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CULTURE.

University of North Carolina at Chapel Hill,  
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COPENA: A TENNESSEE VALLEY MIDDLE WOODLAND CULTURE

by

John Allen Walthall

A dissertation submitted to the faculty  
of the University of North Carolina at  
Chapel Hill in partial fulfillment of  
the requirements for the degree of  
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of Anthropology

Chapel Hill

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JOHN ALLEN WALTHALL. Copena: A Tennessee Valley Middle Woodland Culture. (Under the direction of Joffre L. Coe.)

In 1939 William S. Webb described a number of Woodland burial mounds which had been excavated in the Middle Tennessee Valley region of northern Alabama. Recognizing the homogeneity of these mounds, in regard to both cultural material and construction techniques, he deemed the evidence sufficient to place these sites into a single complex, which he named Copena. Throughout the succeeding archaeological salvage projects conducted in the area during the 1930's, emphasis was placed upon further investigation of these mound structures. However, this complex was consistently treated as a mortuary tradition, and little effort was expended in delineating its temporal position within the regional or local prehistoric sequences or in defining its cultural relationships.

Based upon a study conducted by this author of excavation records and cultural materials from over twenty-five Copena related mortuary sites and habitation localities an attempt was made to define this burial complex in cultural terms. In this study the Copena burial tradition is viewed as a subsystem within the total local Middle Woodland culture. The genesis of the ritual component of this culture is seen in terms of diffusion through trade and culture contact between the local peoples and Hopewellian groups in other areas of the Eastern United States. The

secular aspect of the Copena culture is also discussed and hypotheses concerning settlement patterns and subsistence activities are offered. Through the integration of the information currently available concerning the Copena culture, and through the development of a series of hypotheses concerning this cultural phenomenon, groundwork is laid for future, more intensive, investigation into the development of this prehistoric cultural system.

## PREFACE

### Background

Beginning in 1932, and continuing up to the beginning of World War II, extensive archaeological investigations were conducted in the Middle Tennessee Valley. During this series of government sponsored projects over thirty burial mounds belonging to the Copena complex were excavated. The field records and cultural material from the investigations of these mortuary structures were subsequently stored at the University of Alabama Museum of Natural History repository at Mound State Monument.

In choosing the Copena burial complex as the topic for this dissertation several factors were considered. First, although many of the burial structures had been investigated, little was known concerning the temporal placement or cultural relationships of this complex. Thus there was no problem concerning the formulation of research problems.

Second, unlike the Hopewell or Adena mounds, the majority of the Copena sites were excavated in a scientific, controlled manner during a single well organized research program. The records and cultural material from both published and unpublished sites were conveniently located at a single facility and through

the use of a well planned and maintained filing and storage system these data were easily accessible.

Third, during the last decade intensive investigations have been made into the related Adena and Hopewell complexes. This new information, and coupled with abundant radiocarbon determinations on each of these manifestations has provided new insight into the origins and development of the Woodland burial mound traditions in the Eastern United States. This in turn, has allowed me to interpret the Copena complex in terms of regional cultural development and elucidate both the ritual and secular aspects of this cultural system.

It has not been my intention to produce the definitive work on Copena. This dissertation is not seen as an end product but rather as a beginning. The compilation of the site reports contained in this study, and the hypotheses proposed in the final section of this volume should serve as a base for future investigations of the Tennessee Valley Woodland period, while also adding to the usefulness of the published reports on archaeological sites in the area compiled during previous investigations.

#### Acknowledgments

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Associate Professor of Anthropology at the University of Alabama and Director of Mound State Monument, provided me with my initial training in archaeology and has personally supervised the research upon which this thesis is based. James B. Griffin, Professor of Anthropology at the University of Michigan, guided my initial years of graduate work, and his extensive criticisms and comments concerning this present project have added immeasurably to this study. Joffre L. Coe, Professor of Anthropology at the University of North Carolina, directed my doctoral program and his advice and counsel have been invaluable. Dr. Coe was also the chairman of my dissertation committee.

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Several of the graduate students in the Department of Anthropology at the University of Alabama contributed their time and talent to the compilation of this thesis. Credit is due Ned Jenkins for drafting the maps, George McCluskey for the preparation of the photographic plates,

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## SECTION I

### COPENA: EXCAVATION AND INTERPRETATION, 1915-1970

#### A. INTRODUCTION

The term "Copena" was coined during the third decade of this century as the name for a complex of burial mounds excavated in the Tennessee Valley region of northern Alabama. The name for this burial complex was derived from the first syllable of "copper" and the last two syllables of "galena", two minerals frequently found in these mounds in burial association.

This mound complex was first formally defined by William S. Webb in his report on the Wheeler Basin archaeological survey (Webb 1939). During this depression decade two additional hydro-electric dams were built on the Middle Tennessee River and subsequent archaeological investigations in the areas to be inundated by the construction of these structures revealed more components belonging to this complex. These Copena mounds excavated in conjunction with these three Tennessee Valley Authority projects were not, however, the first such burial mounds to be investigated and reported. Nearly twenty years earlier, C. B. Moore reported his investigations of mounds later to be assigned to this complex (Moore 1915) and only shortly after this initial

work, Gerard Fowke of the Bureau of American Ethnology excavated two more mounds belonging to this cultural manifestation (Fowke 1928).

These burial mounds, now numbering approximately thirty known structures, occur individually, or at times, in groups up to seven in number. These conical mounds were constructed over subsoil burial pits and usually contained secondary burials within the mound fill. Burial positions varied from bundle to flexed to extended and cremations were common. Burial preparation was at times elaborate, including specially prepared pits lined with foreign puddled clay and logs or bark. The most characteristic artifacts associated with the Copena burials were copper reel-shaped ornaments, earspools, bracelets, celts and beads; marine shell cups and beads; long stemless projectile points; galena nodules; greenstone celts and digging implements; and steatite elbow pipes (DeJarnette 1952:278).

The purpose of Section I in this dissertation is to present a diachronic synthesis or survey of previous excavations and subsequent interpretations of the Copena culture. Although this burial complex has been known for over fifty years, and although it has been discussed in every major work on Eastern States archaeology, such a synthesis, gleaned from the extant literature, has never been compiled. In actuality, little is known about this burial tradition - its cultural affiliations, development, temporal position and internal chronology, are vaguely understood at best. How-

ever, this lack of knowledge about the total culture of which the Copena burial system was a part, is not totally confined to this manifestation alone:

Many other instances of Hopewellian intrusion into the Southeast could be mentioned. The elements that reveal such a connection are often striking, as in the famous Crystal River Mound in Florida, but there is always the question of whether they reflect a serious orientation of pre-existing Early Woodland patterns or merely some sort of trade relations. The same developmental uncertainty attaches to Middle Woodland cultures in the Southeast which seem to have been more resistant to Hopewellian influences. An example is the Copena (COPper-gALENA) of the Tennessee River Valley in Northern Alabama. Here again, our information is confined to burial mounds of modest proportion and their contents, which show a level of sophistication comparable to Adena and Hopewell, but little can be said about the kind of settlement or economic base (Willey and Phillips 1958:160-161).

It is then necessary, before presenting new data and interpretations, to present what has gone before. It is hoped that this synthesis of former research on Copena will illuminate the many problems concerned with its interpretation, and while placing these earlier views into historical perspective, will serve as a base for the new descriptive information given in Section II and this author's interpretations discussed in the third and concluding section.

Only the mounds excavated by Moore and Fowke during the period under consideration will be dealt with in any detail in this introductory section. The burial data from these reports have been summarized in table form. This has

been done in these two cases to make comparison with the descriptive data contained in the three T.V.A. survey volumes and in the second section of this present paper less difficult.

## B. EXCAVATIONS BY MOORE, 1915

Clarence B. Moore was one of the more interesting and colorful investigators during the early history of Eastern States archaeology. He investigated every major waterway in the southeastern United States, and while his techniques, in light of modern field methodology, can be termed crude or unscientific at best, his results were nothing short of the spectacular. Schwartz in his Conceptions of Kentucky Prehistory states that:

Moore, who was independently wealthy, was a member of the Antiquarian Society of Philadelphia and a collector of prehistoric artifacts from the eastern U.S. He acquired a steamboat, the Gopher, to carry him up and down rivers from Florida and Louisiana to Kentucky and Ohio. From the boat as a reconnaissance vehicle and from local farmers as informants, he and his captain, J. S. Raybon, discovered the location of prominent archaeological sites. Once located, Moore would enlist local labor and supervise the excavation of the sites. Because of his substantial private income, he was able to publish magnificent color plates of the material, accompanied by descriptions of the sites and the artifacts...Viewed in the perspective of time Moore was considered 'a competent worker whose results were respected (Goggin 1952: 34)' (Schwartz 1967:22-23).

Moore began an investigation of the Tennessee Valley in January of 1914. Before this archaeological exploration was finished, he and his crew had traversed the 652 mile river no less than three times (Moore 1915:180). He located and excavated dozens of sites, among which were several burial mounds in northern Alabama which were later assigned

to the Copena complex (Webb 1939). Unlike previous, or sometimes future, investigators, Moore went beyond a mere description of his excavations and the artifacts recovered. In the northern Alabama burial mounds unusual copper artifacts were recovered. Of these Moore stated:

The reel-shaped, ceremonial ornament of copper, to our knowledge, has been but once previously described. Thruston (1891) figures one of these objects and speaks of it as probably used as a pendant or breast ornament. It was found, he says, in a mound in Marshall County, Tenn. (This county is just south of Nashville, midway between the Cumberland and the Tennessee Rivers.)

To Prof. W. K. Moorehead we are indebted for the information that one of the ceremonials from a mound at Newark, Ohio, is in the collection of Phillips Academy, Andover, Mass. In a note accompanying a tracing of this ornament, written some time ago by Mr. R. S. Peabody, we are told 'Objects of this form are very unusual in stone and only one or two of copper are in the museums.'

Evidently this class of ceremonial ornament hitherto has been but little known, presumably because its vogue was principally among aborigines of northern Alabama, where there has been so little archaeological research.

We have examined the handsome, reel-shaped ceremonial of copper in the small but interesting collection of the University of Alabama, at University, Alabama, near Tuscaloosa, which, owing to its size and the graceful, terminal expansion of the arms, is the most striking example of this class of objects of which we have knowledge (and we obtained nineteen of them in varying degrees of completeness from mounds along the Tennessee River in Alabama). We are under obligation to Prof. Eugene A. Smith, State Geologist of Alabama and member of the faculty at the University, for full details as to the ceremonial, which is nearly 6.5 inches by 8.5 inches, over all, and about .1 inch thick. It came from near the Coosa River in Coosa County, Alabama, some distance south from where most of our objects of this kind were obtained.

We were not able to decide positively on what part of the body the ceremonials were worn, as we found them both on the chest and one the pelvis of the skeletons, and having perforations sometimes in line with the burial and sometimes transverse to the skeleton. Usually, however, when determination was possible (and frequently it was not), the ornament lay on the

chest, and the two perforations were across, not in line with the trunk. Several of our specimens, wrought from unusually thick material, are without perforations (1915:245-246).

The above quotation indicates that Moore utilized the comparative method and was also interested in the functional aspect of this type of artifact also. His correspondence with Warren K. Moorehead is especially important for it was the first statement linking the northern Alabama burial mound complex to the burial mound manifestation in Ohio later to be known as Hopewell. Since Moore surveyed the entire Tennessee River he was able to delineate the spacial limits of this burial mound complex. Going upstream he first encountered this type of structure in Hardin County, Tennessee near the Alabama border and found that the last group of mounds were located in Marshall County in the northeastern part of the state. Moore's contribution to the study of the Copena complex is therefore meaningful and important. The seven mound sites he discovered and investigated are summarized below in the order in which they were encountered:

1. Mound Near Boyd's Landing, Hardin County, Tennessee

This mound was located about one-quarter mile north of Boyd's Landing (Map 1). At the time of the excavation, it was 7 feet high and 70 feet in diameter at the base. Moore's excavation consisted of a hole 11 by 6.5 feet dug into the mound summit to a depth of 7 feet 7 inches where the original surface was encountered. The excavation

pit was not carried through this old humus so subsoil burial pits were not encountered. The mound fill was sterile except for occasional flint chips and five masses of galena. Two of these approximately fist-size galena nodules were found together and "were surrounded by the dark material composing the base-line, and evidently were a deposit of some kind (1915:231)."

2. Mounds Near the Mouth of Yellow Creek,  
Hardin County, Tennessee

Two mounds were investigated near the confluence of Yellow Creek and the Tennessee River. Although few diagnostic artifacts were recovered from these structures, they both appear to have been components of the Copena complex.

Mound 1: This structure was located one-half mile due west from the mouth of Yellow Creek. At the time of investigation it was 32 feet in diameter at the base. It had been constructed on a slope and varied in height from 1 foot 4 inches to 5 feet. The old land surface had apparently been prepared before the mound was constructed since no old humus layer was encountered: "An excavation 12 feet square was put down in the central part of the mound, showing it to be raw, yellow clay and there was no marked line of the base, compact clay of lighter shade than that of the mound being encountered, however, at a depth of thirty inches (1915:231)." Five fragmentary burials were encountered in the mound fill. These are summarized in Table 1 in

the order in which they were discussed in Moore's report. Besides the burials, a projectile point (Copena?) and a mass of galena were recovered from the mound fill.

Mound 2: This structure was located one-quarter mile WSW from Mound 1. The mound had previously been "investigated" but Moore estimated that it had originally been approximately 5 feet high and 38 feet in diameter at its base. An excavation pit 16 feet square was dug from the mound summit through the old humus layer and eventually into the red clay subsoil. Three burials and a subsoil burial pit were encountered (Table 1). Moore also reported that a "fireplace" had been made on an old mound surface since "this clay had been somewhat discolored by heat (1915:232)" This fired area was found at a depth of 3 feet from the mound summit.

### 3. Mounds Near Riverton, Colbert County, Alabama

Two mounds were investigated near the entrance to the Colbert Shoal canal. The first of these was a Mississippian temple mound; the second was a conical burial mound 4 feet in height and 35 feet in diameter. Moore reports that, "A thorough examination accorded this remnant failed to discover bones, but came upon one arrowhead or knife, of flint, and three masses of galena (lead sulphide) placed together (1915:240)." The largest of these galena nodules had been ground into discoidal form 2 inches in diameter and 1 inch in thickness.

4. Mounds Near Perkins Spring,  
Lauderdale County, Alabama

A group of three burial mounds, located 200 yards NNE of Perkins Spring near Koger's Island, were investigated by Moore. The first of these structures, Mound A, was 7 feet 8 inches high and 62 by 55 feet in diameter at the base. An excavation 16 feet square was put down through the central portion of the mound and eight "trial holes" were dug near the periphery. The mound had been constructed over an old village midden containing cultural debris. Twelve burials (described in Table 1) were encountered during the excavation.

The second structure, Mound B, was located one-half mile SE by S from Mound A. At the time of the excavation this mound stood 3.5 feet high and had basal axes of 50 and 60 feet. Three burials and several isolated artifact caches were uncovered in the central excavation unit. Mound C, the third structure, was located only a few yards from Mound B. It was located in a field under cultivation at the time it was visited by Moore and was reported to be 4 feet high and 45 feet in diameter. Four burials were uncovered during the excavation of the central portion of the mound.

5. Mound Near Limestone Creek,  
Limestone County, Alabama

A burial mound, 6 feet high and 55 feet in diameter

at its base, was found in a cultivated field near the bank of Limestone Creek, approximately 1.5 miles back from the Tennessee River. Moore states that during the excavation of this mound some "thirty burials were encountered, all of which, with one exception, where a quantity of disconnected bones had been interred, were of the flexed form of burial or at full length, so far as could be determined. In the body of the mound especially there had been great disturbance, burials cutting through other burials, leaving parts of skeletons only. Single skulls were encountered also and were classed as burials (1915:272)."

#### 6. Mounds on the Slaughter Place,

Morgan County, Alabama

A pair of conical burial mounds, located in a field one-quarter mile SW of Slaughter Landing on the Tennessee River, were investigated by Moore. The first of these structures, Mound A, was 7 feet high and 50 feet in diameter. Three burials were encountered during the excavation. Mound B was found to be 6 feet 7 inches high and 35 feet in diameter at its base. This was apparently an incipient mound containing only a central subsoil burial pit (Table 1).

#### 7. The Roden Mounds, Marshall County, Alabama

One quarter of a mile NW from the western bank of the Tennessee River at a point 3.5 miles north of Guntersville, a group of six conical burial mounds were located

and later excavated by Moore's crew. The highest two mounds, A and B, had not been cultivated at the time of Moore's visit, but the remaining four mounds had undergone varying degrees of plowing.

Mound A, the largest structure in this group, was measured and found to be 50 feet in diameter at its base and approximately 10 feet high. Of the sixty-four burials encountered during the excavation of this structure thirteen were interred in subsoil pits. The remaining burials were concentrated at the mound base and in the mound fill. Twelve of the sixty-four burials were determined to have been of infants or small children.

Mound B was only a few yards away from Mound A and was found to be 48 feet in basal diameter and approximately 8 feet high. An excavation unit 16 by 20 feet was carried down through the center of the mound. Of the eighteen burials found during the excavation of this unit, four interments had been made in subsoil pits.

Mound C was unusual in that it was not round at the base but more rectangular, having measurements of 43 feet by 73 feet. It was almost 8 feet high. Seven burials and three subsoil pits were found during the excavation of this structure.

Mound D, the smallest of the mounds in this group, was the only structure completely excavated. It was 38 feet in diameter and 5 feet high. Thirteen burials, including two bundle burials, were encountered. Seven of

these interments had been made on the old land surface while two were found in shallow subsoil pits.

Mound E was located in a near-by cotton field and had been spread and reduced by cultivation. At the time of investigation it was found to be 5 feet high and 40 to 50 feet in basal diameter. Twenty burials were found in the excavation unit which measured 20 feet on a side.

Mound F appeared to have contained three units or "humps". Its original proportions had been altered by years of cultivation. Its maximum height was 4.5 feet and the structure was 65 feet wide and 130 feet long. Unit 1, the highest of the three promontories, contained 13 burials, including eight burials in subsoil pits. Unit 2 contained four burials (three in subsoil pits) and Unit 3 contained four burials, including three extended interments in subsoil pits (Table 1).

**Map 1. Copena Mounds Excavated by Moore.**

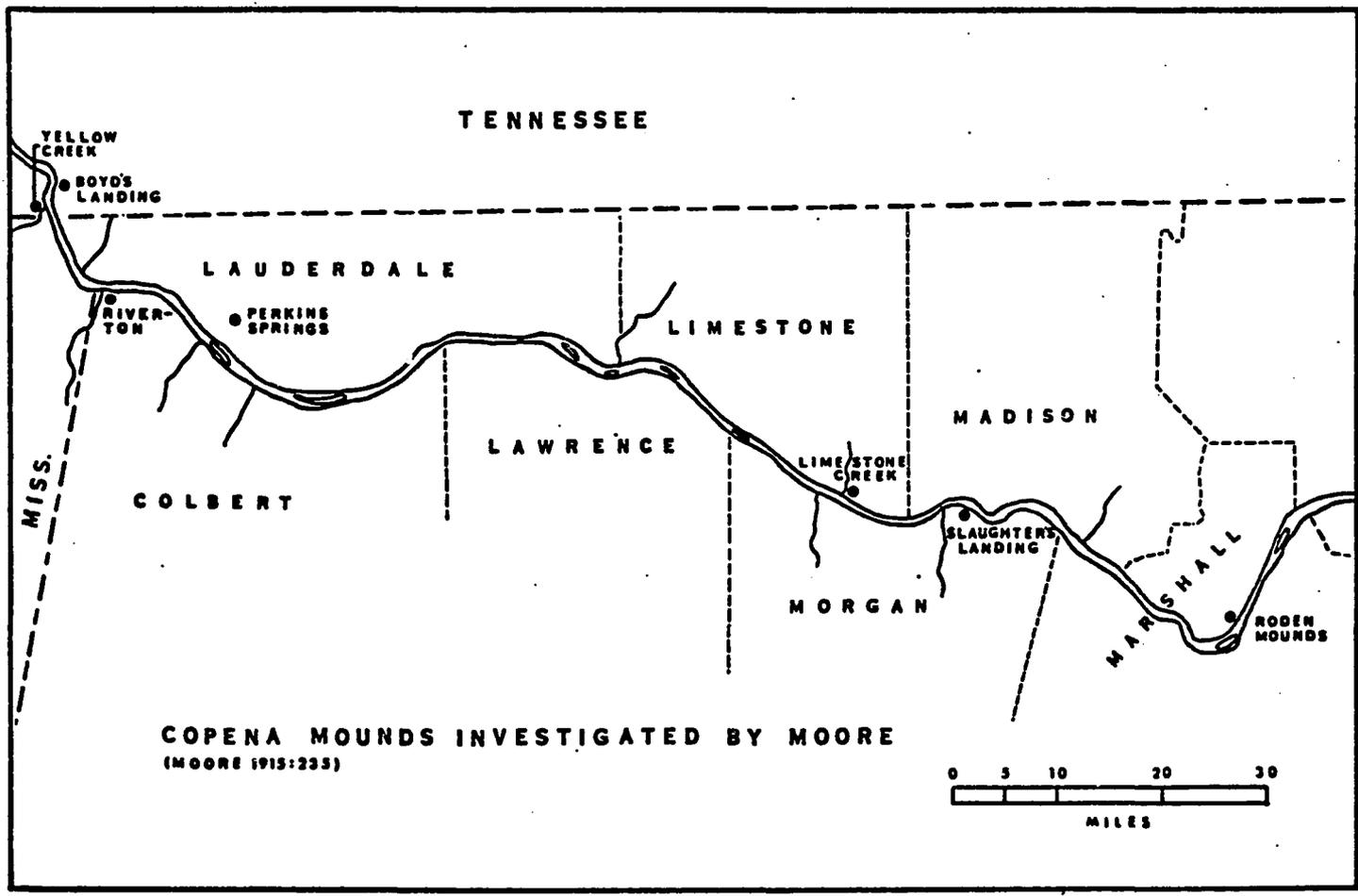


TABLE 1. BURIAL DATA - COPENA MOUNDS EXCAVATED BY MOORE, 1915

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
Yellow Creek	1	5"	Flexed	
Mound 1	2	15"	-	"two long-bones"
	3	28"	-	"mere traces of bone"
	4	28"	Bundle	two femora, two tibiae and skull
	5	22"	?	traces of bone placed upon sandstone slabs
Yellow Creek	1	3'	?	pelvis and two femora lying on limestone slab
Mound 2	2	4'	?	"traces of bones"
	3	2'4"	Flexed	under limestone slabs
	4	base	Extended	pit 2'3" wide; 6'5" long; filled with yellow clay; "no trace of bone remained"
Perkins Spring Mound A	1	1'	Extended	small bowl near head (probably an intrusive Mississippian burial)
	2	2'	Extended	layer of puddled clay over body; greenstone digging implement found 2' away from skull
	3	5'3"	Extended	skull resting in marine shell cup; clay pillow near head; mass of galena (10 lbs) near thorax; shell disc beads under galena

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
	4	5'3"	Extended	clay pillow at feet; mass of heavily ground galena near thorax
	5	base; center	Extended	central subsoil pit; 7.5' long by 2.5' wide; spool-shaped copper ear ornaments at each side of head; reel-shaped gorget near pelvis; clay pillow at feet.
	6	base; center	Extended	central subsoil pit, 9'8" by 4'4"; contained two burials, an adult, Burial 6, and the remains of a child, Burial 7. By these burials was a mass of pure grey clay 8' long and 13-16" wide. A mass of galena (5 lbs) near right shoulder; copper celt 4" long by 2" wide, under lower dorsal vertebrae; masses of galena (10 lbs) near knees and near ankles (6 lbs)
	7	base; center	Extended	child burial; spherical bead of copper near neck; both heads of burials lying in the same direction
	8	near base; 4'9"	Extended	secondary burial in the mound fill; clay pillow at feet; stone slabs placed over burial
	9	40"	?	"in soil darker than the material of this part of the mound was composed, the deeper shade probably being the result of decay

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
				of human remains, was a reel-shaped ornament of sheet-copper..."
	10	base-subsoil		subsoil pit; 3'7" by 17"; nothing found in pit but probably an infant burial
	11	base		under layer of red clay, a dark stain, "possibly the remains of a burial," and four copper beads
	12	base-subsoil	Extended?	subsoil pit; 9' long by 28" wide; no skeletal remains; mass of galena in bottom of pit; clay pillow at one end
Perkins Spring Mound B	1	3'	?	skeletal remains decomposed; had been covered by a layer of puddled clay (5' long, 18-22" wide and 2-7.5" thick); mass of galena found under the clay
	2	4'	Reburial?	skull only in mound fill
	3	base	Extended?	subsoil pit; 10.5" by 5'7"; possible multiple interment; bottom of pit lined with sand and a layer of clay; mass of galena (over 20 lbs) in one end of galena scattered throughout layers of sand and clay
Perkins Spring Mound C	1	base-subsoil	Extended	subsoil pit; 9.5' by 1'8"; contained three burials (1, 2a, 2b). Burial 1 lying in pit head to SW

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
	2a			feet of Burial 2a lying on pelvis of Burial 1; head to NE; no skull
	2b		Reburial?	only lower extremities of an adult present; feet to NE; skull sitting on top of skeleton material; marine shell cup below the skull; layer of clay poured over all skeletal material
	3	base-subsoil	Extended	central subsoil pit; 9'9" by 2'9"; 36 beads of sheet copper near neck; marine shell cup over head; clay pillow and another marine shell cup above head; galena nodule on thorax; galena nodule on pelvis; clay pillow at feet
Limestone Creek	6		Extended	greenstone spade on pelvis
	15	base-subsoil	Extended	child burial in subsoil pit (3' long by 1'10" wide); two thick discoidal beads of copper at neck
	16	base-subsoil	Extended	adult burial in subsoil pit (8' long by 1'10" wide); pillows of puddled clay at head and feet; projectile point (Copena) near face; celt above skull; galena nodule near pelvis
	18	base-subsoil	Extended	adult burial in subsoil pit (7' long by 2'4" wide); clay

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
				pillow at head; 4 galena nodules near pelvis
	19	base-subsoil	Extended	adolescent burial in a subsoil pit (5'8" long by 1'9" wide) dug at a right angle to pit containing Burial 18, skeletal material covered by a layer of puddled yellow clay 2 to 3" thick; a few shell beads at neck
	20	base-subsoil	Extended	adult burial in a subsoil pit (6'4" long by 1'5" wide); clay pillow at head and feet
	21			child burial in same pit with Burial 20; head in opposite direction from adult
	23	base-subsoil	Extended	adult burial in subsoil pit; clay pillows at head and feet
	24 25	base-subsoil	Bundle	multiple burial; adult and child in subsoil pit (2'3" long by 1'8" wide); marine shell ornaments and beads scattered in grave
	29	base-subsoil	Extended	adult burial in a subsoil pit (8'7" by 2' wide) on margin of mound; skeletal material covered with layer of light yellow clay 5 inches thick

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
	30		Extended	child burial lying on top of layer of clay covering Burial 29
	31		Bundle	skull and long bones of an adult burial in upper portion of pit containing Burial 29
Slaughter Place Mound A	1	2'		no skeletal material remaining; layer of puddled clay (4' long by 16" wide and 2 to 3" thick); at one end of this layer of clay were 25 galena nodules; beside these lay a copper celt (4.4" long by 2.5" wide).
	2	54"		no skeletal material recovered; mass of galena (14 lbs in weight); copper celt (4.4" long by 2.5" wide).
	3	base-sunsoil	Extended	central subsoil pit (7' long by 5' wide); probably a multiple interment; mass of pure, grey clay (2' long by 18" wide); under the celt was a copper reel-shaped gorget about 4" square; traces of bone beneath gorget.
Slaughter Place Mound B	1	base-subsoil	Extended?	central subsoil pit (11' 5" long by 6' wide); possible multiple interment; layer of foreign grey clay 4" thick on

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
				bottom of pit; under the layer of clay, 2'4" from the eastern end of the pit were two copper ear ornaments; crowns of teeth found near these fragments of copper reel found 15" away; large reel found near center of pit
Roden Mound A	1	3'8"	?	traces of bone; celt (12.5" long)
	2	3'		traces of bone; copper reel (6" square)
	5			traces of bone; 3 copper reels; 20 galena nodules
	6	6'3"	Extended	adolescent burial; copper celt (7.25" long by 3.25" wide) on pelvis; marine shell cup nearby
	8	6'10"	Extended	adult burial; 51 tubular copper beads at thorax; cord preserved by copper salts
	9	8'	Extended	shell fragment and mass of pure carbonate of lime
	10	10.5'	Extended	subsoil pit (7.5' long by 22" wide); layer of clean yellow sand poured over skeletal material; 3 copper bar bracelets near skull; shell beads near head

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
	11			disturbed child burial near Burial 10
	12	subsoil	Extended	below Burial 10; copper reel shaped ornament on pelvis
	13	subsoil	Extended	child burial
	14	subsoil	Extended	child burial
	15	subsoil	Extended	infant burial
	17	6'4"	?	traces of skeletal material; galena nodule
	21	subsoil	Extended	shell beads near neck
	22	subsoil	Extended	child burial in pit (3'9" by 1'4"); discoidal shell beads at neck; 16 small galena nodules near right thigh
	23	subsoil	Extended?	traces of skull and femora; near bones was a large mass of galena (10 lbs)
	26	subsoil	Extended?	24 small galena nodules near skull
	35	base?	Bundle	skull lying on femur; fragments of marine shell cup lying over skeletal material
	40	subsoil	Extended	child burial in subsoil pit; marine shell cup ( <u>Cassis tuberosa</u> ) and 13 small galena nodules

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
	41	7.5'	Extended	pillows of foreign clay at head and feet
	44	mound fill	Reburial?	skull only; fragments of a large marine univalve and 5 shell beads. Possibly an intrusive historic burial
	47	near surface	Extended	historic intrusive child burial; mirror, glass beads; shell beads; stone discoidal; shell gorget
	51	subsoil	Extended?	reel-shaped gorget near skull; copper celt (5.4" long by 1.9" wide)
	52	subsoil	Extended?	child burial (?)
	52a	subsoil	Extended	intrusive into Burial 52; large marine shell cup ( <u>Cassis tuberosa</u> ) near right thigh
	53	base	?	skull only; mass of carbonate of lime
	58	4'	Extended?	16 galena nodules near thigh; copper celt (3.2" by 1.3") and two masses of galena near teeth; pottery fragments in pit fill
	59	base	?	skull only; 51 copper beads
	61	mound fill	?	traces of bone; copper celt (3.6" long by 1.7" wide)

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
	62	mound fill	?	directly beneath Burial 61; large (ceremonially "killed") copper reel-shaped ornament
	64	mound fill	?	fragmentary skeletal remains; greenstone celt (10.75" long)
	65	mound fill	?	no skeletal material; layer of foreign sand; 17 galena nodules and a copper reel-shaped gorget in sand layer
Roden Mound B	1	2'8"	?	only trace of skeletal material; 2 galena nodules and a few tubular beads of copper
	2	2'10"		galena and copper beads
	13	6'	?	skull only; greenstone celt (9.5" long)
	14	9'	?	skull only; sphere of galena
	16	subsoil	Extended	burial in subsoil pit (5.5' by 20"); greenstone celt (10" long)
Roden Mound C	1	subsoil	Extended	nodules of galena near thigh and skull
Roden Mound D	1	mound fill	Bundle	"Thigh-bone" near skull fragments
	2	mound fill	Bundle	"foot bones" near cranium

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
	3	32"	?	48 galena nodules; reel-shaped copper gorget
	4	mound fill	?	traces of skeletal material; copper reel
	5	mound fill	?	traces of skeletal material; copper reel
	13	subsoil	Extended	subsoil pit (6'9" by 23")
Roden Mound E	1a	mound fill	?	galena
	1b	mound fill	?	galena
	1c	mound fill	?	skull only; 1 clay pillow near skull
	2	mound fill	?	skull only; on one side of skull is a greenstone celt (12.75" long) had been placed; pillow of clay near skull
	6	mound fill	?	traces of skull; galena discoidal
	7	mound fill	?	child burial; tubular copper beads
	7a	mound fill	?	tubular copper beads
	10	subsoil	Extended	subsoil pit (8' by 2'10"); sheet of mica near skull; galena
	16	?	?	skull only; greenstone digging implement (9.5" by 4.1")

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
Roden Mound F-1	1	2'	?	skull only
	2	2'	?	skull only; 2 perforated shell discs (2.5" in diameter); mass of pure clay near skull
	3	subsoil	Extended	child burial in subsoil pit (40 x 26"); copper reel-shaped gorget
	4	subsoil	Extended?	subsoil pit; clay pillow above skull
	5	subsoil	Extended?	pit lined with pure yellow sand; layer of clay poured over skeletal material
	6	subsoil	Extended	copper ear-spoons at each side of skull; galena nodule near skull; two perforated copper reels near thorax; matting preserved by copper salts; another burial pit (empty) had been dug parallel to that containing Burial 6; two post holes nearby
	7	subsoil	Extended	subsoil pit; two masses of galena; clay pillow
	8	subsoil	Extended?	marine shell cup
	9	subsoil	Extended?	large galena nodule; clay pillow
	10	3'	?	skull only

TABLE 1. Continued.

SITE	BURIAL NUMBER	DEPTH BELOW SURFACE	BURIAL POSITION	ASSOCIATION/COMMENTS
	11	base	?	galena nodule; puddled clay poured over skull
	12	subsoil	Extended?	galena nodule; layer of puddled clay over skeletal material
	13	subsoil	Extended?	no skeletal material; clay pillows at each end of pit
Roden Mound F-2	1	20"	?	skull only
	2	subsoil	?	traces of skull
	3	subsoil	?	pillow of clay at one end
	4	subsoil	?	subsoil pit (7.5' by 2'); clay pillow at one end
Roden Mound F-3	1	mound fill	?	skull only; puddled clay poured over cranium
	2	subsoil	Extended?	pit (8'8" by 2'9") clay pillow near skull; copper celt (3.5" by 1.5")
	3a	subsoil	Extended?	two skulls in subsoil pit (7' long by 2'3" wide). Clay pillow near lower skull; projectile point (Copena) associated with upper skull
	4	subsoil	Extended	clay pillows at head and feet

### C. EXCAVATIONS BY FOWKE, 1917

In 1917, just prior to the construction of the Wilson Dam near Florence, Alabama, the Tennessee Valley Historical Society requested that the Bureau of American Ethnology investigate the prehistoric sites in the area to be inundated. Gerard Fowke was sent to this area in the same year to begin the salvage operations (Fowke 1928: 436-437; Webb 1939:179). Utilizing local labor, Fowke excavated six sites near the mouth of Town Creek in Colbert and Lawrence Counties (Map 2). Among these sites were a shell mound, two conical burial mounds, and three sub-structure mounds. The two conical mounds were homogeneous in both content and construction and were later shown to be components of the Copena burial complex (Webb 1939:188-189).

Fowke's method of excavating these two structures, while perhaps providing more control than Moore's central pit technique, proved inadequate at best. At both sites, once the limits of the mound had been estimated, a line was drawn around the base of the structure. A trench two feet wide was then excavated along this line, forming a circle around the mound base. According to Fowke this narrow trench was dug and this technique was utilized for two reasons: "First, to ascertain whether the line was at a sufficient distance from the center of the mound; secondly, to afford a convenient way of disposing of the

earth to be removed, by throwing it continually toward the foot of the slope on the outside" (1928:453). However, in both cases, once the trench had been carried to the subsoil it was determined that "the limit should have been placed further out" (1928:453) but this "would have required the second removal of all the earth thrown out" (1928:455). The utility of this "encirclement" technique was therefore limited because the excavator "trapped" himself within the confines of his initial trench.

Unable to enlarge the area of excavation, the only alternative (other than removing a large amount of backdirt by hand) was to complete the investigation of the central portion of the mound. In order to provide a method of control, the structure was subdivided into wedge-shape units (much in the same manner as a pie is sliced) and each of the units was given a designation according to its position in relation to the cardinal points (South sector, Southeast sector, etc.) These nine sections (including a final Central sector) were then excavated individually to the subsoil base. The location of burials or artifacts was determined by measuring the distance from the original excavation line inward and the elevation of the feature or artifact from the mound base (i.e., "four feet in, three feet up"). Since a map of the excavation units was not made, these coordinates are only of minimal value.

The first of the conical burial mounds to be excavated by Fowke was located near the river's edge at the

western end of Hog Island. The mound was approximately fifty feet wide and sixty feet long with the maximum dimension on a N - S axis.

This structure, about 4 feet high at the time of investigation, contained the skeletal remains of at least twenty individuals. These "Burials were in tiers; the graves, about a foot to two feet deep; on the (original) surface of the earth; about two feet above the bottom; and near the (present) surface (1928:449)." This indicates that the Hog Island mound contained both primary, subsoil "graves", and secondary interments in the mound fill. The mound was apparently constructed over two primary burial pits, with additional burials added as mound construction progressed. The burials from this mound are listed in Table II according to the order in which they are discussed in Fowke's report (1928:446-449).

The second burial mound to be investigated was the Alexander Mound, located on the farm of J. S. Alexander, some eight miles southeast of Moulton in Lawrence County. This structure was 6.5 feet high and approximately 50 feet in diameter.

The mound had apparently been constructed over an old village site, for a large number of sherds, flint tools, and "many mortars, pestles, and cooking stones" were recovered (1928:453). A sample of the pottery sherds from this old village were illustrated in Fowke's report (Plate 84) and appear to represent an Early Woodland

occupation. Two ceramic series can be recognized; first, the sand-tempered Alexander ware and, secondly, limestone-tempered Long Branch Fabric Marked ware. The early sand-tempered series, later defined by Haag (1939:9), was given the name Alexander after its association with this mound.

At least 91 individuals, from infants to mature adults of both sexes, were buried in this mound. These burials, and the corresponding burial data, are listed in Table 2 according to the order in which each burial is presented in Fowke's report (1928:452-463).

Concerning the construction of this mound, Fowke concluded that:

The stratification of this mound was so unusual in its slopes and curvatures as to make it almost a certainty that it was of three different ages or periods of construction. There was a small mound, of which the grave at the south side, containing the eight skeletons was the center. This held a large number of bodies. There was another burial place to the northwest of this, similarly piled up but without any distinctive central features; the margins of these two coalesced or overlapped. Which of these two may have been constructed first could not be learned. Later, the three burials noted in the graves near the center were made at the junction of the two little mounds, on their north side. Earth was piled over these and over successive burials above them and extended on every side until the result was the apparent single, simple conical mound as it stood before the excavation began (1928:463).

Although Fowke must have been aware of Moore's earlier work on similar burial mounds in the same region, he does not mention the report, nor did he attempt to compare these sites to any other similar sites in other areas. The only comparative treatment contained in Fowke's 21 page report on the Wilson Basin sites was presented in the final,

**concluding paragraph:**

The similarity of burial methods and of material discovered in the Hog Island and the Alexander mounds indicate that they are due to the same tribe and period. The shell heap seems to be the work of an unrelated people... When all the facts are considered, it seems clear that this region has been occupied by at least two different 'nations' (1928:463).

