0105

THE MOSS-WRIGHT PARK ARCHAEOLOGICAL PROJECT: EXCAVATION OF SITE 40SU20, GOODLETTSVILLE, TENNESSEE



Tennessee Department of Conservation
Division of Archaeology
Report of Investigations No. 5

1987

PROPERTY OF TENN. DIV. OF ARCHAEOLOGY

THE MOSS-WRIGHT PARK ARCHAEOLOGICAL PROJECT: EXCAVATION OF SITE 40SU20, GOODLETTSVILLE, TENNESSEE

By:

Joseph L. Benthall with contributions by:

L. Carl Kuttruff

Tennessee Department of Conservation

Division of Archaeology

Report of Investigations No. 5

1987



Autho. No. 327127. This public document was promulgated at a cost of 2.80 ea. 200/1/87. TN Printing Div., Nashville. TN 37219-5208.

TABLE OF CONTENTS

	Page
List of Figures	ii
List of Tables	iii
Preface	iv
Introduction	1
Environmental Setting	5
Physiography and Geology Soils Climate Flora Fauna	5 5 6 6 7
Site Location and Description	8
Field Investigation	8
Research Objectives Methodology	8 9
Burials	11
Lithic Artifact Analysis	53
Projectile Points	53
Other Chipped Stone Artifacts	63
Miscellaneous Stone Artifacts	69
Ceramic Analysis	71
Summary and Conclusions	83
References Cited	87

LIST OF FIGURES

<u>Figure</u>		Page
1	Site 40SU20 location and vicinity.	2
2	Northeast area of Moss-Wright Park and locality of site 40SU20.	3
3	Aerial view of site 40SU20 and excavated cemetery.	4
4	Archaeological excavation at site 40SU20.	4
5	Excavation boundaries and localities of stone box burials.	10
6	Burial 14.	23
7	Closeup of Burial 14 showing turtle carapace in situ.	23
8	Burials 25, 30, and 31.	28
9	Burial 27 (rearranged).	28
10	Burial 44 with box capstones in place.	34
11	Burial 44 with associated pottery vessels.	34
12	Burial 46.	36
13	Empty stone box (No. 67) showing construction.	36
14	Projectile points/knives.	55
15	Projectile points and other artifacts.	58
16	Miscellaneous chipped stone artifacts.	66
17	Miscellaneous lithic artifacts.	70
18	Ceramics.	72
19	Ceramics.	73
20	Ceramic vessels from Burial 44.	74
91	Vessel rim profiles.	79

LIST OF TABLES

<u>Table</u>		Page
1	Burial data, site 40SU20.	15
2	Projectile point distribution, site 40SU20.	54
3	Lithic artifact distribution, site 40SU20.	64
4	Ceramic distribution, site 40SU20.	76

PREFACE

This report on the excavation and subsequent analysis and interpretation of site 40SU20 is the result of archaeological investigations conducted by the Tennessee Division of Archaeology during the summer of 1977.

Any archaeological research project invariably involves the efforts and assistance of numerous individuals, institutions and agencies, and site 40SU20 was no exception.

The Division of Archaeology would, at this time, wish to extend its sincere appreciation to the City of Goodlettsville for its cooperation and financial support in the sum of \$6300.00 that made possible the successful completion of the project.

Appreciation is also extended to the young men and women whose excellent skills and diligence helped to make the project a success.

Workers for the project were obtained through the Comprehensive Employment Training Act (C.E.T.A.) program administered through the Tennessee Department of Conservation. Workers employed though this program include Stephanie Thompson, Doug Paschall, John Story, John Kell, Lucinda Steen, David Lockmiller, William Fitzhugh, and Joe Kell.

The author wishes to extend special appreciation to Mrs. Jane Hinshaw who served as project archaeologist and to Linda Ries who served as field assistant. Special appreciation is also extended to Dr. Carl Kuttruff, principal investigator. Division of Archaeology staff, for providing valuable advisory illustrations in this report, for proofreading of the manuscript and providing useful suggestions regarding its contents. Appreciation is also extended to Mrs. Virginia Atkins, secretary at Fort Loudoun State Historic Area, for typing of the manuscript, and to Emanuel Breitburg for his analysis of the skeletal material.

INTRODUCTION

The site 40SU20 consists of a Mississippian stone box cemetery mound approximately 25 meters in diameter and one-half meter high located on the edge of a terrace formation above Mansker Creek in the northeastern part of the Goodlettsville City Park (Figures 1-4). The mound was originally located and tested in a cultural resource survey of the park during the fall of 1976. That work definitely established that the feature was a stone box grave mound and that there may have been some associated village materials in the surrounding area (Hinshaw and McCulloch 1976:5-10). The second stage of the community park development called for the construction of four baseball diamonds and a concession stand over the area where the mound was located. It was, therefore, recommended that the mound be completely excavated in order to recover as much information as possible before destruction.

From all appearances, the mound did not seem to have been previously disturbed (this was contradicted by the excavations), and the tests indicated that the bone preservation was good. It was believed that the excavation of this mound would, therefore, provide excellent comparative information and materials for other similar and related sites in the Nashville area. Although thousands of these stone box graves have been excavated since the 19th century, controlled scientific excavations and data recording have been rare exceptions. Exceptions include the West Site in Bell's Bend of the Cumberland (Dowd 1972), the Ganier Site on the Cumberland River (Broster 1972), the Arnold Site on the Harpeth River (Ferguson 1972), and the Noel Cemetery Site on Granny White Pike in Nashville (Benthall 1983).

The potential for good bone preservation, the chance to completely excavate a mound of this nature, and the possibility of recovering a complete population unit would provide the osteological materials necessary for a study of Mississippian physical characteristics. A study of an entire Mississippian cemetery could also produce information necessary for the determination of certain status differences and social organizational factors that were present within Mississippian society and reflected in their burial practices. Minimally, the excavation of this material would preserve part of the aboriginal history of the area, information which would be lost through construction activities.

Excavations began in June 1977 and continued through August 1977. Laboratory processing of the materials was done in the fall and winter of 1977 and 1978, and the skeletal analysis was done during that time. Completion of the artifact analysis was done during the fall and winter of 1985-86.

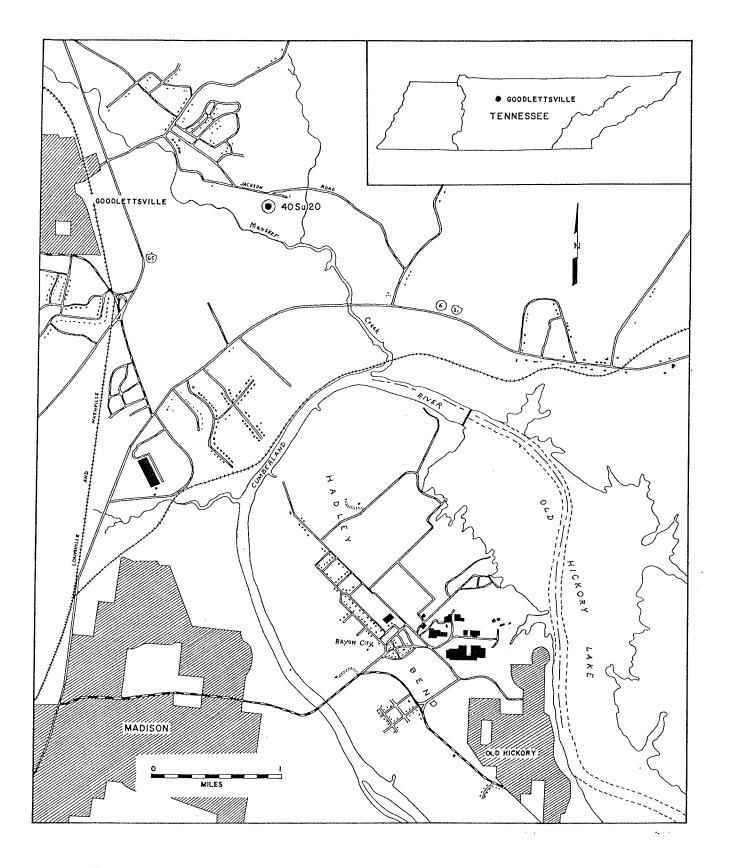


FIGURE 1. Site 40SU20 location and vicinity.

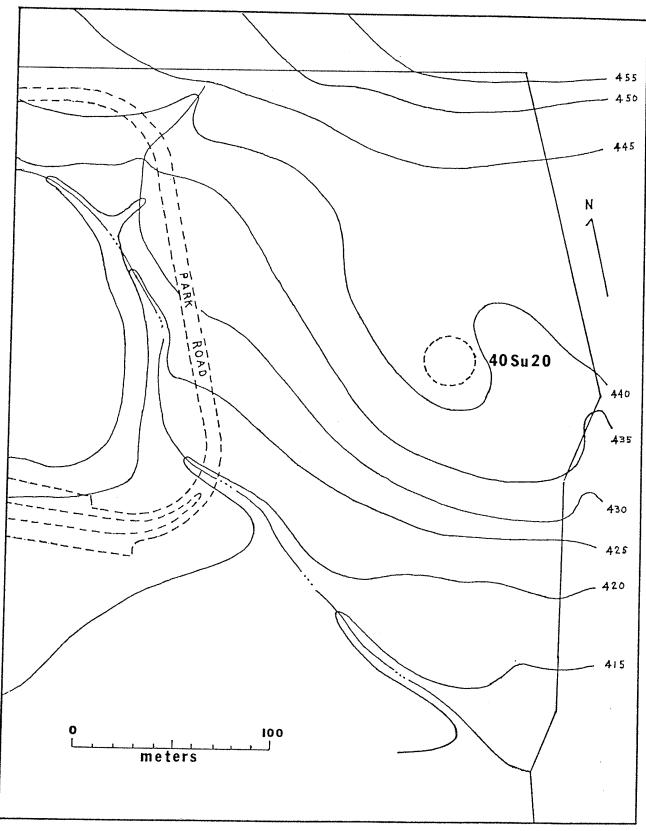


FIGURE 2. Northeast area of Moss-Wright Park and locality of site 40SU20.



FIGURE 3. Aerial view of site 40SU20 and excavated cemetery.

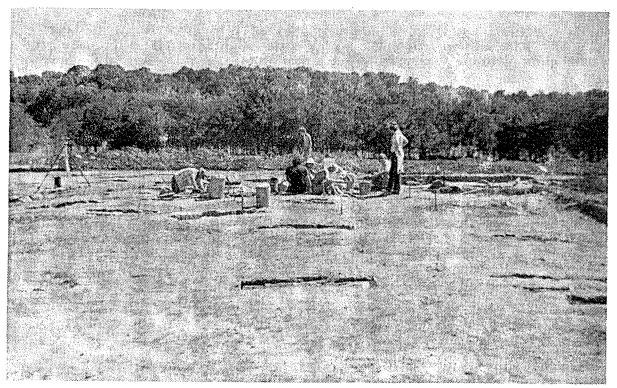


FIGURE 4. Archaeological excavation at site 40SU20. Note exposed stone burial boxes in foreground.

Environmental Setting

Physiography and Geology

Geologically, Sumner County is located within the Central Basin section of the Interior Low Plateaus Physiographic Province (Fenneman 1938). The Central Basin is a nearly elliptical area enclosed by the Highland Rim, and is characterized by gently rolling to hilly terrain, with some nearly level areas, and by meandering, low-gradient streams. It was formed by the erosion of the Nashville Dome, the structural center of which coincides with the geographic center of the basin located near the present city of Murfreesboro (Miller 1974).

This erosion has been facilitated by the relatively quick removal by solution of the limestone exposed after the more resistant overlying siliceous rocks were breached. Solutional removal of calcium carbonate by percolating ground water is most rapid along joints, the usually near-vertical cracks created by stresses in the limestone. These joints also appear to have controlled the pattern or lineation of many of the stream segments in the Central Basin (Miller 1974).

The outer areas and major drainage which divide the basin are characterized by hilly terrain. There are numerous hills capped by siliceous rocks, some nearly 1300 feet in elevation. The average elevation of the outer part of the Central Basin is approximately 750 feet (Miller 1974). Within the overall Central Basin is an area of flat to low hill topography which is identified as the inner basin (DeSelm 1959; Miller 1974).

The major streams within the Central Basin include the Cumberland, Stones, Harpeth. Duck and Elk Rivers.

The primary geologic deposits available for prehistoric utilization along the Cumberland were predominantly alluvial deposits including clay and silt with lenses of chert and quartz gravel. These sands and clays would have been important to prehistoric pottery traditions of the region. Secondary geologic deposits in the bottoms would have included gravel and point bar deposits along the Cumberland, most likely at the mouths of tributary creeks. Such deposits would probably have contained materials from most of the lithologic systems occurring upstream. Primary geologic deposits that make up the local ridges and hills were also available in scattered outcrops for prehistoric utilization. These deposits included primarily the cherts associated with the Warsaw and St. Louis limestone as well as with the Fort Payne Formation. Dover chert, mined intensively at site 40SW64 in Stewart County, was also widely utilized.

Soils

The soil at site 40SU20 consists of the Armour silt loam series which is generally found on nearly level to sloping stream terraces, fans and gently to strongly sloping foot slopes. The soil formed in approximately 2 to 4 feet of silty alluvium or loess underlain by

alluvium or residuum of phosphatic limestone. The soil is dark brown silt loam to a depth of 17 inches. Beneath this to a depth of 75 inches it is silty clay loam which is brown in the upper part, reddish-brown in the middle part and mottled reddish-brown, strong brown and lighter yellowish-brown in the lower part. Slopes range from 0-20 percent.

The Armour series is a member of the fine silty, mixed, thermac family of ultic hapludalfs. The dark brown silt loams are included in soil horizon A, and brown to reddish brown silty clay in horizon B. Solum thickness ranges from 40-80 inches, while depth to limestone bedrock ranges from 4-10 feet. Each horizon is medium to strongly acidic except the surface layer which is less acidic where limed (Prater n.d.).

Climate

The Interior Low Plateaus Province, which includes the Central Basin, lies in the humid Mesothermal Climatic region of Koppen (Trewartha 1968). This is a warm, temperate rainy climate that covers the entire southeastern section of the United States. In the Interior Low Plateaus, however, the continental air masses produce greater winter and summer temperature extremes than occur along the Atlantic and Gulf coasts where temperatures are modified by the maritime influence (Quarterman and Powell 1978:24). In a humid mesothermal climate, precipitation is considered to be well distributed through the year, yet Middle Tennessee, Northern Alabama, as well as the southern portions of Kentucky and Illinois, lie in an area that has a greater amount of rainfall in the cold season than in the warm season (Trewartha 1968).

Annual mean temperatures decrease along a south to north gradient from 60-65° F. in Northern Alabama and Southern Tennessee to 55° F. in Southern Indiana and Illinois. Temperature differences along this gradient are more marked in winter than in summer, which has a bearing on the northward limits of ranges, especially of biennial and perennial species that are exposed to winter temperatures (Quarterman and Powell 1978:74).

Sumner County is generally favored with relatively mild winters and warm summers. Weather sometimes differs in various portions of the county, but altitude differences are not large enough to cause significant differences in the climate.

Flora

In consideration of the floral resources, Quarterman and Powell (1978) have concluded that the original vegetation on the good soils of the Central Basin must have been magnificent mixed deciduous forests. Killebrew et al. (1874) speak of yellow poplar trees six to seven feet in diameter, and of black walnut, maple, hickory, elm and oak in great abundance and of enormous size. The principal timber trees of the region were ash, poplar, black walnut, beech, hickory, maple and cedar. Trees that were abundant in the original forest consistently include, in addition, linden, buckeye, sassafras, hackberry, coffee tree

and sweet gum (Sargent 1884; Safford 1884; Killebrew et al. 1874; Killebrew 1898). Red cedar forests grew so exclusively upon Lebanon limestone that the boundaries of the limestone outcrop could be distinguished by those forests (Killebrew et al. 1874).

The tops of the Highland Rim outliers within the Central Basin are dominated by oak-hickory forests, with chestnut-oak and pignut hickory assuming almost complete dominance on the highest narrow ridges. These are occasionally accompanied by post oak and blackjack oak, with mountain laurel, sparkleberry and sourwood in the lower forest layers. North-facing slopes of such hills support a mixed mesophytic forest dominated by a mixture of species that include sweet buckeye, sugar maple, white oak, red oak, chinquapin oak, basswood, shagbark hickory, pignut hickory, beech, white ash and blue ash. South-facing slopes have a greater number of oak and hickory species and all but sweet buckeye and basswood from the above list. Bur oak, black walnut and tulip poplar are found on the low slopes and benches. Yellowwood occurs sparingly in all rich woods, and spring flowers are especially abundant in all forests (Quarterman and Powell 1978).

Stream margins and flood-plains are dominated by willow, box elder, silver maple, cottonwood and sycamore (Quarterman and Powell 1978).

Many smaller varieties of plants, shrubs and low growing floral species useful to prehistoric peoples were also found in the area.

Fauna

The forests and riverine environments in the vicinity of site 40SU20 supported a variety of animal life utilized by the Indians.

Faunal populations within the area would have included most of the species indigenous to the mixed deciduous forests of the southeastern United States. The most commonly known mammalian species included white-tailed deer, elk, black bear, bobcat, cougar, beaver, otter, muskrat, weasel, mink, skunk, raccoon, opossum, cottontail rabbit, squirrel, groundhog, wolf and red fox. Additionally, there were many varieties of small rodents, such as mice, rats and chipmunks.

There were also many varieties of birds, of which the most commonly known species considered by the Indians as a food source include wild turkey, Canada goose, passenger pigeon, bobwhite and several varieties of duck. Other common species not necessarily considered as a potential food source include owls, crows and woodpeckers, as well as many smaller species. Several of these may have been taken for their plumage.

Amphibians and reptiles were also found in great numbers, but it is unlikely that reptiles were utilized as a food source. The occurrence of the shells and other bony parts of turtles at Noel Cemetery (40DV3), as well as other local sites, lends support to the premise that turtles served as a supplement to the aboriginal diet.

Large numbers and varieties of fish and mollusks were also available to the Indians. Such fish and mollusks were to be found in the Cumberland River and its smaller stream tributaries.

Site Location and Description

Site 40SU20, a low lying Mississippian burial mound, is located along a bench or terrace approximately 300 meters northwest of the confluence of Madison and Mansker Creeks, and approximately 2 miles northwest of the confluence of Mansker Creek and the Cumberland River. The Moss-Wright Park property on which the site is located consists of an 88.6 acre tract located in Sumner County and bounded on the south by Mansker Creek, on the north by Jackson Road, on the west by the Goodlettsville city limits and on the east by the Peter Dudney farm (Hinshaw and McColloch 1976:2) (Figures 1 and 2). Approximately 600 meters west of site 40SU20 is the Bowen-Campbell house, constructed ca. 1788 and identified as the earliest standing historic structure in Sumner County.

The site is located 36°19'14" north latitude and 86°41'04" west longitude (U. S. Department of Interior Geological Survey Map, Goodlettsville, Tennessee Quadrangle).

During the Hinshaw-McColloch survey of 1976, the site was described as a low, circular mound approximately 25 meters in diameter and 50 centimeters in height (Hinshaw and McColloch 1976:5).

Surface examination and excavation of several 20 centimeter test pits disclosed several stone box burials and human skeletal remains encompassing an area of approximately 200 square meters. Although extensive shovel testing was done in an attempt to locate the principal village area, these efforts were unsuccessful. However, a single pit feature located 18 meters southwest of the burial mound, as well as various artifacts, provided evidence of earlier Archaic and Woodland habitation of the site (Hinshaw and McColloch 1976:8-10).

Field Investigation

Research Objectives

The archaeological investigation of site 40SU20 during the summer of 1977 was carried out in reference to the proposed construction of the Moss-Wright Recreational Park by the City of Goodlettsville. The existence of the site was first brought to the attention of the Tennessee Division of Archaeology through a survey of the proposed park property in November, 1976 by Jane Hinshaw, consulting archaeologist.

Faced with the destruction of the site by proposed grading and subsequent construction of four baseball fields, it was decided that

excavation be conducted since the site consisted of a low-lying Mississippian burial mound, a comparatively rare feature in Middle Tennessee.

Since the proposed construction of the four baseball fields would inflict severe damage and destruction of the mound, the 1977 excavations were conducted to:

- 1. Gain greater insight and understanding of Mississippian settlement and burial patterns in the Nashville Basin.
- 2. Prevent loss of archaeological data pertaining to the prehistory of the Cumberland Valley of Middle Tennessee.
- 3. Establish temporal placement (C-14 dates), if possible, for the mound and related village.

Methodology

Standard archaeological field methodology was employed in the excavation of this site. A datum point for a transit station was established and tied into the property boundaries. A grid system was established, oriented magnetic north, and staked. The North 0/East 0 point was placed to the southwest of the area to be excavated, so that all grid readings in the excavated area were north and east of that point. All burials, features, and artifactual materials were recorded in reference to a 2 meter grid square and bagged and subsequently labeled with that unit number, for example, North 42/East 52. Burials were numbered sequentially in the order in which they were excavated.

