Title:	The Johnson Site: Precursor to Pinson Mounds?
Year:	1986
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Source:	*Tennessee Anthropologist* 11(1):29-41

THE JOHNSTON SITE: PRECURSOR TO PINSON MOUNDS?

Mary L. Kwas and Robert C. Mainfort, Jr.

ABSTRACT

Recent archaeological research has demonstrated that large platform mounds were constructed in the Midsouth during the Middle Woodland period. Located only several kilometers northwest of the substantial Pinson mound group, the Johnston site includes two platform mounds and a small, conical mound that can be attributed to the Middle Woodland period on the basis of morphology and surface collections. The available data suggest that the Johnston site dates to the first century B.C.

Introduction

Approximately 4 km northwest of the large Middle Woodland ceremonial center of Pinson Mounds is another major site of similar age and function, known as the Johnston site (40MD3). Within an area of approximately 30 ha, the site includes two platform mounds, a small conical mound, and associated habitation areas. Although no professional excavations have been conducted, the extant mounds represented at the Johnston site, as well as artifacts obtained during surface collections, indicate a close affinity to Pinson Mounds and suggest that the site predates the larger Pinson mound group.

The Johnston site is located atop a bluff on the east side of the South Fork of the Forked Deer River in Madison County, Tennessee, about 12 km south of Jackson (Figure 1). This locality lies within the transitional zone between the West Tennessee Uplands to the east and the West Tennessee Plain (Miller 1974). Dice's (1943) Carolinian Biotic Province encompasses much of west Tennessee, including the Johnston site, and the pre-settlement vegetation consisted primarily of an Oak-Hickory Forest (Delcourt and Delcourt 1981). The topographic setting of the mound group is virtually identical to that of Pinson Mounds and both sites are underlain by the gently rolling Lexington Silt Loam (Brown et al. 1978), which has a very limited distribution in the area and is particularly well-suited to agriculture. The association of Lexington Silt Loam with these two large Middle Woodland sites is clearly intriguing, but the significance is not presently known.

As at the Pinson Mounds site, the resources of the river bottomlands, the mixed beech-oak slopes, and the oak-hickory uplands can be effectively exploited from the Johnston site, ensuring the availability of a large number of edible plants and animals including white-tailed deer, rabbits, squirrels, beaver, a variety of fish and waterfowl, and numerous species of nut-bearing trees and berries (Broster and Schneider 1977). Seasonal peaks of food resources occur during the fall and, secondarily, in the spring. Although little is known about prehistoric subsistence in west Tennessee, the Forked

