	7	0	0	1	8
var. Hopson	56	1	0	0	57
var. Twin Lakes	36	0	2	0	38
Unspecified Cord Impressed	1	0	7	0	8
Unspecified Cross Hatched	18	1	0	0	19
Unspecified Eroded	57	5	108	18	188
Unspecified Incised	15	0	7	0	22
Unspecified Punctated	3	0	0	0	3
Withers Fabric Marked					
var. Twin Lakes	5	0	1	0	6
var. Withers	556	20	0	0	576
Totals	3524	78	5285	2048	10935

Tchula

Weinstein (1991) provides an excellent overview of Tchula period phases in the Lower Valley in which he briefly reviews the history of phase designation. Phillips (1970:878) defined a single phase for the north Delta based on excavations and surface collections at the Lake Cormorant site in the extreme northern part of the region. This site contained both early and late material, and this was one of the reasons it was selected for excavation (Phillips, Ford, and Griffin 1951:248). The two test pits at the site exposed more than a meter of cultural deposit with clear stratigraphic trends (Phillips, Ford, and Griffin 1951:figs. 25, 26). The frequency diagrams show an initial occupation in which Withers Fabric Impressed predominated along with Cormorant Cord Impressed, among other types. About midway in the sequence cord marking becomes more common than fabric marking, and Marksville Incised types appear. The Turkey Ridge phase is defined primarily on the basis of Cormorant Cord Impressed in conjunction with Withers Fabric Marked with the proviso that Withers continues to be made after the end of the Tchula period (Phillips 1970:878).

The Boyd site report (Connaway and McGahey 1971) appeared the year following the publication of Phillips's phase summary and provides what proves to be the key to understanding the Tchula period ceramics of the northern Delta. Excavations at Boyd exposed two midden deposits separated by a zone of sterile sand. The lower of the two, Zone I, contains a nearly pure Tchula period assemblage, particularly when the Zone I features are considered (Connaway and McGahey 1971:table 3). Ceramics include Withers Fabric Marked, Cormorant Cord Impressed, Twin Lakes, *vars. Twin Lakes* and *Crowder*, and Churupa Punctated, *var. Boyd.* One cross-hatched rim was found in Zone I.

Connaway and McGahey propose that Zone I is comparable in time to the lower levels at Lake Cormorant and note a similarity to material recovered from the Twin Lakes site to the east, arguing that if Zone I at Boyd is pre-Marksville, then so too should be the Twin Lakes ceramics (Connaway and McGahey 1971:29). This is an important point because Phillips had just defined a phase based on the Twin Lakes material, which he considered to be early Marksville. The chronological assignment appears to be based on "extreme minorities of unspecified varieties of Marksville Stamped and Marksville Incised and the 'Hopewell' cross-hatched rim," which are found in surface collections from sites assigned to this phase (Phillips 1970:891). However, these rims are not typical of the cross-hatched rims from Hopewell or, for that matter, Marksville pots, in which cases the rest of the vessel is covered with stamped or incised decoration. Phillips is aware of this difficulty, noting that the surface collection from the Twin Lakes site produced fourteen cross-hatched rims, but no body sherds with decorations. "It may be," he concludes, "that cross-hatched rims in this complex, like Twin Lakes Punctated, were strictly rim treatments on vessels otherwise undecorated" (Phillips 1970:891).

Minority types in the Twin Lakes phase are Twin Lakes Punctated, *vars. Twin Lakes* and *Crowder*, which were earlier thought to be Tchula period types (Phillips, Ford, and Griffin 1951:437), but were reconsidered to be Marksville (Phillips 1970:880). Therefore, Toth (1988:118) sees two components in the ceramics from Zone I at Boyd. The Cormorant Cord Impressed and Withers Fabric Marked sherds are Tchula period while the cross-hatched rim, and Twin Lakes Punctated varieties are Marksville. Churupa Punctated, *var. Boyd,* is also considered to belong to the Marksville period.

On the basis of a reanalysis of the Boyd ceramics, Brookes and Taylor (1986) argue that some varieties of Twin Lakes and Crowder Punctated begin in the Tchula period. Ford (1988) examined the data upon which the Twin Lakes phase is based and found it to be extremely thin. Brookes (1988:xi) agrees, but proposes that it or something like it be reformulated as a Tchula period phase. That phase would contain varieties of Twin Lakes Punctated, Cormorant Cord Impressed, and Mabin Stamped.

The key to resolving the chronological placement of the Twin Lakes phase and corresponding timing of Twin Lakes Punctated is the interpretation of cross-hatched rims. If all cross-hatched rims are Marksville period markers, then the Twin Lakes phase must be Marksville, for cross-hatched rims are clearly a part of that phase. Boyd is no help here. Three cross-hatched rims were recovered in the excavation of that site; one from Zone I, one from Zone II, and one from a mixed context. However, all three are made of the same soft, dusty paste of the majority of the Zone I sherds (McGahey, personal communication, 1999).

The ceramic assemblage from the Batesville Mounds site contains nineteen cross-hatched rims, all from Mounds A and B. These rims are in association with a substantial sample of Twin Lakes Punctated, *vars. Crowder, Hopson,* and *Twin Lakes,* Cormorant Cord Impressed, Churupa Punctated, *var. Boyd,* and Withers Fabric Marked sherds. None of the Marksville Stamped or Marksville Incised types found at the site came from mounds. The assemblage almost exactly matches that of Zone I at Boyd except that there is nearly no mixing of later types in the mound assemblages at Batesville. The inescapable conclusion is that Connaway and McGahey (1971) and Brookes (1988) were right Twin Lakes, if it is a phase, is a Tchula phase.

So, should the Batesville Mounds ceramics from Mounds A and B be assigned to the Twin Lakes phase? Probably not. Although the geography is right—the Twin Lakes site is located just 25 miles down the Tallahatchie River from the Batesville Mounds—the systematics are not. Twin Lakes is entrenched in the literature as a Marksville phase. What is more, there is a named Tchula period phase for the region.

In their review of other sites with ceramics similar to those of Zone I at Boyd, Connaway and McGahey (1971:30–31) note the resemblance to several mound assemblages recovered from small burial mounds located on the upland to the east. Ford (1990) overviewed the ceramics from these mounds, arguing effectively that they form a cohesive ceramic group. Characteristic types include Cormorant Cord Impressed, Withers Fabric Marked, and Twin Lakes Punctated, *var. Twin Lakes* and *Hopson.* Although there are several vessels on which the decoration is restricted to the rim in typical Twin Lakes fashion, these mortuary ceramics are, understandably, more elaborate than the sherds found in surface collections from habitation sites. In some cases the rows of punctations arranged in parallel or herringbone patterns were used to fill a variety of zoned patterns on the body of the vessel. Ford (1990) designated these Twin Lakes Punctated, *var. Tidwell.* As in the Boyd phase ceramics to the west, red paste and red filming are present. There are, however, some unusual vessel shapes including bowls with triangular orifices.

Weinstein (1991:164) used Ford's (1990) data to define a Tidwell phase. The Batesville Mounds site falls on the western edge of the mapped distribution of the phase (Weinstein 1991:fig. 5), and, in fact, the McCarter Mound is one of the sites used in defining the complex. Others (Holland 1994; Holland-Lilly 1996a, Ford 1993) have argued that this mound should be considered part of the Batesville Mounds site. Its location just to the north of Mounds A and B is reason enough to question the arbitrary division into two sites. The ceramics from Mounds A and B strengthen the argument considerably.

So, although the Mound A and B assemblages from the Batesville Mounds site have not yielded the more flamboyant elements of the Tidwell phase ceramic set, the site must surely be assigned to that phase. We would also argue that most of the Twin Lakes phase sites be assigned to this phase as well. The real problem, then, is where to draw the line between the Tidwell and Boyd phases. Excepting the absence of Twin Lakes Punctated, *var. Tidwell,* in the Boyd phase and Churupa Punctated, *var. Boyd,* in the burial mounds reported by Ford (1990), both phases are quite similar. The excellent sample of *var. Boyd* from Mound B at Batesville strengthens the similarity. Only the Turkey Ridge phase stands out among the north Mississippi Tchula phases in the reported sparsity of Twin Lakes Punctated types in that phase.

Marksville

The reassessment of the Twin Lakes phase also leads to difficulty in assigning the South Village assemblage to a phase. Twin Lakes is the only named Marksville phase for the region. Dorr is the next closest, defined on the basis of material excavated at the turn of the century from the Dorr Mound in what is now downtown Clarksdale (Peabody 1904; Belmont 1961; Phillips 1970) and expanded to include a number of sites in the upper Sunflower River drainage of the western Delta (Toth 1988). But this assignment is not much more satisfactory.

"Diagnostic" ceramics for the Dorr phase are Mabin Stamped, *vars. Mabin* and *Point Lake,* and Indian Bay Stamped, *vars. Cypress Bayou* and *Indian Bay* (Toth 1988:130). These varieties are distinct from the more characteristic Marksville ceramics in a number of ways. Those that have zoned decorations, *Mabin* and *Point Lake,* are not decorated with rocker stamping. Those that are decorated with rocker stamping, *Cypress Bayou* and *Indian Bay,* are not zoned. Excepting one sherd, all the stamped pottery from the South Village is zoned rocker stamped. The exception is a small fragment of plain rocker stamping, which has been classified as Marksville Stamped, *var. Troyville,* on the basis of a similarity to other, larger sherds on which the U-shaped line defining the zone is evident. It could have been classified as Indian Bay Stamped, the unzoned rocker-stamped type for the area except for this resemblance and the fact that all the illustrated examples of Indian Bay show a much larger, more open rocker stamping than is characteristic of *var. Troyville.*

"Prevailing types" on Dorr phase sites are Indian Bay Stamped, Withers Fabric Marked, and two varieties of Mulberry Creek Cord Marked (Toth 1988:130). The South Village did give up a generous sample of cord-marked pottery, but our excavations failed to recover the mix of fabric-impressed and cord-marked pottery that appears to be characteristic of the Dorr phase. Remember, excavations at the Lake Cormorant site in the early 1940s suggested that Marksville period ceramics begin to appear in the stratigraphic sequence at about the time that cord marking was replacing fabric marking in popularity (Phillips, Ford, and Griffin 1951:252). The mix of the two surface treatments is exactly what you would expect at an early Marksville phase site, and Dorr is clearly recognized as an early phase (Phillips 1970:890; Toth 1988:89).

What we appear to have in the South Village is a later Marksville phase, one that occurred after fabric marking had disappeared, when rocker stamping occurred within zones defined by broad, U-shaped lines, and when cross-hatched rims of any kind were missing. Zoned, plain rocker stamping, *var. Troyville,* is considered a late variety of Marksville Stamped (Phillips 1970:127). Moreover, 10.5 percent of the South Village sample is made up of bone-tempered sherds. These ceramics, Turkey Paw Plain and Cord Marked, have been placed in the late Miller II phase of eastern Mississippi by Jenkins (1981:157).

Unfortunately, although many of the Dorr phase sites described by Toth (1988) contained late Marksville phase material, neither he nor Phillips defines a late phase. It is equally unfortunate that diagnostic varieties of Marksville Stamped and Incised rely on either design characteristics that are not evident on small sherds or paste distinctions that are irrelevant outside of the Valley, particularly in the lower Tallahatchie River drainage where sand temper is the rule rather than the exception. So, for the time being, we will do no more than say that the South Village ceramics belong to an as-yet unnamed, late Marksville phase.