Excavations were initially carried out by using a smooth-bucket backhoe to remove the topsoil to the level of the top of the stone box One quarter of the area was done at a time, and cleared outward from the center of the mound to a point where it was believed that all stone boxes had been exposed. The limits of the excavations are shown in Figure 5. One meter wide balks were left in place along the North 50 line and the East 38 line. After exposure by the backhoe, the stone boxes were then cleared and defined by hand with shovels and trowels. After definition, capstones, if still in place, were removed and the contents of the boxes were hand excavated with small The skeletal material and any associated artifacts were cleared and left in place. Burial record forms were completed, the grave plotted on the site map, and black and white photographs and color slides were then taken. The skeletal materials and any associated material was then removed and bagged or boxed and appropriately numbered for transport to the lab. At the Division of Archaeology laboratory all the skeletal material and artifacts were cleaned, labeled and analyzed.

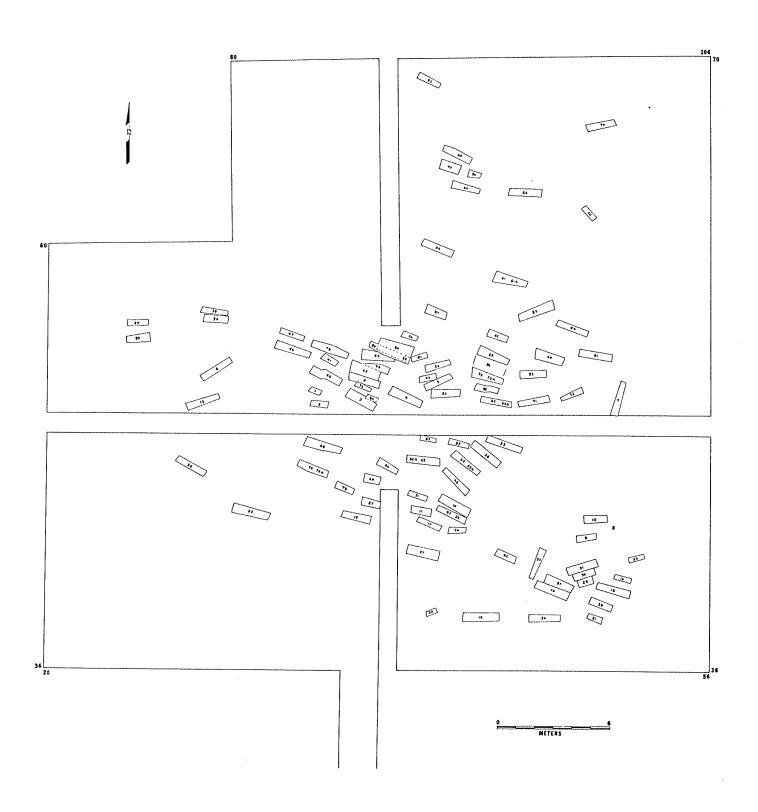


FIGURE 5. Excavation boundaries and localities of stone box burials.

BURIALS

The 96 boxes and 106 burials exposed and recorded at site 40SU20 were of the Cumberland stone box variety found at Mississippian sites in the Nashville Basin and adjacent regions. The box was generally constructed by lining the floors, sides and ends of the burial pit with thin limestone slabs, thereby forming a rectangular stone box whose length, width and depth were determined by the height and width of the body placed within it. Limestone slabs were also used to cap or seal the boxes. Although most stone box floors were paved with limestone slabs, boxes with floors composed of pottery sherds have also been observed at 40SU20 as well as other sites. The floors of several boxes have no floor paving.

It has been observed that stone-lined burial pits are not necessarily confined to sites of the Mississippian cultural tradition. Stone burial boxes, similar in both construction materials and design have been recorded at the Watkins burial mound, a Woodland site in Logan County, Kentucky (Ferguson 1972:15). However, the Woodland forms differ from those at Mississippian sites in that they are larger or more spacious in proportion to the size of the interred bodies (Ferguson 1972:15). Mississippian burial boxes were almost form-fitting in construction, as most are wide at the head and more narrow at the feet.

Although the project excavations were confined to the mound-cemetery, it is presumed that the related village habitation area was somewhere within the vicinity. It is believed that this area was located on privately owned land adjoining the Moss-Wright Park property.

Among the 106 burials excavated and recorded, only 19 of these were reasonably preserved and complete, the remaining 87 being fragmentary and disturbed. There was considerable evidence that many burials had been disturbed by diggers or relic collectors in the years preceding the onset of the 1977 project. This fact is verified by the absence of many of the box capstones, and disarticulation and rearrangement of skeletal remains. It is also probable that many of the disturbed burials had previously contained associated artifacts. Burials 9, 19 and 44 were the only ones containing associated grave goods.

Although no particular pattern was observed with the placement and locality of the boxes, several of these occur at greater depths in the mound than the others. Those occurring at greater depths include Boxes 44, 66, 78, 79, 80, 90 and 91. The intrusion of Boxes 3, 9, 45 and 82 into those of 80, 79, 66 and 82 indicates the latter had been buried at an earlier date.

Of the total burials recorded, it is reasonably certain that at least 82 of these were extended at the time of interment. However, Burials 43 and 94 were flexed and the remaining 22 indeterminate due to disturbance or poor preservation. The extended burial position is the

dominant form at all Mississippian sites in Middle Tennessee and closely adjoining areas. However, examination of the published literature and records regarding Mississippian Dallas phase sites in eastern Tennessee indicates that the vast majority of burials on such sites were flexed. Stone lined burial pits are also virtually absent in this area. Sites from which comparative data were derived include Hiwassee Island (Lewis and Kneberg 1946:179), Tomotley and Tuskegee on the Little Tennessee River (Guthe and Bristline 1978:83-87) and sites in the Norris Basin (Webb 1938).

Of the 106 burials excavated and recorded at 40SU20, 36 of these or approximately 34% are included within the infant-child age categories. The following table lists the age categories as well as the numbers and percentages within each.

	<u>Infant - Child</u>	
Age Newborn 1-6 Mo.	$\frac{\text{No}}{1}$	Percent 2.77 8.33
7-8 Mo. 1-3 Yrs. 3.5-6 Yrs. 8-12 Yrs.	$\begin{matrix} 1\\9\\19\\\underline{3}\end{matrix}$	2.77 25.00 52.77 8.33
Totals	36	99.97

Among the remaining seventy burials examined, thirty-four were males, twenty-nine females and seventeen indeterminate. Of the fifty-three burials whose age and sex were determined, it is of interest that the death rate was highest for both males and females within the 30-35 year age category. The smallest number of deaths among females occurred within the 25-30 and 40-45 year age categories, while among males the lowest percentage of deaths was in the 35-40 year range. The age categories as well as the numbers and percentages of deaths within each for males and females are presented as follows:

	Males	
Age	$\frac{\text{No}}{3}$.	Percent of Adults
18-25	3	5.47
25-30	2	3.75
30-35	12	22.64
35-40	1	1.88
40-45	2	3.75
45-50	_4	7.54
Totals	24	45.03

	<u>Females</u>	
Age 18-25	$\frac{\text{No}}{2}$.	Percent of Adults
25-30	3 1	5.47
30-35	13	$\substack{\textbf{1.88}\\24.52}$
35-40	5	9.43
40-45	1	1.88
45-50	6	$\frac{11.32}{}$
Totals	<u>29</u>	54.50
	53	99.53

Although no pathological disorders were noted within the infant-child age categories, a relatively high number of such is noted among the adult population. Of the fifty-three identified burials, two males and seven females exhibited evidence of osteomyelitis or periostitis. Evidence of varying stages of arthritis was also seen in the skeletal remains of ten females and eleven males. The greatest percentage of osteomyelitis-periostitis noted in both males and females occurred within the 30-35 year age category. Another pathological disorder identified as abnormal cranial thickening was noted in one male and one female burial. It is also of interest that the highest incidence of arthritic disorders occurred among males 30-35 years of age. An almost equal number of females also suffered from the disorder. The various burials exhibiting pathological disorders are presented as follows:

	eomye riosti		<u>A</u> :	rthrit	<u>is</u>		Crania icken	
Burial 10 14 56 60 64 65 68 6 58	Sex F F F F F F F M M	Age 35-40 30-35 45-50 30-35 45-50 30-35 30-35 30-35 30-35	Burial 3 4 10 13 37 53 56 62 64 68 6 7 17 33 40 46 58 74 85 89 96	Sex F F F F F F F F M M M M M M M M	Age 45-50 30-35 35-40 35-50 40-45 30-35 45-50 45-50 30-35 30-35 30-35 30-35 30-35 30-35 30-35 30-35 30-35 30-35 30-35 30-35 30-35 30-35 30-35	Burial 19 8	Sex F M	Age 35-40 20-25

It is interesting that an almost equal number of males and females had arthritic developments of varying degrees. Although causes of this disease are not fully known, the individual's age, body "wear and tear," exposure to the natural elements, and the nature of the environment have been considered as contributing factors. Heredity, a few instances of bone trauma, certain diseases, and dietary disturbances have also been considered (Brothwell 1965:143). The high percentage of arthritis among 30-35 year old males is perhaps activity related.

Prior to and during excavations at 40SU20, it was hoped that the cemetery might produce evidence for ranked social organization and craft specialization, which might have existed in the related village. However, the excavation provided no evidence for such organization, which is relatively common at other Mississippian sites. Excavations at the Averbuch Site (40DV60) in Nashville also produced no evidence for ranked social organization or craft specialization (Klippel 1984:1.14.4).

During surveys of the Cumberland and other related river systems in Middle Tennessee, Jolley (1983) proposed a hierarchical settlement pattern for Mississippian sites in the Cumberland River drainage n ar Nashville. Here thirty sites with platform mounds were identified as "civic-ceremonial centers." The locations of these mound centers are tentatively correlated with trade routes and salt production within the area (Klippel 1984:1.14.4). Of interest is the fact that sites without platform mounds such as Averbuch and 40SU20 are not included as civil-ceremonial centers.

In his analysis of Moundville phase sites in the Black Warrior River drainage in Alabama. Peebles (1978) has suggested that ranked status is relatively obvious at ceremonial centers but not at outlying villages that are part of the same Mississippian Period settlement hierarchy (Klippel 1984:1.14.4). Site 40SU20 can, therefore, be classified as an outlying village related to the more prominent mound ceremonial centers in the area.

Burial polarity of the 106 burials at 40SU20 shows that 26 of these were oriented toward the East, one North, one South, and 41 to the West. Polarity of the remaining 38 burials was indeterminate due to disturbance or poor preservation. Of those oriented toward the East, 10 were female, 3 male, 1 infant and 12 children. There were an additional 13 burials that were oriented to the East, but the sex of those individuals is unknown. Of those individuals who were oriented toward the West, 8 were female, 16 male 10 children and 3 infants. Additionally, the sex of 15 individuals oriented toward the West is unknown. Of the remaining ten burials, neither polarity nor sex is presently known. There was also a single adult male oriented to the South and a single one toward the North. It is of interest that the largest percentage of the female burials at 40SU20 were oriented toward the East and the vast majority of males toward the West.

All the above data are presented in Table 1. while a description of each burial and stone box along with comments is as follows.

TABLE 1

BURIAL DATA, Site 40SU20

Burial	Position	Orientation	Preservation	Age	Sex
1	extended	East 116°	disturbed	3.5	
2	extended	East 100°	disturbed	2	
3	extended	West 300°	disturbed	50	Female
4	extended	East 112°	disturbed	35	Female
5	extended	West 249°	disturbed	40	Female
6	extended	unknown	disturbed	35	Male
7	extended	South 266°	undisturbed	35-40	Male
8	extended	East 80°	disturbed	21-25	Male
9	extended	unknown	disturbed	6	
9A	extended	unknown	disturbed		Male
10	extended	unknown	disturbed	40	Female
11	extended	unknown	disturbed	1.25	
12	extended	East 89°	disturbed	3	
13	extended	East 76°	undisturbed	35-40	Female
13A	extended	East 76°	disturbed	2	
14	extended	West 293°	undisturbed	25-30	Female
15	extended	West 268°	disturbed	35	Male
15A	extended	West 268°	disturbed	35	Female
16	extended	unknown	disturbed	5	
17	extended	West 286°	disturbed	50	Male
18	extended	East 106°	undisturbed	18-19	Female
19	extended	East 102°	disturbed	40	Female
20	extended	unknown	disturbed	newborn	
21	extended	East 110°	disturbed	2.5	
22	extended	unknown	disturbed	35	Male
23	extended	East 68°	disturbed	3.5	
24	extended	unknown	disturbed		
25	extended	East 72°	disturbed	• 5	
26	extended	West 268°	disturbed	18-25	Male
27	extended	unknown	disturbed	40-45	Male
28	extended	West 297°	disturbed	35-50	Male
29	extended	East 84°	disturbed	4.5	
30	extended	East 70°	undisturbed	5	
31	extended	East 72°	undisturbed	50	Female
32	?	unknown	disturbed	1.25	
33	extended	North 20°	undisturbed	39-44	Male
34	?	unknown	disturbed		
35	extended	West 278°	disturbed	12	
36	extended	West 282°	disturbed	•5	
37	extended	West 295°	undisturbed	45	Female
38	extended	unknown	disturbed	28	Male
39	?	East 106°	disturbed	6	•
39A	?	West 286°	disturbed	6	
40	extended	West 290°	disturbed	35	Male
41	?	unknown	disturbed		

TABLE 1	BURIAL	DATA.	Site	40SU20	Continued

Burial	Position	Orientation	Preservation	Age	Sex
42	?	unknown	disturbed		
43	flexed	East 114°	incomplete	40	Female
44	extended	West 263°	undisturbed	4.6	r cmarc
45	extended	West 286°	disturbed	35	Male
46	extended	West 285°	undisturbed	30-35	Male
47	extended	West 290°	disturbed	8	marc
48	extended	West 318°	disturbed	28-30	Male
49	extended	West 283°	disturbed	20 00	marc
50	extended	East 135°	disturbed	5	
51	extended	East 110°	disturbed	4.5	
52	extended	unknown	disturbed	25-35	Female
53	extended	West 304°	disturbed	35	Female
53A	extended	unknown	disturbed	35	Male
54	extended	West 292°	disturbed	35	Male
55	extended	West 288°	disturbed	28	Male
56	extended	East 98°	undisturbed	50	Female
57	extended	unknown	disturbed	00	Male
58	extended	West 316°	disturbed	35	Male
59	extended	unknown	disturbed		Male
60	extended	unknown	disturbed	35	Female
61	?	unknown	disturbed	35	Female
61A	· ?	unknown	disturbed	50	Female
62	?	unknown	disturbed	50	Female
62 A	· ?	unknown	disturbed	3.5	2 0
63	?	unknown	disturbed	35	Male
64	extended	West 289°	undisturbed	30-25	Female
65	extended	West 285°	disturbed	50	Female
65A	bundle	West 285°	disturbed		
66	extended	West 285°	disturbed	30-35	Female
67	?	unknown	disturbed	.75	
68	extended	unknown	disturbed	35	Female
69	extended	East 118°	undisturbed	25-28	Male
70	extended	West 286°	disturbed	1	
71	extended	unknown	disturbed		
72	extended	West 247°	disturbed	6	
73	extended	West 289°	disturbed		
73A	extended	West 289°	disturbed	5-6	
74	extended	unknown	disturbed	35-50	Male
74A	extended	unknown	disturbed	20-22	Female
7 5	extended	unknown	disturbed	6	
76	extended	unknown	disturbed		
77	extended	unknown	disturbed		
78	extended	West 288°	undisturbed	25-30	Male
79	extended	West 296°	undisturbed	1	
80	?	unknown	disturbed	.5	
81	extended	West 280°	disturbed	18-25	Male

TABLE	1	BURIAL DATA, S	ite 40SU20 C	ontinued	l
Burial	Position	Orientation	Preservation	Age	Sex
82	extended	West 289°	disturbed		Male
83	extended	East 68°	undisturbed	35	Female
84	extended	East 115°	disturbed	- 4	Female
85	extended	West 294°	disturbed	35	Male
86	extended	West 302°	disturbed	5-6	
87	extended	West 289°	disturbed	5	
88	extended	unknown	disturbed	35	Female
89	extended	East 84°	disturbed	35	Male
90	extended	unknown	disturbed	25	Female
91	extended	West 254°	disturbed	3	
92	extended	West 286°	disturbed	8	
93	extended	unknown	disturbed	5	
94	flexed	East 92°	disturbed	3.5	
95	extended	East 88°	disturbed	35	Female
96	extended	West 296°	undisturbed	50	Male
97	extended	unknown	not excavated		

Burial 1

Location: Square N50E34

Box Description: Length: 66cm; Width: 39cm; Depth: 20cm;

Floor: Stone

Individuality: Single interment

Demography: Age: 3.5 yrs.; Sex: Undetermined;

Pathology: None observed

Preservation: Poor

Articulation: Disarticulated Position: Undetermined

Orientation: Undetermined Undetermined Undetermined

Grave Goods: None

Comment: Box fill contained 2 shell-tempered plain

sherds and 9 chert flakes.

Burial 2

Location: Square N50E34

Box Description: Length: 94cm; Width: 40cm; Depth: 20cm;

Floor: Stone

Individuality: Single interment

Demography: Age: 2 yrs.; Sex: Undetermined; Pathology:

None observed

Preservation: Poor

Articulation: Disarticulated, fragmentary

Position: Undetermined

Orientation: Box 100°, head to East

Grave Goods: None

Comment: Box fill contained 1 shell-tempered plain sherd,

7 flakes and 1 biface. Burial previously

disturbed.

Burial 3

Location: Square N50E36

Box Description: Length: 175cm; Width: 57cm; Depth: 17cm;

Floor: Earth

Individuality: Single interment

Demography: Age: 50+ yrs; Sex: Female; Pathology: Arthritic

lipping of vertebrae

Preservation: Poor

Articulation: Disarticulated and scattered bone fragments

Position: Probably extended

Orientation: Box 300°, head of burial to West

Grave Goods: None

Comment: Burial previously disturbed by relic collectors;

skeleton is fragmentary. Box fill contained 31 flakes, 1 utilized flake, 1 triangular (Madison) projectile point, 1 biface. Burial Box 3 was

partially intrusive into Box 80.

Burial 4

Location: Square N50E38

Box Description: Length: 168cm; Width: 50cm; Depth: 16cm;

Floor: Partially paved with stone slabs

Individuality: Single interment

Demography: Age: 35+ yrs.; Sex: Female; Pathology:

Extensive arthritic lipping of lumbar vertebrae,

angulation of body

Preservation:

Poor; disturbed

Articulation: Position:

Disarticulated and scattered skeletal fragments

Probably extended

Orientation:

Box 112°, head of burial to East Grave Goods: None

Comment: Burial previously disturbed by relic collectors.

Box fill contained 7 shell-tempered plain

sherds, 14 flakes and 1 biface.

Burial 5

Location: Square N50E40

Box Description: Length: 170cm; Width: 40cm; Depth: 8cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography: Age: 40+ yrs; Sex: Female; Pathology: None

noted

Preservation:

Poor; disturbed

Articulation:

Disarticulated bone fragments

Position:

Probably extended

Orientation:

Box 249°, head of burial to West

Grave Goods: Comment:

1 elk tibia tarsal, 1 bone needle fragment Burial previously disturbed by relic collectors.

Box fill contained 7 shell-tempered plain sherds, 44 chert flakes, 3 utilized flakes, 1 projectile point (stemmed), 1 spherical stone

ball and 1 fragment of red ochre.

Burial 6

Location: Square N52E28

Box Description: Length: 180cm; Width: 40cm; Depth: 14cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35+ yrs.; Sex: Male; Pathology: Some

arthritic lipping of iliac crest, as well as severe osteomyelitis or periostitis of both femurs and

right tibia

Preservation:

Poor; disturbed Disarticulated bone fragments Articulation:

Position: Probably extended

Box 60°, head of burial orientation unknown Orientation:

due to burial disturbance.

Grave Goods: None Comment:

Burial previously disturbed by relic collectors.

Box fill contained 2 shell-tempered plain

sherds, 17 flakes and 2 bifaces.

Burial 7

Location:

Square N50E50

Box Description:

Length: 205cm; Width: 44cm; Depth: Unknown;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35-40 yrs; Sex: Male; Pathology: Slight

arthritic lipping of lumbar vertebrae

Preservation:

Poor; but skeleton reasonably complete

Articulation: Position:

Articulated Extended

Orientation:

Box 266°, head of burial to South

Grave Goods:

Comment:

Box fill contained 1 shell-tempered plain sherd

and 2 flakes.

Burial 8

Location:

Square N42E48

Box Description:

Length: 108cm; Width: 35cm; Depth: 8cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 21-25 yrs; Sex: Male; Pathology:

Pathological cranial thickening

Preservation:

Poor; skeleton reasonably complete, but many

parts broken

Articulation:

Articulated

Position: Orientation: On back with legs folded on chest Box 80°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 1 shell-tempered plain sherd and 1 crinoid segment possibly used as a bead.

