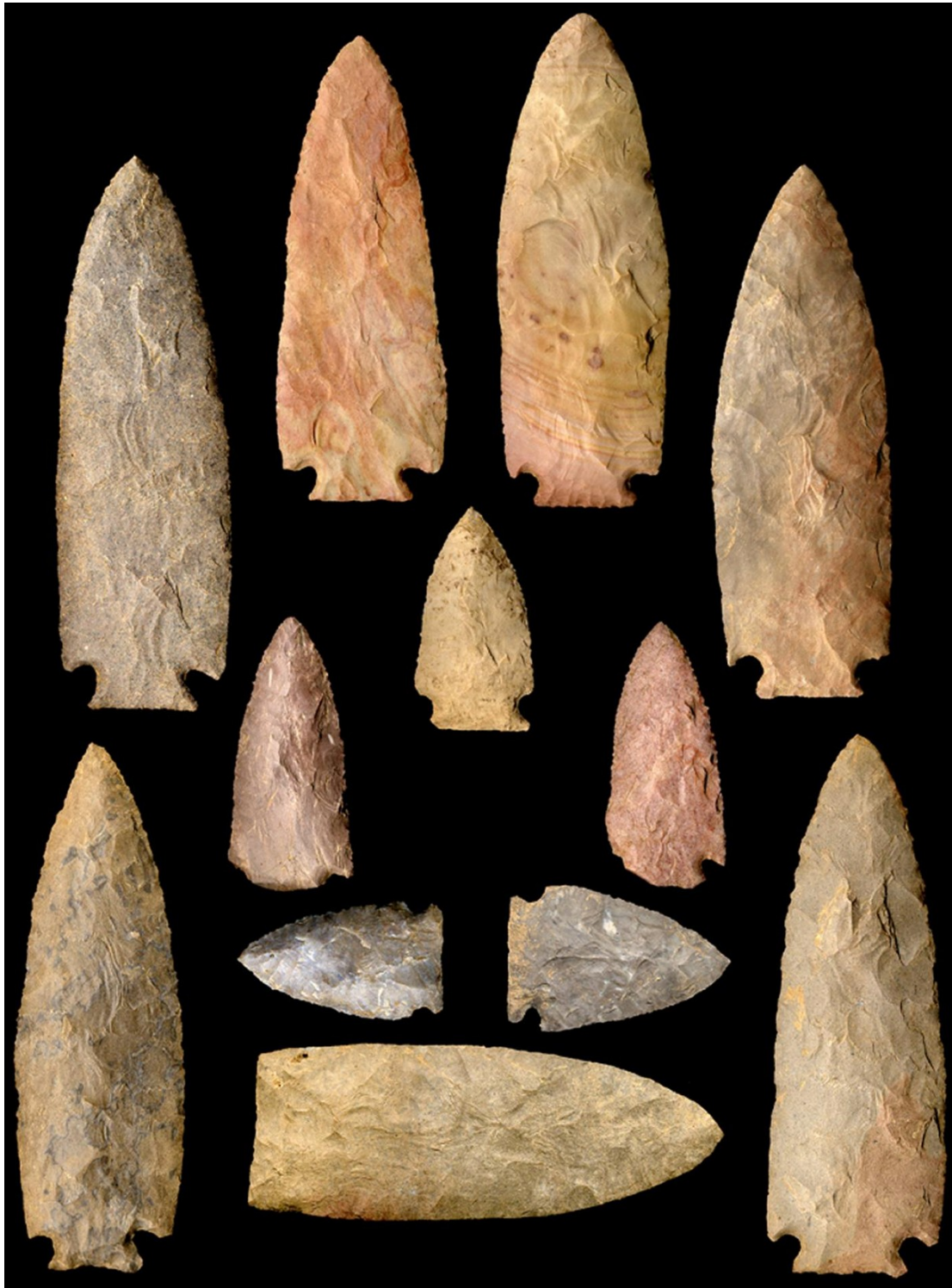


TENNESSEE ARCHAEOLOGY

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On the Cover: Cached Bifaces from Burial 32 at Ensworth, Courtesy Aaron Deter-Wolf

INTRODUCING *TENNESSEE ARCHAEOLOGY*

Welcome to the first issue of *Tennessee Archaeology*, a peer-reviewed journal designed to present free and easily accessed material relevant to archaeological research in the State of Tennessee. The need for this new journal as a publication outlet emerged during discussions involving a variety of constituents at the 2003 and 2004 annual meetings on Current Research in Tennessee Archaeology in Nashville.

With assistance from our friends, associates, colleagues, and other interested persons across the state (and beyond), we proceeded very quickly since January 2004 to solicit articles, complete the peer-review process and technical editing, incorporate suggested revisions, and finalize galley proofs while simultaneously creating a "format" for the new journal. We cannot express enough appreciation for the cooperation and assistance of the reviewers and authors in working with us on an "expedited process" to meet our summer deadline for Volume 1, Issue 1. With their help, the articles in this issue were reviewed, revised, edited and ready for publication in days and weeks instead of months.

Tennessee Archaeology is neither designed nor presented as an electronic journal – we are not taking advantage of hyperlinks and other "special" capabilities of the Internet. Instead, we are experimenting with a "print journal published in electronic format." While many valid criticisms exist for publishing a print journal "only" in electronic format, there are also many advantages to our "experiment." Perhaps most significant from a cost-benefit analysis -- the time and money needed to advertise, attract, and manage paid subscribers; print, package and mail hard copies; and keep up with many of the government filing requirements are obviated by this approach. Another equally significant benefit is the potential exposure for the journal and citation of articles – as a journal provided free-of-charge on-line, *Tennessee Archaeology* has the potential to reach a much wider state, regional, national and even international audience than most existing state archaeology journals. We plan to actively promote the "on-line" journal to libraries as an addition to their "electronic journal databases." A final advantage of this format is that we can include more figures and tables than we could afford to "publish" in hard-copy – and we can use high resolution full-color images.

At the same time, we also recognize the disadvantages to our current experiment. Digital formats – including the Adobe Portable Document file format used for current production – are changing and not "archival." We will print and bind a limited number of hard-copies and distribute them to archaeology repositories in Tennessee. In addition, although we have a long-term commitment, the "web location" cannot be guaranteed as permanent – we will distribute electronic copies on CD in several formats to those repositories as well.

Our special thanks to our employers at the Division of Archaeology, Tennessee Department of Environment and Conservation and the Department of Sociology and Anthropology, Middle Tennessee State University for supporting our time to help create this much needed publication venue for Tennessee archaeology. Finally, we thank the Tennessee Council for Professional Archaeology for providing the institutional "base" for this publication.

Kevin E. Smith and Michael C. Moore, Editorial Coordinators

THE SOGOM SITE (40DV68): A MISSISSIPPIAN FARMSTEAD ON COCKRILL BEND, DAVIDSON COUNTY, TENNESSEE

Mark R. Norton and John B. Broster

Archaeological excavations for a new state prison in Davidson County uncovered a Mississippian farmstead at the Sogom site (40Dv68). A refuse-filled pit with shell-tempered plain and cordmarked ceramics near the Mississippian structure yielded a corrected radiocarbon date of cal A.D. 1033-1160. This date places the Mississippian occupation at 40Dv68 within the Dowd phase (A.D. 1050-1250).

Also exposed during the limited investigations were features dating to earlier Archaic and Woodland occupations. These features include a refuse-filled pit with an uncorrected date of 6590 +/- 90 B.P., and a semi-flexed pit burial with an uncorrected date of 1250 +/- B.P.

This report presents the results of salvage excavations conducted by the Tennessee Division of Archaeology at the Sogom site (40Dv68) in western Davidson County during the spring of 1990 (Figure 1). In early 1990, the Tennessee Department of Corrections notified the Division of proposed plans for expansion of the state prison complex on Cockrill Bend, a major bend of the Cumberland River west of Nashville. The proposed "Special Needs" prison facility for sex offenders encompassed an extensive tract of land containing four archaeological sites (40Dv64, 40Dv65, 40Dv67, and 40Dv68) identified during prior reconnaissance level surveys (Butler 1977).

The Division of Archaeology initiated a program of investigation in March 1990 to determine the extent and integrity of these four sites. All versions of the preliminary construction plans involved the destruction of sites 40Dv64, 40Dv65 and 40Dv67, with some alternatives involving direct impacts on 40Dv68 (see Figure 1). As a result, initial testing efforts were oriented towards the former three sites. Subsequent to determination that these three sites were heavily deflated, the focus of the project shifted to 40Dv68.

Backhoe trenches excavated at 40Dv68 revealed intact subsurface fea-

tures. Several strip blocks were under active investigation when construction engineers informed the Division that final plans involved no additional construction impact to 40Dv68. At that time, excavation units in progress were completed and stripped areas not yet investigated were back-filled and sown with grass to preserve the remaining deposits.

Site Setting

Cockrill Bend, extending from the junction of Richland Creek (ca. CRM 175.7) to a point opposite the confluence of Whites Creek (ca. CRM 182.7), includes approximately 2900 acres within an entrenched meander loop of the Cumberland River in western Davidson County (Butler 1977). The bend and surrounding area falls within the Central Basin physiographic region, an elliptical elevated depression within the surrounding Highland Rim (Miller 1974:5).

The Cockrill Bend terrain represents a fairly typical cross-section of landforms found along the Cumberland River within the Central Basin. The central and southern portions of the bend include a series of gently sloping hills averaging between 500 and 560 feet AMSL, while the northern portion of the bend includes a broad

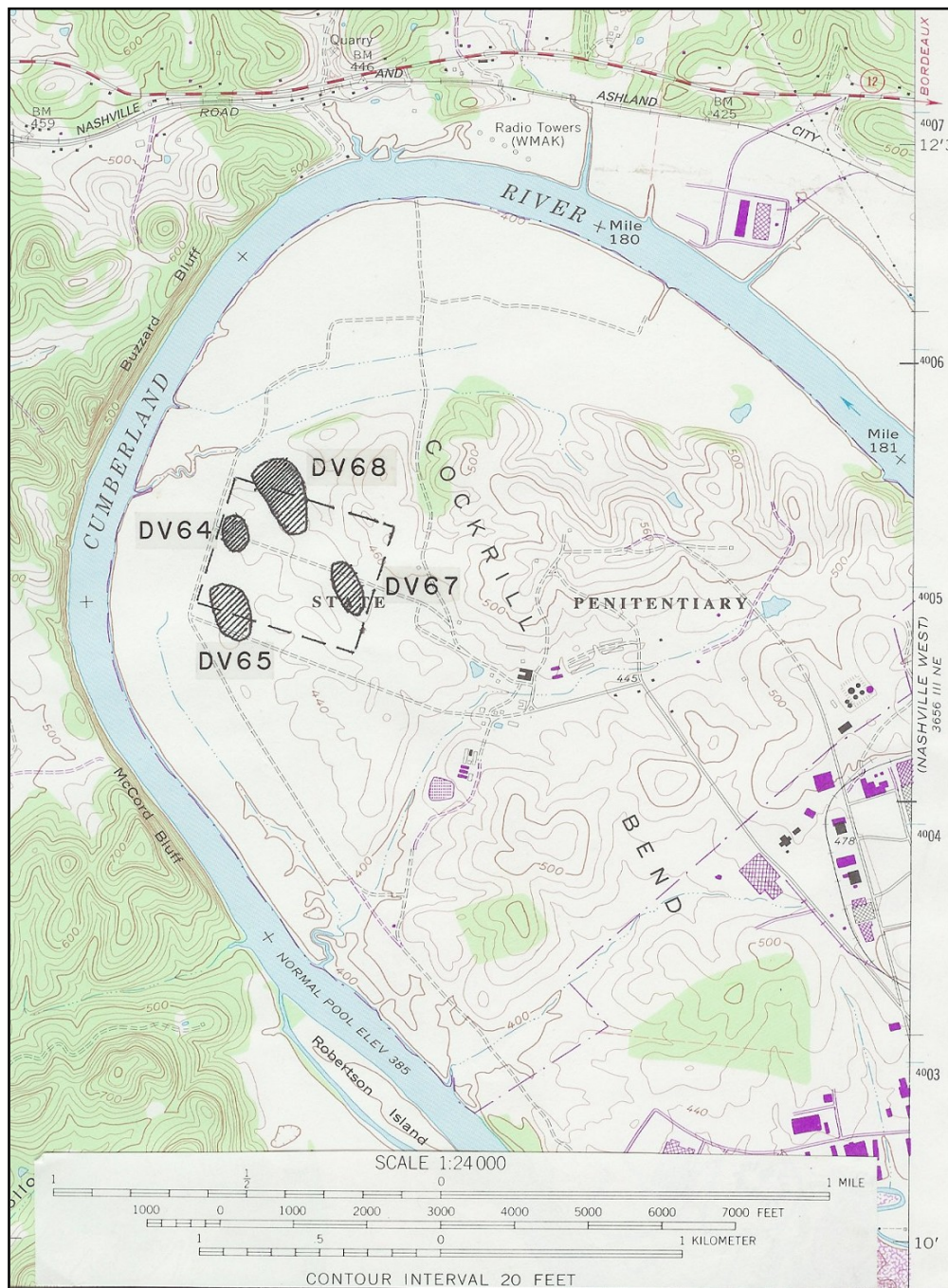


FIGURE 1. Topographic map location of 40DV68 (USGS 7.5' Series 308 NE).

alluvial terrace and an active river floodplain ranging between 400 and 450 feet AMSL. The study area occurs on the northwestern portion of the bend, and includes a series of low rolling slopes which

gradually descend from about 450 feet AMSL to the floodplain (Butler 1977).

Site 40Dv68 is located on a projecting point of the first terrace approximately 400 meters from the Cumberland River (see



FIGURE 2. Strip block showing Structure 1 and associated features (view southwest).

Figure 1). Previous surveys recorded an approximate 150 meter by 60 meter area containing a moderate scatter of lithic materials. Artifacts recovered during the 1977 survey included one corner-notched projectile point, one shallow side-notched projectile point, a biface, and 40 pieces of debitage.

Additional examination of the area in 1990 under better visibility conditions expanded the site boundaries to an approximate 300 meter by 100 meter area. Impending construction deadlines and the relatively large size of the site prompted the use of backhoe trenches to permit the rapid assessment of the horizontal site limits. Profiles indicated a consistent 20-25 cm thick plowzone composed of brownish organic silt overlying a sterile, brownish-orange, silty clay subsoil. No intact midden deposits were observed. Backhoe trenches and subsequent strip-

block excavations did uncover 33 cultural features (Figures 2-3).

Feature Descriptions

A total of 57 potential features were exposed within the excavated areas. Thirty-three of these were determined to be cultural features, including 21 pits, one human burial, and one domestic structure. Basic information on these cultural features has been summarized in Tables 1 and 2.

Pits

Two pit features exposed during the 40Dv68 investigations deserve additional discussion. Feature 14, a circular pit defined in Strip Block 2, was stratified with an upper and lower zone. The upper level (ca. 32 cm thick) was composed of a

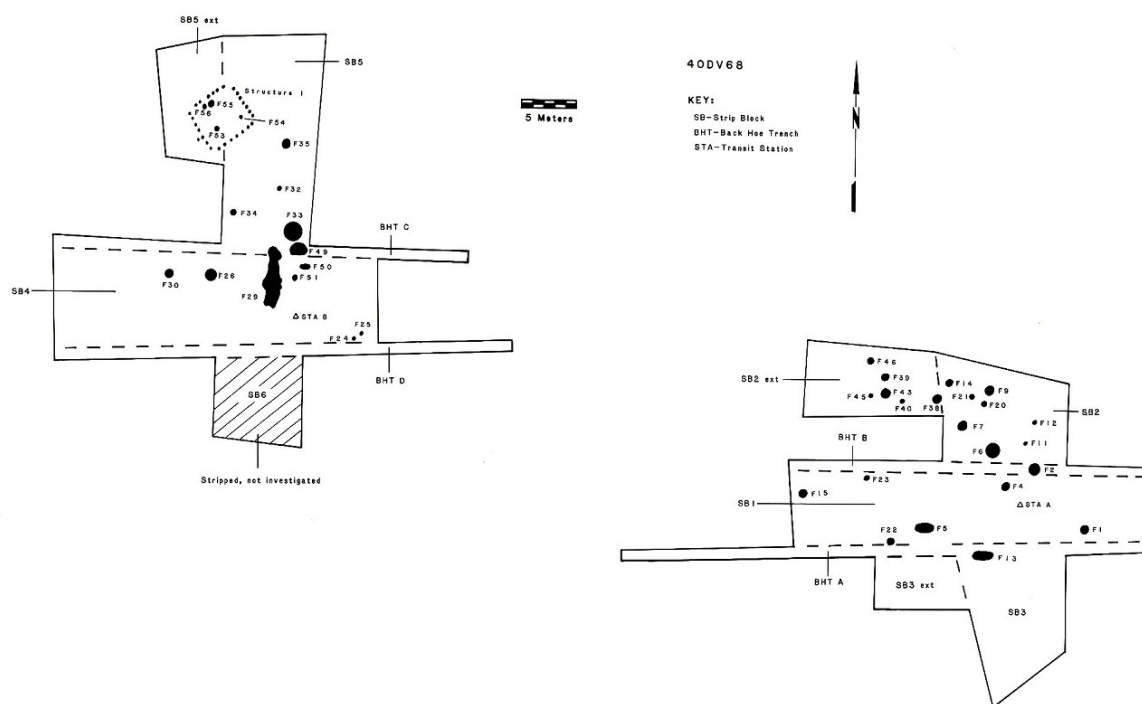


FIGURE 3. Excavation plan with exposed cultural features.

medium-dark brown, sandy loam, and contained burned bone, charcoal flecks, burned clay, charred nutshell, and a Co-taco Creek-like projectile point. A small, basin-shaped, whitish clay deposit (25 cm in diameter) was encountered in the southeastern portion of this level. The upper level graded into a lower level (ca. 19.5 cm thick) of dark brownish-black, greasy fill containing charcoal, charred nutshell, charred seeds, calcined bone,

and unburned bone. This level yielded Kirk Serrated and Kirk Corner Notched variant projectile points, along with a steatite bowl fragment. A sample of charred wood from the lower level yielded an uncorrected radiocarbon date of 6590 ± 90 B.P. (Tx-7002).

Feature 33 comprised a large, partially stratified, circular to ovate pit found in Strip Block 5. This stratification suggests multiple episodes of deposition (Figures 4-6). Stratum 1 (ranging from 8-20 cm in thickness) consisted of a medium-dark brown silty loam interspersed with charred wood fragments. This feature had a large quantity of shell-tempered ceramics along with moderate

TABLE 1. Summary List of Postholes (excluding the structure).

Feature	Provenance	Plan View	Dimensions	Profile	Origin (meters AMSL)	Depth (cm)
10	Strip Blk 2	Irregular	40 x 36 cm	Irregular to conical	132.11	29.0
11	Strip Blk 2	Irregular	16 x 14 cm	Irregular to conical	132.30	18.0
12	Strip Blk 2	Circular	18 x 17 cm	Conical	132.27	26.0
24	Strip Blk 4	Circular	25 x 25 cm	Constricted base	130.96	11.5
25	Strip Blk 4	Oval	23 x 16 cm	Constricted base	130.93	8.0
32	Strip Blk 5	Circular	34 x 32 cm	Conical	130.46	42.0
34	Strip Blk 5	Circular	30.5 x 29 cm	Conical	130.46	35.5
51	Strip Blk 4	Circular	36 x 35 cm	Conical	130.75	45.0

TABLE 2. Summary List of Pit Features.

Feature	Provenance	Plan View	Dimensions	Profile	Origin (AMSL)	Depth (cm)
1	BHT A	Roughly circular	45 cm N-S, 48 cm E-W	Bell shaped	132.11 m	29.0
4	Str Blk 1	Slightly ovate	70 cm N-S, 61 cm E-W	Shallow	132.25 m	2.5
6	Str Blk 2	Circular	40 cm N-S, 44 cm E-W	Basin?	132.19 m	11.0
7	Str Blk 2	Roughly circular	65 cm N-S, 71 cm E-W	Shallow basin	132.29 m	10.0
9	Str Blk 2	Roughly circular	80 cm N-S, 91 cm E-W	Basin	132.26 m	35.0
13	Str Blk 3	Ovate	70 cm N-S, 176 cm E-W	Ovate	132.28 m	47.0
14	Str Blk 2	Circular	64 cm N-S, 69 cm E-W	Oval w/ flat base	132.30 m	51.5
15	Str Blk 1	Irregular	87 cm N-S, 84 cm E-W	Basin-shaped	132.47 m	21.5
20	Str Blk 2	Roughly circular	37 cm N-S, 41 cm E-W	Basin-shaped	132.31 m	13.5
21	Str Blk 2	Circular	41 cm N-S, 47 cm E-W	Basin-shaped	132.28 m	20.0
26	Str Blk 4	Circular	78 cm N-S, 72 cm E-W	Basin-shaped	130.64 m	18.0
29	Str Blk 4	Irregular	607 cm N-S, 202 cm E-W	Basin-shaped	130.70 m	17.0
30	Str Blk 4	Circular	53 cm N-S, 51 cm E-W	Basin-shaped	130.52 m	10.0
33	Str Blk 5	Circular to ovate	165 cm N-S, 131 cm E-W	Basin w/ flat base	130.54 m	48.0
35	Str Blk 5	Roughly circular	61 cm N-S, 60 cm E-W	Basin-shaped	130.32 m	12.0
37	Str Blk 4	Determined to be a portion of Feature 29.				
38	Str Blk 2	Circular	69 cm N-S, 70 cm E-W	Vertical w/ flat base	132.32 m	31.0
39	Str Blk 2	Irregular	64 cm N-S, 77 cm E-W	Basin-shaped	132.38 m	25.0
43	Str Blk 2	Roughly circular	71 cm N-S, 69 cm E-W	Straight w/ flat base	132.41 m	62.0
49	Str Blk 4	Irregular	130 cm N-S, 143 cm E-W	Overlapping pits	130.63 m	68.0
50	Str Blk 4	Oval	64 cm N-S, 98 cm E-W	Irregular basin	130.68 m	15.0
55	Str Blk 5	Irregular	64 cm N-S, 73 cm E-W	Irregular, disturbed	130.18 m	16.0

amounts of mussel shell, burned limestone, and faunal remains. Stratum 2 fill was similar to Stratum 1, but contained much heavier concentrations of mussel shell and burned limestone, and a somewhat lesser density of faunal remains. Stratum 2 also contained quantities of shell-tempered ceramics. Stratum 3 was comprised of a medium brown, highly organic, silt loam mottled with tan-orange, silty clay inclusions, and contained much lesser amounts of mussel shell and ceramics, and no burned limestone. The floor of the pit exhibited several small brown "pockets," presumably gouge marks from excavation. All feature fill (except the two liter flotation sample) was water-screened through 1/4" and 1/16" hardware mesh to maximize recovery of small faunal elements. Two bifaces, lithic debitage, a Bakers Creek-like projectile point, and 59.4 kg of (mostly burned) limestone were included in the fill. A charred wood sample from the fill yielded an uncorrected radiocarbon date of $930 \pm$

60 B.P. (Tx-6998; Table 7).

Hearth

Feature 26, exposed in Strip Block 4, was a somewhat circular feature that measured between 72 and 78 cm in diameter. The walls and base of this basin-



FIGURE 4. Feature 33 before cross-section.



FIGURE 5. Feature 33 profile after cross-section.