Table 4.5. Grog- and Sand-Tempered Sherds Broken Down by Cord Marking Versus Fabric Marking

	Grog	Grog/ Sand	Sparse Grog/ Sand	Sand
Fabric Marked	0	576	4	2
Cord Marked	0	1539	735	624

Table 4.6. Grog- and Sand-Tempered Sherds Broken Down by Site Area

	Grog	Grog/ Sand	Sparse Grog/ Sand	Sand
Mounds A & B	20	3411	121	50
South Village	0	3389	1717	1430

Temper

The value of temper as a chronological marker has been a contentious issue in northwestern Mississippi from the beginning of ceramic typology for the region (Phillips, Ford, and Griffin 1951:252). As Phillips (1970:891) recounts it, of the three coauthors of the baseline ceramic study for the region, Phillips and Ford could see no pattern in the relative frequency of sand or grog temper during the Woodland. Griffin, on the other hand, believed sand to be earlier, as it clearly was in the then recently published Miller sequence of northeastern Mississippi (Jennings 1941). Stratigraphic tests at the Lake Cormorant site would seem to have put the matter to rest. Sand-tempered ceramics were a minority ware from top to bottom in a ceramic sample that spanned most of the Woodland period (Phillips, Ford, and Griffin 1951:252).

Still, Phillips, Ford, and Griffin (1951:432), influenced, according to Phillips (1970:891), by the sandy nature of the pottery from the Twin Lakes site, placed this site early in the Woodland sequence, assigning it to the Tchula period. Phillips (1970:891) correctly argues that sand temper is not an Early Woodland marker in the Delta and reassigns the Twin Lakes site and phase to the Middle Woodland on the basis of the presence of crude cross-hatched sherds in many Twin Lakes phase collections. In this he disregards the fact that the Twin Lakes site collection falls at the very bottom of the seriation chart for surface collections in the 1951 report (Phillips, Ford, and Griffin 1951:fig. 19). As discussed above, excavations at the Boyd site and now the Batesville Mounds site indicate that it is time to put the Twin Lakes ceramic assemblage back where it began, in the Early Woodland.

That does not mean, on the other hand, that sand-tempered ceramics are earlier than grog-tempered ceramics in northwestern Mississippi. Subsequent work by Ford (1981, 1989) and Johnson (1988) has documented the presence of both grog and sand temper throughout the Woodland sequence. However, recent work in the Holly Springs National Forest of north-central Mississippi has discovered a series of small, upland sites that contain plain and fabric-marked material along with a few Cormorant Cord Impressed sherds (Peacock 1996, 1997; Fant 1996). The sherds from these Tchula period sites contain a mixture of grog and sand, leading Peacock (1996) to propose that the sequence is reversed for north-central Mississippi. Seriation of several small collections suggests that grog drops out of the sequence at about the same time that cord marking replaces fabric impressing as a surface treatment. Unfortunately, later assemblages in the Holly Springs National Forest in which cord marking predominates have not been adequately sampled, making a full exploration of the proposed temporal shift in temper impossible for that region.

In this, the Batesville Mounds data provide an important basis upon which to evaluate Peacock's hypothesis. We are fortunate in having an adequate sample of both Early and Middle Woodland ceramics from the same site. Before we begin, we must emphasize that almost all the sherds from the uplands of north Mississippi contain some sand. Some contain quite a lot. Many have argued that this sand may be a result of the sandy nature of the clay in the region (Phillips 1970:54; Ford 1988). The Batesville ceramics are no exception. All but twenty sherds were judged to contain sand. What is interesting is the presence or absence of grog.

In order to search for possible pattern in temper, four categories were developed: grog only, grog and sand, sparse grog and sand, and only sand. These are refinements of the traditional sand tempered/clay tempered dichotomy recognized in the *Thomas, Blue Lake,* and *Twin Lakes* varieties of Baytown Plain, Mulberry Creek Cord Marked, and Withers Fabric Marked, these being the sand-tempered versions, respectively, of each type. The clearest chronological event for which we have a large sample is the shift from fabric marking to cord marking as a surface finish. Table 4.5 shows these two techniques broken down by temper category. Although grog and sand are present in both kinds of sherds, there is clear patterning. Very few fabric-marked sherds lack clear evidence for grog temper whereas about half of the cord-marked sherds contain only sand or mostly sand with very small amounts of clay (sparse grog/sand).

The fabric marked/cord marked division parallels almost exactly the distinction between Mounds A and B on the one hand and the South Village on the other. In Table 4.6 the entire ceramic sample is subdivided by area and temper. The same pattern is evident. That is, the mound ceramics that are clearly Early Woodland, Tchula period material are mostly tempered with a grog/sand mixture. This same temper class drops to almost half of the sample by the late Marksville period, the time the South Village was occupied.

The Batesville data would seem to confirm the pattern suggested by Peacock (1996, 1997) and Fant (1996). However, before temper is once more elevated to a prime consideration in evaluating the age of a Woodland site in the region, it should be emphasized that this is just one sample. Considerably more work needs to be done in addressing the question throughout the region. Even if the pattern holds, it is not the either/or relationship that obtains between sand and grog in the Miller area or appears to hold for bone temper in the Batesville region. It is a matter of proportions, a subtle thing, particularly when the subjective nature of the boundaries between these temper categories is considered.

5
Lithics

Like most excavations on a prehistoric site in a resource-rich area, the Batesville project recovered a large number of lithic artifacts. And, because Johnson has done a good deal of work on the lithic technology of the region, and previous work at the site had given us some idea what the site contained, we went into the laboratory analysis with a specific set of expectations. In the first place, the site is located just downriver from the location of a survey of the Little Tallahatchie floodplain conducted by Johnson shortly after he arrived in Mississippi (Johnson 1980). The several small to medium site assemblages that were collected during the course of that survey all contained abundant evidence of early-stage production activity. This was reasonable in that Citronelle gravel outcrops in the bluffs overlooking the floodplain in this portion of the Tallahatchie drainage, and all of the small streams that cut across the terraces contain gravel bars. In fact, the Tallahatchie region became one of the best examples of a source area assemblage used in a later synthesis of lithic resource availability and tool production in Mississippi (Johnson 1989). Therefore, it did not take much imagination to predict that the evident midden we sampled in the South Village would contain the early-stage flakes, amorphous cores, and biface production rejects that are characteristic of a source-area habitation.

Janet Ford and the field school students had also recovered several blades made from exotic chert during their work in the South Village. Johnson has been fascinated with blade technology since his dissertation and has taken every opportunity to analyze blades from Mississippi and the surrounding region. Among the collections of blades that he has studied are large samples of Middle Woodland artifacts from the Fant and Oak Grove sites just to the north of Clarksdale in the Delta of western Mississippi. These and other Middle Woodland blade assemblages from the Mississippi Valley indicate that trade was focused primarily on the Midwestern chert resources in Illinois and Missouri (Johnson and Hayes 1995). The debitage from Oak Grove made it clear that these northern cherts were brought into the area as blade cores and barely modified blocks. Blades were produced at the site. We expected the same combination of Midwestern cherts and local manufacture to be evident in the South Village lithics. Gena Aleo had already begun work on the South Village lithics from the field school excavations and expanded her thesis to include the material we recovered during the 1996 fieldwork.

The one thing we knew about the lithic assemblage from Mound B at the start of the excavations was that it would contain large amounts of thermal shatter. A reexamination of Holland's (1992, 1994) auger data showed a heavy concentration of this artifact category in the Mound A and B area with little elsewhere. We were not disappointed when we opened the trench into Mound B. The first two stages of mound construction contain a remarkable amount of thermal shatter: more than 126 kilograms were recovered from the Mound B excavations. Holland, in a review of her thesis research, which she gave as a paper at the Southeastern Archaeological Conference meetings in Birmingham (Holland-Lilly 1996b), joked that all we could say for sure about the concentration of thermal shatter that she found in her auger tests was that the site inhabitants were doing something that involved a whole lot of fire and a whole lot of rock. Thanks to John Sullivan's ongoing thesis research on fire-cracked rock, we can now say a bit more about the activity that produced the Mound B lithic assemblage.

Mound B was built on an existing cultural deposit that appeared to be a midden. It seemed reasonable to assume that, although we knew this occupation to predate the South Village midden, these two presumed habitation areas would be similar in terms of the lithic assemblages. Because the large amounts of thermal shatter from the mound fill suggested some sort of special activity, we thought that the submound flakes and tools would differ from those in the mound fill. As it turns out, the Batesville lithic analysis produced several surprises.

FLAKES

During the excavations and initial stages of the laboratory analysis, it became apparent that the flakes from Mound B were generally larger than those from the South Village. Consequently, we size-sorted the material. Our initial impression was correct, but not in the way we thought (Table 5.1). That is, more than 80 percent of the flakes from the South Village fell through the ¼-inch screen, but were caught in the ⅛-inch screen. That compares to slightly less than 50 percent ⅛-inch flakes from Mound B. However, when ½-inch and ¼-inch flakes from the two portions of the site are considered alone, there are proportionally more large flakes from the South Village. The other thing that is evident in Table 5.1 is the small number of flakes that came from our test pit in Mound A. Density (flakes per cubic foot of excavation) for Mound A is considerably less than that for Mound B. This and other aspects of the Mound A assemblage suggest that it was used for something different from Mound B. Likewise, flake density for the South Village is nearly three times that for Mound B. The size distributional data for the flakes suggest different activities in the three areas of the site that we tested. Unfortunately, the sample from Mound A is too small for more detailed consideration.

The primary raw material used in the manufacture of tools in the Loess Hills of north Mississippi is the locally available Citronelle gravel, a generally small chert gravel with a tan cortex and cream to light tan interior that turns red when thermally altered. During the course of several years of research in the region, Johnson and his students (Johnson and Raspet 1980; Johnson 1989) have developed production trajectory typologies for both flakes and bifaces made from this raw material. Since it is a small gravel, two trajectory-sensitive things occur to flakes as tool production continues from unmodified stone to finished artifact. The amount of cortex on the outside (dorsal) surface of the flake is reduced as the core or biface is worked. Also, the platform becomes more complex; that is, early-stage flake platforms have cortex, middle-stage platforms have two or fewer facets left by flake removals on the platform surface, and late-stage flakes have more facets. These two attributes were combined to form a paradigm that was used to classify the larger flakes (½- and ¼-inch screens) from the South Village and Mound B (Tables 5.2 through 5.4).

Table 5.1. Flakes Broken Down by Size and Location

	½ Inch	¼ Inch	⅛ Inch	Density (flakes/ft.³)
Mound A	25	70	72	0.668
Mound B	524	1845	2324	2.618
South Village	160	501	2913	7.301

Recall that we had thought that the lithic assemblage from the South Village would be similar to that from the premound occupation of the Mound B area and that the mound fill lithics from Mound B would be different, reflecting a specialized, perhaps ritual activity that would contrast with the presumed domestic occupation of the midden deposits. An examination of the tables shows there is little contrast between the mound fill and other contexts. DB9 (two or fewer facets on the platform and no dorsal cortex) is the predominant flake type in all three assemblages. This is followed in frequency by DB8, which is similar excepting that it has some dorsal cortex. The similarity of these three assemblages is easiest to see in a cumulative proportion ogive (Figure 5.1). Flake types DB1, DB2, and DB3 are not plotted because their fragmentary condition makes trajectory placement uncertain. Mound B fill and Mound B submound are more like one another than they are like the South Village.