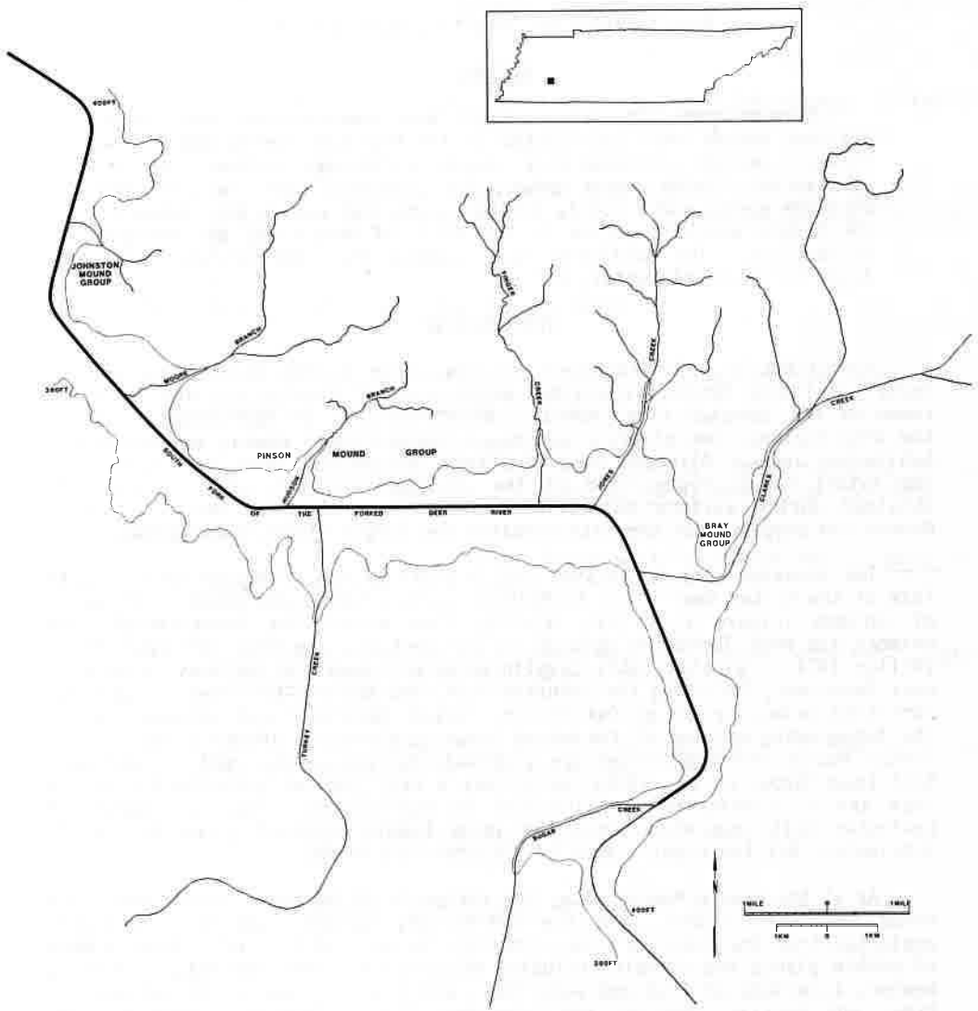

Figure 1. Location of the Johnston site.

Deer River drainage is known to have supported a substantial population during Middle Woodland times (Broster and Schneider 1977; Smith 1979; Mainfort n.d.a.).

Historical Accounts and Descriptions

The Johnston site was discovered in 1820 by M.H. Howard and his crew, who were surveying the recently opened lands in west Tennessee. According to Howard:

> On emerging from the swamp of Forked Deer river about a dozen miles from Jackson, we found a bold spring and near it a mound six or seven feet high and large enough for a house, which we named Mount Pinson (for Joel Pinson, a member of the survey crew - ed.). We did not then know of the large mounds two or three miles farther south and persons who had seen them supposing it was these we had so named adopted the name as having been intended for them and they have borne that name since. . . The land, including the spring and the low mound we had named Mount Pinson, was entered by Hunt and Dickens (partners in charge of the surveying operation - ed.) for Col. Thomas Henderson, who built and lived on it (Howard 1902:61).

Due to the more impressive size of Pinson Mounds, the Johnston site was generally overlooked by early artifact collectors and antiquarians, and was seldom noted in the period literature. The site was not mentioned by Squier and Davis (1848), nor by Thomas (1894) in his classic Bureau of American Ethnology compendium. Further, in the few early references, the Johnston site is often not easily identified from the descriptions. The earliest description of the site, published in 1823, states that:

> On the south side of Forked Deer river 60 miles above its mouth, is a dirt wall parallel to the river, and distant three or four rods from it, where is on the river a steep precipice or bluff, at least 50 feet from the surface to the water. The wall itself is a mile long, and is at present 18 inches or two feet high, and 10 in width, with poplars growing upon it five feet through. Opposite to this is another wall of the same size and length, distant one-quarter of a mile, and in some places 59 poles from the other. At the lower end they approach each other till they come within four poles. Between the walls are 75 acres of exceedingly rich lands. At the interval where the walls approach within four poles of each other and between the walls, there is, in the inside of the passage, a mound 8 or 10 feet high which commands the passage, so that all who come in must on the inside turn to the left or right, between the mound and the wall. On the outside of the entrance is a steep bluff or a swamp, winding round the southern wall, and passing in a northwardly direction, near the entrance to the river, with a wide swamp on the eastern side of the bluff. On the inside of the walls are square ones (i.e., mounds - ed.), 40 or 50 feet in diameter, at different places, which probably were once covered, when the ancient inhabitants lived there. There are square mounds on the inside,