**Map 2. Copena Mounds Excavated by Fowke, 1917.**

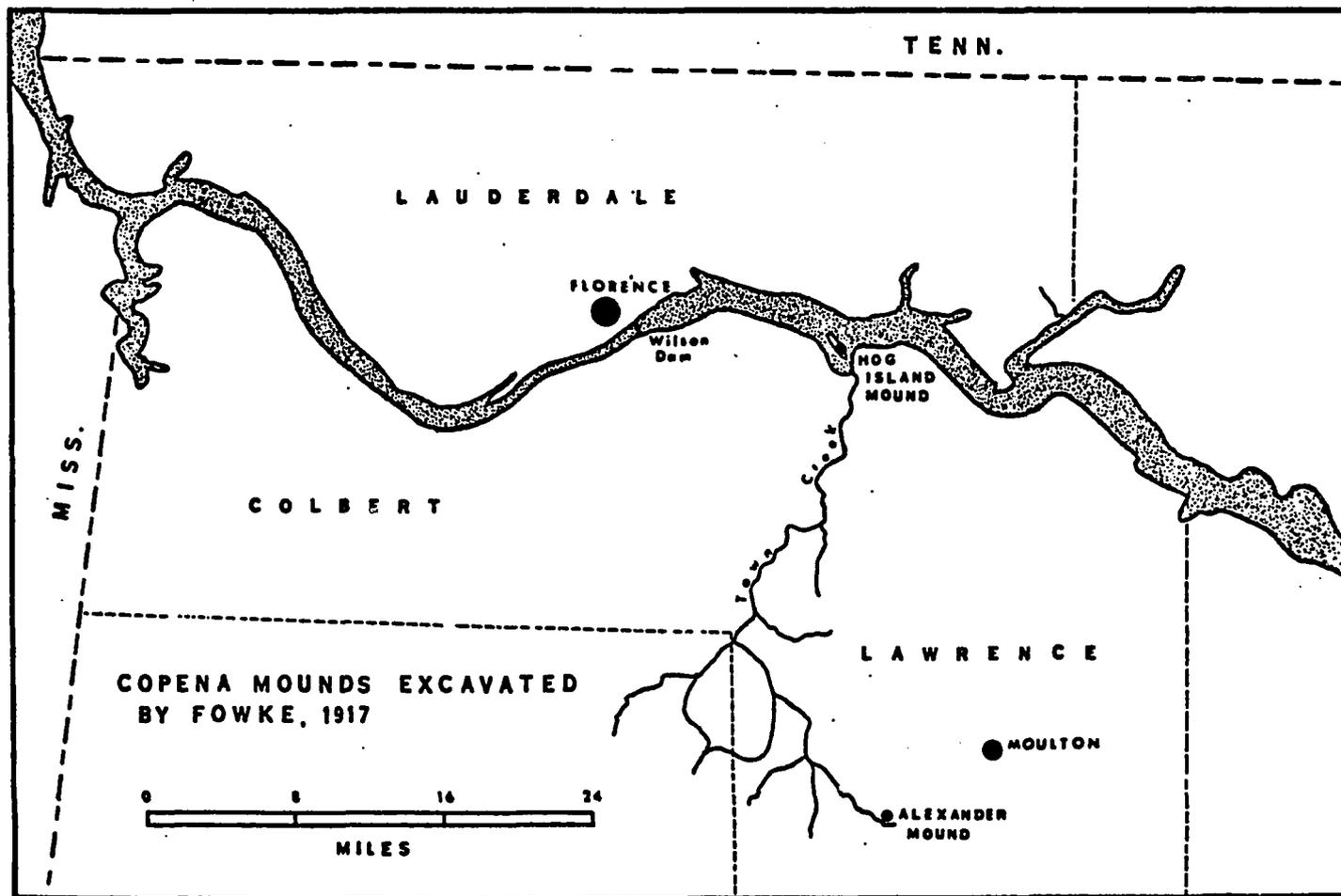


TABLE 2. BURIAL DATA - MOUNDS EXCAVATED BY FOWKE, 1917

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
A. Hog Island Mound	1	Trench E	a	?	
	2	Trench W	A	?	
	3	SE			
	4	Trench			No association; mound fill.
	5		a-A	E - F	
	6		a-A	E - F	
	7		a-A	E - F	
	8		a-A	E - F	
	9		a-A	E - F	
	10		a-A	E - F	
	11		a-A	E - F	

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	12	South	A	?	skull only.
	13	East side	A	E	Four individuals were found in a sub-soil pit 8.5 x 4, and 2 feet deep. Two were lying side on the bottom, while the other two were lying in a similar manner directly above these. All heads to NE. On the bottom was an adult male, copper beads at neck and reel-shaped copper ornament near pelvis. One of the other burials also had a reel-shaped gorget placed near the pelvis.
	14	East side	A	E	
	15	East side	A	E	
	16	East side	A	E	
	17	East side	A	E	
B. Alexander Mound	1	Trench W	A	E	Encased in burned earth; skeletal material was unburned.
	2	Trench W	A	E	

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	3	Trench SE			1 cylindrical shell bead.
	4	Trench SE	I-A	F or B	3 cylindrical shell beads.
	5	Trench SE	I-A	F or B	Spade (11 1/4 x 5") under skull.
	6	Trench SE	I-A	F or B	Under Burial 5 - flexed - spade (11 1/4 x 5").
	7	Trench SE	I-A	F or B	
	8	Trench SE	I-A	F or B	
	9	Trench SE	I-A	F or B	
	10	Trench SE	I-A	F or B	
	11	Trench SE	I-A	F or B	
	12	Trench E	A	F	Puddled clay (top and bottom).
	13	Trench E	A	F	"killed" polished celt.

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	14	Trench E	A	E	Puddle clay, celt near skull, limestone slab over head. Head N.
	15	Trench W	I	E	
	16	Trench W	I	E	
	17	Trench SW	I	E	Conch shell.
	18	Trench S	A	F	Burials 18-20 together; encased in burned (puddled?) clay - bones of Burial 20 burned; Burial 20's head N; Burial 18 E; Burial 19 W; near head of Burial 20 whorl of conch shell, galena nodule (2 lbs.) and the central portion of a steatite bar gorget (broken).
	19	Trench S	A	F	
	20	Trench S	a	F	
	21	Trench S	I	B(?)	Burials 21 - 28 found in subsoil pit directly below Burials 18-20. Pit 4 x 5' and 18" deep.
	22	Trench S	C	B(?)	

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	23	Trench S	A	B(?)	
	24	Trench S	a-A	B(?)	No associations.
	25	Trench S	a-A	B(?)	
	26	Trench S	a-A	B(?)	
	27	Trench S	a-A	B(?)	
	28	Trench S	a-A	B(?)	
	29	North	?	B	An old land surface at base of mound.
	30	North	?	Skull?	Teeth and skull fragments under spade.
	31	North	A	E	Base of mound; body covered with yellow sand; pillows of red clay at head and feet.
	32	North	A	E	Base of mound near Burial 31.
	33	North	A	F	Base of mound.

TABLE 2. Continued.

SITE	BURIAL NUMBER	POSITION	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	34	North	A	F	Base of mound.
	35	NE	A	Skull	Skull burial? - mound fill.
	36	NW	a	F	Spade (13 x 4") near skull (work from use).
	37	E	A	F	Base of mound; body covered with puddled clay.
	38	E	?	?	Mound fill. Burials 38 and 39 together.
	39	E	?	?	Mound fill. Burials 38 and 39 together.
	40	E	?	?	Skeletal remains crushed. Burials 40 and 41 together.
	41	E	?	?	Skeletal remains crushed. Burials 40 and 41 together.
	42	Center	C	F or B	3 or 4 children together under center of mound near Burial 45.
	43	Center	C	F or B	

TABLE 2. Continued.

SITE	BURIAL NUMBER	POSITION	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	44	Center	C	F or B	
	45		A	E(?)	Skull encased in puddled clay.
	46	W	A	?	Skull only - encased in red clay.
	47	W	a	F	Under Burial 46; celt (11" long). Under head another celt (8" long). Yellow sand under head 32 shell beads around neck.
	48	W	A	B	Skull placed upon pile of long bones.
	49	W	A	F	Subsoil burial; ground galena nodule on skull, top of skull - celt.
	50	W	a	F	Directly above Burial 49; spade (11" long) near skull.
	51	W	I	F	Lower mound fill.
	52	W	I	?	

TABLE 2. Continued.

SITE	BURIAL NUMBER	POSITION	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	53	W	I	F	Shallow subsoil pit; pit 3 x 4'; 22" deep. By neck - disk shell beads; portion of conch shell over head; two other pieces of the same shell placed on hips. A broken celt (7 1/4" long) in bottom of pit.
	54	W	A	E	Base of mound - celt (13" long) near femurs.
	55	W	A	E	Adult and child burials directly (1') above Burial 54.
	56	W	I	E	Hoe (12 x 5") under adults head, at the neck was a conch shell and shell bead.
	57	W	I	B(?)	Burials 57 and 58 together; few disk shell beads.
	58	W	A	B(?)	Burials 57 and 58 together; few disk shell beads.
	59	W	A	F	Mound fill.

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	60	SW	A	F	Base of mound; spade under skull (10 x 4 1/4"); stone elbow pipe under spade.
	61	SW	I	F	Mound fill.
	62	SW	A	E	Base of mound; near pelvis; reel-shaped (unperforated) copper gorget; celt near left shoulder; galena nodule (ground) under pelvis; several more smaller nodules. No skull.
	63	SW	A	F	Mound fill. Large steatite elbow pipe near shoulder. Near pipe were a large and a small conch shell.
	64	SW	C	E(?)	Shell beads and small celt (5 3/4 " long) near neck and head.
	65	SW	A	E	Subsoil pit (8' long; 2' deep) - many shell beads (both disk and cylindrical) near neck; two large (killed) spades near feet.

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	66	SE	A	F	Lower mound fill.
	67	SE	C	F	Mound fill.
	68	SE	A	B	Burials 68 and 69 piled together; Burial 70 one foot to the east.
	69	SE	A	B	On same level (2' above base).
	70	SE	A	B	
	71	SE	A	B	3' from Burials 68, 69 and 72.
	72	SE	A	B	Directly beneath Burial 71.
	73	SE	A	B	Burials 73 and 74 piled together.
	74	SE	A	B	Burials 73 and 74 piled together.
	75	SE	a	B	"Although all the other bones remaining were in confusion - one femur being exactly reversed yet with the head placed in the socket where it belonged. The bones of one foot were in their

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
					proper order as if that member had still retained the flesh when it was placed here. Such conditions probably mean that 'bone pickers' had been employed (Fowke 1928:460)."
	76	SE	A(?)	B	Just above Burial 75; remains of 3 individuals piled together, Burials 76, 77 and 78.
	77	SE	A(?)	B	
	78	SE	A(?)	B	
	79	SE	A	F	Mound fill.
	80	SE	C	?	
	81	S	A	Cr	Mound base; "...a mass of much broken burned human bone, lying in confusion as if dumped from a basket. That they were carried from outside, and were not burned and raked together where they lay, is proven by the fact that the

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
					earth about them showed no signs of fire (Fowke 1928:460)." Portion of the bowl of a large pottery pipe. Piece of galena near skull; tubular copper bead (3/4" long) - probably in mouth (teeth stained by copper salts).
	82	S	A	F(?)	Lower fill.
	83	S	A	E	Subsoil pit (1' deep) - puddled clay?
	84	S	A	F	Burial 84 one foot above Burial 83; 24 shell beads near neck; celt (6" long) - 2 spades on each side of the skull (11 1/4"; 16 1/4 x 5") 3' above were portions of a conch shell.
	85	S	A	E	Base of mound; 24 shell beads near pelvis; 40 - 50 copper beads at neck; large shell disk 3" in diameter with a large perforation 3/4" in diameter. Large ground galena nodule (1 lb.) with beads.

TABLE 2. Continued.

SITE	BURIAL NUMBER	PLACEMENT	AGE	BURIAL POSITION	ASSOCIATION/COMMENTS
	86	S	I	?	Only trace of skull. 2 Cylindrical shell beads.
	87	S	I	?	Near surface. On layer of clean sand; a spade (15 x 5") found nearby.
	88	Center	A	?	Scattered bone.
	89	Center	C	E	Historic burial intrusive; remains of wooden coffin found and nails, etc.
	90	Center	A	E	Subsoil pit. Near pelvis was a celt (8" long).
	91	Center	A	E	Directly above Burial 90. Only a layer of bark separated the two burials. Large conch shell on left side, string of copper beads at neck; celt (17 1/2" long) resting against pelvis.

A - Adult, a - adolescent, C - Child, I - Infant, F - Flexed, E - Extended, B - Bundle, Cr - Cremation

#### D. EXCAVATION AND INTERPRETATION, 1933 - 1940

With the financial collapse of Wall Street in 1929 and the ensuing economic depression of the following decade numerous, and long reaching, changes occurred in the American life-style and ethos. Somewhat surprisingly, this dark decade of want and hard times gave birth to a new science in the United States, archaeology. Vast numbers of men and women were left jobless after this initial financial collapse and the federal government was compelled to initiate programs to find work for these people:

The passage of the Emergency Relief Appropriation Act of the Congress in 1935 initiated a program providing work for able-bodied relief recipients. The Works Progress Administration, the most important single agency employing persons under this program, was a perfect pool from which to draw archaeological field workers. Since the WPA's main objective was to put people to work, its administrators searched for projects which involved hand labor, and inasmuch as archaeological projects used most of their funds on people rather than supplies or equipment, in contrast to road and building construction, archaeology fit the requirements of the WPA program perfectly. The relief rolls in the southeast were among the largest in the country, and the archaeologists took full advantage of this fact (Schwartz 1967:54).

The Tennessee Valley area became one of the most active regions in the relief work programs when the Tennessee Valley Authority announced plans to erect the Wheeler Dam at the upper end of Wilson Lake in northern Alabama. Concerning the plans to salvage as much information as possible from the archaeological sites in the area to be inundated, Webb states that:

In December 1933 a conference was held in Knoxville which was attended by the representatives of the Tennessee Valley Authority, the University of Tennessee, and the University of Alabama. Mr. Neil M. Judd, Curator of Archaeology at the Smithsonian Institution, was invited to act as consultant to the group. As the result of tentative plans and suggestions made at this conference, the work of the survey of the Wheeler Basin was begun late in December, 1933...The author took charge of this survey as supervising archaeologist for the Tennessee Valley Authority, January 6, 1934. The field work continued with the use of Civil Works Administration labor until its demobilization in March 1934; later with various interruptions until July 1, 1934; by the use of Federal Emergency Relief Administration labor (Webb 1939:2).

#### 1. Wheeler Basin Survey

The construction of the Wheeler Dam impounded some 80 miles of the Tennessee River and produced a lake covering approximately 100 square miles. Nineteen sites, out of a total of 237 found and recorded by the Alabama Museum of Natural History in 1932, were excavated during this salvage project. Two of the sites excavated, La°14 and La°37, were found to be burial mounds belonging to the Copena complex, which was first formally defined in the volume on this project.

The excavations of these two mounds demonstrates the increasing sophistication of archaeological techniques and investigation in the Eastern United States in the ensuing twenty years since C. B. Moore plied the major waterways aboard his steamboat. Largely due to the organization of the first archaeological field school at the University of Chicago under the direction of Fay-Cooper Cole, excavation

techniques had "evolved from an almost haphazard method, utilizing only natural stratigraphy as a means of control, to one utilizing a complex grid system and artificial stratigraphy for maximum control over the distribution of archaeological material within a site (Schwartz 1967:61)."

Both of the burial mounds investigated during the Wheeler Basin project were excavated in a similar manner:

The mound was first cleared of undergrowth and staked off in 5-foot squares by establishing a line along the western side of the mound...Across the mound E-W were twelve 5-foot blocks and lengthwise of the mound N-S there were 14. Starting at the base line on the western side, the mound was cut down by slicing it in 1-foot layers 5 feet wide. Each 5-foot slice was carried to the floor of the mound, so that a level floor and a straight vertical profile could be seen as the work proceeded...As there was almost unlimited man power available, one man was put to each 5-foot square and the mound worked in from four sides simultaneously...All the earth above the mound floor was removed and when the entire floor was bare it was restaked and excavated. Beginning on the edge of the mound, the floor was taken down in 1-foot levels and worked in from all four sides as before. Each pit (encountered) was cut around and left as a pedestal which was worked down by hand using a trowel for digging. When all the soil had been removed and the mound thoroughly worked the sand was restored to the hole and the entire area left suitable for plowing (Webb 1939:46).

During the course of excavation each artifact, feature or burial encountered was given a numerical designation and its position plotted on standardized forms. Before any digging was begun a contour map was made of the site, and during the investigation vertical and horizontal profiles were drawn of the excavation units. This systematic technique of excavation and recording revolutionized Eastern States archaeology and allowed large numbers of

sites and vast quantities of cultural material to be collected and recorded.

The immense increase in archaeological field work during the 1930's created certain problems however. Where in previous years classificatory and interpretative approaches had been simplistic and few in number, usually utilizing only the direct historical approach, the new mass of data demanded a more complex conceptual scheme. A new classificatory system was created when:

A group of archaeologists met in Chicago, stimulated by a suggestion made by [W. C.] McKern in the spring of 1932...This conference resulted in the formulation of 'The Mid-Western Taxonomic Method' of cultural classification. The taxonomic frame of this method, to quote McKern 'consists of five major divisions: focus, aspect, phase, pattern, and base, progressing from localized detail to large general classes...The method is comparable to a filing cabinet equipped with labelled drawers to facilitate the orderly arrangement of culture - indicative data ... (Guthe 1952:9; see also McKern 1939; Griffin 1943; Ritchie 1944).

The development of this classificatory approach had an important impact upon the work of William S. Webb. Webb was a physicist by training and the resemblance of the McKern system to biological taxonomies apparently appealed to his scientific mind. Webb's initial work in archaeology seems to have developed out of an interest in the local prehistory of Kentucky and his friendship with several groups of American Indians. According to Taylor, Webb was one of the first and most ardent supporters of the Mid-Western Taxonomic System and "from this time onward Webb...

bent his major efforts to elaborating trait lists and their comparative implications and...made a stepchild of his former interest in more detailed cultural pictures of life as it was led (Taylor 1948:75)."

Taylor further states that there was a basic and fundamental assumption underlying Webb's later field work and publications, "namely, that the important factor about a cultural manifestation in archeology is its presence or absence within a given site. This assumption is accompanied by a corollary: that the manifestation's location, association, quantitative and qualitative relation to its cultural and natural environment seem to be of secondary importance (Taylor 1948:77)." In fairness to Webb, whose contributions to Eastern States archaeology are of considerable importance, the major problems in his later approach were mainly derived from certain failures within the taxonomic system itself. Culture content was the single most important aspect utilized in this comparative method, while the spacial dimension of culture was relegated to a secondary position. This and the fact that the temporal dimension was completely ignored made this system only of limited use from the time of its conception. The basic comparative unit of this system, the trait, became so important in its utilization that prehistoric cultures were no longer interpreted; it was only necessary to compile a trait list, for somehow this compilation "spoke" for itself. If enough traits were held in common by two

prehistoric cultural units then they were considered to be related (regardless of time and space) and were summarily placed into the proper classificatory hierarchy.

Webb's interpretative treatment of the two conical burial mounds excavated during the Wheeler Basin project illustrates his use of the trait list and Mid-Western Taxonomic System in formalizing a cultural unit. First, Webb noted that of the nineteen sites excavated, only La°14 and La°37 shared such exotic artifacts as copper reel-shaped gorgets and ground galena nodules. He then compiled a list of 36 "selected" traits and compared the two Wheeler Basin sites with the two burial mounds excavated by Fowke and three of the mound sites excavated by Moore. This comparison was synchronic in nature, since Webb combined the traits from several sites which had more than one mound component (e.g., the Roden Site reported by Moore was composed of a group of at least seven mounds in various stages of construction. These mounds contained over 150 burials and must have been constructed at different times and over a considerable temporal period.)

While not attempting to delineate temporal markers within the burial system, Webb also failed to attempt establishing spacial markers as well. The sites in question are widely separated geographically and spacial differences in quantity and type of certain mortuary offerings or techniques of interment were not recognized.

The list of 36 traits compiled by Webb were divided into six categories: Traits pertaining to mound construction (4), burial traits (11), stone artifact traits (8), shell artifact traits (2), copper artifacts (8), and miscellaneous traits (3) (Webb 1939:189-190). These traits ranged from the very specific (e.g., "Celts, greenstone, 17" to 7" long, pointed poll, high polish"). From this comparative compilation, Webb concluded that "This group of traits, which for the purpose of description herein has been called the copper-galena complex, though small, contains many quite unusual traits, and its homogeneity on these seven areas seems to justify setting it apart as distinctly different from other cultural complexes in the southeastern area, at least for the time being (Webb 1939: 191)."

In this report on Copena, Webb devoted only a single paragraph to ethnological comparison. He states that "Perhaps the most interesting suggestion of connection of this complex with any ethnic group of early historical times may be found in the possibility that they may have been the Yuchi, who, at the time of DeSoto's expedition down the Tennessee River (1540), were reported living in the same general region of the Tennessee River which now yields the copper-galena complex (Webb 1939:;9;)."

Although this report by Webb was written a considerable time before the technique of radiocarbon dating was invented, certain temporal calculations, based upon relative

chronologies, were made on the cultural materials recovered during the basin survey. Beginning with this initial publication on northern Alabama sites, an attempt was made to establish a cultural-chronological model based upon ceramic temper groups. It was noted that the "study of the ceramic remains from the Wheeler Basin has brought out the presence of at least four separate wares, namely: 1) the shell tempered, 2) fiber tempered, 3) sand tempered, and 4) the grit, limestone, and clay tempered. These four wares are distinct and do not show cultural intermixture. Their distribution cultural associations, and chronological positions are not the same (Griffin 1939:165)." However, the Copena mounds could not be specifically placed into this chronological framework since pottery vessels were not used as mortuary offerings with the copper-galena complex hanging in cultural and temporal limbo.

Since the ceramic chronology could not be utilized, other alternative methods were attempted. Webb noted that:

The fact that skeletal material from these sites has nearly all vanished, while not conclusive evidence of great age, prevents the acquisition of valuable information which well-preserved skeletons would yield. It is well known that the preservation of skeletal material is affected by so many variable factors that it is quite unsafe to regard advanced decomposition of bone material as positive proof of great age. Yet, on other sites in this region similarly situated, and not belonging to this complex, skeletal material is found by comparison well preserved. So far as it may be determined, all of these sites lie wholly within the prehistoric period. Because of these facts one is constrained to feel that the copper-galena complex of northern Alabama probably antedated the other earth-mound builders of that region (Webb 1939:191).

**Figure 1. Copena-Hopewell Trait List Comparison.  
(Webb, 1939:192).**

TABLE II.—Rearrangement of traits of the copper-galena complex to determine those traits most basic and characteristic with a comparison of the occurrence of these traits on 7 Ohio sites

	Copper-galena	Hopewell
	Hog Island Mound—Fowke Alexander Mound—Fowke Perkins Springs—Moore Slaughter Place—Moore Horden Place—Moore L.S. 37 L.S. 14	Hopewell Group Turner Group Mound City Group Tremper Mound Harrison Mound Serp Mounds, 1 and 2 Heslet Mound
(18) Pipes, large zoomorphic, steatite.....		
(33) Bracelets, flat bar bent end to end.....		
(13) Mica as burial furniture.....		
(8) Scattered post molds.....		
(20) Flint knives, finely chipped, 5" to 8" long..		
(21) Flat-bar gorget, steatite or chlorite.....		
(7) Deposit of cremated bones.....		
(17) Pipes, elbow form.....		
(36) Woven textiles preserved by copper salts..		
(25) Large marine shell vessels.....		
(24) Disk shell beads.....		
(28) Copper beads, spherical, drilled.....		
(22) Stone artifacts "killed".....		
(32) Reels or exceptional copper pieces "killed".....		
(27) Copper celts about 5" long.....		
(35) Mounds frequently occur in groups.....		
(4) Foreign clay in pits.....		
(30) Spool-shaped ear ornaments.....		
(29) Copper beads, cylindrical, rolled sheets.....		
(16) Celts, greenstone, 17" to 7" long, pointed..		
(15) Spades, or exceptional artifacts, under head.		
(31) Long copper bead with teeth.....		
(8) Skull, disarticulated, separated.....		
(14) Flexed or bundle burials.....		
(19) Spades, schist, many large—1 x 6 x 26".....		
(10) Artifacts accompany subsoil burials.....		
(9) Burial pits below mound base.....		
(2) Mounds with inclusive burial pits.....		
(11) Pottery vessels absent from burials.....		
(34) Mounds in vicinity of large river.....		
(26) Copper reel-shaped objects.....		
(23) Deposit of galena throughout mound.....		
(12) Galena as burial furniture.....		
(6) Skeleton preservation poor.....		
(5) Burials extended in the flesh.....		
(1) Conical earth mounds.....		
	20 27 25 16 31 25 19	24 20 22 13 17 22 7

Since a local culture or chronological position for the copper-galena complex was difficult to establish, Webb, utilizing Moore's (1915) earlier comparative research, constructed a detailed list of common trait occurrences between the northern Alabama group and the Hopewellian burial mound complex in Ohio. From this comparative treatment, Webb concluded that:

"...in considering what significance is to be attached to the apparently similarity in the two regions, Ohio and Alabama, of some 32 traits, it is difficult to believe that the coincidence of so large a number of such unusual traits in two separate areas can be unrelated as to origin. It seems difficult to explain how native copper, originating presumably in the Lake Superior region, could reach northern Alabama and be represented there in such large quantity and in this highly specialized form. It is hardly satisfying to point out that the great river courses were routes of trade. They were obviously, but it would appear necessary to assume a more potent influence than the mere transfer of material things to account for such widespread similarities. As yet nothing is known of the chronological relation of Hopewell and the copper-galena complex, and there may have been considerable difference in time between them. However, it seems possible to suggest in terms of the latest taxonomic method of classification that the copper-galena complex may be tentatively regarded as a manifestation of the Hopewellian phase (Webb 1939: 200-201).

On the basis of these observations, Webb then placed the copper-galena complex into the Mid-Western Taxonomic heirarchical structure, and in so doing the word "Copena" first appeared in print (Webb 1939:201):

**CULTURE CLASSIFICATION OF THE COPPER-GALENA  
COMPLEX OF NORTHERN ALABAMA**

**Basic Culture:**

**Phase: Hopewellian**

**Aspect: (Southern)**

**Focus: COPENA (COPper-gALENA)**

**Component:**

1. Hog Island
2. Alexander
3. Perkins Springs
4. Slaughter Place
5. Roden Mound
6. Lauderdale °37
7. Tick Island La°14

## 2. Pickwick Basin Survey

In November of 1934 the Tennessee Valley Authority authorized the construction of the Pickwick Landing Dam. The work on this dam, located in Hardin County, Tennessee, was completed on February 8, 1938. The resulting reservoir backed water upstream 53 miles to the foot of Wilson Dam, flooding an area of 75 miles in Hardin County, Tennessee, Tishomingo County, Mississippi, and Colbert and Lauderdale Counties in Alabama (Webb and DeJarnette 1942:2-3).

In 1936 a survey project was begun to locate all archaeological sites in the basin to be formed by the Pickwick Dam. This project was headed by R. D. Silvey, party chief from the survey section of the Engineering Service Division, T. V. A., and "Under his direction a thorough field search for archaeological sites was made throughout the area to be flooded. Each site was described and classified, and its location plotted on the precise aerial mosaic of that region, scale 1 inch = 1,250 feet. The intent was to produce so accurate a location of every known site that, if need be, its exact location could be recovered - even after inundation for many years had caused silt to cover the site. As the result of this location survey, a total of 323 sites were recorded... (Webb and DeJarnette 1942:3)."

From this large number of sites, some 19 were chosen

for excavation. Among these were five Copena mounds, an associated mortuary area and a village site. These sites were given the following names and designations:

Wright Mound, No. 1 . . . . .	Lu°63
Wright Mound, No. 2 . . . . .	Lu°64
Wright Village Site . . . . .	Lu <sup>V</sup> 65
Colbert Creek Mound . . . . .	Lu°54
Boyd's Landing Mound . . . . .	Hn°49
Fisher Mound and pit areas . . . . .	Hn°4

In this volume on the Pickwick Basin Project these seven sites were compared and briefly analyzed in a summary section on the Copena complex. The Wright Village site was tentatively associated with the pair of burial mounds (Lu°63 and 64) excavated nearby. The cultural material from this habitation site was re-studied as a part of this present research project and a portion of Section II is devoted to this village component. Suffice it to say at this juncture that the major ceramic complex at this site consisted of plain and carved-paddle stamped limestone tempered pottery and the lithic assemblage contained many medium triangular projectile points as well as greenstone celts and digging implements identical to those recovered from the nearby mounds.

The five burial mounds were found to be a fairly homogeneous complex, although certain absences of important traits were noted (e.g., stone pipes). The addition of these components to the complex added eleven new traits

to the list, while two of the original 36 traits were dropped, one because it was overly vague and the other because of its negative quality (Webb and DeJarnette 1942: 302).

Although the following statement concerning the cultural and chronological position of this burial complex was given in the summary section, it can still be seen that there were many doubts concerning the place of Copena in the established local and regional archaeological sequences:

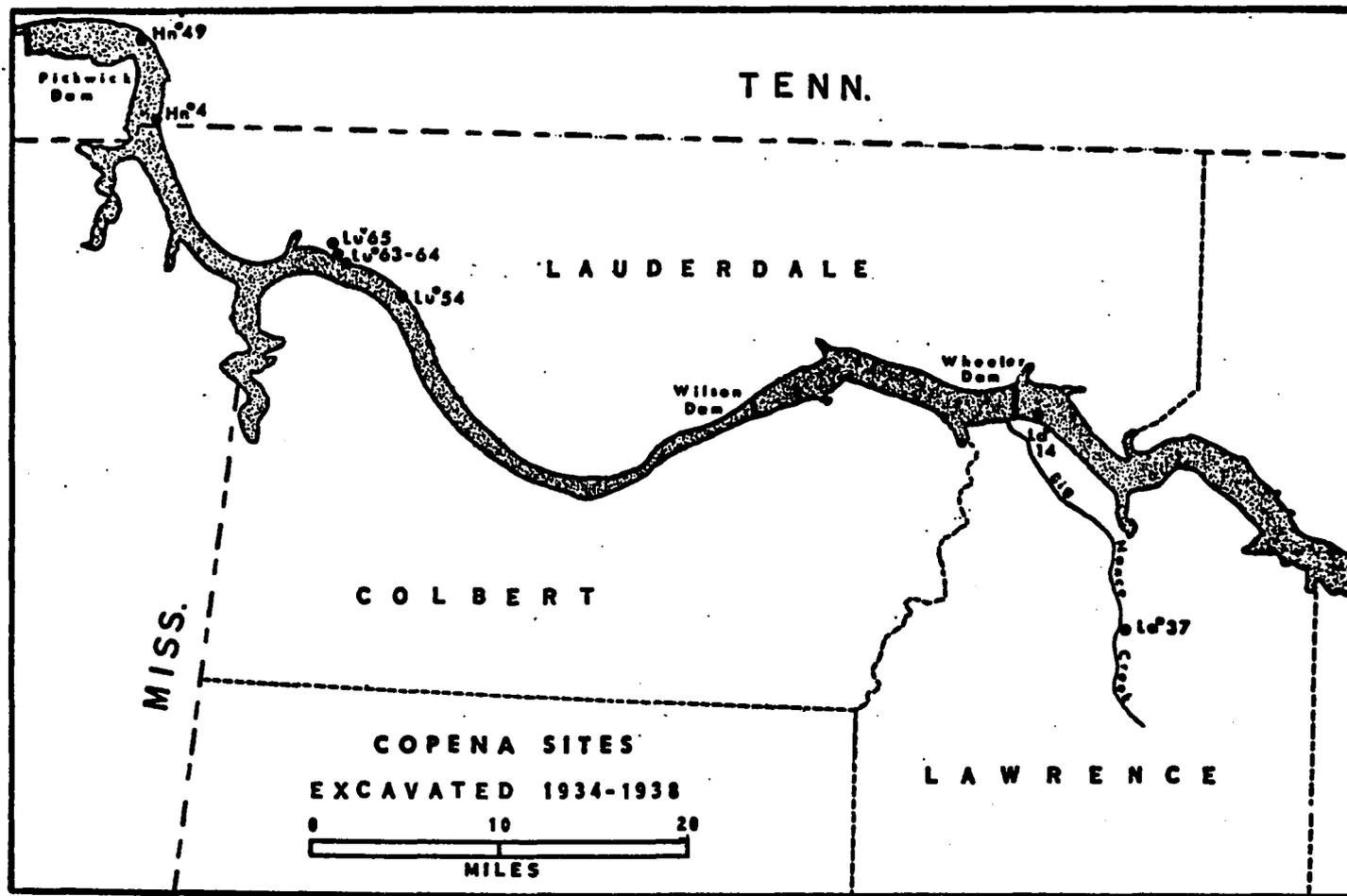
So far, from what is known of the Copena focus, it is not possible to place it chronologically except that it lies wholly within the prehistoric but probably the pottery era. It is not certain that they made or used pottery, but crushed limestone-tempered potsherds often occur, seemingly as inclusions in mounds of this complex. As yet, no vessel or even sherd has been found in certain association with any burial. It has not been possible to suggest any ethnological or historic connection for this culture complex aside from evidence placing it in an aspect within the Hopewellian phase. The only suggestion of any possible connection with other archaeological cultural complexes is derived from the considerable and varied use of puddled clay. The method of sealing bodies, extended in the flesh between thick layers of foreign clay, is a trait found in some sites in Kentucky and is there regarded as belonging to the Adena Aspect (Webb and DeJarnette 1942:303).

Two important observations can be made concerning these summary statements. First, of 325 pages of text dealing with the 19 archaeological sites excavated in the Pickwick Basin only 21 pages are devoted to an interpretative summary section. Of these 21 pages, four and a half are devoted to the Copena burial system, and of these, two

pages contain only trait list compilations. This unbalanced ratio between description and interpretation cannot be considered the fault or oversight of the authors, but must be considered a product of the state of archaeological research at the time the volume was written. The key to understanding this can be seen in one of the opening sentences of the Copena summary, "It is perhaps not necessary here to repeat the arguments for the suggested classification of this complex of traits (Webb and DeJarnette 1942:301)." This sentence illustrates that the Copena burial mounds were not at that time considered a subsystem within a total cultural system, but were viewed as an aggregate of traits. The compilation of traits was the major goal at this time while culture was relegated to a secondary position. It was not important to attempt to define or interpret the complex in cultural terms, but sufficient only to list the traits. These were the building blocks of archaeological units and once rearranged to "determine traits most basic and characteristic" represented the sum total of the culture or component in question.

Secondly, the passing reference to the use of puddled clay in both the Copena and Adena complexes signals the beginning of an important change in Webb's thinking concerning the cultural associations of the northern Alabama burial mounds. Beginning in 1935, when the first of many Adena mounds was excavated in Kentucky (Webb and

**Map 3. Copena Sites Excavated 1934-1938  
(Wheeler and Pickwick Basins).**



Funkhouser 1935) Webb became increasingly concerned with this Early Woodland burial mound complex. This interest led to the excavation of some sixteen additional Adena mounds and was culminated in a summary Adena volume (Webb and Snow 1945; Schwartz 1967:90-91).

As Webb's interest in Adena progressed he became more convinced that it was an independent development ancestral to the Hopewell mound complex in Ohio. This consuming interest in Adena colored his later views on the genesis of the Copena complex and initiated years of debate concerning the origin and development of this burial system.

### 3. Guntersville Basin Survey

The Guntersville Dam, the last of the three large T. V. A. dams to be built on the Tennessee River in northern Alabama, was authorized on November 27, 1935 and completed on January 16, 1939. The dam was located some nine miles downstream from the city of Guntersville, just below the Big Bend in the Tennessee River. The Big Bend is formed as the Tennessee River leaves its southerly course through the Sequatchee Valley and turns northwestward across northern Alabama. The closing of the dam gates formed a reservoir covering some 68,200 acres of the river for a distance of 82 miles to the base of Hales Bar Dam in Marion County, Tennessee (Webb and Wilder 1951:2).

A survey of the area to be inundated was made in 1936 under the direction of R. D. Silvey of the survey section of the Engineering Service Division of the Tennessee Valley Authority. The positions of all the sites located during this survey were placed on an aerial mosaic of the region, utilizing the technique developed to map the sites in the Pickwick Basin (Webb and Wilder 1951:4-5). A total of 343 sites were found in the Gunterville Basin area, 141 in Marshall County and 202 in Jackson County. Of this total, some 41 sites were excavated in a 20 month period extending from 1938-1939.

Ten Copena burial mounds and a cave containing cultural material associated with this manifestation were investigated during the course of this project. These sites were given the following designations (Webb and Wilder 1951:273):

The Rose Site . . . . .	Ms°134
The Samuels Site . . . . .	.Ms°136, 137
The Columbus City Site . . .	Ms°91, Unit 2 (2 mounds)
The Roden Mounds . . . . .	Ms°48, 49, 51, 53, 53A
The Hampton Cave . . . . .	Ms <sup>C</sup> 145

Of these sites only the Roden mounds had been previously investigated by earlier researchers. C. B. Moore (1915) was first to report this site and during his investigation extensively excavated three of these structures:

T. V. A. Survey Numbers	Moore's Designation
Ms°47 . . . .	Mound A - Reported completely dug
Ms°48 . . . . .	Mound B
Ms°49 . . . . .	Mound C
Ms°50 . . . .	Mound D - Reported completely dug
Ms°51 . . . . .	Mound E
Ms°52 . . . .	Mound F - Extensively excavated
Ms°53 . . . . .	Mound F
Ms°53A. . . . .	No report

Concerning these structures and Moore's earlier investigations, Webb and Wilder state that:

From this tabulation it will be noticed that Moore's Mound F, which he describes as 'Seemingly three mounds or humps merged in part (Moore 1915:300),' comprised two units in the TVA survey. It will also be noticed that the TVA survey includes a unit, Ms°53A, which was not reported by Moore. This almost obliterated mound was discovered during the latter part of the present excavations. Thus mounds Ms°47, Ms°50 and Ms°52 were eliminated from further consideration because of the near completeness of their destruction by former excavation. The remaining five mounds were excavated, in whole or in part... (Webb and Wilder 1951:87-88).

The excavation of the Roden site and the five other mounds investigated during this project added only two additional traits to the list of 47 previously compiled to define Copena. However, the excavation of the Hampton Cave revealed a new type of Copena mortuary site. This was the first ossuary belonging to the Copena complex to be found and reported. Since it was unique at the time of this survey its true significance, or the significance of this

type of mortuary site, was not known. As a part of this present study, an intensive search has been made, both in the extant literature and through local inquiries with numerous local amateurs, for additional sites of this nature. Several unreported sites of this type have now been located indicating an extensive use of caves as places of interment in the Copena burial system.