Another aspect of these assemblages runs contrary to our expectations for material from a region that is rich in raw material. Early-stage byproducts (DB4 through DB8) are relatively uncommon. This shows up best when the Batesville Mounds flake assemblages are compared with several regional assemblages from throughout Mississippi (Table 5.5). Comparative data are derived from an earlier regional overview (Johnson 1989), and all of the assemblages were based on gravels. Both the South Village and Mound B assemblages fall somewhere between the two source area assemblages (Natchez Bluffs and Little Tallahatchie River) and the rest of the assemblages, which are from non–source areas at various distances from raw material. The pattern is particularly noteworthy in that the Little Tallahatchie River sample came from a survey located immediately upriver from the Batesville Mounds. Again, the pattern is clearer when it is presented graphically (Figure 5.2). The two source-area assemblages are represented by dashed lines, non–source areas by solid lines, the Mound B flakes by a dotted line, and South Village by a dot-dash line.

The two Batesville samples fall between the source and non-source assemblages. That is, they have more early-stage flakes than the non–source area samples, but considerably fewer than the

Table 5.2. South Village Flakes Broken Down by Platform and Dorsal Configuration

	Dorsal Cortex		
Platform Configuration	>75%	<75%	None
Missing	DB1 22	DB2 50	DB3 87
Cortex	DB4 4	DB5 35	DB6 92
<2 Facets	DB7 41	DB8 89	DB9 241
>2 Facets	DB10 0	DB11 0	DB12 1

Table 5.3 Mound B Submound Flakes Broken Down by Platform and Dorsal Configuration

	Dorsal Cortex		
Platform Configuration	>75%	<75%	None
Missing	DB1 17	DB2 66	DB3 96
Cortex	DB4 3	DB5 18	DB6 44
<2 Facets	DB7 28	DB8 84	DB9 246
>2 Facets	DB10 1	DB11 2	DB12 15

Table 5.4. Mound B Construction Fill Flakes Broken Down by Platform and Dorsal Configuration

	Dorsal Cortex		
Platform Configuration	>75%	<75%	None
Missing	DB1 55	DB2 146	DB3 311
Cortex	DB4 14	DB5 98	DB6 107
<2 Facets	DB7 117	DB8 265	DB9 611
>2 Facets	DB10 2	DB11 3	DB12 20

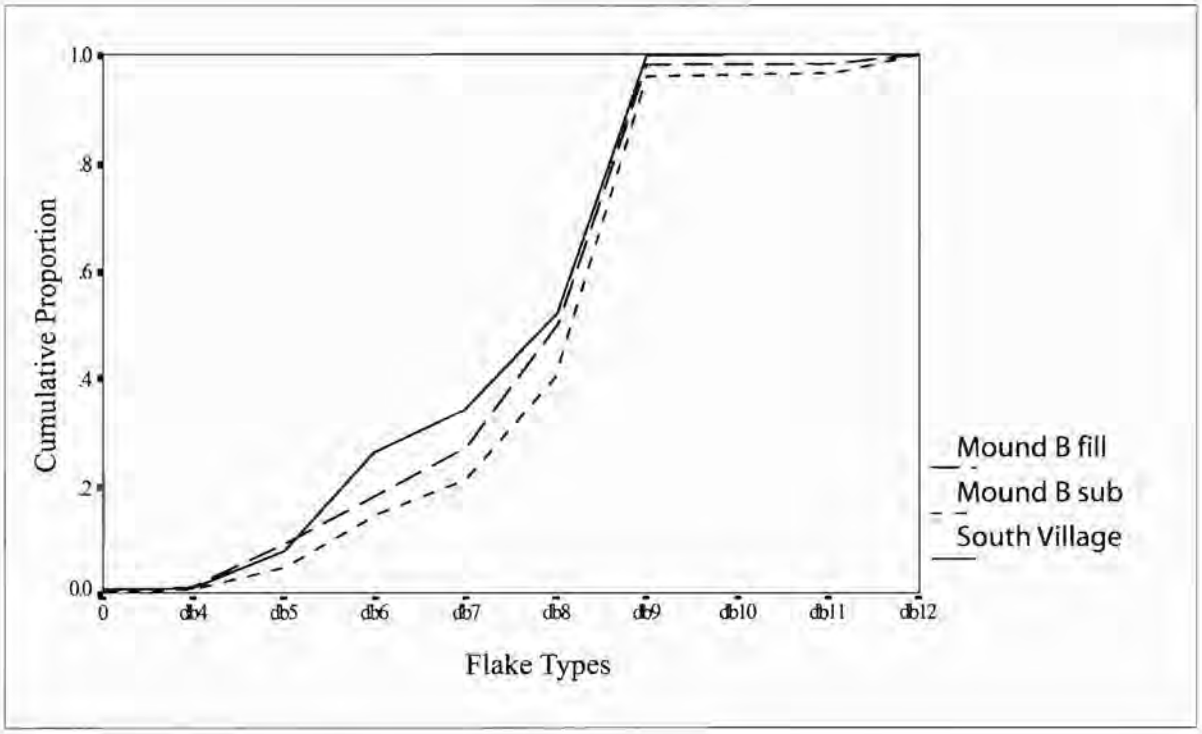

Figure 5.1. Broken line graph of flake types, Batesville sample.

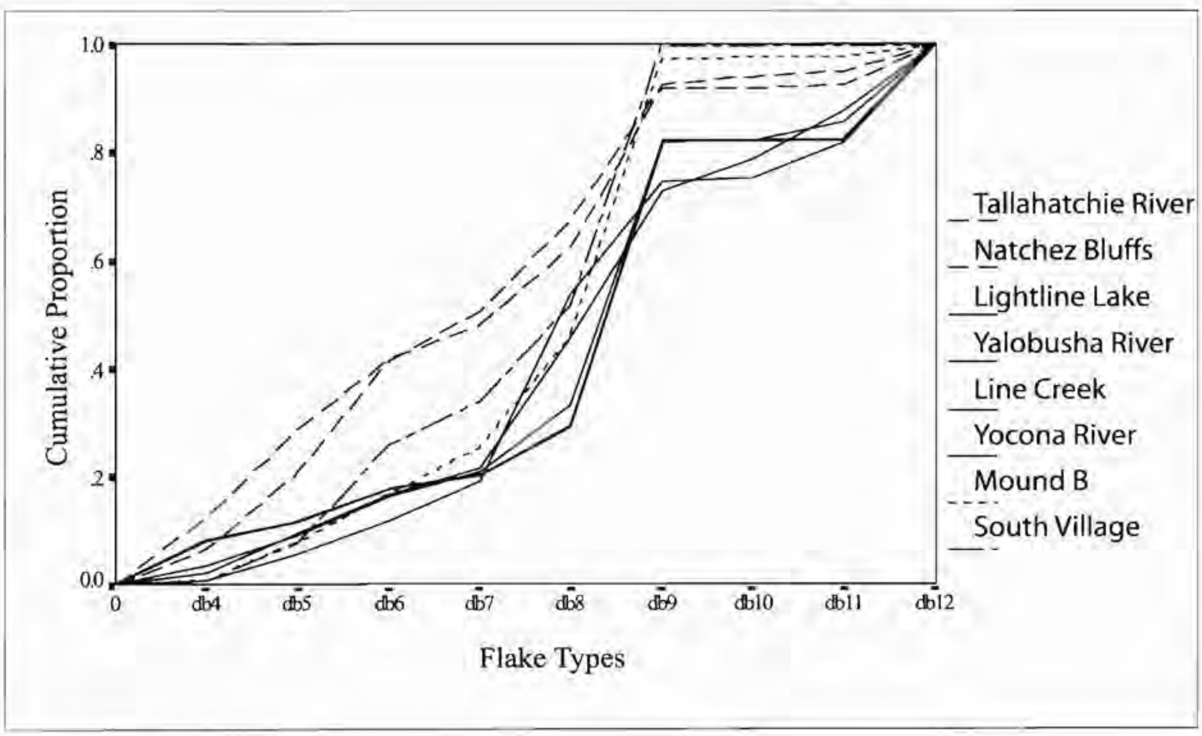

Figure 5.2. Broken line graph of flake types, regional sample.

samples from the source areas. It is clear that relatively little early-stage reduction was taking place at the Batesville Mounds site. The Batesville assemblages are also distinctive in their relative lack of late-stage flakes other than DB9. These appear to be specialized assemblages.

	Source Distance (km)	Number of Flakes	Proportion Early Stage
Batesville, South Village	0	503	0.519
Batesville, Mound B	0	1678	0.464
Natchez Bluffs	0	1737	0.674
Little Tallahatchie River	0	160	0.625
Lightline Lake	5	9552	0.539
Yalobusha River	5-12	394	0.459
Line Creek	24-54	486	0.335
Upper Yocona River	50-61	58	0.397

Bifaces

Production Stage Classification

The biface typology for gravel cherts in Mississippi breaks the production trajectory into four stages. A *blank* is a biface on which the lateral margins are not completely worked. These bifaces were usually discarded because some irregularity in the gravel made it impossible to establish the edge or because a mistake, such as a serious hinge fracture, made it obvious that bifacial thinning would not be possible. The distinction between a blank and an amorphous core is often difficult. *Preform 1* is the next stage. The bifacial edge is completely worked, but there is still cortex on one or both faces of the biface. As bifacial thinning progresses, this cortex is removed, and the resulting biface is classified as a *preform 2*. After bifacial

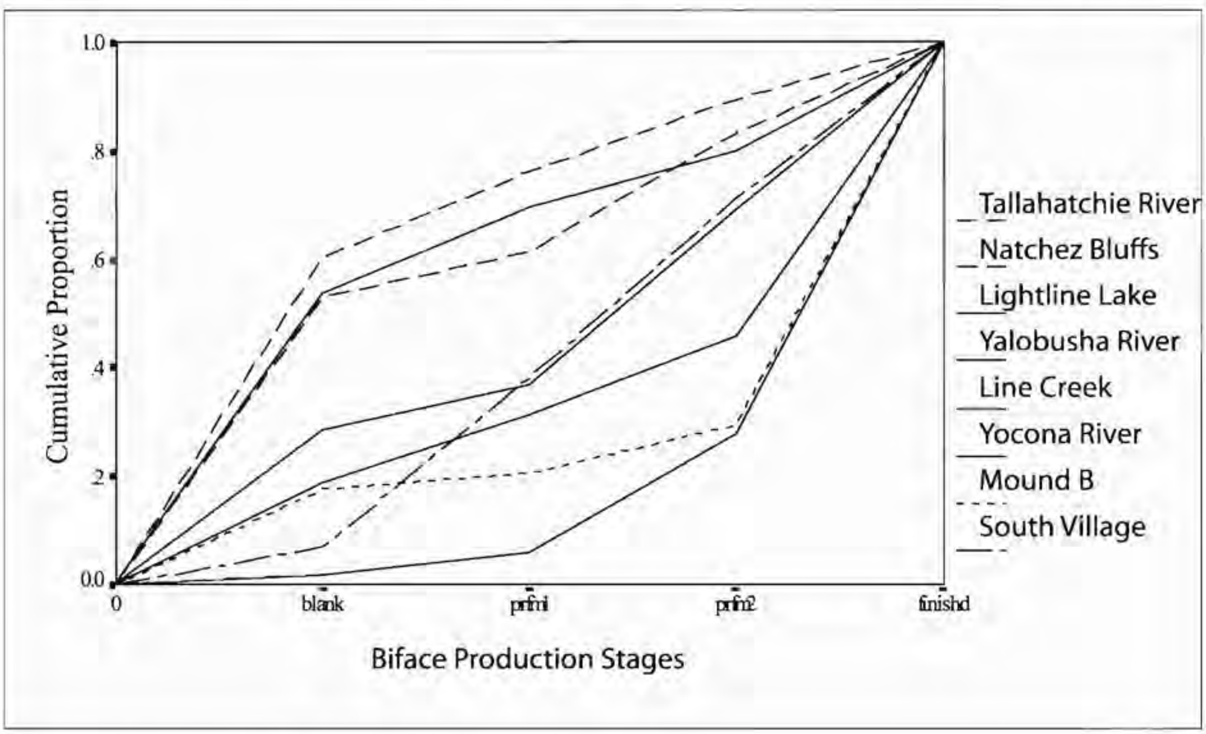

Figure 5.3. Broken line graph of biface production stages, regional sample.

thinning is complete, the edges of the biface are straightened using pressure retouch. Bifaces on which this step has been completed are classified as *finished bifaces*.