which are not hollow, 14 or 15 feet high. Poplar trees are upon them, 5 feet through at least. The wall next to the river, at a point equidistant from its end, turns to the river; and from the river by another short parallel wall, runs to a point in the direction of the wall prior to the diversion, and thence is continued in that direction of the wall prior to the diversion, and thence is continued in that direction. The two short walls to the river leave an opening from it into the interior of the enclosure, and doubtless was once a covered way for the protection of those who went to the river for water (Haywood 1959:160-161).

A letter sent back east in 1826 by an unknown author also describes several mounds in the vicinity of Jackson, Tennessee and includes a brief reference to the Johnston site:

About one mile and a half from Mount Pinson, on the plantation of Col. Thomas Henderson, late of Raleigh, are two mounds about 60 yards a part, and about 5 feet high; one of which 130, and the other about 60 feet square. One of these is the site for his mansion house; the other is within the enclosure of his garden, and upon which he is preparing a beautiful and picturesque summer house (Anonymous 1826).

In the late 1800s, a flamboyant newspaperman, J.G. Cisco, arrived in Jackson and founded the Forked Deer Blade. In addition to his journalistic interests, Cisco had several avid hobbies, including that of archaeology. He examined a number of mound sites in the area and amassed a substantial collection of artifacts, primarily from the Madison County area. His short "History of Madison County," which was published by his newspaper circa 1900, includes a detailed description of Pinson Mounds and also mentions the Johnston site:

Northwest of this group (i.e., Pinson Mounds - ed.) about four miles, and on the same stream, on a farm owned by Mr. William Harris, is another group, two of which cover a considerable area, but only a few feet high. The largest covers almost an acre and is about twenty feet high (Cisco n.d.:6; this description was omitted from a later version of the county history that was published in American Historical Magazine).

In 1916, William E. Myer, a research associate with the Smithsonian Institution, began gathering information for a lengthy tome entitled "Stone Age Man in the Middle South" (Myer n.d.). He made contact with Cisco, who provided him with information about a number of sites in Madison County, including Pinson Mounds (Myer 1922) and the Johnston site. Myer visited these sites and in 1917 contracted with a local surveyor to map them (see Figure 2). Myer's untimely death prevented completion of his manuscript and, consequently, it was never published. His discussion of the Johnston site, which has been slightly edited, is presented below:

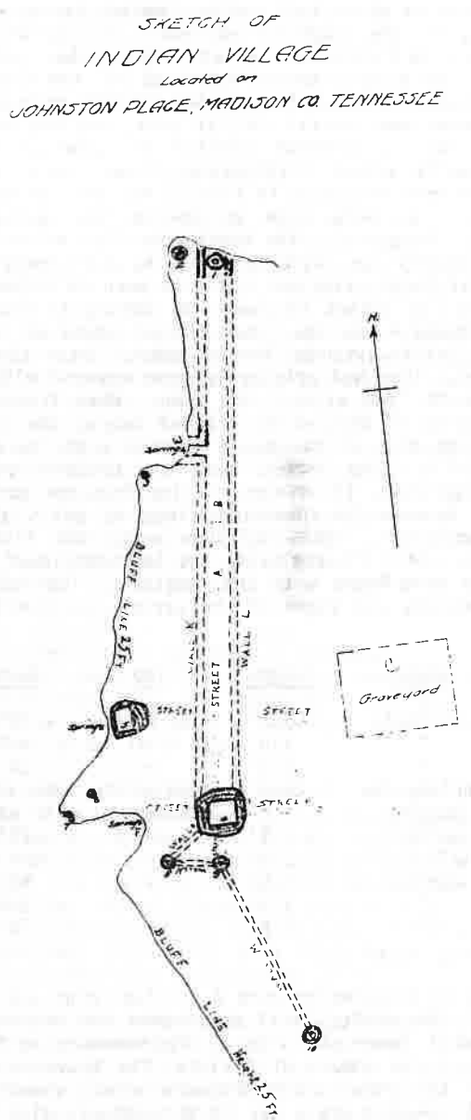

Figure 2. William Myer's map of the Johnston site.