The entrance to Hampton Cave was located some 200 feet above the valley floor in the side of a steep bluff. The mouth was small, measuring 38 inches in width and 29 inches in height. One room within this cavern contained a deposit of calcined bones some six feet deep. Among the cultural materials recovered from the cave were shell beads, conch shell fragments, a pearl bead, copper beads, a copper reel fragment, galena cubes and medium triangular and stemmed projectile points. This burial cave is compared with other similar sites in Section III of this paper and a more complete description and list of the artifacts recovered are given in that discussion.

The summary section of the Gunter'sville Basin report, while still constituting only a fraction of the space devoted to description, contained the most inclusive relative chronology prepared during the T. V. A. survey projects. This cultural-chronological model constructed for the archaeological sequence in the Gunter'sville Basin area was divided into five periods, Gunterlands I-V, on

the basis of ceramic temper groups (Webb and Wilder 1951: 269). For example, Gunterlands III began with the appearance of limestone tempered ceramics and ended with the introduction of shell tempered pottery into the area. Since limestone tempered sherds had been found in the fill of several Copena mounds, these structures were considered to date to, or beyond, the Gunterlands III period (Webb and Wilder 1951:276).

Even though this relative chronological placement of the Copena complex assigned this phenomenon to a temporal placement contemporaneous with the limestone tempered ceramics, and an expanded trait list provided a more detailed comparative treatment of the units within the complex, certain problems concerning the interpretation of this mortuary system continued to plague Webb:

This trait list gives a much more satisfactory picture of the complex than can be obtained by a detailed description. However, the presentation of the Copena manifestation is as yet quite unsatisfactory. It is to be noted that these traits are largely burial traits and have to do in general with burials in the mounds. It has not been possible to identify certainly, villages of these peoples and thereby extend the trait list beyond burial traits. In Pickwick Basin one village was excavated, Lu<sup>v</sup> 65, which could not certainly be demonstrated to belong wholly to this complex. The few additional traits found at this site thus lack the validity attaching to duplication on other sites (Webb and Wilder 1951:276).

This inability to associate habitation sites with the mound complex is especially perplexing in the light of the following statement:

Since the people of Gunterlands IV are thus found to have buried most of their dead in the midden deposit largely in the Gunterlands III period it is natural to inquire what types of burials were used by the Gunterlands III population. The data indicate that the number of burials assignable to the Gunterlands III period is very small. This fact raised the question, where are the Gunterlands III burials? It may be that this question cannot now be fully answered. Obviously Gunterlands III burials, if made in these middens, would be much older than the Gunterlands IV burials, and the skeletal remains might have in some cases disappeared. Further, the considerable digging done in these middens by the Gunterlands IV occupancy might have assisted in the destruction of many Gunterlands III burials. What is more probable is that there may never have been many Gunterlands III burials in these middens. If this is the correct interpretation, the people who deposited the Gunterlands III midden either buried their dead elsewhere or used some other form of disposal of the dead. This could well be possible. Since no cemeteries of these people have been found, some credence may be given to the possibility that they may have used 'scaffold burials', cremation or other forms of disposal which would have left no human remains. Whatever is the explanation, this fact seems outstanding, that in this Gunterlands III period the number of burials found and assignable to it is very small and quite out of proportion to this considerable occupancy (Webb and Wilder 1951:271).

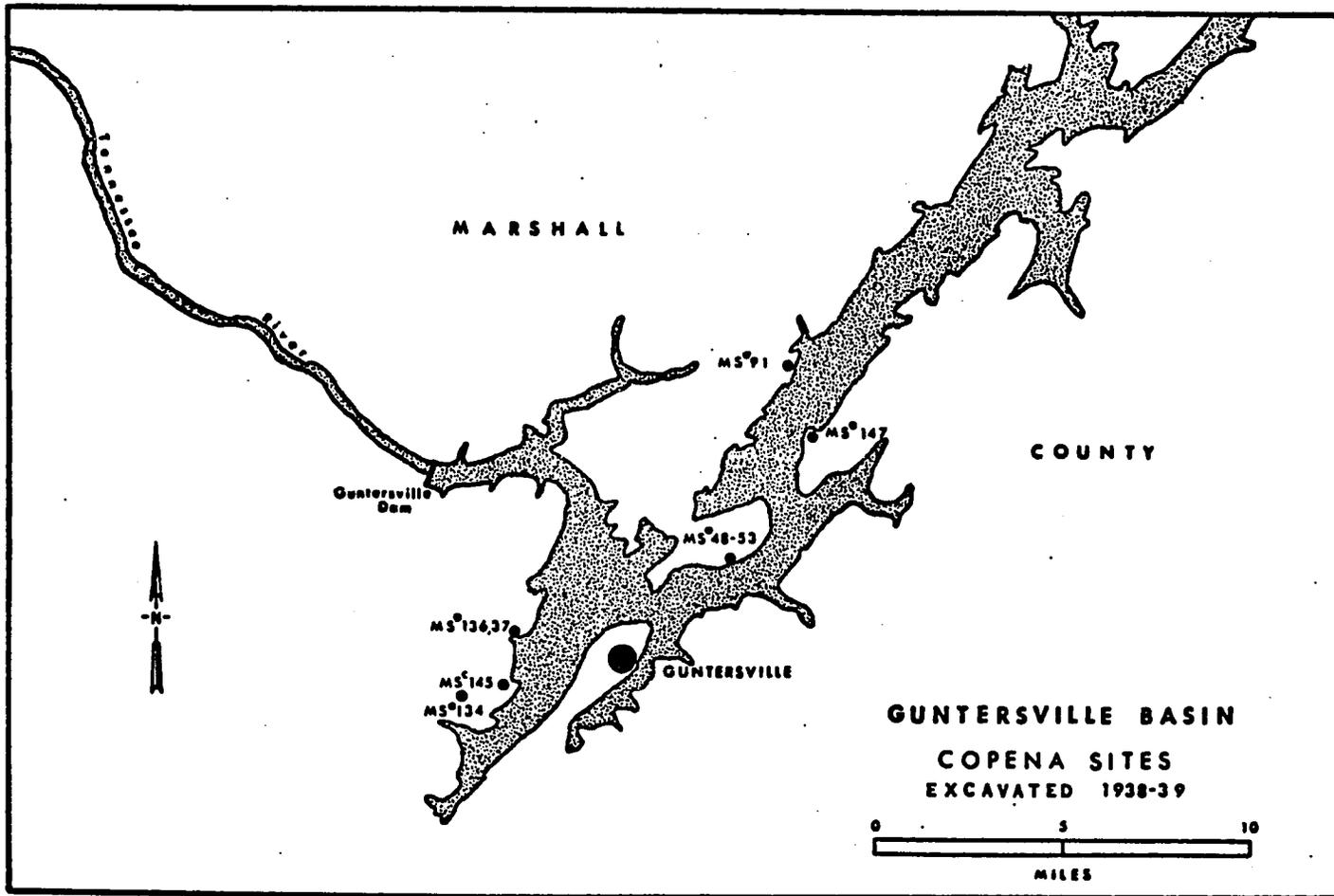
Thus we have village middens with no burials and burial mounds with no villages, and both types of sites assignable to the Gunterlands III period. Why Webb did not make the obvious correlation is difficult to understand. That he knew there were strong candidates for Copena habitation sites within the basin is seen in the original field report on one of the Gunterlands III middens. Harold Dahms, who excavated this site (Ms°80), noted that the cultural material found in one of the strata of this multicomponent site compared extremely

favorably with the Wright Village material and with material found in the Copena mounds. This site was located in close proximity to three Copena mound sites and Dahms made a strong case for its association with the burial mound system. While Webb relied heavily upon Dahms report he omitted any reference to this possibility.

James B. Griffin (Personal Communication) regards Webb's failure to correlate the lack of burials in the habitation sites with the numerous burials in the Copena burial sites as rather "remarkable" and believes that the absence of pottery as burial furniture was the deciding factor in Webb's interpretation. Webb (Webb and Wilder 1951: 276-277) does devote a considerable portion of his Copena summary to this matter. He notes that pottery vessels were used as burial offerings in both earlier and later complexes and finds the lack of ceramic burial goods in the Copena mounds extremely perplexing. Griffin believes that Webb, from the beginning of the T. V. A. survey, held the opinion that the Copena mounds were built by non-pottery or pre-pottery groups (Personal Communication). It might also be that Webb understood that the relative chronology constructed on the basis of ceramic temper groups was too broad and general for specific dating.

Since the 1930's further work on the Tennessee Valley ceramics indicates that the limestone tempered ware had a long history in the area, spanning a thousand year

**Map 4. Guntersville Basin Copena Sites Excavated 1938-39.**



temporal segment beginning in the late Early Woodland period and extending up to the Late Woodland period (Walthall 1972a:7). Without delving further into the realms of "Paleopsychology", suffice it to say that Webb's interpretation of the Copena complex had a major impact upon future studies of this burial system. The reasons for his conservatism are not now known and it is likely that they will never be completely understood. Only Webb knew the reasoning behind his interpretation and this information was lost at the time of his death.

#### E. Interpretation: 1940-1970

After the completion of the Guntersville Basin survey in 1939, excess funds in the T. V. A. budget allowed the continuation of archaeological work in the Tennessee Valley area or northern Alabama. Among the sites excavated between 1939 and 1941 were several Copena mounds and at least two village sites which can be associated with this complex. The information obtained during the excavation of these additional sites was being compiled for publication when the United States was drawn into World War II in December of 1941. The manuscript was never published and therefore the data obtained from these later excavations never influenced the future interpretations of the Copena complex. The interpretative and classificatory placement of the complex during the succeeding

thirty years was based entirely upon the published reports of Fowke, Moore, Webb and DeJarnette. The publication of the Guntersville Basin report was also postponed by the war and it was finally issued by the University of Kentucky in 1951 (Webb and Wilder 1951:v). Thus the Copena sites excavated in the Guntersville Basin also played only a minor role in later interpretative works, especially those published or written during the 1940's. The unpublished sites excavated in the final phase of the T. V. A. project (1939-41) were re-analysed as a part of this present project and are reported and discussed in the second section of this paper.

The vast amount of archaeological work conducted in the Eastern United States during the Depression Era resulted in several interpretative and classificatory schemes. The first of these, the McKern or Mid-Western Taxonomic System, as earlier discussed, failed to provide an adequate conceptual model. Two major attempts at synthesizing this large volume of data were written during the late 1930's and had a major and lasting impact on future archaeological work in the region (Haag 1961:20). Although both of these culture histories were written during the latter part of the 1930's, both were published in the succeeding decade. The first to be published was that of Ford and Willey (1941) while the second, written by James B. Griffin, was published shortly after the end of World War II (1946). While the McKern taxonomy was

primarily concerned with culture content and secondarily with the spacial aspect of culture, both of these succeeding conceptual schemes also included the temporal dimension.

Both of these later diachronic studies placed the known prehistoric cultures into an evolutionary system of stages. Ford and Willey divided the known archaeological sequences into five major stages, Archaic, Burial Mound I, Burial Mound II, Temple Mound I, and Temple Mound II (Ford and Willey 1941). Although this synthesis was written over a decade before the radiocarbon dating method was invented, the authors attempted to place these stages into an absolute chronological sequence. While the dates for these stages were mainly speculative, they did have some basis in relative chronological comparisons with the American southwest where dendrochronology did produce accurate temporal determinations. The dates given in this synthesis have been termed the "short count" for they placed all five stages into the Christian era. When the first radiocarbon dates on the shellmound sites of the Green River and the Tennessee Valley areas were made it was determined that the prehistoric culture sequence in the Eastern United States had much more time depth than estimated in this synthesis. Although the dates were shown to be wrong, the conceptual framework presented in Ford and Willey's article has proven to be viable and is still in use with only minor modifications (Willey 1966).

Griffin's synthesis divided the known prehistoric culture units of the Eastern United States into two main evolutionary stages, Paleo-Indian and Neo-Indian, and further subdivided these macro-units into a number of local, regional and areal sequences. Griffin defined the two major stages as follows:

Paleo-Indians, sometimes called Early American Hunters, are those who hunted for birds, animals, berries, or women at an economic stage which more nearly resembles a cultural 'paleolithic' than a cultural 'neolithic'. Neo-Indian is a term given to cultural units which either possess, or are assumed to possess, a pottery-making, agricultural economy (1946:38).

The cultural and chronological position of the Copena complex was considered in both of these syntheses. Ford and Willey considered the genesis of the Copena complex to be contact with Adena groups at the mouth of the Ohio River during the Burial Mound I stage, but also indicate that there was "some suggestion that the Copena culture lasted longer in the Tennessee Valley than did most of the Adena sites in the Ohio region. During its later stages Copena was probably contemporaneous with the Hopewell culture of Ohio, a culture which has been assigned to the Burial Mound II stage (1941:337)." In their chronological chart they placed the Copena mounds into a temporal position around AD 1200 (Ford and Willey 1941:330).

Griffin was much more cautious about assigning temporal placements for his archaeological sequences. Although

Griffin was concerned with chronology, he did not estimate any absolute dates, but instead relied upon relative chronologies, mainly based upon ceramic sequences, an area of study in which he had no equal. Griffin equated Copena temporally with late Hopewell in Ohio and with the Troyville Focus in the lower Mississippi Valley. He further concluded that:

The limestone pottery types which are presumably Copena show connections with middle Swift Creek, and the Upper Valley Aspect in eastern Tennessee. This culture, while possessing a marked individuality of its own, has many resemblances to the basic Hopewellian burial complex. Its homogeneity in artifacts and mound construction suggests a relatively brief time span. It is not identified with the Alexander Series nor with the earlier limestone-tempered pottery types found in the Tennessee drainage (1946:72).

The next publication to appear in which the Copena complex was discussed was Webb's summary of his excavations of the Adena mounds (Webb and Snow 1945). In this summary volume detailed comparisons were made of the Adena, Hopewell and Copena manifestations. As part of this comparative treatment, skeletal samples from mounds associated with each of these three cultural units were compared. Cranial samples were measured and studied from each of the groups. The Kentucky Adena sample included 78 adult skulls, 46 males and 32 females and the Ohio Hopewell sample was composed of 104 skulls, 66 male and 38 female (Webb and Snow 1945:254,288). The poor preservation of skeletal material in the Copena mounds resulted in few measurable skulls. Only 14 skulls were contained

in this sample. From this study the following conclusions were made:

- 1) Adena skeletons are of a broad headed stock which by cradle board practices, deformed the heads of their infants, thus amplifying those vault dimensions which characterize their skulls. The group appears relatively pure, and may be the first round headed group to enter the Ohio Valley from the south...
- 2) The Hopewell skeletons are of a long headed stock probably related to the dolichocephals (sylvid) of the eastern woodland region. The presence of long headed skulls with greatly flattened occipital regions and others of Adena - like character would suggest a mixed group; long heads predominant.
- 3) The small Copena series suggests, like Hopewell, that Copena was a mixture of different physical types, mainly broad headed like Adena. Their heads were deformed to extreme degrees of fronto-occipital (possibly pseudo-circular) flattening. A minor type, long headed by nature shows similarities to Ohio Hopewell long heads, including the bifronto-occipital type of deformation (Webb and Snow 1945:295-297).

Utilizing the comparisons of both cultural and skeletal material from Adena, Hopewell, and Copena mounds, a new theory was put forth by Webb and Snow to explain both the demise of Adena and the rise of Copena:

If Adena, a deforming broad headed people with the concept of a complex social organization, by contact with representatives of the eastern long headed peoples, having a somewhat less highly developed society, stimulated them to a development of Ohio Hopewell which seems to have reached a higher level of cultural development than that attained by Adena, one naturally wonders what became of Adena after contact. Physical anthropology seems to show that some Adena-like individuals became, to all intent and purpose, Hopewell people. Whether this is the result of a mingling of blood or a mixing of peoples

cannot as yet be demonstrated. It may be assumed that some Adena sites continued to be occupied while Early Hopewell was developing, but the archaeological record would seem to indicate that all Adena sites had ceased to be occupied before Late Hopewell acquired any alligator teeth, grizzly bear teeth, obsidian, silver, or conjoined tubes of copper, since not a single Late Hopewell artifact has ever been found in any Adena site. One may assume, therefore, that as Ohio Hopewell rose in strength and importance and adopted from Adena for reasons unknown, some of them may have moved southward. The Lower Ohio and Tennessee Rivers provided both an excellent means and a route of travel. These authors speculate that this may have been the means by which Copena in northern Alabama became established. In making such an assumption, it is not necessary to conceive that a chain of occupational sites should have been established along the Ohio in southern Indiana and Illinois and along the lower Tennessee in western Kentucky. The extent of occupancy of Copena in the southeast is as yet not fully known, but excavations along the Tennessee River in Alabama show that that area is a region of concentration of a mixed group of broad-headed (68%) and long-headed (32%) people who had many Adena traits, but whose material culture was largely that of Hopewell. This group contains individuals which show extreme forms of head deformation which occur in Hopewell but not in Adena. The Copena people followed in time the reparation people of the shell mounds in this region, but were definitely earlier than the Middle Mississippi people of the Southeast. Their artifacts which are clearly of Hopewell origin; copper breastplates, copper ear spools, copper reels, copper celts, galena masses, all point to Middle Hopewell. There are no Late Hopewell artifacts in Copena. The Copena people are predominantly broad headed with pronounced fronto-occipital deformation. Some resemble the deformed Ohio Hopewell long heads with bifronto-occipital deformation. They are thus distinct and possess a material culture unlike any other cultural complex in the Tennessee Valley.

The copper reels which were used by Copena seem to show internal evidence that they were later than Ohio Hopewell copper reels, which are later than copper or stone reels in Adena. This analysis of the chronological development of the copper reels seems to be quite objective. One may speculate, therefore, that Adena sites never show any contact with Late Hopewell in Ohio because such Adena as had not been completely fused with Hopewell by Middle Hopewellian

times and had not become indistinguishable from it, had, before, Late Hopewell times, migrated down the Ohio and up the Tennessee Rivers, taking with them the joint cultures of the two parent stocks. Thus, we may speculate on the disappearance of Adena as such from the Ohio River Valley and the rise of Copena in northern Alabama along the Tennessee River Valley. Thus, we may see the possibility of Copena in Alabama being in part contemporary with Middle Hopewell in Ohio and, although widely separated from it, still maintaining some communication with it (Webb and Snow 1945:335-337).

It is interesting to note that Griffin, in a chapter in this same volume, contradicted the above hypothesis. He states that it is extremely "unlikely that any movement of the Adena peoples took place down the Ohio and up the Tennessee (1945:245)." The reasons for the two contradictory conclusions in the same volume appear to be the result of different approaches utilizing different data. Webb and Snow, in proposing their migratory hypotheses, utilized only skeletal and cultural material from the burial mounds as comparative traits. Griffin, on the other hand, used ceramic traits as his raw data. First, Griffin noted that check stamping was very rare or completely absent in Adena pottery samples (1945:221). Secondly, that one of the major Adena ceramic types, Fayette thick was not found in the Tennessee Valley region, but that there were some similar elements between other Adena ceramic types and the early sand and fabric marked limestone temper types. Griffin then compared the plain and carved-paddle stamped ceramics from the Wright Village (Lu<sup>V</sup>65), which he considered a definite Copena village, to sherds

recovered from Copena mounds. Griffin had first hand knowledge of the Wright Village material because he was working with William Haag when the latter excavated this site (Griffin: Personal Communication). From this comparative treatment Griffin concluded that:

This discussion of the possible ceramic associations of Copena has been made because it has considerable bearing upon the relationships between Adena, Hopewell, and Copena. Like the Adena and Tchefunte people the Copena group did not place pottery vessels with the dead. They often erected their mounds in an area where there was no village debris as was also practiced the Adena culture. However, in the only good instance in which Copena mounds were placed on a village site and where village debris was included in the mound fill, namely, at the Wright Mounds and Village Site, the pottery is limestone tempered and bears distinctive surface finishes. Furthermore, most of the included sherds in the other Copena mounds have been sherds of this same complex. On the basis of that evidence I am strongly inclined to view this complex as found at the Wright Village site as Copena. This conclusion has a corollary, namely, that the similar limestone tempered complex of a high proportion of Mulberry Creek Plain and Wright Check Stamped, with a small proportion of Long Branch Fabric Marked, Bluff Creek Simple Stamped, and Pickwick Complicated Stamped when found at other sites and shell mounds will also belong to the Copena culture group and time period (1945:232).

Griffin further noted that the Copena village ceramic complex was distinct from both Adena and Hopewell pottery. This, coupled with the fact that no Adena material had been recovered west of southeastern Indiana, indicated to him that Copena evolved locally and was not the result of an Adena, or Hopewell, migration (Griffin 1945:245). He also equated Adena temporally with the Tchefunte culture of the lower Mississippi Valley and with

the pre-Copena Alexander series and fabric marked limestone tempered ware in the Tennessee Valley.

In 1952 one of the truly monumental works on Eastern States archaeology appeared. This volume, edited by James B. Griffin and dedicated to Fay-Cooper Cole, contained twenty-nine articles by some 27 authors on local and aerial archaeological sequences of the states east of the Rocky Mountains. The majority of these articles were written in the late 1940's and this volume in which they were collected, represents the last major synthesis prior to the widespread use of radiocarbon determinations as the base for chronological sequences. The Copena manifestation is discussed in four of these articles.

The most extensive, and for the purposes of this current study, the most important, discussion of Copena in this volume was contained in a synthesis of Alabama archaeology by David L. DeJarnette (1952:272-284). DeJarnette placed the Copena burial complex into a chronological position equivalent to the Middle Woodland, or Hopewellian phase in the local archaeological sequence. While he concluded that the burial complex was associated with the makers of the limestone tempered ceramics in the Tennessee Valley area, and although he discussed the possible relationship of the Wright Village and the Copena complex, he left the interpretation of this association to future investigation (DeJarnette 1952:279). However, from this summary statement it is clear that DeJarnette

felt that:

- 1) The Copena burial complex was an intrusive manifestation into the local cultural tradition.
- 2) Copena was to be equated with the Middle Woodland, or Hopewellian phase in the state's prehistory.
- 3) Copena was associated with the Tennessee Valley limestone tempered ceramics, and
- 4) The Wright Village was the strongest candidate for a Copena habitation site known at that time.

While excavations were being conducted along the Middle Tennessee River in Northern Alabama during the 1930's, similar investigations were being made in the Upper Valley of Eastern Tennessee and in the Lower Valley of west-central Tennessee. The results of these latter investigations were partially reported in 1946 (Lewis and Kneberg 1946) and were summarized in two articles in the Fay-Cooper Cole volume (Kneberg 1952; Rowe 1952). Three Woodland traditions, Watts Bar, Candy Creek, and Hamilton were delineated for the Upper Valley area, and excavation in the lower valley resulted in the discovery of a Woodland tradition, the Decatur focus, thought to be a chronological equivalent to the Copena focus of Northern Alabama. The description of the Decatur culture is rather vague, but from the short account presented by Kneberg (1952:193) it is apparent that this group made limestone tempered pottery, and constructed burial mounds. The Candy Creek and Hamilton cultures of Eastern Tennessee

were more fully described in the article by Rowe (1952: 199-206).

The Candy Creek peoples constructed circular houses and made limestone tempered pottery, but did not build burial mounds and little exotic cultural material was found on their village sites. The Hamilton focus did contain a burial mound complex and its relationship to the Copena focus was thoroughly discussed by Rowe (1952:204-205). Rowe compared the two traditions and concluded that "although Hamilton and Copena are probably contemporaneous variants of one culture...a genetic relationship between them cannot be adequately demonstrated at present (Rowe 1952:205)."

Finally, the local and regional sequences described in the articles in this volume were summarized by Griffin in a concluding synthesis. In this summation Griffin reaffirmed his belief that Copena was to be associated not with the Adena complex, but with Hopewell: "Another distinctive enclave in Middle Woodland is represented by the Copena culture of northern Alabama and adjacent Tennessee. This is a culture unit of sufficient distinctiveness, along with a specific physical type, which strongly indicates that Copena was a separate tribal and perhaps linguistic group of the Hopewellian complex (Griffin 1952: 361)."

In the 1945 publication of the Adena culture Webb and Snow hypothesized that the genesis of Copena in

northern Alabama was due to an Adena migration, even though they maintained that the Copena "artifacts...are clearly of Hopewell origin" (Webb and Snow 1945:336). In 1957 a second volume on the Adena people appeared (Webb and Baby 1957). This volume included summaries of 49 additional sites excavated since the original volume had appeared. Radiocarbon determinations from Adena and related mounds were presented which indicated to the authors that Adena had considerable temporal depth, spanning a period of 2000 years, from 1200BC to AD900 (Webb and Baby 1957:110-111). While the Adena-Copena migration hypothesis was not altered in this subsequent volume the earlier observation concerning the Copena artifactual assemblage was refuted: "Because of the increased information of Adena since 1945, it seems that the cultural contribution of Adena may be evaluated correctly as greater than that of Ohio Hopewell to Copena. This may be possible because the contribution to Copena may have been more direct" (Webb and Baby 1957:80).

A third major work on Adena appeared some six years later (Dragoo 1963). This volume presented new information obtained during the excavation of the Cresap Mound, in Marshall County, West Virginia. This structure, excavated in 1958, was a stratified Adena mound built over a considerable temporal span. From the careful investigation of this mound, Dragoo was able to suggest an internal

chronology for Adena and reevaluate the absolute chronology proposed by Webb and Baby 1957. Dragoo considered the proposed 2000 year time span for Adena to be too long and from the radiocarbon dates obtained from the Cresap Mound and other Adena structures in the Ohio River drainage area he concluded that a recognizable Adena manifestation began as early as 1000 BC and ended as many as 200 years before the beginning of the Christian era (Dragoo 1963:288-297). In discussing the relationship between Adena and the other areas in the Eastern United States, Dragoo supported the migration hypothesis postulated first by Webb and Snow and later by Webb and Baby:

The evidence of Adena participation in the Copena culture is extensive. Thus, Webb and Baby's evaluation of Adena's contribution as being more direct and greater than that of Hopewell seems well founded. In Copena we certainly find our best evidence for the presence of Adena peoples who after moving from the Ohio Valley were able to establish themselves in another area and to perpetuate at least certain elements of Adena culture in spite of strong cultural and physical influences from Hopewell and from peoples surrounding them in their new homeland in the Tennessee Valley (Dragoo 1963: 282).

In 1966 the most ambitious synthesis of North and Middle American archaeology to date was published. In this volume, written by Gordon R. Willey, the archaeological sequences in the Eastern United States were divided into six stages, Paleo-Indian, Archaic, Burial Mound I, Burial Mound II, Temple Mound I and Temple Mound II. With the addition of the Paleo-Indian data and an absolute chronological sequence based upon radiocarbon

determinations, the conceptual framework utilized in this volume is identical to that first conceived in the 1941 synthesis by Ford and Willey. In this second synthesis the two Woodland periods, Burial Mound I and II, were dated at 1000 BC to 300 BC to AD 700 respectively (Willey 1966:249). The Copena phase was equated with the Hamilton phase in Eastern Tennessee and assigned to the Burial Mound II period at approximately AD 1 (Willey 1966: 250-251; 286). Although it is not explicitly stated, this temporal placement makes Copena and Ohio Hopewell chronological contemporaries and suggests a connection between these two burial mound complexes, since Willey associates Adena with the Burial Mound I period (1966:268-272).

The temporal placement of Copena and Hamilton at AD 1 proposed by Willey was proven incorrect in two reports which appeared in the same year. In 1964 plans for the construction of Nickajack Dam in the upper Gunterville Basin area of Marion County, Tennessee were announced. The University of Tennessee summarily applied to the National Park Service for a contract to investigate the archaeological sites in the area to be inundated. Two of the sites investigated, the Westmoreland-Barber site (40Mill) and the Lay Site (40Mi20) were found to have Woodland components (Faulkner and Graham 1966a; 1966b). The excavation of these two sites produced new data, including two radiocarbon dates, which were of major significance in determining an internal chronology for the

Woodland traditions in the Middle Tennessee Valley. At the Westmoreland-Barber Site two samples of charcoal were collected and submitted for radiocarbon analysis. These two samples, submitted to the Geochron Laboratories on February 24, 1966 produced the following determinations:

<u>Sample No. GX0574.</u>	2290 $\pm$ 150 years BP (340 BC). Charcoal from an Early Woodland pit. The preponderance of Long Branch Fabric Marked pottery in the fill indicates a date near the beginning of the Early Woodland period.
<u>Sample No. GX0573.</u>	1325 $\pm$ 105 years BP (625 AD). Charcoal from a Late Woodland pit. This dates an early, yet fully developed Hamilton culture (Faulkner and Graham 1966a).

These two radiocarbon determinations indicate that the Gunterlands III period as proposed by Webb and Wilder for the Gunterville Basin area was too broad and that the limestone tempered ceramic tradition in the area had a long history, spanning over a thousand year period. The latter date also indicates that the Hamilton tradition arose during the final phase of Willey's Burial Mound II period and actually continued into his Temple Mound I period (AD 700-1200).

The importance of the second Woodland site, the Lay Site, excavated in the Nickajack Reservoir is seen not in terms of absolute chronology, but in its placement of the Copena and Hamilton manifestations into the proper stratigraphic or relative chronological sequence. Two

cultural strata assignable to the Woodland period were excavated at the Lay Site. The lower strata was composed of a dark earth midden almost devoid of shellfish remains. This layer contained a high proportion of limestone tempered carved-paddle stamped and plain finish ware, including Wright Check Stamped, Pickwick Complicated Stamped, Bluff Creek Simple Stamped and Mulberry Creek Plain. In a comparison between the Lay Site and the Copena Wright Village Site in Lauderdale County it was noted that the ceramic complexes on these two sites were very similar and that "Other similarities between the Wright Village and the Lay Site include a large number of shallow pits, flexed burials in the village area, Copena projectile points and blades, a preponderance of medium size triangular projectile points, biface knives, greenstone celts, gorgets and double tapered bone awls or projectile points (Faulkner and Graham 1966a:77)."

The second Woodland strata at this site consisted of a shell midden superimposed over the Middle Woodland layer described above: "The top shell layer at the Lay Site was evidently laid down by a Late Woodland Hamilton group. This is evidenced by the fact that stamped pottery declines markedly above the 1.5 foot level and its place is taken by the plain and brushed types. Other Hamilton artifacts in the top shell layer include the diagnostic triangular point (Faulkner and Graham 1966b: 78)."

The data recovered from this site and the radio-carbon determinations obtained from the Westmoreland-Barber Site indicated to these authors that:

The discovery of a Hamilton shell midden over strata containing Copena material should lay to rest once and for all the idea that Copena and Hamilton were regional expressions of the same horizon. While it is possible Hamilton developed shortly after the end of the Copena tradition, there are few Copena horizon markers in Hamilton and vice versa. This discontinuity is seen primarily in the mortuary tradition, for continuities are evident in the habitation sites of the two complexes. Certain continuities can be seen in ceramics, point types, and various utensils. The distinctive traits of Hamilton include a re-emphasis on shellfish collecting, and the appearance of certain traits, (viz. cord-marked pottery) that suggest not only a change in economy, but influences arriving from the north. However, this does not mean Hamilton is a displaced northern Late Woodland culture. The continuation of many traits implies a primarily indigenous development (Faulkner and Graham 1966b:78).

In this summary section of the Lay Site report, Faulkner discussed the origin of the Copena complex. He concluded that "There is little evidence Adena people moved into the Tennessee Valley, particularly through Tennessee, and Copena seems nothing more than a regional late Early Woodland tradition that shows varying degrees of influence from outside sources (Faulkner and Graham 1966b: 76)." Faulkner further developed this theme in a succeeding paper given at a symposium on Adena in 1970 (Faulkner 1970). In this paper, Faulkner tested the Adena-Copena migration model on three points: "It appears that the test of the hypothesis is that the Adena people were responsible for the Copena culture rests on 1) proof of an

Adena migration through the eastern Tennessee Valley; 2) evidence that the round headed Copena people were actual migrants into northern Alabama; and 3) the presence of Late Adena traits in Copena" (1970:100).

From his lengthy treatment of each of these topics, Faulkner concluded that 1) Although extensive archaeological work has been conducted in the eastern Tennessee Valley there has been no evidence recovered that would indicate a migration of Adena peoples through that area; 2) using Dragoo's (1963:207-208) list of Late Adena traits, such characteristic artifacts as Robbins blades, blacked-end tubular pipes, expanded-center gorgets, and formal tablets have never been found in a Copena mound (1970:103); 3) Copena shares more common traits, such as copper reel shaped gorgets, ear spools, celts and breastplates, steatite effigy pipes, and conch shell vessels, with Hopewell than with Adena (1970:104); 4) A broad headed population already existed in the Tennessee Valley during the Late Archaic before the rise of either Adena or Copena (1970:102) and finally that 5) "All of this evidence suggests that the mortuary complex found in the Copena culture owes its genesis to what has been called the Hopewell 'interaction sphere'" (Faulkner 1970: 105; Caldwell 1964:136-138).

#### F. Summary

In this review of the excavation and interpretation of the Copena complex it has been noted that there has

been no small amount of controversy concerning the development of Copena. During the almost forty years since Webb first formally defined the Copena manifestation, the debate concerning the genesis of Copena has swung back and forth between an Adena origin (Webb and Snow 1945; Webb and Baby 1957; Dragoo 1963) and a development from a Hopewellian base (Webb 1939; Griffin 1945; 1946; 1952; Faulkner 1970). The reasons for this apparent confusion concerning the origin and cultural relationships of Copena have been commented upon in a recent report:

Like Adena and Hopewell, Copena has been misinterpreted for years because it is known almost exclusively from a burial complex. But whereas Adena and Hopewell have been recently saved from this morass of misunderstanding by new field data and scholarly interpretations (see Dragoo 1963; Prufer 1964 and Streuver 1964; 1965; for examples of this work), Copena remains a vague burial culture or "cult", unilluminated by either temporal determinations or re-evaluations (Faulkner and Graham, 1966b, 74-75).

Yet to be considered is why no attempt has been made in the succeeding years since the T. V. A. survey work to synthesize or re-study the information available, both in the extant literature and museum collections, on Copena. In this section it has been shown that Copena has been of interest to many researchers in the Eastern United States and has been a topic of discussion in numerous articles. The question then is simple, why is the present synthesis contained in this section the only compilation of this nature to be made in the thirty years since the T. V. A. survey in northern Alabama was completed? The

answer is of course much more complex than the question posed.

The answer appears to be related to both historical accident and to the nature of archaeological research in the area since World War II. At the time when enough data had been recovered to compile a volume on Copena the United States was drawn into World War II. Harold Anderson, a geologist working with the T. V. A. survey, began in 1940 to write a summary work on Copena, based upon the investigations conducted in conjunction with three T. V. A. dams built in the 1930's and subsequent investigations conducted from late 1939 through early 1941 in the areas adjacent to the inundated basins. This volume was to be divided into four chapters; the first chapter reviewed the earlier T. V. A. investigations and the second presented site reports from the later post-survey excavations. A third chapter contained a study of Copena pottery by Steve B. Wimberly. The fourth and final chapter, which was apparently never completed, was intended to summarize all of the available data recovered during the preceding decade. All that is known of the intended content of this chapter was that it was to be based upon more detailed trait list comparisons.

World War II did more to the course of archaeological research in Alabama than halt the completion and publication of the Copena manuscript. Literally all archaeological work was stopped for the entire decade. When

archaeological investigations were resumed during the 1950's salvage projects were initiated in other areas of the state where new dams and construction work had begun. The Tennessee Valley region did not become an area of archaeological interest again until the following decade. However, the emphasis of this new research was not on salvage related projects but was problem oriented. The University of Alabama began, under the directorship of David L. DeJarnette, excavations of several bluff shelters in the outer portions of the valley proper. These investigations were concerned not with Woodland or Mississippian sites, but were conducted in an attempt to delineate and define early cultural horizons in the area and to establish a stratigraphic sequence for these units. During this entire time, Paleo- and Transitional-Paleo Indian cultures were the focal point of archaeological research in the state.

However, during the 1960's another trend in archaeological research was increasingly becoming a major area of interest. Influenced by studies in the Tehuacan Valley of Mexico by Richard MasNeish (Byers, ed., 1967) on the development of early food production in the New World, environmental anthropology became a center of interest for problem oriented archaeological research. Mainly as a result of this interest in the role of the environment in cultural evolution, and based upon earlier studies of

the functional implications of settlements patterns (Willey 1953; Chang 1968), there was a renewed interest in the Woodland cultures of the Eastern United States. The work of Stuart Struever on Illinois Hopewell culture (1964; 1965) and Olaf Prufer on Ohio Hopewell (1965) are examples of this type of study.

The stimulus for this present study of Copena is in turn related to these studies of the cultural systems which developed into, and comprised, the Middle Woodland traditions of the Eastern United States. The interpretation of the Middle Woodland tradition in the Tennessee Valley, of which the Copena burial system was a part, had to await further study of Hopewell and Adena. Until the research conducted by Struever and Prufer on Hopewell, and the study of Adena by Dragoo, little could be said of these manifestations other than the listing of traits associated with the burial mounds. Now that settlement pattern studies have been, and are being, made on these two cultures, and internal chronologies have been delineated for them, research on the related, but peripheral, cultures like Copena can begin again with new vigor.

## SECTION II

### COPENA: SITE ANALYSIS

#### A. INTRODUCTION

It was noted in the preceding section that after the completion of the archaeological survey of the Gunterville Basin in 1939, excess funds in the T.V.A budget allowed a continuation of archaeological research in the Tennessee Valley region of northern Alabama. During the succeeding two years (1939-41) over a dozen sites were investigated in the areas adjacent to the inundated basins created by the construction of the three large hydro-electric dams (Wheeler, Pickwick and Gunterville). Several sites excavated during this terminal T.V.A.-W.P.A. project were Copena mounds. Two village sites which can be associated with this manifestation were also investigated. These sites are reported in this section.

The field records and cultural material recovered from these sites have been on file and in storage at Mound State Monument in Moundville, Alabama for the past 32 years. Brief summary reports were prepared for each of these sites by the excavator and these statements were in the process of being compiled for publication when the United States entered World War II in December of 1941. All work on this manuscript ceased at that time and it was never completed.

In January of 1972, I began a study of these sites. In each case the original field notes and records were utilized in writing the new site reports contained in the following pages. Besides reanalyzing the data retrieved during these later excavations, the cultural material and records from the earlier investigation of the Wright Village (Lu<sup>V</sup>65) in the Pickwick Basin were also restudied. The Wright Village site constitutes the only generally recognized Copena habitation site and since the report on it in the volume on the Pickwick Basin survey was extremely terse it was decided that this site should also be subjected to re-examination to facilitate comparison with similar components excavated during later salvage projects.