Burials 9-9A

Location:

Squares N50E36 and N52E36

Box Description:

Length: 180cm; Width: 50cm; Depth: 18cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Two interments

Demography:

(B-9) Age: 6 yrs; Sex: Not known; Pathology:

None noted. (B-9A) Age: Not known; Sex:

Male; Pathology: None noted

Preservation:

Poor; both skeletons fragmentary and incomplete

Articulation:

Both skeletons disarticulated

Position: Orientation: (B-9) not known; (B-9A) probably extended Box 112-292°, head orientations of B-9 and B-

9A not known due to disturbance and poor

preservation.

Grave Goods:

11 Madison triangular projectile points associated with Burial 9, but scattered

throughout the box fill.

Comment:

Burials 9 and 9A interred in the same box. Box fill contained 17 shell-tempered plain

sherds, 32 flakes, 1 utilized flake and 1 biface. Burial 9 box was partially intrusive into Burial

Box 79.

Burial 10

Location:

Squares N44E42 and N44E40

Box Description:

Length: 180cm; Width: 45cm; Depth: 24cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Demography:

Single interment Age: 40+ vrs.; Sex Female: Pathology

Arthritic lipping of lumbar vertebrae,

osteomyelitis or periostitis of both femurs and

tibia

Preservation:

Poor; skeleton fragmentary and incomplete.

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 114-294°, head of burial orientation not

known due to fragmentary and disturbed

condition of burial.

Grave Goods:

None

Comment:

Box fill contained 23 chert flakes and 1 crinoid

section possibly used as a bead.

Burial 11

Location:

Squares N44E40 and N44E38

Box Description:

Length: 105cm; Width: 50cm; Depth: 18cm;

Floor: Stone slabs: Capstones: 0

Individuality:

Single interment

Demography:

Age: 1.25 yrs; Sex: Unknown; Pathology: None

observed

Preservation:

Poor; skeleton fragmentary and incomplete

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 96-276°, head orientation unknown due to

disturbed condition of burial.

Grave Goods:

Comment:

Box fill contained 4 chert flakes. Burial

disturbed by relic collectors.

Burial 12

Location:

Square N44E48

Box Description:

Length: 120cm; Width: 43cm; Depth: 19cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography .

Age: 3 yrs; Sex: Unknown; Pathology: None

observed

Preservation:

Poor; skeletal remains disturbed and

fragmentary.

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 89°, head of burial to East

Grave Goods:

None

Comment:

Burial disturbed by relic hunters. Box fill

contained 3 flakes.

Burials 13-13A

Location:

Square N50E28

Box Description

Length: 195cm; Width: 45cm Depth: 21cm;

Floor: Stone slabs; Capstones: 0

Individuality

Two interments (adult female and infant)

Demography:

(B-13) Age 35-50 yrs Sex Female; Pathology: Arthritic lipping of arm joints, vertebrae and

ribs; fused iliac crest.

(B 13A) Age 2 yrs; Sex: Not determined;

Pathology: None noted.

Preservation:

Poor but Burial 13 reasonably complete. Burial 13A fragmentary and incomplete.

Articulation:

Burial 13 articulated; Burial 13A partially

articulated

Position:

Both burials extended

Orientation:

Box 76°, head of Burial 13 to East. Head of

Burial 13A to East

Grave Goods

Comment:

None

Burial 13A was positioned between the legs of Burial 13. Box fill contained 2 shell-tempered

plain sherds, 14 flakes, charcoal fragments and

1 snake vertebra.

Burial 14 (Figures 6 and 7)

Location ·

Squares N40E46 and N42E46

Box Description:

Length: 170cm; Width: 90cm; Depth: 29cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 25-35 yrs; Sex Female Pathology:

Right femur exhibits pitting and bone

resorption on the superior posterior surface and may indicate osteomyelitic development. Similar

breakdown is also noted on the condyle posterior surface. An auxiliary foramen is present in the right ramus interior aspirus. Left and right tibia exhibit osteomyelitis as well

as the left and right humuri.

Preservation

Poor; but skeleton reasonably complete.

Articulation: Position

Articulated Extended

Orientation:

Box 293°, head of burial to West

Grave Goods:

None

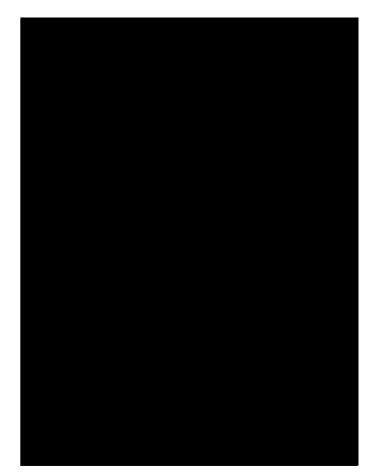


FIGURE 6. Burial 14.



FIGURE 7. Closeup of Burial 14 showing turtle carapace in situ.

Comment:

Box fill contained 4 flakes, 1 biface and 1

turtle carapace.

Burial 15-15A

Location:

Squares N38E42 and N38E44

Box Description:

Length: 210cm; Width: 45cm; Depth: 16cm; Floor: Stone slabs and shell-tempered sherds;

Capstones: 0

Individuality:

Two interments

Demography:

(B-15) Age: 35 yrs; Sex: Male; Pathology:

None noted.

(B-15A) Age: 35 yrs; Sex: Female; Pathology: Abscessing of dentition and evidence of bone

resorption.

Articulated

Preservation:

Poor; both skeletons scattered and fragmentary.

Articulation:

Position:

Probably extended

Orientation:

Box 268°, heads of both burials to West

Grave Goods:

e Goods: Non

Comment:

Box fill contained 5 shell-tempered plain

sherds, 6 flakes and 1 biface.

Burial 16

Location:

Square N40E50

Box Description:

Length: 90cm; Width: 25cm; Depth: Not known; Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 5 yrs; Sex: Unknown; Pathology: None

noted

Preservation:

Poor; fragmentary

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 110-290°, head orientation of burial not

known due to disturbance.

Grave Goods:

None

Comment:

Box fill contained 2 shell-tempered plain sherds

and 3 flakes.

Burial 17

Location:

Squares N42E40 and N44E40

Box Description:

Length: 130cm; Width: 40cm; Depth: 10cm;

Floor: Stone slabs; Capstones: 0

Demography:

Age: 50+ yrs; Sex: Male; Pathology: Arthritic

lipping of vertebrae; left parietal area of cranium exhibits pathology; osteo-arthritic infection of medial condyle of right femur.

Preservation:

Poor; burial disturbed.

Articulation:

Disarticulated; few remaining skeletal parts

Position:

Probably extended

Orientation:

Box 286°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 1 shell-tempered plain sherd

and 5 flakes.

Burial 18

Location:

Squares N40E50 and N40E48

Box Description

Length: 185cm; Width: 50cm; Depth: 14cm;

Floor: Stone slabs; Capstones: 0

Individuality ·

Single interment

Demography:

Age: 18-19 yrs; Sex: Female; Pathology: None

noted

Preservation

Fair: skeletal remains reasonably complete.

Articulation: Position:

Articulated Extended

Orientation:

Box 106°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 2 flakes.

Burial 19

Location:

Square N44E36

Box Description:

Length: 170cm; Width: 50cm; Depth: 25cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 40 yrs; Sex: Female: Pathology: Cranial

fragments exhibit abnormal density

Preservation:

Very poor; skeletal remains incomplete and

fragmentary.

Articulation:

Articulated

Position:

Extended

Orientation:

Box 102°, head of burial to East

Grave Goods:

Large jar (Mississippi Plain)

Comment:

Box fill contained 100 shell-tempered plain sherds, 12 flakes, 1 biface and 1 fragmentary

Cotaco Creek projectile point.

Burial 20

Location:

Square N38E48

Box Description:

Length: 51cm; Width: 25cm; Depth: 15cm;

Floor: Partially covered with stone slabs;

Capstones: 0

Individuality:

Single interment

Demography:

Age: fetal Sex: unknown; Pathology: none

noted

None

Preservation:

Very poor; no bones remaining

Articulation:

Not determined

Position

Probably extended

Orientation:

Box 70-250°, head orientation of burial not

determinable

Grave Goods:

Comment:

Box fill contained 1 shell-tempered plain sherd.

Burial 21

Location:

Square N38E48

Box Description:

Length: 82cm; Width: 42cm; Depth: 17cm;

Floor: Earth; Capstones: 2 remaining

Individuality:

Single interment

Demography:

Age: .5-2.5 yrs; Sex: Unknown; Pathology:

None noted

Preservation:

Poor; little remaining of the skeleton

Articulation:

Not determined due to extremely poor skeletal

preservation

Position:

Probably extended

Orientation:

Box 110°, head orientation of burial to East

Grave Goods:

None

Comment:

Box fill contained 6 flakes.

Burial 22

Location:

Square N44E30

Box Description:

Length: 210cm; Width: 62cm; Depth: 24cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography: Preservation: Age: 35 yrs; Sex: male; Pathology: None noted

Poor; scattered with little remaining of the

skeleton

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 106-286°, burial head orientation not known

due to poor preservation and disturbance.

Grave Goods:

Comment:

Box fill contained 1 shell-tempered plain sherd, 18 flakes, 1 utilized flake and 5 fragments of

worked deer metapodial.

Burial 23

Location:

Squares N44E50 and N44E52

Box Description:

Length: 92cm; Width: 39cm; Depth: 18cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 3.5 yrs; Sex: Not known; Pathology:

None observed

Preservation:

Poor; with scattered fragments and cranium

Articulation:

Disarticulated

Position:

Extended

Orientation:

Box 68°, head of burial to East

Grave Goods:

None

Comment:

None

Burial 24

Location:

Square N38E46

Box Description:

Length: 171cm; Width: 47cm; Depth: Unknown;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: Unknown; Sex: Unknown; Pathology: None

observed

Preservation:

Poor; few skeletal fragments remaining

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 96-276°, burial orientation unknown due to

disturbed nature of skeletal remains

Grave Goods:

Comment:

Burial previously disturbed by relic hunters.

Burial 25 (Figure 8)

Location:

Square N40E48

Box Description:

Length: 84cm; Width: 33cm; Depth: 22cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: .5 yr; Sex: unknown; Pathology: None

noted

Preservation:

Poor; cranial fragments only

Articulation:

Disarticulated Probably extended

Position: Orientation:

Box 72°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained no artifacts.

Burial 26

Location:

Square N50E40

Box Description:

Length: 173cm; Width: 49cm; Depth: 17cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 18-25 yrs; Sex: Male; Pathology: None

noted

Preservation:

Fair; burial disturbed

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 268°, head of burial to West

Grave Goods:

Comment:

Box fill contained 32 flakes.

Burial 27 (Figure 9)

Location:

Square N44E36

Box Description:

Length: 100cm; Width: 46cm; Depth: 15cm;

Floor: Earth: Capstones: 0

Individuality:

Single interment

Demography:

Age: 40-45 yrs; Sex: Male; Pathology: None

noted

Preservation:

Fair; burial disturbed

Articulation:

Disarticulated and rearranged to form "skull

and crossbones"

Position:

Probably extended



FIGURE 8. Burials 25, 30, and 31.



FIGURE 9. Burial 27 (rearranged).

Orientation:

Box 100-280°, head of burial orientation not

known

Comment:

Box fill contained 5 flakes and 1 stemmed

projectile point (Adena cluster).

Burial 28

Location:

Squares N46E26 and N46E28

Box Description:

Length: 89cm; Width: 50cm; Depth: 26cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35-50 yrs; Sex: Male; Pathology: None

noted

Preservation:

Poor; small fragmentary remnant of burial due

to disturbance

Articulation:

Disarticulated Probably extended

Position: Orientation:

Box 297°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 8 flakes and 1 stemmed

projectile point.

Burial 29

Location:

Square N54E24

Box Description:

Length: 115cm; Width: 28cm; Depth: 14cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 4.5 yrs; Sex: Unknown; Pathology: None

noted

Preservation:

Poor; only a few fragments of burial remaining

Articulation:

Articulated

Position:

Probably extended

Orientation:

Box 84°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 4 flakes.

Burial 30 (Figure 8)

Location:

Square N40E48

Box Description:

Length: 123cm; Width: 50cm; Depth: 20cm;

Floor: Stone slabs; Capstones: 9

Individuality:

Single interment

Demography:

Age: 5 yrs; Sex: unknown; Pathology: None

noted

Preservation:

Poor; skeleton reasonably complete

Articulation:

Articulated

Position: Orientation:

Extended Box 70°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 3 shell-tempered plain

sherds. Cranium exhibits occipital flattening.

Burial 31 (Figure 8)

Location: Square N40E48

Box Description: Length: 155cm; Width: 45cm; Depth: 21cm;

Floor: Stone slabs; Capstones: 11

Individuality: Single interment

Demography: Age: 50 yrs; Sex: Female; Pathology: None

noted

Preservation: Poor; skeleton reasonably complete

Articulation: Articulated Position: Extended

Orientation: Box 72°, head of burial to East

Grave Goods: None

Comment: Cranium exhibits occipital flattening. Box fill

contained 1 shell-tempered plain sherd and 4

flakes.

Burial 32

Location: Square N40E48

Box Description: Length: 155cm; Width: 45cm; Depth: 21cm;

Floor: Stone slabs; Capstones: 11

Individuality: Single interment

Demography: Age: 1.25 yrs; Sex: unknown; Pathology: None

noted

Preservation: Fair; skeleton represented by a few fragments

Articulation: Articulated Position: Unknown

Orientation: Box 72°, orientation of burial unknown

Grave Goods: None

Comment: Box fill contained 1 shell-tempered plain sherd

and 4 flakes.

Burial 33

Location: Squares N40E46 and N42E46

Box Description: Length: 180cm; Width: 40cm; Depth: 32cm;

Floor: Stone slabs; Capstones: 8

Individuality: Single interment

Demography: Age: 39-44 yrs; Sex: Male; Pathology: arthritic

lipping of vertebrae

Preservation: Good; burial reasonably intact

Articulation: Articulated Position: Extended

Orientation: Box 20°, head of burial to North

Grave Goods: None

Comment: Box fill contained 9 shell-tempered plain

sherds.

Burial 34

Location: Square N54E28

Box Description: Length: 140cm; Width: 50cm; Depth: 7cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: Unknown; Sex: Unknown; Pathology: None

noted

Preservation:

Poor; disturbed and composed of few skeletal

fragments

Articulation:

Disarticulated

Position:

Unknown due to disturbed and fragmentary

condition of burial

Orientation:

Box 272°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 4 flakes.

Burial 35

Location:

Square N54E28

Box Description:

Length: 150cm; Width: 35cm; Depth: 12cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 12 yrs; Sex: Unknown; Pathology: None

noted

Preservation:

Poor; disturbed and composed of a few skeletal

fragments

Articulation:

Articulated

Position:

Extended

Orientation:

Box 278°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 12 flakes.

Burial 36

Location:

Square N62E42

Box Description:

Length: 68cm; Width: 35cm; Depth: 14cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: .5 yrs; Sex: Unknown; Pathology: None

noted

Preservation:

Poor; burial consisted of a few skeletal

fragments.

Articulation:

Articulated

Position:

Probably extended

Orientation:

Box 282°, head of burial to West

Grave Goods:

None

Comment:

None.

Burial 37

Location:

Squares N40E46 and N40E48

Box Description:

Length: 170cm; Width: 55cm; Depth: 9cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 45 yrs; Sex: Female; Pathology: Arthritic

lipping in cervical vertebrae

Preservation:

Fair; skeleton reasonably complete

Articulation:

Articulated

Position:

Extended

Orientation:

Box 295°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 21 shell-tempered plain

sherds.

Burial 38

Location:

Square N52E40

Box Description:

Length: 150cm; Width: 50cm; Depth: 19cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography: Preservation: Age: 28 yrs; Sex: Male; Pathology: None noted Poor; burial consists of 3-4 skeletal fragments.

Articulation:

Unknown

Position:

Probably extended

Orientation:

Box 250°, NW, orientation of burial unknown

Grave Goods:

None

Comment:

None.

Burials 39-39A

Location:

Squares N38E48 and N38E50

Box Description:

Length: 130cm; Width: 43cm; Depth: 60cm;

Floor: Earth; Capstones: 0

Individuality:

Double interment

Demography:

(B39) Age: 6 yrs; Sex: Unknown; Pathology:

None noted.

(B-39A) Age: 6 yrs; Sex: Unknown; Pathology:

None noted

Preservation:

Poor; both burials partially complete and

fragmentary

Articulation:

Unknown

Position:

Unknown

Orientation:

Box 106-286°, head of Burial 39 to East; head

of Burial 39A to West

Grave Goods:

None

Comment:

Box fill contained 7 flakes.

Burial 40

Location:

Square N52E34

Box Description:

Length: 179cm; Width: 50cm; Depth: 14cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Male; Pathology: Arthritic

lipping of linea aspera

Preservation:

Poor; skeleton incomplete and fragmentary

Articulation:

Articulated

Position:

Probably extended

Orientation:

Box 290°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 2 shell-tempered plain, 2 Salt

Pan Fabric Marked sherds and 5 flakes.

Burial 41

Location: Square N52E34

Box Description: Length: 140cm; Width: 60cm; Depth: 12cm;

Floor: Stone slabs; Capstones: 0

Individuality: Single interment

Demography: Age: Unknown; Sex: Unknown; Pathology: None

noted

Preservation: Poor: disturbed burial with only 3-4 bones

remaining

Articulation: Disarticulated Position: Probably extended

Orientation: Box 116-296°, orientation of burial unknown

Grave Goods: None

Comment: Box fill contained 6 flakes.

Burial 42

Location: Squares N54E42 and N54E44

Box Description: Length: 115cm; Width: 45cm; Depth: 7cm;

Floor: Stone slabs; Capstones: 0

Individuality: Single interment

Demography: Age: Unknown: Sex: Unknown; Pathology: None

noted

Preservation: Poor; no bone remaining

Articulation: Unknown

Position: Probably extended

Orientation: Box 104-284°, orientation of burial unknown

Grave Goods: None

Comment: Burial possibly plowed out in previous years.

Burial 43

Location: Square N62E40

Box Description: Length: 115cm; Width: 70cm; Depth: 40cm;

Floor: Earth, partially paved with stone slabs;

Capstones: 10 (2 layers)

Individuality: Single interment

Demography: Age: 40 yrs; Sex: Female: Pathology: None

noted

Preservation: Poor; skeleton partially complete

Articulation: Articulated Position: Flexed

Orientation: Box 114° head of burial to East

Grave Goods: None

Comment: Box fill contained 18 flakes, 1 biface and 1

projectile point mid-section.

Burial 44 (Figures 10 and 11)

Location: Square N52E40

Box Description: Length: 100cm; Width 35cm; Depth: 19cm;

Floor: stone slabs; Capstones: 4

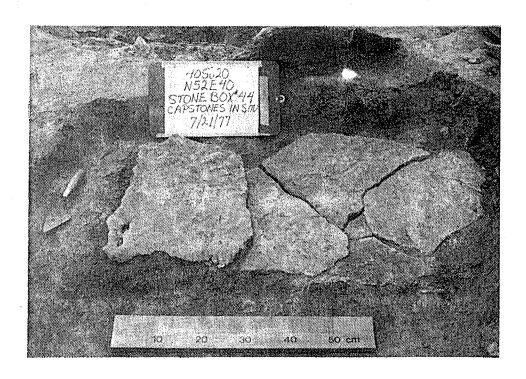


FIGURE 10. Burial 44 with box capstones in place.

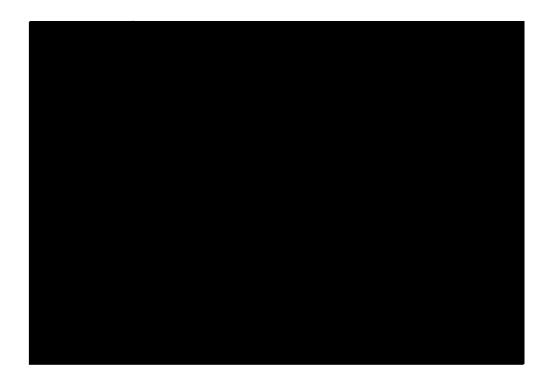


FIGURE 11. Burial 44 with associated pottery vessels.

Individuality:

Single interment

Demography:

Age: 4.6 yrs; Sex: Unknown; Pathology: None

Preservation:

Fair; skeleton reasonably complete

Articulation: Position:

Articulated Partly flexed

Orientation:

Box 263°, head of burial to West

Grave Goods:

1 Mississippi Plain, 4 lobed pottery jar, 1 conch shell effigy (noded) bowl, 2 fragments of red

Comment:

Box fill contained 1 shell-tempered cord marked sherd and 2 flakes. The Mississippi Plain jar

also contained 1 mussel shell.