When the bifaces from the South Village and Mound B are classified using this scheme, the same surprises that were evident in the flakes appear (Table 5.6). That is, the amount of early-stage production that was expected for a source-area assemblage is not there. Once again, the pattern is easier to see in comparison with other biface assemblages from Mississippi (Table 5.7) and in a broken line graph (Figure 5.3). The Batesville samples look more like non–source area assemblages than anything else. There are proportionally more preforms from the South Village than Mound B and fewer blanks. It is evident that biface production was not one of the activities that was very common at the site.

Production Trajectory Type	South Village	Mound B
Total	42	34
Blank	0.071	0.177
Preform 1	0.381	0.206
Preform 2	0.714	0.294
Finished	1.000	1.000

Table 5.7. Proportion of Unfinished Bifaces in Several Regional Assemblages from Mississippi

	Source Distance (km)	Number of Bifaces	Proportion Unfinished
Batesville, South Village	0	42	0.714
Batesville, Mound B	0	34	0.294
Natchez Bluffs	0	93	0.833
Little Tallahatchie River	0	38	0.895
Lightline Lake	5	1034	0.695
Yalobusha River	5-12	76	0.802
Line Creek	24-54	96	0.458
Upper Yocona River	50-61	11	0.272

Chronological Types

Of course, finished bifaces can also be classified using named types, and here the differences between the two main Batesville areas that we sampled are remarkable and satisfying, given the chronological assignments of Mound B and the South Village on the basis of the ceramics (chapter 4). The bifaces can be divided into three type clusters, which can in turn be subdivided into a total of four types (Table 5.8).

The type cluster concept was introduced into southeastern archaeology by Faulkner and McCollough (1973) in the first volume of a major research series reporting on a reservoir salvage project in central Tennessee. Clusters are groups of similar named types, recognizing the fact that many named types are identical or at least very difficult to distinguish and have essentially the same distribution in time. Two early applications of the concept to large collections of material from northwestern Alabama and eastern Mississippi are especially applicable to north Mississippi bifaces. Futato (1983) reports on material from the Cedar Creek and Upper Bear Creek reservoirs, and Ensor (1981) does the same for the Gainesville Reservoir lithics. Of the two, Futato's (1983) is more useful for our purposes.

There are at least three type clusters evident in the Batesville Mounds bifaces. The earliest is the Late Archaic Rounded Base cluster, certainly a misnomer inasmuch as most of the types in this cluster extend into the Early Woodland period. The distinguishing criterion for this cluster is the rounded base. The one example of Adena Narrow Stemmed is sorted from the rest on the basis of its relatively narrow, poorly defined shoulders (Figure 5.4). The Gary type is essentially a catchall. However, all

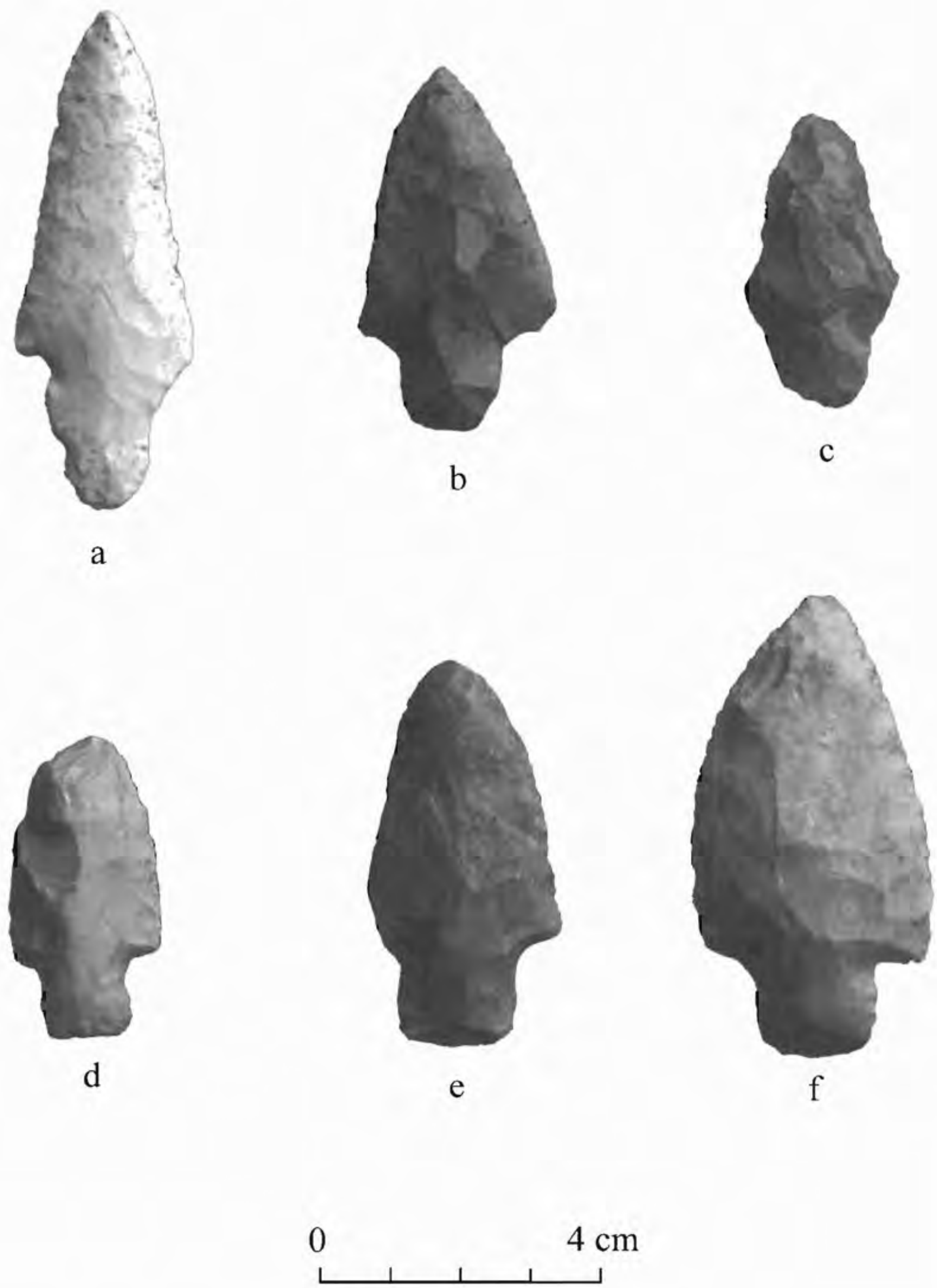

Figure 5.4. Stemmed bifaces: Adena, a; *Gary,* b - c; *Straight Stemmed,* d - f.

Provenience	Length (mm)	Width (mm)	Thickness (mm)	Raw Material
Late Archaic Rounded Base Cluster				
Adena Narrow Stemmed				
23	72	25	7	Gravel
Gary Stemmed				
20	51	27	10	Gravel
37	—	31	9	Ft. Payne?
113	51	29	9	Gravel
125	77	35	11	Gravel
Late Archaic/Early Woodland Straight Stemmed Cluster				
25	54	27	8	Ft. Payne?
26	—	36	12	Gravel
115	65	33	10	Gravel
125	44	23	11	Gravel
174	47	30	8	Gravel
206	43	24	13	Gravel
11507*	—	24	13	Gravel
Lanceolate Expanded Stem Cluster				
Swan Lake				
175	35	18	7	Gravel
176	46	18	7	Gravel
201	31	18	6	Pitkin?
207	49	18	11	Gravel
215	—	23	5	Ft. Payne?
215	—	20	8	Ft. Payne?
11537*	36	17	6	Pitkin?

**Field school catalog numbers.*

members of this cluster came from Mound B, indicating, on the basis of the associated ceramics, a clear Early Woodland association.

The Late Archaic/Early Woodland Straight Stemmed cluster is a residual class as it is applied here. That is, there are several clusters and types that contain straight-stemmed, square-base bifaces that date to this time period, the Flint Creek and Wade clusters, for example (Futato 1983), but the Batesville points do not fit comfortably in any of them (Figures 5.4, 5.5). All but three are from Mound B. The remainder (bag numbers 174, 206, 11507) are from the South Village.

The third type cluster, Lanceolate Expanded Stem, clearly demonstrates the value of the concept. Nearly identical bifaces were recovered from the Walling site, a Middle Woodland platform mound located in northern Alabama. Knight (1990:97) notes the several named types that could be used, Bakers Creek, Mud Creek, Swan Lake, and Coosa Notched, but declines to subdivide the cluster, arguing that all these types overlap and are contemporaneous. Waldorf and Waldorf (1987:193) note a similar range of types with different names in different regions, adding Steuben points in northern Illinois and Lowe points in southern Illinois and Indiana. These also are Middle to Late Woodland types. Justice (1987:208–14) defines what he calls the Lowe cluster, which includes Steuben Expanded Stemmed, Bakers Creek, Lowe Flared Base, and Chesser Notched. These are all terminal Middle Woodland to early Late Woodland types. The Swift point (Phelps 1969; Kellar, Kelley, and McMichael 1962) is associated with Middle Woodland material in southwest Georgia and northwest Florida and could also be considered a member of this cluster.

It is particularly gratifying, therefore, that all the Lanceolate Expanded Stem cluster points from the Batesville Mounds excavations came from the South Village, the source for all of the late Middle Woodland ceramics from the 1996 excavations. All of the Batesville examples appear to belong to a single type, Swan Lake (Figure 5.5). The overall similarity of the points in the Swan Lake category in terms of size and shape suggests a relatively narrow time span that may prove significant.