During the T.V.A-W.P.A. archaeological survey project classificatory systems were constructed for the ceramic and lithic materials recovered from the Tennessee Valley sites. The ceramic taxonomy, based upon differences in temper, finish and decoration, was highly sophisticated and has, over the succeeding years, proven to be a viable and useful tool. The ceramic material examined during this present study was classified according to these type descriptions delineated during the 1930's (Griffin 1939; Haag 1942; Heimlich 1951).

However, the classificatory system prepared during that time to facilitate the interpretation of the lithic material (particularly projectile points) has not proven

useful in light of the current knowledge of the archaeological sequence in the Tennessee Valley. This taxonomy was based entirely upon formal attributes. The types were divided into five generalized categories: "1, Stemless; 2, stemmed points; 3, notched points; 4, blanks; 5, drills (Webb and DeJarnette 1942:9)." Upon this basis all of the lithic artifacts, other than ground stone, recovered from the basins and surrounding areas were classified. Immediately it can be seen that such a system is impractical because it leaves out an important criteria, time. In this system a Copena projectile type was given the numerical designation "5". Cumberland projectile points dating to well over 8,000 years ago, because of size and blade form, were lumped into this same category. Likewise, the small stemless LeCroy point which dates to the Early Archaic period was classified as a "type 46" along with much later Mississippian trianguloid forms. Also, uniface and biface chipped stone tools were usually lumped into "blank" or other generalized categories.

Since that time, archaeological investigations of stratified sites in the Tennessee Valley area and surrounding regions have provided data which has allowed much more satisfactory classificatory systems for typing chipped stone artifacts to be conceived. In this present study, the volume by Cambron and Hulse (1964) on Alabama projectile points has been followed in typing the specimens recovered

from the sites under consideration. This system is also based upon formal and structural attributes but also relies heavily upon temporal considerations. Likewise the chipped stone tools have been classified utilizing a similar system worked out by Lewis and Kneberg (1961) in their report on the Eva site, which is located only a short distance downriver from the northern Alabama Tennessee Valley sites. In the following site reports, the dimensions given for the lithic artifacts are maximum measurements unless otherwise stated.

## B. THE WRIGHT VILLAGE (Lu<sup>V</sup>65)

The Wright Village was a small habitation site located on the farm of D. T. Edwards, sixteen miles west of Florence in Lauderdale County, Alabama. A pair of Copena mounds, Lu<sup>V</sup>63 and Lu<sup>V</sup>64, had been constructed on a low knoll some 600 feet west of this village site. All three of these sites were excavated during the Pickwick Basin archaeological salvage program and are reported in the volume on that project (Webb and DeJarnette 1942: 159-178).

The reasons for the excavation of the Wright Village were given in the Pickwick Basin Report:

Under ordinary circumstances this village would have been considered too small to warrant investigation. However, it was determined that this site should be excavated owing to its proximity to sites Lu<sup>O</sup>63 and Lu<sup>O</sup>64, which were found to belong to the Copena complex. At the time of excavation no village unquestionably belonging to this complex had been discovered. It was hoped that it might prove to be the habitat of the builders of the two earth mounds in its vicinity (Webb and DeJarnette 1942: 173).

### Site Environment -

The Wright Village was located on a low knoll in the level bottomland one-half mile east of the Tennessee River. This knoll was situated between the burial mounds and several extensions of the Chert Belt sub-region. A spring was located at the base of one of these high ridges 400 feet to the west. The site was thus well back from the river near the valley edge. However, the presence of large

quantities of fresh-water mussels in the village pits and soil indicate that the exploitation of riverine fauna continued to be of economic significance.

Therefore, the inhabitants of this village site had access to three adjacent environmental niches or zones, the river and shoreline area, the fertile bottomlands, and the hilly Chert Belt region. The Chert Belt region is an extension of the Highland Rim of Tennessee and the "barrens" of western Kentucky. The topography of the region can be termed moderately hilly with occasional steep bluffs and deep hollows (Harper 1943: 70). The predominant vegetation cover before European settlement was an oak forest, with red oak, white oak, pine and chestnut present in large numbers. The broad bottomlands, varying from a half-mile to a mile wide in the area of Lu<sup>V</sup>65, was probably originally a wet oak-hickory forest.

#### Excavation -

Lu<sup>V</sup>65 was excavated in 1938 by a WPA crew under the direction of William G. Haag. The site area was easily distinguishable by the presence of large quantities of mussel shells, cultural debris, and a dark stained area in the otherwise light sandy soil. The area in which the site was located had been cleared and planted in cotton for at least the past 16 seasons prior to the acquisition of the land by the TVA in the fall of 1936 (Webb and DeJarnette 1942: 173).

An area, 70 x 25 feet, was staked off into five-foot squares and excavated horizontally to the top of the subsoil. Exploratory trenches were cut from the main excavation unit outward to determine the extent of the village. The village midden was found to be only about one foot deep, but due to the shallow plowing for cotton (only about three inches) the lower portion of the midden had not been disturbed (Webb and DeJarnette 1942: 173). A large number of pits were found to extend into the subsoil. These features were excavated by hand and recorded as individual units. The cultural material recovered from these features was bagged and catalogued according to individual unit. Provenience data for the artifacts found during the general excavation were recorded by square and level designations.

#### Features -

One of the more unusual aspects of Lu<sup>V</sup>65 was the large number of features uncovered in the excavation units. The majority of these features were circular, basin-shaped midden pits. Sixty-eight pits of this type, including two associated with Feature Two, were excavated and recorded. They vary in size from 1.4 to 5.6 feet in diameter and from .5 to 2.0 feet in interior depth from the subsoil surface. The average dimensions for these pits were 3.0 feet in diameter and 1.2 feet in interior depth. The vast majority of these pits (57 of 68) contained Wright Check Stamped sherds (Table 7). This suggests that the major occupation

at Lu<sup>V</sup>65 dates to the time when this type of pottery had achieved great popularity. The purpose of these basin-shaped pits is problematical but "so large a number of pits in so small a village would seem to suggest that the dwellers here had much need for storage facilities (Webb and DeJarnette 1942: 174)."

Other than the midden pits and a few random post-holes the only other feature of interest that occurred at Lu<sup>V</sup>65 was Feature Two, a circular house pattern. This feature has been described in some detail in the Pickwick Basin Report (Webb and DeJarnette 1942: 174). The structure pattern was formed by 84 randomly spaced postholes. The interior floor of the structure was 12 feet in diameter.

Along the southern portion of the posthole pattern two round basin-shaped midden pits were found. These pits were approximately two feet in diameter and 1.4 - 1.8 feet in interior depth. Table 3 lists the types of ceramics recovered from these pits.

In the center of the structure was a fire basin or hearth. This feature consisted of two components. The first was a circular pit, 2.5 feet in diameter and 1.8 feet deep, with straight walls and a flat bottom. A clay mantle had been prepared around the rim of this pit. This basin contained fire-cracked rock and village debris including ceramic vessel fragments (Table 3). A burial pit had been dug into this central hearth. This intrusive pit was 6.8

TABLE 3: Lu<sup>V</sup>65 - POTTERY IN FEATURE 2

	<u>MULBERRY CREEK PLAIN</u>	<u>WRIGHT CHECK STAMPED</u>	<u>LONG BRANCH FABRIC MARKED</u>
Central Basin	3	10	2
Post Molds	3	15	2
West Pit	1	2	1
East Pit			1
<b>Total</b>	<b>7</b>	<b>27</b>	<b>6</b>

feet long, 4.7 feet wide, and varied in depth from .4 feet deep in the eastern end to 1.8 feet deep in the western end. Into this large pit a flexed burial had been placed with its head to the west. The predominate pottery type found in the units of Feature Two (Table 3) was Wright Check Stamped. This suggests that this structure was constructed contemporaneously with the majority of the midden pits and perhaps the two Copena mounds, which both contained similar sherds. However, the chronological relationship of the flexed burial and the structure is unclear. The burial pit is definitely intrusive into the hearth, but the amount of time which passed between the abandonment of the structure and the preparation of the burial cannot be determined at this time.

LITHIC MATERIAL

## Projectile Points:

## A. Triangular Types -

Type: Copena (Webb and DeJarnette 1942: 176 and Plate 207)

Number of Specimens: 19

Plate: 1

Form and Manufacture: All of these medium to large triangular points have recurvate blade edges. Basal edges are straight to slightly incurvate or excurvate. All basal edges have been thinned and several specimens exhibit basal grinding. Specimens with broken distal tips are indicated by an asterisk (\*). These incomplete measurements were not utilized in computing mean length.

Dimensions:

<u>Cat No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
125	94mm	25mm	7mm
100-1	80mm*	25mm	6mm
206-20	70mm*	25mm	7mm
206-7	76mm	24mm	6mm
97-7	79mm	20mm	8mm
58-1	68mm	24mm	10mm
206-19	70mm	24mm	7mm
208-7	68mm	26mm	9mm
176	58mm	22mm	7mm
95-3	63mm	20mm	8mm

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
206-5	56mm*	22mm	7mm
206-9	50mm*	21mm	7mm
206-13	57mm*	24mm	6mm
206-15	61mm	20mm	6mm
206-17	63mm*	20mm	7mm
212-10	60mm*	26mm	9mm
193-2	58mm*	27mm	8mm
137	58mm*	20mm	8mm
154-1	43mm*	22mm	8mm
Mean:	73mm	23mm	7mm

Comments: There has been some conjecture concerning the function of these Copena blades. Some investigators believe they were utilized as projectile points while others believe their form and size indicate use as knives. Although a microscopic examination of these specimens is yet to be made, it is significant that 13 of the 19 specimens listed above have been fractured just below the distal tip. Several of these fragmentary examples have impact fractures extending down from these breaks. This would suggest that the majority of these specimens were utilized as projectile points, probably in connection with an atlatl dart or throwing spear.

Type: Copena Triangular (Webb and DeJarnette 1942: 176 and Plate 207)

Number of Specimens: 16

Plate: 1

Form and Manufacture: These are medium triangular points with parallel blade edges. Basal edges are straight to incurvate, thinned, and frequently exhibit light grinding. Specimens with broken distal tips are indicated by an asterisk (\*).

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
67-3	62mm*	28mm	9mm
78-2	54mm	27mm	7mm
84	49mm	30mm	9mm
209-1	45mm	28mm	8mm
212-6	37mm*	26mm	5mm
212-8	41mm*	29mm	9mm
192-1	55mm*	27mm	10mm
140-3	44mm*	30mm	10mm
212-9	42mm*	29mm	9mm
211-2	37mm*	30mm	7mm
173-2	46mm*	29mm	9mm
106-3	47mm*	25mm	9mm
143-2	36mm*	25mm	7mm
211-1	27mm*	30mm	8mm
77	40mm*	27mm	9mm
212-5	30mm*	30mm	6mm
Mean:	49mm	29mm	8mm

PROVISIONAL TYPE 11-A -

Number of Specimens: 90

Plate 1. LuV65 - Projectile Points: Top Row, left to right, Copena (1,2), Copena Triangular (3,4). Middle Row, Provisional Type 11a (1,2), Provisional Type 11b (3), Provisional Type 11c (4). Bottom Row, Provisional Type 11d (1,2), Provisional Type 11e (3,4).

Plates

Form and



Plates

Form and



Plates

Form and

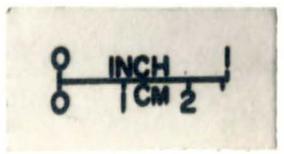
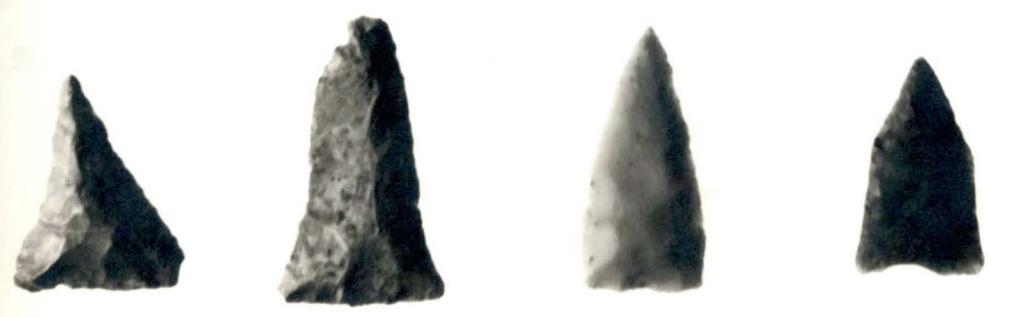


Plate: 1

Form and Manufacture: These are long, narrow trianguloid points. Blade edges are parallel to slightly recurvate. Basal edges are straight and are generally thinned. Although most of these specimens could be placed into the Copena or Copena Triangular categories none are good examples of either type. Some of these specimens probably represent variants of the Copena types while others appear to be preforms. Some of the latter forms have been thinned only on one side (plano-convex) while others exhibit only percussion flaking.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	48-70mm	17-27mm	6-13mm

PROVISIONAL TYPE 11 - B -

Number of Specimens: 10

Plate: 1

Form and Manufacture: These are medium triangular points, most of which could be placed into the Nolicucky category (Kneberg 1957). Blade edges are straight to excurvate. Basal edges are straight to slightly incurvate and most specimens have one prominent auricle.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	48-55mm	23-32mm	8-10mm

PROVISIONAL TYPE 11 - C -Number of Specimens: 32Plate: 1

Form and Manufacture: These specimens are medium triangular points with straight blade edges. Basal edges are straight to slightly excurvate. All basal edges are thinned. Examples placed into this category can be differentiated from the Copena Triangular type mainly by blade form and size. The Copena Triangular type has parallel blade edges and is, on the average, larger. While it is possible that the specimens placed into this provisional type represent a variant of the Copena types, it is also possible that these shorter, straight blade examples represent resharpened Copena Triangular points.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	40-50mm	22-32mm	7-9mm

PROVISIONAL TYPE 11 - D -Number of Specimens: 13

Plate: 1

Form and Manufacture: These are medium triangular points with expanded bases. Basal edges are thinned and straight to slightly excurvate. Blade edges are incurvate. All specimens appear to have been heavily reworked or resharpened.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	35-59mm	23-28mm	6-9mm

PROVISIONAL TYPE 11 - E -

Number of Specimens: 35

Plate: 11

Form and Manufacture: These are small to medium triangular points similar to the Greenville-Camp Creek types (Cambron and Hulse 1964: A-16; A-43). Blade edges are parallel to excurvate. Basal edges are generally thinned and straight to incurvate.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	30-40mm	18-23mm	5-7mm

Residual Triangular - Twenty specimens were placed into this category. All are either too fragmentary for proper identification or lack a sufficient number

of diagnostic attributes to be placed into any of the above established or provisional types.

B. Other Projectile Point Types -

Type: Cumberland (Kneberg 1956; Cambron and Hulse 1964: A-26).

Number of Specimens: 1

Plate: Not illustrated

Form and Manufacture: The Cumberland point type is characterized by recurvate blade edges, collateral flaking, and an incurvate basal edge with prominent auricles. The one specimen of this type recovered from Lu<sup>V</sup>65 was a basal fragment with flutes on both blade faces.

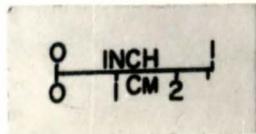
Comments: This specimen was not present in the study sample. However it is commented upon and illustrated in the Pickwick Basin Report (Webb and DeJarnette 1942: 176 and upper left hand corner Plate 207). This projectile point type dates to the Paleo-Indian period.

Type: Big Sandy (Kneberg 1956; Cambron and Hulse 1964: A-10 and A-11).

Number of Specimens: 1

Form and Manufacture: This is a small side-notched point with slightly excurvate blade edges and an incurvate basal edge. The basal edge exhibits slight grinding. The distal tip on this specimen is broken.

Plate 2. Lu<sup>V</sup>65 - Projectile Points: Top Row,  
left to right, Big Sandy (1), Swan  
Lake (2), Plevna (3), Cotaco Creek (4).  
Middle Row, Provisional Type 1 (1),  
Provisional Type 2 (2), Ledbetter (3),  
Provisional Type 4 (4). Bottom Row,  
Provisional Type 5 (1), Provisional Type  
4a (2), Provisional Type 10 (3).



Dimensions:

<u>Cat No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
	39mm	20mm	7mm

Type: Swan Lake (Cambron and Hulse 1964: A-81)

Number of Specimens: 1

Plate: 2

Form and Manufacture: This specimen is a small thick point, bi-convex in cross section. The base has been formed by shallow side notches.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
	45mm	16mm	8mm

Type: Ledbetter (Kneberg 1956; Cambron and Hulse 1964: A-53).

Number of Specimens: 1

Plate: 2

Form and Manufacture: The Ledbetter type is a large stemmed point with asymmetrical blade edges. The stem is usually straight with a straight to slightly incurvate basal edge.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
	77mm	32mm	8mm

Type: Cotaco Creek (Cambron and Hulse 1964: A-24)

Number of Specimens: 1

Plate: 2

Form and Manufacture: This specimen is a medium straight-stemmed point. The stem is straight and the blade shoulders are rounded. The distal tip is broken.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
	59mm	39mm	7mm

Type: Plevna (Cambron and Hulse 1964: A-72)

Number of Specimens: 1

Plate: 2

Form and Manufacture: This is a medium stemmed projectile point with an excurvate base formed by side notches. The blade is excurvate and the lateral edges are beveled. This specimen has a broken distal tip.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
	46mm	33mm	7mm

Provisional Point Types: (Cambron and Hulse 1964).

Provisional Type 1: Twenty-eight medium to large straight stemmed projectile points were placed into this category. Twelve of these specimens have the following range of measurable dimensions:

Length: 44-80mm; Width: 18-31mm; Thickness: 7-11mm.

Provisional Type 2: All expanded stem projectile points that could not be placed into an established type were assigned to this category. These 13 specimens have the following range of dimensions: Length: 46-92mm; Width: 18-37mm; Thickness: 6-12mm.

Provisional Type 4: Twelve medium sized stemmed points with shoulder barbs were placed into this category. These specimens have a range of 48-57mm in length, 29-37mm in width and 7-9mm in thickness.

Provisional Type 4-A: This specimen was unique at Lu<sup>V</sup>65 and although it does not conform to an established type description it does deserve some comment. It is a large stemmed point with an expanded base and short shoulder barbs. It is made of gray chert and was recovered from Pit 61. The blade edges are excurvate and exhibit retouching. It measured 80mm in length, 61mm in shoulder width and 6mm in thickness.

Provisional Type 5: Three medium to large stemmed points with serrated blade edges were placed into this category. They have a range in length from 67-92mm, width 25-33mm and thickness 7-10mm.

Provisional Type 10: Two eccentric notched stemmed points were placed into this provisional type. Both specimens have deep notches along the blade edge. The first specimen measured 58mm x 26mm x 9mm and the second 62mm x 28mm x 10mm.

Residual: This category represents unidentifiable projectile point fragments. Of the 142 specimens placed into this category, 98 were distal tips while the remainder were midsections or proximal ends which were too fragmentary to identify.

TABLE 4: 1965 PROJECTILE POINTS

	Copena	Copena Triangular	Camberland	Flava	Cotaco Creek	Swan Lake	LeDbetter	Big Sandy	Pt 1	Pt 2	Pt 4	Pt 5	Pt 10	Pt 11a	Pt 11b	Pt 11c	Pt 11d	Pt 11e	
Surface	10	7	1		1	1	1	12	8	10			1	36	5	16	6	20	
One Foot Level		7						1	10	3	1	1		38	4	10	6	10	
Two Foot Level									3		1	1		1					
Pit 1									1					7		1	1	1	
Pit 2														1	1	1		1	
Pit 5				1															
Pit 6											1								
Pit 8														1					
Pit 9	1													1					
Pit 13									1					2		1			
Pit 15																1		1	
Pit 16		1																	
Pit 18		1										1							
Pit 22														1		1			
Pit 24	1																		
Pit 25																		2	
Pit 28		1																	
Pit 40														1		1			
Pit 58										1									
Pit 60									1										
Pit 61									1		1								
Pit 66																		1	
Total	19	16	1	1	1	1	1	1	20	13	13	2	2	90	10	32	13	25	
Total Count:	299																		

Other Chipped Stone Artifacts:

Drills (Plate 3): Ten examples of this tool type were recovered during the excavation of Lu<sup>V</sup>65. Three types are represented in this sample: stemmed with projecting shoulders (200-9, 204-39), expanded base (200-6, 160, 205-2) and rounded base (205-3, 85-1, 209-8). Two broken bits were also recovered. The dimensions of the complete specimens are given below:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
200-9	36mm	31mm	9mm
200-6	66mm	19mm	7mm
85-1	58mm	17mm	11mm
209-8	52mm	18mm	11mm

Biface Blades: Small Triangular (Plate 3):

Fifty-four specimens were placed into this category. Based upon differences in formal characteristics they were divided into two types. The first is represented by relatively thin blades with a straight to slightly rounded base and an acute distal end. These specimens exhibit both percussion and pressure flaking. The second type is characterized by a thick blade, bi-convex in cross-section, with a straight to slightly rounded base and an acute distal end. These specimens exhibit only percussion flaking and might represent preforms for triangular blades or projectile points. The first type has a range of 55 to 80mm in length, 25-34mm in width and 6-12mm in thickness. The second group has a range of 51-72mm in length, 21-35mm in width and 12-19mm in thickness.

Biface Blades - Long Narrow (Plate 3): Twelve specimens were assigned to this category. These are long (80 - 100mm), narrow (17-32mm) blades which are thick in cross section (14-17mm). These blades were made by the percussion flaking technique. It has been suggested these were piercing rather than cutting implements (Lewis and Lewis 1961:47).

Biface Blades - Medium Triangular (Plate 3): The 46 artifacts placed into this category were trianguloid in outline with straight to excurvate blade edges and straight to rounded basal edges. The distal ends on these specimens were generally acute. Dimension Ranges: Length: 70-115mm; Width: 35-46; Thickness: 10-16mm.

Biface Blades - Medium Asymmetrical (Plate 3): The asymmetric shape of the one specimen placed into this category suggests that it was utilized as a knife. This is further substantiated by the presence of fine retouching and wear on the excurvate blade edge. Dimensions: 110mm x 40mm x 13mm.

Flint Adzes (Plate 3): Twenty-two bifacially chipped specimens were assigned to this type. These tools have parallel to slightly excurvate blade edges and expanded distal, or working, ends. In cross section they are bi-convex to plano-convex. Several examples have heavy wear and polish on the distal end, extending midway up the blade faces. This wear pattern suggests that this type of implement functioned as an adze in wood working activities. The lack of wear on the proximal ends possibly indicates that these were hafted implements. Dimensions:

Length: 70-153; Width: 44-58mm; Thickness: 15-26mm.

Ovoid Scrapers (Plate: 3). Eleven roughly ovoid biface tools were assigned to this category. Wear patterns on the blade edges suggests they were utilized as scrapers.

Dimensions: Length: 55-72mm; Width: 40-57mm; Thickness: 13-27mm.

Uniface Blades: Eight unifacially worked blades were recovered. All specimens have one or more utilized blade edges. Two of these specimens appear to be true prismatic blades while the remainder are large flakes. Dimensions: Length: 49-96mm; Width: 23-36mm; Thickness: 7-13mm.

Scrapers - Uniface, Thick: Two specimens were placed into this category. They appear to be end scrapers made from thick flakes. The working edges on these examples are steeply flaked.

Scrapers - Uniface Trapezoid: Three unifacially chipped scrapers, trapezoid in outline, were recovered. All are made from thick flakes and have steep working edges.

Dimensions: Length: 47-55mm; Width: 24-36mm; Thickness: 9-12mm.

Scrapers - Uniface Side: Ten examples of this tool type were found. All specimens have one or more utilized edges and all have acute distal ends. Dimensions: Length: 49-91mm; Width: 25-44mm; Thickness: 9-11mm.

Cores: Five cores were recovered during the excavations. Four of these are large and have random flake scars. They

all have battered edges which suggests they were also utilized as choppers or cleavers. The one remaining specimen is small and has the appearance of a prismatic core. Four long, narrow blades have been removed from the core faces.

Ground and Pecked Stone Artifacts:

Digging Implements: One complete and five fragmentary examples of this tool type were recovered. All specimens were made of greenstone. The complete specimen measures 248mm in length, 96mm in width and 22mm in thickness. The distal end of this specimen exhibits heavy wear and polish. The wear extends up both faces to within 60mm of the proximal end. This specimen is illustrated in Plate 203-2 of the Pickwick Basin Report.

Celts: Twenty-four complete and fragmentary examples were recovered. Of these, 19 are made of greenstone while the remaining 5 are limestone. Two types were differentiated in the study sample. The first is a relatively narrow "polled" variety. They are bi-convex in cross-section. No complete examples of this type were recovered, but one proximal fragment measures 111mm x 51mm x 23mm. The second type is a shorted trianguloid form which is flat in cross section. Two complete examples of this type measured 91 - 105mm in length, 48 - 54mm in width and 11 - 15mm in thickness. Examples of this type are illustrated in Plate 203-2 of the

TABLE 5 LuV65 - CHIPPED STONE TOOLS

	Drills	Biface Small Triangular	Biface Medium Triangular	Biface Long Narrow	Biface Medium Asymetric	Flint Adze	Ovoid Scraper	Uniface Blades	Scrapers Uniface Thick	Scrapers Uniface Trapezoid	Scrapers Uniface Side	Cores
Surface	5	30	24	7		15	6	5	2	1	6	3
One Foot Level	2	15	13	4	1	5	3	2		2	4	2
Two Foot Level	1	1										
Pit 1	2	1				1						
Pit 2		1										
Pit 4			1									
Pit 6			1									
Pit 8		1	1									
Pit 13		1										
Pit 16		1						1				
Pit 19												
Pit 22		1		1								
Pit 26			1									
Pit 30						1						
Pit 37			1									
Pit 44			1									
Pit 51		1										
Pit 55			1									
Pit 63			1									
Pit 66		1										
Total		54	45	12	1	22	11	8	2	3	10	5
Total Count:		<u>183</u>										

Pickwick Basin Report.

Greenstone-Pick: One long, narrow greenstone implement was placed into this category. Both distal and proximal ends are battered and worn from use. This specimen measures 134mm x 33mm x 14mm. It is illustrated in the lower right hand corner of Plate 203-2 in the Pickwick Basin Report.

Greenstone Fragments: Thirty-one fragments which could not otherwise be identified were placed into this residual category. Some specimen exhibit wear. They probably all represent fragments of digging implements or celts.

Hammerstones: One specimen found in the study sample was placed into this category. It is a water-worn sandstone cobble. It is approximately fist size and has one battered end.

Anvil Stones: Three specimens of this type are water-worn cobbles with circular depressions on one or more flat sides. Both also exhibit battering along one or more edges. These specimens are illustrated in Plate 204-1 of the Pickwick Basin Report. The third specimen is a block of breccia with four circular depressions on one surface and two on the reverse surface.

Grinding Stones: Four river cobbles were recovered which exhibit heavy grinding on one or both flat surfaces. This wear pattern suggests they were utilized as muellers or pebble manos.

Mortar: One large rectangular slab of sandstone was recovered which had large circular depressions ground into each flat surface. One side of the mortar has two smaller concave depressions near the grinding surface. This large circular grinding surface is approximately 13mm deep and 130mm in diameter. The smaller circular depressions are 6mm deep and 13-15mm in diameter.

Other Artifacts:

Gorget: A midsection fragment of a flat brown slate gorget was recovered. Its form suggest that it is part of an expanded center gorget. The surface is polished and has been penetrated by two drilled perforations 5mm in diameter. The specimen is 39mm wide and 6mm thick. It is illustrated in Plate 204-1 of the Pickwick Basin Report.

Faceted Stone Ball: This stone sphere was made by randomly grinding a small piece of light brown shale. The object, of unknown use, is 29mm in diameter.

Pottery Discs: Two pottery discs were recovered during the excavation of Lu<sup>V</sup>65. Both were made from Pickwick Complicated Stamped sherds. One disc is 38mm in diameter and has had a hole 7mm in diameter drilled from both sides. The second specimen is 34mm in diameter. It is apparently unfinished. The edges of the disc are rough and the perforations have not been completed. Both specimens are shown in Plate 204-1 of the Pickwick Basin Report.

Engraved Disc: A thin fragmentary disc of black cannel coal was recovered. Both sides of the disc have been engraved. Although the disc is fragmentary, it appears to have been 38mm in diameter and 2mm thick. It is shown in the Pickwick Basin Report in Plate 204-1.

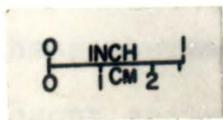
Copper Pin: A piece of rolled copper was recovered at Lu<sup>V</sup>65. It possibly served as a pin and was 26mm in length and 1mm in diameter. In association with this piece of copper were bone fragments (deer mandible?) heavily stained with copper salts. Adhering to this fragment were small pieces of woven matting similar to that found in the nearby Copena mounds. The fibers were flat in cross section, 3mm wide, and were woven in an over four under one pattern.

Bone Artifacts:

Bone Awls: Eight worked specimens of deer bone were placed into this category. Seven of these have one end ground to a sharp point while the remaining specimen has one sharp and one rounded end. Three of these specimens are illustrated in Plate 204-1 of the Pickwick Basin Report. The first specimen on the bottom left of this photograph is 57mm long.

Bone and Antler Projectile Points: Two specimens of antler and one of bone were assigned to this category. The bone specimen has both ends tapered. Its shape suggests that it was utilized as a projectile point. It is very similar in form to a specimen recovered from the Lay site in the Upper

Plate 3. Lu<sup>V</sup>65.- Chipped Stone Artifacts: Top  
Row, left to right, Biface Blades:  
Long, Narrow (1), Small, Triangular (2),  
Medium, Triangular (3,4). Bottom Row,  
Ovoid Scraper (1), Flint Adze (2),  
Medium Asymmetrical Biface Blade (3).



Guntersville Basin (Faulkner and Graham 1966:62 and Plate XXIII). The specimen recovered from Lu<sup>V</sup>65 is 188mm long and is second from the left in the bottom row of artifacts in Plate 204-1 in the Pickwick Basin Report. The two antler points have straight cut and ground bases and ground acute distal ends. One of these specimens is second from the right in the lower row of the above plate. It is 81mm long.

Bone Flaker: One specimen was placed into this category. It was made from a bone of a large mammal (probably deer). Both ends have been ground and rounded. The specimen is 78mm long and 18mm wide. It is the first specimen on the lower right in Plate 204-1 of the Pickwick Basin Report.

#### Ceramic Material

Over 4,000 pottery sherds, representing three temper groups, were recovered from Lu<sup>V</sup>65. Of the 4094 sherds analyzed in the original ceramic study, 3981 or 97.4% were found to have been tempered with crushed limestone. Sixty-two sand-tempered and forty-eight clay-grit tempered sherds were also found. The Early Woodland fiber tempered and Mississippian shell tempered wares were entirely absent.

The 66 midden pits uncovered in the excavation units contained a total of 2,133 sherds. The individual pottery counts for each of these features are given in Table 7. Since a large number of these sherds were not available for study at the time this present analysis was undertaken, the

original counts by William G. Haag are utilized. The site records on file at Mound State Monument contained this individual feature data. The original total ceramic count for Lu<sup>V</sup>65 is given in the Pickwick Basin Report (Webb and DeJarnette 1942: 525-526). This pottery sample can be divided into the following types:

Limestone-Tempered Ware:

Mulberry Creek Plain: The 2,000 plain limestone-tempered pottery sherds recovered at Lu<sup>V</sup>65 constituted approximately 50% of the total ceramic sample. About half of the ware of this type was recovered from the features.

A sample of 686 sherds which had previously been typed Mulberry Creek Plain, and counted during the original laboratory study, were re-analyzed. Since smoothing was a common finish technique on this type of ware the exterior surface on each of these sherds was wiped lightly with a damp cloth and then studied under a strong light. This process helped bring out any surface treatment which had been subsequently partially obliterated by smoothing. The individual finish types found in this sample are given below in Table 6.

LU<sup>V</sup>65 - TABLE 6 - MULBERRY CREEK PLAIN CERAMIC SAMPLE

TYPE	NUMBER OF SHERDS	PERCENTAGE
Mulberry Creek Plain	530	77%
Wright Check Stamped	99	14%
Long Branch Fabric Marked	22	3%
Bluff Creek Simple Stamped	14	2%
Pickwich Complicated Stamped	9	1%
Flint River Cord Marked	7	1%
O'Neal Plain	<u>5</u>	<u>.9%</u>
Total	686	98.9%

Although the overall significance in total percentages by type would not be greatly effected by the results of this re-study, two important factors were brought out. First, a large number of vessels with a stamped exterior finish were smoothed before firing while the clay was still plastic. In these cases the stamping technique apparently functioned as a finish and not as a decorative treatment. It would appear that the Wright Check Stamped type had a slightly higher relative percentage and the Mulberry Creek Plain a slightly lower one at this site. An additional pottery type, Flint River Cord Marked, while not reported in the original study, was found to be present in this study sample.

Of the 530 Mulberry Creek Plain sherds in this sample, 62 were rims, while 26 podal supports were present. Twenty-three of these podal supports were rounded, while the remaining three had been pinched into a trianguloid form. Individual specimens in this podal sample varied from 20-40mm in diameter at the vessel base and from 25-32mm in height.

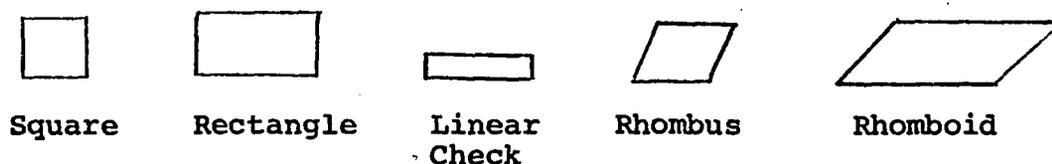
The sixty rims ranged from slightly inverted (8) to straight (23) to flared or everted (29). Lip treatment was fairly simple on these rims. Twenty-eight rim sherds had rounded lips, 16 flattened, and 12 had everted folds or burrs. Four rim sherds had added rim strips 15-23mm wide. One reconstructable plain vessel was recovered which had an incised decoration around the neck and rim areas. This specimen is illustrated in Plate 206 of the Pickwick Basin Report. The vessel is a large mouth pot with a rounded base, everted rim and rounded lip. The decoration consists of a curvilinear motif of zoned incising. This style of decoration has definite Hopewellian overtones. The remainder of the vessel exterior has been heavily scraped. Since this vessel is unique at Lu<sup>V</sup>65 its presence can best be explained as a result of trade or stimulus diffusion.

Wright Check Stamped: The 1341 sherds of this type which were recovered from Lu<sup>V</sup>65 represent approximately one-third of the total pottery count. Sherds of this type were found in the vast majority of the features from this site, as well as in all levels of the midden deposit.

A sample of 235 sherds of this type from the one foot level of the general excavations was analyzed in the present study. The majority of these sherds had a rhombus grid pattern (Figure 2) while only 30 (13%) had a true rhomboid pattern on their exterior surface. The rhomus is defined here

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Figure 2: Wright Check Stamped Grid Types -



as an equilateral parallelogram with oblique angles, while the rhomboid is a parallelogram with oblique angles and unequal adjacent sides. The square was second in frequency to the rhombus while the rectangle and linear check were present but proportionately rare. Some of the larger body sherds had both square and rectangular grids on their surfaces. The grids range in size from a small square 1.5mm on a side to the large rhomboid grid which measures up to 11mm in length and 9mm in width.

There were 13 rims in the study sample. Three of these were slightly inverted, three were straight and seven were everted. Lip treatment varied from flat (3) to rounded (3) to folded (6). One of these rim sherds had an added rim strip 20mm wide. While this rim strip was check stamped the

remaining vessel fragment had a smoothed surface. This zoning suggests that at least some of the Mulberry Creek Plain sherds previously discussed represent undecorated portions of embellished vessels.

Long Branch Fabric Marked: Some 215 sherds with a fabric marked finish were reported to have been recovered from this site. An additional 85 can be added to this total. These sherds were found among Mulberry Creek Plain and Wright Check Stamped samples taken from the original laboratory sacks. Most of these additional sherds were smoothed after they were impressed with a fabric.

The most common weave pattern present on these sherds is that of a close weft and wide warp. This is the most common weave-impression found on sherds of this type throughout the valley. Two additional weave variations were present on sherds in the sample studied. The first is quite rare and appears to have equal weft and warp elements. The second and more common type is a plaited basketry impression which gives the vessel surface a honey-comb appearance. This third type was most commonly mistaken for Wright Check Stamped when its surface had been smoothed. The geographical distribution or cultural or temporal significance of these last two types are not at the present time known.

Of the 12 rims of this type found in the study sample nine were everted, one was inverted and two were straight. Lip treatment is simple; 10 of the rims have rounded lips while

two have lips that have been flattened. One of these sherds had an added rim strip 28mm wide. The vessel surface was plain below this fabric impressed rim. One rounded basal fragment was recovered. This base had a rounded podal support 23mm high attached.

The added fabric marked rim strip described above suggests that some vessels had combinations of plain and fabric marked finishes. This also appears to be the case with the one podal support of this type recovered. The podal support and most of the vessel base were plain while the vessel body had been impressed with a fabric. This data suggests that many of the Long Branch Fabric Marked and Mulberry Creek Plain sherds recovered from this site were originally portions of the same vessels.

Pickwick Complicated Stamped: Two-hundred and twenty-one sherds were recovered from Lu<sup>V</sup>65 which had complicated stamped surface finishes or decorations. The most common motif on sherds of this type is a curvilinear geometric pattern occasionally including series of concentric circles. A concentric diamond or angular motif was also found on some of the sherds in this sample but is exceedingly rare. Vessels bearing such an angular motif are thought to be chronologically later than the more common curvilinear stamped vessels.

Only eleven rim sherds were present in this sample. Five of these have straight rims while the remaining six are slightly everted. All of these rims had rounded lips. Nine

of these specimens have stamping up to the lip while three have a smoothed strip 20-30mm wide between the lip and the stamped vessel body.

The two pottery discs that were recovered at this site were both made from Pickwick Complicated Stamped sherds. A pottery disc, similar to the finished example recovered from Lu<sup>V</sup>65, was recovered in association with a Copena burial at Ma<sup>O</sup>49. This particular disc had been made from a Mulberry Creek Plain sherd.

Bluff Creek Simple Stamped: Sherds of this type have been impressed with a carved paddle upon which series of parallel lines have been cut. This surface treatment was found on 204 sherds at this site. Nine rim sherds and two podal supports were present in the study sample. The rim sherds were either everted (7) or less commonly straight (2). Lips were rounded in all but one case. The stamping finish was carried all the way up the vessel exterior to the rim lip in all cases. One rim sherd had a plain finish from the shoulder portion down. This specimen suggests a vessel with a stamped neck and plain or smoothed body. The two podal supports recovered were plain but a portion of the vessel fragment to which they were attached had been simple stamped.

Flint River Cord Marked: This type was not reported during the initial ceramic study. However, 20 sherds of this type were found to have been placed into the Mulberry Creek Plain or Long Branch Fabric Marked types. The majority of these

sherds have been smoothed. All of the specimens in this sample are body sherds. One of the sherds is a portion of a vessel shoulder. The lower portion has a cord-marked finish while the neck of the vessel was left plain or was smoothed.