Burial 45

Location:

Square N52E36

Box Description:

Length: 180cm; Width: 70cm; Depth: 15cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography: Preservation:

Age: 35 yrs; Sex: Male; Pathology: None noted

Poor; skeleton incomplete and fragmentary

Articulation: Position:

Articulated Extended

Orientation:

Box 286°, head of burial to the West

Grave Goods:

None

Comment:

Burial 45 was intrusive into Burial 66. 45 box fill contained 1 shell-tempered plain sherd and 7 flakes. Burial Box 45 was

partially intrusive into Box 66.

Burial 46 (Figure 12)

Location:

Square N52E32

Box Description:

Length: 195cm; Width: 60cm; Depth: 23cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 30-35 yrs; Sex: Male; Pathology: Mild arthritic lipping of posterior margin of sacroilial

areas, pelvis, sciatic notch margins

Preservation:

Fair; burial reasonably complete

Articulation:

Articulated Extended

Position: Orientation:

Box 285°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 25 flakes, 2 utilized flakes

and 1 biface.

Burial 47

Location:

Square N54E32

Box Description:

Length: 136cm; Width: 33cm; Depth: 25cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

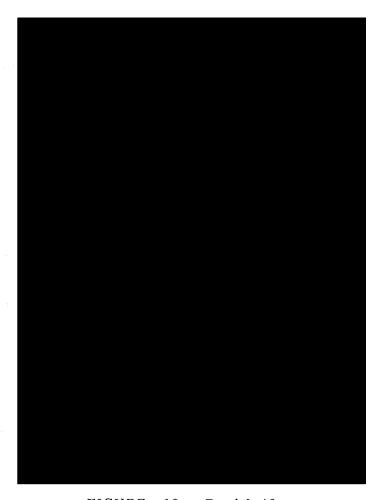


FIGURE 12. Burial 46.

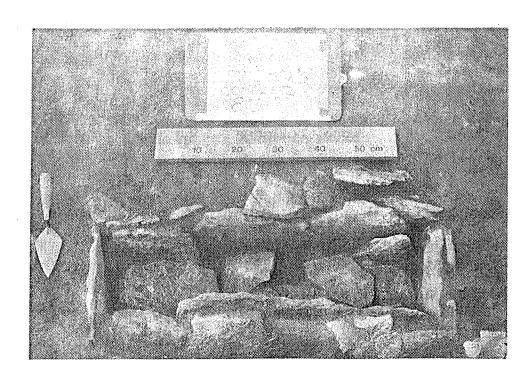


FIGURE 13. Empty stone box (No. 67) showing construction.

Demography: Age: 8 yrs; Sex: Unknown; Pathology: None

noted

Preservation: Poor; burial incomplete and fragmentary

Articulation: Partially articulated

Position: Extended

Box 290°, head of burial to West Orientation:

Grave Goods: None Comment: None

Burial 48

Location: Square N46E42

Box Description: Length: 187cm; Width: 50cm; Depth: Unknown;

Floor: Stone slabs; Capstones: 0

Individuality: Single interment

Demography: Age: 28-30 yrs; Sex: Male; Pathology: None

noted

Preservation: Poor; only a few fragments of burial remaining

(disturbed)

Articulation: Disarticulated

Position: Probably extended

Orientation: Box 318°, head of burial to West

Grave Goods: None Comment: None

Burial 49

Location: Square N46E36

Box Description: Length: 110cm; Width: 60cm; Depth Unknown

Individuality: Single interment

Demography: Age: Unknown; Sex: Unknown; Pathology: None

noted

Preservation: Poor; 1-2 bone fragments remaining of burial

Articulation: Unknown Position:

Probably extended Orientation:

Box 283°, head of burial to West

Grave Goods: None

Comment: Stone floor only portion of box remaining.

Burial 50

Location: Square N60E48

Box Description: Length: 94cm; Width: 24cm; Depth: 31cm;

Floor: Stone slabs; Capstones: 4

Individuality: Single interment

Demography: Age: 5 yrs; Sex: Unknown; Pathology: None

noted

Preservation: Poor; partially intact

Articulation: Articulated

Position: Probably extended

Orientation: Box 135°, head of burial to East

Grave Goods: None

Comment: Box fill contained 1 shell-tempered plain sherd

and 2 flakes.

Burial 51

Location: Squares N44E38 and N44E40

Box Description: Length: 115cm; Width: 39cm; Depth: 28cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 4.5 yrs; Sex: Unknown; Pathology: None

noted

Preservation:

Poor; burial incomplete and fragmentary

Articulation:

Articulated

Position:

Extended

Orientation:

Box 110°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 9 flakes.

Burial 52

Location: Squares N40E44 and N42E44

Box Description: Length: 115cm; Width: 47cm; Depth: 26cm;

Floor: Limestone slabs; Capstones: 0

Individuality:

Single interment

Demography: Age: 25-35 yrs; Sex: Female; Pathology: None

noted

Preservation:

Poor; burial fragmentary

Articulation:

Unknown

Position:

Probably extended

Orientation:

Box 114-294°, NW-SE, orientation of burial

unknown

Grave Goods:

None

Comment:

Burial has been disturbed by diggers in

previous years.

Burials 53-53A

Location:

Square N46E42

Box Description:

Length: 185cm; Width: 55cm; Depth: 13cm;

Floor: Stone slabs: Capstones: 0

Individuality:

Double interment

Demography:

(B53) Age: 35 yrs; Sex: Female; Pathology: Arthritic lipping of rib sections and proximal anterior section. (B53A) Age: 35 yrs; Sex:

Male; Pathology: None noted

Preservation:

(B53) Poor; fragmentary and incomplete; (B53A) Poor; fragmentary and incomplete

Articulation:

(B53) Articulated; (B53A) Bundle?

Position:

(B53) Extended; (B53A) Bundle?

Orientation:

Box 304°, (B53) head of burial to West; (B53A) burial orientation unknown

Grave Goods: Comment:

Box fill contained 3 shell-tempered plain sherds

and 19 flakes.

Burial 54

Location:

Square N58E40

Box Description:

Length: 190cm; Width: 57cm; Depth: 7cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Male; Pathology: None noted

Preservation: Articulation:

Poor; fragmentary

Position:

Articulated Extended

Orientation:

Box 292°, head of burial to West

Grave Goods

None

None

Comments:

Box fill contained 2 shell-tempered plain

sherds.

Burial 55

Location:

Square N48E44

Box Description

Length: 200cm; Width: 40cm; Depth: 25cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 28 yrs; Sex: Male; Pathology: None noted

Preservation:

Poor; fragmentary

Articulation:

Burial is fragmentary and partially articulated

Position:

Probably extended

Orientation:

Box 288°, head of burial to West

Grave Goods:

Comments:

Box fill contained 7 flakes.

Burial 56

Location:

Squares N62NE44 and N62E46

Box Description:

Length: 180cm; Width: 50cm; Depth: 18cm;

Floor: Partially paved with stone slabs:

Capstones: 0

Individuality:

Single interment

Demography:

Age: 50 yrs; Sex: Female; Pathology:

Arthritic lipping of 4 thoracic vertebrae, arthritic development of right lateral anterior margin of body, periostitis/osteomyelitis distal section of left tibis, fibula, and right tibis.

section of left tibia, fibula, and right tibia

Preservation:

Poor burial reasonably complete

Articulation:

Articulated Extended

Position: Orientation:

Box 98°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 7 shell-tempered plain

sherds, 7 flakes and 7 animal bone fragments.

Burial 57

Location:

Squares N42E38 and N42E40

Box Description:

Length: 170cm; Width: 60cm; Depth: Floor

remaining only; Floor: Stone slabs: Capstones:0

Individuality:

Single interment

Demography:

Age: Unknown; Sex: Male; Pathology: None

noted

Preservation:

Poor scattered fragments, all remained of

burial

Articulation:

Disarticulated Probably extended

Position: Orientation:

Box 84-264°, orientation of burial unknown due

to disturbed condition

Grave Goods:

None

Comment:

Box fill contained 8 flakes, 1 utilized flake, 1

biface and 1 projectile point (Morrow Mt.?)

Burial 58

Location:

Squares N46E42 and N48E42

Box Description:

Length 194cm; Width: 57cm; Depth: 25 cm:

Floor: Stone slabs; Capstones 0

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Male Pathology: Right tibia and humerus are pathological, arthritic deposits

on tarsals, and granulated appearance of eye

orbits

Preservation:

Poor; burial disturbed and fragmentary

Articulation:

Articulated (partial)

Position:

Extended

Orientation:

Box 316°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 5 shell-tempered plain sherds

and 3 flakes.

Burial 59

Location:

Squares N52E42 and N52E44

Box Description:

Length 185cm; Width: 50cm; Depth: 10 cm;

Floor: Stone slabs; Capstones 0

Individuality:

Single interment

Demography:

Age: Unknown; Sex: Male; Pathology: None

noted

Preservation:

Poor: skeleton fragmentary and incomplete

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 110-290°, burial orientation unknown

Grave Goods:

None

Comment:

Box fill contained 14 flakes, 1 biface and 1

projectile point (stemmed).

Burial 60

Location:

Square N52E46

Box Description:

Length: 175cm; Width: 67cm; Depth: 13 cm;

Floor: Stone slabs

Individuality:

Single interment

Demography: Age: 35 yrs; Sex: Female; Pathology:

Periostitis infection of the right humerus, right

and left tibia

Preservation:

Poor; skeleton incomplete and fragmented

Articulation

Articulated (partial)

Position:

Extended

Orientation:

Box 100-280°, burial orientation unknown

Grave Goods:

None

Comment:

Box fill contained 4 shell-tempered plain sherds

and 16 flakes.

Burials 61 61A

Location:

Square N56E44

Box Description:

Length: 186cm; Width: 65cm; Depth 33 cm;

Floor: Stone slabs

Individuality

Double interment

Demography:

(B-61) Age 35 yrs; Sex: Female Pathology:

Dental abscesses and bone resorption;

(B61A) Age: 50 yrs; Sex: Female: Pathology:

None noted

Preservation:

Poor (both burials) Both burials fragmentary

Articulation: Position:

Unknown (both burials)
Unknown (both burials)

Orientation:

Box 104-289°, burial orientation unknown

Grave Goods:

None

Comment:

Box fill contained 18 flakes.

Burials 62-62A

Location:

Square N46E40

Box Description:

Length: 185cm; Width: 50cm; Depth 27cm;

Floor: Earth; Capstones: 0

Individuality:

Double interment

Demography:

(B-62) Age: 50 yrs Sex: Female: Pathology: Arthritic lipping of vertebrae; (B-62A) Age: 3.5 yrs; Sex: Unknown; Pathology: None noted

Preservation:

Poor; both burials fragmentary

Articulation:

Unknown

Position:

Unknown (both burials) due to almost total

absence of skeletal remains

Orientation:

Box 92-272°, orientation of both burials

unknown

Grave Goods:

None

Comment:

Box fill contained 1 shell-tempered plain sherd

and 1 stemmed projectile point fragment (Cotaco

Creek)

Burial 63

Location:

Square N52E36

Box Description:

Length: Unknown; Width: 65cm; Depth: 14cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age 35 yrs; Sex: Male; Pathology: None noted

Preservation:

Poor: burial incomplete and fragmentary

Articulation: Position:

Unknown Unknown

Orientation:

Box 104-284° burial orientation unknown due

to almost total absence of skeleton

Grave Goods Comment:

None.

Burial 64

Location:

Square N62E42

Box Description:

Length: 165cm; Width: 44cm; Depth: 14cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 30-35 yrs Sex: Female Pathology: Arthritic development of right lateral anterior surface of 5th lumbar process; development most pronounced at the lateral end, anterior

surface. Swelling of left fibula shaft is indicative of a healed fracture or periostitis.

Preservation:

Fair; burial reasonably complete

Articulation:

Articulated Extended

Position: Orientation:

Box 289°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 2 flakes and 1 biface.

Burials 65-65A

Location:

Squares N50E42 and N50E44

Box Description:

Length: 180cm; Width: 45cm; Depth: 25cm;

Floor: Earth; Capstones: 0

Individuality: Demography:

Double interment; adult female and male child (B-65) Age: 50 yrs; Sex: Female; Pathology:

Pitting of left femur and tibia; lesions exhibited

on right femur and tibia as well as left

humerus; left maxilla exhibits bone resorption

from an abscess.

(B-65A) Age: Unknown; Sex: Male Pathology:

None noted

Preservation:

Poor; both burials incomplete and fragmentary

(skulls only)

Articulation:

(B-65) Articulated (B-65A) Bundle in center of

box

Position.

(B-65) Extended; (B-65A) Bundle

Orientation:

Box 285° heads of burials 65 and 65A to West

Grave Goods:

None

Comment:

Box fill contained 1 shell-tempered plain sherd,

26 flakes and 1 biface.

Burial 66

Location:

Square N52E36

Box Description: Length: 164cm; Width: 48cm; Depth: 25cm;

Floor: Stone slabs; Capstones: 4

Individuality:

Single interment

Demography:

Age: 30-35 yrs; Sex: Female: Pathology: None

noted

Preservation:

Poor; burial incomplete and fragmentary

Articulation: Position

Articulated Extended

Orientation:

Box 285°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 1 shell-tempered plain sherd

and 6 flakes.

Burial 67 (Figure 13)

Location: Square N48E40

Box Description: Length: 89cm; Width: 28cm; Depth: 13cm;

Floor: Stone slabs; Capstones: 3

Individuality:

Single interment

Demography:

Age: .75 yr - 1 yr; Sex: Unknown; Pathology:

None noted

Preservation:

Poor; few bone fragments all that remained of

burial

Articulation:

Unknown Unknown

Position:

Unknown

Orientation:
Grave Goods:

Box 96-276°, orientation of burial is unknown

Grave Good Comment: None.

Burial 68

Location:

Square N48E34

Box Description:

Length: 198cm; Width: 54cm; Depth: 30cm;

Floor: Limestone slabs Capstones: 0

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Female; Pathology: Arthritic development of rim of sacro-ilial anterior and ilial crest. Left tibia and fibula exhibit evidence

of osteomyelitis

Preservation:

Poor; burial incomplete and scattered

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 104-284°, burial orientation is unknown

Grave Goods:

None

Comment:

Box fill contained 13 flakes, 1 biface and 2

shell beads.

Burial 69

Location:

Square N64E42

Box Description:

Length: 177cm; Width: 55cm; Depth: 13cm;

Floor Partially paved with stone slabs:

Capstones: 0

Individuality:

Single interment

Demography: Age: 25-28 yrs; Sex: Male; Pathology: None

noted

Preservation: Fair; burial reasonably complete

Articulation Articulated Position: Extended

Orientation: Box 118° head of burial to East

Grave Goods: None

Comment: Box fill contained 2 flakes and 1 projectile

point.

Burial 70

Location: Square N54E38

Box Description: Length: 90cm; Width: 35cm; Depth: 20cm;

Floor: Soil and stone slabs; Capstones: 0

Individuality: Single interment

Demography: Age: 1 yr; Sex: Unknown; Pathology: None

noted

Preservation: Poor; several skull fragments only remains of

the burial

Articulation: Unknown

Position: Probably extended

Orientation: Box 286°, head of burial to West

Grave Goods: None

Comment: Box fill contained 1 flake.

Burial 71

Location: Square N50E46

Box Description: Length: 181cm; Width: 47cm; Depth: 13cm;

Floor: Stone slabs; Capstones: 0

Individuality: Single interment

Demography: Age: Unknown; Sex: Female; Pathology: None

noted

Preservation: Poor; burial incomplete and fragmentary

(disturbed)

Articulation: Disarticulated

Position: Probably extended

Orientation: Box 76-256°, orientation of burial unknown due

to its disturbance

Grave Goods: None

Comment: Box fill contained 8 flakes and a single biface.

Burial 72

Location: Square N50E48

Box Description: Length: 135cm; Width: 39cm; Depth: 19cm;

Floor: Stone slabs; Capstones: 0

Individuality: Single interment

Demography: Age: 6 yrs; Sex: Indeterminate; Pathology:

None noted

Preservation: Poor; skeleton incomplete and fragmentary

reservation. 1001, sketeton i

Articulation: Partially articulated

Position: Extended

Orientation:

Box 247°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 6 flakes.

Burials 73-73A

Location:

Square N52E42

Box Description:

Length: 185cm; Width: 55cm; Depth: 23cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Double interment

Demography:

(B-73) Age Adult indeterminate; Sex: Indeterminate; Pathology: None noted; (B 73A) Age 5-6 yrs; Sex: Indeterminate;

Pathology None noted

Preservation: Articulation:

Poor; both burials incomplete and disturbed (B-73) Disarticulated; (B-73A) Disarticulated Both burials were probably extended prior to

being disturbed

Orientation:

Box 289°, heads of both burials to West

Grave Goods

None

Comment:

Position

Box fill contained 1 shell-tempered cordmarked

sherd and 17 flakes.

Burials 74-74A

Location:

Square N46E34

Box Description:

Length 170cm; Width: 54cm; Depth: 19cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Double interment

Demography:

(B-74) Age: 35-50 yrs; Sex: Male; Pathology: Arthritic lipping of thoracic vertebrae; (B-74A) Age: 20-22 yrs Sex: Female; Pathology None

noted

Preservation:

Poor; both burials disturbed, consisted of

scattered bone fragments

Articulation:

Both burials disa ticulated Both burials probably extended

Position: Orientation:

Box 110-290°, orientation of both burials

indeterminate

Grave Goods:

None

Comment

Box fill contained 6 flakes.

Burial 75

Location:

Square N46E36

Box Description

Length: 110cm; Width: 41cm; Depth: 8cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography

Age 6 yrs; Sex: Indeterminate; Pathology:

None noted

Preservation:

Poor: burial fragmentary and incomplete

(disturbed)

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 118-298°, orientation of burial unknown

Grave Goods:

None None.

Comment:

Burial 76

Location:

Squares N66E48 and N66E50

Box Description:

Length: 165cm; Width: 40cm; Depth: Bottom only remaining portion of box; Floor: Stone

slabs: Capstones: 0

Individuality:

Indeterminate

Demography:

Age: Indeterminate; Sex: Indeterminate;

Pathology: None noted

Preservation:

Poor; no bone remaining

Articulation:

Indeterminate

Position:

Probably extended

Orientation:

Box 75-255°, orientation of burial unknown

Grave Goods:

None None.

Comment:

Burial 77

Location:

Square N66E40

Box Description:

Length: Indeterminate; Width: Indeterminate;

Depth: Indeterminate; Floor: Indeterminate;

Capstones: 0

Individuality:

Indeterminate

Demography:

Age: Indeterminate; Sex: Indeterminate;

Pathology: None noted

Preservation:

Poor; no bone remaining

Articulation:

Unknown

Position:

Probably extended

Orientation:

Indeterminate

Grave Goods:

None

Comment:

None.

Burial 78

Location:

Square N52E34

Box Description:

Length: 205cm; Width: 48cm; Depth: 23cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 25-30 yrs; Sex: Male; Pathology: None

noted

Preservation:

Fair; burial reasonably complete

Articulation:

Articulated Extended

Position: Orientation:

Grave Goods:

Box 288°, head of burial to West None

Comment:

None

Burial 79

Location:

Square N52E36

Box Description: Length: 90cm; Width: 30cm; Depth: 20cm;

Floor: Stone slabs; Capstones: 7

Individuality:

Single interment

Demography:

Age: 1 yr; Sex: Indeterminate; Pathology:

None observed

Preservation:

Fair; burial reasonably complete

Articulation: Position:

Articulated Extended

Orientation:

Box 296°, head of burial to West

Grave Goods:

None

Comment:

Cranium exhibits occipital flattening. Box fill

contained 2 bifaces.

Burial 80

Location:

Square N50E36

Box Description:

Length: 62cm; Width: 26cm; Depth: 12cm; Floor: Shell-tempered plain sherds and stone

slabs: Capstones: 5

Individuality:

Single interment

Demography:

Age: .5 yr; Sex: Indeterminate; Pathology:

None noted

Preservation:

Poor; burial incomplete and fragmentary

Articulation:

Disarticulated Indeterminate

Position: Orientation

Box 117-297°, orientation of burial unknown

Grave Goods:

None

Comment:

Box fill contained 8 large shell-tempered plain

sherds (part of box floor) and 2 flakes.

Burial 81

Location:

Square N52E48

Box Description:

Length: 180cm; Width: 50cm; Depth: 19cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 18-25 yrs; Sex: Male; Pathology: None

noted

Preservation:

Poor; burial approximately 50% complete

Articulation:

Articulated Extended

Position:

sxtended

Orientation:

Box 280°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 1 flake and 1 projectile point

fragment (Big Sandy II).

Burial 82

Location:

Squares N52E38 and N54E38

Box Description:

Length: 190cm; Width: 55cm; Depth: Bottom

only remaining; Floor: Stone slabs; Capstones:0

Individuality:

Single interment

Demography:

Age: Adult indeterminate; Sex: Male;

Pathology: None noted

Preservation:

Poor burial incomplete, bones fragmentary

Articulation:

Indeterminate Indeterminate

Position: Orientation:

Box 289°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 22 flakes and was disturbed

by the intrusion of Box 90.

