1989 EXCAVATIONS AT PINSON MOUNDS: OZIER MOUND

Robert C. Mainfort, Jr.
Richard Walling

ABSTRACT

Block excavations were undertaken on the uppermost intact summit of Ozier Mound (Mound 5), the second largest earthwork within the Pinson Mounds site and the oldest dated flat-topped mound in eastern North America. Several features dating to the Middle Woodland period were uncovered and excavated to varying extents. These features, as well as the artifact assemblage, suggest the presence of discrete activity areas associated with this mound summit. The ceramic assemblage raises interesting questions about the age of Ozier Mound relative to other earthworks in the Pinson Mounds complex.

Introduction

The largest Middle Woodland site in the Southeast, Pinson Mounds (40MDI) is located in western Tennessee on the South Fork of the Forked Deer River, a waterway that was navigable by steamboat to within no more than 20 km of the site as late as the mid-1800s. Occupying a relatively level tableland ringed by areas of slightly higher relief on the bluffs above the Forked Deer bottomlands, the site consists of at least 12 extant mounds, a large geometric enclosure, and associated ritual activity localities within an area of approximately 160 ha (Fig. 1). In addition to its large size and the immense volume of earthwork fill represented (more than 100,000 cubic m), the presence of five large, rectangular platform mounds of Middle Woodland affiliation underscores the unique nature of the site. Background ecological data have been summarized by Mainfort (1986). Pinson Mounds is owned and managed by the Tennessee Department of Conservation as a State Archaeological Area.

Despite its size, Pinson Mounds received scant attention in the early antiquarian literature (e.g., Cisco 1879; Haywood 1823) and is conspicuously absent in the classic tome by Squier and Davis (1848). The earliest map of

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the site appeared in an obscure article by William Myer (1922), an intermittent employee of the Smithsonian Institution who recorded nearly three dozen mounds and nearly 10 km of earthen embankments. Although many of the mounds and most of the embankments reported by Myer are now known to be natural landforms (Mainfort 1980, 1986; Morse 1986), researchers have retained Myer's mound numbering scheme (Fig. 1). Prior to the 1980s, Pinson Mounds had been only cursorily investigated by professional archaeologists, and although this initial research suggested that major use of the site occurred during the Middle Woodland period (Fischer and McNutt 1962; Mainfort 1980; Morse and Polhemus 1963) it was generally assumed that at least some, it not all, of the large platform mounds were of Mississippian affiliation (e.g., Faulkner 1972).

In 1981, the Tennessee Division of Archaeology (TDOA) began a three-year intensive investigation of Pinson Mounds. While this research yielded a large body of data about mound structure, mortuary behavior, and interaction with Middle Woodland cultures throughout the Southeast, possibly the most significant result was demonstration that the large platform mounds at the site were built by Middle Woodland peoples, with most of the construction apparently taking place between roughly A.D. 1–A.D. 200 (Mainfort 1986, 1988). In part as a result of these investigations, large Middle Woodland platform mounds have subsequently been documented at several other sites in the Midsouth (Knight 1990; Kwas and Mainfort 1985; Rafferty 1987), although the relative size and number of mounds continue to set Pinson Mounds apart from these sites.

Ozier Mound (Mound 5 in William Myer's [1922] numbering scheme) is the second largest earthwork at the site, standing approximately 10 m tall and containing nearly 26,000 cubic m of fill. The base of this rectangular mound measures approximatley 73 by 70 m, with the top roughly 36 by 31 m; these dimensions are based on a recent photogrammetric contour map (Fig. 2). A ramp extends from the northeast side.

In 1981, test excavations and systematic testing with a posthole digger revealed that the upper mound fill consists primarily of undifferentiated dark brown sandy loam containing sparse amounts of Middle Woodland cultural material. A layer of pale yellow (10YR7/8) sand, interbedded with gray clay, averaging 15 cm in thickness was encountered at a depth of approximately 80 cm below the present mound surface. This limited testing suggested that the sand layer covered most of the uppermost preserved summit of the mound. Beneath the sand layer is a thick deposit of mottled clay in which individual basketloads are readily observable. Solid core testing disclosed five additional sand strata ranging in depth from 2.7 to 5.5 m below the present surface. These strata presumably mark summits of earlier construction stages.

Fortuitously, the 1981 test units exposed two small hearths inclusive within the upper sand stratum (Features 1 and 2), suggesting that this layer represented a definable floor or surface. Charcoal from these features returned uncorrected radiocarbon ages of 20 B.C. ± 110 and A.D. 190 ± 160. A large Furrs Cordmarked sherd was found in Feature 2. The 1981 excavations, which were designed simply to determine cultural and temporal affiliation, exposed only a small area and did not produce sufficient data for a functional assessment of the earthwork (Mainfort 1986, 1988).

Armed with the results of the earlier test excavations and a much more extensive knowledge of the Pinson Mounds site as a whole, additional excavations on Ozier Mound were undertaken in 1989. The principal objective of this research was to expose a substantial amount of the uppermost sand stratum in order to locate additional features which, in turn, would hopefully provide a basis for a functional interpretation of the mound (Mainfort and Walling 1989). In those instances where potential features were encountered, emphasis was consistently placed on areal delineation at the expense of actual removal.

Stratigraphic Trench

A few days prior to the beginning of fieldwork, a small tornado passed over the western portion of the Pinson Mounds site, uprooting a half dozen large trees and creating gaping holes in Ozier Mound. The largest of these holes, measuring approximately 5 m in diameter and 3 m deep, was located on the northwest face, several meters down slope from the mound summit. In an effort to partially mitigate the effects of the storm damage, we elected to excavate a 1 m wide stratigraphic cut from the tree-fall outward to the northwestern margin of the mound and vertically to the mound base. This trench extended a total of 17 m (approximately 10.5 m of which are illustrated in figure 3) and reached a maximum depth of about 4.5 m.

Several construction stages are evident in the profiles. The deepest definable soil zone associated with mound construction is 8, a laminated grayish brown clayey fill that was plainly visible in both profiles. This zone merges with Zone 9, which is very similar to the strong brown clayey subsoil of the Pinson Mounds area. However, Zone 9 overlies the slightly lighter Zone 25, which unequivocally is undisturbed subsoil. Moreover, Zones 9 and 25 are separated by a ferric concretion band that appears in the south profile and extends at least a meter along the west profile. It seems likely that Zones 8 and 9 represent the earliest stage of mound construction, but adequate definition would require additional excavation.