The remains of an ancient Indian town are found on the lands of W.C. Johnston, on the highland adjoining Forked Deer River at Hart's Bridge across Forked Deer River, eight miles southeast of Jackson, and two and a half miles northwest of the City of Cisco (i.e., Pinson Mounds - ed.). The remains of this town consist of two very large mounds and several smaller ones, and the remains of some long parallel walls, somewhat similar to some of the elaborate low earthen-walls around Chillicothe, Ohio. Here, as at the City of Cisco, we were fortunate in finding men who had known the site 40 to 60 years. We were able to locate the destroyed portion with accuracy. Originally, the nearly parallel walls K, L extended from Mound 4 nearly due north to Mound 1, a distance of 2,200 feet. A portion of these walls can still be seen on either side of Mound 1. Wall K had an offset to reach the spring at the Forked Deer swamp bluff. Mound 4 was the great central mound of the town. From its cardinal points extended four streets. These streets were about 20 feet wide. They had originally been covered with a layer of white clay brought from without the town. When freshly plowed the soil shows traces of this white colored clay. The street running from the western edge of the mound reached a spring on the Forked Deer swamp bluffs. The street from the southern portion of Mound 4 reached Mound 6. The street running from the north edge of Mound 4 extended between the parallel lines of walls until it reached a square enclosure. The enclosure marks the site of some ancient buildings. At right angles to the last mentioned street was another extending from Mound 5 to the cemetery. The following table gives the dimensions and shape of the various earthworks in the Johnston group:

No.	Shape	Height	Top	Base	Volume
1	conical	7.5'	-	70'	475 yd.^{3}
2	"	2.0'	-	60'	93 yd.^{3}
3	"	2.5'	-	34'	37 yd.^{3}
4	rectangular	20.0'	100'x100'	200'x200'	18,518 yd.^{3}
5	polygon	9.6'	60'x90'	140'x155'	4,818 yd.^{3}
6	conical	2.5'	-	20'	12 yd.^{3}
7	half oval	2.5'	-	15'x35'	16 yd.^{3}
8	conical	2.5'	-	65'	136 yd.^{3}
9	"	1.5'	-	65'	82 yd.^{3}
10	"	2.5'	-	70'	158 yd.^{3}

The walls or breastworks were 2 1/2 feet high and 10 feet across the base when the whites first discovered the ancient town. They are now somewhat lower and wider. The cemetery at this place has not yielded a large amount of relics. The graves are not stone slab. In one of the graves an earthenware vessel shaped like a squash was found. In another grave was found a pottery pipe about 3 1/2 inches in length, with a human head bowl. The surface of this old town, like that at the City of Cisco, is remarkably bare of artifacts.

The surface finds by the author on this site include one gray flint implement 6 1/2 inches long, one beveled spearpoint of red jasper (probably from the chert deposits near Pickwick Dam - ed.), one arrowhead of gray flint, and two weather-worn fragments of pottery. The local people report finding only a few relics on this site (Myer n.d.).