Burial 83

Location:

Square N54E46

Box Description:

Length: 210cm; Width: 60cm; Depth: 28cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Female; Pathology: None

noted

Preservation:

Poor; burial reasonably complete

Articulation:

Articulated Extended

Position: Orientation:

Box 68°, head of burial to East

Grave Goods:

Comment:

None

Box fill contained 1 flake and 1 mussel shell.

Burial 84

Location:

Square N54E48

Box Description:

Length: 180cm; Width: 50cm; Depth: 13cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: Indeterminate; Sex: Female; Pathology:

None noted

Preservation:

Poor; remains of burial consist of a few

scattered bone fragments

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 115°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 1 shell-tempered plain sherd.

Burial 85

Location:

Square N68E40

Box Description:

Portion of floor only remaining; Floor: Partially

paved with stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Male; Pathology: Arthritic

lipping of thoracic vertebrae

Preservation:

Poor; burial remnant consisted of a few bone

fragments

Articulation:

Disarticulated (partially)

Position:

Extended

Orientation:

Box 294°, head of burial to West

Grave Goods:

None

Comment:

None.

Burial 86

Location:

Square N46E38

Box Description:

Length: 130cm; Width: 40cm; Depth: 7cm:

Floor: Earth; Capstones 0

Individuality:

Single interment

Demography:

Age: 5-6 yrs; Sex: Indeterminate; Pathology:

None noted

Preservation:

Poor; burial fragmentary

Articulation:

Articulated Extended

Position: Orientation:

Box 302°, head of burial to West

Grave Goods:

None

Comment:

Box fill contained 1 marine shell which had possibly been associated with Burial 86, as well

as 2 flakes.

Burial 87

Location:

Square N54E40

Box Description:

Length: 125cm; Width: 50cm; Depth: 17cm;

Floor: Partially paved with stone slabs;

Capstones: 0

Individuality:

Single interment

Demography:

Age: 5 yrs; Sex: Indeterminate; Pathology:

None noted

Preservation:

Poor; skeleton fragmentary and incomplete

Articulation:

Partially articulated

Position:

Extended

Orientation:

Box 289°, head of burial to West

Grave Goods:

Comment:

None None.

Burial 88

Location:

Squares N52E36 and N52E38

Box Description:

Length: 195cm; Width: 55cm; Depth: Unknown;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Female: Pathology: None

noted

Preservation:

Poor; burial disturbed and incomplete

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Grave Goods:

Box 109-289°, orientation of burial unknown

None

Comment:

None.

Burial 89

Location:

Square N54E24

Box Description:

Length: 125cm; Width: 60cm; Depth:

Indeterminate; Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Male; Pathology: Arthritic development in hands (phalanx), left frontal

section of supra-orbital ridge

Preservation:

Poor; burial consists of a few scattered

fragments

Articulation: Position:

Partially articulated Probably extended

Orientation:

Box 84°, head of burial to East

Grave Goods: Comment:

None None.

Burial 90

Location:

Squares N52E36 and N52E38

Box Description:

Length: 180cm; Width: 45cm; Depth: 25cm;

Floor: Stone slabs; Capstones: 9

Individuality:

Single interment

Demography:

Age: 25 yrs; Sex: Female; Pathology: None

noted

Preservation:

Poor; burial disturbed and incomplete

Articulation: Position:

Disarticulated Probably extended

Orientation:

Box 112-292°, orientation of burial unknown

Grave Goods:

None

Comment:

Box fill contained 3 flakes, 1 biface and 1

rodent mandible.

Burial 91

Location:

Squares N52E38 and N52E40

Box Description:

Length: 92cm; Width: 29cm; Depth: 9cm; Floor

Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 3 yrs; Sex: Indeterminate; Pathology:

None noted

Preservation: Articulation:

Poor; burial partially complete

Partially articulated

Position:

Extended

Orientation:

Box 254°, head of burial to West

Grave Goods:

None

Comment:

None.

Burial 92

Location:

Square N50E42

Box Description:

Length: 128cm; Width: 35cm; Depth: 10cm;

Floor: Stone slabs; Capstones: 0

Individuality:

Single interment

Demography:

Age: 8 yrs; Sex: Indeterminate; Pathology:

None noted

Preservation: Articulation:

Poor; burial incomplete Partially articulated

Position:

Extended

Orientation:

Box 286°, head of burial to West

Grave Goods:

1 pottery vessel, shell-tempered plain (small

jar) near skull

Comment:

Box fill contained 3 shell-tempered plain sherds. The associated pot with burial

contained a single mussel shell.

Burial 93

Location:

Square N48E42

Box Description:

Length: 120cm; Width: 45cm; Depth: 15cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 5 yrs; Sex: Indeterminate; Pathology:

None noted

Preservation:

Poor; burial incomplete and fragmentary

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 100-280°, orientation of burial unknown

Grave Goods:

None

Comment:

Box fill contained 20 flakes and 1 utilized flake.

Burial 94

Location:

Square N42E42

Box Description:

Length: 95cm; Width: 38cm; Depth: 17cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 3.5 yrs; Sex: Indeterminate; Pathology:

None noted

Preservation:

Poor; burial incomplete and fragmented

Articulation:

Articulated

Position:

Partly flexed on left side

Orientation:

Box 92°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 1 flake.

Burial 95

Location:

Squares N52E44 and N52E46

Box Description:

Length: 150cm; Width: 50cm; Depth: Indeterminate; Floor: Earth; Capstones: 0

_

Individuality:

Single interment

Demography:

Age: 35 yrs; Sex: Female; Pathology: None

noted

Preservation:

Poor; burial is disturbed consisting of scattered

fragments

Articulation:

Disarticulated

Position:

Probably extended

Orientation:

Box 88°, head of burial to East

Grave Goods:

None

Comment:

Box fill contained 10 flakes.

Burial 96

Location:

Square N52E44

Box Description:

Length: 175cm; Width: 80cm; Depth: 15cm;

Floor: Earth; Capstones: 0

Individuality:

Single interment

Demography:

Age: 50 yrs; Sex: Male; Pathology: Arthritic

lipping of lumbar and thoracic vertebrae

Preservation:

Poor; burial reasonably complete

Articulation:

Articulated

Position:

Extended

Orientation:

Box 296°, head of burial to West

Grave Goods:

Comment:

Box fill contained 5 flakes.

LITHIC ARTIFACT ANALYSIS

A total of 824 lithic artifacts was recovered from the site, including those from pit features, burials, stone box fill, general excavations and the surface. Also included are several specimens recovered from the surface of the nearby Pete Dudney property. The overall collection includes specimens that are classified within the general categories of chipped, ground and pecked stone as well as lithic debris. The artifact count does not indicate in every instance complete specimens, as many artifacts recovered were fragmentary, nonetheless informative statistically.

Examination of the 824 lithic artifacts from the site suggests that these had been manufactured from a variety of local materials that can be found within the Nashville Basin. The most common cherts used in the manufacture of tools from site 40SU20 were the gray, blue-gray, tan, and brown varieties derived from the Fort Payne, Warsaw, St. Louis, Monteagle and Bangor geologic formations. Cherts from these formations occurred as large nodules and weathered blocks that are common in the Nashville Basin and adjacent areas of the Lower Highland Rim.

Other stones utilized for tools, such as sandstone or quartzite, were also derived from local stream beds, older terraces and upland ridges.

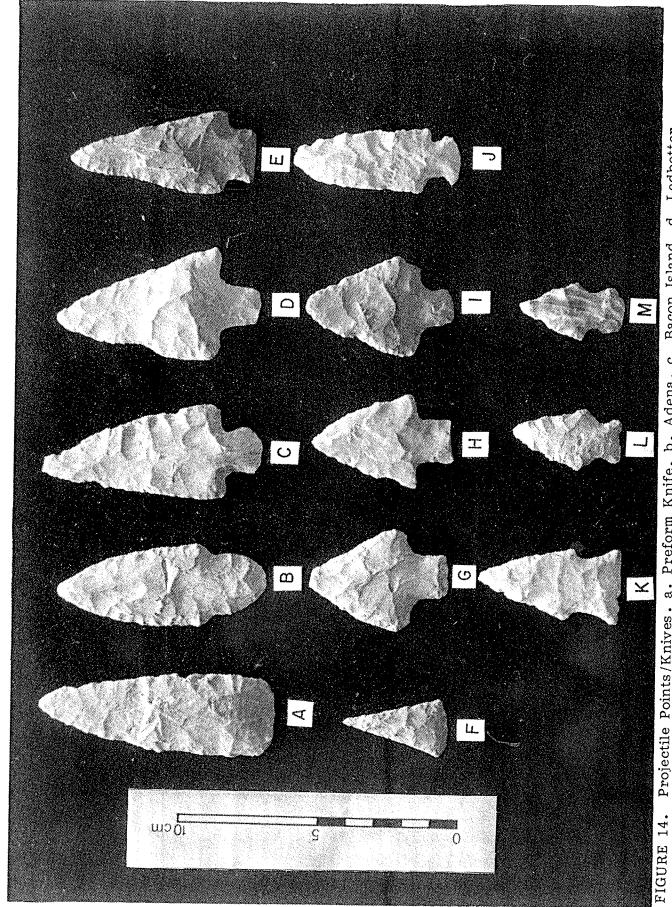
Projectile Points

A total of 28 complete and 25 fragmentary projectile points was recovered from the general excavations, stone box fill, burials and the surface of the site. Although the sample is comparatively small, the types nonetheless conform to similar forms found in other areas of East, Middle and West Tennessee within the Cumberland, Duck, Harpeth, Tennessee, as well as other river drainage systems. Similar forms and related cultural sequences are also noted in the adjoining areas of Kentucky, Virginia and Alabama. Excavation at many sites in the areas noted has permitted a classification scheme and refinement of lithic tool and projectile point categories with tight temporal controls.

The projectile points recovered from site 40SU20 are classified by established type name or by categories comparable to other sites. These types and categories are based on morphological differences, style and, to a lesser degree, technology. Each type or category is described along with comparative data which are presented with comments. Distribution of projectile points is presented in Table 2.

Category 1. Adena (Cambron and Hulse 1964; Bell 1958) (Figure 14). Sample size: 1 complete, 1 fragmentary. Form: triangular blades with excurvate edges and poorly pronounced shoulders. Stems: straight

Be5 Box Be6 Box 1 6 7 8 9 10 11 12 13 14 15 16 17 Frag. Totals Be6 Box Be 6 Box 1 <t< th=""><th>TABLE 2</th><th></th><th>8</th><th>ייי</th><th>PROJECTILE</th><th>LE PC</th><th>POINT DISTRIBUTION,</th><th>DIST</th><th>RIBU</th><th>JTIO</th><th>N, Site 40SU20</th><th>08020</th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	TABLE 2		8	ייי	PROJECTILE	LE PC	POINT DISTRIBUTION,	DIST	RIBU	JTIO	N, Site 40SU20	08020						
ence 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 Frag. K K K K NO NO NO NO NO NO NO	-	,		·		Pro	jectile	Poir	nt Ca	atego								
x x 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ience			က		9	2	8	6	10	11 12	13	14	15		- 1	rag.	Totals
x x x x x x x x x x x x x x x x x x x	×																	in die
soc. xx xx xx xx xx xx xx xx xx	×																· · · · · · · · · · · · · · · · · · ·	-1 - -
0.8 0.8 </td <td>soc.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>4</td> <td>- -</td>	soc.							H									4	- -
0.8 0.8 </td <td>χo</td> <td></td> <td>4 </td>	χo																	4
$egin{array}{cccccccccccccccccccccccccccccccccccc$	χo										,							, , ,
$egin{array}{cccccccccccccccccccccccccccccccccccc$	οx								-									٠.
$egin{array}{cccccccccccccccccccccccccccccccccccc$	οx								i.									1 • • • • • • • • • • • • • • • • • • •
$egin{array}{cccccccccccccccccccccccccccccccccccc$	οx																	
$egin{array}{cccccccccccccccccccccccccccccccccccc$	χo																ं. •⊣	l 1
$egin{array}{cccccccccccccccccccccccccccccccccccc$	χo				–												leus,	3 1
$egin{array}{cccccccccccccccccccccccccccccccccccc$	οx																-	
$egin{array}{cccccccccccccccccccccccccccccccccccc$	Χo				• • • • • • • • • • • • • • • • • • •													•
$egin{array}{cccccccccccccccccccccccccccccccccccc$, , ,						2
$egin{array}{cccccccccccccccccccccccccccccccccccc$				 1														
$egin{array}{cccccccccccccccccccccccccccccccccccc$														++				•
$egin{array}{cccccccccccccccccccccccccccccccccccc$, i			, — d
$egin{array}{cccccccccccccccccccccccccccccccccccc$																	H	
$egin{array}{cccccccccccccccccccccccccccccccccccc$		1									, —,							2
$egin{array}{cccccccccccccccccccccccccccccccccccc$, _
$egin{array}{cccccccccccccccccccccccccccccccccccc$																* :		2
$egin{array}{cccccccccccccccccccccccccccccccccccc$																		-
$egin{array}{cccccccccccccccccccccccccccccccccccc$																-		.
$1 3 1 \qquad 2 \qquad 1 \qquad \qquad$, -
		-	3		2	-							Н			2	4	16
	TOTALS	.7	4	7	3 9	1		I	-		- -	—	7	2	 (က	တ	52



e. McIntire. f. Madison. g,i. Cotaco Creek. h. Delhi. j. Flint Creek. k-1. Bakers Creek. Projectile Points/Knives. a. Preform Knife. b. Adena. c. Bacon Island. d. Ledbetter. m. Category 11.

and wide with rounded bases. Cross section: flattened to biconvex. Material: brown and gray chert.

Size: Length: 63mm; Stem Length: 15-16mm (Mean: 15.5mm); Stem Width: 17-18mm (Mean: 17.5mm); Width: 25-27mm (Mean: 26 mm); Thickness: 9mm.

Comments: Of the two specimens represented, one was recovered from Level A of Square N50E32 and the other from the excavation backfill. In East Tennessee the Adena point is generally considered to be a diagnostic artifact of the Early Woodland Period. The Adena point has been recovered from Early Woodland contexts at the Calloway Island site on Little Tennessee River, where a radiocarbon date of 2180+125 years B.P. (before present) was obtained (Chapman 1979:162). The Adena type also occurs frequently at Late Archaic sites in the Cumberland Valley and has been dated at the Robinson Shell Mound site at approximately 1000 B.C. (Morse and Polhemus 1963:26). It is probable that the two specimens from site 40SU20 also fall within a similar temporal range.

Category 2. Bakers Creek (Cambron and Hulse 1960b) (Figure 14). Sample Size: 2 complete, 3 fragmentary. Form: triangular blades with excurvate and straight edges. Shoulders are weak and horizontal. Stems: Stems are expanded with straight bases. Cross section: varies from flattened to biconvex. Material: tan, red, brown, light and dark gray cherts.

Size: Length: 31-43mm (Mean: 37mm); Stem Length: 9-14mm (Mean: 11.5mm); Stem Width: 13-24mm (Mean: 18.5mm); Width: 19-23mm (Mean: 21mm); Thickness: 5-8mm (Mean: 6.5mm).

Comments: Of the five specimens found, four were recovered from the excavation backfill and the remaining one from Level A of Square N50E34. Bakers Creek projectile points are generally found on Middle Woodland sites over a wide area of the Southeastern United States and were also recovered from the Yearwood site in Lincoln County, Tennessee, which produced radiocarbon dates of A.D. 150+75 and A.D. 50+95 (Butler 1977:10).

Category 3. Benton (Cambron and Hulse 1964:11) Sample size: 2 fragmentary. Form: blade form not determinable due to fragmentary condition of specimen. The shoulders are pronounced and slightly barbed. Stems: The stem is straight with a slightly concave base which is slightly ground. Cross section: flattened. Material: mottled blue and gray Fort Payne chert.

Size: Length: indeterminate; Stem Length: 12mm; Stem Width: 17mm; Width: indeterminate; Thickness; 6mm.

Comments: Of the two specimens recovered, one was recovered from the excavation backfill and one from Level A of Square N44E40. The <u>Benton</u> projectile point type is generally found on sites along the Cumberland and Tennessee as well as several other river drainage areas in Tennessee, Alabama and Kentucky. A Middle to Late Archaic

temporal span of approximately 4000-2000 B.C. has been suggested for Benton points (Cambron and Hulse 1964:11).

Category 4. Big Sandy Side Notched (Lewis and Kneberg 1959; Cambron and Hulse 1960a) (Not Illustrated). Sample Size: 1 fragmentary. Form: elongated triangular blade with excurvate edges. Shoulders are slightly tapered with the remaining side notched and moderately deep. The base is straight but exhibits no evidence of grinding. Cross Section: biconvex. Material: mottled blue and gray Fort Payne chert.

Size: Length: indeterminate due to fragmentary condition of specimen. Stem Length: 8mm; Stem Width: indeterminate due to fragmentary condition; Width: 24mm; Thickness: 6mm.

Comments: The single specimen was recovered from the fill of Stone Box Burial No. 81. Association with Stone Box 81 fill indicates that the <u>Big Sandy</u> projectile point had, in prehistoric times, been removed from its original stratigraphic context when the stone box was constructed during the Mississippian cultural period (A.D. 900-1600). The chronological position of <u>Big Sandy</u> points is complicated since few stratified sites have been excavated that contain this point type. Evidence of Early Archaic association was noted at the North Alabama Stanfield-Worley Bluff Shelter which produced a radiocarbon date of 9640+45 years B.P. (DeJarnette, Kurjack and Cambron 1962:85).

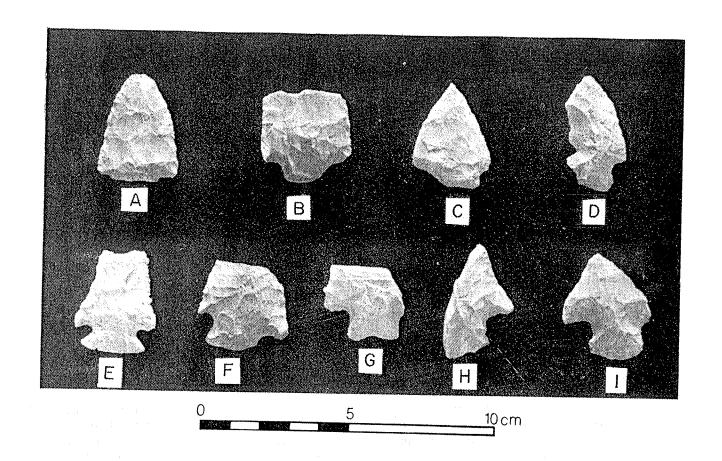
However, the Eva site in Benton County, Tennessee (approximately 70 miles southwest of Goodlettsville) produced <u>Big Sandy</u> points within Middle Archaic contexts which have been dated to around 5996 years bp.P. (Lewis and Lewis 1961:37).

Category 5. Cotaco Creek (Cambron and Hulse 1964) (Figure 14). Sample Size 2 complete, 5 fragmentary. Form: wide blade, pronounced horizontal shoulders, all of which are rounded in varying degrees. Blade edges are straight to excurvate. Stems: straight to slightly expanded with straight bases, two of which are ground. Cross Section: flattened to slightly biconvex. Material: mottled blue and gray Fort Payne chert; tan, gray and tan banded; and gray and white variegated chert.

Size: Length 40-45mm (Mean: 42.5mm); Stem Length: 9-12 mm (Mean: 10.5mm); Stem Width: 11-18mm (Mean: 14.5mm); Width: 30-40mm (Mean: 35mm); Thickness: 5-9mm (Mean: 7mm).

Comments: Of the seven specimens collected, two were recovered from the excavation backfill, one from Level A of Square N50E38, one from Feature 2, and one each from the fill of Stone Boxes 5, 19 and 62. Although no good radiocarbon dates have been established in Tennessee for the Cotaco Creek point types, it is considered a Terminal Archaic-Early Woodland type in Northern Alabama (Cambron and Hulse 1964).

Category 6. Kirk Corner Notched (Coe 1964) (Figure 15). Sample Size: 1 fragmentary. Form: triangular blade having incurvate edges



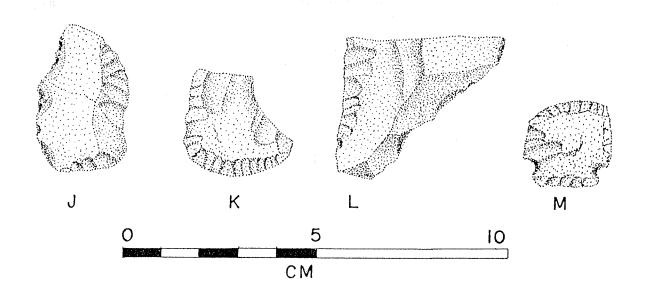


FIGURE 15. Projectile Points and other Artifacts. a. Distal end.
b. Morrow Mountain. c. White Springs. d. Flint Creek.
e. Kirk Corner Notched. f-i. Wade. j. Flake Knife.
k. End Scraper. l. Side Scraper. m. Stemmed Scraper.

which are lightly serrated. Stem: The specimen is corner notched with an expanded straight base stem which has been lightly ground. Cross Section: flattened. Material: white and light purple variegated chert.