Sand-Tempered Ware: Only 62 sand-tempered sherds were found at Lu<sup>V</sup>65 during the excavations. These specimens total over one percent of the entire ceramic sample. Thirty-six of these sherds were recovered from midden pits while the remainder were taken from the general excavation units.

These sherds can be divided into the following types:

O'Neal Plain: Over half (36) of the sand-tempered sherds had a plain finish. All of these specimens are body sherds.

Benson Fabric Marked: The 13 sherds of this type account for 21% of the specimens in this temper group. The textile impression on these sherds is similar to that found on Long Branch Fabric Marked vessels. It consists of close weft and wide warp elements. According to Haag, only 15 sherds of this type were found in the Pickwick Basin during the entire survey (Webb and DeJarnette 1942: 525). The paste and finish of these sherds is identical to the Dunlap Fabric Marked type of Northern Georgia. The recovery of 31 sherds of this type from the Guntersville Basin adds further support to an eastern source for this ware.

Sauty Cord Impressed: Of the nine sherds of this type that were recovered, 7 were rim sherds. The cord impressions appear to have served mainly as a decorative treatment on the

necks and along the rims of otherwise plain, relatively small bowls or jars. Two types of motifs are found on these rim sherds. The first is a series of cord impressions running around the vessel just below, and parallel to, the lip. The second type, "from straight-sided beaker-like vessels, have designs formed by short crossed impressions of cords, and one rim of this latter type was perforated at 0.4 inch below the lip (Webb and DeJarnette 1942: 177)." The low ratio of body to rim sherds present in this sample and the absence of rim sherds in the O'Neal Plain sample indicates that at least some of the O'Neal body sherds could represent fragments of plain vessels with rims decorated with cord impressions.

Alexander Incised: Two small sand temper body sherds were recovered which had been decorated with incised lines. The lines are curved but the size of these two specimens prohibits any generalizations concerning the overall geometric pattern of which these were a part.

Alexander Pinched: Two small body sherds with a row of pinched impressions across their exterior surfaces were recovered.

Clay Grit Tempered Ware:

McKelvey Plain: The 48 sherds of this type that were recovered at LuV65 had smoothed exterior surfaces and were not decorated in any way. Thirty-nine of these sherds occurred

TABLE 7: LU<sup>V</sup>65 - POTTERY FROM MIDDEN PITS (ORIGINAL COUNTS BY HAAG):

<u>PIT NO.</u>	<u>MCP*</u>	<u>WCS</u>	<u>RHOM</u>	<u>LBFM</u>	<u>PICK</u>	<u>BCS</u>	<u>O'N</u>	<u>BFM</u>	<u>SC</u>	<u>KI</u>	<u>MCK</u>	<u>AP</u>
1	58	39	31	3		10			2		35	
2	50	46	38	13	26		1					
3	19	20	11	4			1					
4	38	22	15		4	1	1					
5	40	22	17	5	6							
6	37	23	22	3	6		1			1		
7	10	9	35									
8	30	9	22	2	7				2			
9	19	11	17	4	3		2					
10	7	2	3			2						
11	9	2	3			2						
12												
13	23	11	16	4	9			5				
14												
15	9	1	6	5			1					
16	2	1		1								
17	18	3	8	2								
18		2	4	1							1	
19	1		3	1								
20	14	2	1	3	1							
21	5		1		1							
22	3	2		1	1							
23			3									
24	8	1		2			1					
25	36		9	1	1				1			
26	15	3	4		1							
27	38	7	8	4	1		2					
28	19	19	1	4	10							
29	3			1				2				
30	2	2	4									
31	2			2								
32												
33	8	4	5	12	1		1	1				
34	28	9	3			41						
35	22			1								
36												
37	36	10	8	1								
38	1		2	2								
39	27	7	14	8								
40	15	1	3	1								
41	13	4	12		1		2					
42	5	1	6	3				1	1			
43	23	1	1		2	2		1				1
44		6										
45												1
46	4	3	6	1								
47	11		1									
48	9	2										
49	8					1						

TABLE 7. Continued.

<u>PIT NO.</u>	<u>MCP*</u>	<u>WCS</u>	<u>RHOM</u>	<u>LBFM</u>	<u>PICK</u>	<u>BCS</u>	<u>O'N</u>	<u>BFM</u>	<u>SC</u>	<u>KI</u>	<u>MCK</u>	<u>AP</u>
50	3											
51	3		2		1		1					
52	3		3									
53	10	4	9	3							1	
54	15			6								
55	15		1	8								
56	7		3	3							1	
57	6	5	5	4								
58	4	1					1					
59	6	3	1									
60	19	12	1	3								
61	81	22	32	5	7	5	5					
62	20	6	3	4		2						
63	2	3	4									
64	5	5	2									
65	4		9									
66	20	17	13	2		4						
<b>Total</b>	<b>947</b>	<b>386</b>	<b>431</b>	<b>133</b>	<b>89</b>	<b>70</b>	<b>19</b>	<b>10</b>	<b>5</b>	<b>1</b>	<b>39</b>	<b>1</b>
	45%	18%	20%	6%	4%	3%						
Total Count: 2133												

*MCP	Mulberry Creek Plain	O'N	O'Neal Plain
WCS	Wright Check Stamped	BFM	Benson Fabric Marked
RHOM	Rhomboid Stamped	SC	Sauty Check Stamped
LBFM	Long Branch Fabric Marked	KI	Kirby Complicated Stamped
PICK	Pickwick Complicated Stamped	MCK	McKelvey Plain
BCS	Bluff Creek Simple Stamped	AP	Alexander Pinched

in pits while the remaining nine were recovered in the general excavation units. Thirty-five of the 39 sherds found in features were taken from Pit One, and one each was taken from Pits 18, 45, 53, and 56.

Although these sherds could represent a Late Woodland McKelvey occupation their distribution and small number suggest they might also represent the remains of a trade vessel. The fact that no cord marked or check stamped clay grit sherds, both usually associated with the plain ware, were found supports this conclusion.

#### Summary

The information presented in this report indicates that the Wright Village was a multi-component habitation site. Diagnostic artifacts recovered from the excavation units can be assigned to three of the four major cultural periods in Tennessee Valley pre-history. The knoll upon which the site was located was first visited by man during the Paleo-Indian Period. This occupation, probably only an over-night encampment, is represented in the lithic sample by the broken Cumberland projectile point and possibly some of the uniface tools.

The site was also sporadically utilized during the following Archaic Period. The Big Sandy and Plevna projectile points, along with their associated uniface tool kits, can be placed into an Early Archaic context. The Ledbetter and Cotaco Creek projectile point types, as well as forms

similar to many of the stemmed points placed into the provisional categories, have been recovered from shell mound sites along the nearby Tennessee River and date to Middle or Late Archaic occupations.

While these early occupations were of an intermittent nature, the major settlement of Lu<sup>V</sup>65 occurred during the succeeding Woodland Period. Although there are several ways to interpret this more permanent and extensive occupation, the data presented in this paper suggest to this investigator that the major occupation of Lu<sup>V</sup>65 was entirely confined to the Middle Woodland Period.

The ceramic complex during the initial phases of the Middle Woodland occupation of the Wright Village consisted of limestone tempered fabric, impressed plain and check-stamped wares. The late Early Woodland ceramics on nearby shell mound sites was confined largely to fabric-marked limestone tempered ware with the plain finished ware comprising a minority type. Through the Middle Woodland Period there was a decrease in the production of the fabric impressed wares and a concomitant increase in the quantity (and diversity) of stamped varieties. Previous ceramic studies of this limestone tempered series (Griffin 1939; Haag 1942; Heimlich 1952) suggest the following diachronic sequence for the introduction of the new Middle Woodland finish types: Check stamped, simple stamped, complicated stamped (curvilinear motif), cord-marked,

complicated stamped (angular motif) and brushed. The brushed ware was not present at Lu<sup>V</sup>65, but at other sites in the valley, especially in the Gunter'sville Basin area, it totally replaced the carved-paddle wares, and along with the plain variety, became the dominant type during the Late Woodland Period. However, in the western portion of the valley, the Middle Woodland ceramics were replaced by a Late Woodland-Early Mississippian clay-grit ware which continued the plain, cord-marked, and check stamped surface treatments of the earlier era.

Although it is possible that some of the sand-tempered sherds present at Lu<sup>V</sup>65 are the result of earlier brief occupations (the Alexander Pinched sherds for instance) another, equally viable, explanation is that their presence is the result of trade with areas to the east and south. The presence of the few clay-grit tempered sherds can be similarly explained. Clay-grit ware was the dominant temper type to the west of the Tennessee Valley, especially in the Lower Mississippi Valley area, during Middle Woodland times.

During the Middle Woodland period the Wright Village apparently functioned as a permanent or semi-permanent base where a variety of general maintenance activities were conducted. The large number of pottery sherds, grinding and anvil stones, fire-cracked rock and mussel shell suggest female related activities such as cooking and food preparation. The presence of numerous basal fragments of projectile

points (the base: tip ratio in the lithic sample was 3:1), and a proportionately large amount of debitage in relation to finished tools, suggest male related activities such as the repairing and production of weapons and tools.

The biface tools and bone awls indicate activities such as butchering and hide preparation. While only a few fauna fragments were recovered, all appear to be the remains of white-tail deer (Odocoileus virginianus), an important source of protein to both previous and succeeding aboriginal cultures in the area. The relatively large number of flint adzes exhibiting heavy wear suggest that wood working was also an important activity at this site.

Besides the ceramic material thought to represent the remains of trade vessels, several objects made from non-local materials were recovered which reflect contact with other areas. These include the cannel coal disc, the copper pin, and the greenstone celts and digging implements. Copper artifacts and greenstone celts and spades are common mortuary goods in Copena mounds and all three classes of artifacts occurred at Lu<sup>0</sup>63 and Lu<sup>0</sup>64. Limestone tempered plain and check-stamped sherds were also found in the fill of these mounds, as were Copena and Copena Triangular projectile points. Only two burials, both of unclear context, occurred in the village area. This seems unusual since the site appears to have been utilized for extended periods of time. While other explanations could be offered, the most logical

one that comes to mind is that the people inhabiting Lu<sup>V</sup>65 buried their dead in the adjacent mounds, which they constructed for that purpose.

The large number of pits found at this relatively small site indicated to the excavators that there must have been a great demand for storage. If this hypothesis is correct, then some type of plant food or foods were placed into these pits for later retrieval and consumption and/or use. Whether the food placed into these storage receptacles was a cultigen or not cannot presently be determined.

The geographical position of this site is also a change from the old order when base camps were more usually made on the river banks. It is interesting to note that even though apparent economic prerequisites determined that the camp should be made back from the river, the inhabitant-taste for riverine fauna was not diminished. Bushels of bi-valves littered the site area and filled many of the abandoned storage pits.

The special position of the site in the local environment allowed access to at least three adjacent and diverse environmental zones. This situation would have been advantageous to both a collecting or agricultural economy. The fertile bottomlands between the village and the river were an ideal environment for a swidden type of maize economy, while the uplands to the north would have provided abundant game and edible flora.

In summary, the data presented here suggests that:

1) The Wright Village was extensively occupied during the Middle Woodland Period, 2) this occupation represents a multiple activity base camp, 3) the temporal position, and cultural material, from this site indicate that the village and adjacent Copena mounds were contemporary components settled and constructed by the same group (possibly an extended family or local community of a segmentary tribe), the large number of pits and the position of the site back from the river are indicative of a new and perhaps more complex economic subsistence base.

#### C. THE FOX CREEK SITE (La<sup>V</sup>47)

This was a small habitation site situated atop a low knoll about 400 yards from the northwestern bank of Fox Creek in Lawrence County, Alabama. The site, two miles west of Trinity, Alabama, is located in Section 23, Township 5 south, Range 6 west. It was discovered in the summer of 1940 while two small Copena mounds (La<sup>O</sup>43 and La<sup>O</sup>44) were being excavated near-by. Since the site was only a short distance from these mounds it was chosen for testing and later for more extensive excavations.

The owner of the land on which the site was discovered, Anderson P. Terry, told the investigators that the site had been in cultivation for some fifty years. The major portion of the site lay in a cotton field under cultivation

at the time of discovery. A less intensely occupied portion of the site extended into a small orchard. Also, according to the owner, about two feet of top soil had been removed from the crest of the knoll by sheet erosion since the area had been under cultivation.

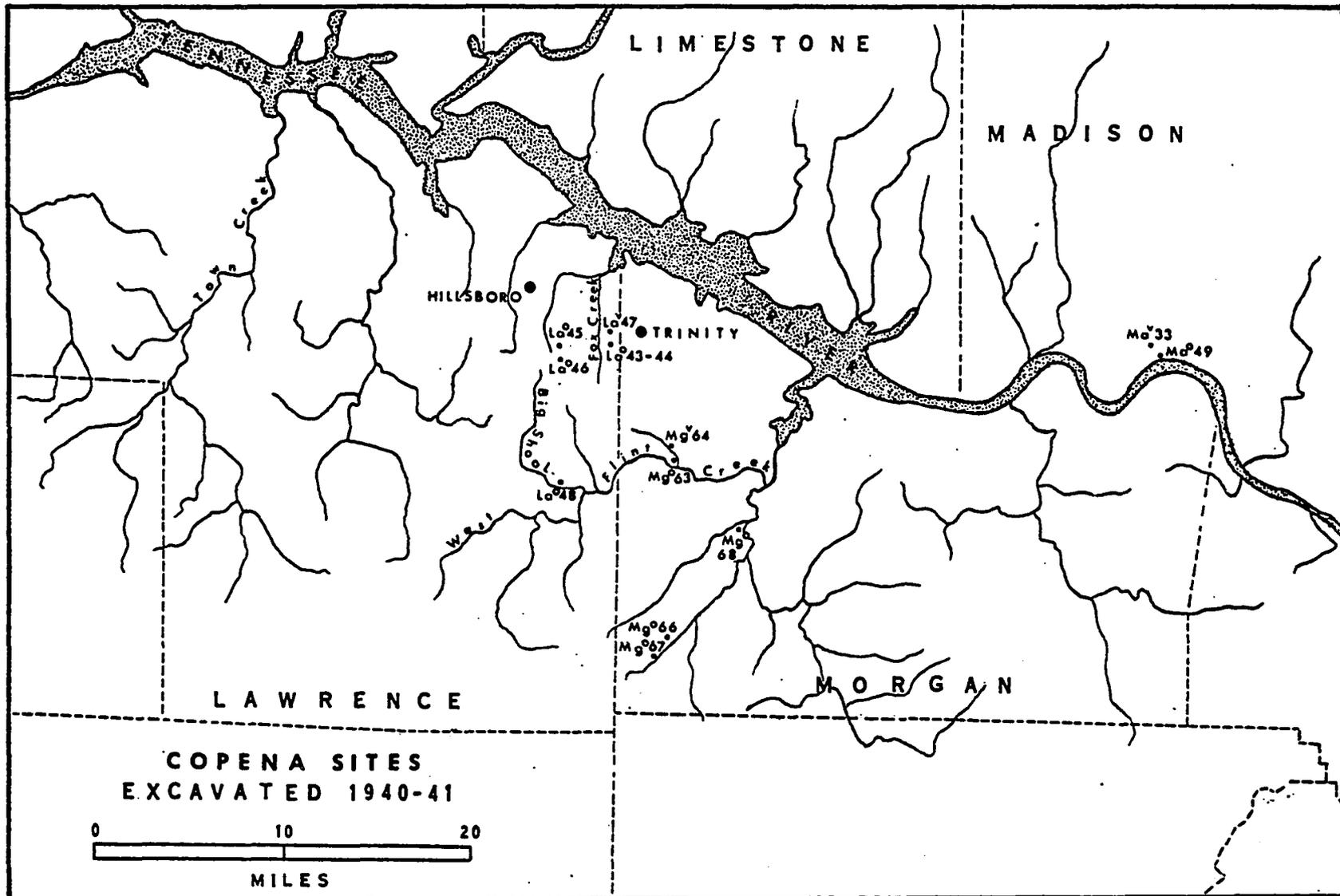
#### Site Environment

The site lies in an ecologically diverse area. The knoll on which it is located overlooks an alluvial stream valley through which the Fox Creek flows northward to the Tennessee River, approximately four miles away. The area surrounding the site could be termed an ecological edge area, bounded on the north by the Tennessee Valley proper, and on the south by the Little Mountain sub-region. Geologically, the Little Mountain area is composed of a sandstone outcrop, lying between limestone formations. The area averages five miles in width and covers an area of two hundred square miles. On the northern side, where La<sup>V</sup>47 is located, it forms a limestone-based escarpment cut by several small streams (Harper 1942:22). This formation could have possibly served as a quarry source for the raw material used to make the limestone digging and cutting implements found on the aboriginal sites in the area.

#### The Excavation

In July of 1947, J. R. Foster and a crew of seven men

**Map 5. Copena Sites Excavated 1940-41.**



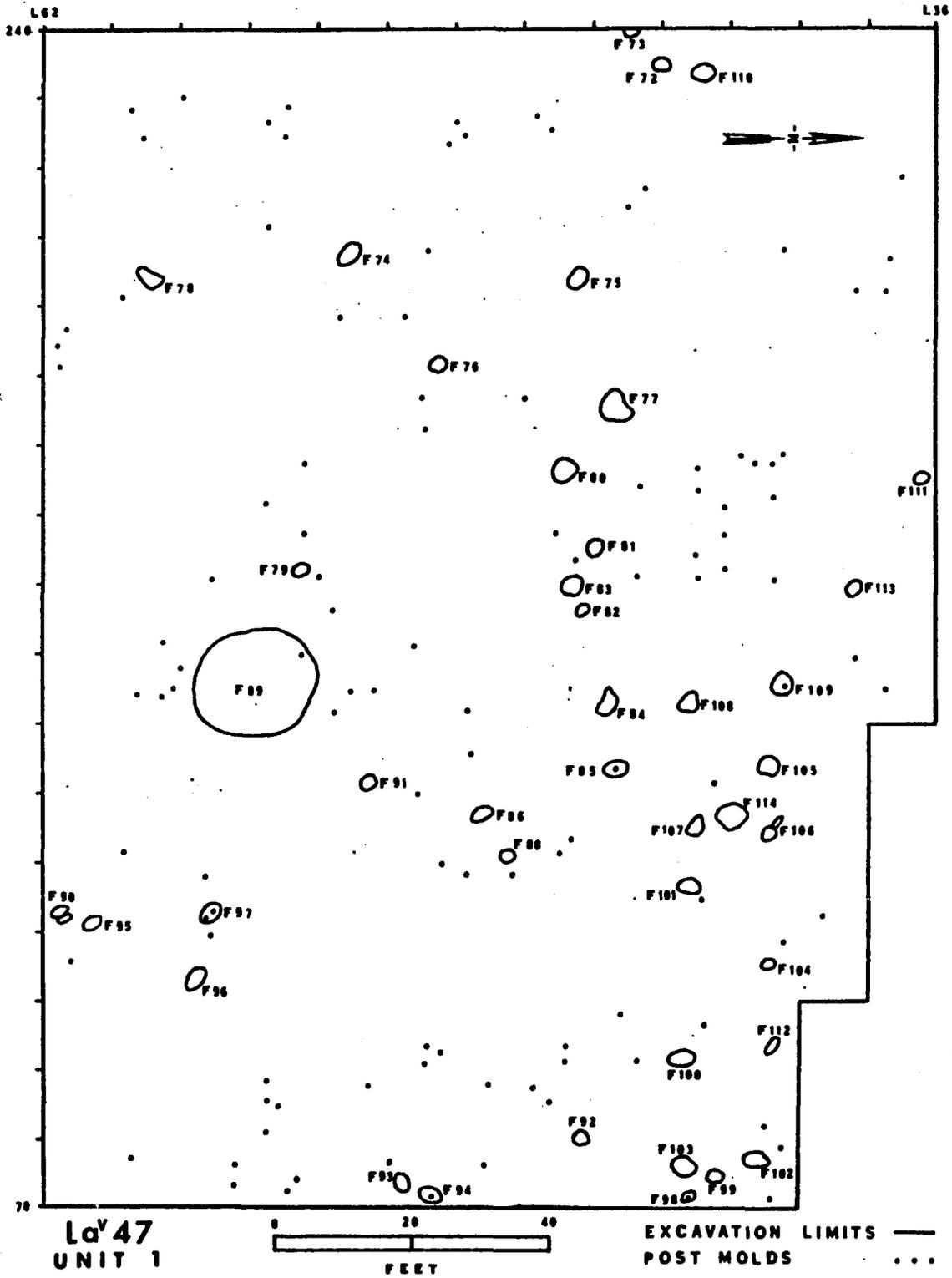
test excavated LaV47. These excavations were limited since the major portion of the site was under cultivation. Testing was confined to two 100 foot trenches, each five feet wide, in the orchard area and to between rows in the adjacent cotton field. Only one shallow pit was found in the orchard. However, four subsoil midden pits (Features 78, 79, 85, 89) containing pottery sherds and flint chips were found in the field.

In November of 1940 more extensive excavations were conducted at this site under the direction of Steve B. Wimberely. Two major areas, Units I and II, were excavated in the cotton field where Foster had previously found the four midden pits. The site was staked off into 10 foot squares, with the base line running in a north-south direction. The plow zone, yellow clay and sand, was removed by horizontal slicing to the red clay subsoil. The subsoil was subsequently cleaned with trowels to expose pit outlines. Each pit was given an individual feature number and the material collected from these features was kept separate from the material from the general excavation. Material from the plow zone was collected by ten foot squares, with the lower right stake number serving to designate the square (Figure 3 and 4).

#### Features

One of the more striking aspects of this site was the large number of features encountered in the two

Figure 3. La<sup>V</sup>47 - Unit 1, Horizontal Profile.



excavation units. A total of 110 features were recorded for these units, 72 in Unit I and 38 in Unit II. These features were divided into three types, based upon their formal, and in some cases functional, attributes.

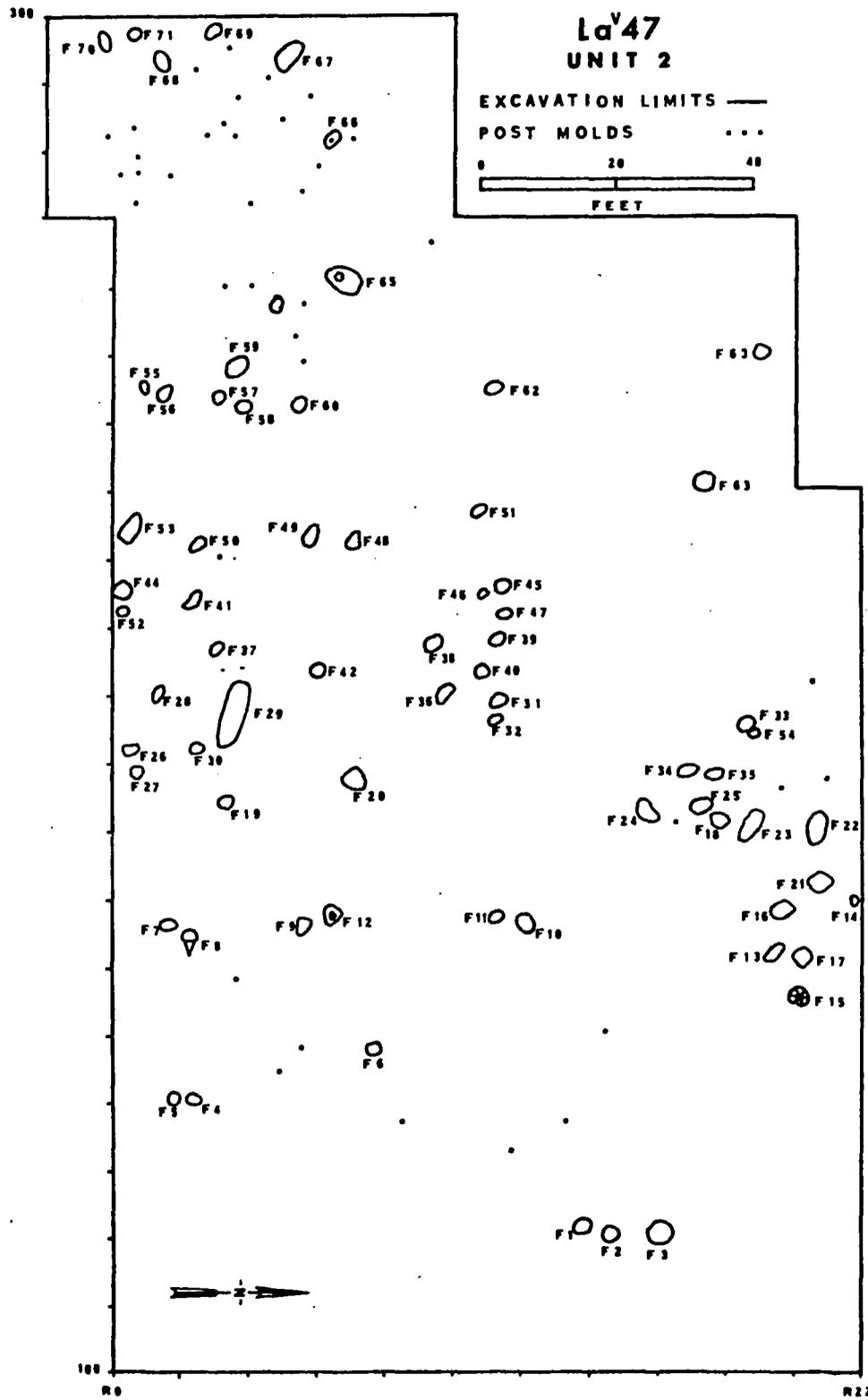
Type A - These are basin shaped midden pits, generally circular in form. The diameters of these pits range from .85 to five feet. Depth from the subsoil surface varies from .2' to 2.75'. Individual dimensions and provenience for these pits are listed in Table 8 and 9. The function of these pits is problematical. All contained varying amounts of village refuse, but it is doubtful that such a great quantity of pits would have been dug solely for garbage disposal. Although no flora remains were reported from the fill of these pits, their quantity and form suggest they were dug for storage. The excavator stated in his original progress report that remains of fiber matting were found lining several of these pits. This observation further substantiates the interpretation of these pits as storage receptacles. Midden debris and waste material probably filled these pits after they were emptied of their stored contents. The relatively large number of anvil and grinding stones recovered from the excavation units implies that nuts and/or seeds were being processed at this site and perhaps stored in these pits.

Type B - All midden pits which exhibited evidence of having had fire within them were placed into this category.

Functionally these features could have served as roasting pits or hearths. Tables 10 and 11 list their provenience and measurements. Feature 72, also placed into this type, was unusual in that it had been lined with puddled clay which had been fired to an orange hue. The pit fill contained ashes, fire cracked rock, a Copena point and village debris. Although no bone was recovered from this feature the evidence is suggestive of a crematory basin similar to types found in Copena mounds. Two other features (44 and 50) at this site contained puddled clay but apparently did not exhibit signs of having been fired.

Type C - Features which could not be placed into the two previous types were placed into this category. Two features have the appearance of having been dug for extended burials, although no evidence of actual interments was recovered. Feature 22, located in square 180R22 was 6 feet long, 3.5' wide and 1.95' deep. Midden debris, including a Provisional Type 2 projectile point, was found in the pit fill. Feature 29 was found in square 190R4 and had dimensions of 9.2' x 2.0' x .40'. Midden debris was also found in the fill of this pit. A third feature was placed into this miscellaneous category. Feature 89, located in squares 140L56 and 140L54, was, by far, the most unusual and problematical feature found at La<sup>V</sup>47. This feature, a large circular pit, was 17.5' long, 17.75' wide and 8 feet deep. The pit fill contained many fire-cracked stones although

Figure 4. La<sup>V</sup>47 - Unit 2, Horizontal Profile.



no other evidence of fire was recovered. Midden debris, including 13 projectile points (Table 12), was also found in this feature. Suggestions as to the function of this feature have ranged from pit house to barrow pit for the nearby Copena mounds, but there is little evidence to indicate why a pit of this proportion was actually dug.

Postholes - One-hundred and fifty-six postholes were found in the excavation units. These range in diameter from .4 to .9 feet and have an interior depth range from .5 to 1.4 feet. There were no apparent patterns present. Horizontal distribution of these postholes is shown in Figures 3 and 4.

Chipped Stone - Two-hundred and forty-six chipped stone artifacts, including 119 projectile points, were recovered from this site. The projectile points, whenever possible, were placed into established type categories. Specimens which did not exhibit established attribute clusters were placed into provisional types (Cambron and Hulse 1964: 117-122). Of the 119 projectile points in the study sample 83, or 69%, were placed into five of these provisional types. Provenience data for all of the projectile points is given in Table 12. Chipped stone implements, other than projectile points, were placed into eleven categories according to their formal, or apparent functional, characteristics. Functional attributes such as use or wear patterns, when present, were the deciding traits in placing a given specimen into one of these categories. In

the following type data all dimensions are maximum measurements.

Projectile Points

Type: Copena (Webb and DeJarnette 1942: 176 and Plate 207, Cambron and Hulse 1964: 25).

Number of Specimens: 7

Plate: 4

Form and Manufacture: These are medium triangular points with recurvate blades. Basal thinning is present on all of the specimens. Three specimens exhibit light basal grinding. One point (42-3) was made by retouching a prismatic blade. Three of the points (111-1, 84-1 and 58-1) have broken distal tips and were not utilized in computing mean length.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
25-9	65mm	22mm	9mm
18-3	49mm	21mm	7mm
84-1	44mm	21mm	8mm
111-1	51mm	21mm	8mm
58-1	48mm	20mm	5mm
42-3	65mm	17mm	6mm
59	61mm	19mm	9mm
Mean	60mm	21mm	8mm

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Type: Copena Triangular (Webb and DeJarnette 1942: 176  
Cambron and Hulse 1964: 26)

Number of Specimens: 7

Plate: 4

Form and Manufacture: These are medium triangular points with a parallel blade. The basal edge is straight on five of the specimens and slightly incurvate on two. Three of the points exhibit slight grinding in the hafting area. Two of these specimens (19-1 and 25-7) have been made from prismatic blades. Two points (13-2 and 11-2) have broken distal tips.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
11-2	44mm	21mm	6mm
13-2	44mm	23mm	6mm
25-11	48mm	25mm	7mm
25-3	51mm	22mm	7mm
19-1	47mm	22mm	7mm
6-1; 7-2	62mm	25mm	9mm
25-7	51mm	21mm	8mm
Mean	51mm	23mm	7mm

Comments: The base of one of these specimens (6-1) was recovered from Feature 2, while the matching distal portion (7-2) was found in Feature 3. Both features are Type A midden pits located in Square 120R16.

Type: Greenville (Kneberg 1957; Lewis and Kneberg 1957;  
Cambron and Hulse 1964: 73).

Number of Specimens: 3

Plate: 4

Form and Manufacture: In recent years as more specimens have become available for study it has proven to be increasingly difficult to differentiate between the Greenville and Camp Creek projectile point types. For the purpose of this study the Greenville type was classified as having a parallel blade and a straight base as major attributes while the Camp Creek type has a straight to slightly incurvate blade and an incurvate (ca. 2mm) base. Specimen 25-1 has a broken distal tip.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
25-1	37mm	18mm	8mm
56-2	40mm	17mm	8mm
20-1	40mm	19mm	7mm
Mean	40mm	18mm	8mm

Type: Camp Creek (Kneberg 1956:23; Cambron and Hule  
1964:17).

Number of Specimens: 3

Plate: 4

Form and Manufacture: Medium triangular points with a straight to slightly incurvate blade and an incurvate base.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
8-3	32mm	22mm	8mm
92-18	29mm	20mm	7mm
92-43	34mm	22mm	6mm
Mean	33mm	21mm	7mm

Type: Candy Creek (Kneberg, 1956; Cambron and Hulse 1964:18).

Number of Specimens: 5

Plate: 4

Form and Manufacture: This projectile point type is characterized by a trianguloid, nearly lanceolate shape. The base is straight to incurvate and usually exhibits some thinning. Three of these specimens have prominent basal auricles or tangs. Specimen 61 is a basal fragment.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
58-2	46mm	16mm	7mm
50-2	44mm	20mm	6mm
41-1	51mm	18mm	8mm
16	44mm	20mm	6mm
61	-	20mm	6mm
Mean	46mm	18mm	7mm

Type: Bakers Creek (DeJarnette, et al, 1962:47; Cambron and Hulse 1964:8)

Number of Specimens: 2

Plate: 4

Form and Manufacture: These are medium expanded-stem points. Both specimens exhibit fine retouching. Both have fractured distal tips.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
19-5	49mm	25mm	6mm
92-4	41mm	21mm	7mm

Type: Wade (Cambron and Hulse 1960; 1964: 110)

Number of Specimens: 3

Plate: 4

Form and Manufacture: These are medium stemmed points with exaggerated shoulder barbs. One of the specimens has a slightly excurvate base while the other two have incurvate bases. Specimen 91-2 has a broken distal tip.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
82	43mm	37mm	7mm
91-2	38mm	29mm	6mm
91-3	41mm	33mm	7mm
Mean	42mm	33mm	7mm

Comments: Specimens 91-2 and 91-3 were recovered from the same square in Unit I. Specimen 82 was recovered during the general excavation of Unit II.

Type: Pine Tree (Cambron 1957; Cambron and Hulse 1964:95).

Number of Specimens: 1

Plate: 4

Form and Manufacture: This is a medium side-notched point with expanding shoulders and a serrated blade. The basal edge has been thinned and exhibits slight grinding.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
15	54mm	30mm	7mm

Type: Flint Creek (Cambron 1958; Cambron and Hulse 1964:44).

Number: 1

Plate: 4

Form and Manufacture: This specimen is a medium straight-stemmed point with a serrated blade. The basal edge is unfinished with rind still attached.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
92-2	54mm	20mm	10mm

Type: Swan Lake (Cambron and Hulse 1960; 1964:108)

Number: 1

Plate: Not Illustrated

Form and Manufacture: This is a small, thick, side-notched point. The distal tip is missing.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
92-48	-	15mm	6mm

Type: Motley (Ford, Phillips and Haag 1955).

Number: 1

Plate: Not Illustrated

Form and Manufacture: This is a crudely chipped medium stemmed point with deep side notches and a straight basal edge.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
92-6	47mm	20mm	6mm

Type: Eva (Kneberg 1956; Cambron and Hulse 1964: 78).

Number: 1

Plate: 5

Form and Manufacture: This is a medium stemmed point with basal notches. The stem has been fractured. The blade is finely serrated.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
25-8	66mm	34mm	10mm

Type: Lecroy (Kneberg 1956)

Number of Specimens: 1

Plate: 4

Form and Manufacture: This is a medium bifurcated-stemmed point. The blade is straight and serrated.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
62	38mm	22mm	7mm

Plate 4. La<sup>V</sup>47 - Projectile Points. Top Row, left to right, Copena (1,2), Copena Triangular (3,4). Middle Row, Greenville (1), Camp Creek (2), Candy Creek (3), Bakers Creek (4). Bottom Row, Wade (1), Flint Creek (2), LeCroy (3), Pine Tree (4).



PROVISIONAL TYPES: (Cambron and Hulse 1964:117-122).

PROVISIONAL TYPE 1: There were 40 specimens which exhibited similar characteristics but could not be placed into any established category or type. These are small to large points with straight stems. Many have been fractured with only the basal portion remaining. The range of dimensions for the measurable specimens is as follows: Length: 50-70 mm; Width: 26-47mm; Thickness: 6-12mm.

Plate: 5

PROVISIONAL TYPE 2: There were 26 basal fragments with expanded stems which could not be placed into a known type. These fragments have the following measurable proportions: Width: Range - 26-47mm; Thickness: Range - 6-12mm.

Plate:

PROVISIONAL TYPE 4: Four broken basal fragments were placed in this category. These are stemmed points with barbed shoulders.

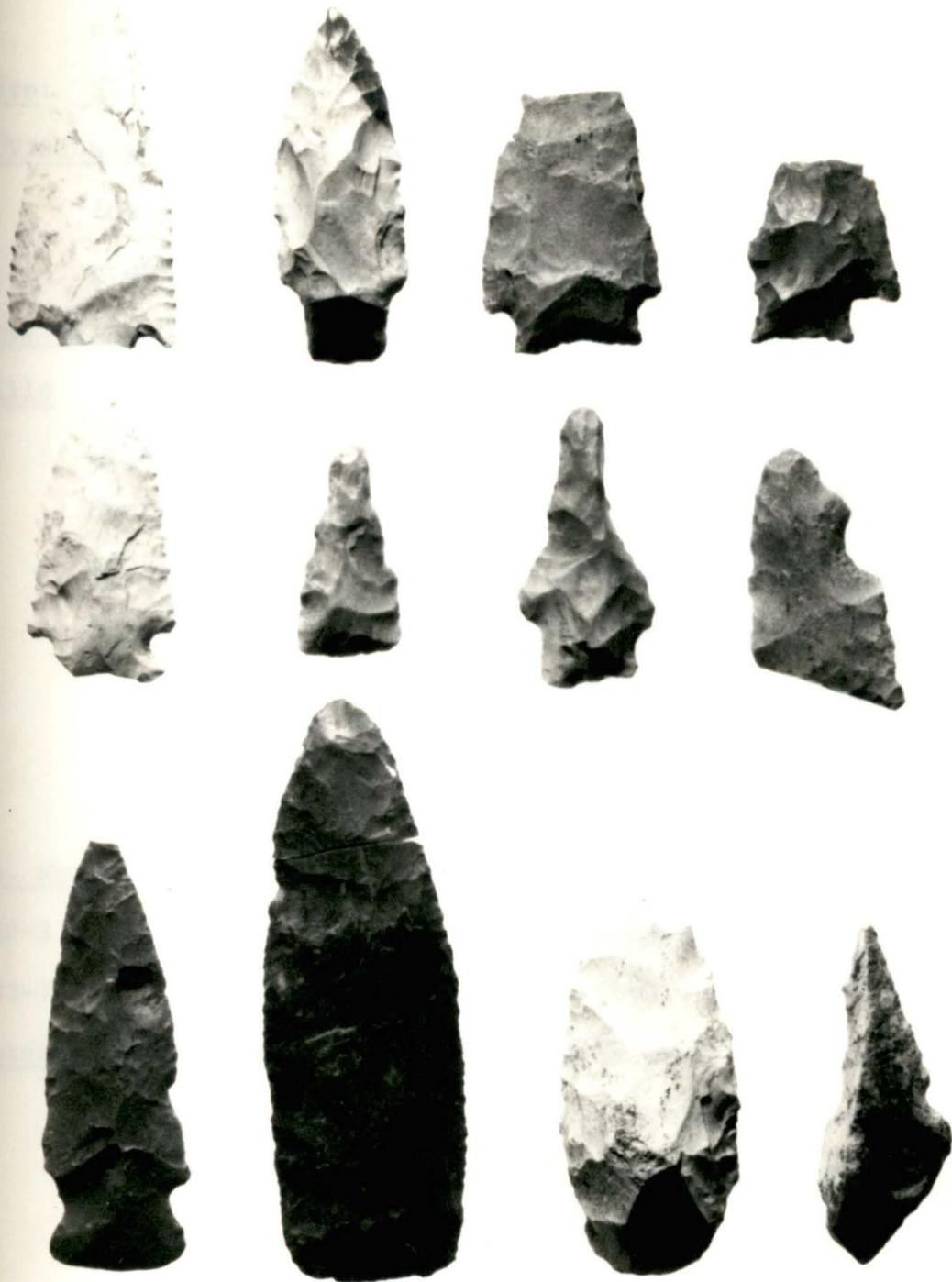
Plate: 5

PROVISIONAL TYPE 5: Two specimens were placed into this provision type. Both are medium stemmed points with finely serrated blades. The complete specimen measured 50mm x 27mm x 7mm.