Recent Investigations

A number of the features recorded by Myer are no longer visible and, since it is now known that a number of alleged mounds and embankments identified by him at Pinson Mounds are actually natural landforms (Mainfort [ed.] 1980, n.d.a.; Myer 1922), there is good reason to question the existence of some of the alleged earthworks at the Johnston site. Only Mounds 1, 4, and 5 can be confirmed as prehistoric earthworks and there are no traces of the "streets" or elaborate embankments shown on Myer's map (Figure 2). Nonetheless, it is possible that the parallel embankments shown between Mounds 1 and 4 were of aboriginal construction, since they were described by Haywood (1959) in the 1820s (although their length is stated to be over twice that given by Myer). However, Myer (n.d.) quoted Haywood's description in its entirety, raising the possibility that he simply convinced himself that the embankments described by Haywood were real. It is also important to note that, even in the 1820s, the alleged embankments stood only about two feet high, with a width of 10 feet (Haywood 1959:160-161), which would make them much less substantial than the geometric embankments in Ohio and the circular enclosure at Pinson Mounds. Clearly, this is a problem that warrants test excavations.

The existence of a prehistoric cemetery at the Johnston site has not been confirmed, but here there seems little reason to question Myer. The two artifacts from the cemetery that are mentioned by Myer sound vaguely Mississippian, but could easily have been of Woodland origin and the fact that the graves were "not stone slab" is of note.

Even if the three extant mounds represent all of the prehistoric earthworks, the Johnston site is nonetheless a very large and impressive site. The smallest of the earthworks, Mound 1, is a small conical mound constructed on the edge of a bluff approximately 10 m high that overlooks a small, unnamed creek that passes through the bluff and enters the Forked Deer River bottoms at the north end of the site. Mound 1 presently stands about 2 m tall, with a diameter of perhaps 15 m. The center has clearly been disturbed, but there is no record of the excavation; presumably this disturbance post-dates Myer's visit to the site, as his notes make no reference to it.

Mound 4 is a large platform mound measuring approximately 6 m in height, that is located about 550 m south of Mound 1. The base is essentially square in outline, with sides about 60 m long, while the level top measures about 30 m on each side. Containing approximately 16,200 m^3 of earth, this structure is larger than most of the earthworks at the Pinson Mounds site, the only exceptions being Mounds 5 and 9 (see Mainfort n.d.a.). Interestingly, Mound 4 is oriented at about 5° east of magnetic north, as is the somewhat smaller

Mound 29 in the Pinson group. Although the historical records cited earlier suggest that this earthwork served as the base for a house in the 1820s, no early nineteenth century artifacts have been observed on the surface. Mound 4 seems to have suffered little damage over the years, although the present landowner informed the authors that he once made a small backhoe cut into one side out of curiosity.

The final extant earthwork is Mound 5, which was reported by Myer as being a flat-topped, polygonal structure about 3 m tall, 42 m by 47 m at the base, and 18 m by 27 m on the top. Although somewhat reduced by plowing, Mound 5 appears to be substantially intact and was probably a rectangular platform mound. Again, there are no surface indications of an early nineteenth century residence on top of this earthwork.

Myer's observation regarding a paucity of artifacts visible on the surface of the Johnston site has been confirmed by the authors during several visits to the site and it is important to note that artifacts are also fairly sparse at Pinson Mounds. Although the precise extent of the associated habitation area(s) has not been defined, the total area of the site is certainly no less than 30 ha. Much of the site is in pasture and the bulk of the artifacts collected have been obtained from garden plots adjacent to the landowner's house, which is located approximately 200 m south of Mound 1, near "E" on Figure 2.

The ceramics from the Johnston site are virtually identical to those recovered from Pinson Mounds. Sand tempered wares, which are characteristic of the Middle Woodland period in west Tennessee (Smith 1979), comprise approximately 84 percent of the sherds available for analysis, with the remainder being of mixed sand and clay tempered paste (i.e., var. Tishomingo). In Middle Woodland assemblages from the Forked Deer drainage, var. Tishomingo sherds are consistently associated with sand tempered types and the inclusion of minor amounts of clay temper does not appear to have temporal significance (see Mainfort n.d.b.). Importantly, no shell or grog tempered sherds are represented in the collections. Surface erosion precluded typological attribution to over 70 percent of the ceramic sample, although it can be assumed that the bulk of the eroded sherds were plain surfaced. Among the identifiable ceramics, Furrs Cord Marked was the dominant type (57 percent), followed by Baldwin Plain (22 percent), Saltillo Fabric Impressed (13 percent), and Baytown Plain var. Tishomingo (9 percent). These percentages are roughly comparable to type frequencies at the Pinson Mounds site, although fabric marked ceramics seem to be slightly more prominent in the collections from the Johnston site.