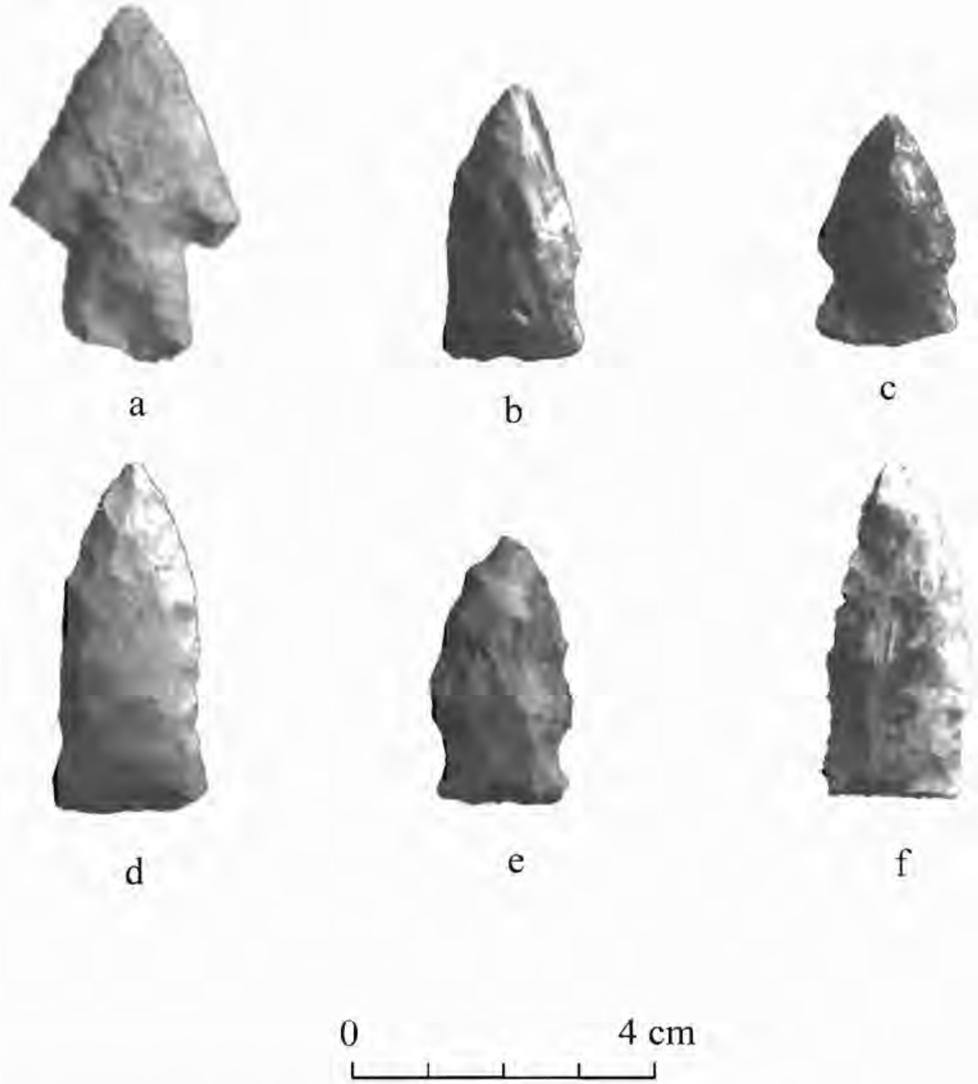

Figure 5.5. Stemmed bifaces: Straight Stemmed, a; *Swan Lake,* b - f.

All but two of the Early Woodland points are made of local gravels. More than half of the Middle Woodland points are made from exotic material. This is undoubtedly significant in terms of the relative amount of long-distance trade during the two periods of time as expressed by the presence of blades of exotic cherts in the South Village sample and by the general abundance of artifacts made from nonlocal material during the Middle Woodland throughout the Southeast.

Cores

The Batesville excavations also produced twenty-eight cores. In spite of the fact that the South Village sample contains several blades, only one of the cores is a blade core, also from the South

Village. And, although all but one of the blades is made from exotic chert, the single example of a blade core is made from local chert. There is little chance that nonlocal core fragments were missed in our analysis because all exotic chert pieces were pulled and examined. None are the remains of the exhausted blade cores such as are found on some Middle Woodland sites from north Mississippi (Johnson and Hayes 1995). Blades must have been made at some other location and brought to the site.

The remaining twenty-seven cores are amorphous. That is, there is no particular attempt to establish and maintain a platform. Flakes rather than blades are drawn from the core in an opportunistic manner. More often than not, the platform is bifacial, but there is little regard to establishing a bifacial edge that is continuous and in a single plane, a prerequisite to biface production. In fact, many of what we have classified as blanks were probably cores. The distinction is likely to be arbitrary to begin with. Certainly a blank is just as useful in producing flakes as a core, and one of the benefits of early-stage biface reduction is a large supply of flakes, many of which are large enough to have been tools in their own right.

Johnson (1985) belatedly came to realize the importance of amorphous core technology in the analysis of material from a group of upland sites in northwestern Alabama. In that study, it became evident that a local, low-quality raw material was being used to produce flake tools that appear to have been used to conserve bifaces made from better-quality, nonlocal material. A subsequent examination of the regional distribution of amorphous cores found them to be a common source-area artifact (Johnson 1986), and this is reasonable. Although the technology is wasteful in terms of raw material and not particularly portable, it is an expedient way to derive cutting tools in areas where raw material conservation is not a consideration. Others have documented similar patterns in the Southeast (Wright 1984; Custer 1987).

Therefore, because the Batesville Mounds are located in a source area, we expected a relatively large core–to–finished biface ratio. Once again, we were confounded (Table 5.9). This ratio for both the South Village and Mound B is considerably lower than expected for a source area and, in fact, is lower than the ratio for at least one of the non–source area assemblages. However, it should be noted that finished bifaces are unusually common for a source area assemblage at the South Village and especially at Mound B. If the ratios are recalculated, using unfinished rather than finished bifaces (Table 5.10), Mound B looks a bit more like a source-area assemblage. The South Village is still equivocal.

Table 5.9. Core to Finished Biface Ratios for Several Regional Samples from Mississippi

	Source Distance (km)	Amorphous Cores	Finished Bifaces	Core/Biface
Batesville, South Village	0	17	12	1.417
Batesville, Mound B	0	10	24	0.417
Natchez Bluffs	0	55	16	3.438
Little Tallahatchie River	0	49	4	12.260
Lightline Lake	5	39	315	0.123
Yalobusha River	5-12	43	15	2.867
Line Creek	24-54	5	52	0.096
Upper Yocona River	50-61	0	3	0.000

BLADES

A total of twenty-nine blades have been recovered from the Batesville Mounds excavations, including twenty-two from the several seasons of field school in the South Village (Table 5.11). In fact, all but one of the blades came from the South Village. That specimen (bag number 46) came from Mound B. The association between the blades and the late Middle Woodland, Marksville pottery of the South Village appears particularly strong.

There is a good deal of variation in size and platform attributes (Table 5.11) with no clear patterning in platform preparation. Some show edge grinding, some show microflaking down the face of the core to maintain the platform; some show both, some show neither. All of the platforms are relatively small, with the proximal end of the blade coming to a point at the platform. Platform angles are fairly acute, and there is some lipping on the ventral edge of the platform. Many of the blades show intensive utilization in terms of microflaking along the edges (Figure 5.6).

Perhaps the most notable aspect of the assemblage is that all but three are made from obviously exotic raw material. In fact, Middle Woodland blades in the Southeast are characteristically made on nonlocal cherts. In addition, there seems to be some patterning to the distribution of the various raw materials (Johnson and Hayes 1995). Cherts from Illinois and Missouri, primarily Cobden and Burlington, predominate in the Lower Mississippi Valley (Ford 1963; Toth 1988). Cherts from Ohio are found at sites to the east, in northeastern Mississippi, central and eastern Tennessee, western North Carolina, and Georgia (Bohannon 1972; Butler 1979; Chapman 1973; Chapman and Keel 1979; Cridlebaugh 1981; Jefferies 1976, 1979; Keel 1976; Smith 1979).

The Batesville Mounds assemblage fits this pattern to an extent. That is, 66 percent of the blades are made from Illinois and/or Missouri cherts (Cobden, Burlington, Kaolin, Mill Creek). However, four of the total are made from material from Arkansas (novaculite and possible Pitkin). Three blades are made from local, Citronelle gravels. Most interesting of all, two blades appear to have been made from Dover chert, a material that is found in central Tennessee, and one blade may be made from Harrison County chert, the source of which is located in southern Indiana. This use of eastern Midwestern cherts sets the Batesville Mounds assemblage apart from other Middle Woodland blade assemblages in the Mississippi alluvial valley. However, the Batesville Mounds location at the eastern edge of the valley, on the banks of one of the major rivers draining from the east, makes this minority representation reasonable.

Table 5.10. Core to Unfinished Biface Ratios for Several Regional Samples from Mississippi

	Source Distance (km)	Amorphous Cores	Unfinished Bifaces	Core/Biface
Batesville, South Village	0	17	30	0.567
Batesville, Mound B	0	10	10	1.000
Natchez Bluffs	0	55	77	0.7143
Little Tallahatchie River	0	49	34	1.441
Lightline Lake	5	39	719	0.054
Yalobusha River	5-12	43	61	0.7049
Line Creek	24-54	5	44	0.114
Upper Yocona River	50-61	0	8	0.000

Provenience	Segment	Platform Grinding	Microflaking	Length	Width	Thickness	Raw Material
26*	whole	no	yes	45	10	3	Cobden
198	whole	yes	yes	39	12	4	Cobden
1023*	proximal	no	yes	39	10	2	Cobden
11484*	proximal	yes	no	—	16	3	Cobden
193	proximal	no	yes	—	12	2	Cobden
11493*	proximal	yes	yes	—	15	3	Cobden
10*	proximal	no	yes	—	10	3	Cobden
1019*	medial	—	—	—	27	3	Cobden
14*	medial	—	—	—	13	2	Cobden
1025*	medial	—	—	—	13	4	Cobden
11481*	distal	—	—	—	12	3	Cobden
1005*	whole	no	yes	48	10	3	Burlington
11488*	whole	no	no	28	12	2	Burlington
216	medial	—	—	—	14	5	Burlington
1061*	medial	—	—	—	8	2	Burlington
11486*	distal	—	—	—	10	2	Burlington
1021*	whole	no	yes	40	17	4	Kaolin
58*	proximal	no	yes	—	11	3	Kaolin
11485*	distal	—	—	—	12	5	Mill Creek
46	whole	no	no	35	9	3	Gravel
176	whole	no	yes	36	12	2	Gravel
175	proximal	no	yes	—	9	2	Gravel
11490*	whole	no	no	33	10	2	Novaculite
1057*	proximal	no	no	—	10	2	Novaculite
21*	medial	—	—	—	10	3	Pitkin?
1064*	distal	—	—	—	9	3	Pitkin?
171	distal	—	—	—	10	2	Dover?
11489*	distal	—	—	—	9	2	Dover?
33*	medial	—	—	—	10	3	Harrison County?

Field school catalog numbers.