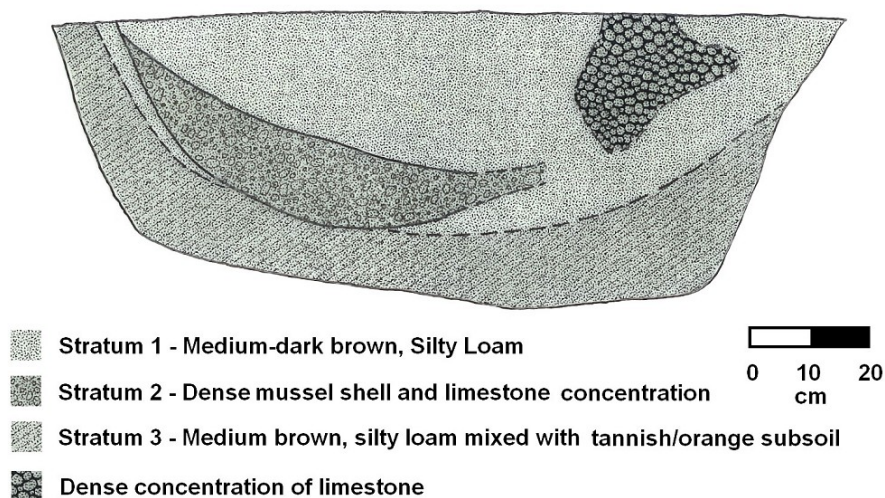


FIGURE 6. Feature 33 profile.

shaped hearth were burned.

Burial

One human burial was initially recorded in Strip Block 1 as Feature 5, a

large, ovate (123 cm by 72 cm) stain of medium brown, silty loam. The southern half of this pit was excavated first, revealing very fragmentary, poorly preserved human skeletal remains. The remainder of the feature was then removed and water-



FIGURE 7. Structure 1 after excavation.

screened through 1/4" and 1/16" hardware mesh and floated to ensure maximum recovery.

The skeletal remains in Feature 5 were removed under a court order issued by the Chancery Court of Davidson County. Following analysis, designated representatives of Tennessee's Native American community reburied the remains on July 30, 1993 at Cockrill Bend.

The burial comprised an individual in a semi-flexed position, oriented on an east-west axis with the head towards the west. Although the remains were very poorly preserved and could not be retrieved in sufficient condition for detailed evaluation, fully erupted third molars suggest a minimal age of 18 years (Bass 1971:223). Temporally sensitive artifacts within the burial pit included a cordmarked body sherd with crushed quartz temper, a plain surface body sherd with grit temper, and a small corner-notched projectile point. A

moderate amount of charred wood and nutshell fragments were also recovered from the burial pit. A sample of charred wood yielded an uncorrected radiocarbon date of 1250 ± 90 B.P (Tx-7003). Corrected date ranges (at two standard deviations) of cal A.D. 649-978 suggest the burial derives from the terminal Middle Woodland or possibly Late Woodland period.

Structure

One structure was exposed in Strip Block 5 along the northern end of the excavation (Figure 7). While presenting a readily interpretable posthole pattern, interior features generally associated with a Mississippian period structure were not observed. The building was square with rounded corners and walls measuring 5.0 meters on a side. The east, south, and west walls exhibited seven evenly spaced

TABLE 3. Ceramic Artifacts.

Provenance	Shell Temper				Quartz Cordmarked	Grit Plain	Totals
	Mississippi Plain	Bell Plain	Cordmarked	Fabric Impressed			
Burial (Feat 5)	-	-	-	-	1	1	2
Feature 29	78	5	7	1	1	-	92
Feature 33	81	4	154	48	-	-	287
Feature 37	17	-	3	4	-	-	24
Totals	176	9	164	53	2	1	405

posts, while the north wall exhibited only six. Spacing of posts suggests the possibility that entryways were situated on the north wall, perhaps at the open corners.

No evidence for an interior hearth was observed during stripping. Although this particular feature could have been completely obliterated through plowing, the presence of an exterior hearth (Feature 26) located some ten to twelve meters south of the structure in association with several isolated postholes and pits suggests another possibility. The location of potentially associated processing facilities outside the structure provides some support for the interpretation of this structure as a "summer house" or "day station" used primarily during peak agricultural seasons. The absence of cane, stick, or thatch impressed daub from the structure area suggests two primary possibilities: (a) the structure was pole-and-thatch rather than wattle-and-daub; or (b) the daub was never sufficiently dried or fired (i.e. through burning of the structure) to be preserved in the archaeological record. In general, the available data would tend to suggest the former interpretation.

Artifact Descriptions

Ceramics

A total of 405 ceramic sherds were recovered from excavations at 40Dv68, including a predominance of Mississippian period ceramics along with a very minor

representation of Woodland period ceramics (Table 3). Ceramics were initially subdivided on the basis of paste and temper, with further subdivisions based on surface treatments.

Mississippi Plain (n=176). This category includes all sherds with no exterior surface modifications, and tempered with coarse-crushed mussel shell greater than 1.0 mm in size (Phillips 1970:130-135). The ceramic paste includes varying amounts of other particles (such as grit and sand) that likely represent natural inclusions in the clay.

Bell Plain (n=9). This category contains those sherds with no evidence exterior surface modifications, and tempered with finely crushed mussel shell less than 1.0 mm in size (Phillips 1970). None of these sherds represent the bowl form exhibiting an applique notched rim strip that is considered diagnostic of the Thruston phase (A.D. 1250-1450; Smith 1992).

Shell temper, Cordmarked (n=164). These shell-tempered sherds display cordmarking on the exterior surface. The cordmarking is vertical and generally occurs along the upper body and shoulder (Figure 8). These specimens are comparable to McKee Island Cordmarked ware (Heimlich 1952).

Shell temper, Fabric Impressed (n=53). This category subsumes all sherds tempered with coarse-crushed mussel shell that exhibit fabric-impressed exterior surfaces. Rounded grit particles in the paste are likely part of the natural clay



FIGURE 8. Shell-tempered cordmarked jar from Feature 33.

matrix. The majority of these specimens can be attributed to exterior fabric-impressed jars, with the others originating from fabric-impressed pans.

Quartz temper, Cordmarked (n=2). Two quartz-tempered sherds exhibiting cordmarking on their exterior surfaces were present in the 40Dv68 assemblage. Both body sherds, including one from Feature 5 (human burial), undoubtedly derives from an earlier Woodland occupation. These specimens possibly represent a local variant of the Watts Bar Cord Marked type (Faulkner 1968; Lewis and Kneberg 1957).

Grit temper, Plain (n=1). One plain surface body sherd with grit temper was recovered from the Feature 5 (human burial) fill. This specimen is likely associated with the Woodland period.

Vessel Forms

Vessel forms and estimates of the

minimum number of vessels (MNV) have been assessed by individual feature. The methodology used to evaluate the MNV is presented in discussions of the three features to yield ceramic sherds.

Feature 29 (n=92). The majority of sherds from Feature 29 appear to have originated from globular or subglobular jars, including a minimum of three distinct vessels. Unfortunately, the sample was insufficient to reconstruct specific forms. Five sherds appear to have originated from a crude bottle exhibiting fine-crushed shell temper. Manipulatory appendages consist of a single thin flange. The only other attribute of importance noted in the sample was a single rim node. The single quartz-tempered, cordmarked sherd from the feature fill is interpreted as an intrusive item from an earlier site occupation.

Feature 33 (n=287). The Feature 33 sample, tempered with medium to coarse-crushed shell, yielded a minimum of five vessels. At least three fabric impressed

pans with thickened rims were identified. Two jars were also defined in the sample, including examples of exterior fabric-marked and exterior cordmarked vessels (see Figure 8). The manipulatory appendages associated with these two vessels include two loop handles (one riveted). These forms are representative of earlier Dowd phase (A.D. 1050-1250) occupations throughout the Middle Cumberland study area (Moore and Smith 2001; Smith 1992; Smith and Moore 1996).

Feature 37 (n=24). Feature 37, later determined to be part of (pit) Feature 29, yielded sherds representing a minimum of three vessels. One specimen with finely crushed shell almost certainly originates from an undefined bottle form. A minimum of one jar form was identified, although it appears likely that several jars are represented by the sample. Manipulatory appendages include a flattened loop handle and a single thin lug. Although the combination of paired loop handles and paired single lugs is unusual for the region, the possibility of their co-occurrence on a single vessel cannot be ruled out. Also, three body sherds exhibit cordmarking on the shoulder or body and two exhibit (probable) fabric-impressions. Their presence is supportive of the general use of shoulder cordmarked and fabric-impressed vessels in the overall site assemblage. At least one fabric-impressed pan is represented in the sample in the form of two rim sherds. Although the small size of these two sherds prevents any substantive interpretations, fabric-impressed pans were apparently a necessary component in the vessel assemblage even at the farmstead level.

Faunal Remains

The 1990 work at 40Dv68 yielded 3961 bone and shell specimens from 16

feature contexts (Tables 4 and 5). The vast majority (>97%) of remains derived from Feature 33, a Mississippian period pit located to the southeast of the structure. Of primary interest is the overall diversity of the faunal assemblage represented in a single Mississippian trash pit. This deposit presumably originated from a single-family Mississippian farmstead over a relatively short period of time. The assemblage from Feature 33 essentially underlines the fact that Mississippian families were exploiting numerous animal resources. The variety of exploited species also adds some insights into the diversity of microenvironments represented on Cockrill Bend during the Mississippian period. In concert with limited faunal samples from Sandbar Village (40Dv36), a Mississippian hamlet or small village located approximately one mile to the north (Smith and Moore 2000), the Feature 33 assemblage indicates that Mississippian populations on Cockrill Bend were extracting fauna from the Cumberland River proper, floodplain bottomlands, swampy backwater sloughs located primarily on the northern portion of the bend, terrace forest areas, and the upland forests located in the central and southern portions of the bend.

The 40Dv68 assemblage is supportive of general models of Mississippian bone tool use. Bone tools and manufacturing residue recovered from Feature 33 include fish hooks, fish hook manufacturing residue, and a bone awl.

Six possible shell artifacts were recovered during the excavations. Two freshwater mussel species, the three-ridge (*Amblema plicata*; n=4) and mucket (*Actinonaias carinata*; n=2) display a circular hole in the center. Several of these artifacts exhibit a series of small, semi-circular indentations around the hole that appear to be the result of successive drill-

TABLE 4a. Vertebrate Faunal Remains.

Species	Count	MNI	Burn	Cut	Mod	Features									
						5	6	8	14	26	29	30			
MAMMALS															
<i>Odocoileus virginianus</i> , White-tailed deer	43	2	8	2	2	1	-	-	-	5	-	2	-	-	
<i>Mephitis mephitis</i> , Striped skunk	6	1	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Procyon lotor</i> , Raccoon	6	2	2	-	-	-	-	-	-	-	-	-	-	-	
<i>Ursus americanus</i> , Bear	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Glaucomys volans</i> , Flying squirrel	1	1	1	-	-	-	-	-	-	-	-	-	-	-	
<i>Sciurus carolinensis</i> , Squirrel	16	2	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Sciurus</i> spp., Squirrel species	8	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Sylvilagus floridanus</i> , Cottontail rabbit	25	2	7	-	-	-	-	-	-	-	-	-	-	-	
<i>Scalopus aquaticus</i> , Common mole	1	1	1	-	-	-	-	-	-	-	-	-	-	-	
<i>Blarina brevicauda</i> , Shrew	1	1	1	-	-	-	-	-	-	-	-	-	-	-	
<i>Didelphis marsupialis</i> , Opossum	3	1	-	-	-	-	-	-	-	1	-	-	-	-	
BIRDS															
Passerine spp., Perching birds	75	10	18	-	-	-	-	-	-	-	-	-	-	-	
<i>Philohela minor</i> , Woodcock	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Meleagris gallopavo</i> , Wild turkey	22	3	3	-	1	-	-	-	-	2	-	-	-	-	
<i>Colinus virginianus</i> , Bobwhite quail	4	2	1	-	-	-	-	-	-	-	-	-	-	-	
<i>Buteo jamaicensis</i> , Hawk	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
Teal spp.	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Anas platyrhynchos</i> , Mallard	5	1	-	-	-	-	-	-	-	-	-	-	-	-	
Mallard/Black duck spp.	4	2	-	-	-	-	-	-	-	-	-	-	-	-	
Duck spp.	20	2	1	-	-	-	-	-	-	-	-	-	-	-	
<i>Branta canadensis</i> , Canada goose	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Ardea herodias</i> , Great blue heron	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
REPTILES															
<i>Trionyx spiniferus</i> , Softshell turtle	2	1	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Chrysemys/Graptemys</i> spp.	2	1	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Terrapene carolina</i> , Box turtle	23	3	-	-	-	-	-	-	-	-	-	1	-	-	
<i>Sternotherus odoratus</i> , Stinkpot	4	1	-	-	-	-	-	-	-	-	-	-	-	-	
Colubridae, Non-poisonous snake family	23	1	3	-	-	-	-	-	-	-	-	-	-	-	
Viperidae, Poisonous snake family	34	1	5	-	-	-	-	-	-	-	-	-	-	-	
Serpent spp.,	51	-	3	-	-	-	-	-	-	-	-	-	-	-	
AMPHIBIANS															
<i>Rana</i> spp., Frog spp.	3	2	1	-	-	-	-	-	-	-	-	-	-	-	
<i>Rana/Bufo</i> spp., Frog/Toad spp.	46	3	4	-	-	-	-	-	-	-	-	-	-	-	
Salamander spp.	5	1	-	-	-	-	-	-	-	-	-	-	-	-	
FISHES															
<i>Aplodinotus grunniens</i> , Drumfish	14	3	1	-	-	-	-	-	-	-	-	-	-	-	
Centrarchidae, Bass family	12	5	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Ictalurus punctatus</i> , Channel catfish	8	2	3	-	-	-	-	-	-	-	-	-	-	-	
<i>Ictalurus</i> spp., Catfish	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Moxostoma</i> spp., Redhorse	21	3	1	-	-	-	-	-	-	-	-	-	-	-	
Cyprinidae, Minnow	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
<i>Lepisosteus</i> spp., Garfish spp.	2	1	1	-	-	-	-	-	-	-	-	-	-	-	
Large mammal fragments	132	-	55	-	6	-	-	-	-	-	1	3	-	-	
Mammal fragments	815	-	769	-	-	-	-	-	-	-	-	-	-	-	
Small mammal fragments	46	-	5	-	-	-	-	-	-	-	-	-	-	-	
Small rodent fragments	1	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mammal/bird fragments	5	-	-	-	5	-	-	-	-	-	-	-	-	-	
Bird fragments	244	-	28	-	2	-	-	-	-	-	-	2	-	-	
Reptile fragments	43	-	5	-	-	-	-	-	-	-	-	1	-	-	
Amphibian fragments	2	-	1	-	-	-	-	-	-	-	-	-	-	-	
Fish fragments	1228	-	15	-	-	-	-	1	-	-	-	-	-	-	
Miscellaneous bone	126	-	4	-	5	-	1	-	-	-	-	-	-	-	
TOTAL	3194	68	947	2	21	1	1	1	8	1	9	1			

ing to remove the circular shell fragment. Lewis and Kneberg (1946;131) identified 161 mussel shells with roughly similar perforations at Hiwassee Island, which

they interpreted as agricultural implements or hoes. Similar artifacts fashioned from *Megaloniaias gigantea* and *Fusconaia ebenus* at the Apple Creek site in

TABLE 4b. Vertebrate faunal remains (continued).

Species	Features								
	31	33	37	38	39	47	48	49	50
MAMMALS									
<i>Odocoileus virginianus</i> , White-tailed deer	-	28	2	-	-	-	-	5	-
<i>Mephitis mephitis</i> , Striped skunk	-	6	-	-	-	-	-	-	-
<i>Procyon lotor</i> , Raccoon	-	6	-	-	-	-	-	-	-
<i>Ursus americanus</i> , Bear	-	-	1	-	-	-	-	-	-
<i>Glaucomys volans</i> , Flying squirrel	-	1	-	-	-	-	-	-	-
<i>Sciurus carolinensis</i> , Squirrel	-	13	-	-	1	-	1	1	-
<i>Sciurus</i> spp., Squirrel species	-	8	-	-	-	-	-	-	-
<i>Sylvilagus floridanus</i> , Cottontail rabbit	-	23	2	-	-	-	-	-	-
<i>Scalopus aquaticus</i> , Common mole	-	1	-	-	-	-	-	-	-
<i>Blarina brevicauda</i> , Shrew	-	1	-	-	-	-	-	-	-
<i>Didelphis marsupialis</i> , Opossum	-	2	-	-	-	-	-	-	-
BIRDS									
Passerine spp., Perching birds-	-	74	-	-	-	-	-	1	-
<i>Philohela minor</i> , Woodcock	-	1	-	-	-	-	-	-	-
<i>Meleagris gallopavo</i> , Wild turkey	-	16	-	-	3	-	1	-	1
<i>Colinus virginianus</i> , Bobwhite quail	-	4	-	-	-	-	-	-	-
<i>Buteo jamaicensis</i> , Hawk	-	1	-	-	-	-	-	-	-
Teal spp.	-	1	-	-	-	-	-	-	-
<i>Anas platyrhynchos</i> , Mallard	-	5	-	-	-	-	-	-	-
Mallard/Black duck spp.	-	2	-	-	-	-	-	-	-
Duck spp.	-	20	-	-	-	-	-	-	-
<i>Branta canadensis</i> , Canada goose	-	-	-	-	1	-	-	-	-
<i>Ardea herodias</i> , Great blue heron	-	-	-	-	1	-	-	-	-
REPTILES									
<i>Trionyx spiniferus</i> , Softshell turtle	-	-	-	-	1	-	-	-	1
<i>Chrysemys/Graptemys</i> spp.	-	2	-	-	-	-	-	-	-
<i>Terrapene carolina</i> , Box turtle	-	11	2	-	8	-	1	-	-
<i>Sternothaerus odoratus</i> , Stinkpot	-	4	-	-	-	-	-	-	-
Colubridae, Non-poisonous snake family	-	17	-	-	4	-	2	-	-
Viperidae, Poisonous snake family	-	26	3	-	1	-	4	-	-
Serpent spp.,	-	50	1	-	-	-	-	-	-
AMPHIBIANS									
<i>Rana</i> spp., Frog spp.	-	3	-	-	-	-	-	-	-
<i>Rana/Bufo</i> spp., Frog/Toad spp.	-	46	-	-	-	-	-	-	-
Salamander spp.	-	5	-	-	-	-	-	-	-
FISHES									
<i>Aplodinotus grunniens</i> , Drumfish	-	14	-	-	-	-	-	-	-
Centrarchidae, Bass family	-	12	-	-	-	-	-	-	-
<i>Ictalurus punctatus</i> , Channel catfish	-	8	-	-	-	-	-	-	-
<i>Ictalurus</i> spp., Catfish	-	1	-	-	-	-	-	-	-
<i>Moxostoma</i> spp., Redhorse	-	20	-	-	-	-	-	1	-
Cyprinidae, Minnow	-	1	-	-	-	-	-	-	-
<i>Lepisosteus</i> spp., Garfish spp.	-	2	-	-	-	-	-	-	-
Large mammal fragments	-	113	6	-	5	1	3	-	-
Mammal fragments	-	814	1	-	-	-	-	-	-
Small mammal fragments	-	45	-	-	-	-	1	-	-
Small rodent fragments	-	-	-	-	-	-	-	1	-
Mammal/bird fragments	-	5	-	-	-	-	-	-	-
Bird fragments	-	227	3	-	11	-	-	1	-
Reptile fragments	-	40	-	-	-	-	2	-	-
Amphibian fragments	-	2	-	-	-	-	-	-	-
Fish fragments	-	1226	-	-	-	-	1	-	-
Miscellaneous bone	1	121	-	1	1	-	-	-	-
TOTAL	1	3084	21	1	37	1	16	10	1

Illinois (Parmalee, Paloumpis, and Wilson 1972:5) were also determined to be hoes.

At the Lake George site, Williams and Brain (1983:282) noted that "function as a

hoe, digger, or rake has been most often suggested for these artifacts, although they have also been considered ornamental or merely problematical. Use as a hoe,

TABLE 5. Identifiable Molluscs.

Species	Count	MNI	Modified	Feature 29	Feature 33
<i>Actinonaias carinata</i>	85	47	5	3	82
<i>Amblema plicata</i>	88	45	1	-	88
<i>Cumberlandia monodonta</i>	60	30	-	-	60
<i>Cyclonaias tuberculata</i>	54	30	-	-	54
<i>Dromus dromas</i>	32	18	-	-	32
<i>Ellipito dilatatus</i>	82	43	-	-	82
<i>Ellipito crassidens</i>	10	5	-	-	10
<i>Epioblasma arcaeiformis</i>	7	4	-	-	7
<i>Epioblasma brevidens</i>	3	2	-	-	3
<i>Epioblasma haysiana</i>	2	1	-	-	2
<i>Epioblasma cf. propinqua</i>	8	4	-	-	8
<i>Fusconia subrotunda</i>	1	1	-	-	1
<i>Lampsilis ovata</i>	3	2	-	-	3
<i>Lasmigona costata</i>	1	1	-	-	1
<i>Ligumia recta</i>	1	1	-	-	1
<i>Obovaria reflexa</i>	2	2	-	-	2
<i>Obovaria subrotunda</i>	5	4	-	-	5
<i>Plagiola lineolata</i>	1	1	-	-	1
<i>Plethobasus cyphus</i>	2	1	-	-	2
<i>Plethobasis cicatricosus</i>	6	4	-	-	6
<i>Pleurobema clava</i>	20	11	-	-	20
<i>Pleurobema cordatum</i>	165	93	-	-	165
<i>Pleurobema cordatum cmplx</i>	92	47	-	-	92
<i>Ptychobranhus faciolare</i>	18	12	-	-	18
<i>Quadrula cylindrica</i>	2	1	-	-	2
<i>Quadrula pustulosa</i>	12	8	-	-	12
<i>Villosa cf. tanieta</i>	5	3	-	-	5
Indeterminate fragments	54	-	-	-	54
TOTAL	767	421	6	3	764

however, has the most currency and is further supported by an actual example found still hafted to a wooden handle in excavations at the Salts Bluff Rockshelter No. 1, Benton County, Arkansas. This specimen appears to be a short, or one-handed hoe, an identity that seems con-

sistent with the size and strength of the shell." The specimens from 40Dv68 do not show substantial use-wear, although some form of attrition can be noted on the posterior edge opposite the hinge. These artifacts could have functioned as "weeding" tools at periodic episodes during the agricultural season and discarded following use.

Botanical Remains

The 40Dv68 excavations retrieved a moderate sample of botanical remains from feature context (Table 6). Feature 14 yielded the vast majority of specimens in the form of hickory nut and black walnut shells. Feature 33 produced the only maize found during the investigations.

Lithic Artifacts

A modest total of 2441 lithic artifacts was retrieved from the 40Dv68 excavations. Flakes and angular debris com-

TABLE 6. Identified Botanical Remains.