Seven identifiable projectile points have been recovered during surveys of the site, of which at least three can be classed as Pickwick (Cambron and Hulse 1975:103). These exhibit straight bases, contracting hafts, straight tapered shoulders, and straight to recurvate blades (Figure 3, upper row, center and right; lower row, right). Characteristic expanded barbs are prominent on the two smaller examples, one of which exhibits extensive fine bifacial secondary flaking along the blade edges. Lengths range from 54 to 60 mm, widths from 29 to 31 mm, and thicknesses from 8.6 to 14 mm. Made on a

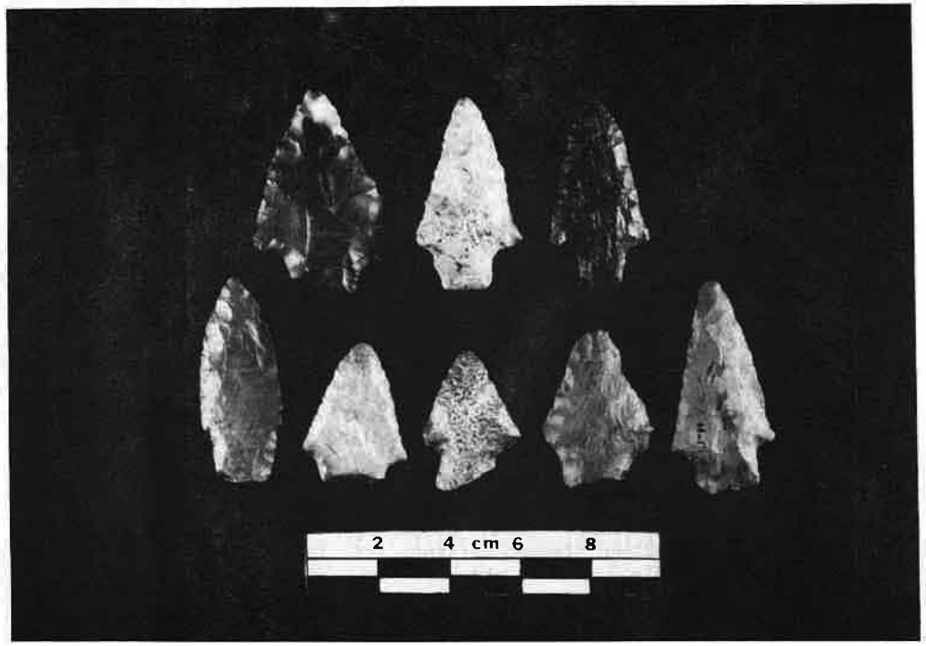

Figure 3. Projectile points from the Johnston site.

flake of heat treated Fort Payne chert, a fourth probable Pickwick variant has been extensively reworked (Figure 3, lower row, second from left), but is technologically similar to the point illustrated in Figure 3, upper row, right; additional secondary flaking is present on the base. Extensive bifacial secondary flaking is evident on the blade edges of the Adena Narrow Stemmed variant (Cambron and Hulse 1975:3; see also Futato 1977:83); this specimen was made on a piece of gray Fort Payne chert and the base has been broken. The small expanded stemmed point (Figure 3, lower row, center) was made from a thermally altered flake of the same material used for one of the Pickwick variants; although the base has been damaged, this example can be identified as a Bakers Creek (Cambron and Hulse 1975:8). A flake of heat treated Fort Payne chert from the Pickwick dam area was used to produce the broad-bladed, stemmed point illustrated in Figure 3, upper row, left, which may be a variant of the type Cotaco Creek (Cambron and Hulse 1975:33); massive angular expanding flakes were removed during primary flaking and secondary flaking is present on only one blade edge. The remaining illustrated specimen was manufactured from gray nodular chert of unknown origin and appears to be a damaged and/or extensively reworked contracting stemmed point.