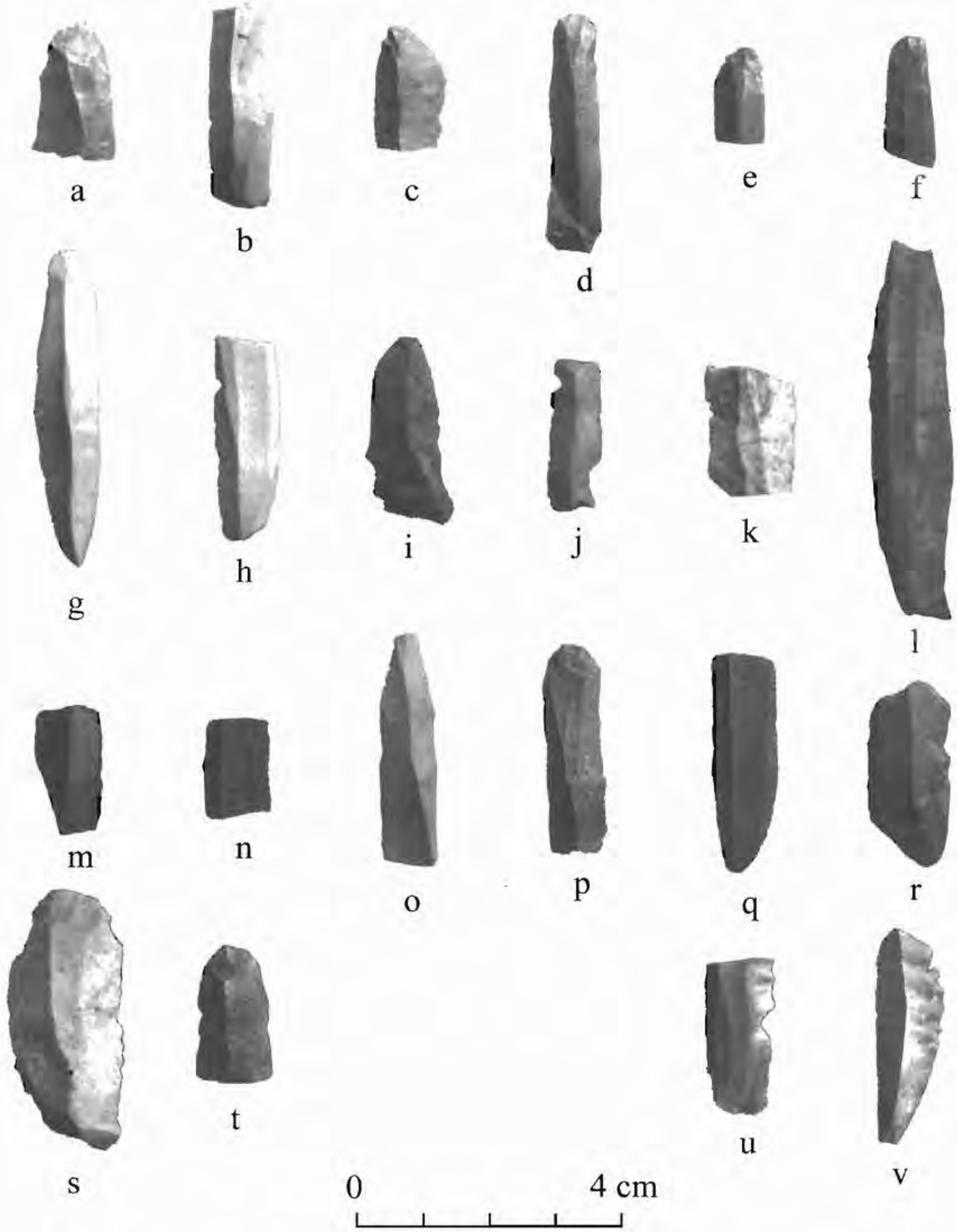

Figure 5.6. Blades: Cobden, a - f*; Burlington,* g - k*; Mill Creek,* l*; Pitkin?,* m*; Harrison County?,* n*; Citronelle,* o - p*; Dover?,* q - r*; Kaolin,* s - t*; Novaculite,* u - v.

Thermal Shatter

The majority lithic category in the Mound B assemblage is, by far, fire-cracked rock. An amazing 126.97 kilograms (280.59 pounds) of thermal shatter was recovered from the trench and other excavations in that mound. This compares to 1.26 kilograms (2.78 pounds) from Mound A and 4.11 kilograms (9.08 pounds) from the South Village. The contrast is even more striking when these figures are adjusted for the volumes of the excavations in the three areas. Mound B density is 70.81 grams per cubic foot whereas the densities in Mound A and the South Village are 5.03 and 8.40, respectively. Moreover, Holland-Lilly's (1996b) auger test data show the concentration of thermal shatter to be an exclusively Mound B phenomenon.

The distribution of fire-cracked rock is not uniform within Mound B. As any one of the people who worked in the trench can attest, Stage II (Zone 2) contained a remarkable amount of thermal shatter. Table 5.12 confirms our impressions from the field. More than half of all of the Mound B sample of thermal shatter came from this stage, and the density is two to three times that of any of the other construction stages and five times the density in the midden that we found in the buried A horizon at the base of the trench. Still, that midden contained considerably more fire-cracked rock than the South Village midden.

Some sort of specialized activity that produced thermal shatter is implied by the concentration and density of thermal shatter in Mound B. John Sullivan has decided to explore this aspect of the Batesville Mounds lithics in his thesis. Although that research is ongoing, preliminary results from his review of the literature and experiments are informative.

Fire-cracked rock has been the stepsister in lithic analysis. Although present in most archaeological assemblages, particularly in areas where stone is available, little has been done beyond noting the occurrence and perhaps counting or weighing it. Binford (Binford et al. 1970) provided an early exception when he plotted the distribution of cracked cobbles in the surface collection from a site in southern Illinois. Without much in the way of justification, he argues that these artifacts are the debris from earth ovens. Similar assumptions augmented by limited experimentation were basic to the analysis of thermal shatter in the Cache River survey (Shiffer and House 1975), another cultural resource management project, this one in Arkansas.

It is a measure of the relative importance that archaeologists have afforded this artifact class that the two primary references that deal with functional differences within the class come from the grey literature of contract reports (Taggart 1981; Zurel 1979). Although cited over and over, they have never been published. These early results have been duplicated by several experiments including our own. Two basic conditions result in thermal fracture. The rock can be heated too rapidly, causing the outside to expand more rapidly than the inside. This expansion fracture results in exfoliation, and the resultant pieces look like flakes in general shape, but lack platforms and other flake characteristics. The rock can also be cooled too rapidly, causing contraction fractures when the outside contracts faster than the inside. This causes fractures to form that are roughly perpendicular to the surface of the rock and run through to the other side, producing irregular chunks of rock. The types have been related to dry heat (expansion fracture) and wet heat (contraction fracture). In terms of cooking, dry heat is generally considered the result of roasting, and wet heat is related to stone boiling.

Sullivan has applied this typology to a small sample of thermal shatter from Mound B (one bag per zone), and the results are informative (Table 5.13). Wet fractures predominate in Stages I and II and the submound midden, while dry fractures are a bit more common in the relatively low-density

Table 5.12. Fire-Cracked Rock in Mound B Broken Down by Construction Stage

Stage	Zone	Weight (gm)	Density (gm/ft^3)
IV	1a	7,634	38.17
III	1b	12,473	45.36
II	2	85,991	127.77
I	3	17,169	51.87
Submound A	4	3,898	25.48
Subsoil	5	552	3.43

Table 5.13. Fire-Cracked Rock Sample from Mound B Broken Down by Construction Stage and Fracture Type

Stage	Wet Fracture	Dry Fracture	Indeterminate	Wet/Dry
IV	36	80	9	0.45
III	6	16	3	0.38
II	1174	645	68	1.82
I	20	11	1	1.82
Submound A	31	11	2	2.82
Subsoil	2	2	0	1.00

Stage III and IV deposits. It appears that stone boiling was a major activity in the Mound B vicinity. Of course, the presence of dry fracture in the assemblage does not necessarily signify oven cooking. These fractures could well be the results of the careless heating of rocks for stone boiling.

Assemblage Level Comparisons

It is convenient to begin this section by referring to the lithic assemblages from the Fant and Oak Grove sites to the west of the Batesville Mounds, located north of Clarksdale in the Delta. Although these sites and the South Village at the Batesville Mounds all have substantial Middle Woodland components, the lithic assemblages could hardly be more different. The only thing they have in common is the presence of blades made from exotic raw material. At Fant these blades are made from Burlington and Cobden cherts with a few examples made from quartz crystal. Blade core fragments from all three raw materials were found, clearly documenting the local production of these blades. Finished bifaces made from these same raw materials are common as are all stages of biface manufacture. Blades are relatively rare at Oak Grove, but there is evidence for a substantial amount of biface reduction based on another exotic raw material, novaculite. Amorphous cores are fairly common at both sites.

In contrast, the South Village assemblage from the Batesville Mounds contains a small sample of blades made from northern cherts, but evidence for local manufacture is entirely lacking. These blades were made elsewhere and brought into the site. Biface manufacture was not a major activity at the Batesville site, particularly given its location in a source area. However, amorphous cores are well represented.

Perhaps the key to understanding the Batesville assemblage lies in the flake analysis. The majority of the flakes from all portions of the site fall into the DB9 category. The only other reported assemblage that comes close to resembling the Batesville debitage profile came from a series of upland sites on the edge of the Tennessee River valley in northern Alabama (Johnson 1985). At Colbert Ferry, a local, low-quality raw material was used in an amorphous core technology to produce large flakes, many of which appeared to be utilized. Bifaces were made from a distinctive, nonlocal raw material, and there was relatively little evidence for biface manufacture. More than 80 percent of the flakes made from local chert fell into the DB9 category (Johnson 1985:table 8.7). The defining characteristics of this flake type, simple platform and lack of dorsal cortex, make it a reasonable product of an amorphous core technology. Its predominance in Mound B, and the South Village sample corresponds with the relatively large number of amorphous cores from these two locations.

The primary activity in terms of tool manufacture appears to have focused on an expedient flake core technology. Biface manufacture is poorly represented, especially given the location of the site in an area where raw material is readily available, and blade manufacture was not performed at all. Blades and finished bifaces are, however, abundant. The abundance of fire-cracked rock in the Mound B assemblage also suggests a specialized site function, one that had changed by the time of occupation of the South Village, where fire-cracked rock is relatively rare.

In an early and programmatic statement of the New Archaeology, Struever (1968) proposed a hypothetical model for Middle Woodland settlement in the Illinois Valley. He delineated four basic site types: base camps, mortuary camps, agricultural camps, and regional exchange centers. The remarkable thing about this model is that, given the amount of research that has been done in the Illinois Valley, it has yet to be thoroughly tested. However, several base camps and at least one mortuary camp have been identified. The characteristics of the lithic assemblage from Napoleon Hollow, the proposed mortuary camp, are what are of interest here (Wiant and McGimsey 1986; Odell 1994, 1996).

The Napoleon Hollow site is located in the lower Illinois Valley in west-central Illinois, in the Illinois Hopewell heartland. Two components at the site were excavated, one on the floodplain and one on the hillside. An extensive burial mound site was located on the edge of the alluvial valley, just above the hillside component. Although different in some ways, the two components of the Napoleon Hollow site share several characteristics that distinguish them from base camp assemblages. Both contain faunal assemblages with relatively low diversity, and both contain an unusual amount of elaborate Hopewell ceramics. Nonlocal lithics, particularly blades, are common on both sites, and other tools such as bifaces are relatively unusual. Retouched and utilized flakes are the primary tool in both assemblages. Biface manufacturing rejects tend to be early stage, and there is some suggestion that these were cores used in an expedient flake tool technology rather than blanks or preforms (Wiant and McGimsey 1986:361). Finally, use wear analysis indicates a specialized use for the blades from Napoleon Hollow that contrasts with the more general use for blades from the Smiling Dan site, a proposed base camp (Odell 1996).

The Illinois data suggest a general explanation that would account for the unexpected nature of the Batesville lithic assemblage. Even though it is located in a source area, tool production and maintenance were relatively unimportant because the primary function of the site was ceremonial. People came to the site periodically to perform rituals that focused on the flat-topped mounds and the burial mounds. They used stone tools, bifaces and blades and a lot of flakes, but the only tools they produced at the site were the flakes, driven from amorphous cores. It is interesting to note that amorphous cores are unusually common in apparent short-term, specialized occupations at the Pinson Mounds, the premier Middle Woodland platform mound site in west-central Tennessee (France 1985).

6

Summary and Conclusions

As is usually the case, our excavations have raised nearly as many questions as we have answered. But we have answered several questions, some of which are of importance in understanding the prehistory of north Mississippi. In the first place, we have confirmed Holland-Lilly's assertion that the Batesville Mounds, both the burial mounds and the platform mounds, were built entirely during the Woodland period. We have secured a sizeable sample of ceramics from two distinct phases during the Woodland period, and that has allowed us to critically evaluate several aspects of the Early Woodland, Tchula ceramic assemblage and the Middle Woodland Marksville assemblage for the region. In the process, we have been able to refine the definition of these ceramic complexes.

The lithic analysis yielded a few surprises. In particular, there was substantially less tool production than we expected, and at least some of the blades appear to have come from farther to the east than we anticipated. The abundant sample of fire-cracked rock gave us an opportunity to assess this important but neglected artifact category. Only the stemmed bifaces cooperated completely with distinct and different types coming from the Tchula period deposits of Mound B and the Marksville period deposits from the South Village.