Species	Features											Totals
	1	5	9	14	15	21	33	38	39	43	55	
WOOD/CANE CHARCOAL												
Arundinaria sp., Cane	-	1	-	1	-	-	1	-	-	2	-	5
Acer sp., Maple	-	-	-	3	-	-	-	-	1	-	-	4
Carya sp., Hickory	-	1	1	7	-	-	6	2	-	-	-	17
Diospyros virginiana, Persimmon	-	-	-	2	-	-	-	-	-	-	-	2
Fraxinus sp., Ash	-	-	-	2	-	-	4	-	-	1	-	7
Gleditsia triacanthos, Honey Locust	-	-	-	-	-	-	2	-	-	-	-	2
Juglans sp., Walnut/Butternut	-	-	-	-	-	-	2	-	-	-	-	2
Maclura pomifera, Osage Orange	-	-	-	-	-	-	3	-	-	-	-	3
Quercus sp., Oak	-	3	-	8	-	-	8	5	1	-	-	25
Ulmus sp., Elm	-	-	-	-	-	-	-	1	-	-	-	1
NUTSHELL												
Carya sp., Hickory	18	13	4	227	-	-	4	21	16	15	-	318
Juglans nigra, Black Walnut	-	1	-	171	23	-	16	-	-	1	-	212
Corylus sp., Hazelnut	-	-	-	6	-	-	-	-	-	-	-	6
SEED/FRUIT												
Diospyros virginiana, Persimmon	-	-	-	4	-	-	1	-	-	-	1	6
MAIZE												
Kernels	-	-	-	-	-	-	4	-	-	-	-	4
TUBER												
	-	-	-	1	-	3	-	-	-	15	-	19
TOTAL	18	19	5	432	23	3	51	29	18	34	1	633

TABLE 7. Radiocarbon Dates.

Sample Number	Dates BP	Calibrated Results*				Provenience
		1 Sigma		2 Sigma		
Tx-7002	6590 +/- 90	BC 5619	5573	BC 5701	5692	Feature 14 (refuse-filled pit)
		BC 5564	5476	BC 5665	5366	
Tx-7003	1250 +/- 90	AD 687	784	AD 649	978	Feature 5 (human burial)
		AD 787	878			
TX-6998	930 +/- 60	AD 1033	1160	AD 999	1222	Feature 33 (refuse-filled pit)
*CALIB REV4.4.2. Stuiver et al. 2002						

*CALIB REV4.4.2, Stuiver et al. 2002

prised the vast majority (n=2377, 97.4%) of stone items recovered from the site. No Mississippian period tools or projectile points were recovered during the 1990 work.

Radiocarbon Dates

Three carbonized wood samples from one human burial and two pit features containing temporally sensitive artifacts were submitted for radiocarbon assay (Table 7). Uncorrected dates were calibrated using the atmospheric record calibration curves in the program CALIB 4.4.2 (Stuiver et al. 2002). As shown in Table 7, the assay results yielded dates supportive of 40Dv68 site occupations ranging from the Middle Archaic to Middle/Late Woodland to Mississippian periods.

Discussion

The recorded structure does not exhibit any substantial evidence for renovation or rehabilitation. This lack of rehabilitation was also recorded at the isolated Mississippian structure at the Brandywine Pointe site, 40Dv247 (Moore and Smith 1993; Smith and Moore 1994, 1996). Oetelaar (1993) notes "it is not unreasonable to suggest a life expectancy of 10 years for pole-and-thatch structures and 20 years for wattle-and-daub buildings." Although these estimates appear somewhat

short for complete rebuilding episodes, some renovation of the structure would have been required within ten to fifteen years. Assuming the structure was not in use year-round, more substantial decay through seasonal neglect would be expected.

Making further presumptions that Features 29 and 33 are associated with the use of this structure, the artifact content would lend additional support for shorter-term occupation, and perhaps seasonality of use. The quantities of fish, frog, and turtle remains identified in Feature 33 fill, along with the general absence of charred nutshells, strongly suggests that feature disposal episodes were primarily conducted during warmer months. The presence of several fishhooks and fishhook-manufacturing residue indicates that fishing was a primary occupation of the site occupants. In addition, the presence of several modified shells generally interpreted as shell hoes in the archaeological literature indicate that some light gardening work was being conducted on the site.

The three distinct filling episodes indicated in Feature 33 can be interpreted to suggest an initial excavation and use of the feature, followed by a period of abandonment during which surrounding material infiltrated the pit (Stratum 3). Subsequent reuse of the pit as a trash disposal area appears to have taken place during at least two phases (Strata 1 and 2), pos-

sibly as the result of two distinct "cleaning" episodes.

The generally low numbers of jars represented in the sample would tend to suggest a relatively short use of the structure as well. Ethnoarchaeological studies of the use life of earthenware vessels have suggested an average use life of 1.5 to 2.2 years for cooking vessels (Lightfoot 1993:171). Larger storage vessels, represented only by the finer-paste bottle in the 40Dv68 assemblage, have a cross-cultural average use life of 5.4 years (Lightfoot 1993:171). The nature of the sample from 40Dv68 does not permit any substantial interpretations based on minimum number of vessels due to the effects of plowing and erosion. However, the general nature of the discarded assemblage would tend to support a shorter-term occupation of the site, possibly a period somewhat less than ten years. The general absence of larger storage vessels in the assemblage also supports an interpretation of the site as a seasonal use structure.

In summary, the Mississippian structure and feature complex located to the south can be interpreted as the remains of a periodically occupied warm-weather field structure, probably used over the course of less than ten years by a single nuclear family. The relatively ephemeral nature of the structure, the (apparent) absence of an interior hearth, and the absence of cane-impressed daub, all serve to support this interpretation. Faunal and floral remains recovered from the (presumably) associated feature complex to the south also tend to support these conclusions.

The overall artifact assemblage and radiocarbon date suggests a relatively early date for the use of the site area by Mississippian peoples. A ten-year occupation of the structure sometime between

circa A.D. 1000 and 1200 appears to be a reasonable interpretation.

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THE ENSWORTH SCHOOL SITE (40DV184): A MIDDLE ARCHAIC BENTON OCCUPATION ALONG THE HARPETH RIVER DRAINAGE IN MIDDLE TENNESSEE

Aaron Deter-Wolf

During the summer of 2003, TRC, Inc. conducted a burial removal project at site 40Dv184 on the grounds of the new Ensworth High School in Davidson County, Tennessee. A total of 335 prehistoric features were exposed during the search for human graves. Sixty-four of these features contained human skeletal remains. Artifacts recovered during the removal project indicate an enduring use of the site area from the Early Archaic through Mississippian periods.

Seven burials yielded Benton biface caches along with other lithic and bone artifacts. These caches along with additional Benton artifacts from non-mortuary pit features and surface collections indicate a significant site habitation at 40Dv184 during the late Middle Archaic Benton phase. Over two-thirds of the Benton specimens were manufactured from non-local lithic resources.

In June 2003, construction at the new Ensworth High School near Bellevue in southwest Davidson County uncovered a series of prehistoric human burials. These remains had been interred on an elevated river terrace containing the previously recorded archaeological site 40Dv184. The site was known to contain intact archaeological deposits and features, but no burials had been previously documented. Ensworth petitioned the Davidson County Chancery Court to remove and relocate all burials within the proposed construction zone to an adjacent portion of the school property.

Investigations by TRC, Inc. resulted in the discovery of 335 archaeological features, of which 64 were determined to contain human remains. Temporally sensitive artifacts recovered during these investigations indicate the site was occupied over a 9000-year time frame stretching from the Early Archaic through Mississippian periods. The investigation results suggest the site was intensively occupied during the later portion of the Middle Archaic period. Artifacts indicative of the Benton phase (6000–5000 B.P.) were prolific at the site, including more

than 30 finely crafted, oversized points from (primarily) burial caches.

This article discusses the Benton component at Ensworth, and places the site within the larger picture of Benton phase occupations in Tennessee and the interior southeast. The discussion first presents the 40Dv184 excavation results, focusing on the identified Benton component. Following the results presentation is a review of the Benton phase as currently reflected in the archaeological literature. And finally, information from other Benton sites in the Harpeth River drainage is presented and compared to the Ensworth site.

Excavations at the Ensworth Site

The Ensworth site is located southwest of Nashville near the intersection of Highway 100 and Old Hickory Blvd. Topographically, the site is situated at approximately 580 feet AMSL on a stream terrace overlooking the junction of the Harpeth and Little Harpeth Rivers (Figure 1). An amateur archaeologist initially recorded the site in 1982 during construction of the Devon

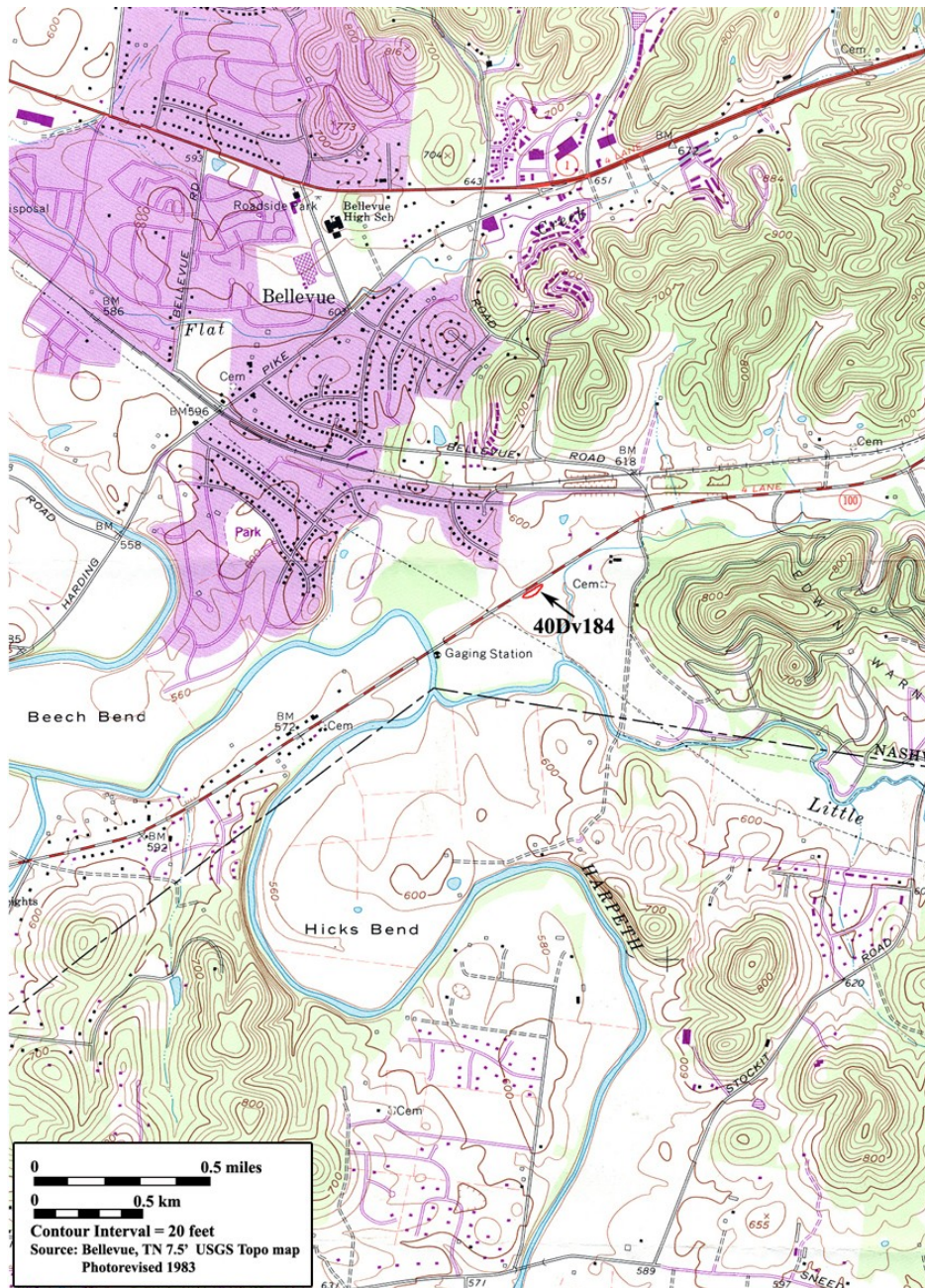


FIGURE 1. Topographic Map showing location of 40DV184.

Park residential development just northwest of Highway 100. Although more than 30 Archaic period projectile points were recovered during that construction, no subsurface features or intact deposits were noted.

In 1995, DuVall & Associates, Inc. investigated the adjacent area across (southeast) of Highway 100 during an archaeological survey for the Tennessee Department of Transportation (Anderson and Josephs 1996; Anderson et al. 1996).

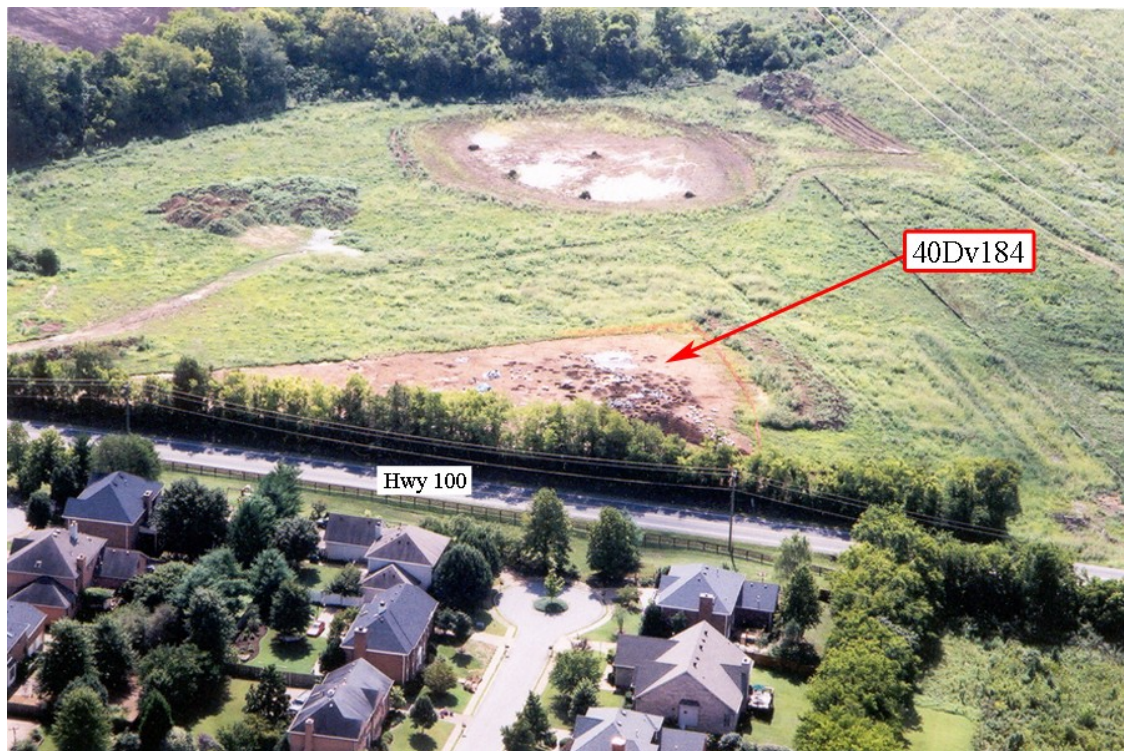


FIGURE 2. Aerial view of 40DV184 Excavations (view south).

Shovel tests along the terrace landform documented the presence of a prehistoric midden and possible intact features. The investigators recommended additional archaeological testing at the site prior to any future highway construction.

After the arrival of the new millennium, the site area southeast of Highway 100 was included within an extensive tract of land (Devon Farm) purchased for the new Ensworth High School campus. Construction of this private school required substantial earthmoving activity for a variety of academic and athletic facilities. In July 2003, grading of the 40DV184 site area was initiated in preparation of the school's tennis courts. Fortunately, a concerned citizen notified the Tennessee Division of Archaeology that grading activity was underway. Division personnel, upon arriving at the

site, observed numerous pit features containing human skeletal remains and immediately halted all grading activity.

At that time, Ensworth officials were notified of the discovery of human



FIGURE 3. Prehistoric features exposed by mechanical stripping.

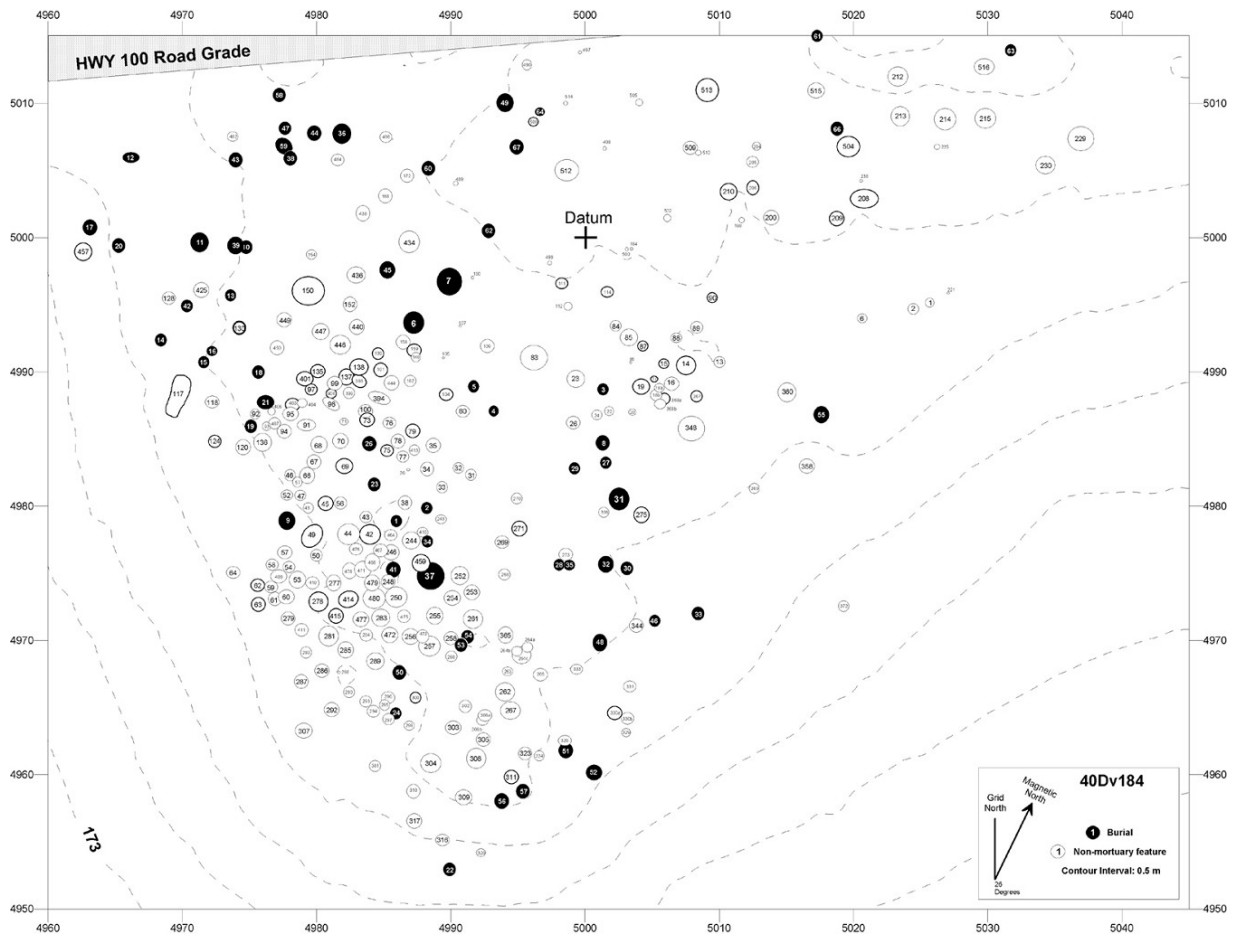


FIGURE 4. Plan map of features.

remains. Upon review of their options for the site area, Ensworth declared their intent to terminate the site area as a cemetery (Tennessee Code Annotated 46-4-101-104), and remove all human burials within the proposed project zone. Removed individuals would subsequently be reburied at a nearby location on the Ensworth property. TRC, Inc., a local archaeological consulting firm, was hired to conduct the burial identification and removal.

One unfortunate consequence of burial removal projects is that the landowner is only legally responsible for

human burials. Non-mortuary features exposed during the search for burials (such as structures and refuse-filled pits) are often destroyed with minimal investigation (Smith and Moore 1996). This lack of investigation is usually related to time. Landowners/developers are motivated to move their project forward since time is money (or loss of money). Extra time to evaluate an interesting or complicated non-mortuary feature is usually not available within a project area cleared of human remains.

The TRC burial removal project began in July 2003 with the mechanical removal

TABLE 1. Summary of Human Burials from 40DV184 (* indicates presence of cache blades).

<i>Burial</i>	<i>Age</i>	<i>Sex</i>	<i>Burial Position</i>	<i>Orientation</i>
1	24 yrs. +/- 1 yr.	male	flexed	northwest
2	adult	indeterminate	extended	northeast
3	adult	indeterminate	tightly flexed	indeterminate
4	newborn/0-6 mos.	indeterminate	possible refuse pit	indeterminate
5	adult	female	tightly flexed	south
6	40 yrs. +/- 5 yrs.	female	flexed	northeast
7	40 yrs. +/- 5 yrs.	male	tightly flexed	east
8	adult	indeterminate	indeterminate	west
9	23 yrs. +/- 2 yrs.	female	semi-flexed	south
10	25 yrs. +/- 5 yrs.	possible female	tightly flexed	west
11	14 yrs. +/- 1 yr.	possible female	semi-flexed	northeast
12	30 yrs. +/- 5 yrs.	male	tightly flexed	east
13	4 yrs. +/- 6 mos.	indeterminate	tightly flexed	south
14	6-7 yrs.	indeterminate	semi-flexed	north
15	22 yrs. +/- 2 yrs.	female	tightly flexed	southwest
16	adult	indeterminate	tightly flexed	indeterminate
17	12-15 yrs.	possible female	semi-flexed	east
18	adult	indeterminate	indeterminate	east
19	12 yrs. +/- 30 mos.	possible male	flexed	north
20	5 yrs. +/- 16 mos.	indeterminate	indeterminate	east
21	newborn +/- 2 mos.	indeterminate	refuse pit	indeterminate
22*	indeterminate	indeterminate	indeterminate	indeterminate
23	4 yrs. +/- 1 yr.	indeterminate	indeterminate	indeterminate
24	adult	indeterminate	indeterminate	indeterminate
25	same as burial 21			
26	22 yrs. +/- 2 yrs.	male	semi-flexed	east
27	indeterminate	indeterminate	indeterminate	indeterminate
28	adult	indeterminate	tightly flexed	southwest
29	indeterminate	indeterminate	indeterminate	indeterminate
30*	adult	indeterminate	indeterminate	southeast
31	adult	indeterminate	indeterminate	indeterminate
32*	adult	possible male	tightly flexed	south
33*	adult	indeterminate	indeterminate	indeterminate
34	indeterminate	indeterminate	indeterminate	indeterminate
35	adult	possible male	tightly flexed	east
36	30 yrs. +/- 5 yrs.	male	semi-flexed	east
37	20 yrs. +/- 2 yrs.	possible male	semi-flexed	southeast
38	12-18 mos.	indeterminate	indeterminate	north
39	adult	indeterminate	flexed	south
40	not a burial			
41	30 yrs. +/- 5 yrs.	female	tightly flexed	north
42	adult	possible male	tightly flexed	east
43	18 yrs. +/- 2 yrs.	female	flexed	west
44	27 yrs. +/- 3 yrs.	male	semi-flexed	east
45	indeterminate	indeterminate	indeterminate	indeterminate
46	adult	indeterminate	tightly flexed	south
47	45 yrs. +/- 10 yrs.	male	flexed	north
48	newborn +/- 6 mos.	indeterminate	refuse pit	indeterminate
49	adult	possible female	tightly flexed	east
50	3 yrs. +/- 1 yr.	indeterminate	indeterminate	indeterminate
51	adult	possible female	tightly flexed	north
52	6 mos. +/- 3 mos.	indeterminate	refuse pit	indeterminate
53*	adult	possible male	tightly flexed	south
54*	adult	male	tightly flexed	northwest
55	possible adult	indeterminate	flexed	northeast
56	adult	possible female	flexed	east
57*	adult	indeterminate	tightly flexed	southwest
58	adult	possible male	tightly flexed	southwest
59	18 yrs. +/- 2 yrs.	female	flexed	southeast
60	37 yrs. +/- 3 yrs.	female	tightly flexed	east
61	indeterminate	indeterminate	indeterminate	northwest
62	27 yrs. +/- 3 yrs.	female	flexed	southeast
63	indeterminate	indeterminate	tightly flexed	east
64	adult	indeterminate	tightly flexed	north
65	not a burial			
66	adult	indeterminate	flexed	southeast
67	adult	indeterminate	flexed	indeterminate

of approximately 5,600 square meters of disturbed (plowzone) soil to expose any preserved features (Figures 2 and 3). This

process resulted in the identification of 516 feature designations, of which 335 were subsequently revealed to be of

prehistoric origin (Figure 4). All of the feature designations were investigated by hand to determine if they contained human remains. These excavations resulted in the identification and removal of 64 human burials.