A number of non-diagnostic distal, midsection, and reworked basal fragments were also recovered; several incurvate bases may represent Early Archaic forms. Also included in the collections is a quantity of lithic debitage, consisting primarily of flakes of Fort Payne chert, some of which showed signs of thermal alteration; heat treated Fort Payne chert is also prominent in the collections from Pinson Mounds. Several ground ferruginous siltstone artifacts were collected, included a grooved "net sinker," a drilled pendant fragment, and an unfinished celt or axe. Siltstone is readily available in many parts of west Tennessee and seems to have been most intensively utilized during the Middle Woodland period.

Although the number of diagnostic lithic specimens is small and cannot be considered to be a representative sample, the Johnston site material differs markedly from the Pinson Mounds assemblage. The latter is dominated by typical Middle Woodland stemmed variants (cf. Ensor 1981), while many of the Johnston site points are more characteristic of the Late Archaic. That the Johnston site includes a significant Late Archaic component cannot presently be ruled out.

Concluding Remarks

The Johnston site represents one of a small, but growing, class of Middle Woodland ceremonial sites in the Midsouth that contain large platform mounds. Other examples include Pinson Mounds, which is located only several kilometers to the southeast, the Ingomar mound group in northeastern Mississippi (Rafferty 1983), and the Ames Plantation mounds near Grand Junction, Tennessee (see Peterson 1979). Low artifact densities are characteristic of all of these sites, implying that they were occupied only on ceremonial occasions and did not support a resident population. Evidence from Pinson Mounds 5 and 10 (Mainfort, Broster, and Johnson 1982; Mainfort n.d.a.) indicates that structures were not present on the summits of Middle Woodland platform mounds

and that, although formally similar to later Mississippian structures, these earthworks differed markedly in function from their later counterparts.

While it seems virtually certain that some of the same social groups that participated in the construction of the large earthworks at Pinson Mounds were also responsible for the mounds at the Johnston site, it is unlikely that these two large sites, which are located only several kilometers apart, were contemporary. The lithic assemblage from the Johnston site may argue for an earlier temporal placement, but it seems likely that the projectile points are not contemporary with the construction of the earthworks. Fabric marked ceramics occur in a slightly greater frequency at the Johnston site than at Pinson Mounds, a second line of evidence favoring the temporal priority of the former. However, the Johnston site assemblage is relatively small (several hundred sherds) and the apparent difference could be a function of sampling error.

The established chronological sequence for Pinson Mounds provides what may be the best available evidence for the relative ages of the sites. This series of dates suggests that the major mounds in the Pinson group were constructed between approximately 50 B.C. and A.D. 150, while those demonstrably constructed later are of much smaller size, indicating the participation of relatively small, local social groups (Mainfort n.d.a.). Since Mound 4 at the Johnston site, which contains over 16,000 m^3 of earth, is larger than most of the earthworks at Pinson Mounds, it seems reasonable to assume that a structure of such magnitude required a work force and degree of organization that was not available in the Forked Deer drainage after about A.D. 200. This, in turn, suggests that the Johnston site was constructed prior to Pinson Mounds, probably during the first century B.C.

Acknowledgements

Mr. Harbert Alexander, of Jackson, Tennessee, generously loaned his collection of lithics from the Johnston site to the authors for study. Gerald Smith made available the surface collections housed at the C.H. Nash Museum, Memphis, Tennessee. Sam Smith, Tennessee Division of Archaeology, supplied materials from William Myer's unpublished "Stone Age Man in the Middle South." Additional research assistance was provided by Parris Stripling. An earlier version of this paper was presented at the 5th Mid-South Archaeological Conference, Pinson, Tennessee.

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