However, many of these results are of the kind that are of primary interest to professional archaeologists. The general reader might find it mildly interesting that bone was added to pottery primarily during the late Middle Woodland period, but is likely to be more interested in broader questions. What were people doing at the Batesville Mounds site, and when were they doing it? We can answer those questions with some confidence and only a little equivocation. But then the question of why they were doing what we think they were doing might come up. That is a much more difficult question, one that archaeologists find just as intriguing as laymen. And, we have a long way to go in answering it. In order to set the stage, it is first necessary to review the data on similar sites throughout the Southeast.

Woodland Period Platform Mounds in the Southeast

It used to be relatively straightforward: burial mounds were thought to first appear at the beginning of the Woodland period—Early Woodland was even called Burial Mound I at one time (Ford and Willey 1941)—and platform mounds marked the beginning of the Mississippian period (Temple Mound I). During the past couple of decades this has all changed. We now know that mound building began several millennia earlier, during the late Middle Archaic (Saunders and Allen 1994; Saunders, Allen, and Saucier 1994; Saunders et al. 1997), and platform mounds appear during the Woodland period. The following overview of Woodland platform mounds is made much easier by three recent reviews of their dating and distribution (Jefferies 1994; Knight 1990; Pluckhahn 1996).

Knight (1990:166) speculates about the impact that a few more weeks of work at the Walling site in northeastern Alabama during the WPA excavations in the 1940s would have had on Southeastern archaeology. If the earlier excavators had recognized the fact that the earlier stages of the construction of this flat-topped mound date to the Woodland period, it might have forced a reevaluation of the chronological importance of platform mounds in defining the Mississippian period during the formative stages of regional archaeology. Or would it? Pluckhahn (1996) documents the struggle that Caldwell had in reconciling the apparent Woodland date of the Summerour Mound with the fact that it was a platform mound. This site, located in northwestern Georgia, was excavated in the early 1950s, but never thoroughly reported. It could be argued that the outline of southeastern prehistory had already been established by that time.

The same cannot be said about the Swift Creek site, excavated as part of the extensive WPA research in the Ocmulgee Basin of north-central Georgia. This fieldwork was conducted during the 1930s and provided one of the baseline sequences for the Southeast (Hally 1994). In fact, the site gives its name to the Middle Woodland period for most of Georgia, eastern Alabama, and northern Florida. However, the mound is relatively small, differing from classic Mississippian structures in several ways, allowing it to be dismissed as an accretional mound (Jefferies 1994:72).

However, large platform mounds with ramps and some evidence for summit structures were excavated by other WPA projects in Louisiana at about the same time. While Mound 6, the large platform mound at the Marksville site, was excavated, but poorly reported, stratigraphic data from the smaller Mound 2 clearly establish a Middle Woodland date for the construction of this platform mound (Vescelius 1957), and very little in the way of later material has been found at the site (Toth 1974). An early Late Woodland date for the great mound at the Troyville site is generally accepted although the site was excavated early in the era of professional archaeological research in the region (Walker 1936), and this assignment is not clear. A Late Woodland Coles Creek assignment for the platform mounds at the Greenhouse site cannot be doubted; the site was thoroughly excavated and reported (Ford 1951), providing the basis for a portion of the ceramic sequence in the Lower Mississippi Valley. However, the correlation between the Louisiana sequence and the rest of the Southeast, particularly before radiocarbon dates became available, has been troublesome. In fact, Jennings (1952), in an early regional summary, considers Coles Creek to be Early Mississippian. Even after it was demonstrated that the material from Greenhouse was the temporal equivalent of Late Woodland, workers in the heartland of the Southeast tended to disregard Lower Valley data as peripheral and peculiar.

The same can perhaps be said about Weeden Island sites along the Florida Gulf Coast. There are obvious ties between Weeden Island and Coles Creek (Sears 1977) in terms of ceramics and, perhaps, architecture. However, the temporal placement of Weeden Island relative to the Mississippian period was in question for a good while (Milanich et al. 1984) so that it was possible to dismiss Weeden Island platform mounds as potential antecedents to Mississippian structures. Moreover, discounting excavations by Moore just after the turn of the century, the major early excavation of a Weeden Island site with platform mounds occurred at the Kolomoki site in southwest Georgia (Sears 1956). Mound construction was assigned primarily to the Kolomoki phase, which Sears (1956:46) thought to be late a Late Woodland–Early Mississippian transitional phase. Almost everyone else and ultimately Sears (1992) saw the Kolomoki phase ceramics to be a variant of Middle Woodland Swift Creek material. This confusion and the fact that the two platform mounds that are clearly Kolomoki phase constructions, Mounds F and H, are relatively small allowed southeastern archaeologists to disregard the Kolomoki data in their reconstructions of culture history.

On the other hand, there really is no excuse for ignoring Mound A at the Mandeville site. The site is located a few miles up the Chattahoochee River from Kolomoki. Extensive excavations reported in a major journal (Kellar, Kelley, and McMichael 1962) make it clear that at least the first four stages of a substantial platform mound were constructed during the Middle Woodland period. Copper, clay figurines, blades made from exotic chert, platform pipes, and other Middle Woodland markers were abundant at the site.

Still, at least a decade would pass before additional discoveries of Woodland platform mounds at the Garden Creek site in western North Carolina and Annewakee Creek site in central Georgia forced a reevaluation of the distribution of pre-Mississippian platform mounds in the region (Dickens 1975; Hally 1975). Woodland period platform mound construction in the central Southeast is, today, clearly established. Knight (1990:table 43) lists a conservative twenty-two examples in Alabama, Florida, Georgia, and North Carolina.

In spite of the early documentation of Woodland period platform mounds at Marksville, Troyville, and Coles Creek sites in the Lower Valley, archaeologists working in the Midsouth were slow to recognize the significance of the phenomenon in their region. That is, while there was general agreement that platform mounds were built in the Lower Valley during the Late Woodland (Phillips et al. 1951:337; Phillips 1970:555; Williams and Brain 1983:406), which made the Late Woodland date for the numerous platform mounds at the Toltec site in Arkansas relatively easy to accept (Rolingson 1982, 1990), these mounds were perceived to be emergent Mississippian. The frequent arrangement of these mounds around apparent plazas was certainly a major factor in this interpretation. Relatively few have been excavated so the presence or absence of mound-top structures cannot be determined.

Excavations at the Pinson Mounds in western Tennessee during the mid-1970s forced a reevaluation of the status of Woodland platform mounds in the Midsouth (Mainfort 1980). Not only was Mississippian material unusual at this large, multimound site, but also the majority of the ceramics recovered relate to the Middle Woodland. Subsequent excavations in the platform mounds demonstrated a Middle Woodland time of construction in terms of both ceramics and radiocarbon dates (Mainfort 1986). In addition, the site has yielded small numbers of exotic sherds, copper, and imported lithics, which tie it to other Middle Woodland cultures in the Midwest and Southeast. Rafferty's (1983, 1987, 1990) evaluation of Smithsonian collections from the Ingomar site in northeastern Mississippi and a limited amount of test pit data confirm a comparable Middle Woodland date for this mound group.

So, archaeologists can now agree that platform mounds are a feature of the Middle Woodland cultural landscape in the Southeast. What they cannot agree on is the significance of these mounds. Are they different in function from the low platforms that are often found as a first stage of construction within Middle Woodland burial mounds (Brose 1988; Knight 1990)? Should the Lower Valley, Coles Creek Mounds be discounted because they are ancestral to the Mississippian temple mounds (Knight 1990)? Is the distinction between platforms capped with sterile fill and those without useful (Pluckhahn 1996)?

In fact, the one thing that does characterize Woodland platform mounds is their variability (Jefferies 1994; Knight 1990; Pluckhahn 1996). Knight (1990:170–71) lists a number of traits that are often, but not always, present in these mounds and tentatively labels it the Kolomoki pattern. The list includes irregular scatters of postholes and pit features, lack of clear summit structure remains, large postholes, funnel-shaped posthole orifices, burned summit areas and hearths, multistage construction, special use of multicolored fills, and presence of exotic artifacts and special ceramics. Jefferies

(1994:82) adds the tendency to add later stages to the top of the mound, but not the sides; the mound gets higher, but not wider or longer.

Mound B at the Batesville site fits nicely among the Woodland platform mounds in the Southeast in the refusal to conform to a clear pattern. Postholes and pits are rare; only one posthole and one possible pit were found in the excavated portion of the mound. No summit structures were encountered in the three 5 by 10 units excavated on the top of the mound. No large postholes or funnel-shaped posthole orifices were found. While the abundant fire-cracked rock in Stages I and II suggests that burning was taking place someplace nearby, there is no evidence that it was done on the mound. There was clear multistage construction and marked contrasts between the Stage I/II fill and the III/IV fill, but the OCR and soils data suggest a considerable time elapsed between the completion of Stage II and the beginning of Stage III. None of the exotic lithics found in the South Village were present in the mound. There does, however, appear to be an unusual number of decorated sherds from Stages I and II. Finally, although relationship between the edges of Stage I and II cannot be determined because they have been obliterated by plowing and soil genesis, Stage III is smaller in plan view than Stage II, and Stage IV is smaller yet. That is, the Batesville Mound B is like several other Woodland platform mounds in the way that subsequent stages were added only to the top.

So, Mound B is like other Woodland platform mounds in some ways and unlike them in others. It differs in another respect. None of the Woodland mounds that have been described show the extensive concentration of fire-cracked rock that was found in Stages I and II of Mound B. The irregular boundary between Stages I and II and II and III on the flank of the mound may also prove to be a significant difference. That is, there is no apparent attempt to smooth and dress the sides of the mound at the completion of these stages. The stage boundaries in the center of the mound, on the other hand, are horizontal and relatively even, particularly at the tops of Stages II and III.

Because construction stages were added in roughly horizontal layers without extending down over the sides of earlier stages, a rough idea of the shape of the mound can be gotten by subtracting the top layers from the contour map. When this is done, another fundamental difference between Stages I/II and III/IV is evident. The mound during the first two stages appears to have been an irregular oval in plan view. It was not made rectangular until the final two stages. Of course, the original outline of the first two stages may have been obscured by plowing and weathering.

Although there are an abundance of amorphous cores and apparent flake tools from Stages I and II, there are relatively few finished bifaces, and no specialized stone tools analogous to the blades found in other Woodland platform mounds, Walling (Knight 1990) and Mandeville (Kellar, Kelley, and McMichael 1962), for example. The only suggestion of specialized activity associated with the construction of the first two stages of Mound B is the concentration of fire-cracked rock that characterized these zones. If these artifacts are the result of food preparation, then there may be a parallel between the Batesville platform mounds and other Woodland platform mounds in terms of suggested function. Although none of the other Woodland mounds show similar concentrations of fire-cracked rock, many of them have yielded artifacts and features that suggest communal feasting (Knight 1990; Rolingson 1991, 1992), pointing out what may prove to be the primary functional distinction between Woodland platform mounds and Mississippian period examples. Mississippian mounds were generally topped with structures that, on the basis of ethnographic and artifactual data, are interpreted to have been temples. Access to these temples was likely restricted to the elite members of society. Knight (1990) suggests that the feasting activities implied by the form and content of the Woodland platform mounds would have been open to the entire community. In this way, differences in mound function may reflect fundamental differences between the social organization of the Woodland period tribes and Mississippian period chiefdoms.