A prepared surface near the base of the mound marked by Zones 12 (a laminated gray clay) and 21 (grayish brown sandy clay) articulates with

Zones 16 and 20 to the southeast and the northwestern edge of Zone 19B. Zone 16 represents a pit, while Zone 20 appears to be a cap over the pit.

The ferric concretion band above Zone 4 in both the west and south profiles clearly marks a major construction stage that includes Zones 4, 5, 10A, and 10B. The latter zones articulate with Zones 16 and 20, suggesting that the capped pit served a special purpose in conjunction with the construction stage. The soil zones immediately above the latter inferred construction stage (Zones 2, 11, and 15) also articulate with Zone 16; note the concretion band above Zone 11B. These deposits seem to add only a small amount of height and to make the angle of the mound slope more acute. A thin layer of pale yellow sand partially overlies Zone 19A (a deposit of loaded fill with numerous horizontally oriented basketloads) and probably defines the top of another construction phase, as similar sand occurs on the mound summits (Mainfort 1986 and below).

Zone 14 may represent a redeposited portion of the sand associated with the top of Zone 19A. The strata underlying Zone 14 (Zones 13, 18, 19C, and 24) appear to be a depressed area associated with the edge of the mound stage defined by Zone 19A and the sand layer. These strata may represent a walkway around the mound, similar to a feature observed stratigraphically in the northern Twin Mound (Mainfort 1986). The final construction stage observable in the profile is marked by Zone 19B. Plowing and erosion have destroyed or obscured subsequent construction stages at this locality.

Mound Summit Excavations

Three areas, encompassing 195 m^2, on the uppermost preserved summit were initially selected for block excavation: the center of the mound (including, and extending north and west from, the features exposed in 1981), an area in the northwest quadrant of the mound, and a small area adjacent to the ramp (Figs. 2 and 4). The latter area remained largely unexcavated so that the features encountered elsewhere could be more thoroughly investigated. The blocks were placed in order to provide data that would maximally complement previous information about the earthwork. Two m squares were the standard excavation unit.

Based on stratigraphy observed in 1981, most units were initially excavated in three arbitrary 20 cm levels (Levels 1 through 3); the base of Level 1 was defined as 139.78 m AMSL across the entire excavation area. A WPA era benchmark (designated N100/E100) on top of the mound anchored horizontal and vertical control during both field seasons. Fill from the upper three levels was selectively screened. Combined with results of the 1981 investigations, approximately 10% of the upper mound fill was screened.

Excavation within Level 4 ceased upon encountering evidence of the yellow sand layer. The soil matrix containing yellow sand deposits (referred to as Level 5 in the discussion that follows) was treated as a natural stratum and removed in 5 cm levels, with most excavation conducted with trowels. The top of Level 5 was defined in the field as beginning when patches of yellow sand first appeared in an excavation unit. The stratum varied in thickness from 8 to 23 cm.

All material excavated from Levels 4 and 5 was screened through ¼-inch hardware cloth, with selected samples retained for flotation or fine water-screening as appropriate. Excavation was generally terminated when the basketloaded fill underlying the sand deposits was reached. Since stratigraphic data was a crucial concern, east/west balks were maintained along the grid lines between excavation units. Upon encountering the sand stratum (Level 5), these profiles were recorded and removed in order to provide maximum exposure of the sand layer. Within Level 5, balks were maintained and recorded on all four sides of each square.

A total of 93 sq m of Level 5 was exposed and excavated during 1989. Adding the 34 sq m excavated during 1981, 127 sq m of this stratum have been examined.

As revealed by the 1989 excavations (and, in retrospect, to some degree by the 1981 testing), Level 5 does not constitute a single "floor" or layer. Rather, numerous profiles indicate that this zone includes three to four layers or lenses of pale yellow sand that vary considerably in thickness and lateral extent. These sand deposits are generally interbedded with thin layers or lenses of mottled gray clay (not puddled). We interpret Level 5 as representing discrete episodes of use that might have included whole or partial removal of previously deposited sand and during which new deposits of sand were added.

Importantly, there is no indication that the sand and clay deposits comprising Level 5 were obtained from habitation areas within the Pinson Mounds site, and all cultural materials recovered from Level 5 are almost certainly the byproducts of activities that occurred on the summit of Ozier Mound. Since this issue is central to much of the discussion that follows, it seems appropriate to justify our interpretation of the association between artifacts and the soil matrix that constitutes Level 5.

A number of factors militate against the possibility that the artifacts recovered from Level 5 represent redeposited cultural material from one or more non-mound activity areas. First, there simply are no areas interpreted as Middle Woodland habitation loci recorded within the Pinson Mounds site, and it would be most unusual if the only such locality that existed was incorporated into the fill of Ozier Mound. Second, the density of cultural material in Level 5 is markedly greater than that recorded in almost

all non-mound excavations at the site including those areas interpreted by Broster and Schneider (1977) as "mortuary camps." Third, the occurrence of seven of the 11 recovered specimens of mica, the single piece of copper, and four microblades in Level 5 (see below) suggests a primary depositional context. Finally, the pale yellow sand contained within Level 5 outcrops only rarely within the site complex and nowhere within the site are intensive cultural deposits associated with this sand. The gray clay does not, to our knowledge, occur on the surface within the Pinson Mounds site proper.

During the 1981 field season, sand deposits (Level 5) were encountered in almost all of the test units and posthole tests, leading to the conclusion that this stratum was virtually continuous across the uppermost preserved summit, although very little sand was found in the westernmost excavation unit (N90/E92). In 1990, additional excavations were conducted in N88/E96 (a unit partially excavated in 1989) to obtain more information about Features 5 and 6 (see below). Although the excavation attained a sufficient depth to expose sand deposits characteristic of Level 5, few traces were found. This suggests that little or no sand is present over a significant portion of the southwest quadrant of the mound.

Although relatively few definable features have been identified to date, we feel confident in suggesting that Level 5 represents a specialized activity surface associated with ritual behavior. Significantly, the uppermost preserved summit of Ozier Mound lacks evidence of posts and/or possible structures, accumulated midden deposits, and large quantities of faunal and floral remains that characterize the summits of some other Middle Woodland platform mounds (e.g., Knight 1990).