Plate: 5

PROVISIONAL TYPE 9: Two side notched points that could not

Plate 5. La<sup>V</sup>47 - Projectile Points. Top Row, left to right, Eva (1), Provisional Type 1 (2), Provisional Type 3 (3), Provisional Type 4 (4). Middle Row, Provisional Type 5 (1), Drills (2,3), Spokeshave (4). Bottom Row, Provisional Type 9 (1), Triangular Biface Blade (2), Uniface Side Scraper (3), Uniface Borer (4).



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be identified were placed into this provisional type. They have the following dimensions: 47mm x 12mm x 6mm and 78mm x 25mm x 8mm.

Plate: 5

PROVISIONAL TYPE 11: One broken triangular base was placed into this category. It had the following measurable proportions: Width: 35mm, Thickness: 9mm.

Other Chipped Stone Artifacts

Drills (Plate: 5): There were five examples of this tool type recovered from La<sup>V</sup>47. Two of the specimens are broken bits, exhibiting wear and some polish on the edges. Another specimen (22-17) is a side notched base fragment similar in form to the Swan Lake projectile point. There are two complete specimen; one has a stemmed base (22-3), the other (92-7) a triangular base. They have the following dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
22-3	45mm	23mm	9mm
92-7	39mm	19mm	7mm

Spokeshaves (Plate: 5): There were only two examples of this type of tool recovered. Both are reworked projectile point fragments. Each specimen has a concave scraper edge measuring 12mm in length and 4mm deep. The working edge on both specimens is well worn from use.

Biface Blades - Triangular (Plate: 5): There were seven

complete and fragmentary blades which were placed into this category. One complete blade is 106mm in length, 33mm wide and 8mm thick. The base of this blade was recovered during the excavation of square 100R18 while the distal tip came from square 100R8. All of these blades have a straight to rounded base and an acute distal end.

Residual Biface Blade Fragments: Nine bifacially chipped specimens that were functionally unidentifiable were placed into this category. They could possibly represent point blanks or unfinished triangular biface blades. Basal fragments have straight to rounded edges.

Uniface Side Scrapers (Plate: 5): Six specimens have been placed into this class. These specimens range from 40 to 75mm in length, 16 to 35mm in width and 8 to 20mm in thickness. All examples have been worked on two edges and have a rounded distal end.

Uniface Borer (Plate: 5): One example of this tool was recovered at La<sup>V</sup>47. The dimensions of this specimen are 63mm x 22mm x 10mm. Lateral edges exhibit fine chipping with two deep chips taken out on each side 32mm from the distal end. The distal tip is worn from use.

Utilized Flakes: There were five flakes or chips in the study sample which showed signs of having been

utilized, probably as knives or scrapers.

Cores: Six cores were recovered from La<sup>V</sup>47. All are small and some have edges battered from use after the core itself was exhausted.

Unidentified Worked Flint: Fifty-seven specimens were placed into this category. They appear to be fragmentary projectile points, blade and core fragments, or waste spalls that lack diagnostic form or wear patterns.

Digging Implements: Twenty-eight fragmentary and complete digging implements were recovered from this site. Five are limestone while the remaining 23 examples are made from greenstone. The more complete specimens range from 110-170mm in length, 65-130mm in width, and 20-35mm in thickness. All examples were shaped by rough chipping. All basal working edges exhibit wear and in some cases polish from use.

Chopper: One crudely shaped tool was recovered which has a battered cutting edge. This example might be a tool blank which was discarded and later utilized. Dimensions of this specimen are: 124mm x 64mm x 24mm.

Ground and Pecked Stone Artifacts:

Celts: Ten ground and polished celt fragments were recovered from this site. All examples were made of

greenstone. Measurable dimensions of these specimens are: Width, range at bit end: 50-55mm; thickness, range of bit end: 14-20mm.

Hammerstones: There were 11 waterworn pebbles recovered that exhibit battering on one or more edges, probably from use as hammers.

Anvil Stones: Eleven medium to large river cobbles were recovered which were battered on one or more edges and had shallow circular depressions, usually on both sides. These are commonly referred to as nutting-stones.

Grinding Stones: Seven river cobbles were recovered which have one or both flat sides heavily worn by grinding. This wear pattern suggests that they were utilized as grinding stones or mullers.

Sandstone Cubicle: One piece of sandstone was recovered which had the shape of a small cubicle. The six facets were all ground. The sides of the specimen were all approximately 34mm wide.

Ceramic Material: A total of 394 potsherds were recovered from La<sup>V</sup>47. All of these specimens were recovered from midden pit fill. Their distribution is shown in Table 13. Of this study sample, 392 sherds were limestone tempered, while only two were clay-grit ware. These sherds were placed into the following established types:

Limestone-Tempered Pottery:Mulberry Creek Plain (Haag 1939:9; Heimlich 1952:15-17):

This is the predominant pottery type at this site, totalling 190 sherds or 47% of the total sherd count. Ten rim sherds and three podal supports were recovered. All sherds are badly leached, a typical characteristic of limestone-tempered ware. All rim sherds exhibit a simple lip treatment; two are flattened and the remainder have a slight overhang or "burr." Only one rim sherd has an overhang which has been folded towards the interior of the vessel. This flaring rim was common on both bowls and jars. The podal supports are 23-25mm in length from the vessel base and range from 23-31mm in width at the base.

Pickwick Complicated Stamped (Haag 1939:14; Heimlich

1952:18): There were 100 sherds recovered from this site which had a curvilinear stamped finish. This type constitutes 25% of the total pottery sample from this site. There was only one rim sherd recovered, a straight unmodified rim with a rounded lip.

Wright Check Stamped (Haag 1939:12; Heimlich 1952: 17-18):

There were 71 sherds of this type recovered from La<sup>V</sup>47. This constitutes 19% of the total sherd count. There were no rim sherds in this sample.

Some body sherds exhibit a partial smoothing over of the check stamping. One check stamped podal support was recovered. It is 26mm long and 24mm wide at the base of the vessel. Several types of grids are present in this sample, square, rectangular, and romboidal are predominate.

Long Branch Fabric Marked (Haag 1939:10; Heimlich 1952:17):

Fabric marking occurred on 22 sherds or 6% of the pottery sample. One rim sherd was recovered, with a thin flattened lip, indicating a small mouth vessel, probably a jar.

Bluff Creek Simple Stamped (Haag 1939:12; Heimlich 1952:18):

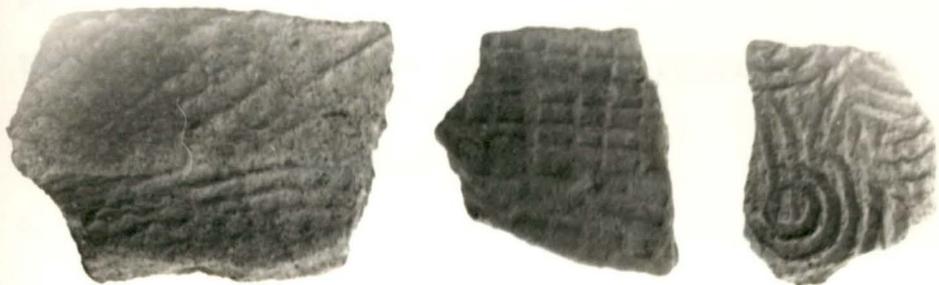
Eight sherds with simple stamping were recovered from the features at this site. They constitute 2% of the pottery sample. All specimens represent body sherds and exhibit parallel longitudinal grooves impressed into the vessel from a die, probably a carved paddle. The lands formed by these grooves range from 1-3mm in width. It is possible that these sherds actually represent portions of complicated stamped vessels. A common motif on this finish type is a curvilinear design developing into parallel lines.

Clay-Grit Tempered Pottery:

Wheeler Check Stamped (Haag 1939:16; Heimlich 1952:22):

Two clay-grit sherds with a check stamped finish

Plate 6. Middle Woodland Ceramic Types. Top row,  
left to right, Wright Check Stamped  
(1,2), Pickwick Complicated Stamped (3).  
Middle Row, Bluff Creek Simple Stamped  
(1), Flint River Cord Marked (2,3).  
Bottom Row, Mulberry Creek Plain (1,2,3).



found at La<sup>V</sup>47 have been recovered from both pre-shell mound and shell mound contexts and can probably be assigned to an Early-Middle Archaic horizon (Lewis and Lewis 1961; Cambron and Hulse 1964:A-35). Also, in all probability some of the stemmed points placed into the provisional categories could conceivably date to a Middle-Late Archaic occupation.

Socio-economic organization during the Archaic period was apparently not very complex, probably nomadic or semi-nomadic bands based upon a generalized hunting and foraging economy. The knoll upon which La<sup>V</sup>47 is located, like hundreds of others in the valley area, probably served as an over-night or temporary camp for some of these groups.

Early Woodland - Aside from some of the above mentioned provisional stemmed points which could be assigned to either a Late Archaic or Early Woodland context little other data indicate an occupation of La<sup>V</sup>47 during this time. The Wade, Flint Creek and Motley projectile points recovered from this site have considerable temporal depth and could be placed into either Early or Middle Woodland contexts. Early Woodland fiber or sand tempered pottery was not present at this site. Long Branch Fabric Marked pottery, an early limestone tempered ware, appears in the Tennessee Valley ceramic sequence in the middle to late stages of the Early Woodland period, and was present at La<sup>V</sup>47 as a minority type (6%).

However, information obtained from other sites in the valley suggest that this type also has considerable time depth and was made in decreasing quantities through the Middle Woodland period (Heimlich 1952:37).

Middle Woodland - The major occupation at La<sup>V</sup>47 appears to date to a Middle Woodland horizon. This observation is substantiated by the presence of limestone tempered stamped pottery, medium triangular projectile points and greenstone celts and digging implements.

Although the pottery sample for La<sup>V</sup>47 is rather small, the proportionately high percentage of Pickwick Complicated Stamped sherds is nevertheless very significant. Two motifs are common to this ceramic type. The first is a curvilinear design, common to all sherds of this type from La<sup>V</sup>47, which is apparently related to Early-Middle Swift Creek. This type appeared earlier in the valley sequence than did the second type which bears an angular motif related to the Napier series. Although there are no radiocarbon dates for any of the carved-paddle stamped types in this portion of the valley, absolute dates on similar ceramic series in adjacent areas suggest that the curvilinear complicated stamped pottery diffused into this region at some point in the first three centuries A.D., while Wright Check Stamped ware seems to have entered the area one to two centuries earlier (Faulkner and Graham 1966a:114-118).

The ceramic complex and lithic assemblage from La<sup>V</sup>47

were reported by the excavator to have been recovered from La<sup>V</sup>47. These were not in the sample studied and no details concerning them are given in the original field or laboratory reports.

#### Summary

Although all stratigraphy had been destroyed at La<sup>V</sup>47 by cultivation and subsequent erosion, occupations during two major cultural periods, the Archaic and Woodland, can be inferred from the artifactual inventory. A relative chronology can be constructed for these occupations by comparing the lithic and ceramic material from La<sup>V</sup>47 to sequences previously established for the Tennessee Valley area of Northern Alabama (Griffin 1939; Haag 1942; Heimlich 1952; DeJarnette, Cambron and Kurjack 1962).

Archaic - The relative sparseness of material which can be assigned to this period indicates that this site was only intermittantly occupied during this time. The Early Archaic is represented at La<sup>V</sup>47 by two of the recognizable projectile point types, the Lecroy and Pine Tree. Both of these types have been recovered in association with Early Archaic material at several sites in the Tennessee Valley, including the stratified Stanfield-Worley and Flint Creek rock shelters (DeJarnette, Cambron and Kurjack 1962; Cambron and Waters 1961). Eva projectile points similar to the one

compares favorably with other Middle Woodland sites or components recently excavated in the Tennessee Valley region. The Lay site in the upper Gunter'sville Basin (Faulkner and Graham 1966b), the Moccasin Bend site in Hamilton County, Tennessee (Graham 1964) and the Brickyard Site in the Tims Ford Reservoir (Butler 1968) all share many traits and are probably more or less culturally contemporaneous. However, a more striking similarity exists between the cultural assemblages recovered from La<sup>V</sup>47 and Lu<sup>V</sup>65, the Wright Village in the Pickwick Basin (Webb and DeJarnette 1942: 173-178). Both of these sites are small villages located well back from the Tennessee River. At both the Wright Village and La<sup>V</sup>47, Long Branch Fabric Marked pottery is a minority type while plain and carved paddle stamped finishes are dominant. Medium triangular points and blades were abundant at the former and constituted a significant percentage at the latter. Other similarities include stone-digging implements and celts, stemmed projectile points, a large number of basin shaped pits presumably used for storage of vegetal foods, absence or near absence of village burials and pairs of Copena mounds located nearby. These last two traits are extremely significant in the context of this paper. At the Wright village only two burials, both flexed, were found (Webb and DeJarnette 1942: 175), while no actual interments were reported from La<sup>V</sup>47. The presence of abundant midden pits and postholes at both

sites suggest that they served as permanent or semi-permanent base camps occupied for extended periods of time. In light of this observation it seems unusual that more burials were not found. Although other mortuary practices could account for this phenomenon, it would not appear too presumptuous to suggest that these villagers constructed the nearby mounds for interment of their dead.

This comparative treatment also indicates that the Wright Village and La<sup>V</sup>47 were functionally similar settlement types. Their location in the hinterlands back from the river and the common abundance of grinding and anvil stones and midden pits suggest that the major activity at these sites was the storage and preparation of nuts or seed foods.

In summary, the data presented in this report indicates that La<sup>V</sup>47 was a seasonal camp for an economic procurement system centered around the harvesting of plant foods. The presence of projectile points and other chipped stone tools implies that activities such as hunting and butchering also constituted a major economic endeavor. Seasonality data at this site, though tenuous at best, indicates an early-fall through winter occupation. The presence of two Copena mounds in close proximity, plus the Middle Woodland placement of the cultural material from this site, strongly suggest that La<sup>V</sup>47, and Lu<sup>V</sup>65, are Copena Villages.

Late Woodland - Mississippian - Few artifacts from this site indicate any occupation during these periods. Two clay-grit check stamped sherds were reported to have been recovered during the excavation, but these were not present in the study sample. These sherds could be assigned to either a Middle or Late Woodland context. Similarly, one incised shell tempered sherd was reported from this site but could not be located in the study sample. No diagnostic projectile points from these periods were found. If these specimens were present at La<sup>V</sup>47 they probably represent the material remains of temporary encampments.

TABLE 8 MIDDEN PITS - UNIT I - TYPE A

<u>FEATURE NO.</u>	<u>PROVENIENCE</u>	<u>MEASUREMENTS</u>	<u>INTERIOR DEPTH</u>
73	230L44	2.1x2.1 feet	.50 feet
74	200L52	2.7x2.4	.70
75	200L46	3.7x3.5	2.20
77	180L44	4.7x3.5	1.00
78	200L58	4.4x2.5	1.55
79	160L54	2.8x2.5	2.70
82	150L46	1.6x1.6	.75
83	160L46	2.5x2.5	.75
84	140L44	3.4x2.9	1.25
85	130L44	1.8x1.6	1.30
86	12048	2.1x2.1	1.40
87	130L60	2.0x1.8	1.55
88	120L48	1.8x1.8	.60
90	110L60	2.4x1.7	.90
91	130L52	2.0x1.9	2.00
94	70L50	1.8x1.1	.45
95	110L60	1.8x1.2	.55
96	100L56	3.7x1.7	1.00
98	70L42	1.8x1.0	.70
99	70L42	1.8x1.5	1.50
100	90L42	2.2x2.2	.55
101	110L42	2.4x2.4	.95
102	70L40	2.0x1.8	.65
104	100L40	1.2x1.2	.75
105	130L40	3.3x3.3	2.10
106	120L40	4.0x1.7	.95
107	120L42	2.2x1.7	.85
108	140L42	2.7x2.1	.55
109	140L40	2.7x1.9	.80
110	230L42	3.0x2.8	.85

TABLE 9 MIDDEN PITS - UNIT II - TYPE A

<u>FEATURE NO.</u>	<u>PROVENIENCE</u>	<u>MEASUREMENTS</u>	<u>INTERIOR DEPTH</u>
1	120R14	2.0x2.0 feet	.75 feet
2	120R16	2.5x2.5	.85
3	120R16	3.0x3.0	.95
4	140R4	1.5x1.5	.25
5	140R2	1.6x1.8	.20
6	140R8	1.4x1.5	1.25
7	160R2	1.4x .85	.45
8	160R4	2.9x1.6	.60
9	160R6	1.6x1.3	.50
10	160R12	2.5x2.2	.30
11	160R12	1.3x1.3	.75
12	160R8	2.1x2.1	1.15
13	160R20	2.4x2.4	.80
14	160R22	1.1x1.0	1.00
15	150R22	1.7x1.7	1.20
16	160R20	2.1x2.1	2.75
17	160R22	2.8x1.9	1.65
18	180R18	2.2x2.2	2.25
19	180R4	1.3x1.3	1.85
20	180R8	2.8x2.8	.80
21	170R22	3.1x3.1	1.90
23	180R18	4.7x2.4	.55
24	180R16	2.8x2.0	1.30
25	180R18	2.4x2.4	1.30
26	190R2	1.0x1.0	.80
27	180R2	1.2x1.2	.80
28	200R2	1.3x1.0	.75
30	190R3	1.0x1.7	.95
31	190R12	1.5x1.0	1.40
32	190R12	1.1x .90	1.55
33	190R20	1.0x .80	.55
34	180R18	1.6x1.3	1.90
35	180R18	1.5x1.0	3.05
36	200R10	2.5x1.1	.95
37	200R4	1.7x1.1	1.10
38	200R10	1.5x1.3	.40
39	200R12	1.3x1.3	.80
40	200R12	1.1x1.1	.90
41	210R4	1.2x1.2	.95
43	220R6	1.3x .70	1.10
44	210R2	2.4x1.9	1.30
45	210R12	1.1x1.1	.95
46	210R12	1.2x1.3	.90
47	210R12	1.1x .80	.80
48	220R8	1.4x .80	.90

TABLE 9 Continued

<u>FEATURE NO.</u>	<u>PROVENIENCE</u>	<u>MEASUREMENTS</u>	<u>INTERIOR DEPTH</u>
49	220R6	1.9x1.7	.55
50	220R4	1.2x1.2	.75
51	220R12	1.5x1.2	.70
52	210R2	.70x.70	.95
54	190R20	.80x.70	.45
55	240R2	1.4x1.2	.85
56	240R2	1.1x1.1	.80
57	240R4	1.5x.90	.70
58	240R4	.9x.9	.75
59	240R4	1.8x1.0	.50
60	240R6	1.5x1.3	.55
61	250R6	1.6x.80	1.10
62	240R12	1.1x1.1	.60
63	230R18	2.5x2.5	.75
64	250R20	1.45x1.5	1.25
65	260R8	4.1x2.1	1.40
66	280R8	1.7x1.4	.70
67	290R6	4.5x3.1	1.30
68	290R2	2.1x1.3	1.65
70	290-0	2.4x1.0	1.20
71	290R2	1.6x1.2	1.80

TABLE 10 MIDDEN PITS - UNIT I - TYPE B

<u>FEATURE NO.</u>	<u>PROVENIENCE</u>	<u>MEASUREMENTS</u>	<u>INTERIOR DEPTH</u>
76	190L50	2.3x2.3 feet	1.45 feet
80	170L46	2.6x2.3	1.25
81	160L44	1.8x1.8	.85
92	80L46	1.9x2.0	.90
93	70L50	2.6x1.5	.70
97	110L56	2.6x2.6	.75
103	70L42	2.6x2.6	2.55
72	230L44	2.6x2.6	1.10

TABLE 11 MIDDEN PITS - UNIT II - TYPE B

<u>FEATURE NO.</u>	<u>PROVENIENCE</u>	<u>MEASUREMENTS</u>	<u>INTERIOR DEPTH</u>
42	200R8	1.8x1.5 feet	.90 feet
53	220R2	3.0x2.1	2.20
69	290R4	1.8x1.9	1.65

TABLE 12. IA<sup>V</sup>47 - PROJECTILE POINT DISTRIBUTION.

SURFACE- PLOWZONE	COPENA	COPENA TRIANGULAR	GREENVILLE	CAMP CREEK	CANDY CREEK	BAKERS CREEK	WADE	PINE TREE	FLINT CREEK	SWAN LAKE	MOTLEY	EVA	LECROY	PROVISIONAL TYPE ONE	PROVISIONAL TYPE TWO	PROVISIONAL TYPE FOUR	PROVISIONAL TYPE FIVE	PROVISIONAL TYPE NINE	TOTAL
FEATURE 2	4	1	1	2	4	1	3		1	1	1		1	35	19	2	1	1	77
3		1																	1
16				1											1				2
21														1					1
22														1					1
23		1													1				2
25		1																	1
53								1											1
54																			1
72	1													1					2
76		1												1					3
79	1																		1
80			1														1		2
89														8	5				13
103														1					1
110	1	3	1									1		1		1	1	1	9
TOTAL	7	7	3	3	5	2	3	1	1	1	1	1	1	49	26	4	2	2	119

TABLE 13. LA<sup>V</sup>47.

FEATURE	MULBERRY CREEK PLAIN	PICKWICK COMPLICATED STAMPED	WRIGHT CHECK STAMPED	LONG BRANCH FABRIC MARKED	BLUFF CREEK SIMPLE STAMPED	TOTAL
1	-	-	4			4
2	1	1	-			2
3	52	15	18	1		86
13	2	3	1			6
17	2	-	-			2
18	8	16	10			34
22	35	5	8	2		50
23	2	1				3
27	5	6	-		1	12
29	10	3	3			16
32	1		1			2
48	2	-				2
53	4	-	2			6
64	10	-	-	5		15
65	5	3	1	1		10
72	22	17	5	2	8	54
99	3	-	6			9
105	11	16	2	11		40
110	15	14	10			39
<b>TOTAL</b>	<b>190</b>	<b>100</b>	<b>71</b>	<b>22</b>	<b>9</b>	<b>392</b>

#### D. THE TERRY MOUND (La<sup>0</sup>43)

The Terry Mound was one of a pair of small burial mounds located on a low knoll near the Fox Creek in Lawrence County, Alabama. The two mounds were separated by a section line road and a distance of fifty feet. A village site, La<sup>V</sup>47, was located 350 feet to the east on another low rise. All three of these sites lay near a spur of Jackson Mountain, four miles south of the Tennessee River. La<sup>0</sup>43, the eastern-most mound, was situated on land owned by Anderson P. Terry. It was approximately 60 feet in diameter and 8 feet high. The excavator, James R. Foster, reported that the mound had previously been "investigated" by a local youth, Mr. Joe Wheeler Plant, who had riddled the mound with pits and tunnels in search of treasure. Mr. Foster stated in his final report that "Mr. Plant visited the site shortly after excavation was begun and when asked what he had found in his digging, replied that he had found some 'green tomahawks, some copper beads and some heavy stuff like lead.'" This information indicated to Mr. Foster that this mound belonged to the Copena complex and since "most Copena artifacts lie deep, it was felt that the site was worth excavating."

#### Excavation

A W.P.A. crew began work at La<sup>0</sup>43 on May 5, 1940. The site was first cleared of brush and small trees and then staked off into a five-foot grid system. The base

line of the grid system (Figure 6) was laid down on the southern side of the mound. Since the work crew was rather large, excavations were begun on both the southern and northern sides of the mound.

The method of excavation utilized at this site was horizontal slicing. Six inch arbitrary levels were excavated in each lateral trench until the red subsoil was reached. Features encountered in the mound fill were excavated as soon as their limits could be determined. Subsoil pits were outlined and left for later excavation. All features were recorded on standardized data forms. Vertical profiles were drawn as each trench was excavated and a horizontal floor plan was drawn at the completion of the excavation (Figure 6).

#### Stratigraphy

Underlying the mound structure were two subsoil strata. The upper layer consisted of a white sandy clay. The lower strata was made up of red clay interspersed with particles of jasper. The mound was constructed almost entirely of the upper white sandy clay. Although occasional streaks of red clay were found in the mound fill, there were no other apparent indications of structural stratigraphy.

#### Features

Fifteen features were recorded for this site. Twelve of these features appear to be burial pits, while two others

were recent intrusions. The remaining feature was a large mass of yellow clay found in the mound fill. A brief description of these features is given in Table 14.

Artifacts:

Galena - Nodules of lead sulphide were the most common exotic material used as burial goods at this site. Of the 13 pieces of galena found at this site, 6 were associated with burials. The remaining 7 specimens were found apparently unassociated in the mound fill. All specimens exhibited grinding. The most common shape is a disc or sphere. Two galena beads were among these specimens. The first, F. S. 10, was found associated with Feature 1. It was recovered from the chest area of the burial. It was 23mm in length and 16mm in diameter. The bead had been drilled from both sides. F. S. 12, the second galena bead, was found in Feature 3 near the waist area of the burial. It was disc shaped, 24mm in diameter and 16mm in width, and had been drilled from both sides. The other galena artifacts ranged from a diameter of 26mm to over 100mm and 20mm to 73mm in thickness. Weight ranged from 100 grams to slightly over 8 pounds. Total weight for the galena recovered from La<sup>0</sup>43 was approximately 24 pounds.

Greenstone - Artifacts made of greenstone were the most numerous types of field specimens recovered from this mound. Eleven greenstone digging implements and four greenstone celts were recovered during the excavation.

Digging Implements - All of the greenstone digging implements

Table 14. 43. Feature Data.

Feature Number	Definition	Pit Dimensions	Associations/Comments
1	Burial Pit	Length: 8.0' Width: 2.4'	Rectangular pit in mound fill. Fragmentary remains of an adult of undetermined sex (Burial 1). Skull fragments were found near the eastern end of the pit. A galena bead (F.S. 10) was found near the chest area.
2	Burial Pit	Length: 7.7' Width: 2.6'	Rectangular pit in mound fill. Skeletal remains fragmentary (Burial 2). A galena nodule (F.S. 11) was recovered from this pit.
3	Burial Pit	Length: 6.8' Width: 2.0'	A rectangular pit in mound fill. Skull fragments and teeth caps of an adult of undetermined sex (Burial 3). A galena bead (F.S. 12) was found near the waist and a string of copper beads were recovered from the foot (eastern end) of the pit.
4	Burial Pit	Length: 6.2' Width: 2.2'	A rectangular pit in mound fill. A blue clay head rest found in the northwestern end of the pit. Also sheets of charred bark were recovered from the bottom of the pit and were apparently used as a lining.

Table 14. Continued.

Feature Number	Definition	Pit Dimensions	Associations/Comments
5	Burial Pit	Length: 6.6' Width: 2.0'	A rectangular pit in the subsoil. This subsoil burial pit was rimmed with red clay. Apparently when the pit was dug the fill was scattered around the pit area while clean white clay was used to refill the burial pit. The layer of upper white subsoil was quite thick between the lower red subsoil layer and the scattered lense of red pit fill. This would suggest that a low mound was already in existence before this burial was dug.
6	Clay Mass		A large mass of yellow foreign clay. A limestone tempered podal support was found in this clay mass. Also a rectangular pillow-like mass of blue clay was found by the yellow clay.
7	Burial Pit	Length: 6.0' Width: 2.5'	No associations.
8	Burial Pit	Length: 7.3' Width: 2.1'	No associations.

Table 14. Continued.

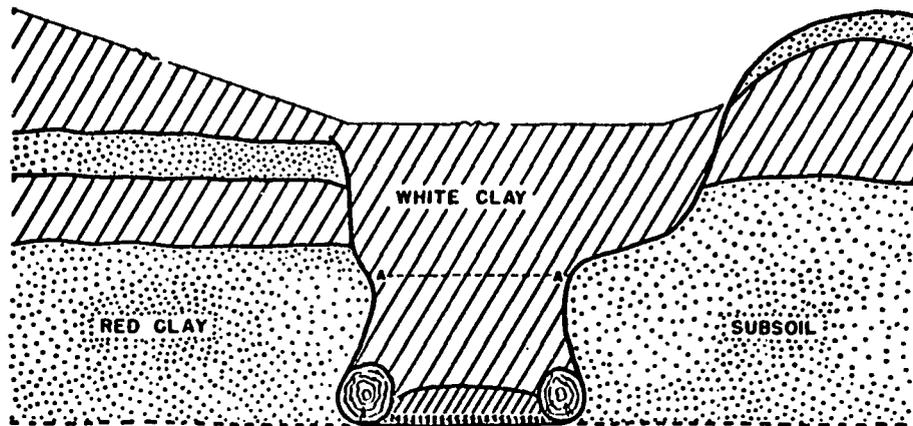
Feature Number	Definition	Pit Dimensions	Associations/Comments
9	Burial Pit	Length: 6.6' Width: 2.2'	No associations.
10	Burial Pit	Length: 9.1' Width: 2.5'	<p>Rectangular subsoil burial pit. F.S. 41 a large galena nodule and F.S. 42 a greenstone celt were recovered from the bottom of this pit. Since this was the most elaborately prepared burial found in La°43 it warrants more detailed description. The preparation of this burial pit included the following steps: First, a long pit was dug into the red clay subsoil. The red clay pit fill was removed and carried away from the pit area. The pit was then lined with fiber matting or bark and two long logs were placed parallel to each other on each side of the pit. Next a pillow of foreign blue clay was prepared at the northern end of the pit. The body was then placed into the grave. The grave goods were placed into the pit and the entire body was encased in a foreign puddled clay. Finally clean white sandy clay was used to fill up the remainder of the pit.</p>

Table 14. Continued.

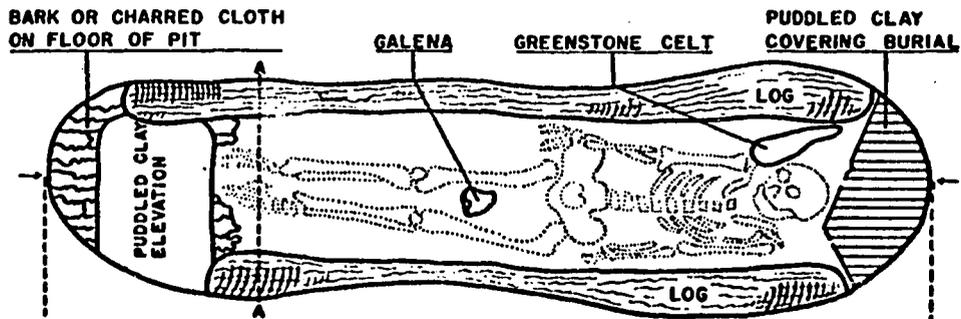
Feature Number	Definition	Pit Dimensions	Associations/Comments
11	Recent Intrusive Pit		This pit was dug by a treasure seeker. It was put down near the center of the mound and apparently penetrated several burials. Fragmentary skeletal material was found at the bottom of the pit.
12	Burial Pit	Length: 7.5' Width: 2.7'	Rectangular burial pit in mound fill. A greenstone celt (F.S. 29) was found near one end of the pit.
13	Burial Pit	Length: 7.8' Width: 2.8'	Rectangular burial pit in the subsoil. A pillow of foreign blue clay was found near the southeastern end of the pit.
14	Recent Intrusive Pit		This was another pit dug by a treasure seeker. Fragmentary skeletal remains were found in the bottom of this pit.
15	Burial Pit	Length: 6.5' Width: 2.2'	Rectangular pit in the mound fill. Long bone fragments were found in the western end of the pit. A copper reel shaped gorget (F.S. 40) was found near the chest area and fiber matting or cloth was recovered from under the gorget.

Figure 5. La<sup>43</sup> Feature No. 10. (From Andersen n.d.)

LA° 43  
FEATURE NO. 10



PROFILE SHOWING END VIEW OF BURIAL PIT  
AND STRATIGRAPHY



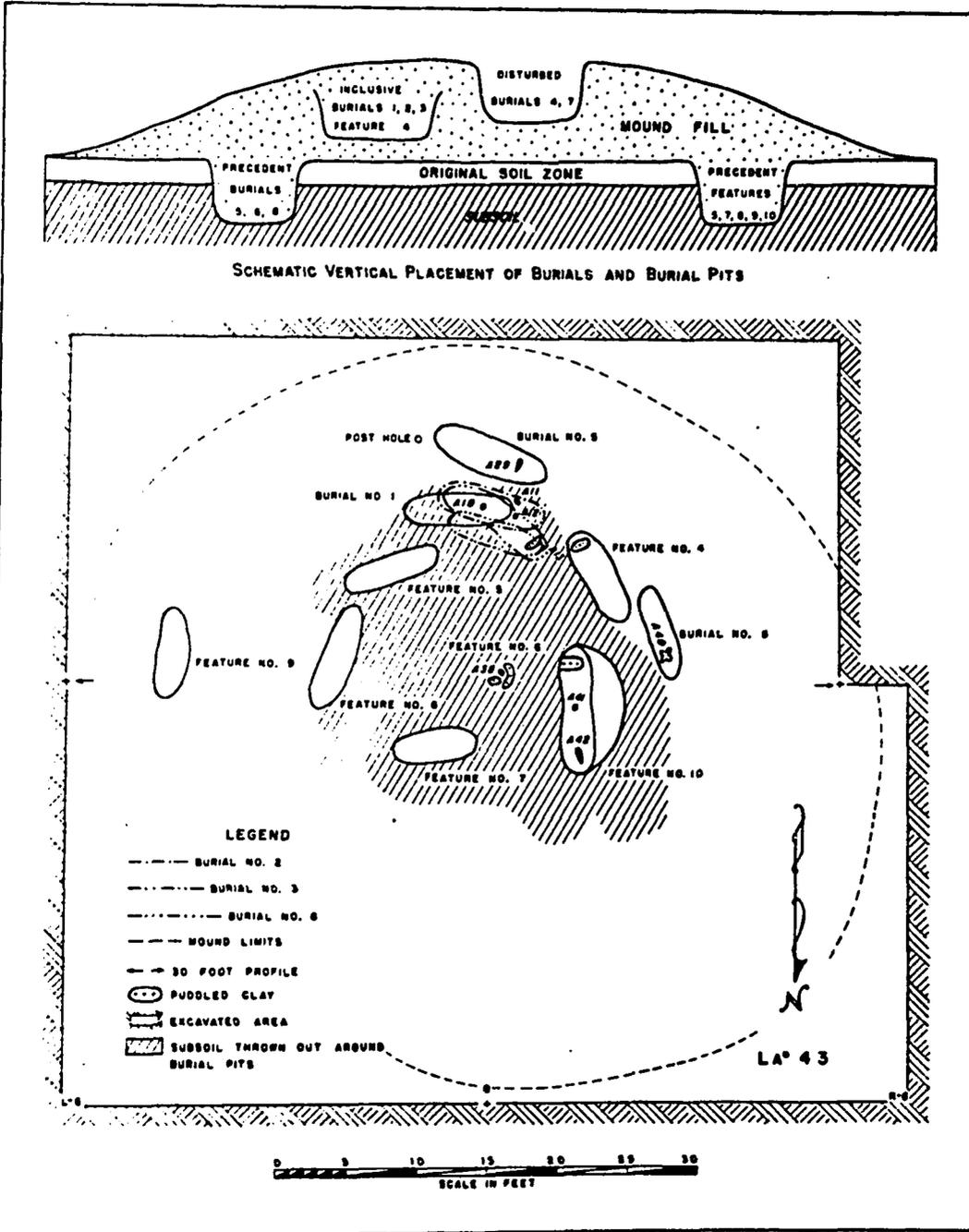
BURIAL PLAN



LONGITUDINAL CROSS SECTION



Figure 6. LA<sup>o</sup>43 - Horizontal Profile (From Anderson n.d.)



were recovered from the mound fill. None were found in association with a burial. Table 15 gives the dimensions of these specimens. Individual specimens range from 240mm in length to 480mm, width 115-175mm, thickness 22 to 31mm. Average dimensions are: length 347mm, width 135mm, thickness 28mm. The specimens had parallel blade edges and round proximal and distal ends. They were apparently shaped by percussion flaking. All specimens with the exception of F.S. 24, had heavy wear on the distal or working end. F. S. 24 was apparently a quarry blank. It had been crudely shaped into the standard form but was much larger than the other examples. There was no wear on any of its surfaces. These formal attributes suggest that the greenstone digging implements were roughed out at the quarry site and finished elsewhere. It is possible that these blanks were traded and only worked into final form when they were to be utilized. All specimens which exhibit wear on the distal end also show slight wear on the blade edges and none on the proximal end. This would indicate that they were hand held and that the blade edges were utilized to rake away the loosened soil.

Celts - Four greenstone celts were recovered from La<sup>o</sup>43. All are of the narrow polled celt variety. They are all ground and polished. All examples are biconvex in cross section. None of the specimens show any wear. However, the proximal end on all specimens is rough. Although this could have resulted from battering, it is probable that these

portions were not as finely finished as the remaining sections. Two of these celts were found in burial association. Specimen 29 was recovered from Feature 5. It was 240mm in length, 59mm in width and 45mm thick. Specimen 42 was found in Feature Nine in association with a galena nodule. This specimen had dimensions of 254mm x 55mm x 42mm. The remaining two celts were found in the mound fill and have the following measurements: 217mm x 63mm x 35mm, 197mm x 46mm x 38mm.

Copper: Artifacts made of copper were fairly abundant burial associations in this mound. A small copper reel shaped gorget was found in Feature 8. It was found near the chest area of the burial. The reel arms form a square 84mm on a side. The reel is made from a beaten copper sheet 2mm thick. An earspool was found in Feature 30. The outer section was cymbal shaped, 33mm in diameter and 1mm thick. The inner section was a roughly circular flat disc 28mm in diameter. Connecting these two components was a small tube of rolled copper. The tube was 3mm long and had been made by wrapping the copper sheet around a small stick. Portions of the stick had been preserved by the copper salts. A large flat bar bead or gorget was recovered from the mound fill in square 15-0. It was made by rolling a thick rectangular sheet of copper. The specimen is 51mm in length, 21mm wide and 14mm thick. The copper sheet was 3-4mm thick. In Feature One a string of tubular copper beads was found.