Size: Length: indeterminate due to fragmentary condition of specimen; Stem Length: 8mm; Stem Width: 21mm; Width: 27mm; Depth of Notches: 7mm; Thickness: 6mm.

Comments: The single specimen was recovered from the backfill of the excavations. The <u>Kirk</u> point type is widely distributed throughout the southeast as <u>well</u> as other areas of Eastern United States and is generally found in Early Archaic contexts.

Radiocarbon dates derived for <u>Kirk Corner Notched</u> points from several sites on Little Tennessee River in <u>Eastern Tennessee</u> are as follows: Icehouse Bottom Site, Stratum 16, 74604+290 B.C. (Chapman 1977:147); Bacon Farm, Stratum 9, 7155 B.C. (Chapman 1978:54).

At the Daugherty Cave Site in Southwestern Virginia a radiocarbon date of 7840+400 B.C. was obtained from Zone J which contained an Early Archaic (Kirk) component (Benthall n.d.).

Category 7. Ledbetter (Kneberg 1956) (Figure 14). Sample Size: 1 complete. Form: wide elongated blade with straight edges and slightly asymmetrical shoulders. Stem: slightly tapered with straight base. Cross Section: slightly biconvex. Material: gray and tan banded chert.

Size: Length: 62mm; Stem Length: 12mm; Stem Width: 13mm; Width: 34mm; Thickness: 9mm.

Comments: The single specimen from the site was recovered from the excavation backfill. The <u>Ledbetter</u> point types are generally associated with Late Archaic components at sites on the Cumberland and Tennessee as well as other rivers in Middle and Western Tennessee, North Alabama and portions of Kentucky.

Category 8. Madison (Ritchie 1961) (Figure 14). Sample Size: 9 complete, 2 fragmentary. Form: triangular blades with straight to incurvate edges. Base: straight to convex. Cross Section: slightly biconvex to flattened. Material: gray, red, tan, and brown, as well as gray and white banded chert.

Size: Length: 21-39mm (Mean: 30mm); Width: 14-17mm (Mean: 15.5mm); Thickness: 3-4mm (Mean; 3.5mm).

Comments: The eleven specimens were associated with Burial No. 9 which dates within the Mississippian cultural period of A.D. 900-1600.

Category 9. McIntire (Cambron and Hulse 1964:A-106) (Figure 14). Sample Size: 1 complete. Form: elongated triangular blade with straight edges. Stem: The stem having a straight base is short and formed by shallow corner removals. Shoulders are narrow and slightly tapered. Cross Section: biconvex. Material: mottled blue and brown Fort Payne chert.

Size: Length: 56mm; Stem Length: 8mm; Stem Width: 16mm; Width: 25mm; Thickness: 8mm.

Comments: The single specimen was recovered from the fill for Stone Box No. 28, but is not culturally or temporally related. The McIntire projectile point is generally associated with Late Archaic shell middens along the Tennessee River in Tennessee and Northern Alabama (Cambron and Hulse 1964:A-106). A Late Archaic association has also been suggested for the Normandy Reservoir area on the Duck River in Middle Tennessee (Faulkner and McCollough 1973:110). Similar finds have also been made along the Cumberland River.

Category 10. Morrow Mountain I (Coe 1964) (Figure 15). Sample Size: I complete. Form: asymmetrical having a medium, broad blade with excurvate edges. Shoulders are broad and taper to form a rudimentary stem. Stem: contracting and exhibits a nipple which served as a striking platform at the stem base. Cross Section: biconvex. Material: brownish-gray chert.

Size: Length: 37mm; Stem Length: 3mm; Width: 23mm; Thickness: 6mm.

Comments: The single specimen was recovered from the fill of Stone Box No. 57, but is not culturally or temporally related. Morrow Mountain projectile points occur on Middle Archaic sites over a wide area of the Southeastern United States. Radiocarbon dates from the Morrow Mountain complex in the Little Tennessee River Valley of Eastern Tennessee include the following: Howard Site, Level 3, 5305 B.C. (Chapman 1979:79); Icehouse Bottom Site, 5045+245 B.C., 5045+130 B.C., and 4575+165 B.C. (Faulkner 1977:281).

Category 11. Narrow Thick Lanceolate Side Notched (Faulkner and McCollough 1973:100) (Figure 14). Sample Size: 1 complete. Form: narrow, lanceolate crude blade with straight edges. Shoulders are tapered. Stem: Stem is expanded with a slightly rounded, thick base and was formed by removal of flakes forming broad, shallow side notches. Cross Section: biconvex. Material: gray and white banded chert.

Size: Length: 30mm; Stem Length: 12mm; Stem Width: 14mm; Width: 16mm; Thickness: 7mm.

Comments: The single specimen was recovered from Level A of excavation Square N50E32. This projectile point type is also reported from sites in the Normandy Reservoir area of Middle Tennessee and appears to be associated with Middle to Late Woodland occupation (Faulkner and McCollough 1973:100).

Category 12. Delhi (Ford and Webb 1956:58-60) (Figure 14). Sample Size: 1 fragmentary. Form: wide triangular blade with slightly excurvate blade edges. Stem: Although a small basal portion is missing, the stem was long, narrow and straight, having been formed by broad corner removals. Shoulders are well pronounced with slightly downward

turned barbs. Cross Section: slightly biconvex. Material: light and dark gray banded chert.

Size: Length: indeterminate due to fragmentary condition of specimen. Stem Length: indeterminate. Stem Width: 13mm; Width: 28mm; Thickness: 6mm.

Comments: This specimen was recovered from the fill of Stone Box No. 27, but is unrelated culturally and temporally with the feature. Delhi projectile points were first described by Ford and Webb (1956:58-60) from the Poverty Point and Jaketown Sites in Louisiana. The Poverty Point culture has been described as belonging to the Late Archaic phase with estimated temporal placement of 1700-500 B.C. (Webb 1977:60-61).

Category 13. White Springs (Cambron and Hulse 1964:86) (Figure 15). Sample Size: 1 fragmentary. Form: medium sized point with a triangular blade with excurvate edges. Stem: short and wide formed by shallow corner notching. Shoulders are horizontal and poorly pronounced. Cross Section: flattened. Material: mottled blue and gray Fort Payne chert.

Size: Length: 36mm; Stem Length: 5mm; Stem Width: indeterminate due to fragmentary condition; Width: 22mm; Thickness: 5mm.

Comments: The single specimen was recovered from Level A of excavation Square N44E39. White Springs points were found in association with Morrow Mountain burials at the Stanfield-Worley Bluff Shelter in Northern Alabama (DeJarnette, Kurjack and Cambron 1962:80), indicating a Middle Archaic temporal placement for these artifacts.

Category 14. Tapered Shoulders; Long, Expanded Stem (Cridlebaugh 1986:160). Sample Size: 1 complete, 1 fragmentary. Form: narrow, elongate blade with excurvate edges. Stem: deep, wide corner removals, wide elongate notches and narrow, expanding stem with excurvate bases. Shoulders are narrow and tapered. Cross Section: biconvex. Material: mottled blue and gray Fort Payne chert and white and gray variegated chert.

Size: Length: 50mm; Stem Length: 9-12mm (Mean: 10.5mm); Stem Width: 14-15mm (Mean: 14.5mm); Width: 19-23mm (Mean: 21mm); Thickness: 7mm.

Comment: Of the two specimens, one was recovered from the excavation backfill and the other from Level A of Square N50E38. Similar forms were recovered from the Penitentiary Branch in Jackson County, Tennessee and are identified as belonging to the Late Archaic component, with radiocarbon dates ranging from 3727+493 to 3211+277 years B.P. (Cridlebaugh 1986:68).

Size: Category 15. Wade (Cambron and Hulse 1964) (Figure 15). Sample Size: 1 complete, 1 fragmentary. Form: broad triangular blades with

excurvate edges. Stem: expanded with straight to slightly excurvate bases, formed by broad corner removals. Shoulders are tapered with pronounced barbs. Cross Section: flattened to biconvex. Material: gray Fort Payne chert, red chert.

Size: Length: 37mm; Stem Length: 11-12mm (Mean: 11.5mm); Stem Width: 17-18mm (Mean: 17.5mm); Width: 30-31mm (Mean: 30.5mm); Thickness: 7-8mm (Mean: 7.5mm).

Comments: One of the specimens was recovered from excavation Square N50E40 and the other from Square N46E32. The <u>Wade</u> point type has been found in a Terminal Archaic context in the <u>Nickajack Reservoir</u> in the Eastern Tennessee Valley (Faulkner and Graham 1966:72; Faulkner and McCollough 1973:110). In the Normandy Reservoir area of Middle Tennessee, <u>Wade</u> points also were found in Terminal Archaic and Early Woodland context. The Late Archaic-Early Woodland transition period occurred within the period 1000-500 B.C. (Faulkner and McCollough 1973:149).

Category 16. Bacon Island (Cambron and Hulse 1975:9) (Figure 14). Sample Size: 1 complete. Form: triangular blade with straight edges. Stem: wide, expanded with rounded or excurvate base and formed by broad corner removals. Shoulders are horizontal with wide barbs. Cross Section: biconvex. Material: gray Fort Payne chert.

Size: Length: 68mm; Stem Length: 12mm; Stem Width: 14mm; Width: 29mm; Thickness: 7mm.

Comments: The single specimen was recovered from Level A of excavation Square N48E32. A Late Archaic cultural affiliation is suggested for this point type (Cridlebaugh 1986:171).

Category 17. Flint Creek (Cambron 1958) (Figures 14, 15). Sample Size: 3 fragmentary. Form: narrow, elongated blade with excurvate edges. Stem: slightly expanded with straight base which is lightly ground. The single shoulder remaining is slightly tapered and moderately pronounced. Cross Section: biconvex. Material: gray Fort Payne chert.

Size: Length: 38mm; Stem Length: 9mm; Stem Width: 11mm; Width: indeterminate due to fragmentary condition; Thickness: 6mm.

Comments: Two specimens were recovered from the excavation backfill and one from Level A of Square N56E38. The Flint Creek point is generally associated with Terminal Archaic-Early Woodland cultural components noted at sites on the Duck River in Middle Tennessee (Faulkner and McCollough 1973:102), as well as on the Tennessee River in Northern Alabama and Western Tennessee. Flint Creek points were also recovered from Site 40HA63 in Moccasin Bend on the Tennessee River in Hamilton County, Tennessee (Graham 1964), as well as from the Penitentiary Branch Site (40JK25) on the Cumberland River in Jackson County, Tennessee (Cridlebaugh 1986:161-162).

Projectile Point Fragments. In addition to the fragmentary and complete identifiable types, an additional 6 basal fragments, 2 distal ends, 1 midsection and 1 stem fragment were recovered from the site. Of the total unidentifiable specimens recovered, 5 were from the excavation backfill, 1 from Level A of Square N50E38, and one each from the fill of Stone Boxes 6, 43. 59 and 69. Materials utilized in manufacture include pink, tan, light gray and dark gray chert.

Other Chipped Stone Artifacts

The several chipped stone artifact categories other than projectile points recovered from the site include bifaces, gravers, blades, utilized flakes, various knife and scraper forms, notched flakes, raclettes, perforators and drills. Each of the above categories is briefly described along with comparative data. Distribution of the above forms is presented in Table 3.

Preform Knives (Figure 14). These are fully thinned and edge retouched, bifacially flaked forms which are categorized into three basic shapes: (1) trianguloid with parallel blade edges and straight bases, (2) ovate with excurvate blade edges and rounded bases and (3) amorphous with straight to excurvate blade edges and irregular bases.

Of the 42 complete and fragmentary specimens from the site, 14 were midsections, 19 distal ends, 7 basal fragments and 2 complete. Of the identifiable specimens, 1 complete and 2 fragmentary are trianguloid, 3 fragmentary are ovate, and 1 complete, 2 fragmentary are amorphous. Measurements of the three types are shown below:

No.	Type	Length	Width	Thickness
3	Trianguloid	71mm	25-46mm	6-8mm
3	Ovate		27-30mm	6-10mm
3	Amorphous	42mm	25-40mm	7-11mm

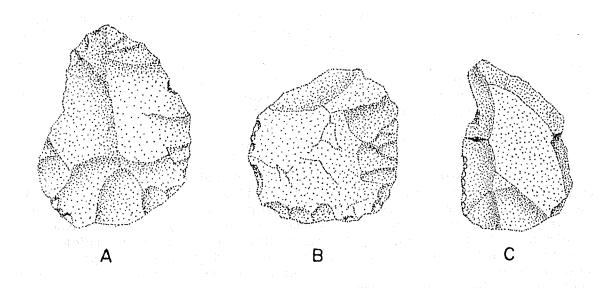
Materials used in manufacture of all recovered preform specimens include mottled blue and gray Fort Payne chert, light and dark gray banded, gray, tan, pink, brown and light gray chert.

Biface Knives (Figure 16). A single specimen was recovered from the fill of each of Stone Boxes 6 and 43 as well as from Level A of Squares N50E34 and N50E38. Three of the specimens are complete and the fourth fragmentary. These are thick flakes which have been bifacially flaked, exhibiting knife retouch along one or more lateral edges. Two of the specimens are ovate, one asymmetrical and the fourth lunate. The specimens, 39-51mm long, 31-40mm wide and 8-13mm thick, are manufactured from gray, blue and gray, and dark gray and tan mottled Fort Payne chert.

Flake Knives (Figure 15). The single specimen recovered from Level A of Square N50E38 consists of a large flat flake exhibiting

LITHIC ARTIFACT Stemmed Flake	DISTRIBUT Thick		Site 40SU20 Side End		
15		Bifaces	rs Sc	Drills	Choppers
₽					
		₩			
		2			
,					
		ب سو			
\$ (
				₩-	
			⊢ 1		
 -1					
₩.					
	-				
	₩				
p1 p		- 1	•		
- 4					
7 7					
1					
			-		
		₩	-		
 1			₩		
—	₩	2			
3					
—	1				
, mad					
			₩		
13 1	8	သ	က	2	
36 1 1	1.4	1.4	8	~	

	TABLE 3		LITHIC AR	TIFACT DIS	ARTIFACT DISTRIBUTION. Site 40SU20	Site 40SU20	, C	Continued	
	Provenience	Blades	Utilized Flakes	Gravers	Raclettes	Notched Flakes	Ground	Hammer	Totale
									STORES TO
	B∴3 Box								•
	B-5 Box		က						⊣ c
	B-9 Box				•				י כי
	B-46 Box	Н			4				⊣ ¢
	B-54 Box			·					7 -
	B-93 Box		H	I					
	N44E32		2						c
	N50E30		· +-						77 +
	N50E32				y				1 - -
65	N50E34		H	-	1				c
;	N50E36		· •	i					7 -
	N50E38	•	,						C
	N50E40		•		₹				7 -
	N50/52E36	 1				•			⊣ c
	N52E38/40		₽-1		•	4			7 c
	N52E40				Ī				7 -
	Backfill		3			-	2	v− ··!	7
	TOTALS	က	16	က	4	6	6		31
					ı	1	7	7	70



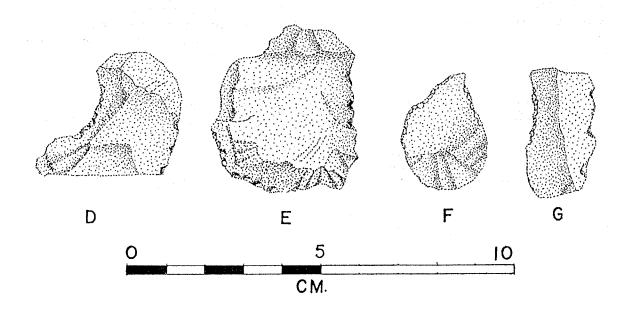


FIGURE 16. Miscellaneous Chipped Stone Artifacts. a. Biface Knife. b. Ovate Biface. c. Utilized Flake. d. Notched Flake. e. Raclette. f. Graver. G. Retouched Blade.

bifacial retouch along one lateral edge. The specimen, 36mm long, 21mm wide and 6mm thick, is manufactured from brown chert.

Stemmed Knives. A single fragmentary specimen having a contracting stem and exhibiting knife retouch and wear along both lateral edges was recovered from the backfill of the excavations. Wear also occurs along one lateral edge of the contracting stem. Although length of the specimen cannot be determined due to its fragmentary condition, its width is 35mm and thickness 8mm. Material used in manufacture is mottled blue and gray Fort Payne chert.

Thick Bifaces. Of the 7 complete and 11 fragmentary specimens from the site, 10 were recovered from the excavation backfill, 1 each from the fill of Stone Boxes 17, 46, 68, 79 and 90, as well as 1 each from Level A of Squares N50E40, N48E32 and N50E32. All the identifiable specimens are small to medium ovate forms which were discarded in the beginning process of thinning. The complete specimens, 52-86mm long, 27-45mm wide and 11-27mm thick, are manufactured from gray, and mottled blue and gray Fort Payne chert. Two fragmentary specimens are manufactured from tan as well as light green and white mottled chert.

Bifaces (Figure 16). Nine fragmentary specimens from the site include 2 from the excavation backfill, 1 each from the fill of Stone Boxes 4, 6, 14 and 79, as well as 1 each from Level A of Squares N50E38 and N44E30. Six of the specimens are thick flakes and the seventh a thin chert cobble which had been bifacially flaked and broken during the process of manufacture. The latter specimen is partially backed with cortex. Although lengths of the specimens are indeterminate due to fragmentary condition, they are 20-48mm wide and 8-12mm thick. Materials used in manufacture are brown, gray, blue and brown banded, tan, and blue and gray mottled Fort Payne chert.

Raclettes (Figure 16). The 4 specimens, 1 each from Level A of Squares N50E32, N50E38, Level B of Square N52E38 and the fill from Stone Box 9, consist of 1 flat, 1 decortication, and 2 bifacial thinning flakes exhibiting short segments of abrupt unifacial retouch around each flake circumference. Materials used in manufacture include mottled blue and gray Fort Payne chert and pale green and tan chert.

Gravers (Figure 16). The 2 specimens recovered from Level A of Square N50E34 and the fill from Stone Box 46 consist of 1 flat flake and 1 shatter fragment which have been retouched along one and two edges respectively, isolating a triangular projection. Retouch also occurs along both lateral edges of one specimen, thereby suggesting its additional use as a knife. The specimens, 30-36mm long, 15-21mm wide and 3-6mm thick, are manufactured from light and dark gray cherts.

Notched Flakes (Figure 16). Of the 2 specimens from the site, 1 was recovered from the backfill of the excavations and the other from Level B of Square N50-52E36. One specimen consists of a bifacial thinning flake with a single-blow notch at the center of one lateral edge. The notch exhibits fine retouch along one edge surface. The second specimen consists of a thick decortication flake with a multiple-

blow notch at the ventral end on one lateral edge. Steep retouch occurs along one surface of the notch. Materials used in manufacture consist of mottled blue and tan chert.

Utilized Flakes (Figure 16). A total of 18 specimens was collected from the site. Of this total, 3 were recovered from the backfill, 2 from Level A of Square N44E32, 1 from Level B of Square N52E38-40 and 1 each from Level A of Squares N50E32, N50E38, N50E36, N50E34, N50E28 and N50E40. The specimens consist of flat, decortication and bifacial thinning flakes showing utilization in the form of regular or irregular localized retouch along one or more edges. Materials used in manufacture consist of gray, mottled blue and gray, blue and gray banded, and tan Fort Payne chert.

Retouched Blades (Figure 16). One specimen from the fill for Stone Box 46, and one each from Level B of Squares N50-52E36 and N52-E40, are flakes whose lengths are twice their widths. Previous flake scars are exhibited which indicate that flake removals have occurred from the same striking platform. Slight retouch is exhibited on two edges of one specimen and on one edge of two specimens. The specimens are 31-36mm long, 15-19mm wide and 3-4mm thick. Materials used in manufacture include dark gray and mottled blue and gray Fort Payne chert.

Scraper-on-Biface. A single specimen was recovered from Level A of Square N50E36 and consists of an incompleted biface having a single straight working edge formed by a line of steep retouch on one face. The line of retouch is 25mm long and is centered at the basal end of the biface. The specimen, 40mm long, 48mm wide and 20mm thick, is manufactured from mottled tan and white chert.

End Scrapers (Figure 15). Three specimens recovered from the site include 1 from the backfill of the excavations, 1 from the fill of Stone Box 22 and 1 from Level A of Square N44E42. All the scrapers are worked on thick flakes with one to two convex working edges formed by a continuous line of steep retouch on one face. One of the scrapers exhibits knife retouch along one lateral edge and the base, suggesting its additional use as a knife. The three scrapers are 26-50mm long, 28-40mm wide and 5-18mm thick. Material used in manufacture includes gray as well as tan and white banded and mottled chert.

Side Scrapers (Figure 15). Of the 6 specimens collected at the site, 3 were recovered from the backfill of the excavations and 1 each from Level A of Squares N48E30, N50E32 and N50E40. All the scrapers are worked on thick decortication flakes and have a single straight to convex working edge formed by a continuous line of steep retouch on the lateral margins of the flakes. Materials used in manufacture are tan, gray, light and dark gray banded, and light and dark gray mottled chert.