Approximately 60% of the identified individuals were sufficiently intact to allow some form of osteological analysis (Deter-Wolf et al. 2004). Analysis results provided tangible information regarding the people who inhabited the site. Table 1 offers summary information on all burials excavated during the project. This information includes sex and age determinations when feasible, as well as burial position and orientation.

Twenty-one percent (n=14) of the excavated graves contained temporally diagnostic data useful for determining a general date range associated with their creation (Figure 5). Seven burials could be conclusively assigned as Middle Archaic Benton phase based on the inclusion of finely crafted, oversized bifaces (Figures 6-11). Four of the seven Benton phase burials were interred in a tightly flexed position. The positions of the other three individuals were indeterminate. Nineteen of the remaining 57 burials (33.3%) were tightly flexed and may also date to the Middle Archaic time period (see Table 1).

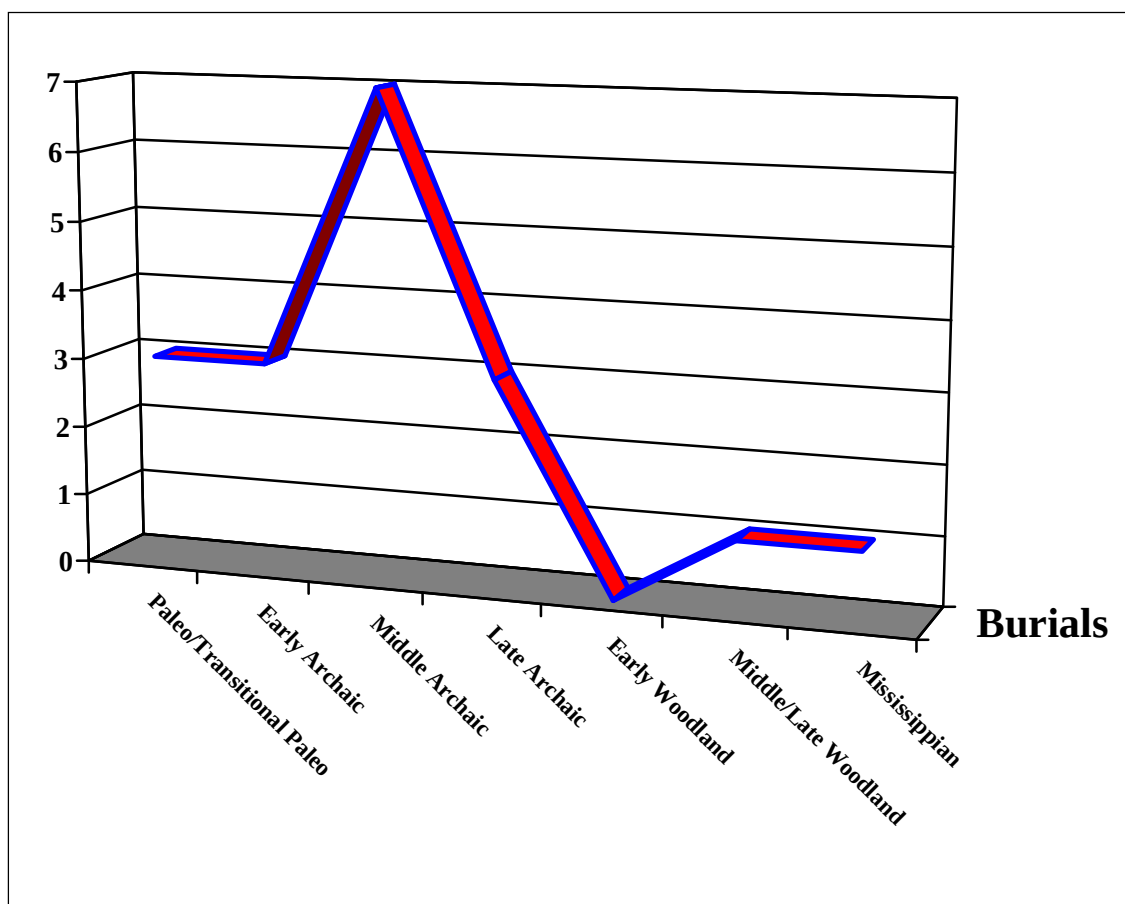


FIGURE 5. Temporally assigned burials at 40DV184.

A total of 252 non-mortuary pit features and 19 post molds was recorded during Ensworth excavations. As previously discussed, the project goal was the identification and removal of human

burials. Non-mortuary features were not subject to total artifact recovery or exhaustive hand excavation. Collections from these particular features were generally limited to ceramics, stone or

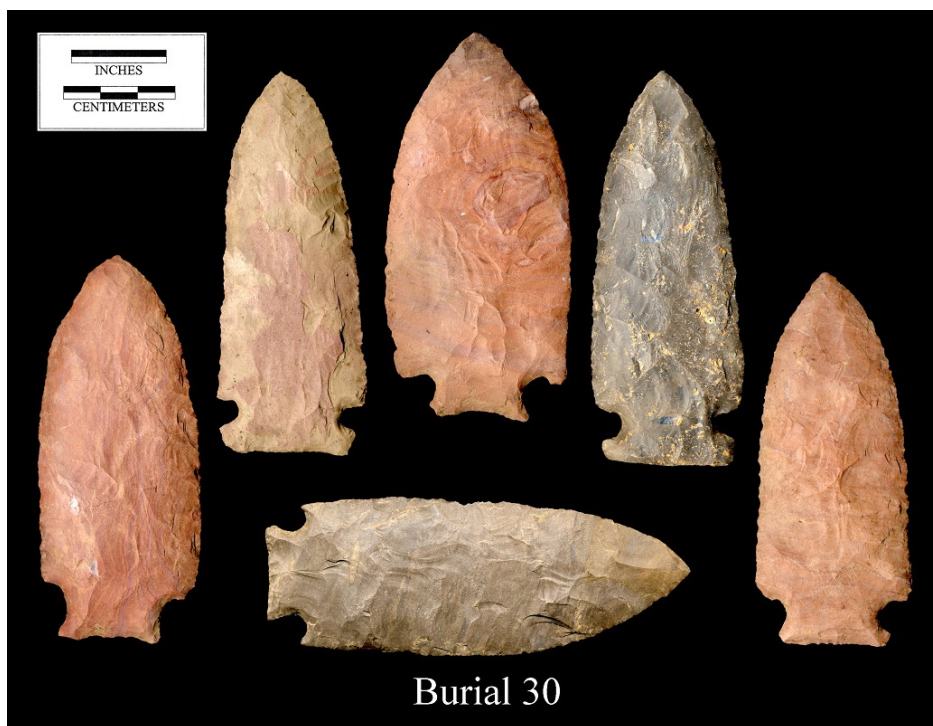


FIGURE 6. Cache bifaces from Burial 30.

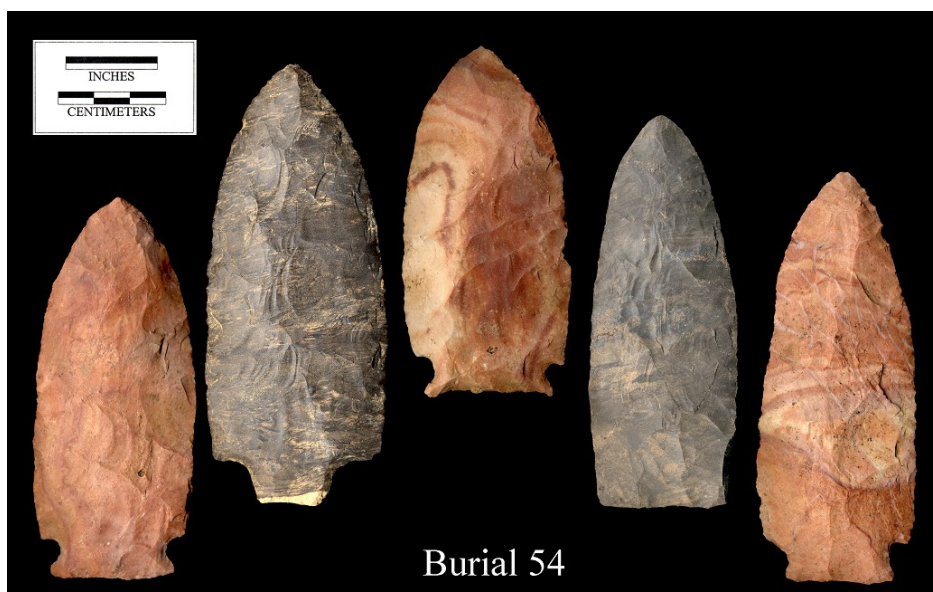


FIGURE 7. Cache bifaces from Burial 54.



FIGURE 8. Cache bifaces and bannerstone (Burial 33).

bone tools, and faunal remains observed during hand excavation. Flakes and other lithic by-products were noted but minimally collected.

Pit features are often divided into categories according to their apparent function, as determined by size, morphology, and the types of artifacts they contain. The non-mortuary pit features at Ensworth are best described as trash-filled pits. Although a percentage of these features may have been initially dug as storage or borrow pits, they all contained a wide and intermixed variety of artifacts. These artifacts included chipped and ground stone tools, stone tool manufacture debris, bone tools, burned and unburned bone, burned and

unburned mussel shell, ceramics, burned limestone, wood charcoal, and fired earth. There were no indications that any of these features served as hearths or cooking locations. About 18% (n=60) of the total excavated features from the site contained temporally diagnostic data useful for assessing a general date range associated with their creation, use, or filling. Also, nearly one-half (n=75) of the temporally sensitive projectile points recovered from the site came from disturbed plowzone soils. The recovered artifacts and features clearly indicate an intensive site occupation during the Middle Archaic period.

Middle Archaic Benton and White Springs point types have the highest

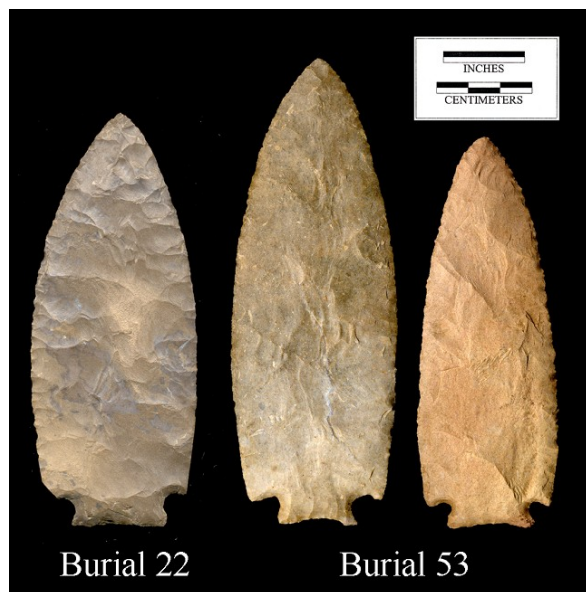


FIGURE 9. Cache bifaces (Burials 22 and 53).

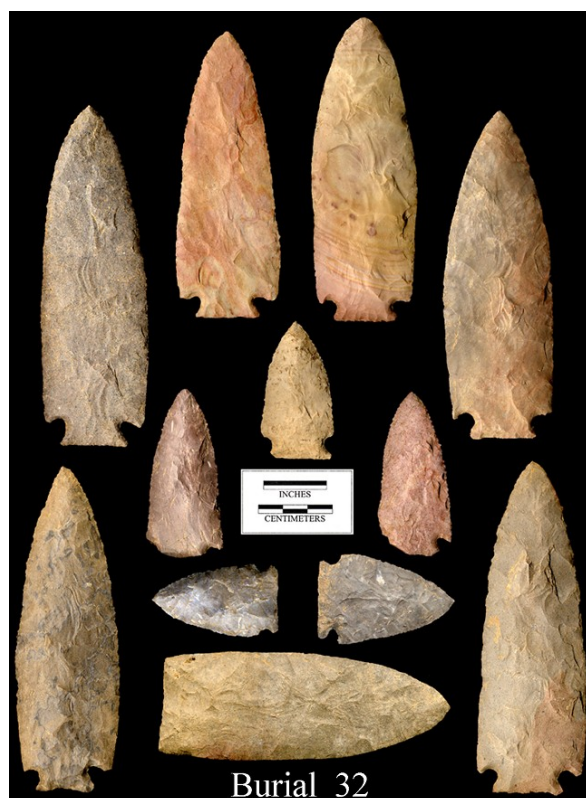


FIGURE 10. Cache Bifaces (Burial 32).

individual counts within the identified projectile point sample (Table 2). Fifteen

percent (n=7) of the 46 non-mortuary features contained temporally diagnostic artifacts confidently assigned to the Middle Archaic period.

The White Springs point type was first defined at the Stanfield-Worley bluff shelter in Colbert County, Alabama, where it was recovered from the lower levels of Zone A (DeJarnette et al. 1962). These points appear in the archaeological record beginning about 6000 B.P., overlapping in some cases with both the earlier Morrow Mountain and later Benton types (Cambron and Hulse 1990; Justice 1987; Meeks 2000). None of the Middle Archaic features from Ensworth contained both Benton and White Springs points. It is therefore possible that the four White Springs features denote a separate, pre-Benton occupation of the site.

Benton Phase Occupations in the Midsouth

The Middle Archaic period (about 8000-5000 B.P.) is generally seen as a difficult time for prehistoric populations, coinciding with the warmer and drier Hypsithermal Interval. This event marks the peak of interglacial conditions and is believed to have resulted in long droughts from around 8000-4000 B.P. throughout the Southeast. At the Eva site in Benton County, Tennessee, Lewis and Lewis (1961) noted that Middle Archaic occupations yielded heavy concentrations of shell, while deer and other mammal bones dominated midden contents during earlier and later phases. They attributed this subsistence pattern to droughts during the Hypsithermal Interval having a negative effect on white-tailed deer populations, while simultaneously facilitating the collection of shellfish through lowered river levels.

Similar reliance on shellfish has been

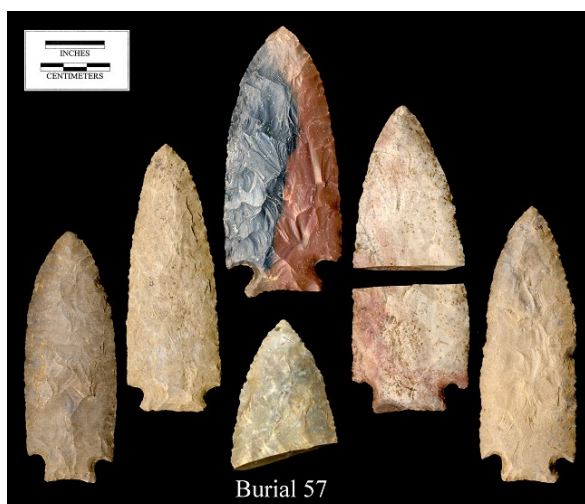


FIGURE 11. Cache Bifaces (Burial 57).

noted at numerous sites along the Tennessee and Green Rivers with occupations from around this time (Claassen 1996; Deter-Wolf 2002, 2003; Hensley 1991). The availability of riverine resources such as shellfish beds would not have been as great along smaller waterways such as the Little Harpeth and Harpeth Rivers, and as a result local populations would have experienced increased pressure on available resources and possibly periods of famine.

Despite the decreasing resource base, population density seems to have increased from the Early to Middle Archaic periods in most regions of the Southeast. With larger populations came a trend away from small, mobile bands, and a decrease in population mobility. Patterns of raw material use at late Middle Archaic sites trend toward locally available sources, and seem to indicate a reduction in territory size (Meeks 2000). The size and depth of the various Middle Archaic shell midden sites along the Tennessee, Tombigbee, and Green Rivers can be attributed to long-term or repeated seasonal occupation of the resource-rich, lower terrace formations

(Hofman 1984; Jenkins 1974; Meeks 2000).

Benton occupations generally occur between 6000 and 5000 B.P. based on radiocarbon dates from sites throughout Tennessee. Dates as late as 3,900 B.P. have been suggested, however (Justice 1989; Meeks 2000; Peacock 1988). Barker (1997) examined a series of 12 radiocarbon dates for Benton components from sites in Alabama and Mississippi, and identified a span of 640 years for Benton occupations. These uncorrected dates fell between 5745 and 5105 B.P., with a mean date of 5453 B.P. Meeks (2000) synthesized these 12 dates along with 20 additional dates from Alabama,

TABLE 2. Identified Projectile Points (counts for Benton do not include cache bifaces).

PROJECTILE POINT TYPE	DATES (B.P.)	COUNT
Paleoindian (> ca. 10,000; n=3)		
Clovis	11,600-10,900	1
Dalton	10,500-9800	2
Early Archaic (ca. 10,000-8000; n=31)		
Big Sandy Auriculate	10,200-9500	5
Lost Lake	9500-8900	3
Plevna	9500-8900	2
St. Charles	9500-8900	2
Kirk Corner-Notched	9500-8900	7
Pinetree	9500-8900	2
Kirk Serrated	8900-8000	6
LeCroy	8500-7800	2
Kanawah	8200-7800	2
Middle Archaic (ca. 8000-5000; n=40)		
Big Sandy	8000-6000	10
Morrow Mountain I	7000-6500	2
White Springs	7000-6000	10
Benton	6000-4000	17
Eva II	6000-4000	1
Late Archaic (5000-3000; n=26)		
Matanzas-like	5600-5000	7
Late Archaic Stemmed	5500-3000	12
Ledbetter	4500-3000	2
Little Bear Creek	3500-1500	5
Early Woodland (ca. 3000-2200; n=11)		
Cotaco Creek	2950-2000	1
Motley	2800-2600	8
Robbins	2500-1800	2
Middle Woodland (ca. 2200-1650; n=11)		
Middle Woodland Triangular	2200-1650	3
Snyder s Cluster	2100	3
Copena	1800-1500	5
Mississippian (ca. 1100-400; n=2)		
Madison	1100-400	1
Sand Mountain	1100-400	1
Totals		124

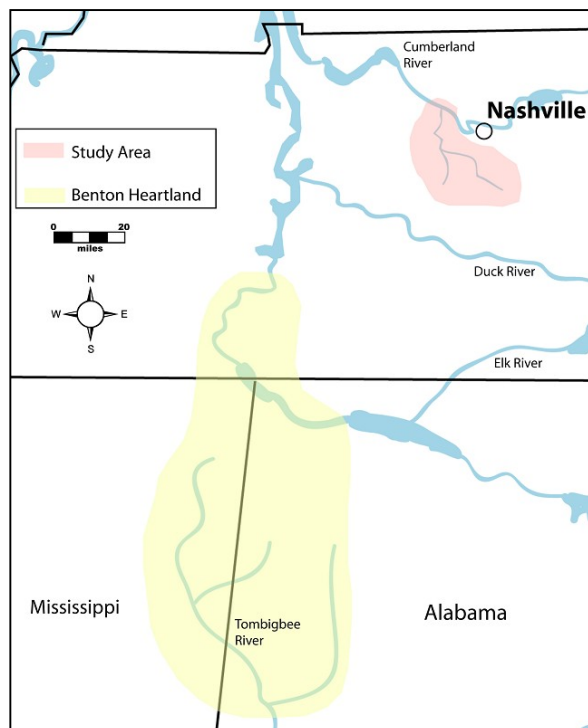


FIGURE 12. Location of the current study area and the traditionally identified "heartland" of Benton occupation.

Mississippi, and Tennessee, and showed Benton components clustering between uncorrected dates of 5700 and 5200 B.P. Peacock (1988) concluded that corrected radiocarbon dates for Benton components cluster in the 6700 to 5800 B.P. range by using dendrochronological calibration to examine a series of 20 dates (including 12 from sealed strata and Benton features).

The major exploration of Benton occupations (Figure 12) has focused on an apparent "heartland" area situated along the middle Tennessee and upper Tombigbee Rivers in northeast Mississippi and northern Alabama, as well as the Mississippi River and its tributaries in western Tennessee (Johnson and Brookes 1989; Meeks 2000; Peacock 1988). Beyond the central heartland, the boundaries and settlement patterning associated with the Benton sphere are not particularly well understood. Benton-like

points have been identified at sites ranging from southern Mississippi through Kentucky, Illinois, Indiana, and Ohio, and from Arkansas through South Carolina (Johnson and Brookes 1998; Meeks 2000; Peacock 1988). To draw firm boundaries for the periphery of the Benton sphere would rely heavily on apparent variations in the Benton point style that may or may not be actually related to that type. As stated by Peacock (1988:18), "A rigid definition of typological attributes and a closer examination of associated types is needed before a sharper line can be drawn."

The Benton projectile point type was first identified at the Eva site, where it appeared almost entirely within Stratum I (Kneberg 1956; Lewis and Lewis 1961). Benton points are traditionally identified by the presence of bifacial edge beveling along the base, notch, and sometimes blade (Justice 1987; Lewis and Lewis 1961). This beveling was believed to be a primary distinguishing feature of the Benton type, separating it from similar Sykes points (Futato 1983; Peacock 1988). However, Meeks (2000) indicates that many Benton points exhibit beveling to a greater or lesser extent, whereas others display no beveling whatsoever. Beveling along the base and shoulders often results in variations to the hafting element, leading in some cases to the assignment of Benton subtypes including Short Stemmed, Extended Stemmed, and Barbed (Cambron and Hulse 1990; Meeks 2000). A second traditional identifier of Benton points is the presence of fine parallel oblique flaking on one or both faces (Justice 1987; Lewis and Lewis 1961). Lewis and Lewis (1961:34) noted that this flaking was present only on "exceptional examples." Walling et al. (2000) suggests that Benton specimens

TABLE 3. Benton Component Sites within the Harpeth River Watershed.

Site	Recorded Artifacts	Nearest Water Source
40Ch85	Benton Stemmed point	Harpeth/South Harpeth River confluence
40Ch91	Benton point	Harpeth River
40Ds67	11 Benton points	Parker Creek
40Dv47	Benton cache reported by collector	Harpeth River
40Dv184, Ensworth	17 Benton points; cache burials	Harpeth/Little Harpeth River confluence
40Dv423	Benton blade "	Harpeth River
40Dv523	Benton cache reported by collector	Harpeth River
40Wm9, Anderson	Benton points; cache burial	Harpeth River
40Wm32, Hicks Bend	Over 100 Benton points	Harpeth River
40Wm48	Benton point	Harpeth River
40Wm153	Benton point	Harpeth River
40Wm205	Benton point	Tributary of West Harpeth River
40Wm255, Mizzell	Benton cache burials	Little Harpeth River
40Wm277	Benton point	Glass Spring

manufactured from Fort Payne chert exhibit finer flaking than smaller, more roughly fashioned points created using other locally available chert sources.