While we suspect that few would disagree with our interpretation of Level 5 as a specialized activity surface, given the fact that a large mound 9m tall was erected and sand was placed over much of its summit, artifactual data from the 1989 excavations strengthen the case for ritual use. Mica, a relatively common Hopewellian commodity that is somewhat underrepresented in the Midsouth (cf. Seeman 1977), was recovered from 11 loci (consisting of single or multiple small fragments). The fact that seven of these were in Level 5, while only three were recorded in Level 4, is especially interesting in that fill from both of these levels was screened for every unit. Four of the 11 recovered microblades (including both 1981 and 1989 assemblages) were associated with Level 5, as was the single specimen of copper. These artifacts and commodities are typically found in non-domestic Middle Woodland contexts. Though not necessarily perinent specifically to ritual activities, it bears repeating that the density of ceramics and lithic debitage within Level 5 exceeds that recorded for most excavated non-mound localities at Pinson Mounds (Broster and Schneider 1976, 1977; Mainfort 1980).

Among the Level 5 ceramics are several specimens of non-local origin, which also suggests specialized use (cf. Knight 1990: 158).

The soil deposits defined here as Level 5 seem unquestionably linked to specialized, non-domestic use, but some cultural remains associated with the overlying fill suggest that this material also derives from a non-domestic situation. Single specimens of unworked galena were recovered from Levels 1, 2, 3, and 4, while mica occured in Levels 3 (N = 1) and 4 (N = 3). Microblades were also recovered from the upper mound fill, with Levels 1, 3, and 4 each yielding two specimens. In considering the occurence of non-local raw materials and ceramics in the upper fill of Ozier Mound, it bears repeating that there is presently no evidence of what could properly be called domestic occupation areas within the Pinson Mounds site; even the putative pre-mound "occupation" strata beneath Mound 12 are associated with mortuary activities (Mainfort 1980). Associated with those areas in which evidence of typical Middle Woodland bent-pole structures have been found (the Twin Mounds sector, Mound 12 sector, and the Cochran site area) are mortuary features and/or non-local raw materials and ceramics (Mainfort 1980, 1986; Morse 1986).

Features

Four definable prehistoric features were recorded during the 1989 field season, none of which were completely excavated (Fig. 4). As noted above, our excavation strategy emphasized defining the lateral extent of features, rather than complete excavation. Based on their proximity to one another, Features 3 and 4 are probably functionally related; both are located in the north-central portion of the excavation area near the ramp. Feature 3 was actually encountered in 1981, but its significance was not recognized due to the limited extent of excavations.

Covering an area of approximately 28 sq m, Feature 3 consists of a deposit of reddish brown sandy clay (7.5YR4/6), characteristic of the local subsoil, lying directly below a thin, dispersed layer of pale yellow sand and attaining a maximum thickness of 20 cm. The deposit rests on the basket loaded clays defined above as the base of Level 5. Thus, Feature 3 lies entirely within Level 5. In Unit N98/E102, the surface of Feature 3 was clearly burned. Little cultural material and no distinctive artifacts were recovered from the excavated portion of Feature 3.

Feature 4, located adjacent to and immediately northeast of Feature 3, is a poorly defined, irregularly-shaped basin (perhaps oblong) bounded in part by Feature 3. Stratigraphically, this feature is at least partially covered by a deposit of sand that constitutes a component of Level 5. The interior of the basin exhibited complex microstratigraphy which, along with its size

and the impending cessation of fieldwork, precluded complete excavation. Contained within Feature 4 are at least one layer of burned sand and small pieces of charcoal as well as two layers of clean pale yellow sand, with thin deposits of compact gray clay separating the sand layers. These soil deposits are virtually identical to Level 5 and may, in fact, simply be a continuation of Level 5. The apparent base of Feature 4 consists of extensively fired gray clay that may be part of the basketloaded fill found elsewhere under Level 5. No charcoal was found on the presumed base, suggesting that material had been removed from the basin prehistorically. Few artifacts were recovered from the excavated portion of Feature 4, but these included several scraps of mica. Several charcoal samples for radiocarbon dating were also collected (see below).

Feature 6, a second deposit of reddish brown sandy clay (7.5YR4/6) about 45 sq m in areal extent, was encountered in the southwestern quadrant of the 1989 excavations. Unlike Feature 3, which lies within Level 5, Feature 6 is inclusive within the upper mound fill. In those areas from which complete soil profiles that include Feature 6 were obtained, this deposit averages roughly 20 to 30 cm in thickness, but thins toward the peripheries. Interestingly, the relative elevation of the upper surface remains fairly constant across the feature; near the edges there is simply more undifferentiated fill underlying the reddish brown clay. Thus, Feature 6 appears rather V-shaped (albeit with a flat bottom) in profile, with the base approximately 15 cm above the top of Level 5. Importantly, there is no evidence that the surface of the feature had been exposed to weathering.

The lithic assemblage from the excavated portion of Feature 6 includes 1,421 pieces of chert debitage (almost all of which are less than 2 cm long), one core, and a microblade. These small flakes generally exhibit flat platforms and represent the products of amorphous core technology (Jay Johnson and Carol Morrow, personal communication). Although displaying considerable variability in color (ranging from white [10YR8/2] to very pale brown [10YR7/3] to light yellowish brown [10YR6/4] to very dark gray [10YR3/0], with several individual specimens exhibiting the extremes of variation), all specimens of debitage fall within the range of variability for Fort Payne chert from the western Tennessee River valley. The density of lithics in Feature 6 far exceeds that from any other context within Ozier Mound and, in fact, any excavated locality within the entire Pinson Mounds complex.

The lithics are inclusive within the fill of Feature 6, rather than being concentrated on the surface or base of the feature, although apparent concentrations were observed within the fill. In part because of the limited extent of our excavations, Feature 6 is difficult to interpret. The matrix of the feature consists of subsoil that is characteristic of the Pinson Mounds site. Since the feature fill appears to be homogeneous and lacks indications

of organically stained basketloads, it seems inappropriate to view the lithics as redeposited material. The distribution of material throughout the small excavated portion of the feature does not support an interpretation of Feature 6 as a specialized lithic reduction area on Ozier Mound.

We believe that Feature 6 represents a low, raised platform with the margins apparently aligned with the edges of the mound summit, as well as the ramp on the northeast side of Ozier Mound (Figs. 2 and 3). No evidence of Level 5 (the yellow sand layer) was observed beneath the matrix of Feature 6. This suggests the southwestern quadrant of the mound (the area within which Feature 6 is located) was functionally differentiated from the sand-covered portions of the mound summit.