Mississippian platform mounds are more likely than not to occur in concentrations of two or more per site, arranged around a plaza. This characteristic of the Coles Creek mound sites from the Lower Valley, Greenhouse, for example (Ford 1951), has prompted some to view these Late Woodland platform mounds as precocious Mississippian rather than characteristic Woodland (Knight 1990). Although Mound A at the Batesville site is so badly eroded that its original shape is difficult to determine, Brown (1926:113) describes it as an irregular rectangular on the basis of his first visit in 1906. He sketches it as a platform mound (Brown 1926:fig. 23) with little apparent regard to Mound B in terms of the orientation of the sides. Mound A has suffered a good deal more destruction in the intervening ninety years, and its status as a platform mound rests on Brown's description. It may be that the area between the two can be interpreted as a plaza: auger testing demonstrated it to be clear of any artifactual debris. However, except for in mounds themselves, prehistoric artifacts are unusual in the portion of the site where Mounds A, B, and C are located. The question of the presence or absence of a plaza at Batesville is not likely to be resolved given the degree of destruction that has occurred as the result of cultivation.

Beyond the concentrations of fire-cracked rock, Mound B at Batesville may be unusual for Woodland platform mounds in terms of time of construction. The ceramic, OCR, and some of the radiocarbon data suggest that Stages I and II were built during the Early Woodland, Tchula period. Although Early Woodland mounds are fairly common in the Mississippi Valley (Jackson, In prep.), all those that have been described are conical rather than flat topped. Likewise, it is not until the Middle Woodland that platform mounds become common in the Midsouth and the rest of the Southeast. This is the period of time when Stages III and IV at Mound B and, perhaps, Mound A were built. As it stands, Mound B may be one of the earliest examples of a platform mound in the region.

Tchula Period Activity at the Batesville Mounds

The earliest clearly evident activity at the Batesville Mounds site is preserved in the midden buried under Mound B. This obvious anthropic A horizon contains a large sample of Tchula period ceramics, fire-cracked rock, and amorphous cores. Although the boundary between this old land surface and the first stage of mound construction is obvious, the premound artifact assemblage is nearly identical to the material contained within the first two stages of mound construction. This could be interpreted to indicate a continuation of the same activity at that location after mound construction began. And, if we are correct in interpreting this assemblage to be the result of ritual feasting, ceremonial activity at this location predates the beginning of mound construction.

Of course, like many things in archaeology, the Tchula phase assignment for the construction of Stages I and II of Mound B is not without question. The OCR dates, the ceramics, the lithics, and one of the radiocarbon dates indicate Early Woodland. A second radiocarbon date suggests that the mound may have been built during the Middle Woodland using fill that contained abundant Early Woodland material. However, if this were the case, the Middle Woodland builders were remarkably thorough in gathering up all the Tchula period material on the site. Holland-Lilly's auger tests failed to uncover similar deposits anywhere else. Moreover, the dense concentration of fire-cracked rock that characterizes the Stage I and II deposits in Mound B are also unique to that portion of the site. Finally, there are some apparent architectural changes that occur after the completion of Stage II.

If the construction of Stages I and II does date to early Woodland, what were the inhabitants of the Batesville Mounds site doing during that period? The lithic assemblage gives us some clues. In the first place, it appears to be a specialized assemblage, representing a restricted range of activities. Unlike the occupations at several smaller Woodland sites just upriver from the Batesville Mounds, tool production and maintenance were not a major concern of the Tchula period inhabitants at Batesville. They did use tools: a good sample of bifaces that could have served as spear points or knives were found in the mound fill, and a large number of flakes and cores were also found. All of the Early Woodland material from the Batesville site was made on local gravel. This limited range of activity suggests that people came to the site for short periods of time to perform specialized tasks.

The nearly 300 pounds of fire-cracked rock from Mound B also suggests a specialized activity. Even though the field school excavations in the south portions of the South Village recovered some Tchula period ceramics, the fire-cracked rock concentration is unique to the Mound B area. Our analysis indicated that most of this rock is the result of wet heat, likely a by-product of stone boiling. This, and the abundant carbon that makes the basket loading in Stages I and II so evident, indicate that a good deal of cooking was carried out in the Mound B locality. The fact that the debris from this cooking was very deliberately relocated to form a flat-topped mound suggests that the cooking might have been ritual rather than domestic. The mound appears to represent a monument to multiple episodes of feasting. Remember that the tops of both Stages I and II are horizontal and flat. Perhaps the feasting took place on top of the structure, which was constructed from the remains of previous feasts. There appears to have been no effort to dress the sides of the mound, and the plan view outline of the mound at this stage can best be described as irregular.

Feasting was not the only activity carried out at the site during the Tchula period. In addition to Mounds A and B, the two platform mounds at Batesville, Brown (1926) mapped the locations of Mounds C, D, and E, all of which he described as conical. Mound E may be a barely recognizable rise in the field to the east of the North Village. If so, field school excavations at that location failed to uncover any material that would suggest the original use of the mound. All that remains of Mound D is a 2-foot rise to the east of the South Village. The field school trenched that mound, but again failed to recover diagnostic artifacts. Mound C, the largest and best preserved of the conical mounds, has not been investigated in a systematic way, but there is the local tradition that a single, undecorated pot was recovered from a pot hole near the summit.

Because of their shape, all of the conical mounds are assumed to be burial mounds. Their cultural affiliation, of course, cannot be determined. However, although the early descriptions of the site failed to note its presence, Holland (1994; Holland-Lilly 1996a) and Ford (1993, 1996a) are undoubtedly correct in including the McCarter Mound as part of the Batesville Mounds group. Excavations there by a group of local enthusiasts uncovered three burials, some caches of pottery, and a copper-covered panpipe (G. Johnson 1969). The ceramics are directly comparable to the Mound B, Tchula period material, strengthening the inclusion of this mound as part of the ceremonial area.

So, in addition to the Mound B activity, Early Woodland people at the Batesville site built at least one low conical mound in which to place their honored dead. The inclusion of the copper panpipe is significant. The ceramic analysis of the Mound B assemblage makes the Tchula assignment of the McCarter ceramics considerably more secure. That is, the single cross-hatched rim from mound fill can no longer be considered to be an indication of a possible Marksville assignment for the mound. An Early Woodland date for the panpipe is troublesome. Similar artifacts are usually considered to be Middle Woodland. Extensive use of nonlocal material is generally unusual in the Tchula period, and the copper for the panpipe is surely nonlocal, the nearest available source being north Georgia.

Finally, the few Tchula period sherds from the South Village indicate some habitation that was primarily domestic. The South Village is located at the edge of the terrace, where an old channel of the river cuts up against that elevation, an ideal habitation site.

Marksville Period Activity at the Batesville Mounds

The radiocarbon and OCR dates suggest that Stages III and IV at Mound B and perhaps all of Mound A were built during the Middle Woodland. There is an obvious change in construction that begins with Stage III. In the first place, sterile or nearly sterile fill was used. This may be because the nature of the ritual in the vicinity of the mound had changed, no longer producing large amounts of charcoal, fire-cracked rock, and broken pottery. It may be because the deposits of this material had been exhausted and sterile soil, most likely gotten from one or all three of the nearby borrow pits, was all that was available. It is with Stage III that the mound takes on its rectangular shape, and the sides of the mound are dressed smooth for the first time. Still, we recovered no evidence for structures on the mound except for a single posthole extending down from the top of Stage III.

However, if the last two stages of Mound B were added during the Middle Woodland, its builders were a particularly tidy bunch. Although there are considerably fewer sherds in the Stage III and IV fill, those that we did recover are all Tchula period. There is not a single Middle Woodland sherd from Mound B or A.

The one place the Middle Woodland people did surely occupy was the South Village. The sherd density from Zone 2 at that location is more than six times what it is in the richest levels of Mound B. The South Village deposit also contains a good deal of animal bone, confirming the idea that people were actually living at that location. In addition, pits and postholes are common at the top of Zone 3, the subsoil zone in the South Village.

Still, the specialized nature of the lithic assemblage suggests that this was a short-term habitation, one that focused on a narrow range of activities, probably having to do with the ceremonial district just to the north. They were not there to refurbish their tool kit or to settle in for the summer. They were just camping while performing sacred ritual at the nearby mounds. The exact nature of this ritual, and which of the Batesville Mounds they used cannot be determined. It is tempting to assign Mound C to this period of time. Many of the large, conical burial mounds in the Southeast date to the Middle Woodland. However, the chronological assignment of Mound C and, for that matter, Mound D must await further excavation at the site.

We do know that they had quit using stones to boil water: the amount of fire-cracked rock from the South Village is insignificant when compared to that in Mound B. This may be because ceramic technology had progressed to the point that water could be boiled by placing the vessel directly over the fire. It might be because feasting was no longer a part of the ritual activity at the site.

Trade

Beyond the differences in ceramics and construction activity that characterize the two periods of occupation at the site, the Middle Woodland differs in the amount of trade that appears to have occurred. This is in keeping with what we knew about this period coming into the excavations. Actually, one of our motivations in excavating in the South Village was to increase our sample of Middle Woodland trade goods.

In fact, we did recover additional blades made of exotic chert. When we added those we found to the field school sample, we ended up with twenty-nine blades, all but three of which were made from exotic raw material. As anticipated on the basis of an earlier study of the distribution of exotic raw material during the Woodland period in the Southeast (Johnson and Hayes 1995), the large majority of this material came from chert sources in Illinois and, perhaps, Missouri. This is the pattern for Middle Woodland sites in the lower Mississippi River Valley. Middle Woodland sites in the Southeast that are located to the east, outside of the Mississippi River drainage, more often contain cherts from Ohio. This includes sites in the upper Tombigbee River drainage of northeastern Mississippi (Bohannon 1972).

Therefore, we were somewhat surprised that three of the South Village blades appear to have been made from chert from Indiana and central Tennessee. In retrospect, however, the situation of the Batesville Mounds site, on the banks of the Tallahatchie River whose headwaters reach to the divide between the Mississippi and Tombigbee watersheds, makes the occurrence of the eastern exotics reasonable.

There are other indicators of ties to the east. Although the ceramic inventory throughout the occupation of the site shows strong similarities to ceramics from the Mississippi Valley, the predominance of the fabric-impressed material during the Early Woodland and the fairly large number of bone-tempered ceramics during the Middle Woodland point to connections with the cultures of northeastern Mississippi.

Conclusions

Certainly the situation of the Batesville Mounds at the edge of the alluvial valley, on the banks of one of the major westward flowing rivers, must have had something to do with the cultural dynamics that led to its growth as a regional center. Although trade in exotic materials was not economically important in the narrow sense of the word—one can live without copper panpipes and blades made from exotic chert—it must surely have been important in maintaining the structure of Woodland society. These trade items were used to display and maintain the social differentiation evidenced by the central tombs in the burial mounds from many Middle Woodland sites in the Southeast. And this structure was just as surely displayed by the platform mounds.

As several authors have noted, Woodland platform mounds are significantly different from the platform mounds of the following Mississippian period. They are much more diverse in size, shape, and content, suggesting a variety of functions. The contrast between the first two stages and the last two stages in Mound B at the Batesville Mounds serves to underscore this diversity. And these differences no doubt reflect a dynamic and evolving social organization and consequent ritual.

The one thing that Woodland platform mounds have in common that sets them apart from Mississippian platform mounds is they lack evidence for enclosed space at the mound summit. In fact, Mississippian platform mounds are most often called temple mounds in reference to the small structures that were built on their summits. These temples likely housed ritual activity, rituals that were performed by a small segment of the society, out of the view of the general populace. At Batesville and other Middle Woodland sites, the mound-top activity was performed in full view of the entire social group, and, indeed, if our interpretation of feasting is correct, the entire group may have participated. This is just one measure of the difference in degree of social complexity that characterizes the Middle Woodland as opposed to the Mississippian period.

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