Finely wrought, oversized cache blades (bifaces) are the most apparent indicator of a Benton phase occupation. Cache blades resemble ordinary points in overall appearance, but are longer, wider, and thinner than the standard utilitarian artifact form. Standard lithic classification guides and lithic analysis sections of some archaeological reports group cache blades with Benton-type points because of shared cultural context and technological similarity. However, cache blades can exhibit a wide range of shapes, including point styles defined by Johnson and Brookes (1989:134) as Turkey Tails, Double Notched Turkey Tails, Double Notched Square Bases, Oversized Cache Blades, Cache Blades, Oversized Bentons, Bentons, and Tallahata points.

The precise utility or significance that cache blades held for Benton peoples is difficult to assess. However, researchers believe these artifacts served primarily ceremonial rather than utilitarian functions. One piece of evidence for this

differentiation includes their oversized and finely wrought appearance. As mentioned previously, cache blades are substantially longer, wider, and thinner than standard utilitarian points, and likely required much greater skill and a significant time investment to produce. In addition, cache blades lack wear patterning on their edges that occurs from use or resharpening. Other evidence for the ceremonial nature of these artifacts includes the occurrence of intentionally broken ("killed") specimens, the inclusion of cache blades as deliberately placed burial offerings rather than as incidental fill material, and the fact that cache blades rarely appear within general midden context (Johnson and Brookes 1989; Meeks 2000). A variety of other artifacts also appear as Benton burial offerings, including gorgets, stone beads, bannerstones, and groundstone artifacts (Johnson and Brookes 1989).

A Review of Benton Occupations within the Harpeth River Drainage

A review of the Tennessee Division of Archaeology site files was undertaken to identify Benton component sites in the

Harpeth River watershed. This search focused upon Cheatham, Davidson, Dickson, Hickman, Rutherford, and Williamson counties (see Figure 12). A total of 13 sites were identified, with artifact assemblages ranging from a single projectile point to more than 100 specimens, as well as burials containing Benton cache offerings (Table 3).

The Hicks Bend site (40Wm32) is located less than 600 meters from Ensworth immediately across the Little Harpeth River. Although past investigations at this site revealed no indication of intact deposits or features beneath the plow zone, the site has yielded well over 100 Benton points (Lindstrom 1979, personal communication 2004). Hicks Bend, situated along the first terrace about 60 meters from the Little Harpeth River channel, is prone to annual flooding. Ensworth, however, is located on the second terrace well above seasonal floodwaters. It is possible that Benton occupants utilized the higher elevations at Ensworth for activities (such as food storage and burial of the dead) that would have been adversely impacted by flooding. Also, the higher elevation would have been especially attractive during the spring flood period, while summer drought and reduced water levels would have drawn area inhabitants closer to the river at Hicks Bend.

Two sites along the Harpeth River drainage, Anderson (40Wm9) and Mizzell (40Wm255), have extensive midden deposits containing a variety of features, high quantities of lithic debitage, and human burials with cache offerings (Allen 1999; Dowd 1989; Lindstrom and Steverson 1987). The Ensworth and Hicks Bend sites were established at the confluence of the Harpeth and Little Harpeth Rivers. From this confluence, the Anderson site is situated approximately

6.4 linear miles upstream along the Harpeth River, while Mizzell is located approximately 8.2 miles up the Little Harpeth River. The distance between the Anderson and Mizzell sites is 6.3 miles overland.

Other sites reported to have Benton points include 40Ch85, 40Ch91, 40Ds67, 40Dv423, 40Wm48, 40Wm153, 40Wm205, and 40Wm277. Local collectors reported cache blades from sites 40Dv47 and 40Dv523, both located less than two miles from Ensworth. These items probably originate from burial associations, but no additional information is available for either site.

One site located outside the Harpeth River drainage with a substantial Benton component is the Hart or Owl Creek site (40Wm14/40Dv434) excavated by avocational archaeologists during the early 1970s (Parker 1974). This site was established at the intersection of Owl Creek and Mill Creek about 13 miles east of the Ensworth site. Parker (1974) states that eighteen burials from this site yielded over 150 cache blades. In addition, the site featured a dense midden area with "...thousands of mussel shells, marine and terrestrial snail shells and the mandibles of many kinds of wild game," as well as a dense and widely varied lithic assemblage (Parker 1974:4).

Observations of Mortuary Patterns and Cache Inclusions

Mortuary patterns at Ensworth and other Harpeth River sites are fairly consistent, and fit well with what Peacock (1988) has described based on data from Eva and other sites along the Tennessee River. Peacock hypothesizes that a Benton mortuary complex may include preference for fully-flexed interments, inclusions of Benton points or cache

blades, and the presence of cremations.

Four out of the seven Benton burials at Ensworth were interred in the flexed position. Although bone preservation in these burials was generally poor, the remains did not appear to exhibit any consistent orientation (Deter-Wolf et al. 2004). There was little evidence of cremation, with only one possible example from the site. Excavations at both the Anderson (40Wm9) and Mizzell (40Wm255) sites identified cremations, but showed a similar predominance of flexed interments (Allen 1999; Dowd

orientation of cache offerings.

Cache offerings from Ensworth exhibited no standard placement in relation to the skeletal material (Deter-Wolf et al. 2004). These associated mortuary offerings consisted of one to seven cache blades, and in some cases additional artifact types. For example, one cache included five standard sized points (Burial 32, see Figure 10) while another contained a tubular atlatl weight (Burial 33, see Figure 8). At the Anderson (40Wm9) site, a cache blade was recovered from above the individual's

TABLE 4. Lithic Resources for Benton Artifacts from 40DV184.

Provenance	Fort Payne	Unidentified Heat Altered	Dover Chert	Buffalo River Chert	Horse Creek Chert	Total
General Surface	2	3	3	-	-	8
Feature 87	-	-	1	-	-	1
Feature 139	1	-	-	-	-	1
Feature 300	-	-	1	-	-	1
Feature 330*	-	-	1	-	-	1
Feature 368A	1	1	-	-	-	2
Feature 399	-	1	-	-	-	1
Burial 22*	1	-	-	-	-	1
Burial 30*	2	-	-	4	-	6
Burial 32**	5	1	4	2	-	12
Burial 33*	-	-	3	-	-	3
Burial 53*	1	1	-	-	-	2
Burial 54*	1	-	1	3	-	5
Burial 57*	-	2	3	-	1	6
Total	14	9	17	9	1	50
* cache blades						
** cache blades and utilitarian points						

1989). Approximately 96% of the 600+ burials at the Hart (40Wm14/40Dv434) site were flexed (Parker 1974).

Johnson and Brookes (1989:143) examined a series of caches from northern Mississippi and suggested consistency within the selection of biface types included in Benton burials (ritual prescription). However, no consistency appears to exist among the cache burials at Ensworth or other area sites regarding the style, number, placement, or

right shoulder (Dowd 1989). Parker (1974) recorded that Hart site burials contained between one and 11 cache blades.

Johnson and Brookes (1989) identified a number of classes for cached bifaces included in Benton burials, consisting of Turkey Tails, Double Notched Turkey Tails, Double Notched Square Bases, Oversized Cache Blades, Cache Blades, Bentsons, Oversized Bentsons, and Tallahata points. The majority of these styles are not found in the Ensworth lithic

assemblage. Two of the cache bifaces from Ensworth fall within the unnotched forms that Johnson and Brookes identify as cache blades. These are “similar in size to Benton points and may have been intended for use as preforms for Bentons” (Johnson and Brookes 1989:136). Examples of these unnotched forms are also present at the Hart site (Parker 1974). The Ensworth assemblage also included a number of points that do not resemble typical Benton shapes, including side notched and stemmed examples similar to Big Sandy and Pickwick types.

Excluding the five small (and obviously) utilitarian points from Burial 32, the mean length measurements for cache bifaces from Ensworth was 119.1 mm. According to measurements for cache bifaces presented by Johnson and Brookes (1989:136, Table 1), this is somewhat above the 106.94 mm mean length for standard Benton class points, but well below the 183.8 mm mean length for the Oversized Benton class. Although within the standard Benton range, it is seems unlikely that the large cache bifaces from Ensworth were intended for utilitarian purposes. These specimens exhibit no sign of use wear or rejuvenation flaking. These items are also very thin and finely flaked, with the majority made from non-local raw materials.

Ensworth Lithic Resources

Fort Payne chert represents the most readily available material type for the Ensworth site inhabitants. An abundance of Fort Payne cobbles occur in the Harpeth and Little Harpeth River beds where they have been deposited from the nearby Western Highland Rim (Amick 1987). Tabular fragments also occur along the Highland Rim ridges and eroded hills of the Nashville Basin. With that said,

however, Fort Payne chert accounts for only 28% (n=14) of the total Benton artifacts from Ensworth. The majority of identifiable materials originate from non-local sources (Table 4).

Nearly 35% (n=17) of the Benton artifacts were manufactured from Dover chert. This material primarily originates from quarries located near Dover, Tennessee in Stewart County to the northwest. Dover chert has also been reported from Houston and Humphries counties. Although the Dover sources are located some distance from the Ensworth site, the Cumberland and Harpeth River drainages provide a ready access route for prehistoric exchange.

Other non-local material types from the Benton assemblage include Buffalo River (bulls-eye) and “Horse Creek” cherts. Buffalo River chert, a regional variant of Fort Payne chert, accounts for 18% (n=9) of the assemblage. This particular material displays a distinctive target-like (bulls-eye) appearance and derives from outcrops near the Tennessee River around Benton County, Tennessee (Nami et al. 1996). Burial 57 yielded one item of what has been called Horse Creek chert by avocational archaeologists (John Broster, personal communication, 2003). This resource, reported to originate in southern Tennessee around Savannah, exhibits a distinctive look with a dramatic black and red color change sometimes separated by a thin band of yellow (see Figure 11). Additional research is necessary to delineate the true nature of this particular material.

The use of non-local material at Ensworth is not replicated in the Middle Archaic point assemblage from the Hicks Bend (40Wm32) site (Bruce Lindstrom, personal communication 2004). Benton points at Hicks Bend are manufactured

from the readily available Fort Payne chert. This observation creates an interesting dichotomy between the burial ground at Ensworth and its neighbor (Hicks Bend) across the river. It was previously suggested that the two sites represent different seasonal facets of year-round occupation. However, this separation may have originated from other factors, including chronological separation or social forces.

The resource diversity evident in the Ensworth assemblage suggests that the use of local resources is not a principal factor in the ceremonial importance of biface caches within the Harpeth River drainage. Instead, the residents of Ensworth seem to have forgone readily available Fort Payne chert in favor of non-local materials for cache blades. In other words, the premise of exotic materials imbuing cache artifacts with a particular (if yet undefined) significance remains unchanged within the Benton phase in Middle Tennessee.

Summary

The presence of utilitarian Benton points as well as oversized biface cache offerings from flexed burials at Ensworth (and other sites situated in the Harpeth River and adjacent drainages) clearly supports the inclusion of this area of middle Tennessee within the main sphere of Benton influence. However, the biface caches recovered at Ensworth and other Harpeth River drainage sites do not exhibit the same range of size or styles identified within the central Benton heartland to the southwest, and do not demonstrate any clear consistency or patterning between offerings.

This article has provided a brief glimpse of the breadth of Benton lithic material use. Additional research is vital to

identify other Benton assemblages and biface caches from the study area (especially those housed in private collections). Such research is the only way to increase our base understanding of the distribution of Benton phase occupations within the Harpeth River drainage and adjacent areas of middle Tennessee.

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FIELDWORK AT SWALLOW BLUFF ISLAND MOUNDS, TENNESSEE (40HR16) IN 2003

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Swallow Bluff Island, located in the Tennessee River portion of Hardin County, has two Mississippian period mounds that have been known to archaeologists for nearly 100 years. Unfortunately, erosion of the riverbank has removed most of the larger mound. A short expedition to the site in 2003 mapped the remaining part of the site, and recorded information about the stratigraphy of the large mound. The mound had been constructed in four stages, achieving a final height of 5.5 meters.

The Swallow Bluff Island mound site near Saltillo, Tennessee is the northernmost of the outlying mound sites in the Mississippian Shiloh polity, a set of Mississippian communities centered on the Shiloh and/or Savannah sites (Welch 2001:286-292). There are two mounds at Swallow Bluff Island, the larger of which began to be eaten away by erosion of the Tennessee River bank during the 1980s. A 1992 air photo shows the slope of the mound closest to the river had already been largely removed. Erosion continued during the 1990s, but was drastically accelerated after the summer of 1999 (Yarnell 2002).

The cause of the accelerated erosion was a developer who bulldozed the island edges to obtain a 45° slope down to the water instead of an abrupt scarp (see Figure 1). This modification removed much of the stabilizing vegetation along the edges and left the island particularly vulnerable to erosion. This action was conducted without obtaining the necessary permits for shoreline modification and resulted in a \$235,464 fine by the Tennessee Department of Environment and Conservation (Hays 2000). Rather than paying the fine, the developer disappeared with no forwarding address. For nearly two years it was impossible to conduct any archaeological investigation

on the island because there was no way to obtain landowner permission. The bank eventually foreclosed on the mortgage loan, and in autumn of 2001 sold the island to the current owner, Mr. Charles Smith of Savannah, Tennessee. Mr. Smith granted permission for limited test excavation and mapping of the site.

Only 30% of the mound remained by the summer of 2003. Erosion continued to impact the site (very high water in May 2003 came about half way up the mound), and it was important to obtain information before the mound disappeared altogether. A crew of four undergraduate students from Southern Illinois University, under the direction of the author, worked at Swallow Bluff Island between May 29 and June 6, 2003. This work involved mapping the site, excavating two test units in the village area, and recording the stratigraphy exposed in the mound's eroding northern face.

Site History and Description

The mound site on Swallow Bluff Island has been known to archaeologists since C. B. Moore's visit in 1914 (Moore 1915:208-220). At the time of Moore's visit, the large mound was 18 feet (5.5 meters) high, and "practically square" with a basal diameter of 130 feet (40 meters)



FIGURE 1. Freshly bulldozed shoreline and eroding mound face, summer 1999 (Courtesy Nick Fielder; also see Hays 2000).

and a “flat top measuring slightly more than 50 feet [15.25 meters] across” (Moore 1915:208). Although he mentioned the large mound was closer to the Tennessee River than the other (smaller) mound, Moore did not indicate precisely where the riverbank was at that time.

The next report of the mound comes from Gerald Smith (ca. 1980s) who visited the site (referred to as 40Hr235) to clean up several looter holes. These holes were perhaps nothing more than re-excavations of the 20 stone box graves C. B. Moore excavated on the mound’s summit.

By June 1995, the river’s bank had eroded the mound’s northern slope and a portion of the summit. At that time the author estimated (by pacing) the mound’s

horizontal base dimensions as 39 meters east/west by 26 meters north/south. The north/south measurement was only a minimal figure, however, as riverbank erosion had already eaten away the entire mound slope that faced the river. This 39 meter east/west estimate closely matched Moore’s 40 meter measurement. However, the summit estimate of 16 to 17 meters east/west was slightly larger than Moore’s 15.25 meter measurement.

After the flood of mid-May 2003, the mound’s dimensions were 30 meters east/west and a maximum of 13 meters north/south. Almost the entire mound’s summit caved away into the river. Graphic evidence of the erosion can be seen in Figure 2, which shows the site’s topography as surveyed in June 2003 superim-

posed on a 1992 air photo. The basis for matching the map and air photo was the tree line around the smaller mound and the roof of the shed beside the large mound. On the basis of these figures, it appears that about 11 meters of the mound caved into the river before 1992, whereas the river has taken about 16 meters of the mound since 1992. Approximately 30% of the mound is left, compared with an estimate of 40% in August 2002 (Yarnell 2002). Given the rate of

erosion seen during the past decade, the mound will be entirely gone in less than ten years.

Concern about the erosion of the mound and surrounding village area is widespread in Savannah, Saltillo, and other communities along the Tennessee River. The site is well known locally, and is visited by artifact collectors every morning as they cruise up and down the river banks looking for recently exposed items. There has been looting of graves on the

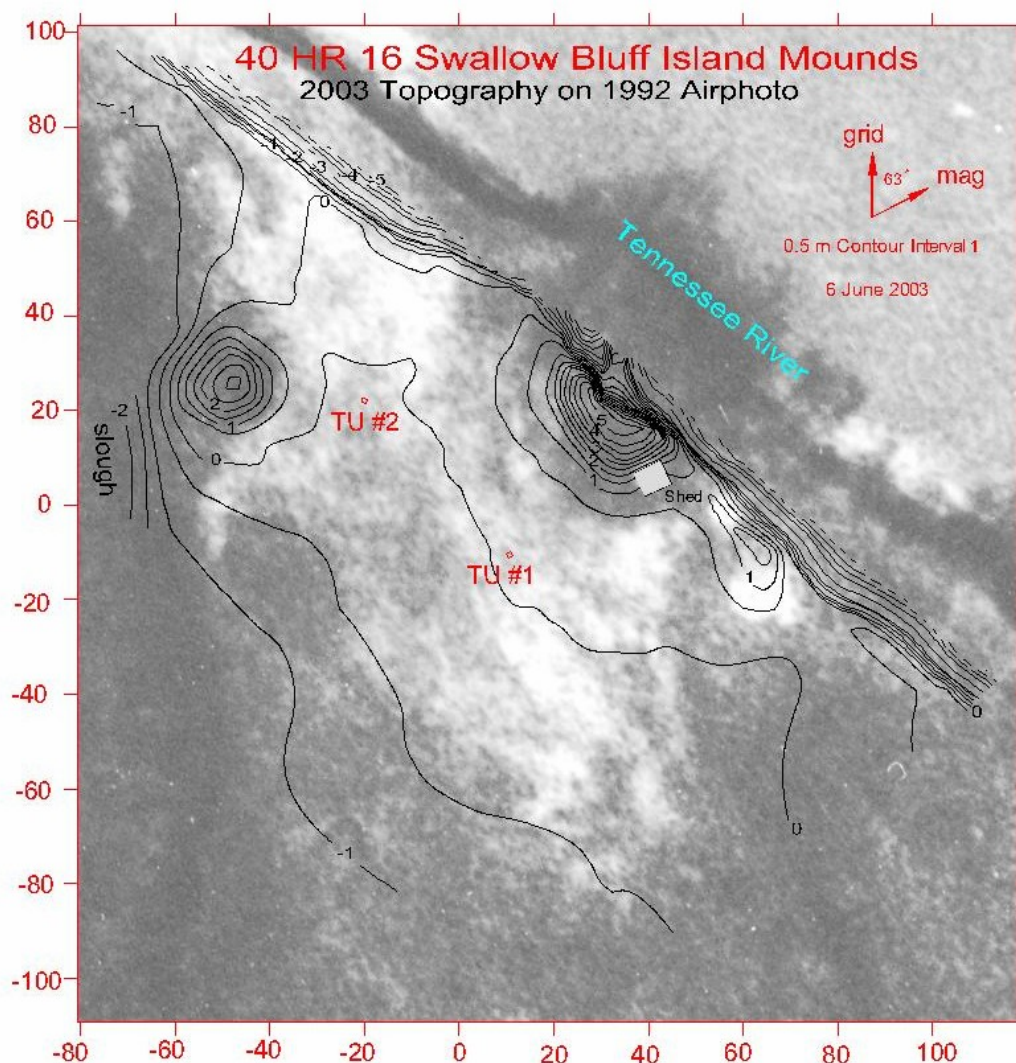
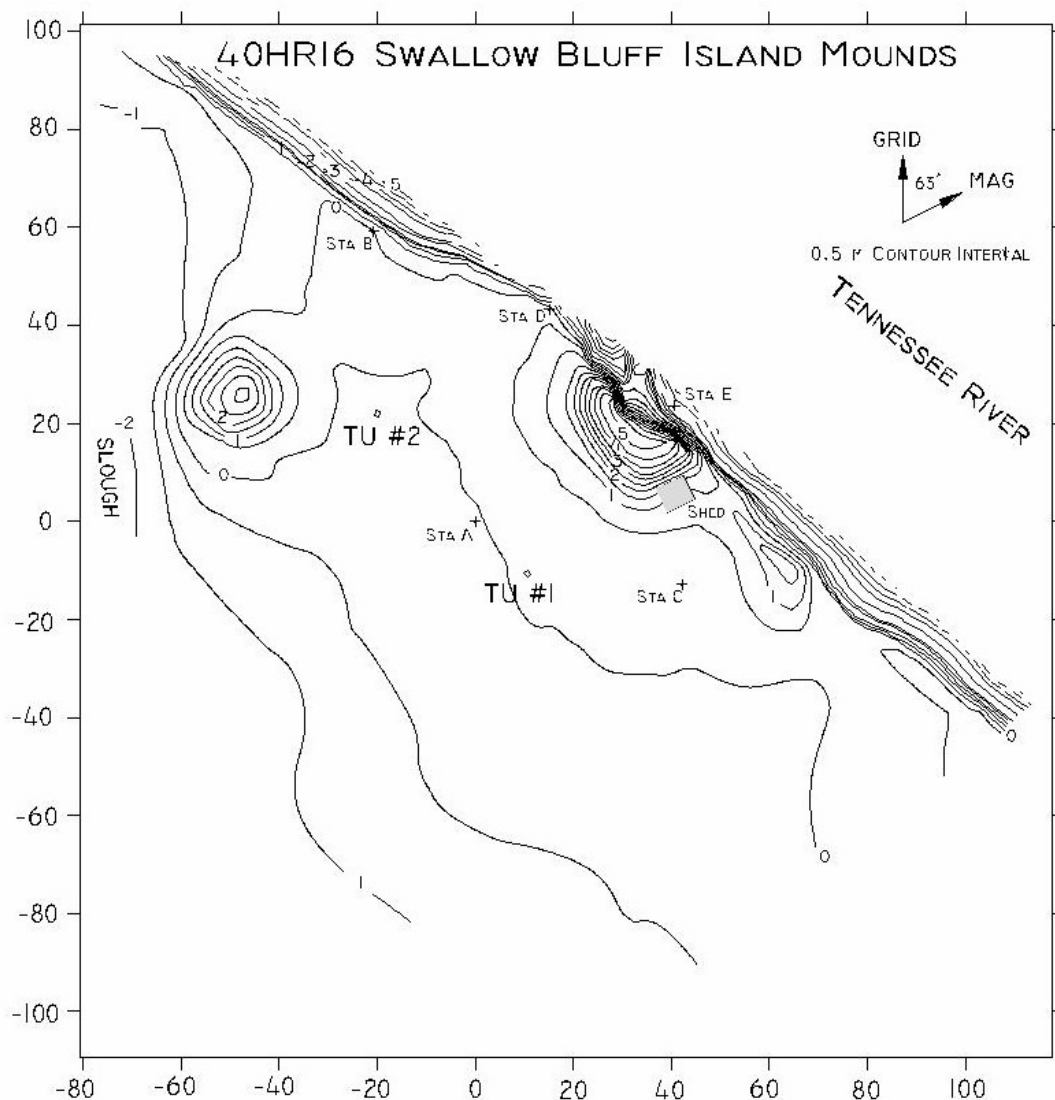


FIGURE 2. Contour map of 2003 superimposed on 1992 airphoto.

FIGURE 3. Map of Swallow Bluff Island site.¹

mounds as well, both before and since the time of Gerald Smith's visit. There is no way to know how many of those pot-holes were dug into C. B. Moore's backfilled excavations. The village area does not show evidence of digging, although it is conceivable that such digging has occurred and the evidence is buried under subsequent flood deposits. Two one-meter by one-meter test units excavated in the village area in 2003 displayed 45 to 50 centimeters of deposits

over a buried A horizon believed to be the ground surface at the time the site was occupied.