Stemmed Scrapers (Figure 15). Two specimens were recovered from the site, 1 from Level A of Square N50E36 and the other from Level B of Square N52E40. One specimen is a stemmed projectile point

(Upper Valley Side Notched) (Cambron and Hulse 1964) having a single, slightly convex working edge formed by a line of steep retouch on one face. The line of retouch, 20mm long, is formed along the broken edge at the distal end of the projectile point. The specimen is 23mm long, 22mm wide and 4 mm thick.

The second specimen consists of a straight stemmed projectile point fragment that has been retouched to form a convex working end. This specimen is 17mm long, 21mm wide and 7mm thick. The line of retouch is 18mm long.

Both specimens are manufactured from gray Fort Payne chert.

<u>Drills</u>. Two distal ends and 1 midsection of drill shanks were recovered from the site. Of these, 2 were found in the backfill of the excavations and 1 from the fill of Stone Box 19. Basal or hafting ends are indeterminate. Materials used in manufacture are pink, dark gray, and light and dark gray banded chert.

Perforator-on-Biface. The single specimen recovered from the backfill consists of a thick biface having a rodlike projection worked on the distal end. Retouch occurs along one lateral edge of the projection. The specimen is 75mm long, 48mm wide and 23mm thick, while the length of the rodlike projection is 18mm. Material used in manufacture is gray chert.

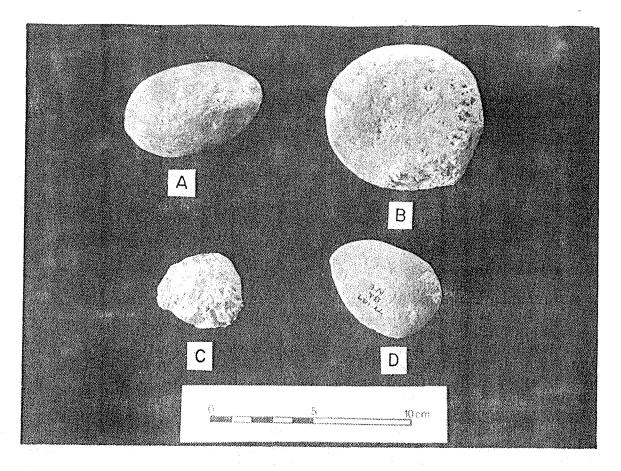
Miscellaneous Stone Artifacts

Rectangular Gorgets (Figure 17). A single fragmentary specimen recovered from Level B of Square N52E38 exhibits one unidirectional solid drill hole and two grooves on one surface, indicating its latest use as a whetstone. The specimen had probably had two holes, since it had been broken at its approximate center between the holes. Although the overall length of the specimen is indeterminate, its width is 53mm and thickness 5mm. Material used in manufacture is dark gray slate.

Hammerstones (Figure 17). A single specimen exhibiting battering over half its edges and surface was recovered from the backfill of the excavations. Material used in manufacture is dark gray chert.

Ground Cobbles (Figure 17). Two specimens recovered from the backfill of the excavations consist of sandstone and chert cobbles which exhibit abrasion wear at both ends and along the edges of the long axis.

<u>Debitage</u>. The small quantity of lithic debris from the site has been separated into several categories which generally include cores and flakes. Of the 660 pieces collected, 656 are flakes and 4 are cores and fragments. The various flake categories were not individually separated, as the collection of debitage was not assessable for detailed analysis.



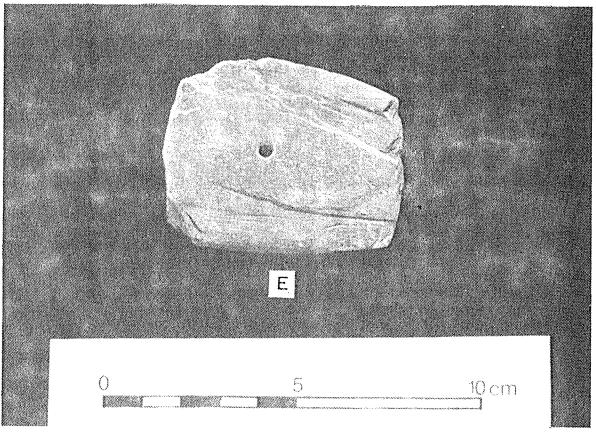


FIGURE 17. Miscellaneous Lithic Artifacts. a-b. Ground Cobbles. c-d. Hammerstones. e. Abrader on Rectangular Gorget.

CERAMIC ANALYSIS

Due to the salvage nature of the 40SU20 site excavation, the small ceramic sample, and the fact that the principal habitation area of the adjacent village site was not investigated, no attempt has been made at this time to interpret the data in terms of provenience. Instead, the data will be categorized according to the numbering system at the site with respect to ware types, vessel forms and surface treatment (decoration).

It should be noted that the 586 sherds and two intact pottery vessels recovered from the excavations, burials and backfill may not be representative of the entire period of the site's occupation nor of the total range in terms of vessel form and decorative treatment. With the exception of a single sand-tempered Woodland Period sherd, all the sherds and intact pottery vessels from the site were associated with the Mississippian Period habitation.

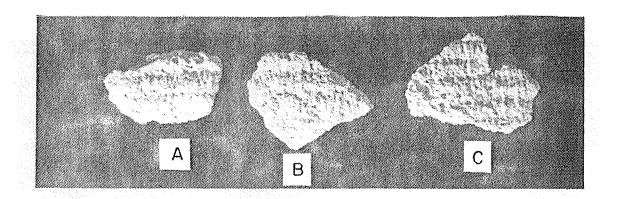
Mississippian ceramics are generally classified in terms of coarse utilitarian wares as well as higher quality "fine wares" with those distinctions based upon size of tempering materials (crushed shell) and the nature of the clay used in manufacture.

Fine ware has a tendency to be smoothed, polished or burnished. It is now recognized that surface lustre is an impermanent characteristic dependent on polishing as well as the nature of the clay and other factors. The most useful criterion for sorting the two wares is the clay paste itself. Fine ware has a finely-textured paste characterized by the small size of the crushed shell temper which is usually 1 millimeter or less. The fine shell-tempered ware recovered from the 1977 excavations at site 40SU20 includes that classified as Bell Plain (Phillips 1970; Faulkner 1977) The only representative of this ware from 40SU20 is a small conch shell effigy bowl associated with Burial 44.

The coarse wares from the site generally have a more roughlytextured paste characterized by medium to coarse crushed shell tempering in excess of one millimeter in size. The coarse wares from site include those classified as Mississippi Plain and Salt Pan Fabric Marked (Phillips 1970; Faulkner 1977). Also included are several sherds of a presently unnamed cordmarked ware. forms represented at 40SU20 include salt pans and medium to large subglobular jars with loop, strap and bifurcated lug handles.

Mississippian assemblages generally include five basic vessel forms: jars, bowls, bottles, pans and plates.

Of the 568 ceramic sherds recovered from the site, 552 are Mississippi Plain (Figures 18 and 19), 11 Salt Pan Fabric Marked (Figure 18), 4 cordmarked and 1 sand-tempered plain. Also included are 1 intact Mississippi Plain 4-lobed subglobular jar and 1 intact Bell Plain small conch shell effigy bowl (Figure 20).



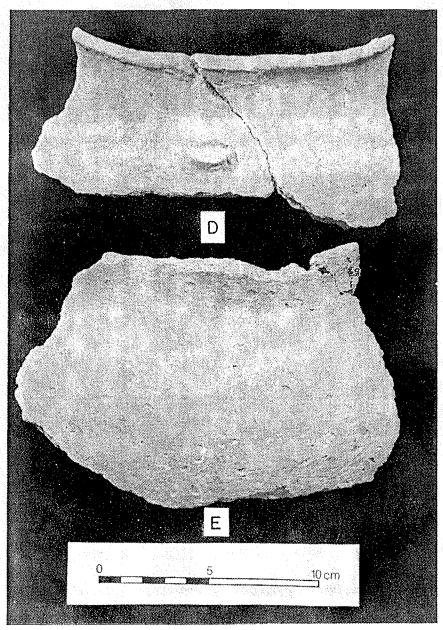
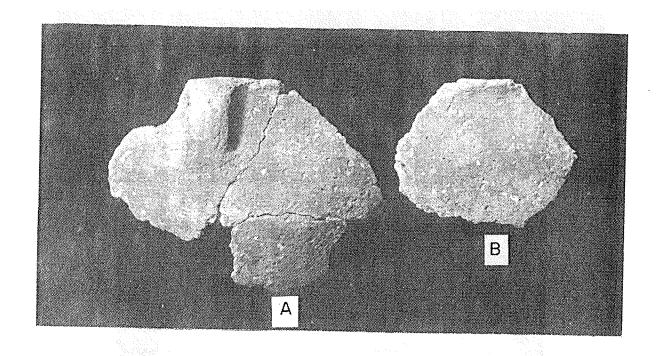


FIGURE 18. Ceramics. a-c. Salt Pan Fabric Marked. d-e. Mississippi Plain.



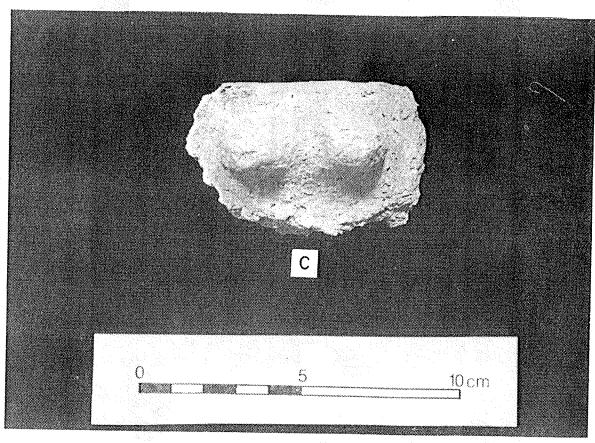
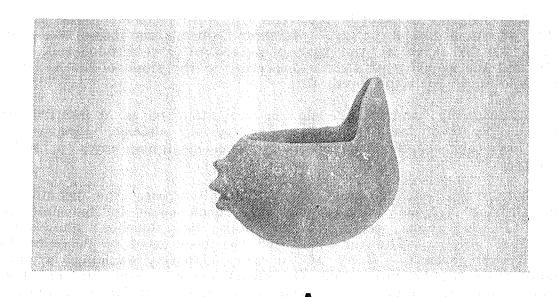


FIGURE 19. Ceramics. a. Mississippi Plain rim sherd with loop handle. b. Mississippi Plain. c. Mississippi Plain rim with bifurcated lug handle.



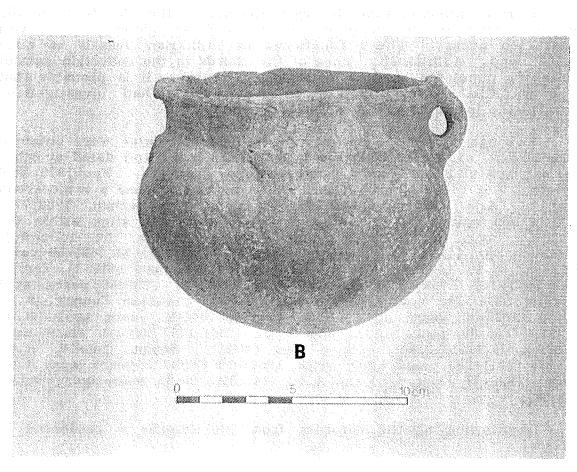


FIGURE 20. Ceramic vessels from Burial No. 44. a. Conch shell effigy bowl. b. Lobed jar.

The majority of sherds from the site were recovered from the fill of the 96 stone burial boxes. However, since stone boxes were not backfilled with earth at the time of interment of the deceased, it is likely that the majority of sherds occurring in the stone boxes had been washed in along with the earth fill.

Additionally, there were also several stone boxes at 40SU20 with floors composed of large shell-tempered pottery sherds. Similar box floors have also been observed at other Mississippian sites in Middle Tennessee.

Within the Mississippian ceramic tradition was the practice of manufacturing vessels whose forms had been made to resemble the shapes of owls, ducks, frogs, turtles, dogs, fish, humans, gourds and marine sea shells. The term "effigy" has been used to describe the above vessel forms. Many of the more elaborate examples of such vessels have highly burnished (polished) exterior and interior body surfaces and are generally believed to be non-utilitarian in regard to everyday household use. However, many examples of effigy vessel forms are not burnished, such as the conch shell effigy bowl from Burial 44 at 40SU20 (Figure 20).

It is of interest that the vast majority of the sherds from site 40SU20 belong to subglobular jars as well as globular jars with constricted necks. These functioned as utilitarian vessels at sites where found. Additionally, none of the sherds in the collection exhibit incised or punctated surface decoration. However, it is probable that such decorated wares would have been evident had investigations included the principal village habitation area.

Although no carbon samples for radiocarbon dates were obtained from 40SU20, similar ceramic forms have been noted and dated at other Mississippian sites in Middle Tennessee and elsewhere. The 1973 Noel Cemetery Site (40DV3) excavations in Nashville produced a radiocarbon (730+45 years ago) (Benthall A.D. 1220+45 Radiocarbon dates from other excavated Mississippian sites within the immediate area of Nashville and vicinity include the following: Averbuch Site (40DV60), Davidson County, A.D. 1255+50 (731+50 years ago) and A.D. 1425+55 (561+55 years ago) (Berryman 1980:3); Ganier Site (40DV15), Davidson County, A.D. 1250+95 (736+95 years ago) (Broster 1972:77); Mound Bottom Site (40CH8) Cheatham County, A.D. 950+80 (1036+80 years ago), A.D. 1040+50 (946+50 years ago), A.D. 1130+60 (856+60 years ago), and A.D. 1280+110 (706+110 years ago) (O'Brien 1977:312-313); Sellars Site (40WII), Wilson County, A.D. 975+235 (1011+235 years ago), A.D. 1050+110 (936+110 years ago) A.D. $115\overline{0}+65$ (836+ $\overline{65}$ years ago) and A.D. $1245+\overline{65}$ (705+ $\overline{65}$ years ago) (Butler 1981:54).

Distribution of the ceramics from site 40SU20 is presented in Table 4.

Brief descriptions of the several recognized ceramic types from the site are as follows.

TABLE 4	CERAMIC	DISTRIBUTION.	Site	40SU20
---------	---------	---------------	------	--------

Description	Square	Level	Feature	No.
Miss. Plain	N50E34	A	B-1 Box	2
Miss. Plain	N50E34	A	B-2 Box	1
Miss. Plain	N50E38	A	B-4 Box	7
Miss. Plain	N50E40	A	B-5 Box	7
Miss. Plain	N52E28	A	B-6 Box	1
Miss. Plain	N50E50	Α	B-7 Box	1
Salt Pan Fabric M.	N42E48	Α	B-8 Box	3
Miss. Plain	N42E48	A	B-8 Box	2
Miss. Plain	N50E36	A	B 9 Box	19
Miss. Plain	N50E28	Α	B-13 Box	2
Miss. Plain	N38E42/44	Α	B-15 Box	5
Miss. Plain	N40E50	Α	B-16 Box	2
Miss. Plain	N42/44E40	A	B-17 Box	1
Miss. Plain (Jar)	N44E36	Α	B 19 (Assoc.)	118
Miss. Plain	N44E30	Α	B-22 Box	1
Miss. Plain	N40E48	Α	B-30 Box	1
Miss. Plain	N40E48	A	B-31 Box	1
Miss. Plain	N40/42E46	Α	B-33 Box	9
Miss. Plain	N40E46/48	A	B-37 Box	28
Miss. Plain	N38E48/50	Α	B-39 Box	2
Cordmarked	N52E34	Α	B-40 Box	4
Miss. Plain (Jar)	N52E40	Α	B-44 (Assoc.)	1
Bell Plain (Bowl)	N52E40	Α	B-44 (Assoc.)	1
Miss. Plain	N52E36	Α	B-45 Box	1
Miss. Plain	N60E48	Α	B-50 Box	1
Miss. Plain	N46E42	Α	B-53 Box	6
Miss. Plain	N58E40	A	B-54 Box	2
Miss. Plain	N62E44/46	A	B 56 Box	9
Miss. Plain	N46/48E42	Α	B-58 Box	5
Miss. Plain	N52E46	Α	B-60 Box	4
Miss. Plain	N46E40	Α	B-62 Box	1
Miss. Plain	N52E36	A	B-66 Box	1
Cordmarked	N52E42	Α	B-73 Box	1
Miss. Plain	N50E36	В	B-80 Box	12
Miss. Plain	N54E48	A	B-84 Box	1
Miss. Plain	N50E42	Α	B-92 Box	54
Miss. Plain	N48E32	A		1
Miss. Plain	N50E36	A		12
Miss. Plain	N42E48	Α		13
Miss. Plain	N44E34	A		3
Miss. Plain	N54E42	A		16
Miss. Plain	N50/52E36	В		38
Sand Temp. Plain	N44E32	A		1
Miss. Plain	N50E50	A		1
Miss. Plain	N44E30	Α		10
Miss. Plain	N52E38/40	В		114

Salt Pan Fabric M. N50E32 A 7 Salt Pan Fabric M. N50E40 A 1 Miss. Plain N50E38 A 15 Miss. Plain N50E40 B 4 Miss. Plain N50E34 A 2 Miss. Plain Backfill 9 Bell Plain N52E38/40 B 7 Total 568	TABLE 4 C	ERA	AMIC :	DISTRIBUT	ION, Site 40SU20	(Continued)
Salt Pan Fabric M. N50E40 A 1 Miss. Plain N50E38 A 15 Miss. Plain N50E40 B 4 Miss. Plain N50E34 A 2 Miss. Plain Backfill 9 Bell Plain N52E38/40 B 4 Total 568	Description		S	quare	Level Featu	re No.
Total			N N N N B	50E40 50E38 50E40 50E34 ackfill	A A B A	1 15 4 2 9
日本の					Total	560
					in a country	, , , , , , , , , , , , , , , , , , , ,
1						
The first section of the control of						
1						
1986 1987 1987 1988						
THE TOTAL AND						
1						
 (2) (2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4						
					A A A A A A A A A A A A A A A A A A A	
 (1) 大田大学 は (2) 日本の (2)						
 (1) 大きない (2) は、 (3) は、 (4) は、			Gi es	A	A VAN VALVA	
					SEARCH,	

Bell Plain (Phillips 1970; Faulkner 1977) (Figures 20, 21)

Sample: 1 intact conch shell effigy bowl, 2 rim sherds, 2 body

sherds.

Paste: The paste is tan to orange with a fine texture and

moderate amounts of finely crushed shell.

Surface: The exterior surfaces range from orange on the two

rim sherds to grayish-tan on the conch shell effigy Interior surfaces are grayish-tan and exhibit scraping on the two rim sherds. Cores of the two rim sherds are gray, but indeterminate with the intact bowl. Both interior and exterior surfaces of

all specimens exhibit dark firing clouds.

Form: The two rims are representative of bowls with everted, flattened rims, which are at a 50° angle to

the vertical body of the sherd. Based on the curvature of the sherds, the overall diameter of the bowl was 10 centimeters, with an estimated height of Thickness of sherds is 4-5mm. The intact conch shell effigy bowl has an overall diameter of 74mm, orifice diameter of 50mm and an overall height 47mm. The orifice of this bowl is severely constricted by convergent side walls that slope or curve inward at an acute angle from the point of maximum body diameter. The vertical profile of the issemi-spherical with a rounded Appendages consist of a spout, vertical to the rim,

and a single node encircled by 6 nodes beneath the

rim opposite the spout-like appendage.

Comments: The two rim sherds were recovered from Level B of Square N52E38-40 and the conch shell effigy bowl from Burial No. 44. Sherds of bowls exhibiting similar node patterns have been noted from the Noel Cemetery Site (40DV3) (Benthall 1983:48), Sellars Site

(40WI1) (Butler 1981:54) and Averbuch Site (40DV60) (Reed 1984:11.7.3). Bell Plain vessels are generally

a minority ware at Middle Tennessee sites.

Mississippi Plain (Phillips 1970; Faulkner 1977) (Figures 18-21)

Sample: 525 body sherds, 21 rims, 1 lug, 1 loop and 2 strap

handles.

Paste:

The paste is tan, orange, or buff with a fine to coarse texture, and moderate to large amounts of fine to coarsely crushed shell. No sherds containing

crushed limestone were found. The shell tempering is

leached from approximately 30% of the sherds.