Seventeen copper beads were found on a preserved string of woven fiber. The beads are made from rolled sheet copper and graduate in size from 4mm in length to 20mm. The larger beads were placed in the center of the string. Another cache of copper beads was found in Feature Three. There were four beads, ranging in length from 5 to 6mm in length and 5-6mm in diameter. These beads were barreled shape.

Stone Pipes: Two sandstone elbow pipes were recovered from La<sup>O</sup>43. Only one of the two specimens was present in the study sample. This artifact, F. S. 19, was found in Feature One. The pipe is made from a light brown sandstone. Bowl height is 108 mm, outside diameter 61mm, inside diameter 45mm. The stem is 113mm in length, outside diameter 48mm, inside 25mm. The base of the stem has been flattened.

Miscellaneous Stone Artifacts:

Stemmed Scraper - A Provisional Type 2, expanded base projectile point, was recovered from the mound fill. The basal edge is incurvate and belveled. The distal end has been retouched into a rounded scraper edge. The form of this specimen is much like the Benton projectile point type. It is likely that this specimen represents a chance intrusion.

Quartzite River Pebble - A flat, disc-shaped river worn pebble was recovered from the mound fill. A portion of the artifact edge had been ground and pecked. The specimen is 100mm in diameter and 30mm thick.

Ceramic Material: Four ceramic specimens were reported to have been found in La<sup>O</sup>43. All specimens were limestone tempered and had a plain finish. Three body sherds were found in the mound fill. A podal

support was found in Feature Fifteen, a mass of foreign yellow clay found in the mound fill.

#### SUMMARY

Although stratigraphic evidence is lacking, it appears that the Terry Mound was built over an extended period of time and in successive stages. This conclusion is supported by the presence of both primary and secondary burials in the mound. Five subsoil burials were found during the excavations. These primary burials form a rough circle around the center of the mound. Since skeletal remains were found in an intrusive pit in the center of the mound it is likely that there had originally been one or more burials in this portion of the mound also.

Of the five sub-soil burials only one contained burial goods. This burial pit, Feature Ten, was the most elaborately prepared interment at this site. It is possible that this feature represents the initial burial on the mound site. A low mantle of white clay was constructed over the burial area after the subsoil burial pits were dug. The secondary burials were apparently added to the primary mound as subsequent deaths occurred. It appears that more fill was added as each additional burial was made until the mound reached its maximum proportions.

The presence of a large number of greenstone digging implements recovered from the mound fill indicates that these implements were left at the mound site after they had been used to prepare the burial pits and dig mound fill. In conclusion, it appears evident that La<sup>O</sup>43 is

TABLE 15. LA<sup>o</sup>43 - GREENSTONE DIGGING IMPLEMENTS -  
DIMENSIONS .

<u>F.S.</u>	<u>LENGTH</u>	<u>WIDTH</u>	<u>THICKNESS</u>
2	280mm	117mm	30mm
3	338mm	142mm	30mm
4	354mm	139mm	30mm
5	315mm	127mm	27mm
8	398mm	139mm	27mm
9	240mm	115mm	31mm
17	336mm	138mm	26mm
24	480mm	175mm	30mm
32	360mm	121mm	22mm
36	285mm	126mm	29mm
37	430mm	144mm	26mm
<b>AVERAGE:</b>	347mm	135mm	28mm
<b>RANGE:</b>	240-480mm	115-175mm	22-31mm

a component of the Copena burial complex.

#### E. THE SIMS MOUND (La<sup>O</sup>44)

This was a small earthen burial mound located in Lawrence County on land owned by the Edward Sims family. The Sims Mound lay fifty feet west of mound La<sup>O</sup>43. Both mounds were located on a low rise some 350 feet east of La<sup>V</sup>47, a small habitation site. The Sims Mound was approximately 40 feet in diameter and eight feet high. Mr. Joe Wheeler Plant, a local boy who looted La<sup>O</sup>43, had also dug for treasure at this site. He had put down three pits, the largest of which was 6 feet in diameter and 6 feet deep, through the center of the mound.

#### Excavation

This site was excavated by W.P.A. labor under the direction of James R. Foster. Excavation was begun on May 20, 1940 and the site was backfilled on June 5, 1940. The mound was first cleared of brush and then staked off into five foot squares. This grid system ran parallel to that at La<sup>O</sup>43 and both sites were tied into the same arbitrary bench mark. The site was excavated by both the horizontal and vertical slicing techniques. A five foot wide trench was opened up on the southern side of the mound and as excavations progressed surplus workers began another trench along the northern boundary. Each five foot trench was taken down to the subsoil. When the subsoil strata had been reached the exposed profile was drawn. Then the next trench was excavated and the procedure duplicated. Thus with trenches opened up on both sides of the mound, the two crews literally dug

towards each other until only a five foot wide balk was left. This last remaining vestage of the mound was then removed and the subsoil burials, which had previously been outlined, were plotted on a horizontal profile sheet and excavated.

### Stratigraphy

The area upon which the mound was located had two subsoil strata. The lower layer was composed of a bright red clay mixed with jasper particles. The upper layer consisted of white sandy clay, averaging one foot in thickness. The mound itself was constructed almost entirely of this upper white sandy clay. Subsoil burial pits which penetrated both the white and red clay strata were refilled with clean white sand. The original red clay pit fill was either carried away or in some cases spread around the pit. According to the excavator the construction layers in the mound were not distinct, but graded imperceptibly from one into another.

### Features

A total of ten features were recorded for this site. Eight of these appear to have been burial pits. The two remaining features are a recent intrusive pit and a fired area encountered in the mound fill. These features can be summarized as follows:

#### TABLE 16

##### Feature One:

Definition - Burial Pit

Provenience - Mound Fill

Pit Shape - Rectangular

Pit Dimensions - Length: 5.1; Width: 2.5 feet

Pit Orientation - East - West

TABLE 16. Continued

**Skeletal Material - Fragmentary Skull**

**Associations** - A greenstone celt (F.S. 21) was found lying across the torso. F.S. 22, a greenstone digging implement was found at the top of the skull and F.S. 23, a galena nodule was recovered from near the area of the left shoulder.

**Comments** - This was apparently the burial of a young child placed into the pit in an extended position. The head of the burial was located in the western end of the pit. A large limestone slab had been placed over the skull.

**Feature Two:**

**Definition** - Recent Intrusive Pit.

**Skeletal Material** - Several skull fragments

**Comments** - This pit was dug by a local boy in search of treasure.

It was put down in the center of the mound and extended to the subsoil. The pit was 6 feet in diameter and approximately 6 feet deep. Fragmentary skeletal remains were found in the bottom of this pit.

**Feature Three:**

**Definition** - Burial Pit

**Provenience** - Subsoil

**Pit Shape** - Rectangular

**Pit Dimensions** - Length: 8.0 feet; Width 2.2 feet

**Pit Orientation** - East-West

**Skeletal Material** - Teeth Caps

## TABLE 16. Continued

Associations - F.S. 8, a string of copper beads, were found near the head.

Comments - Tooth size and wear on the teeth caps suggest that this burial was an adult probably placed into the pit in an extended position. The head was located in the eastern end of the pit.

Feature Four:

Definition - Burial Pit

Provenience - Mound Fill

Pit Shape - Rectanguloid

Pit Dimensions - Length: 3.2 feet; Width 1.8 feet

Pit Orientation - East-West

Skeletal Material - Teeth Caps

Associations - None

Comments - The skeletal remains and pit size suggest an extended child burial. The body was placed into the pit with the head to the east.

Feature Five:

Definition - Fired Area

Provenience - Mound Fill, 5.0 feet below Stake 25C1

Dimensions - Length: 2.0 feet; Width 1.2 feet

Comments - This feature was found in the mound fill and suggests that a fire had been built on an old mound surface.

## TABLE 16 Continued

Feature Six:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 7.0 feet; Width: 1.6 feet

Pit Orientation - North-South

Skeletal Material - None

Associations - A greenstone celt, F.S. 10 was found at the north end  
of the pit.

Comments - Although no skeletal material was recovered from this feature,  
the pit size suggests an adult extended burial.

Feature Seven:

Definition - Burial Pit

Provenience - Mound Fill

Pit Shape - Rectangular

Pit Dimensions - Length: 4.2 feet; Width: 2.0 feet

Pit Orientation - North-South

Skeletal Material - None

Associations - A cache of 8 galena nodules (F.S. 13-20) was found  
scattered in the grave pit.

Comments - Pit size indicates a child burial.

Feature Eight:

Definition - Burial Pit

Provenience - Subsoil

## TABLE 16. Continued

Pit Shape - Rectangular

Pit Dimensions - Length: 6.2 feet; Width: 2.2 feet

Pit Orientation - East-West

Skeletal Material - None

Associations - None

Comments - Pit size suggests an adult burial.

Feature Nine:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 6.4 feet; Width: 1.9 feet

Pit Orientation - East-West

Skeletal Material - None

Associations - None

Comments - Pit size indicates an adult burial.

Feature Ten:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 3.6 feet; Width: 2.1 feet

Pit Orientation - Northwest-Southeast

Skeletal Material - None

Associations - A cache of 6 galena pellets (F.S. 25) was found in the  
center of the pit.

## TABLE 16. Continued

Comments - Pit size suggests an infant burial.

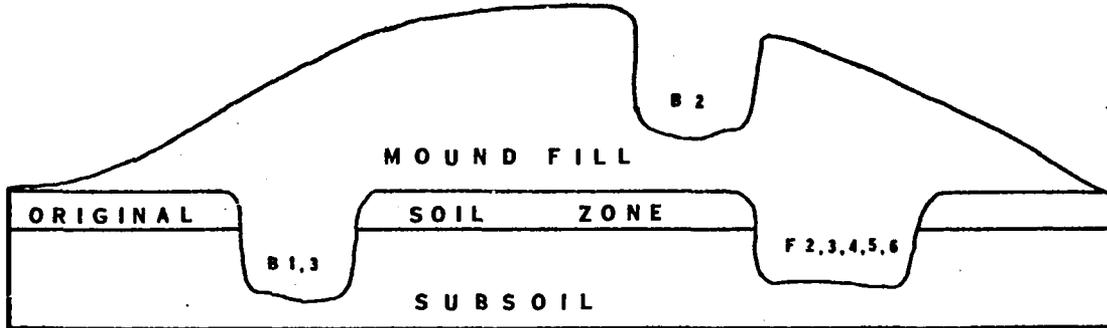
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Artifacts:

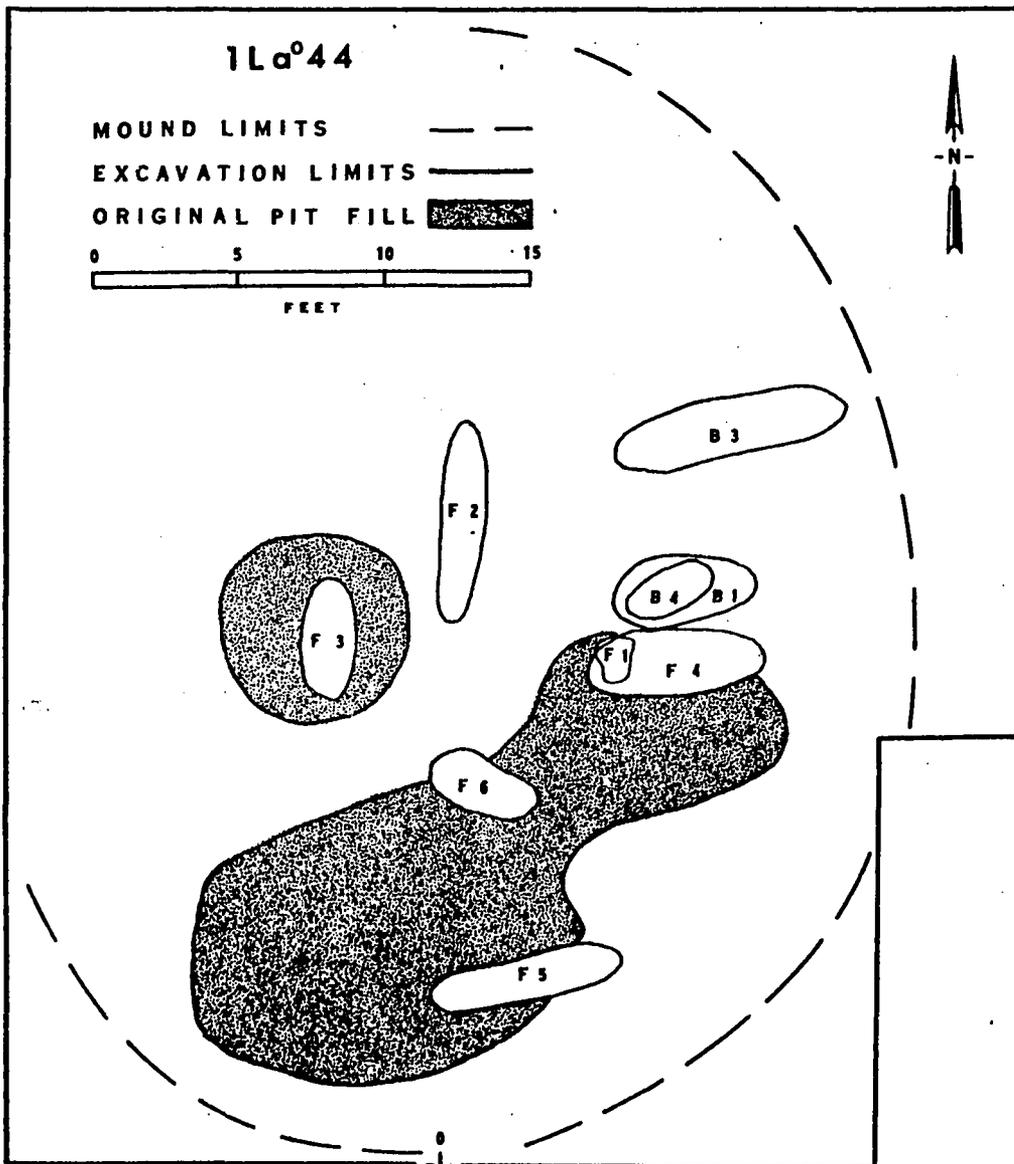
Galena - The most numerous exotic artifacts found in La<sup>0</sup>44 were galena nodules. Of the 25 field specimens recorded for this site twelve were nodules or caches of galena. Three burial pits contained the bulk of this material. Feature One contained a large galena nodule in addition to a greenstone celt and digging implement. In Feature Seven, 8 galena nodules, ranging from 26 x 20 x 15mm to 60 x 56 x 40mm, were recovered. Feature Ten contained six galena nodules. The remaining specimens were recovered from the mound fill. All of the nodules exhibited evidence of heavy grinding. The most common shape of specimens is a sphere or disc. It is interesting that all three burial pits in which galena was found were small. This suggests that galena was a common item in child burials, at least at this particular site.

Greenstone - The second most popular type of exotic material utilized to manufacture artifacts recovered from this mound was greenstone. Two types of greenstone artifacts were recovered, celts and digging implements. Two celts were found in association with burials. The celt found in Feature One had dimensions of 244 x 77 x 42mm, while the celt recovered from Feature Six measured 291 x 68 x 44mm. Both were of the polled variety, having long exaggerated proximal ends. Nine greenstone digging implements were recovered from the mound.

Figure 7.  $\text{La}^{140}$  - Horizontal Profile (After Andersen n.d.).



SCHEMATIC VERTICAL PLACEMENT OF BURIALS



HORIZONTAL FLOOR PLAN

Only one specimen was found in association with a burial (Feature One). All other specimens were found "floating" in the mound fill. Although these specimens were not available for measurements, artifacts of this type from other mounds indicate they were fairly uniform in size. The one specimen for which measurements are available has dimensions of 342 x 118 x 31mm. This specimen was heavily worn on the distal end. The lateral blade edges exhibited light wear while the proximal end had not been used.

Copper - One string of 13 copper beads was recovered in burial association (Feature Three) at La<sup>O</sup>44. The beads were cylindrical in shape and had been made by rolling thin sheets of copper. The beads ranged in size from 5 to 9mm in diameter and 4 to 17mm long. The larger beads were placed in the center of the string and bead size graduated downward from the center. A fragment of two-strand twisted cord was preserved by the copper salts. The beads were found near the head of the burial and probably represent a necklace.

#### SUMMARY

The Sims Mound, like its companion structure, La<sup>O</sup>43, appears to be a small Copena mound built in successive stages over an unknown period of time. Both primary and secondary burial pits were found within the mound. Although the significance, if any, is not known, both La<sup>O</sup>43 and La<sup>O</sup>44, were apparently built over five subsoil burials.

While all burial pits at La<sup>O</sup>43 were rather long (6 to 9 feet),

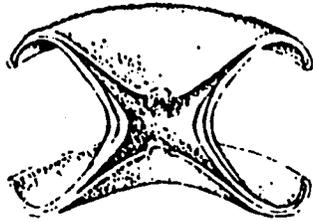
five of the nine burial pits at La<sup>O</sup>44 were under six feet (2.0 to 5.1 feet) in length. This suggests that La<sup>O</sup>44 was primarily utilized for the interment of infants or children while only adult burials were placed into La<sup>O</sup>43. Since the physical remains of these burials were fragmentary or completely absent this apparent segregation by age group is difficult to interpret or substantiate.

A large number of galena nodules and greenstone spades were recovered in the fill of both mounds without burial association. It is possible that these artifacts were stored in the mounds for further use or that since these objects had been utilized as part of the burial ceremony cultural ideology prohibited them from being carried back to the village site.

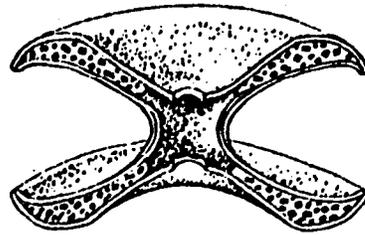
It is apparent that unlike the burial ceremonialism of earlier or later cultures Copena ritual ideology prescribed spacial segregation of the living and dead. Archaic burials have been recovered from living areas at several shell mound sites and a common Mississippian practice was to bury the dead under the house floor while the structure was still being occupied by the family group. All known Copena mounds are located well away from contemporary village sites. While typical Copena burial goods, such as copper reels, earspools and galena nodules, are abundant at mound sites these objects have never been recovered from habitation sites. This data leads to the conclusion that some sort of negative ideology concerning the relationship of the living to the dead was an integral part of Copena ritual.

It has been stated earlier in this paper that the nearby habitation site (La<sup>V</sup>47) was the probable village of the builders of these two mounds. This statement is substantiated by the presence of

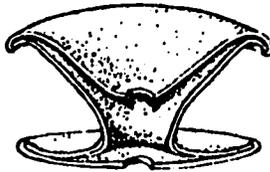
**Figure 8. Copper Earspool Types (From Andersen n.d.).**



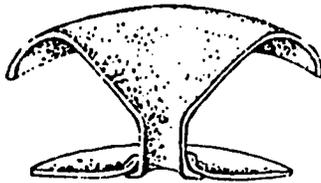
A



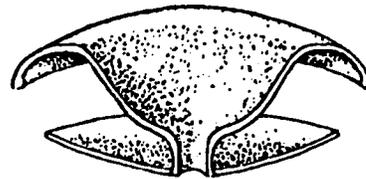
B



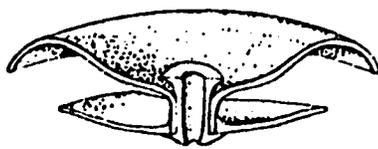
C



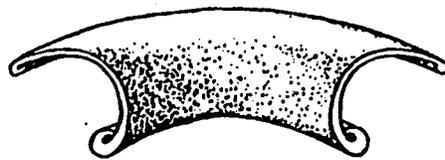
D



E



F



G

diagnostic Copena traits at all three sites. Characteristic greenstone slab spades and polled celts were common to the three sites. Puddled clay was utilized at both the village and mound sites. Limestone tempered sherds were recovered from the mound fill at La<sup>O</sup>44 and constitute the predominant temper group at La<sup>V</sup>47 (99.8%). Copena projectile points, while not present at either La<sup>O</sup>43 or 44, are often found in association with Copena burials and were present in significant numbers at La<sup>V</sup>47.

Although La<sup>V</sup>47 appears to have been a semi-permanent or permanent base camp occupied for an extended period of time, no burials were recovered from within the village confines. A comparatively similar situation has been noted for the Wright Village site in Lauderdale County. A pair of Copena mounds (Lu<sup>O</sup>63 and 64) were located near this village also.

In conclusion, the comparative data presented in this summation indicates that La<sup>V</sup>47, La<sup>O</sup>43, and La<sup>O</sup>44 can be considered to be contemporaneous archaeological units. It also appears probable that these three sites were settled and constructed by the same cultural group.

#### F. THE BASDEN MOUNDS (La<sup>O</sup>45 and La<sup>O</sup>46)

While excavations were proceeding at La<sup>O</sup>43 and La<sup>O</sup>44 the presence of another pair of small conical mounds in the vicinity was brought to the attention of the field personnel. These two mounds were located on the property of the Basden family, some three miles to the west. These new sites were visited in May, 1940 and since they too appeared to be foci of the Copena complex excavations were planned.

Both mounds were situated atop low knolls 100 yards apart. La<sup>0</sup>45, the larger of the two, was approximately 50 feet in diameter and 4 feet high. La<sup>0</sup>46 was 40 feet in diameter and 3 feet high. Treasure seekers had pitted both structures. Three large pits had been put down through the center of La<sup>0</sup>45 and a trench 2 yards wide was dug through La<sup>0</sup>46.

#### Excavation

Both sites were excavated in the usual W.P.A. manner. The mounds were cleared of brush and then staked off into five-foot grid systems. Six inch arbitrary levels were excavated in each trench until the subsoil was reached. At that time profiles were drawn and the process repeated. Since both mounds were relatively small and work crews large, excavations were begun on opposite sides of the mounds. The laborers in each trench dug towards the center of the mound until a five foot wide balk remained. This balk was then removed, profiles were drawn, and the sites were backfilled. Work on these two mounds was conducted during the first two weeks of June 1940 under the direction of James R. Foster.

#### Stratigraphy

The knolls upon which the mounds were located had two subsoil strata, an upper white sandy clay and a lower red clay. Both mounds were constructed of the upper white clay soil. Much of the internal structure of these mounds was destroyed by recent intrusive pits.

#### 1. La<sup>0</sup>45

#### Features

Thirteen features were recorded for La<sup>O</sup>45. Nine of these appear to be burials or burial pits, two are caches of artifacts and the remaining feature is a charred sheet of bark. Individual feature data is summarized in Table 17.

TABLE 17

Feature One:

Definition - Large Elbow Pipe

Provenience - Mound Fill, 1.5' below stake 25R2

Comments - This large steatite elbow pipe was found unassociated in the mound fill. There were no signs of a pit present. However, a small lens of red clay subsoil was found .6 feet away. The exterior of the pipe bowl had been subjected to fire. It is, therefore, possible that this pipe represents the material remains of a crematory burial.

Feature Two:

Definition - Sheet of Charred Bark

Provenience - Mound Fill, 2.5' below stake 25R2.

Comments - This sheet of bark was one foot square and .2 feet thick.

Although there were no apparent associations, the close proximity of this feature to Feature One might be of significance. The elbow pipe was found one foot above the sheet of bark. Both had been subjected to fire. This suggests they may have served as components of a crematory basin. The bark could have served as a lining for the basin and the elbow pipe as a burial offering.

TABLE 17. Continued

Feature Three:

Definition - Burial Pit

Provenience - Mound Fill

Pit Shape - Rectangular

Pit Dimensions - Length: 8.2 feet; Width: 2.0 feet

Pit Orientation - E - W

Skeletal Material - None

Associations - The pit bottom was lined with both red and blue clay.

Clay pillows, of the same material, were found at both ends of the burial pit.

Feature Four:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 10 feet; Width: 4 feet

Pit Orientation - North-South

Skeletal Material - None

Associations - Three long strips of foreign clay were found in the bottom of this pit. Pit size suggests a multiple burial.

Feature Five:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 6.0'; Width: 1.5'

## TABLE 17. Continued

Pit Orientation - NW - SE

Skeletal Material - None

Associations - Pillows made of a foreign gray clay were found at each end of the pit.

Feature Six:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 6.6 feet; Width: 2.7 feet

Pit Orientation - East-West

Skeletal Material - None

Associations - F. S. 3, a greenstone celt, was recovered from the eastern end of the burial pit.

Feature Seven:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

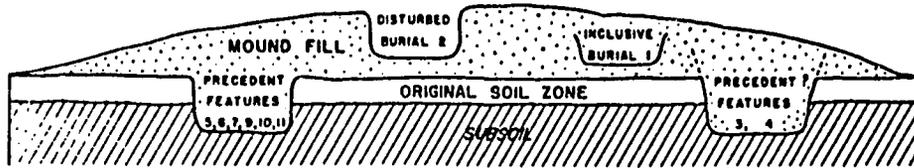
Pit Dimensions - Length: 6.8 feet; Width: 2.0'

Pit Orientation - NE-SW

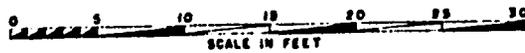
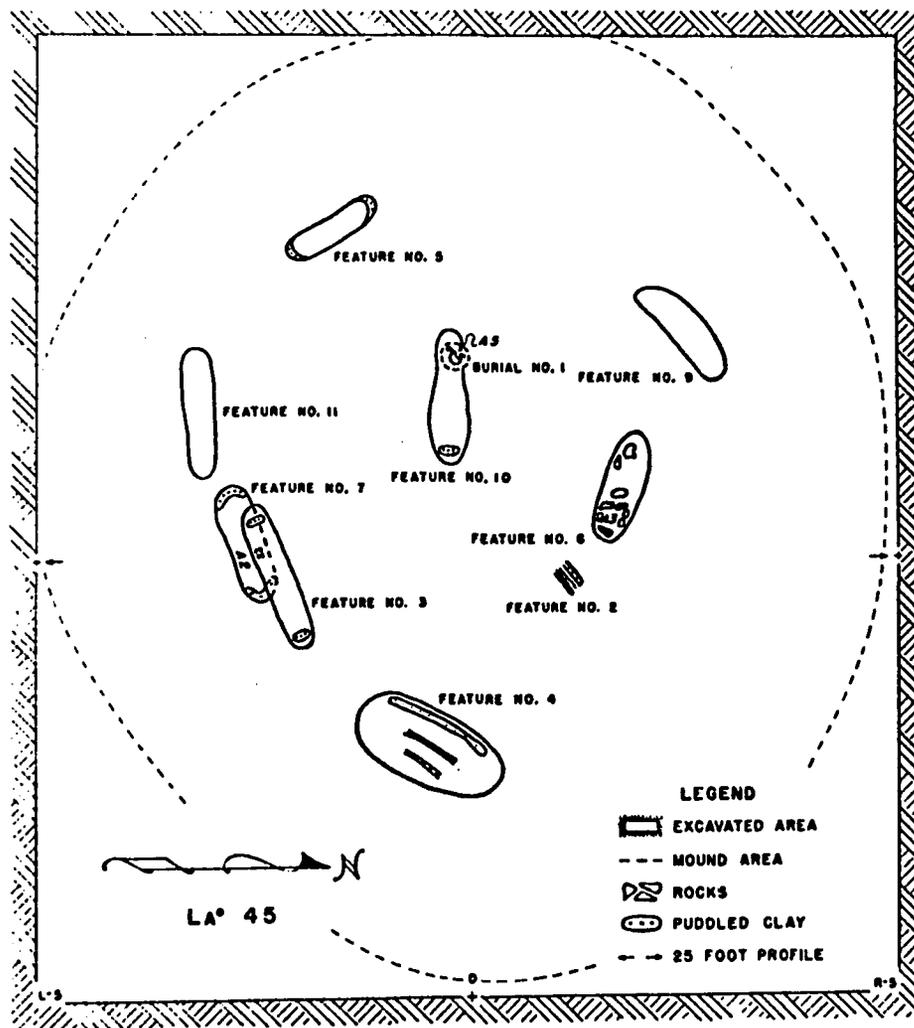
Skeletal Material - None

Associations - A spherical nodule of galena, F. S. 2, was recovered from near the center of the pit. Pillows of foreign blue clay were found at each end of the burial. Feature Three, another burial pit, was located almost directly above this subsoil burial.

Figure 9.  $\text{Ia}^{045}$  - Horizontal Profile (From Andersen n.d.).



SCHMATIC VERTICAL PLACEMENT OF BURIALS AND BURIAL PITS



## TABLE 17. Continued

Feature Eight:

Definition - Cache of greenstone celts

Provenience - Fill near base of mound

Comments - Two celts, F. S. 6 and 7, were found near Stake 35R1.

There were no indications of a pit or other associations.

Feature Nine:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 6.9 feet; Width: 2.0'

Pit Orientation - NE - SW

Skeletal Material - None

Associations - None

Feature Ten:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 8.0 feet; Width: 2.3 feet

Pit Orientation - E-W

Skeletal Material - None

Associations - Pillow of blue clay was found at the eastern end of the pit, and a mass of red clay was recovered from along the northern side, 2.0' from the western end of the pit.

## TABLE 17. Continued

Feature Eleven:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 7.5 feet; Width: 1.6 feet

Pit Orientation - E - W

Skeletal Material - None

Associations - None

Feature Twelve:

Definition - Burial

Provenience - Mound Fill

Skeletal Material - A skull of a mature adult was found resting on a greenstone celt. According to the excavator the frontal and right parietal were well preserved and exhibited definite frontal deformation. There was no other skeletal material present.

Associations - A greenstone celt, F.S. 5, was found lying under the skull.

Comments - Since no sign of a pit or skeletal remains other than the skull were found this feature might represent a partial reburial or perhaps a trophy skull burial.

Feature Thirteen:

Definition - Recent Pit

Provenience - Intrusive into the Mound Fill

## TABLE 17. Continued

**Skeletal Material** - A few unidentifiable pieces of bone were found in the bottom of this pit.

**Comments** - This was a recent pit dug by a treasure seeker near stake 30R. It is possible that it disturbed a burial since bone was found.

Artifacts:

Greenstone Celts - Four greenstone celts were recovered during the excavations. These specimens are all polled celts having long exaggerated proximal ends. All proximal ends appear to have been battered although this might be the result of manufacturing technique. No wear is present on any of the other artifact surfaces. These specimens have the following measurements:

F.S. 3: 300 x 76 x 40mm; F.S. 5: 232 x 80 x 54mm;

F. S. 6: 320 x 67 x 49mm; 236 x 65 x 37mm.

Stone Pipe - A large steatite elbow pipe was found in the mound fill apparently unassociated. This specimen is finely ground and polished. The bowl is 142mm high, 71mm in outside diameter and 42mm inside diameter (bowl cavity). The stem is square in cross-section, measuring 60mm on each side, and is 130mm in length. The stem cavity is 20mm in diameter. The outside surface of the bowl exhibits evidence of having been subjected to fire.

Galena - Three nodules of galena were recovered from the mound proper. Two are small cubicle pellets exhibiting only light grinding. Both are 25mm in length, 15-20mm in width and 7-17mm in thickness. The smaller specimen weighs 30 grams and the larger

50 grams. The third galena artifact has been ground into a spherical shape, 50mm in diameter. It weighs 386 grams.

Chipped Stone - A large number of chipped stone artifacts were recovered from the mound fill and adjacent surface areas. Over twelve hundred specimens were collected. Of these, the largest category is debitage, represented by 1100 flint chips and waste spalls. 120 projectile points were found in this lithic sample.

Projectile Points

Type: LeCroy

Number of Specimens: 1

Form and Manufacture: The one specimen of this type recovered is a medium-sized bifurcated-stemmed point. The blade edges are straight and serrated.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
31	52mm	30mm	5mm

Type: Quad

Form and Manufacture: This specimen is an unfluted, medium-sized point with an auriculate hafting area and heavily ground. The incurvate base has been thinned. Tip and one auricle broken.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
122	52mm	25mm	8mm

Type: Pine Tree

Number of Specimens: 1

Form and Manufacture: This point is medium in size, corner notched

with straight, serrated blade edges. The base is slightly  
excurvate and ground.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
131	41mm	27mm	8mm

Type: Benton

Number of Specimens: 5

Form and Manufacture: These are medium-large stemmed points with  
steeply beveled stem edges.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
148	64mm	30mm	10mm
107	57mm	29mm	9mm
147	47mm	28mm	9mm
17-1	53mm	32mm	8mm
17-2	49mm	27mm	10mm
Mean	54mm	29mm	9mm

Type: Wade

Number of Specimens: 1

Form and Manufacture: This specimen is a medium sized stemmed point  
with exaggerated shoulder barbs. This example has a broken  
stem and distal tip.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
41	60mm	45mm	12mm

Type: McIntire

Number of Specimens: 1

Form and Manufacture: This is a medium size point with excurvate blade edges and an expanded stem.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
16	47mm	32mm	10mm

Type: Pickwick

Number of Specimens: 3

Form and Manufacture: These are medium stemmed points with recurvate blade edges and expanded shoulders.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
10-1	71mm	32mm	9mm
10-2	59mm	31mm	10mm
33	60mm	40mm	10mm
Mean	63mm	34mm	10mm

PROVISIONAL TYPES:

PROVISIONAL TYPE 1: Sixty-eight specimens were placed into this provisional category. These are all medium, straight stemmed projectile points. The great majority of these specimens are basal fragments, many exhibiting only percussion flaking.

PROVISIONAL TYPE 2: All expanded base stemmed points were placed into this category. Of the 20 specimens in this sample, 14 were basal fragments. Many of these points appeared unfinished.

PROVISIONAL TYPE 4: The seven specimens placed into this provisional type were straight-stem points with shoulder barbs. All were medium in size with straight to excurvate blade edges.

PROVISIONAL TYPE 5: All stemmed points with serrated blade edges were put into this category. The twelve points in this sample were all medium size, four with expanded bases and 8 with straight stems.

Drills - Five complete and 6 drill fragments were recovered. The complete specimens are of two types. The first is a rectangular base drill. The two specimens of this type measure 52 x 20 x 8mm and 67 x 25 x 10mm. The second drill type has an expanded base. This type has a range of 51-70mm in length, 22-30mm base width, and 7-10mm in thickness. Six broken drill bits were also recovered. These specimens are 35-53mm in length and 7-9mm in diameter. None of these specimen exhibit any wear from use.

Residual - Over 1100 flint chips, waste spalls, and unidentifiable projectile point fragments were collected at La<sup>O</sup>45. Only 25 of the chips exhibited any signs of having been utilized.

#### GROUND AND PECKED STONE:

Hammerstones - Twelve fist-size river cobbles were recovered which had one or more surfaces pecked from use, probably as a hammer. It is possible that these specimens were used as direct percussion implements in flint knapping.

Grinding Stones - Two river worn cobbles were recovered which had one

or both flat surfaces heavily ground. This wear pattern suggests that these implements served as pebble manos. One specimen was also pecked along one edge which suggests it served as both a hammer and grinding stone.

## 2. Ia<sup>0</sup>46

### Features

Other than the large recent trench put down through the center of the mound no other features were recorded for this structure.

### Artifacts:

Galena - Three small cubes of galena were recovered from the fill of the large intrusive pit. These specimens do not exhibit any signs of grinding on their surfaces. Their combined weight is 36 grams.

Chapped Stone Artifacts - Five projectile points, two biface blade fragments and 8 flint chips were recovered from the mound fill.

### Projectile Points

Type: Copena Triangular

Number of Specimens: 1

Form and Manufacture: This is a medium triangular point with parallel blade edges and a straight base. The distal tip is broken.

### Dimensions:

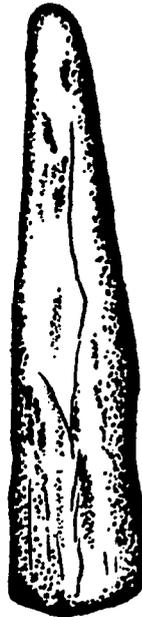
<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
1	35mm	22mm	5mm

Comments: This point was recovered in the fill of the recent intrusive pit with the galena fragments.

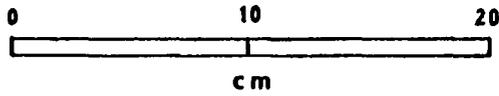
Figure 10. Copena Artifacts. A - Greenstone Digging Implement.  
B - Greenstone Celt.



A



B



PROVISIONAL TYPE 1: Three basal fragments with straight stems were recovered in the mound fill.

PROVISIONAL TYPE 2: One basal fragment of an expanded-stem projectile point was also found in the mound fill.

Other Artifacts:

Grinding Stone - A fist size river cobble was recovered during the general excavation which exhibited grinding on both flat surfaces and along one edge.

Ceramic Material - One body sherd of plain limestone tempered pottery was found in the mound fill.

Fauna Remains:

Antler - One small antler tine was found in the fill of the recent pit. It was 30mm in length and was charred on one side. The base has been cut. It is possible that this specimen represents a small antler projectile point.

Shell - A small fragment of shell was recovered from the fill of the treasure hunter's pit. It is too fragmentary for proper identification but its presence in a Copena mound suggests that it is a portion of a marine shell artifact.

SUMMARY

Both La<sup>045</sup> and La<sup>046</sup> are components of the Copena complex. La<sup>045</sup> appears to have been utilized for a longer period of time, and is probably precedent to La<sup>046</sup>. This conclusion is supported by the presence of both primary and secondary burials within La<sup>045</sup>, its

larger number of burials and artifacts, and its greater size.

The majority of artifacts recovered from La<sup>O</sup>46 were found in fill of the recent pit that had been dug through the center of the mound. This suggests that there were one or more central burials located in this portion of the mound before it was looted. If this was the case, La<sup>O</sup>46 was probably an incipient mound in its first stages of construction. Apparently only one or two central burials had been made and a low mantle of earth prepared over them when the mound was abandoned.

Both mounds were constructed of surface soil. The presence of Archaic projectile points and other lithic material in the fill of these mounds indicates that the areas adjacent to them were sporadically utilized as camp sites by earlier peoples. The Quad, Lecroy, and Pine Tree projectile points are all Early Archaic types while the Benton, Wade, and McIntire types have been associated with Late Archaic and Early Woodland assemblages. Artifacts recovered from the mounds which can be attributed to Copena peoples are the polled celts, the elbow pipe, galena nodules, the Copena Triangular point, the one Mulberry Creek Plain sherd, and possibly the shell fragment from La<sup>O</sup>46.

The burials and associated artifacts found in these mounds, though typical of the Copena complex, are neither particularly elaborate or abundant. Copper artifacts, and the usually numerous greenstone spades, are conspicuously absent. The small size of these mounds and the small number of burials within them indicates that they were probably built and utilized for only a short period of time. The village site of the builders of these mounds, though not located in the

survey, was probably situated along one of the near-by streams. It was perhaps a small seasonal base camp only re-visited two or three times and then abandoned. The apparent incipient nature of the mounds can best be explained by such an hypothesis. The presence of the Fox Creek Village some 3 miles away indicates that small villages such as the one proposed above were located in the area and were probably occupied on a seasonal basis.