A thin (ca. 5 cm) deposit of charcoal, calcined bone, and burned sand was disclosed beneath Feature 6 in the southeast quarter of Unit N90/E96. Designated Feature 5, this deposit covers an area only slightly larger than 1 sq m; the extent was determined during limited follow-up excavations in 1990. Several small fragments of mica were also recovered from the feature fill. Among the numerous bone fragments, a single deer tooth was the only identified specimen. Feature 5 may represent the preparation and consumption of food in a ritual context, but the available data are equivocal.

Radiocarbon Dating

Features 1 and 2, both excavated in 1981, yielded uncorrected radiocarbon ages of 20 B.C. ± 110 and A.D. 190 ± 160 respectively (Mainfort 1986). Two samples of wood charcoal obtained from Feature 4 during 1989 were submitted to the University of Texas Radiocarbon Laboratory for dating and returned uncorrected ages of A.D. 100 ± 80 (TX-6602) and A.D. 270 ± 70 (TX-6603). While providing additional support for the Middle Woodland age of Ozier Mound, these radiocarbon assays are of little assistance in more precisely determining the use of Level 5. TX-6603, although falling within the one sigma range of one of the 1981 dates, appears to be an outlier and should probably be disregarded; the aberrant age may have been caused by the presence of a burned tree root system located above portions of Feature 4. The second assay from 1989, TX-6602, overlaps with the earlier dates between A.D. 30 and 90 (uncorrected), as well as the dates from the mortuary features at the base of the Twin Mounds (Mainfort 1986, 1988). Calibration might clarify matters, but this would necessarily require a reconsideration of all previous radiocarbon determinations for the Pinson Mounds site—a task that lies beyond the scope of this paper.

In summary, the new radiocarbon information provides further evidence that Ozier Mound was constructed during the Middle Woodland period, more particularly during the first century A.D. As discussed below, however,

the ceramic assemblage from 1989 suggests that Level 5 dates to the early first century A.D., if not slightly earlier.

Ceramics

The ceramic assemblage from the 1989 excavations is of considerable interest because of its implications for the temporal placement of Ozier Mound relative to the other large earthworks within the Pinson Mounds complex. Radiocarbon dates from the 1981 and 1983 field seasons suggest that Ozier Mound was essentially contemporaneous with the Twin Mounds (Mound 6), a pair of intersecting conical burial mounds located some 250 m to the south. The available dates place construction of both earthworks during the first century A.D. (Mainfort et al. 1985; Mainfort 1986, 1988, 1989), and one of the two radiocarbon assays from the 1989 excavations supports this conclusion. However, the ceramic assemblage obtained during the 1989 field season is not easily reconciled with the radiocarbon evidence.

Table 1 summarizes the ceramics recovered from Ozier Mound. Since Levels 1 through 3 were composed primarily of undifferentiated fill (but see discussion of Feature 6 above) ceramic counts for these levels were combined. Level 5 (the sand stratum) obviously warrants separate tabulation, while Level 4 is treated separately because it represents fill from immediately above the sand layer. Material from the 1981 excavations has been incorporated into table 1, bringing the total number of identifiable sherds to 732. Of these, 128 were associated with Level 5, while 268 were recovered from Level 4.

The ceramic typology employed here is essentially the same as that used during the 1980s investigations at Pinson Mounds (Mainfort 1986) and is based largely on the work of Jenkins (1981) for the Gainesville Reservoir in the central Tombigbee River valley. The very appropriate cautions and concerns expressed by Charles McNutt (1979) have also guided our classificatory endeavors. Although many of the ceramics are easily accommodated by the Miller series typology, it is important to note that the Pinson Mounds assemblage, as well as the ceramic sequence as presently understood for the surrounding area (cf. Smith 1979), differs significantly from comparable assemblages in the Tombigbee drainage. Of particular importance, the long established and temporally sensitive transition from sand temper (Miller 1 and 2) to grog temper (Miller 3) in the Tombigbee drainage is not as straightforward in the west Tennessee interior. At Pinson Mounds, for example, sand-tempered wares consistently co-occur in good contexts with grog-tempered and mixed-sand and grog-tempered ceramics. The same situation appears to exist at sites throughout much of west Tennessee, perhaps because of stronger ties to the grog-tempered ceramic

tradition of the central Mississippi Valley. The major point to be made here is that the ceramics described below as containing grog as a tempering agent do not, in contrast to the situation in the Tombigbee drainage, carry the same temporal implications. Temporal trends in surface treatment, i.e., the shift over time from fabric impressed to cordmarked, appear to be similar in both western Tennessee and the Tombigbee drainage. Finally, we are reluctant to propose type-variety nomenclature for the majority of the Pinson Mounds ceramic assemblage at this time, primarily because this material derives exclusively from specialized cultural contexts and therefore seems to be an inappropriate sample upon which to base ceramic varieties.

The sand-tempered types of the Miller series as found at Pinson Mounds are generally indistinguishable from comparable material in the Tombigbee River drainage (Mainfort 1986); these types are designated here as Furrs Cordmarked, Baldwin Plain, and Saltillo Fabric Impressed with no varietal distinctions. Our use of the Miller ceramic types does not, in contrast to the position recently taken by Brose (1990), imply that we consider Pinson Mounds to be subsumed within the Miller culture or variant (cf. Jenkins 1982). With the exception of somewhat similar ceramic assemblages, Bynum (Cotter and Corbett 1951), Miller (Jennings 1941), and Pharr (Bohannon 1972) have very little in common with Pinson Mounds, i.e., these northern Mississippi sites are much smaller than Pinson Mounds and lack both platform mounds and embankments. The major structural differences, coupled with considerable geographic separation, do not, in our opinion, sustain the case for grouping Pinson Mounds within the Miller culture.

In addition to sand-tempered wares, grog (or clay)-tempered pottery characteristic of the Central and Lower Mississippi Valley is present at Pinson Mounds. Generally characterized by a slightly chalky paste, this material is classified as Baytown Plain, Mulberry Creek Cordmarked, and Withers Fabric Marked, again without distinguishing varieties. Classificatory problems are created by the occurrence of "sand and grog tempered" or "grog tempered with sandy paste" ceramics at Pinson mounds and other sites in the Midsouth (McNutt 1979). While not an entirely satisfactory solution, we have used Jenkins's (1981) terms Baytown Plain, *var. Tishomingo;* Mulberry Creek Cordmarked, *var. Tishomingo;* and Withers Fabric Marked, *var. Craig's Landing* to subsume the relevant material. Operationally, our use of these varieties is reserved for sherds that exhibit even minor amounts of visible grog temper (or fired clay particles that are assumed to be tempering material), as well as a noticeably sandy paste. As stated above, at Pinson Mounds these varieties do not have the temporal implications noted in the Tombigbee drainage.