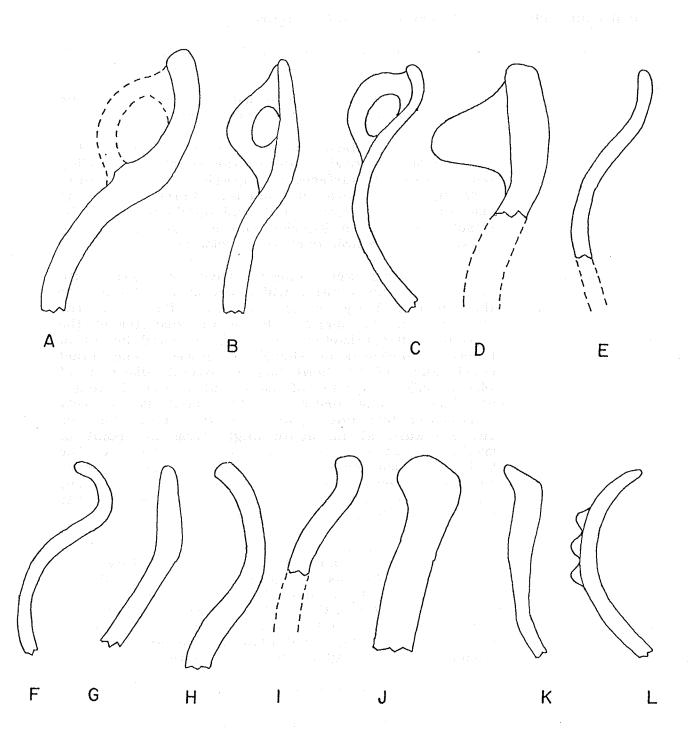


FIGURE 21. Rim Forms. a-c. Mississippi Plain jar with loop handles. d. Mississippi Plain jar with lug handle. e-i. Mississippi Plain. j. Salt Pan Fabric Marked. k-l. Bell Plain bowls.

Surface:

Exterior surfaces are smoothed and vary in color from tan, tannish-gray to orange and buff. Interior surfaces are scraped or smoothed and vary in colors from tan to orange, gray and buff. Both exterior and interior surfaces exhibit dark firing clouds.

Form:

forms include small, medium and Vessel subglobular jars, with constricted necks, rounded bottoms and straight to flaring rims with flattened to rounded lips. Loop handles appear on one jar, strap handles on two rim sherds, while a single example of a bifurcated lug handle occurs on a single rim sherd. Also included is a single, intact subglobular jar with four lobes having an overall body diameter of 13.5cm, an orifice diameter of 10.2cm and a height of 9.5cm. Appearing as concave depressions on the interior of the body, lobes extend 6 to 10mm above the general contour of the wall on the exterior surface where their convex margins usually extend to the juncture The body shape is of the shoulder and neck. spherical and the base rounded. The rim is slightly flaring with a rounded lip. Appendages consist of two opposing loop handles with single ears above the rim lip at points of attachment. Interior and exterior surfaces are mottled tan and buff with black firing clouds. Wall thickness is 4-6mm.

Comments:

This vessel was found in association with Burial No. 44 and closely resembles similar forms found at other Mississippian sites in Tennessee and elsewhere.

Salt Pan Fabric Marked (Faulkner 1977) (Figures 18 and 21)

Sample: 1 rim, 10 body sherds

Paste: The paste is orange with a coarse texture and a large

amount of coarsely crushed shell which has leached

out of the sherds.

Surface: Interior and exterior surfaces are orange and cores of sherds gray to dark brown. Surface treatment

consists of impressions executed with a coarse,

loosely woven fabric.

Form: Vessel form is a large round or oval shallow pan with

outward sloping walls and a thickened rim with a

rounded lip. Thickness of the sherds is 10-11mm.

Comments: Salt pans are a common vessel form found on most

Mississippian sites in Tennessee and elsewhere. The evaporation (boiling) of salt water from springs for salt production is believed to be the function of such

vessels.

Unidentified Cordmarked

Sample:

5 body sherds

Paste:

The paste is light tan to orange with fine to medium texture and moderate amounts of fine to medium crushed shell which has leached from the sherds.

Surface:

Interior and exterior surfaces are tan to orange and sherd cores tan to orange. Surface treatment consists of impressions executed in a crisscross pattern with a fine cord.

Form:

Although no rims were recovered, it is probable that vessel forms had been jars. Thickness of sherds is 5-6mm.

Comments:

Comparisons of sherd collections from other sites in Middle Tennessee have indicated that cordmarked wares are comparatively rare. Cordmarked vessels were also a minority ware at Mississippian sites in Eastern Tennessee. At the Hiwassee Island site in Meigs County, for example, cordmarked sherds constituted only 3% of the total sherd collection (Lewis and Kneberg 1946:90-91). It is possible that the sherds can be identified with the McKee Island series.

Unidentified Sand-Tempered Plain

Sample:

1 body sherd

Paste:

The paste is dark buff with a coarse, gritty texture and a large amount (40-50%) of sand evenly distributed throughout the clay.

Surface:

Interior surface is black and exterior surface dark buff and moderately smoothed. The sherd core is black.

Form:

Although no rims were found, it is probable that the vessel form had been that of a jar.

Comments:

The smallness of the sherd precludes its assignment to any particular named ceramic series. However, it is probable that it dates from the preceding Woodland cultural period.

SUMMARY AND CONCLUSIONS

The brief excavations conducted at site 40SU20 have disclosed evidence that the site had been occupied intermittently over a relatively long period of time. The earliest occupation had occurred during the Early Archaic Period which lasted from approximately 8000-6000 B.C. Although no features were found, the recovery of a single Kirk Corner Notched projectile point serves as evidence of this culture.

Sometime within the period 6000-5000 B.C. people of the Middle Archaic culture occupied the high ground overlooking Mansker Creek and left evidence of their habitation on the site. Evidence of this occupation is noted by the recovery of Morrow Mountain, White Springs, Big Sandy and Benton projectile points, but no features relating to this cultural period were found.

Late Archaic occupation of the site is evidenced by a variety of stone implements and projectile points as well as a single refuse pit containing a fragmentary projectile point and two scrapers, located southwest of the burial mound. Recovered projectile point types include those classified as Adena, Ledbetter, McIntire, Delhi, Bacon Island and an unnamed type with a narrow, expanded stem. The Late Archaic cultural period generally occurred within the time span of 3000-900 B.C. The Terminal Archaic, which is generally considered to fall within the latest part of the Late Archaic phase, is represented by the Flint Creek and Cotaco Creek projectile point types at site 40SU20.

There is also evidence of a later site occupancy by peoples of the Middle Woodland Period which dates generally within the period A.D. 200-600 (Chapman 1985:70). Evidence of this cultural manifestation is noted in the recovery of <u>Bakers Creek</u> and small, thick, side notched projectile points. No related features were found.

The most significant evidence of habitation at site 40SU20 is the burial mound dating from the Mississippian occupation of the adjacent related village. Unfortunately, little can be said specifically regarding the village area, as it was not excavated due to its locality outside the proposed park boundaries. However, some general conclusions based on comparisons of derived data can be made, since archaeological investigations have been conducted at several Mississippian Period sites within the Nashville area and vicinity over the past fifteen years. The earlier explorations conducted by Gates Thruston (1890). Joseph Jones (1876). William Myer (n.d.) and others during the nineteenth and early twentieth centuries have also provided many insights regarding the habitation sites and lifeways of these early people.

The time span of the Mississippian cultural period is generally considered to have occurred within the period A.D. 900-1600. Although no carbon samples for dating were recovered from site 40SU20. C-14 dates from other sites within the area shed considerable light on the possible temporal placement of the site. Temporal placement of

Mississippian habitation within the Nashville Basin as suggested by C-14 dates at the Averbuch (40DV60) (Berryman 1980). Mound Bottom (40CH8) (O'Brien 1977), Noel Cemetery (40DV3) (Benthall 1983). Ganier (40DV15) (Broster 1972), Arnold (40WM5) (Ferguson 1972) and West (40DV12) (Dowd 1972) sites indicates a general time span of A.D. 820-1425. Site 40SU20 can be included within this period.

The Mississippian culture represented the pinnacle of prehistoric cultural development in the southeastern United States, including the Cumberland River Valley. At its peak, the Mississippian tradition is characterized by: (1) increase in population and more stable settlements; (2) the construction of earthen platform mounds on which were erected temples, council buildings, and residences of the elite; (3) the emergence of organized chiefdoms; (4) changes in the ceramic styles; (5) elaborate and well-developed religious ceremonialism; and (6) increased territoriality and warfare (Chapman 1985:74).

Chiefs controlled large populations from centers that were the focus of economic, social and religious activities. Such centers (towns) have been recognized by their large size and the presence of platform mounds. A relatively large number of such centers evidently occurred within Middle Tennessee and controlled large territories within the area. Within the territories controlled were smaller towns, hamlets and farmsteads. The absence of large platform mounds at site 40SU20 suggests that it had been one of the lesser towns or hamlets which had been under the control or rule of the larger ceremonial centers (towns). Social organization was based on kinship and structured through hereditary ranked lineages. The individuals with the highest social rank resided in the ceremonial centers, while those of lesser rank were to be found in the outlying lesser towns.

Recent studies have shown that evidence of social rank and status is most often reflected in the cemeteries that were related to the various habitation sites. Burials containing elaborate grave goods are generally reflective of an individual of high social rank, while burials containing no grave goods might indicate an individual with low social rank (Autry 1983:124). Locality of burials was evidently another factor in regard to rank and social status. Burials found in the large platform mounds or within the charnel houses situated on mounds are generally considered as individuals of high rank. All other persons were buried in outlying cemeteries or at random throughout the village.

The archaeological investigations at site 40SU20 have indicated the presence of a low mound containing stone box burials. The shallow nature of this mound suggests an early or beginning stage of construction.

The occurrence of Burials 44, 66, 78, 79, 80, 90 and 91 at deeper levels suggests that these were buried at an earlier date, then covered with a layer of earth to add to the height of the mound and accommodate additional burials. Although two burials (Nos. 19 and 44) contained associated grave goods, a large number of the remaining burials had been disturbed prior to the 1977 archaeological project. It is, therefore, difficult to determine the total number of burials which

might have contained associated grave goods. Conclusions regarding the nature of social rank, therefore, cannot be made.

From the analysis of the skeletal remains from the site, several interesting observations have been made. Of the fifty-three adult burials whose age and sex were determined, it is of interest that the death rate was highest for both males and females within the 30-35 year age category. Infant-child mortality was comparatively high, representing 34% of the total number of burials recorded. The greatest percentage of deaths occurred within the 3.5-6 year age category.

Although no pathological disorders were noted with infant and child burials, a relatively large number of such is noted among the adult population. Of the fifty-three identified burials, two males and seven females exhibited evidence of osteomyelitis or periostitis. Evidence of varying stages of arthritis was also noted in the skeletal remains of ten females and eleven males. The greatest percentage of osteomyelitis-periostitis noted in both males and females occurred within the 30-35 year age category. The highest incidence of arthritic disorders occurred among males 30-35 years of age. It is possible that the nature of activities and constant exposure of individuals to the natural elements were contributing factors to this disease.

and the sign of the control of the sign of the sign of the sign of the sign of the control of the sign of the But the sign of the sign of

REFERENCES CITED

Autry, William O.

1983

Sociopolitical Dimensions of the Mississippian System in the Cumberland River Valley of Middle Tennessee and Western Kentucky: An Analysis of Mortuary Patterns and Skeletal Remains from Mound Bottom, Tennessee. Report prepared for the Library/Files of the Frank H. McClung Museum. University of Tennessee, Knoxville.

Bell, Robert E.

1958

Guide to the Identification of Certain American Indian Projectile Points. Special Bulletin No. 2, Oklahoma Anthropological Society, Norman.

Benthall, Joseph L.

1983

Archaeological Investigation at the Noel Cemetery Site. Unpublished manuscript on file at the Tennessee Division of Archaeology, Nashville.

n.d. Daugherty Cave: A Stratified Site in Russell County, Virginia. Publication of manuscript in progress.

Berryman, Hugh E.

1980

Mouse Creek, Dallas, and Middle Cumberland: A
Multivariate Approach. In The Skeletal Biology of
Aboriginal Populations in the Southeastern United
States, edited by P. Willey and F. H. Smith, pp. 114. Miscellaneous Paper No. 5, Tennessee
Anthropological Association, Knoxville.

Broster, John B.

1972

The Ganier Site, A Late Mississippian Village on the Cumberland River. In The Middle Cumberland Culture, edited by R. Ferguson, R., pp. 51-78. Vanderbilt University Publications in Anthropology, No. 3. Nashville.

Brothwell, D. R.

1965

Digging Up Bones: The Excavation, Treatment and Study of Human Skeletal Remains. Trustees of the British Museum (Natural History), London.

Butler, Brian M.

1977

The Yearwood Site: A Specialized Middle Woodland Occupation on the Elk River. <u>Tennessee</u> Anthropologist 2(1): 1-15.

Sellars: A Small Mound Center in the Hinterlands. Tennessee Anthropologist VI(1): 37-60.

Cambron, James W.

1958

Some Early Projectile Point Types from the Tennessee Valley, Part II. <u>Journal of Alabama Archaeology</u>, 4(1):17-19.

Cambron, James W. and David C. Hulse

1960a

An Excavation on the Quad Site. <u>Tennessee</u> Archaeologist XVI(1):14-26.

1960b

The Transitional Paleo Indian. Journal of Alabama Archaeology, Vol. VI. No. 1.

1964

Handbook of Alabama Archaeology; Part 1: Point Types. Archaeological Research Association, Inc. University, Alabama.

1975

Handbook of Alabama Archaeology; Part 1: Point Types. Revised edition. Archaeological Research Association, Inc. University, Alabama.

Chapman, Jefferson

1977

Archaic Period Research in the Lower Little Tennessee River Valley - 1975: Icehouse Bottom, Harrison Branch, Thirty Acre Island, Calloway Island. Report of Investigations No. 18, University of Tennessee, Department of Anthropology, Knoxville.

1978

The Bacon Farm Site and a Buried Site

Reconnaissance. Report of Investigations No. 23,

University of Tennessee, Department of Anthropology,
and Tennessee Valley Authority Publications in
Anthropology No. 9, Knoxville.

1979

The Howard and Calloway Island Sites. Report of Investigations No. 23, University of Tennessee Department of Anthropology, and Tennessee Valley Authority Publications in Anthropology No. 27, Knoxville.

1985

Tellico Archaeology. Report of Investigations No. 43, University of Tennessee, Department of Anthropology, and Tennessee Valley Authority Publications in Anthropology No. 41, Knoxville.

Coe, Joffre L.

1964

The Formative Cultures of the Carolina Piedmont. Transactions of the American Philosophical Society, Vol. 54, Part 5, Philadelphia.

Cridlebaugh, Patricia

1986

Penitentiary Branch: A Late Archaic Cumberland
River Shell Midden in Middle Tennessee. Report of
Investigations No. 4, Tennessee Department of
Conservation, Division of Archaeology, Nashville.

DeJarnette, David L., Edward Kurjack, and James W. Cambron
1962 Stanfield-Worley Bluff Shelter Excavations. <u>Journal</u>
of Alabama Archaeology, Volume VIII, Nos. 1 and 2.

DeSelm, H. R.

1959

A New Map of the Central Basin of Tennessee.

Journal of Tennessee Academy of Science 34:66-72.

Dowd, John T.

1972

The West Site. Miscellaneous Paper No. 10,

Tennessee Archaeological Society, Knoxville.

Faulkner, Charles H.

1977 Some Tennessee Pottery Types. Unpublished paper, on file, University of Tennessee, Department of Anthropology, Knoxville.

Faulkner, Charles H. and J. B. Graham

1966

Highway Salvage in the Nickajack Reservoir. Report of Investigations No. 4, Department of Anthropology, University of Tennessee, Knoxville.

Faulkner, Charles H. and Major C. R. McCollough

1973

Introductory Report of the Normandy Reservoir

Salvage Project: Environmental Setting, Typology

and Survey. Report of Investigations No. 11,

Department of Anthropology, University of Tennessee,

Knoxville.

Fenneman, Nevin M.

1938 Physiography of Eastern United States. McGraw-Hill.

New York.

Ferguson, Robert

1972
The Arnold Village Site Excavations of 1965-1966. In

The Middle Cumberland Culture, edited by R.

Ferguson, pp. 1-50. Vanderbilt University

Publications in Anthropology, No. 3. Nashville.

Ford, James A. and C. G. Webb

1956
Poverty Point, A Late Archaic Site in Louisiana.

Anthropological Papers of the American Museum of Natural History 46(1).

Graham, J. B.

1964

The Archaeological Investigations of Moccasin Bend
(40HA63) Hamilton County, Tennessee. Department of
Anthropology, University of Tennessee, Knoxville.

Guthe, Alfred K. and E. Marion Bristline

1978

Excavations at Tomotley, 1973 74 and the Tuskegee

Area: Two Reports. Report of Investigations No.l
24, University of Tennessee, Department of
Anthropology, and Tennessee Valley Authority
Publications in Anthropology No. 20, Knoxville.

Hinshaw, Jane and Eunice R. McColloch

1976

A Survey and Assessment of the Archaeological Resources of the Goodlettsville Community Park at Goodlettsville, Tennessee. Report prepared for Ragan-Smith and Associates, Inc., Nashville.

Jolley, R. L.

1983
Mississippian Adaptation to the Middle Cumberland
Drainage of Central Tennessee. Midcontinental
Journal of Archaeology 8(1):73-90.

Jones, Joseph
1876
Explorations of the Aboriginal Remains of Tennessee.
Smithsonian Contributions to Knowledge, No. 259.

Killebrew, J. B.

1898 Information for Immigrants Concerning Middle
Tennessee. Passenger Department, N.C. and St. L.
Railway. Marshall and Bruce, Nashville.

Killebrew, J.B., J.M. Safford, C.W. Charlton, and H.L. Bentley

1874

Introduction to the Resources of Tennessee. Reports

No. 1 and 2, Tennessee Bureau of Agriculture,

Nashville.

Klippel, Walter E.

1984

Late Mississippian in the Nashville Basin: An
Overview of the Investigations at Averbuch. In

Averbuch: A Late Mississippian Manifestation in the
Nashville Basin. Vol. 1, Observations. Edited by
Walter E. Klippel and William M. Bass, pp. 1.14.11.14.4. University of Tennessee, Department of
Anthropology, Knoxville.

Kneberg, Madeline
1956
Some Important Projectile Point Types Found in the
Tennessee Area. Tennessee Archaeologist 12(1): 1728.

Lewis, Thomas M. N. and Madeline Kneberg

1946

Hiwassee Island: An Archaeological Account of Four

Tennessee Indian Peoples. University of Tennessee

Press, Knoxville.

The Archaic Culture in the Middle South. American Antiquity 25(2).

Miller. Robert A.

1974 The Geologic History of Tennessee Bulletin 74.
Tennessee Department of Conservation, Division of Geology, Nashville.

Morse, Dan F. and James H. Polhemus III

1963

Archaeological Investigations in the Cordell Hull
Reservoir, Tennessee: 1963 Field Season. University
of Tennessee. Report on file, Tennessee Division of
Archaeology.

Myer, William
n.d. Catalogue of Archaeological Remains in Tennessee.
Unpublished manuscript on file at the Smithsonian
Institution, Bureau of American Ethnology Archives.

O'Brien, Michael J.

1977 Intrasite Variability in a Middle Mississippian
Community. Unpublished Ph.D. dissertation,
Department of Anthropology, University of Texas,
Austin.

Peebles, C. S.

1978

Determinants of Settlement Size and Location in the Moundville Phase. In Mississippian Settlement Patterns, edited by B. D. Smith, pp. 369-416.

Academic Press, New York.

Phillips, Philip
1970
Archaeological Survey in the Lower Yazoo Basin,
Mississippi, 1949-1955. Papers of the Peabody
Museum of American Archaeology and Ethnology 60.

Prater, J. L., Olin North, et al.

n.d. Soil Survey of Sumner County, Tennessee. U. S.

Department of Agriculture, Soil Conservation Service, unpublished manuscript.

Quarterman, Elsie and Richard L. Powell

1978

Potential Ecological Geological Natural Landmarks on the Interior Low Plateaus. Vanderbilt University, Nashville.

Reed, G. Ann
1984

Ceramics. In <u>Averbuch: A Late Mississippian</u>

Manifestation in the Nashville Basin. Vol. 2. Edited
by Walter E. Klippel and William M. Bass, ch. 7.

University of Tennessee, Department of Anthropology,
Knoxville.

Ritchie, William A.

1961

A Typology and Nomenclature for New York Projectile Points. New York State Museum and Science Service, Bulletin No. 384.

Safford, J. M.

1884

Cotton Production in the Mississippian Valley and Southwestern States. In <u>U.S. Tenth Census</u>, <u>Tennessee and Kentucky</u>. <u>5:383-416</u>.

Sargent, C. S.

1884

Forests of the United States. In <u>U.S. Tenth</u> Census, Alabama. 9:528-529.

Thruston, Gates P.

1890

The Antiquities of Tennessee and the Adjoining States. Robert Clarke & Co., Cincinnati.

Trewartha, G. T.

1968

An Introduction to Climate. McGraw-Hill. New York.

Webb, C. H.

1977

The Poverty Point Culture. In Geoscience and Man. School of Geoscience, Louisiana State University, Baton Rouge.

Webb, William S.

1938

An Archaeological Survey of the Norris Basin in Eastern Tennessee. Bulletin 118, Bureau of American Ethnology, Smithsonian Institution. U.S. Government Printing Office, Washington.