The buried A horizon was visible in the eroding river bank during the author's 1995 visit. At that time this paleosol was under about 40 centimeters of flood deposits, consistent with our observation in the 2003 test units that the most recent flood left behind about 10 cm of silty sand. In 2000, State Archaeologist Nick Fielder (personal communication, 2000)

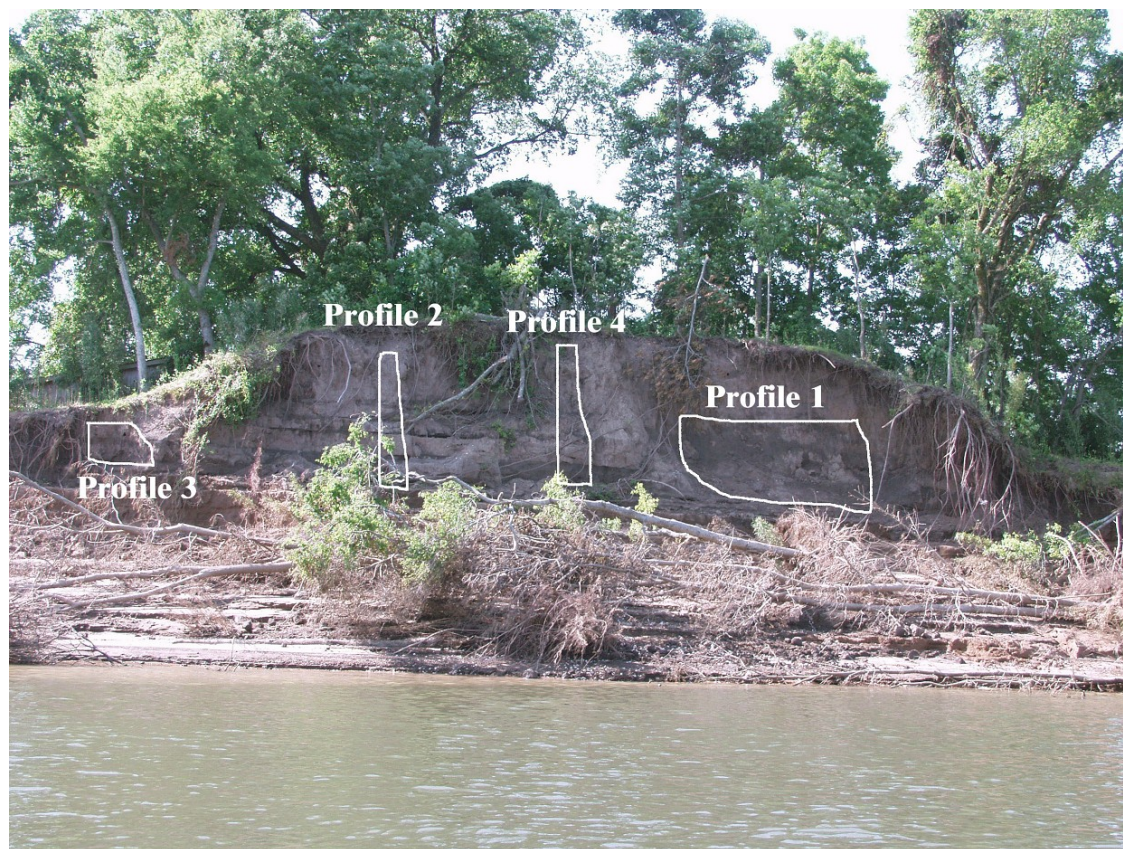


FIGURE 4. Location of profiles on the north face of the larger Swallow Bluff Island mound.

observed the buried soil horizon extending from the upstream point of the island down past the mound. Although artifacts from the 2003 fieldwork have yet to be washed and sorted, it is clear from field observations that the buried A horizon contains Mississippian and earlier Woodland (e.g., Baytown Plain, Long Branch Fabric-marked pottery) materials.

Most of the village area has a grass cover that is being displaced by a vigorous growth of saplings. During the author's 1995 visit, the grass was maintained by periodic mowing with a light tractor (ferried to the island). The owner at that time had previously tried goats on the island as a way to keep down the vegetation. This approach was abandoned in favor of the tractor. The exis-

tence of grassed areas suggests that at some point the surface was plowed. However, no plow zone was visible in either of the test unit profiles. If animal traction or light tractors were used to plow the area, then it is possible the plow depth would be shallow. There is good reason to believe that the remaining village area around the mounds is intact.

Test Excavations

The highest priorities during the 2003 field visit were to: (1) map the remaining portion of the site, and (2) obtain stratigraphic information from the mound profile. The excavation of two test units was also a priority. However, both test units were stopped after one level into the bur-



FIGURE 5. Profile 1 of the larger mound with Hillary Wheeler holding a tape with 6.2 meters unreeled.

ied soil (containing material contemporary with the mounds) due to the considerable overburden depth. Each test unit was excavated in 10-centimeter arbitrary levels, with all sediment screened through $\frac{1}{4}$ " wire mesh. In Test Unit 1, the buried soil was encountered at 45 centimeters below surface and comprised a sufficiently clear stratigraphic break. The next 14 centimeters were excavated as a separate level. In Test Unit 2 there was no abrupt break between the overlying material and buried soil, although the soil color became much darker and the texture richer in clay between 40 to 50 centimeters below surface. Test Unit 2 yielded some chunks of charred wood from the buried soil (at a depth between 50 and 62 centimeters below surface). These samples may have

come from a post, but the context was not clear. The uncertain context made this a less than ideal specimen for radiocarbon dating. No charcoal or other dateable material was recovered from Test Unit 1.

Site Mapping

Since none of the previous fieldwork at the site had produced a map, one of the 2003 project goals was to create an accurate map of the remaining site area. Mapping was performed using a laser total station, with data entered into the Surfer program to generate a topographic map.¹ Of note, one aspect of the topography mapped in Figure 3 is completely modern. The map shows an elongated ridge parallel with the river bank on the

downstream (eastern) side of the larger mound. This is a bulldozer spoil pile, and can be seen freshly heaped up at the left edge of Figure 1.

Mound Stratigraphy

Since the large mound will be completely gone in a few years, the highest priority during the project was to record the earthwork stratigraphy. The high water of May 2003 crested around 119 meters above sea level, an elevation roughly two meters above the level of the village area around the mound (as shown by the mud line on site vegetation). Only the top three meters or so of the mound was above water. This flood cut a new face on

the northern side of the mound that provided a profile mostly free of slump or talus.

Profiles were cleaned in four locations (see Figure 4), with three of them being narrow strips ranging from 0.5 to 2.0 meters wide. The other profile (Profile 1) was 6.0 meters wide by 2.6 meters high, and began 40 centimeters below the mound base. Profile 1 (see Figure 5) revealed the basic stratigraphy of the mound with at least four construction episodes (see Figure 6).

The first construction episode created a mound 1.2 meters high on top of a dark, artifact-rich, loam or clay loam midden soil containing mussel shells. The mound fill was basket-loaded, fine sandy loam

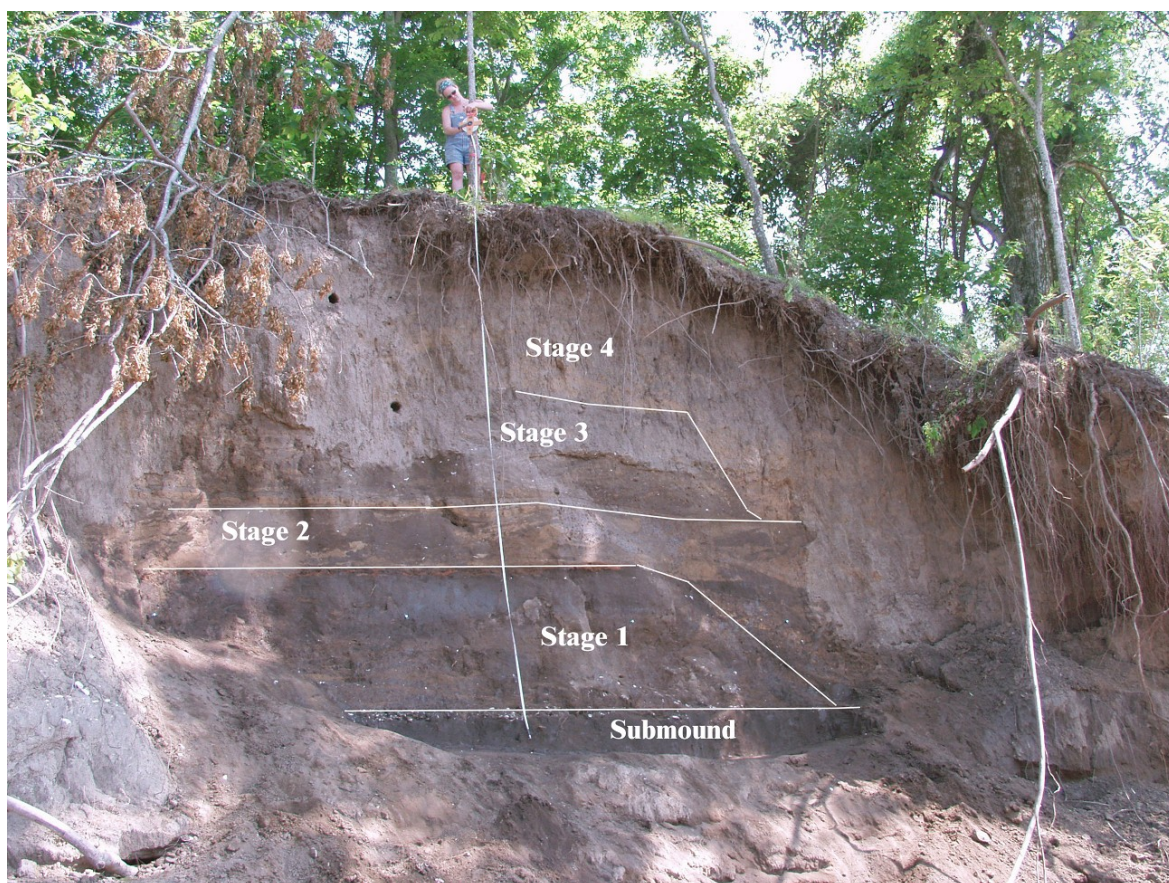


FIGURE 6. Profile 1 with mound stages outlined and fill episodes numbered.

with sparse mussel shells and occasional artifacts. A daubed building was built on top of the mound summit. The building then burned, leaving a layer of fired daub and charcoal about 10 cm thick. Samples of charcoal were obtained from the profile for future radiocarbon assays. Some of the burned/fired rubble was pushed onto the western slope of the Stage 1 mound. The burned rubble atop the mound has a very smooth upper surface, suggesting that it may have been leveled and a second building built on top. Although the presence of a second building was not confirmed, there was a deposit of what may be mound slope midden lying on the western slope rubble (it may also be basket loads of midden used for the next mound fill episode). The eastern slope of mound stage 1 was not exposed. However, the summit was at least 20 meters broad given its western edge in Profile 1 through Profiles 4 and 2.

The next stage of mound construction extended from beyond Profile 2 on the east to past Profile 1 on the west for a summit greater than 22 meters across. This summit was apparently used for a lengthy period of time. The building on top of this stage was reconstructed several times with multiple features inside it. Two postmolds (or possibly wall trenches) were visible in



FIGURE 7. Postmold (around the color/scale card) on the summit of mound stage 2 near the western margin of Profile 1, with western margin of a long, rectangular clay-filled pit to its left.



FIGURE 8. Large postmold from the summit of mound stage 2 penetrating the burned rubble (immediately above the color/scale card) lying atop mound stage 1.

Profile 1, one near the western margin and the other 4.2 meters distant near the eastern margin of the profile. The western postmold appears to be an outside wall post as many of the floor surfaces are

visible to the east (inside) but not to the west (outside) (Figure 7). In contrast, the postmold near the eastern margin of Profile 1 has the same floor layers on both sides (Figure 8). This easterly postmold must date to the very first construction on mound stage 2 since the floor layers are continuous over the top. Several shallow basins were visible between these two postmolds, as well as a 40 to 50 centimeter-deep feature at least 1.3 meters long. This particular feature had a somewhat

rectangular outline, and contained a gray clay loam fill with red-filmed peds. This feature's profile was cautiously cleaned and its face cut back as little as possible on the chance that it might be a burial pit. No skeletal remains or artifacts were seen in this feature.

The third mound stage was narrower than mound stage 2, and had the appearance of a smaller platform sitting on mound stage 2. The western slope of stage 3 is shown in Figure 9, covered by

the mostly yellow fill of mound stage 4. The stage 3 surface was above the level reached in Profile 1, but can be seen in photographs. Profile 4 was examined for the stage 3 summit, but the elevation corresponding to that surface exhibited a change in fill material that did not appear to have a smooth surface. Instead, a smooth surface was visible 90 centimeters higher (see Figure 10, upper surface). It is not clear whether this means the stage 3 summit had several levels, or whether the upper surface seen in Profile 4 is the summit of mound stage 4 covered by a fifth mound fill episode. The available evidence suggests that mound stage 3 had a split-level summit. Because stage 3 sits on top (but does not fully cover) the stage 2 summit, the third version of this mound may have had a tiered appearance.

The final fill episode



FIGURE 9. Summit of mound stage 2 (running across middle of photo), with the dark fill of mound stage 3 atop it on the left and the lighter, yellower fill of mound stage 4 on the right.



FIGURE 10. Top of profile 4 showing the elevation of the stage 3 summit elsewhere, and the upper surface that may be the stage 3 summit at this location.

capped mound stage 3 and raised the summit surface to at least 5.5 meters above the sub-mound surface. The modern summit surface is somewhat uneven, partly due to spoil piles left beside pot-holes and tipped-over trees. There may also have been erosion of the summit

since the mound was abandoned. The true, original height of the mound was likely greater than at present.

One other aspect of the mound profiles needs to be discussed. A sand layer in Profiles 2 and 4, either a floor or a wash deposit, was visible between the



FIGURE 11. Profile 3 showing fill and wash layers atop the premound surface and submound sediments.

sub-mound surface and what has been called the stage 1 summit. If this sand layer were a floor, then the first mound would have been 62 centimeters tall, and all of the stage numbers used above would have to be increased by one. An attempt was made to trace the horizontal

extent of this sand layer from Profile 4 to Profile 1. With a maximum thickness of four centimeters at Profile 4, this sand layer thinned and eventually disappeared as it was traced westward. No distinct edge, mound slope, or difference in fill (above and below the sand) was ob-

served. Given this vanishing act, it seems unlikely this sand layer was actually a mound surface, but rather a wash episode that occurred during the construction of mound stage 1.

Profile 3, located at the eastern margin of the mound, showed two sets of sand wash deposits sandwiched between the sub-mound surface and fill deposits. The upper set of wash lenses lay beneath the fill of mound stage 4. A lower set of wash lenses lay beneath the toe of an earlier mound, but whether it was stage 1, 2, or 3 could not be determined. Profile 3 exposed about 1.5 meters of sub-mound sediments, and displayed about 30 centimeters of pre-mound midden underlain by several cycles of flood deposits and soil formation (Figure 11).

Conclusions

The principal goals of the project were to: (1) record the stratigraphy of the eroding mound; (2) map the site; and (3) test the village area to assess its condition, depth, and thickness. The test excavations defined pre-mound midden lying under roughly 50 cm of sandy and silty flood deposits. These results agreed with what was visible in the eroding riverbank. The horizontal extent of the village area could not be assessed in the small amount of time available. Labor was instead devoted to mapping and stratigraphic recording. Whether or not the map encompasses all of the site village area is not known.

Profiling the mound was more successful than could have been expected. In past years the mound's eroding face was (at times) covered by slumping debris that would have been much too thick to remove. At other times the profile was a sheer scarp over seven meters high, a condition impossible to work on without climbing gear. What our project team en-

countered, however, was a freshly cut mound face. This face, sheer in places with shelves or benches in others, allowed an extensive exposure of the lower 2.6 meters of the mound as well as several narrow slices of nearly the entire vertical profile.

Notes

1 Contour lines were produced using Surfer's "natural neighbor" algorithm for interpolating between the 463 data points. Several other interpolation algorithms were tried with empirically unsatisfactory results. Even with the natural neighbor algorithm the program produced several erroneously positioned contours in areas where no data was available. In these areas the contours were redrawn by hand to match what was observed on site.

The map is oriented to an arbitrary grid north, which was set on the only more-or-less permanent point observable: the 385.71-m-distant bottom of the northeastern of the three metal poles that supports the navigation marker at mile 170.2 on the north shore of the river. Sighting with a Brunton compass indicates that this arbitrary north is roughly 63° west of magnetic north. According to NOAA's online declination-finder utility, magnetic north at this location on 29 May 2003 was 1° 18' west of true north

(<http://www.ngdc.noaa.gov/seg/geomag/jsp/Declination.jsp>).

This Brunton-determined orientation does not match well with the results of GPS data collected at two grid stakes. A receiver set on the grid 0/0 point collected 1480 position fixes, yielding an average UTM location of E 394014 N 3916719 with a standard deviation of 0.8 meters. The same receiver was later set on survey station B (grid location E -20.71 N59.25), and yielded averages of E 393954 N 3916726 (n=1480, sd=2.5 m) and E393954 N 3916727 (n=1480, sd=0.5 m). These UTM coordinates may be less accurate than the small standard deviations suggest, because the UTM coordinates imply a point-to-point distance of 60.41 or 60.53 m instead of the 62.77 m measured by the total station. Matching the GPS locations as well as possible to the survey grid, the direction of the UTM north would be 78° east of grid north. This implies that UTM north is 15° east of magnetic north, when in fact UTM north should be a few degrees west of magnetic north. In short, the GPS and Brunton data dis-

agree, and it is not clear which is more accurate. In any case, the GPS data are the only available data that locate the survey grid in a larger frame of reference. All the survey stakes were removed at the end of the project.

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INTERIOR INCISED PLATES AND BOWLS FROM THE NASHVILLE BASIN OF TENNESSEE

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This report presents information on the limited sample of interior incised ceramic sherds from the Nashville Basin of Tennessee. These specimens favorably compare to the type O'Byam Incised variety Stewart. Comparative information on the distribution of interior incised vessels supports the assertion that O'Byam Incised was not manufactured or used by local residents, but rather brought to the Nashville Basin from the lower Cumberland or Ohio River valleys.

Plates decorated with interior incising and/or painting are generally rare in ceramic assemblages from late prehistoric sites in the southeastern United States. Despite their limited number, such specimens do occur over a relatively large geographic area encompassing the middle Mississippi and lower Ohio River drainages (see Hilgeman 2000). The fact that the Nashville Basin has been generally omitted in discussions of these decorated plates should be no great surprise, since as recently as 1992 only one interior incised sherd from a deep-rim plate had been documented within the study area (Dowd 1972; Smith 1992). However, archaeological investigations at several Mississippian sites in the Nashville Basin over the past decade have identified an additional eight interior incised sherds.

Interior Incised Forms

Interior incised sherds from the Nashville Basin generally fit established type definitions for O'Byam Incised. Williams (1954) originally defined two O'Byam ceramic types in the Mississippi Valley: O'Byam Engraved (fine line) and O'Byam Incised (broad line). Phillips (1970) later subsumed both types under O'Byam Incised *variety O'Byam* noting "without... information [on chronological or

area significance], it seems best to include both in the established variety." The characteristic treatment used to define *variety O'Byam* was "line-filled triangles and other simple rectilinear motifs on the upper surface of plate rims."

Subsequent research in western Kentucky has established three varieties of O'Byam Incised: (1) *variety Adams*, a short rim plate with incised chevrons on the rim; (2) *variety O'Byam*, a standard plate with incised line-filled triangles on the rim; and (3) *variety Stewart*, a deep rim plate with engraved line-filled triangles on the rim. O'Byam Incised *variety Stewart* was initially defined in the lower Tennessee-Cumberland Region (Coe and Fischer 1959; Clay 1963:271-274; 1979:115). The form included

only the shallow bowl with high sides and non-flaring rims. Vessel lips are often decorated with notches or a notched fillet of clay on the exterior surface... Designs are confined to the interior of the vessel walls... generally consist of line-filled triangles beginning at the vessel lip and pointing downward into the vessel interior.

Hilgeman (2000:176) designates these downward pointing filled triangles as "hanging triangles" and the upward

TABLE 1. Contextual Data for O'Byam Incised variety *Stewart* Sherds from the Nashville Basin.

Provenance	Site Type	Motif*; Vessel form	Comments
East Nashville Mounds (40DV4); Unit 140N118E , Zone 2, Level 2	Town with three burial mounds and one platform mound	B; deep-rim plate	Single rim sherd recovered from undisturbed midden
40Dv8; Logan Surface	Large village?	A; flared rim bowl/deep-rim plate? B; indeterminate	Two rim sherds, one body sherd. Commercial development from the 1950s-1970s destroyed most of site without professional investigation. Information provided by local collectors suggests site was 2-4 acre village with at least one cemetery. Three sherds acquired by two different collectors prior to 1972.
40Dv9, Widemeier Surface	Large village?	B; flared rim bowl/deep-rim plate? C; deep bowl with appliqué notched rim strip	Two rim sherds from surface collections
40Dv12, West Burial 24	Moderate size stone-box cemetery (50 graves excavated) and associated village site	B; flared-rim bowl/deep-rim plate	Single sherd, possibly deliberate mortuary inclusion in stone- box grave with multiple interments (two extended adults, an extended infant, and an isolated skull). Two complete ceramic vessels recovered, including incised strap-handled jar and large plain semi-hemispherical bowl.
40Dv392; Kelley s Battery Burial 75	Large village with at least two distinct cemetery areas	B; shallow bowl?	Single rim sherd with exterior notched-rim appliqué strip. Possibly intentional mortuary inclusion with extended adult female (40 ± 5 years) in unlined pit.
40Wm1; Fewkes Disturbed context	Large mound center with five mounds and habitation area	B; indeterminate	One body sherd from disturbed midden
*See Figure 8 for key to motifs A, B, and C. Sources: Dowd 1972; Jones 200; Myer 1928; Smith and Hogan 2004; Walling et al. 2000; Wright 1973.			

pointing filled triangles as “rising triangles”. O'Byam Incised *variety Stewart* was modified to include vessel forms variously referred to as “flared rim bowls” and/or “deep rim plates.”

Chronological Placement of Interior Incised Vessels Outside the Nashville Basin

Research in the Ohio Valley, American Bottom, and Illinois Valley has determined plate morphology to be temporally significant over a relatively large geographic area. The series consists of (from early to late) short rim plates,

standard rim plates, and deep rim plates. The temporal sequence established at the Angel site places short rim plates ca. A.D. 1200-1275, standard rim plates ca. A.D. 1275-1325, and deep rim plates ca. A.D. 1325-1450 (Hilgeman 2000). Hilgeman (2000) also summarizes sequences for other areas as paraphrased following.