Previous research at Pinson Mounds convincingly demonstrated that the

dominant ceramic type during the major use of the site was Furrs Cordmarked, with Baldwin Plain the second most frequent (Mainfort 1980, 1986; Morse 1986). As illustrated in table 1, the Ozier Mound assemblage includes a strong representation of fabric marked wares, particularly in Levels 4 and 5, where fabric marking accounts for 35.8 and 28.9% of the identifiable sherds, respectively. Equally surprising is the fact that Withers Fabric Marked, *var. Craig's Landing* constitutes a significant amount of the assemblage. At no site in the Madison-Chester County, Tennessee, area (within which there are presently 62 recorded Middle Woodland sites) has this variety been recovered in any substantial quantity and, in fact, Woodland ceramics are predominantly sand-tempered (albeit with a consistent small minority of mixed-sand and grog-tempered sherds) throughout the region. Two localities within the Pinson Mounds site have yielded significant numbers of fabricmarked ceramics (including *Craig's Landing*). These are the lower strata beneath Mound 12 (which appear to be associated with mortuary rituals) and the portion of the Mound 14 sector tested by Morse (1986). It is worth noting here that the ceramics recovered from the upper fill of the Twin Mounds include only a relatively small percentage of fabricmarked sherds, with the vast majority being cordmarked (Mainfort 1987).

While most of the sherds from the 1989 excavations are fairly typical of Woodland sites in western Tennessee, non-local ceramics form a significant minority of the Ozier Mound assemblage. Limestone tempered ware, probably derived from the Tennessee River valley, has been recorded from several localities at Pinson Mounds (Mainfort 1980, 1986; Morse 1986), and 23 specimens with identifiable surface treatments were obtained from Ozier Mound. Included here are 20 examples of Mulberry Creek Plain, two Wright Check Stamped, and a single sherd of Flint River Cordmarked. Several sherds of Wright Check Stamped are reported for the Bynum site (Cotter and Corbett 1951), which has been securely dated to the first and second centuries B.C., but none were recovered from the slightly later Pharr Mounds (Bohannon 1972; Kardwesky 1980; Walling, Mainfort, and Atkinson 1991). The Pinson examples are similar to what Jenkins (1981:154–156) has described as Wright Check Stamped, *var. Wheeler Bend.* Three check stamped sherds have sand-tempered paste, while 2 specimens exhibit a mixed-sand and grog paste. The checks are rhomboidal in shape, and the sand-tempered examples are comparable to Sauty Check Stamped (Heimlich 1952:14) and McLeod Check Stamped, *var. Wilke's Creek* (Jenkins 1981:136).

Referring to the Gainesville Reservoir area, Jenkins (1982) notes the consistent co-occurrence of McLeod and Wright Check Stamped in Late Miller II features. Such a context postdates Ozier Mound by several hundred years. At Pinson Mounds, check stamped ceramics were found in the fill

of the Twin Mounds, but with the exception of Ozier Mound, have not been recorded at any other locality. Check stamping is conspicuously absent in the large non-local ceramic assemblage from the Duck's Nest sector (Mainfort 1986, 1987).

None of the incised sherds were large enough to identify the motifs of which they formed a part; indeed only one, a Basin Bayou Incised sherd, is assignable to a defined type. No incised sherds exhibit the chalky paste characteristic of early Marksville ceramics from the Lower Mississippi Valley (e.g., Toth 1974, 1988). While there is little doubt that the limestone tempered and check stamped ceramics discussed above are of non-local origin, the possibility that some of the incised sherds were locally produced cannot be ruled out. Of probable non-local origin is a single sand-and grog-tempered sherd with a plain exterior and red filmed interior. The paste is not similar to that of the red filmed ceramics from the Duck's Nest Sector and Mound 10 (Mainfort 1986). Three sand-tempered podal supports (two from Level 4 and one from Level 2) and three baked clay object fragments were also found; one of the latter represents a cane-impressed biscuit-shaped form that has not previously been recorded in the vicinity of Pinson Mounds (cf. Smith 1979).

Lithics

Relatively few diagnostic lithic artifacts have been recovered from Ozier Mound, and the discussion that follows includes all material obtained during the 1981 and 1989 excavations. Two lanceolate expanded stem points (similar to the Swan Lake and Bakers Creek types) were recovered during the 1989 field season, one each from Levels 4 and 5. One of these was manufactured from a variety of Fort Payne chert. Level 4 yielded two additional complete points. One of these is a moderately large specimen similar to a Savannah River point (Cambron and Hulse 1975), while another exhibits a short, slightly rounded stem of Late Archaic/Early Woodland form. The final complete specimen was recovered from Level 2 in 1981; this is a very small, heavily reworked point with an expanded stem and a slightly rounded base. In the basketloaded fill below Level 5, a drill fashioned from an Eva point was collected in 1981.

Among the seven fragmentary points are two proximal fragments with contracting stems that may derive from Pickwick points. These were found in Levels 4 and 5. The upper mound fill (Level 2) yielded a moderately large straight stemmed proximal, probably of Middle or Late Archaic origin. This example is probably manufactured from Camden chert. Level 1 produced the two remaining short-stemmed proximals. The two distal fragments of points are from Levels 4 and 5, while a medial section was found in

Level 2. Level 5 also yielded the rounded distal end of a bifacially worked microblade made on a gray (possibly Dover) chert.

The Ozier Mound lithic assemblage also includes four retouched flakes interpreted as scraping tools. Three specimens are naturally backed along one edge.

Microblades, including some manufactured from Flint Ridge flint, have been recovered from several localities at Pinson Mounds (Mainfort 1986; Morse 1986). The two field seasons on Ozier Mound produced 11 whole or fragmentary specimens. Four of these are from Level 5, with two each from Levels 1, 3, and 4. Five specimens, several of which are highly translucent, are likely to be of non-local origin, while an equal number are probably made on variants of Fort Payne chert. A single example exhibits a black exterior and white interior; this may be a specimen of Burlington-Crescent chert (Carol Morrow, personal communication).

Concluding Remarks

Since Pinson Mounds is protected by State ownership, and because of the unique nature of the site, researchers at the site have consistently employed a conservative excavation strategy in which definition of features is given higher priority than total excavation. The 1989 excavations on Ozier Mound were successful in achieving the major objective of the project: over 90 sq m of the uppermost sand-covered summit (Level 5) were exposed and excavated, primarily within an area circumscribed by the 1981 test units. Interpretation of the Level 5 deposits has shifted from the simplistic "sand floor" notion presented in earlier publications (Mainfort 1986, 1988) to a dynamic model involving multiple episodes of use during which previously deposited sand was removed (perhaps reflected by some of the sand deposits observed in the stratigraphic trench) and new deposits of sand were added.

Discrete activity areas are definable within Level 5, but there is no evidence of a building associated with the uppermost intact mound summit, and a few definable cultural features were encountered. Mica, copper, and microblades were all found within Level 5. This material links the use of Ozier Mound with other ritual activity areas throughout the Pinson Mounds site, such as the Twin Mounds sector and the Cochran site (Mainfort 1980).

Sand deposits were used to demarcate construction stages within at least two additional earthworks at Pinson Mounds. Mound 29, a 3 m tall platform mound that is located within the circular enclosure on the eastern side of the site, was tested by Morse (1986) in 1963. In both test units, a layer of yellow sand was encountered at a depth of approximately 1.8 m below the mound surface. Since Morse's test pits were placed about 15 m apart, it

seems likely that the yellow sand covers an earlier summit of the mound, rather than simply representing isolated sand lenses.

Sand was also employed to cover the flat-topped primary mound within the northern Twin Mound (Mainfort 1986; Mainfort et al. 1985), but here the context (and probably the function) of the sand are markedly different than the occurrences within the large platform mounds. The flat-topped primary mound was constructed over and delimits a group of submound tombs. The sides of the mound were covered with pale yellow sand similar to that observed on Ozier Mound, but the top was rather elaborately capped with four thin contrasting soil zones. There is no indication that the upper surface of this primary mound was actually utilized for ritual purposes, and the stratigraphic evidence suggests that this surface of the mound did not remain exposed for an extended period of time.

It is also instructive to note several contexts at Pinson Mounds in which sand covered summits might be expected to be present, but where there is currently no evidence for such features. In 1982, a complete series of solid core samples was obtained from Sauls Mound (Mound 9), the largest mound at the site, with no evidence of sand covered summits and minimal indications of specific construction stages (Mainfort 1986). Test excavations on Mound 10, a small, irregularly shaped platform mound located slightly to the east of Sauls Mound, suggest that this earthwork was completed as a single construction event; no evidence of a sand covering was found. Finally, auger testing of Mounds 15 and 28—both large rectangular platform mounds—has failed to produce evidence of sand covered summits.

The 1989 Ozier Mound excavations also produced important data of relevance to the internal chronology of the Pinson Mounds site. Before pursuing this discussion, we wish to stress that Pinson Mounds is, to the best of our knowledge, the most extensively dated Middle Woodland site in the Southeast, if not all of eastern North America (see Mainfort 1986, 1988; several additional dates subsequently obtained from various loci corroborate the published dates). This body of radiocarbon dates, together with the apparent ubiquity of sand-tempered cordmarked and plain ceramics throughout the site, provided a sound basis for positing a temporal sequence of site usage and mound construction.

The chronology of Pinson Mounds, as understood prior to 1989, can be briefly summarized as follows. Pre-mound construction use of the site by Woodland peoples is reflected by a date of 205 B.C. ± 115 derived from a stratum under Mound 12 which contains several mortuary features. Dates from the 1981 Ozier Mound excavations, as well as those from the Twin Mounds to the south, pointed to a major mound construction episode during the first two centuries A.D. Investigation of Mound 10, a small, irregularly shaped platform mound, provided evidence for a construction

date of circa A.D. 200. The small size and unusual shape of the earthwork were interpreted as reflecting that construction occurred after the large rectangular platform mounds had been built. In the Mound 12 sector, structural remains, mortuary features, and associated upper pre-mound midden indicated continued use of Pinson Mounds into the latter half of the third century A.D., while two relatively small mortuary mounds (Mounds 12 and 31) were constructed during the fifth century A.D. (Mainfort 1986, 1988; Mainfort et al. 1982).

Although none of the other large platform mounds at the site have been investigated beyond augering or cursory testing (Mainfort 1986; Morse 1986; Thunen 1987, 1988), the extant data (including the apparently intentional placement of Mounds 28 and 29 virtually equidistant from Mound 9) supported the case for all major earthworks at Pinson Mounds being constructed between approximately A.D. 1 to 200. That is, Mounds 5 (Ozier), 6 (Twin Mounds), 9 (Sauls), 15, 28, and 29 were viewed as being the product of a planned, relatively short-term (roughly 200 years or less) construction effort (Mainfort 1986, 1988, 1989).

Unfortunately, the two additonal radiocarbon assays from the upper occupation layer on Ozier Mound are of little assistance in providing a more precise age for the earthwork than that presented above. In contrast to the radiocarbon determinations, however, the ceramic assemblage, with its relatively high proportion of fabricmarked sherds, strongly suggest that Ozier Mound predates the Twin Mounds, as well as the other large platforms. We tentatively infer that the upper sand layer on Ozier Mound dates between the latter half of the first century B.C. and the first several decades A.D. At this time, Ozier Mound may have been the only earthwork at what was to become the Pinson Mounds site.

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Robert C. Mainfort, Jr.
Tennessee Divison of Archaeology

Richard Walling
Panamerican Consultants, Inc.