In western Kentucky ceramic assemblages, O'Byam Incised variety Adams (short rim plate with incised chevron patterns on rim) predates O'Byam Incised variety O'Byam (standard plate with incised line-filled triangular patterns on rim). A late, deep rim plate with engraved line work in this area is

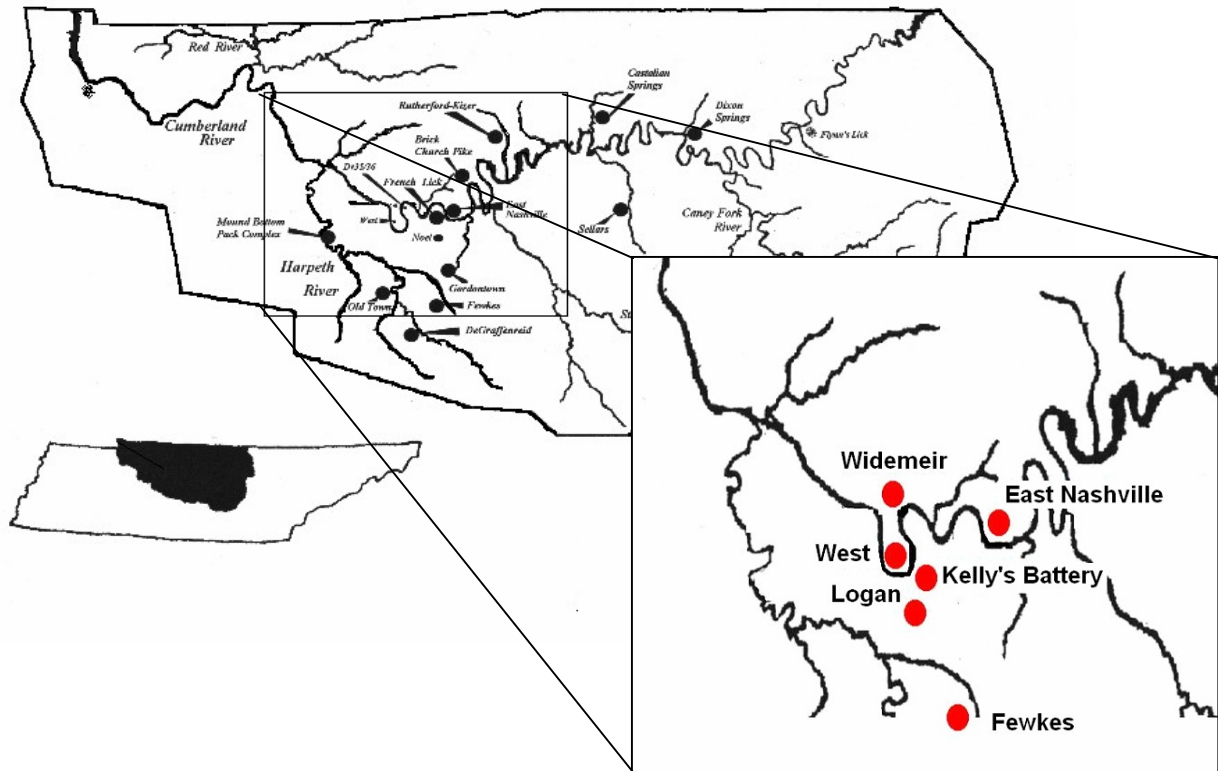


FIGURE 1. Selected Nashville Basin Mississippian Sites and Sites Yielding Sherds (inset).

O'Byam Incised variety Stewart. Variety Adams is characteristic of the Dorena (A.D. 1100-1300) and Middle Wickliffe (A.D. 1200-1250) phases. Variety O'Byam is associated with the Medley (A.D. 1300-1500), Late Wickliffe (A.D. 1250-1350), and Angelly (A.D. 1200-1300) phases. Deep rim plates are characteristic of the Tinsley Hill phase (A.D. 1300-1450).

Within the American Bottom and Illinois Valley, Wells Incised variety *Broad Trailed* (short rim plate) predates Wells Incised variety *Fine Incised* (standard plate). Both varieties are followed by Crable Deep Rimmed Plates. Variety *Broad Trailed* is characteristic of the earlier part of the Morehead phase (A.D. 1200-1275) as well as the Orendorf phase

(A.D. 1200-1275). Varieties *Broad Trailed* and *Fine Incised* occur during the later Morehead and Sand Prairie phases (A.D. 1200-1275 and A.D. 1275-1350) and the Orendorf and Larson phases (A.D. 1200-1275 and A.D. 1275-1325). Crable Incised is associated with the Crabtree (A.D. 1300-1350) and Crable (A.D. 1350-1425) phases.

O'Byam Incised Ceramics from the Nashville Basin

Sherds from vessels exhibiting interior incising have been identified from six Mississippian sites in the Nashville Basin to date. These sites range from moderate-size villages to large towns and mound



FIGURE 2. O'Byam Incised sherd from Kelley's Battery (40DV392).



FIGURE 3. O'Byam Incised sherds: A and D – Logan (40DV8); B (notched rim appliqué strip on reverse) and C – Widemeier (40DV9).



FIGURE 4. Additional O'Byam Incised sherd -- Logan site.

centers (Table 1; Figure 1). Figures 2-7 illustrate all of the currently known sherds of O'Byam Incised *variety Stewart* from the Nashville Basin. Interior incising appears on two vessel forms: deep rim plates (also referred to as flared-rim bowls) and semi-hemispherical bowls

exhibiting notched appliqué rim strips on the exterior. The current sample from the Nashville Basin includes three identifiable variants of line-filled triangles representative of hanging triangles (Figure 8). Examples of rising triangles have yet to be identified. Contextual



FIGURE 5. O'Byam Incised Sherd – Fewkes.



FIGURE 6. O'Byam Incised sherd -- West site.

information for these specimens is admittedly limited. Two sherds were recovered in grave fill, whereas the other items probably largely derive from midden contexts.

Table 2 lists the available radiocarbon dates from Nashville Basin sites yielding interior incised sherds. Unfortunately,

none of these dates are from contexts directly associated with the interior incised sherds. The most relevant dates are those from the West site (A.D. 1329/1343/1395 and A.D. 1402) with the most restricted occupation span, and the Zone 2 midden at the East Nashville Mounds (A.D. 1161; A.D. 1299/1375; A.D. 1406; A.D. 1332/1340/1398; A.D. 1327/1346/1393). Results from the test function (Calib 4.2) indicate these seven radiocarbon dates are statistically the same at the 95% confidence level. The sum of probabilities function provides a range of A.D. 1300-1420 for these dates at one standard deviation. The sum of probabilities at one standard deviation was also calculated separately for the dates from the East Nashville Mounds (A.D. 1300-1410) and West site (A.D. 1300-1430). Taken as a whole, evaluation of the current radiocarbon dates suggests these vessels were used in the Nashville Basin between approximately A.D. 1300 and 1420.

Conclusions

The geographic distribution of O'Byam Incised *variety Stewart* clearly includes (at least) the western half of the Nashville Basin during the period from about A.D. 1300 to 1420. This time frame matches fairly closely the A.D. 1325-1450 range for the Angel 3 ceramic assemblage, characterized in part by deep-rim plates and notched appliqué rim strips (Hilgeman 2000:227). However, the authors propose that the rarity or absence of this vessel type in sizeable contemporaneous ceramic assemblages from the Nashville area indicates that this ceramic type was not frequently manufactured or used by local residents. Although speculative, the limited occurrence of these vessels at the periphery of their geographic distribution might represent their use by immigrants to the Nashville Basin from the lower



FIGURE 7. O'Byam Incised sherd – East Nashville Mounds (Courtesy, Mark Norton, Tennessee Division of Archaeology).

Cumberland or Ohio River valleys.

Two of the Nashville Basin specimens were recovered from grave fill. However, given the complete absence of interior incised vessels from the rather extensive 19th and early 20th century collections of whole vessels from stone box cemeteries throughout the Nashville Basin, it seems

unlikely that O'Byam Incised variety Stewart was primarily designed for mortuary use. Lawrence (2002) proposed that "O'Byam Incised plates ... may have played a role in the 'New Fire' rites conducted during the busk or green corn ceremony." Hilgeman (2000:191-203) proposed a similar function in the "New Fire Ceremony" for Angel Negative

Painted plates from the Ohio valley. While the motifs and design elements on Angel

Negative Painted ceramics are much more diverse than those on the O'Byam sherds from the Nashville Basin, all three of the currently identified design configurations are recorded in small percentages at the Angel site (cf. Hilgeman 2000:176).

Following the assertion that the New Fire ceremony was geographically widespread during the period from about A.D. 1300-1450 and that these ceremonies often involved household ceremonial vessels, what vessel form might have more commonly served this function in the Nashville Basin? While beyond the scope of this report to examine in detail, the

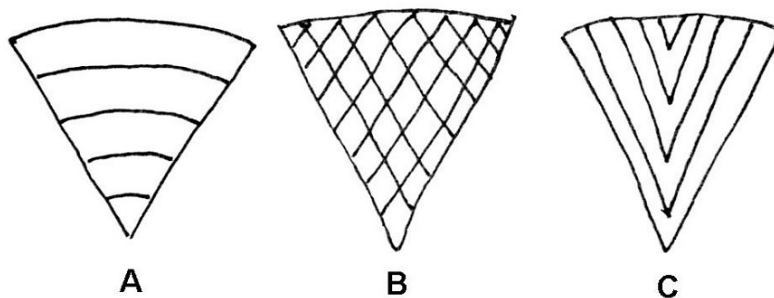


FIGURE 8. Identified design configurations on O'Byam Incised from the Nashville Basin: a) nested horizontal lines; b) cross-hatched lines; and c) nested triangles.

TABLE 2. Radiocarbon Dates from Nashville Basin Sites Yielding Interior Incised Sherds

Site	Reference	Date (B.P)	Calibrated Date A.D. (one sigma)*
40Dv4	Beta-61242	750 +/- 70	1221 (1278) 1296
40Dv4**	Beta-61243	660 +/- 60	1284 (1299, 1375) 1393
40Dv4**	Beta-61244	550 +/- 50	1326 (1406) 1427
40Dv4	Beta-61245	530 +/- 50	1331 (1412) 1435
40Dv4	Beta-61246	530 +/- 60	1329 (1412) 1437
40Dv4	Beta-61250	640 +/- 70	1286 (1302, 1369, 1382) 1401
40Dv4	Tx-7855	670 +/- 60	1282 (1297) 1390
40Dv4**	Tx-7856	890 +/- 100	1023 (1161) 1260
40Dv4**	Tx-7857	580 +/- 50	1304 (1332, 1340, 1398) 1413
40Dv4	Tx-7858	380 +/- 50	1444 (1481) 1627
40Dv4	Tx-7859	440 +/- 50	1429 (1443) 1478
40Dv4**	Tx-7860	600 +/- 40	1302 (1327, 1346, 1393) 1404
40Dv4	Tx-7866	910 +/- 140	997 (1071, 1079, 1128, 1136, 1158) 1272
40Dv12**	UGa-????	565 +/- 110	1296 (1402) 1440
40Dv12**	Uga-333	590 +/- 115	1288 (1329, 1343, 1395) 1436
40Dv392	Beta-156263	670 +/- 60	1282 (1297) 1390
40Dv392	Beta-156264	350 +/- 60	1452 (1516, 1599, 1616) 1640
40Wm1	Beta-148190	760 +/- 40	1244 (1276) 1285
40Wm1	Beta-148191	470 +/- 70	1408 (1437) 1470
40Wm1	Beta-148192	450 +/- 60	1420 (1441) 1477
40Wm1	Beta-148193	750 +/- 40	1259 (1278) 1288
40Wm1	Beta-148194	370 +/- 60	1444 (1486) 1635
40Wm1	Beta-148195	470 +/- 60	1412 (1437) 1453
40Wm1	Beta-148196	460 +/- 60	1415 (1439) 1470
40Wm1	Beta-165653	700 +/- 60	1276 (1290) 1382
40Wm1	Beta-165654	500 +/- 60	1403 (1426) 1443
* CALIB Rev. 4.2, Stuiver et al. 1998.			
** most relevant dates.			
Sources: 40Dv4 (Walling et al. 2000); 40Dv12 (Dowd 1972; Wright 1973); Kelley s Battery (Jones 2001); Fewkes (Gary Barker, personal communication, 2004).			

co-occurrence of interior incising and notched appliqué rim strips on at least two of the Nashville Basin sherds and the ubiquitous presence of otherwise undecorated bowls with notched appliqué rim strips at contemporaneous sites is worth future investigation. Viewed from above, bowls with notched-rim appliqué strips can be interpreted as one of the many ways in which Mississippian peoples represented the radiating sun circle (and its earthly manifestation as fire). At least some of the bowls from the Nashville Basin exhibiting notched rim appliqué strips might have served a household ceremonial function in New Fire ceremonies.

The authors cannot propose to answer these questions given the limited sample presently available. Nonetheless, the distribution and temporal placement of O'Byam Incised sherds from the Nashville Basin reminds us that minority ceramic "types" and information "from the periphery" can provide new insights into broader patterns.

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EARLY INVESTIGATIONS AT GORDONTOWN (40DV6): RESULTS OF AN 1877 EXPLORATION SPONSORED BY THE PEABODY MUSEUM, HARVARD UNIVERSITY

Michael C. Moore

Recent research at the Harvard University Archives discovered four pages of field notes from a previously unknown 1877 excavation at T. F. Wilkinson's Farm (later determined to be the Gordontown site in Davidson County, Tennessee). These notes included a sketch map with invaluable site details, including two previously undocumented mounds. These mound notations provided key insights into puzzling features recorded during later 1920 (Myer 1928) and 1985-1986 (Moore and Breitburg 1998) investigations. The 35+ burials dug across the site area in 1877 yielded a modest assemblage of such artifacts as ceramic effigy vessels and ovate knives.

In 1998, the Tennessee Division of Archaeology published an edited volume on 1985-1986 excavations conducted at the Gordontown site in southern Davidson County, Tennessee (Moore and Breitburg 1998). After submitting that report for printing, the author traveled in March 1998 to the Peabody Museum of Archaeology and Ethnology at Harvard University to examine artifacts and records from an 1878 Peabody-sponsored exploration at "Rutherford's Farm." Now known as the Rutherford-Kizer site (40Su15), this extensive mound complex was investigated by the Tennessee Division of Archaeology between September 1993 and September 1995 (Moore and Smith 2001). A secondary objective of this research trip was to determine if any other artifacts and notes might be located from previously unknown investigations at Middle Tennessee archaeological sites.

Once at the Peabody Museum, the author came face-to-face with a cornucopia of records and artifacts from Peabody-sponsored site excavations across the entire state of Tennessee. Additional research in the administrative records of Frederic Ward Putnam at the Harvard University Archives yielded other field notes and documents pertinent to archaeology in Tennessee. A relatively routine

research trip concerning "Rutherford's Farm" mushroomed into a much larger project than initially imagined. The enormous quantities of artifacts and records from previously unknown "digs" prompted two additional trips to the Peabody Museum in March 1999 and October 2002 to record additional Middle Tennessee site information.

During the three research trips to the Peabody Museum, excavations at several dozen major archaeological sites within the Middle Cumberland River valley were documented. Upon initial perusal, most of the "names" used for these sites by the late 19th-century Peabody excavators were unfamiliar to modern archaeologists – including a site referred to in the notes both as the "T.F. Wilkinson Farm" and the "Scales Mounds." Subsequent research identified this site as what archaeologists know today as Gordontown (40Dv6). The Peabody field notes provide key insights that permit answers to some of the puzzling questions raised in the 1998 publication (Moore and Breitburg 1998). Rather than reiterating information from the published report, this research report is intended as an addendum and addresses only the ramifications of the information from the Peabody Museum collections and archives.

Identification of the T.F. Wilkinson Farm as Gordontown

The records of Frederic Ward Putnam in the Harvard University Archives include four pages of field notes describing the results of work conducted on the farm of T. F. Wilkinson. During the 1998 research trip, the "T. F. Wilkinson farm" was not recognized as a known archaeological site and the field notes were set aside to be more carefully examined at a later date.

In February 2000, the Tennessee Division of Archaeology received requests for assistance from staff at the Peabody Museum to match modern state archaeological site survey numbers with Middle Tennessee sites dug by museum-sponsored personnel during the 1800s. This information was to be included as part of the Peabody Museum inventory of human remains and mortuary objects mandated by the Native American Graves Protection and Repatriation Act (Peabody Museum of Archaeology and Ethnology 2000). Division staff successfully matched many of the locales in Peabody records with currently recorded sites using records from the 1998-1999 research trips and additional information provided during the consultation. During a review of historic maps of Davidson County in the Division files, the name "T. F. Wilkinson" was observed near the southern county border on an 1871 map produced by Wilbur F. Foster and immediately recognized as the location of the Gordontown site.

Date of the Excavations

F. W. Putnam explored a number of sites around Nashville during and after the September 1877 meeting of the American Association for the Advancement of Sci-

ence. His work at Traveller's Rest (the Overton Estates; 40Dv11), Zollicoffer Hill (40Dv32), Brick Church Pike Mounds (Love Mound; 40Dv39), Bowling Farm (40Dv426), and Sellars (Greenwood Seminary or Lindsley Estates; 40Wi1) sites was published shortly after his trip to Tennessee (Putnam 1878). For many years these particular sites were believed to be the focus of Peabody Museum investigations in the Nashville area. However, the three research trips to Harvard found Putnam's impact on archaeology in Middle Tennessee to be much more extensive than previously reported.

Putnam indicates in his 1878 report to the Peabody Museum Trustees that he arranged for Edwin Curtiss to carry on his work in the area, and that Curtiss "...visited several other localities where he was permitted to make excavations..." (Putnam 1878:203). Although Curtiss apparently directed the Wilkinson Farm excavations, the field notes are not in his handwriting. The notes are written in the same handwriting as field notes from several other Nashville sites recorded in 1877, including most notably Mrs. Bowling's Farm (40Dv426) and Edmondson's Place (40Dv573). Putnam and Curtiss apparently employed the same assistant to keep field notes during fall and winter of 1877.

Although the museum inventory ledger lists the T. F. Wilkinson Farm artifact assemblage from Edwin Curtiss with a date of November 1877 (Catalogue Ledger Vol. 3, Peabody Museum of Archaeology and Ethnology 1877), the field notes contain a notation of Sept(ember) 1877. Curtiss probably dug the site in late September after Putnam's departure from middle Tennessee, and shipped the artifacts two months later to Putnam after waiting to acquire more material from other sites.

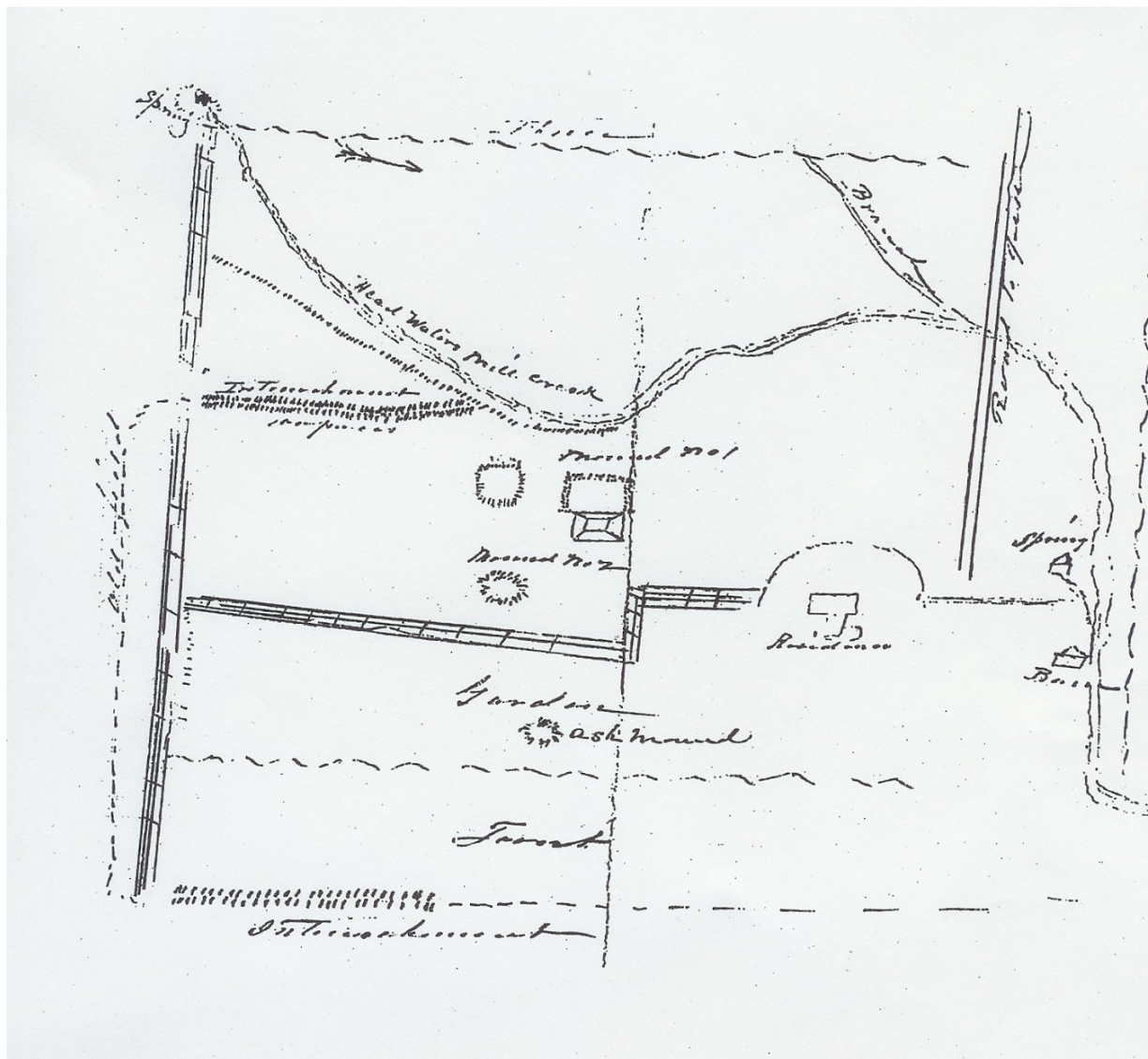


FIGURE 1. Sketch Map of T.F. Wilkinson's Farm, 1877
(Courtesy, Harvard University Archives HUG1717.2.1).

The Field Notes

The field notes from Curtiss' work at Gordontown present substantial information on the site location, surrounding terrain, and condition of the earthworks (three mounds and a palisade line). The penmanship of the four pages is generally neat and clean, although a few words are hard to decipher and have been labeled with a question mark or marks. The following transcription is presented with

minimal editing. Most of the misspellings are easily recognizable and are left unmodified.

Location of the mounds on the scales place. on the Franklin pike nine miles from Nashville Tenn and one mile from Brentwood and a half a mile East of the Pike on the head waters of Mill Creek on lands now owned by Mr T. F. Wilkinson. the family gave us permission to examine there. Below will be found a rough dia-

gram of the grounds [See Figure 1].

About fifteen acres are enclosed within the the(?) intrenchment all of which is covered by a heavy growth of Forest trees free from under brush and soded with Blue grass except the narrow strip upon which the ????? and garden are located. This strip is a ridg sloping each way towards the intrenchments. Circular depressions surrounded by slight embankments about Thirty feet in diameter and about forty feet from center to center are to be seen all over the grounds, arranged in parallel lines with lines cornering there at right angles. There is one large square depression a short distance west of the large square mound. The line of intrenchment starts at the point of little Rock Bluff on the Branch about 100 paces from the large mound and runs southerly to the cornfield. at this point it is lost sight of. the field having been plowed for many Junes it has been lowered. But it comes around into the forest again about 200 paces to the east and terminates at the low Bluff below the spring running about parallel with the first line

Mound no. 1 measures on the top 24 ft by 28 ft and is about 4(?) feet high. This is faced on the west side by a square enclosure elevated about a ft above the general level of the ground and having a slight embankment around the edge. This elevation is about 8 ft wider than the mound.