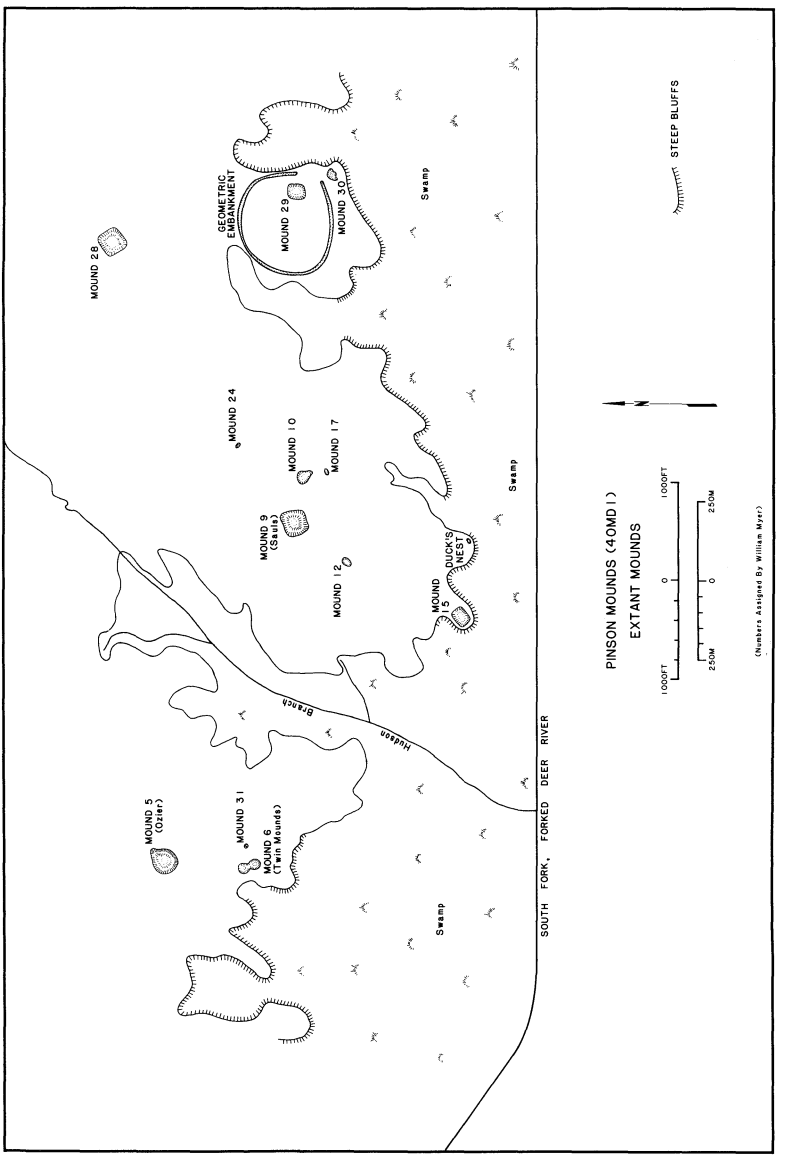

Fig. 1. The Pinson Mounds site.

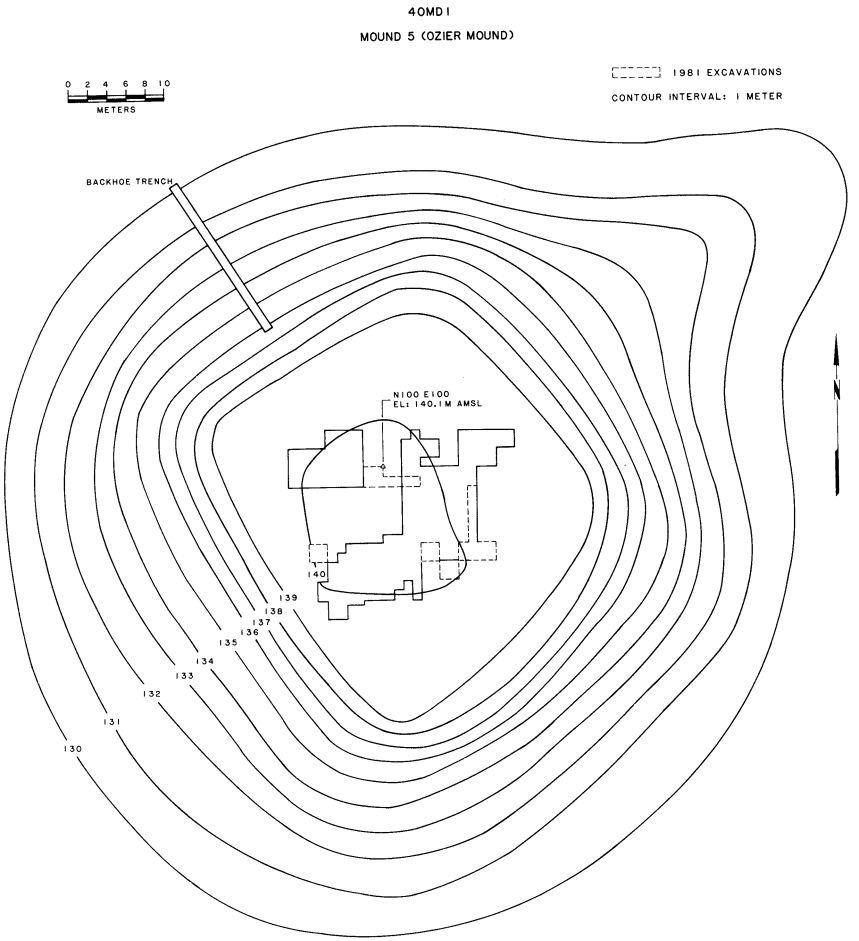

Fig. 2. Ozier Mound, showing 1981 and 1989 excavations. Based on aerial photogrammetry by the Tennessee Department of Transportation.

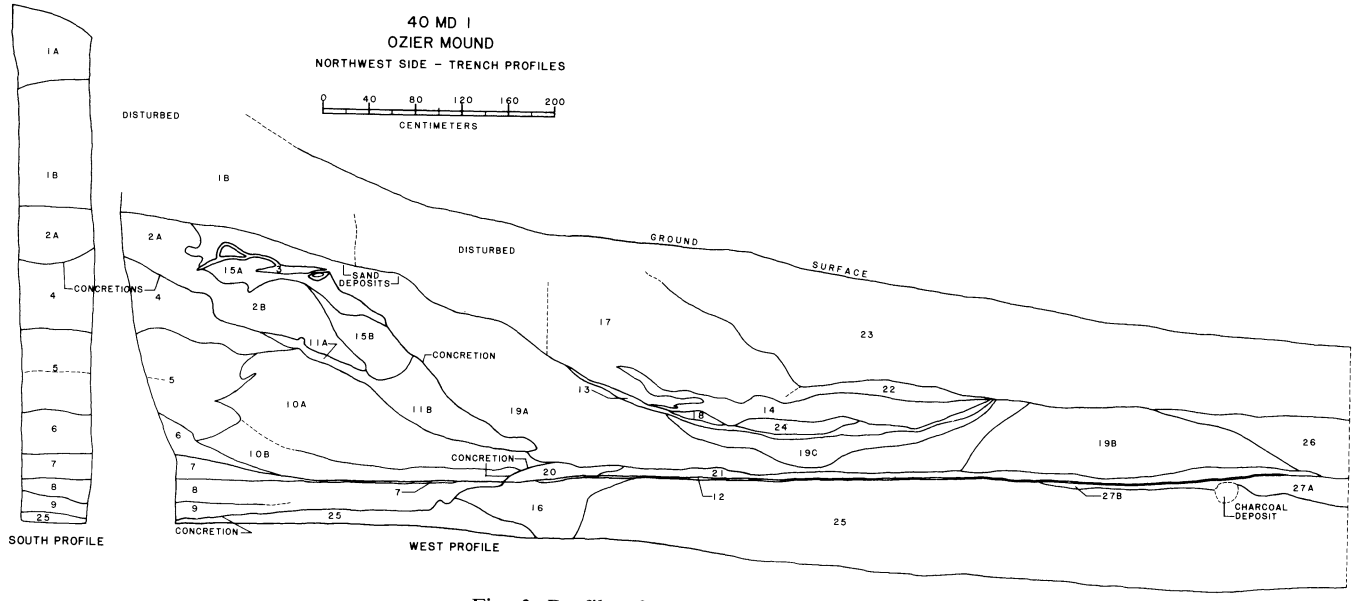

Fig. 3. Profile of stratigraphic trench.

KEY

1A. dark yellowish-brown (disturbed)
1B. mottled light brownish-gray fill
2A. light yellowish-brown to very dark grayish-brown
2B. light gray to grayish-brown
3. pale yellow sand with loaded fill
4. light grayish-brown to very dark gray
5. loaded fill; darker than four with different loading pattern
6. mottled pale-brown to grayish-brown
7. mottled strong brown to yellowish-brown redeposited subsoil
8. laminated grayish-brown clay
9. brownish-yellow subsoil (possibly redeposited)
10A. light brownish-gray to dark grayish-brown clay with horizontal basketloads
10B. sandy grayish-brown clay with downward slanting basketloads
11A. mottled light to dark grayish-brown with ferric concretions and sand
11B. similar to 11A, with more concretions and several pockets of yellow sand
12. laminated gray clay
13. yellowish-brown sandy clay
14. pale yellow sand
15A. light to dark grayish-brown
15B. much lighter and sandier than 15A, with gray clay lumps
16. mottled gray and brown clay
17. dark mottled grayish-brown
18. dark grayish-brown
19. light yellowish-brown to very dark brown loaded fill
19A. basketloads generally half-moon shaped; loading somewhat horizontal
19B. basketloads longer and thinner; loading slopes down toward mound interior
19C. basketloads generally less distinct, but tend to be long and thin
20. laminated dark grayish-brown clay
21. sandy laminated grayish-brown clay
22. mottled dark yellowish-brown sandy clay (disturbance)
23. grayish-brown (redeposited slope wash)
24. yellowish-brown to dark brown
25. yellowish-brown subsoil
26. brown (disturbed by plowing)
27A. mottled reddish-brown subsoil
27B. subsoil discolored by burning

NOTE: All soil zones are loams unless otherwise noted.

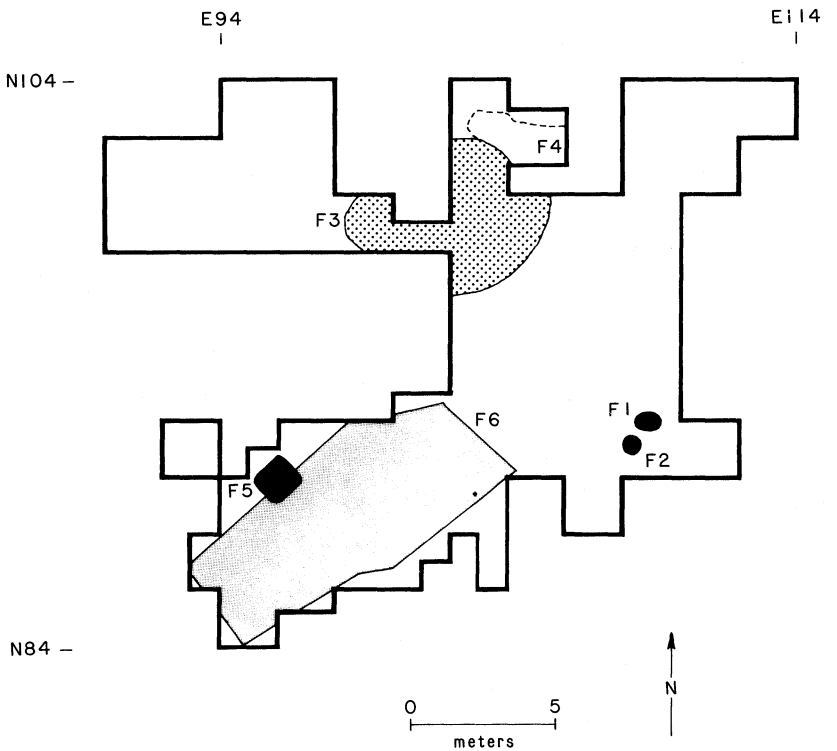

Fig. 4. Excavated portion of Ozier Mound, showing features.

TABLE 1

Ceramics from Ozier Mound (1981 and 1989 excavations)

	Level 1	*Level 2*	*Level 3*	*Level 4*	*Level 5*	*Total*
Baldwin Plain	20	19	14	29	37	119
Furrs Cordmarked	53	53	29	73	32	240
Saltillo Fabric Impressed	11	11	8	32	16	78
Baytown Plain, *var. Tishomingo*	4	9	4	30	4	51
Mulberry Creek Cordmarked, *var. Tishomingo*	6	4	1	18	6	35
Withers Fabric Marked, *var. Craigs Landing*	11	7	16	50	18	102
Baytown Plain	2	1	3	7	1	14
Mulberry Creek Cordmarked	7	1	4	4	3	19
Withers Fabric Marked	7	3	0	13	3	26
Mulberry Creek Plain	0	5	8	4	3	20
Flint River Cordmarked	0	0	0	1	0	1
Wright Check Stamped	0	0	0	0	2	2
Sand Temper Check Stamped	1	0	0	1	1	3
Sand/Grog Temper Check Stamped	0	0	1	0	1	2
Grog Temper, Single Cord Impressed	0	0	1	1	0	2
Basin Bayou Incised	0	0	0	1	0	1
Sand Temper Incised	1	2	0	1	0	4
Sand/Grog/Bone Temper Incised	0	0	1	0	0	1
Incised over Furrs Cordmarked	1	0	0	0	0	1
Sand/Limestone Temper Cordmarked	0	2	0	0	0	2
Sand/Grog Temper, Red Filmed Interior	0	0	0	0	1	1
Podal Support, Sand Temper	0	1	0	2	0	3
Baked Clay Object Fragment	0	1	1	1	0	3
TOTAL	125	119	92	268	128	732

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