We trenched to the center of the mound 3 ft wide and down to the original soil. ??? remains of any burial were found. The material although of Black loam was very hard as though it had been mound(?) or ??????. We also sank a hole in the center of one of the circular depressions 4 ft square at the depth of 2 ft we came to a floor of clay so hard that a pick had but little impression on it. We also cut through the ???? of area and found ??

little nothing but soil. The mound in the garden marked ash mound is a large conical mound about 4 ft high on the top of which is an Elm tree 4 ft through. We made extensive excavations in this mound and found it composed of ashes broken pottery animal bones etc. We found in there the larger broken chisel or celt. We also trenched in the upper end of the garden next the cornfield. The ground having the appearance of containing graves but did not strike any. We opened several graves between the house and spring. In fact all about the house seems to be occupied by graves although there no signs on the surface. The graves below the house that we opened were on the edge of the Bluff and the rocks showed on the surface. Mr. Wilkinson states that in digging his cellar he found the ground full of graves. One of the graves that we opened on the edge of the Bluff had been remarkably well preserved constructed. No water had apparently gotten into it. The Box was about 2/3 filled with borrow. Mostly over the Pelvis and over the neck had been fire(?) leaving a considerable quantity of coal and ashes. The ground having the appearance of having been burnt. In nearly all the graves that not been disturbed we have found remains of fire about the Pelvis. The large burial mound marked No. 2 is about 30 ft diameter at the base and about 5 ft high. A few graves had been opened on the top by Dr. Joseph Jones. The graves in the bottom tier was about two feet below the original surface and had been buried in such an irregular manner that we could not locate them on a diagram. We commenced the excavations on the south side taking the whole width of the mound. The [peculiarity?] of this mound was the irregularity of the graves. The small proportion of children buried in it. and the pain taken in continuing the boxes. The most

TABLE 1. Human Skeletal Remains from 1877 Explorations at T.F. Wilkinson's Farm (data compiled from Peabody Museum 2000).

Peabody Museum 77-65-10/	Provenance	Sex	Age	Elements (lt=left; rt=right)
12797.0	Mound, stone grave 14	M	Adult	Lt/rt parietal, lt/rt temporal, lt/rt maxilla, lt/rt zygomatic, lt nasal, rt nasal fragment, lt/rt palatine, lt/rt inferior nasal concha, mandible, frontal, occipital, sphenoid, ethmoid fragment, vomer, two incisors, one canine, five premolars, eleven molars, lt/rt humerus, rt radius, rt ulna, lt/rt ilium, partial lt ischium, rt ischium, partial lt pubis, rt pubis, lt/rt femur, partial lt tibia, rt tibia, lt fibula, partial rt fibula.
12798.0	Mound, stone grave 25, bottom tier	F	Adult	Lt/rt parietal, partial lt temporal, rt temporal, lt/rt maxilla, lt /rt zygomatic, lt/rt nasal, rt lacrimal, lt/rt palatine, mandible, frontal, partial occipital, sphenoid fragment, ethmoid fragment, one incisor, one canine, one premolar, one molar.
12799.0	Mound, stone grave 28	M	Adult	Lt/rt parietal, lt/rt temporal, lt/rt maxilla, rt zygomatic fragment, lt/rt nasal, partial lt lacrimal, rt lacrimal fragment, lt/rt palatine fragments, mandible, frontal, occipital, ethmoid fragment, one incisor, two canines, four premolars, seven molars.
12800.0	Mound, stone grave 6	M	Adult	Partial lt/rt parietal, partial lt temporal, rt temporal, lt/rt maxilla fragments, lt/rt zygomatic, lt/rt nasal, mandible, frontal, partial occipital, sphenoid fragment, one canine, three premolars, two molars.
12801.0	Mound, stone grave 31	F	Adult	Lt parietal fragment, rt parietal, lt/rt temporal, lt/rt maxilla, lt/rt zygomatic, lt/rt nasal, lt/rt lacrimal, lt/rt palatine, lt/rt inferior nasal concha, mandible, frontal, partial occipital, sphenoid, partial ethmoid, vomer, two canines, seven premolars, eight molars, lt/rt ilium, lt/rt ischium, partial rt pubis, lt/rt femur, lt/rt tibia, lt/rt fibula.
12802.0	Mound, stone grave 20	M	Adult	Lt/rt parietal, Lt/rt temporal, partial lt maxilla, rt maxilla, partial lt zygomatic, rt zygomatic, partial lt/rt nasal, rt lacrimal, mandible, frontal, occipital, sphenoid, ethmoid fragment, vomer fragment, one incisor, one canine, six premolars, eight molars, lt/rt humerus, lt/rt femur, lt/rt tibia, lt/rt fibula, one partial cervical vertebrae.
12803.0	Mound, stone grave 9	M	Adult	Lt/rt parietal, lt/rt temporal, lt/rt maxilla, lt/rt zygomatic, lt/rt nasal, lt/rt palatine, mandible, frontal, occipital, sphenoid fragment, three incisors, two canines, eight premolars, eight molars, rt humerus, lt/rt ilium, lt/rt ischium, lt/rt pubis, lt/rt femur, partial lt tibia, rt tibia, partial lt and rt fibula, two cervical vertebrae.
12804.0	Mound 1, stone grave 24	F	Adult	Lt/rt parietal, Lt/rt temporal, Lt/rt maxilla, lt/rt zygomatic, lt/rt nasal, lt/rt lacrimal, lt/rt palatine, lt/rt inferior nasal concha, mandible, frontal, occipital, sphenoid, ethmoid, vomer, one incisor, two premolars, eight molars, lt/rt humerus, lt/rt radius, lt/rt ulna, lt/rt ilium, lt/rt ischium, lt pubis, rt pubis fragment, lt/rt femur, lt/rt tibia, lt/rt fibula, sacrum.
12805.0	Mound, stone grave	1M 1F 1 Unid	Adults	Lt parietal (1 complete, 1 partial), rt parietal (1 complete, 1 fragment, 1 partial), lt temporal (3 complete), rt temporal (2 complete, 1 fragment), lt maxilla (2 complete), rt maxilla (1 complete, 1 fragment), lt zygomatic (2 complete), rt zygomatic (1 fragment), lt palatine (2 complete), rt palatine (1 complete, 1 fragment), mandible (2 partial), frontal (2 partial), occipital (1 complete, 1 partial, 1 fragment), sphenoid (2 fragment), vomer (1 fragment), six incisors, four canines, nine premolars, thirteen molars.
12806.0	Mound, stone grave	M	Adult	Lt/rt ilium, lt/rt ischium, partial lt and rt pubis, sacrum.
12816.0	Stone grave near house	M	Adult	Lt/rt parietal, Lt/rt temporal, Lt/rt maxilla, lt/rt zygomatic, lt/rt nasal, lt lacrimal, lt/rt palatine, mandible, frontal, occipital, sphenoid fragment, one canine, three premolars, 6 molars, lt/rt clavicle, lt/rt humerus, lt/rt radius, lt/rt ulna, partial lt ilium, rt ilium, lt/rt ischium, lt/rt pubis, lt/rt femur, lt/rt tibia, lt/rt fibula, one rt rib, two unidentified.
12816.1	Stone grave near house	?	Child	Partial lt and rt tibia, rt fibula fragment.

of the rocks being dressed to the perfect shape for the Bones. A portion of the mound about ¼ on the north side we could not examine on account of a large tree growing upon it

Grave no 1 child. nothing found

2 adult ???? opened

3 " under no 2. Jar

4 child " " 1

5 " Bowl T??? and skull

6 adult Skull and Bones

7 " under no 6

8 " west side

9 " East " Skull and Bones and Spoon

From 10 to 35 they were buried in all directions and four tiers deep. There were but two childrens graves from 10 to 35 in one was the shell shaped dish.

The sketch map of the site area included in the notes clearly defines a palisade ("in-trenchment") enclosing one platform mound and two circular mounds (Figure 1). The diagram also includes the location of important landmarks such as several springs and creeks, along with then extant fences, residence, barn, and garden.

Human Remains

Curtiss dug at least 35 stone-box graves inside Mound No. 2, but their location or relative position is not identified. The total number of graves opened during the course of the investigation is not documented, but includes more than 35 based upon several vague references. For example, the notes contain brief statements regarding (several) graves dug between the house and spring, and also (an unknown number of) graves opened on the edge of the bluff.

Table 1 provides an inventory of the skeletal elements from T. F. Wilkinson's Farm curated at the Peabody Museum (Peabody Museum of Archaeology and Ethnology 2000). A total of fourteen individuals is represented in the sample, including eight adult males, four adult females, and one child.

Artifact Descriptions

A modest artifact assemblage (PM 77-65-10/12810-12826) shipped to the museum includes seven ceramic vessels, four ceramic earplugs, three projectile points, two ovate blades, two shell spoons, two clay spheres, one stone sphere, one greenstone celt, one ceramic

disk, and one clay bead (Table 2). All but two of these items have vague context references, such as "stone grave" or "ash mound". The only artifacts assigned to a specific grave were a bowl with notched rim appliqué strip (stone grave 9) and a frog effigy jar (stone grave 29) from Mound No. 2. Brief descriptions of the T. F. Wilkinson Farm artifacts are provided below. Peabody Museum accession numbers are also furnished with each item.

Ceramics

The ceramic sample consists of seven vessels, four earplugs, two clay spheres, one pottery disk, and one clay bead. Vessel forms within this sample are four bowls, two jars, and one bottle. Both human and animal effigies are represented.

Bowls (n=4): One of the stone graves inside Mound No. 2 yielded a (Bell Plain) mussel shell effigy bowl. This vessel (PM 77-65-10/12811) measures 48 mm tall, 97 mm wide at the orifice, and 50 mm wide at the base. A Bell Plain bowl with a notched rim applique (PM 77-65-10/12870) was buried with an adult male (burial 9) in Mound No. 2. With a height of 47 mm, this vessel displays an interior orifice diameter of 118 mm, and an exterior orifice diameter of 126 mm. An unusual effigy bowl (PM 77-65-10/12812) was recovered from a stone-box grave in Mound No. 2 (Figure 2). In plan-view, this Bell Plain vessel somewhat resembles an acoustic guitar. A narrow effigy head and two appendages are present on the broader end of the bowl. The opposing end displays a wide, but relatively short handle (very similar to a duck effigy tail) with a hole in the center. In cross-section, the bowl is very shallow with a flattened base. An argument could be made that this vessel represents a ladle or scoop rather than a bowl. This vessel measures 149 mm long, 84 mm wide,

TABLE 2. Artifacts from 1877 Exploration of T. F. Wilkinson's Farm.

Peabody Museum (77-65-10)	Provenance	Artifact Description
12807	Stone graves, burial mound	Two mussel shell spoons; one unmodified mussel shell
12809	Stone grave 29, burial mound	Mississippi Plain frog jar, 2 strap handles
12810	Stone grave, burial mound	Blank face, hooded effigy bottle. Body has four lobes
12811	Stone grave, burial mound	Bell Plain bowl, mussel shell effigy
12812	Stone grave, burial mound	Unusual effigy bowl. Possibly stylized turtle
12813	Stone grave (in 12814)	Miniature medallion head bowl, notched rim appliqué
12814	Stone grave	Bell Plain jar, contained the miniature bowl (12813)
12815	Stone grave	Quartz cobble (probably unmodified)
12817	Ash mound	Celt fragment, greenstone
12818	Ash mound?	Ovate blade/sword of local Ft. Payne chert
12819	Ash mound?	Unidentified dart point fragment
12820	Ash mound	Sand Mountain arrow point; small, straight-stem dart
12822	Ash mound	Crinoid fossil stem (probably unmodified)
12833	Ash mound	Ceramic disk
12824	Ash mound	Two stone spheres; one clay sphere; one clay bead
12825	Ash mound	One ceramic earplug; two pierced ceramic earplugs or beads; one pierced ceramic earplug or bead fragment
12826	Stone grave, burial mound	Ovate blade/sword of Dover chert
12870	Mound, stone grave 9	Bell Plain bowl with a notched rim appliqué

and stands about 35 mm high. The fourth specimen is a miniature medallion head bowl (PM 77-65-10/12813) from a stone-box grave, possibly inside Mound No. 2. Four human heads are present along the vessel's notched rim. Of note is that this particular vessel was reportedly found inside another vessel (PM 77-65-10/12814).

Jars (n=2): Stone grave 29 in Mound No. 2 contained a frog effigy jar with two strap handles (PM 77-65-10/12809). This Mississippi Plain vessel measures 100 mm high with a maximum diameter of 125 mm. The vessel's interior orifice diameter is 88 mm, and the exterior orifice diameter is 95 mm. A small Bell Plain jar (PM 77-65-10/12814) was recovered from a

stone-box grave in Mound No. 2. Suspension holes are visible on opposing ends of the direct rim. The body is globular with a flattened base. This vessel measures 105 mm wide and 88 mm high. A miniature medallion head bowl (PM 77-65-10/12813) was reported as found inside this jar.

Bottle (n=1): A human effigy, blank face, hooded bottle (PM 77-65-10/12810) was found inside a stone grave from Mound No. 2. The globular body of this Matthews Incised bottle displays four lobes, with each lobe enhanced on top by a single incised line. This vessel measures 165 mm in height, and 105 mm in maximum width. From ear to ear, the

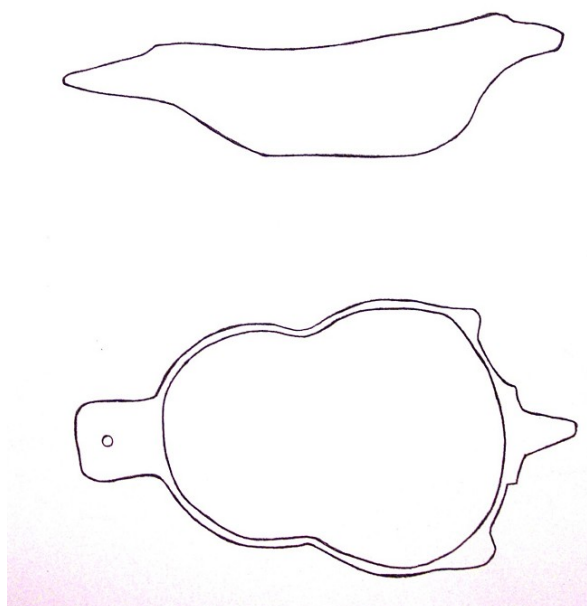


FIGURE 2. Author sketch drawing of unusual effigy vessel (PM 77-65-10/12812) from stone-box grave in Mound 2.

head width is 63 mm. The vessel's interior orifice diameter is 35 mm, and the exterior orifice diameter is 42 mm.

Earplugs (n=4): Three complete specimens and one fragmentary earplug were recovered from the ash mound (PM 77-65-10/12825). All of these artifacts have rounded lateral edges, and three items display a hole drilled through the center. The two complete drilled earplugs measure 21.6 mm and 25.9 mm long, and 15.5 mm and 22.5 mm wide, respectively. The complete specimen with no central hole measures 29.2 mm long and 19.2 mm wide.

Clay Spheres (n=2): One small specimen of shell-tempered clay measures 20.24 mm in diameter. The second item is an untempered clay sphere measuring 17.05 mm in diameter. The provenience of both artifacts (PM 77-65-10/12824) is listed as the ash mound.

Pottery Disk (n=1): Among the items recovered from the ash mound was a

(Mississippi Plain) pottery disk measuring 36.7 mm in diameter and 10.2 mm thick (PM 77-65-10/12823).

Clay Bead (n=1): A single large, barrel-type bead of untempered clay (PM 77-65-10/12824) was also found in the ash mound. This specimen measures 25.75 mm long and 22.30 mm wide. Of interest is that the hole does not run through the long axis of the bead, but rather the short axis.

Lithics

The lithic sample is composed of two ovate blades, two projectile points, one celt, and one sphere. Two specimens, an ovate blade and the celt, are made of non-local resources. The remaining items are composed of locally obtained materials.

Ovate Blades (n=2): One specimen (PM 77-65-10/12818) recovered from the site is made of local Ft. Payne chert. The provenance of this artifact is in some doubt, although possibly from the ash mound. This item is 166.12 mm long, 36.42 mm wide, and 13.58 mm thick. An ovate blade of exotic Dover chert (PM 77-65-10/12826) was found in a stone-box grave in Mound No. 2. This rather long, well-crafted blade measures 232.27 mm long, 45.87 mm wide, and 12.75 mm thick.

Projectile Points (n=3): All three points are reported to originate from the ash mound. The only identified point was a Sand Mountain arrow point (PM 77-65-10/12820) measuring 33.31 mm long, 17.94 mm wide, and 4.52 mm thick. The remaining two unidentified specimens include one small, straight-stem dart point (PM 77-65-10/12820), and one dart point fragment (PM 77-65-10/12819).

Celt (n=1): The ash mound also yielded a greenstone celt fragment (PM

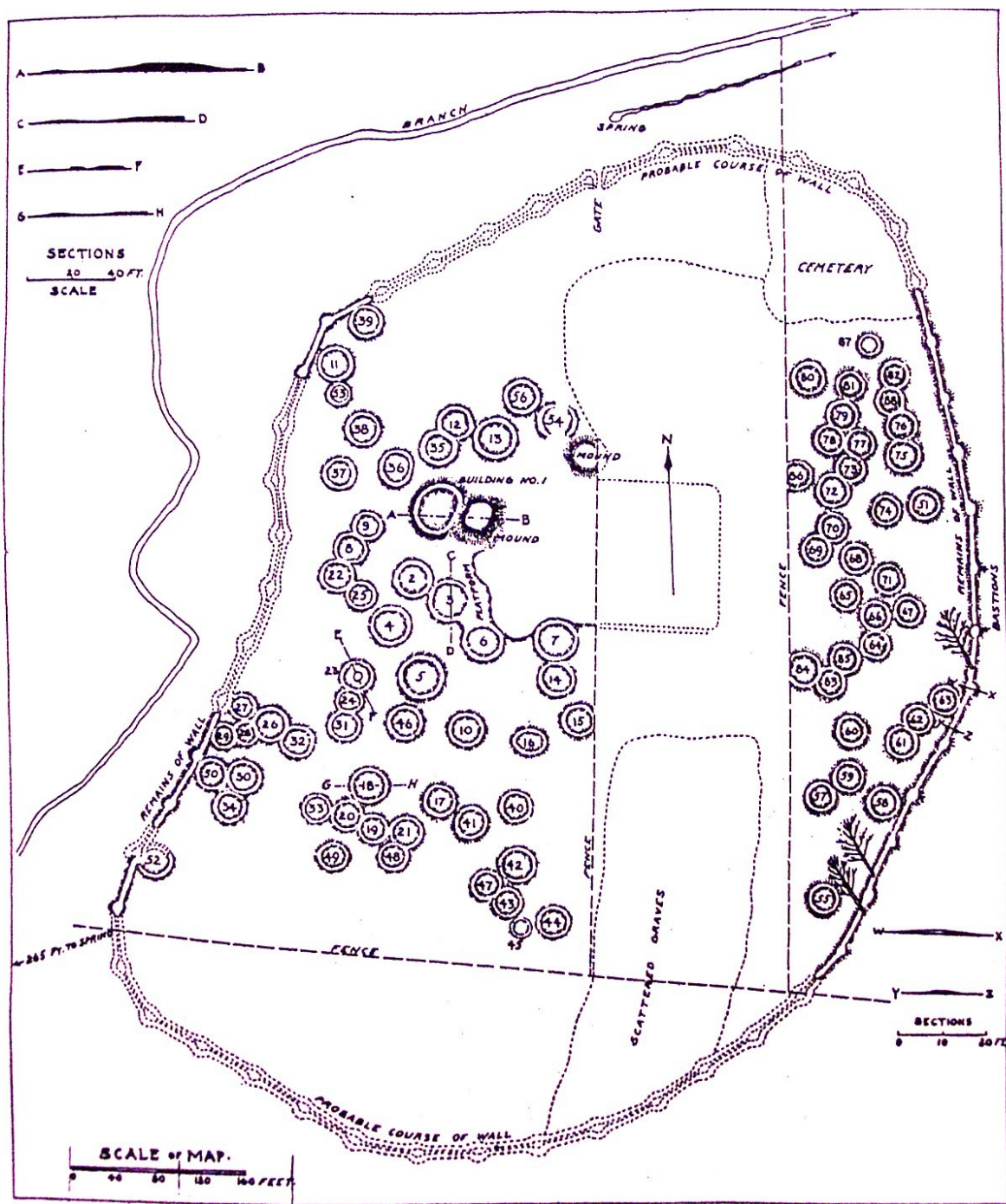


FIGURE 3. Gordontown Site Map by William E. Myer (1928).

77-65-10/12817). This celt measures (at least) 182.4 mm long, 56.0 mm thick, and up to 86.3 mm wide.

Stone Sphere (n=1): Yet another

sphere was recovered from the ash mound (PM 77-65-10/12824). This particular artifact measures 35 mm in diameter, and is much larger than the two clay

specimens reported above.

Shell

Spoons (n=2): Two worked mussel shell sections were found in Mound No. 2 stone-box graves (PM 77-65-10/12807). Although broken, both specimens are undoubtedly spoons.

Concluding Comments

The information contained in these previously unknown field notes is very important to understanding the results of subsequent Gordontown investigations (Myer 1928; Moore and Breitburg 1998). Insights into the number and location of mounds across the site area represent a prime example of the importance of these notes.

The sketch map prepared from the 1877 investigation (see Figure 1) clearly displays three mounds, only one of which (Mound No. 1) is represented on the 1928 Myer map (Figure 3). The Myer map does denote a second mound, but in a location substantially different than the mounds noted in 1877.

Of particular interest is an area marked "platform" on the 1928 Myer map. Myer provides no discussion of the nature of this "platform" in his report. Moore (1998:173) notes this fact while trying to explain the large cluster of stone-box graves (designated Feature 22) exposed during the 1985-1986 excavations within Myer's "platform" area. At that time, the "platform" shown on the Myer map was suggested to be the location of a previously undesignated burial mound (Moore 1998:173). The 1877 Curtiss map validates this suggestion, as Myer's "platform" and the Division's Feature 22 clearly occur at the Mound No. 2 location. The 1877 field notes indicate that substantial

digging of Mound No. 2 took place with numerous burials found. The extensive exploration by Curtiss (in combination with the previous digging of Dr. Joseph Jones in the late 1860s) helps explain why Myer saw a "platform" at this particular location rather than a mound.

Another consideration is the location of an "ash mound" on the 1877 sketch map within the approximate east-central site area. The 1877 field notes state that this mound was extensively excavated with no burials recovered. Artifacts recovered from this ash mound appear limited to domestic debris such as broken pottery, animal bones, and ashes. Myer does not have this mound marked on his map, which now makes sense given the considerable amount of work by the Peabody Museum-sponsored crew.

Through these few brief paragraphs, the 1877 sketch map and field notes have proven to be immensely valuable in better understanding the 1928 and 1985-1986 Gordontown site plans. Of more importance, however, is the explicit illustration of how the major Gordontown earthworks changed their appearance over a relatively short expanse of time.

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Collections Information. Collections and artifacts mentioned herein are accessioned at the Peabody Museum as follows: T. F. Wilkinson Farm, PM 77-

65-10/12810-12828,; Cain's Chapel, PM 78-6-10/14017-15265; Gray's Farm, PM 78-6-10/15818-16009; Rutherford's Farm, PM 79-4-10/17240-17318; E. Hayes Mound, PM 79-4-10/18238-18308; and Dr. Jarman's Farm, PM 82-35-10/27162-32004.

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