#### G. THE BIG SHOAL CREEK MOUND (LA<sup>O</sup>48)

This burial mound was located in Lawrence County on the western bank of Big Shoal Creek, one mile north of the community of Five Points and fifteen miles southwest of the Tennessee River. The Big Shoal Creek is a tributary of the West Flint Creek, which drains into the Tennessee River a few miles east of Decatur. Legal description of the site location is NW quarter of the NW quarter, Section 24, Township 6 south, Range 6 west.

The mound had been constructed on a level meander terrace sixty feet from the creek bank. When the site was cleared of trees and brush the mound was found to be conical in shape, 60 feet in diameter and 8 feet high. Although the surrounding area had been plowed for several seasons, the mound had not been damaged by cultivation. However, treasure seekers had dug several pits into the top of the mound. The largest of these pits was 8 feet in diameter but only a few feet deep.

### Excavation

After the mound had been cleared of brush and undergrowth the area was staked off into a rectangular grid system sub-divided into five-foot squares. The zero line of this grid system was established along the northeastern periphery of the mound. Excavation was simultaneously begun on opposite sides of the mound to provide working space for the crew. Each trench was excavated in .5 foot arbitrary levels to the subsoil base. Profiles were drawn as each trench was completed.

### Features

Twenty-two features were recorded for this site. Three subsoil burial pits and three secondary burial pits were found. Twelve other burials were located in the mound fill but pit outlines could not be distinguished in all cases. Other features include two masses of charcoal found in the mound fill, a fire basin found at the base of the mound, and an intrusive pit dug by treasure seekers which contained the fragmentary remains of two additional burials. These features are summarized in Table 18.

### Artifacts

Greenstone Digging Implements: Thirteen greenstone slab spades were recovered from this mound. Four of these occurred in association with burials while the remainder were found "floating" in the mound fill. Since skeletal preservation was poor at this site, it is possible that some of the unassociated artifacts originally served as mortuary accompaniments. Nine of these implements had parallel lateral edges, rounded distal ends and straight to rounded proximal ends. The remaining

TABLE 18 LA 48 - TABLE I - FEATURES

<u>FEATURE</u>	<u>DEFINITION</u>	<u>PROVENIENCE</u>	<u>PIT SHAPE</u>	<u>PIT DIMENSIONS</u>	<u>ASSOCIATIONS/COMMENTS</u>
1	Charred Wood	Mound Fill	-	-	None
3	Charred Wood	Mound Fill	-	-	None
4	Fire Basin	Base of Mound	Round	Diameter:	Pit filled with fire-cracked rock, sand and ashes.
5	Burial Pit	Subsoil	Rectangular	5.4 x 1.5'	None
6	Burial Pit	Subsoil	Rectangular	7.9 x 1.6'	A greenstone spade (F.S. 71) recovered from northern side of pit.
7	Burial Pit	Mound Fill	Rectangular	6.5 x 1.7'	Fragmentary remains of two burials (Burials 1 and 3) in pit. Cache of galena nodules near northern end of pit.
8	Burial Pit	Mound Fill	Rectangular	6.7 x 1.8'	Two fragmentary skulls (Burials 2 and 4) recovered from southern end of burial pit. Yellow clay pillows found at each end of pit. Two copper beads (F.S. 48, 49) found near skulls.
9	Burial	Mound Fill	-	-	Fragmentary skeletal material (Burial Five). No apparent associations.

TABLE 18. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	PIT DIMENSIONS	ASSOCIATIONS/COMMENTS
10-A	Pit	Subsoil	Rectangular	Length: 9.5 Ft. Width: 4.0 Ft.	Pit on NW edge of mound. Shape suggests a Copena burial pit.
10-B	Pit	Subsoil	Oval	Length: 3.6 Ft. Width: 2.5 Ft.	Pit contained charcoal and fired pieces of blue clay. Possible crematory basin. Intruded into Feature 10A.
11	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 1.5 Ft.	No associations.
12	Burial Pit	Subsoil	Rectangular	Length: 3.5 Ft.	Pit size suggests infant burial.
13	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft. Width: 2.2 Ft.	A mass of charcoal was found near a greenstone spade (F.S. 20) near the NE end of this pit. Pit fill contained a bluish-gray foreign clay.
14	Midden Pit	Subsoil	Oval	Length: 2.0 Ft. Width: 1.8 Ft.	Pit fill contained a few flint chips.
15	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft.	Greenstone spade at NE end of pit. Pit fill contained blue clay. Interior depth of pit 4.5 Ft.

TABLE 18. Continued.

FEATURE	DEFINTION	PROVENIENCE	PIT SHAPE	PIT DIMENSIONS	ASSOCIATIONS/COMMENTS
16	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft.	Greenstone spade at SE end of pit. At the same end of this pit, a deposit of charcoal was found. Blue clay in pit fill.
17	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 1.4 Ft.	Greenstone spade (F.S. 15) near SW end of pit and a greenstone celt (F.S. 24) near opposite end.
18	Burial Pit	Subsoil	Rectangular	Length: 9.0 Ft. Width: 2.5 Ft.	Two galena nodules (F.S 27) found near center of pit. Fill contained both blue and yellow clay.
19	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft.	Pit filled with both blue and yellow clay.
20	Burial Pit	Subsoil	Rectangular	Length: 9.5 Ft.	Pit filled with both blue and yellow clay.
21	Midden Pit	Subsoil	Round	Diameter: 4.6 Ft.	No associations.
22	Basin	Base of Mound	Round	Diameter: 2.7 Ft.	Shallow basin-shaped pit filled with charcoal. Interior depth: .3 Ft. Possibly associated with Burials One and Two.

TABLE 18. Continued.

FEATURE DEFINITION	PROVENIENCE	PIT SHAPE	PIT DIMENSIONS	ASSOCIATIONS/COMMENTS
23 Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 1.9 Ft.	Pit filled with blue clay. Post hole near SE end of pit.
24 Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 1.7 Ft.	Pit fill contained blue clay.
25 Burial Pit	Subsoil	Rectangular	Length: 8.0 Ft. Width: 1.7 Ft.	Pit filled with blue clay. A deposit of charcoal was found near a mass of bright yellow clay in the SW end of the pit.
26 Artifact Cache	Mound Fill	-	-	F.S. 44, a galena bead and F.S. 43, a greenstone spade found together in square 55-0.
27 Burial Pit	Subsoil	Rectangular	Length: 4.5 Ft. Width: 1.5 Ft.	A greenstone spade (F.S. 46) was recovered from NW end of pit. Fill contained blue clay. Possible child burial.
28 Burial Pit	Subsoil	Rectangular	Length: 3.5 Ft. Width: 1.5 Ft.	Pit fill contained blue-gray clay. Pit dug parallel to Feature 27, some .6 Ft. away.
29 Pit	Subsoil	Round	Diameter: 5.0 Ft.	Found directly under Feature 38, a Copena burial pit under the center of the mound.

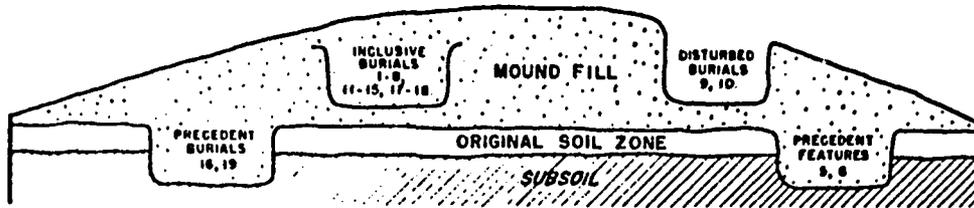
TABLE 18. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	PIT DIMENSIONS	ASSOCIATIONS/COMMENTS
30	Burial Pit	Subsoil	Rectangular	Length: 8.0 Ft. Width: 1.7 Ft.	Pit fill contained both blue and yellow clay.
31	Burial Pit	Subsoil	Rectangular	Length: 7.2 Ft. Width: 1.4 Ft.	Pit filled with bluish-gray clay. Deposit of yellow clay near northern end of pit.
32	Burial Pit	Subsoil	Rectangular	Length: 7.1 Ft. Width: 3.0 Ft.	Pit fill consisted of blue and yellow clay.
33	Burial Pit	Subsoil	Rectangular	Length: 6.2 Ft. Width: 2.2 Ft.	A greenstone spade (F.S. 54 and 55) was recovered from each end of pit. Pit fill contained blue clay.
34	Burial Pit	Subsoil	Rectangular	Length: 5.5 Ft. Width: 1.2 Ft.	Pit fill contained blue clay.
35	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 1.8 Ft.	Pit apparently associated with Feature 19, another Copena burial.
36	Cremation	Mound Fill	-	-	Burials One and Two. Found in mound fill above Feature 22, a charcoal filled basin. Both burials were apparently cremated elsewhere. Bones were blackened and calcined.
37	Cremation	Mound Fill	-	-	Skull and ashes found in mound fill above Feature 23, a burial pit. Earth around skeletal material did not exhibit evidence of fire.

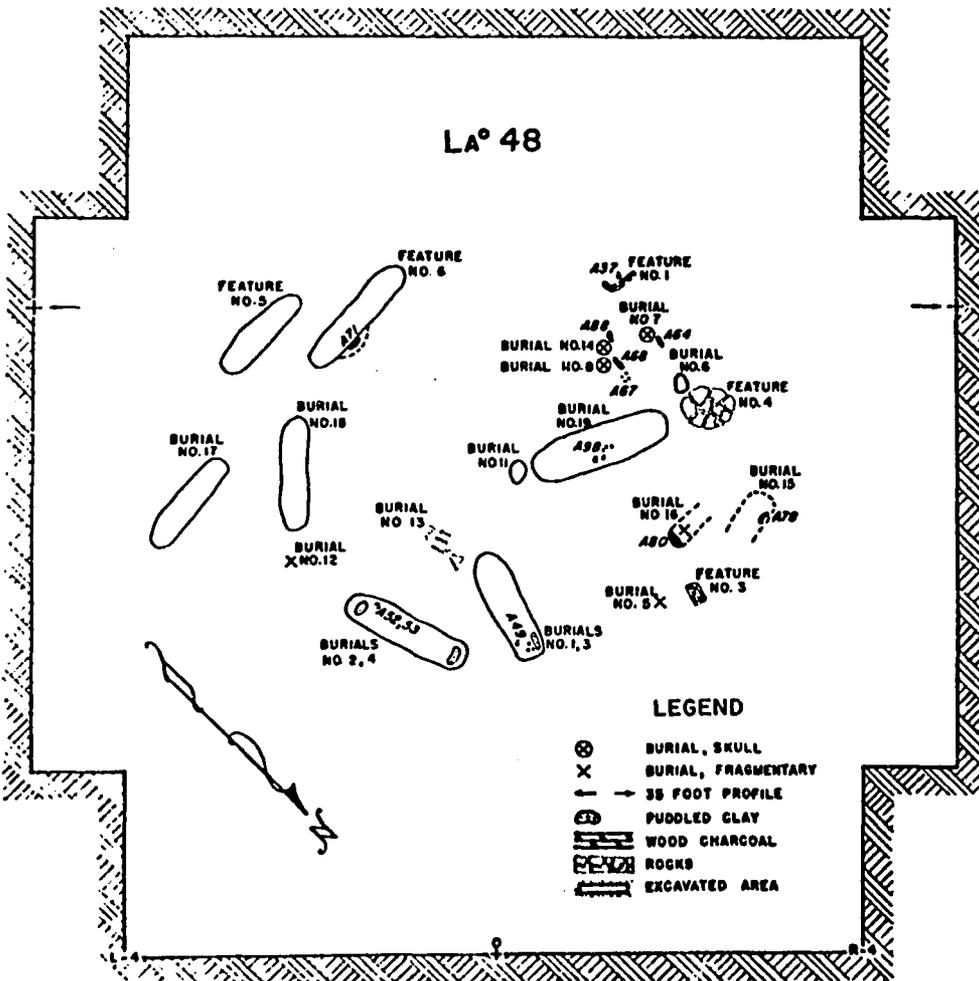
TABLE 18. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	PIT DIMENSIONS	ASSOCIATIONS/COMMENTS
38	Burial Pit	Subsoil	Rectangular	Length: 7.2 Ft. Width: 2.1 Ft.	Fragmentary skeletal material (Burial Four) recovered from bottom of pit. A greenstone spade (F.S. 48) was recovered from near the head. Pit fill contained blue clay.
39	Burial Pit	Subsoil	Rectangular	Length: 8.0 Ft. Width: 2.3 Ft.	Fragmentary skeletal material recovered (Burial Five). A greenstone spade (F.S. 56) was recovered from near the feet. Pit fill contained blue clay.
40	Burial Pit	Subsoil	Rectangular	Length: 9.5 Ft. Width: 1.8 Ft.	Traces of skeletal material recovered (Burial Six). Celt (F.S. 49) found near SW end of pit. Pit filled with a fine blue clay.

Figure 11. La°48 - Horizontal Profile (From Andersen n.d.).



SCHMATIC VERTICAL PLACEMENT OF BURIALS AND BURIAL PITS



specimens had tapered proximal ends and parallel to straight blade edges. The majority of these implements exhibited heavy wear on the distal end and little or no wear on the proximal end. However, one specimen (F.S. 89) is a large quarry blank showing no wear, while two other specimens (F.S. 59 and 56) exhibit only light wear on the ends and heavier wear along the blade edges, possibly resulting from use in raking or spreading loose soil. The dimensions of the specimens in this sample are given in Table 19.

Greenstone Celts: Two greenstone celts, both of the polled variety, were recovered from the mound fill. One of these occurred in association with Feature 17, a fragmentary burial. Both specimens are biconvex in cross-section and both have battered proximal ends. The majority of celts from Copena mounds exhibit similar battering on the narrow end. Although this might be the result of the manufacturing technique, it is also possible that these implements were used as chisels in woodworking activities. The battered proximal ends are possibly the result of blows struck with a hammer-like tool, perhaps a wooden mallet of some sort. These two specimens varied from 168 to 193mm in length, 51 to 64mm in maximum width and 37-41mm in thickness.

Galena: Three burial pits contained caches of galena. Feature Seven contained a cache of 21 small galena cubes, totaling 287 grams in weight. Feature Twelve contained a mass of 9 small nodules, the largest of which weight 28 grams. The total weight for these specimens was 62 grams. Both of these burial pits occurred in the mound fill. Four other nodules occurred in association with Feature 22, a subsoil burial pit. These specimens weighed 90 grams and exhibited some light

TABLE 19 - La<sup>O</sup>48 - GREENSTONE DIGGING IMPLEMENTS

<u>SPECIMEN NO.</u>	<u>LENGTH</u>	<u>WIDTH</u>	<u>THICKNESS</u>
32	300mm	114mm	31mm
56	280	111	26
59	400	119	31
63	280	116	30
64	315	120	26
68	320	106	35
70	445	159	29
71	370	132	30
81	345	149	29
89	540	176	30
90	209	98	32
93	216	93	27
94	290	100	21
<b>Mean:</b>	331mm	122mm	29mm
<b>Range:</b>	209-540mm	93-176mm	21-35mm

grinding on their surfaces. It is possible that the first two caches of galena were originally a single nodule which fractured later as a result of natural actions.

Copper: Two tubular copper beads were found in Feature 8, a secondary burial pit. Both had been made from rolled sheet copper. The edges of the beads had been subsequently ground. They range in size from 31 to 39mm in length, and 9 to 11mm in diameter.

Elbow Pipe: One badly leached limestone elbow pipe was recovered from this mound. It occurred in association with Feature 18, a secondary burial. The bowl was 93mm in height, 34mm inside orifice diameter and 41mm outside diameter. The stem was 87mm in length, and the orifice was 27mm in inside diameter and 36mm in outside diameter. The stem and bowl were rounded.

Ceramic Material: Eight pottery sherds and one podal support were recovered from the mound fill. The podal support is plain and 40mm high and 30mm in diameter at the vessel base. Three Mulberry Creek Plain and one Wright Check Stamped body sherd were in this sample. Also included among these specimens were four Pickwick Complicated sherds with an angular motif. All of these specimens were tempered with crushed limestone.

Grinding Stones: Three fist size river cobbles were recovered from the mound which had been heavily ground on one or more surfaces. Two of these exhibit battering along the edges from use as hammers.

CHIPPED STONE:

Projectile Points: Eighteen projectile points and six distal tips were

recovered from the mound fill. The identifiable specimens were placed into the following provisional categories:

PROVISIONAL TYPE 1 - Three straight-stem projectile points were placed into this category. They are all medium in size. The one complete specimen measures 61mm x 32mm x 11mm.

PROVISIONAL TYPE 2 - Four expanded-stem points were found. These specimens ranged in size from 45 to 58mm in length, 26 to 29mm in width and 6 - 7mm in thickness.

PROVISIONAL TYPE 5 - Five medium points with shoulder tangs or barbs were included in the chipped stone sample. Three of these points had expanded stems while the remaining had straight stems. The one complete specimen measured 54mm x 35mm x 7mm.

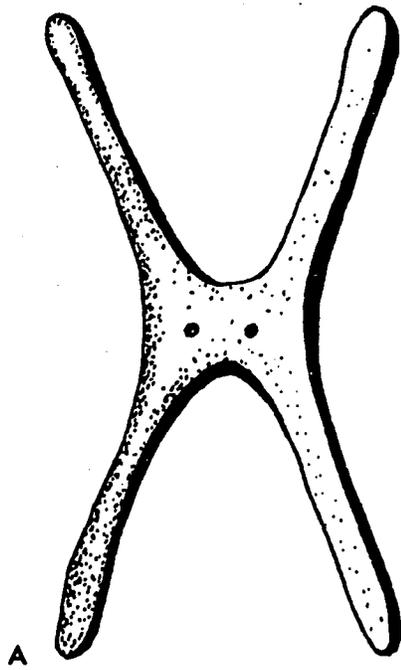
PROVISIONAL TYPE 11 - Two medium triangular projectile points were recovered. Both have parallel blade edges and a straight basal edge similar to the Camp Creek and Greenville forms. Both exhibit basal thinning. These specimens have the following dimensions: 40 x 27 x 6mm and 46mm x 23mm x 7mm.

Drill - This is a proximal fragment of an expanded base drill. The basal edge is excurvate and has been thinned. The blade is incurvate. This specimen is 32mm wide at the base and 6mm thick.

Biface Blades - Eight fragments of biface blades were recovered from the mound fill. A more complete specimen indicates that these blades were trianguloid in form with straight basal edges and acute distal tip. One specimen has a serrated excurvate blade edge suggestive of a cutting implement.

Uniface Scrapers - Two trapezoid uniface scrapers were included in this

Figure 12. Opena Artifacts. A - Copper Reel.  
B - Copper Celt. C - Shell Beads.  
D - Copper Earspools. E - Copper  
Bracelet. (A and E reduced 1/2,  
all others natural size).



lithic sample. Both specimens are steeply flaked. One of these exhibits wear along the broad working edge indicative of an end scraper.

Cores - Four small cores were recovered. All are smaller than a man's fist and have random flake scars on all surfaces.

Flint Chips - Thirty-two chips were found. Seven had been utilized.

#### SUMMARY

The Big Shoal Creek Mound appears to have been an isolated component of the Copena complex. The vertical and horizontal placement of the burials suggests that the construction of this mound was not a single event but an accretive process. The primary mound appears to have been built over Feature 22, a subsoil burial pit, and the closely related Feature 4, a fire basin built on the old humus layer. This conclusion is supported by several factors: 1) the original humus in the area of Feature 22 was not disturbed while the old surface layer under the eastern half of the mound had been reduced, perhaps for use as fill for the initial stage of mound construction; 2) the majority of the secondary burials were placed into the mound fill in the western portion of the structure above Feature 22; 3) the spacial distribution of the burials indicates a lateral expansion of the mound from the west to the east (Figure 11).

The majority of the burials at this site was secondary interments, several of which appear to have been reburials placed upon old mound surfaces and subsequently covered over as mound construction progressed. There were no indications that crematory burials were made at this site, although the presence of deposits of charred wood and

thin lenses of charred material suggest that fires were built on the mound or in the mound area.

Although the chipped stone artifacts from this site resemble Late Archaic or Early Woodland forms, they are, on the whole, rather undiagnostic. It is possible that these specimens represent the physical remains of a Late Archaic hunting camp where weapons and tools were repaired or manufactured. As such, they were probably gathered up in the surface soil used to construct the mound.

The limestone tempered pottery fragments recovered from the mound fill were also chance inclusions. However, since there were no pottery bearing sites in the mound vicinity their presence at this site can be attributed to the mound builders. It is possible that they, and perhaps the fire hearth, are the remains of a temporary mortuary camp made before, or during, mound construction. The presence of the Pickwick Complicated sherds bearing an angular motif is particularly significant. Their inclusion in the fill of this mound is the only recorded instance of such an occurrence. Sherds bearing this type of motif were found at the Wright Village site and are usually considered to be late time markers during the Middle Woodland Period.

#### H. THE PENN MOUNDS (Mg<sup>O</sup>66, 67, 68, 69, 70)

During the Spring of 1941, five burial mounds were located on the property of William H. Penn in the extreme southwestern corner of Morgan County. These mounds were linearly distributed along a seven hundred foot section of a ridge overlooking a narrow valley

formed by a small creek, The Teague Branch. This branch flows out of the adjacent Cumberland Plateau region northward across the Moulton Valley and Little Mountain sub-regions to the Tennessee River, some 18 miles away.

At the time of discovery the mounds appeared as almost imperceptible rises in a large cotton field. Mg<sup>0</sup>70, the largest mound in the group, was 70 feet in diameter, while the other four measured 50 feet across their length and breadth. Intensive cultivation of the area in which the sites were located resulted in the erosion of much of the original mound fill. Since damage to mounds Mg<sup>0</sup>66 and 67 was less extensive, and time was limited, they were chosen for investigation while the remaining three mounds were not excavated.

#### Excavation

Both Mg<sup>0</sup>66 and Mg<sup>0</sup>67 were excavated in a similar manner. Rectangular areas, 120 x 70 feet at Mg<sup>0</sup>66 and 110 x 60 feet at Mg<sup>0</sup>67, were cleared around the mounds and staked off into a five-foot grid system. Trenches were then begun on both the northern and southern sides of the mound and taken down to the shallow subsoil surface by the vertical slicing technique. Excavation of these lateral trenches continued inward until only a five-foot wide balk was left standing. This remaining balk was then excavated and a horizontal floor plan was drawn of the entire area investigated.

#### Stratigraphy

Both mounds had been constructed on old habitation sites. Under the base of each mound a layer of old humus and village midden was found. Beneath this old surface stratum, which averaged a foot in

thickness, was a subsoil layer of sterile dull yellow clay. The mounds were constructed almost entirely of old surface material, interspersed with occasional streaks of yellow clay.

#### 1. Mg<sup>066</sup>

Mg<sup>066</sup>, the northernmost structure, was separated from the other mounds by a distance of 400 feet and a dry creek bed. The mound proper was approximately 3 feet thick at its highest point.

#### Features

Forty features were recorded for the area excavated at this mound site. Ten of these features were midden pits located outside of the mound proper. Nine of these pits were apparently associated with prior occupations, while one (Feature 10) appears to be contemporaneous with the mound structure. Thirty features were found within the mound. Of these, 23 were typical rectangular Copana burial pits, two were Copana crematory interments, and the remaining feature was an artifact cache. The other four features were all circular midden pits which antedated mound construction. These forty features are summarized in Table 20.

#### Artifacts:

Greenstone Digging Implements - Eighteen greenstone slab spades were recovered during the excavation of Mg<sup>066</sup>. Nine of these were found in association with burials, while the remaining nine, including a proximal fragment, were recovered from the mound fill. Specimen form is unusually heterogeneous in this sample. The typical digging implement is a long thin slab of greenstone, rectangular in outline, with parallel blade edges and rounded ends. Only seven of the specimens in this

TABLE 20. SITE MG<sup>66</sup>, FEATURE DATA

<u>FEATURE</u>	<u>DEFINITION</u>	<u>PROVENIENCE</u>	<u>PIT SHAPE</u>	<u>PIT DIMENSIONS</u>	<u>ASSOCIATIONS/COMMENTS</u>
1	Midden Pit	Subsoil	Round	Diameter: 1.7 Ft	Pit contained charred bone, three hammerstones and five flint chips. Outside of mound.
2	Midden Pit	Subsoil	Round	Diameter: 2.0 Ft.	Pit fill contained two Mulberry Creek Cordmarked sherds. Outside of mound.
3	Midden Pit	Subsoil	Round	Diameter: 2.0 Ft.	No associations.
4	Post Holes	Subsoil	Round		Six irregularly spaced post holes, located approximately 25 Ft. NE of mound proper.
5	Post Holes	Subsoil	Round		Post holes surrounded by an area of fired clay. Six feet SE of mound proper.
6	Midden Pit	Subsoil	Round	Diameter: 2.6 Ft.	Pit fill contained flint chips and charcoal. Outside of mound.
7	Midden Pit	Subsoil	Round	Diameter: 1.8 Ft.	Charcoal. Outside of mound.
8	Midden Pit	Subsoil			
9	Midden Pit	Subsoil	Round	Diameter 2.0	No associations. Pit on northern edge of mound.

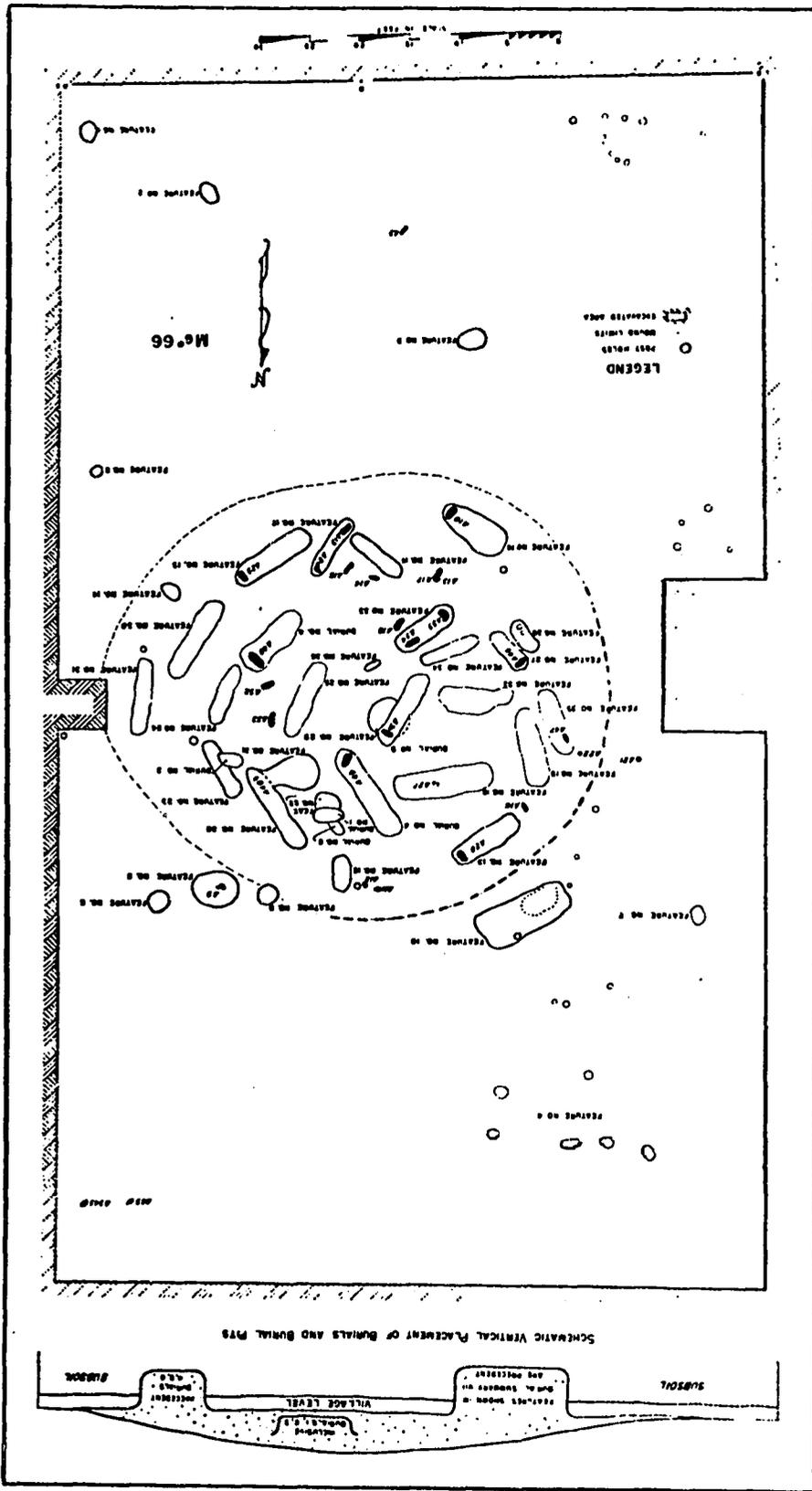
TABLE 20. Continued.

<u>FEATURE</u>	<u>DEFINITION</u>	<u>PROVENIENCE</u>	<u>PIT SHAPE</u>	<u>PIT DIMENSIONS</u>	<u>ASSOCIATIONS/COMMENTS</u>
10	Burial	Mound Fill	-	-	Fragmentary remains of a child burial (Burial 6). No associations
11	Burial	Mound Fill	-	-	Skull fragments (Burial 7) found near greenstone spade (F.S. 64).
12	Burial	Mound Fill	-	-	Skull (Burial 8) recovered in association with a cache of galena nodules (F.S. 67) and a greenstone spade (F.S. 68).
13	Intrusive Pit	Mound Fill	Irregular	-	Two burials (Burials 9-10) apparently disturbed by pit dug by treasure seekers.
14	Burial	Mound Fill	-	-	Skull fragments (Burial 11) only.
15	Burial	Mound Fill	-	-	Long bone fragment (Burial 12) only.
16	Burial	Mound Fill	-	-	Fragmentary, but complete, remains of an adult of undetermined sex (Burial 13). No associations. Possible reburial.
17	Burial	Mound Fill	-	-	Teeth caps and small fragment (Burial 14) found in association with a greenstone celt (F.S. 88).

TABLE 20. Continued.

<u>FEATURE</u>	<u>DEFINITION</u>	<u>PROVENIENCE</u>	<u>PIT SHAPE</u>	<u>PIT DIMENSIONS</u>	<u>ASSOCIATIONS/COMMENTS</u>
18	Burial	Mound Fill	Rectangular	-	Skull and rib fragments (Burial 15). An elbow pipe (F.S. 75) and a mass of charcoal were found near the chest area. Only upper portion of pit could be traced.
19	Burial	Base of Mound	-	-	A skeletal fragment (Burial 16) recovered from beneath a greenstone spade (F.S. 90).
20	Burial	Mound Fill	Rectangular	-	Skull fragments (Burial 17) only. Only upper portion of pit outline could be traced.
21	Burial	Mound Fill	Rectangular	-	Skull fragments (Burial 18) only. Only upper portion of pit outline could be traced.
22	Burial Pit	Subsoil	Rectangular	7.0 x 2.2'	A few skeletal fragments (Burial 19) found near cache of galena nodules (F.S. 98).

Figure 13.  $Mg^{O66}$  - Horizontal Profile (From Andersen n.d.).



sample confers to this description. Eight others had tapered proximal ends, giving these implements a triangular outline. Six of these trianguloid spades had the typical rounded distal ends while the remaining two had straight working edges.

Another implement was asymmetrical in outline. This specimen had a concave depression 40mm wide and 17mm deep along the central portion of the excurvate blade edge. This depression was the only area on the implement which was worn from use. The form of this specimen and the wear pattern described above suggests that this implement was utilized to chop or cut roots or tubers. The remaining two examples were both utilized fragments. The first was a longitudinal fragment with a concave depression similar to that found on the edge of the complete specimen previously discussed. The dimensions of all of the complete implements are given in Table 21.

Greenstone Celts - Four celts of the polled variety and one fragmentary specimen were recovered. Two of the polled celts occurred in burial context and the other two were found unassociated in the mound fill. All four of these celts have an exaggerated proximal end, a slightly tapered and rounded distal end, and are bi-convex in cross-section. Some of these specimens exhibits wear on any of their surfaces. The celts in this sample vary from 150 to 240mm in length, 52 to 63mm in width and 26 to 46mm in maximum thickness. All four of these artifacts are associated with the Copena complex. The remaining specimen was a distal fragment of a siltstone axe or celt. It was bi-convex in cross-section, 74mm wide and 35mm thick. Because of the fragmentary

nature of this specimen its cultural content is unclear.

Galena - Single nodules of caches of galena occurred six times at Mg<sup>O</sup>66. Three of these nodules were associated with features, two in Feature 18, a Copena burial pit, and one in association with Feature 26, an artifact cache found in the fill of the mound. All of these specimens exhibited evidence of grinding on one or more surfaces. The most common shape was a sphere or cube. The smallest specimen in this sample measured 22 x 10 x 7mm and the largest 60 x 60 x 50mm. The weight of individual specimens varied from 26 to 850 grams. The combined weight of all of these specimens is 1727 grams.

Ceramic Material - A total of 142 sherds were recovered from the excavation unit at Mg<sup>O</sup>66. While exact context for the majority of these sherds is not known, most of them apparently occurred in the plowzone outside of the mound proper while a few were recovered from the mound fill. This ceramic sample can be divided into the following types:

Fiber Tempered Ware

Wheeler Plain - One body sherd of this type was recovered from the 1.5 foot level of the mound fill. This fragment is quite thick (16mm) and has a smoothed finish. This type is associated with the Early Woodland Period.

Sand Tempered Ware

O'Neal Plain - Sixteen sherds of this plain sand tempered ware were recovered. Two of these specimens were rim fragments. Both rims are straight and have rounded lips.

Alexander Incised - Nine sherds, including two rims of this type

were found. Four of these are very small and bear only a single incised line. Another specimen, a larger body sherd, also has a row of punctations above, and running parallel to, two incised lines. Two other body sherds have curved lines incised on their exterior surfaces. The two rim sherd are both straight with rounded lips.

Benson Fabric Marked - Three sand tempered body sherds with a fabric impressed finish were present in the study sample. The finish on these specimens is very similar to that found on sherds of the Long Branch Fabric Marked type.

#### Limestone Tempered Ware

Long Branch Fabric Marked - This was the most common type of pottery recovered from the mound area. All 102 sherds of this type in the ceramic sample were body sherds.

Mulberry Creek Plain - Only seven limestone tempered sherds with a plain finish were recovered. All are body sherds.

#### Clay-Grit Tempered Ware

Mulberry Creek Cord Marked - Two body sherds with a cord impressed finish were found in Feature 2, a midden pit outside of the mound proper. Both of these specimens were tempered with particles of burnt clay and sand.

#### Shell Tempered Ware

Plain Shell - One rim sherd of this type was found in the plow zone level of the excavation unit. The rim is slightly everted and has a flattened lip.

#### Other Artifacts

Slate Tablet - A fragment of a rectangular slate tablet was found

in the mound fill. The edges of the tablet have been ground. One face of the tablet has 3 longitudinal grooves and the reverse has two. The specimen, in present form, measures 42mm x 60mm x 8mm. If the tablet was originally symmetrical it would have measured approximately 100mm in length.

Atlatl Weight - This specimen was made of hematite and had been drilled longitudinally. The exterior was ground and polished. The fragment was 41mm long, 19mm wide and 11mm thick.

Expanded Center Gorget - The specimen of this type recovered in the mound fill was 80mm long x 36mm wide x 12mm thick. It was ground and polished.

Hematite Concretion - A hollow hematite-sandstone concretion was recovered. The interior of this small natural bowl has been smoothed. Objects of this type were, at times, used as pigment containers.

Hematite - A rectangular piece of ground hematite was found in the mound area. It was 61mm long, 41mm wide, and 12mm thick.

Steatite Sherds - Four fragments from one or more steatite vessels occurred in the excavation unit. All were smoothed on the interior and rough on the exterior. Thickness ranged from 10 to 19mm.

Hammerstones - Nineteen water-worn sandstone pebbles were recovered from Mg<sup>O</sup>66. All exhibited pecking on one or more surfaces. Several of the specimens were also heavily ground on one or both flat surfaces from use as a pebble mano or mueller.

TABLE 21. MG 66 - GREENSTONE DIGGING IMPLEMENTS

## DIMENSIONS:

<u>F.S.</u>	<u>LENGTH</u>	<u>WIDTH</u>	<u>THICKNESS</u>
3	320mm	110mm	18mm
15	297mm	123mm	31mm
17	340mm	112mm	29mm
18	341mm	131mm	27mm
19	270mm	112mm	29mm
25	365mm	150mm	25mm
43	265mm	120mm	17mm
46	359mm	139mm	30mm
47	188mm	121mm	27mm
48	405mm	133mm	35mm
52	330mm	133mm	32mm
53	263mm	113mm	26mm
54	389mm	148mm	28mm
55	263mm	149mm	30mm
56	318mm	115mm	33mm
65	435mm	140mm	23mm
66	405mm	128mm	20mm
<b>AVERAGE:</b>	315mm	128mm	27mm
<b>RANGE:</b>	188-435mm	110-150mm	17-35mm

## 2. Mg<sup>0</sup>67

### Features

Thirty-one features were recorded for the area investigated at Mg<sup>0</sup>67. Ten of these were rectangular Copena burial pits, 12 were refuge or midden pits, eight were cremations and the remaining feature was an artifact cache. The midden pits were oval to circular, basin shaped pits ranging in size from 1.4 x 1.2 feet to 5.8 x 3.9 feet. The majority of these features apparently antedate mound construction and can be placed into a Late Archaic or Early Woodland context. Individual data for all 31 features is given in Table 22.

### Artifacts

Greenstone Digging Implements - Thirteen complete and four fragmentary greenstone slab spades were recovered from Mg<sup>0</sup>67. The four fragmentary specimens are all proximal fragments and were found on the surface and in the plowzone. The dimensions of the complete specimens are given in Table 23. All thirteen complete specimens had rounded ends, parallel blade edges and were flat in cross-section. Eleven of them exhibited heavy wear on the distal end and moderate wear along the lateral edges. The two remaining specimens were finished examples that had not been utilized. One digging implement also had a shallow notch 40mm wide on one blade edge. This concave dimension showed signs of use, possibly from cutting roots. Nine of these digging implements occurred in association with Copena burials while the remainder were found unassociated in the mound fill.

TABLE 22. SITE MG<sup>67</sup>, FEATURE DATA

<u>FEATURE</u>	<u>DEFINITION</u>	<u>PROVENIENCE</u>	<u>PIT SHAPE</u>	<u>PIT DIMENSIONS</u>	<u>ASSOCIATIONS/COMMENTS</u>
1	Artifact Cache	Mound Fill	-	-	F.S. 2, two greenstone celts and a digging implement.
2	Refuse Pit	Subsoil	Rectangular	Length: 3.4 Ft. Width: 1.9 Ft.	Pit outside of mound proper. No associations.
3	Burial Pit	Subsoil	Rectangular	Length: 5.8 Ft. Width: 1.8 Ft.	No associations.
4	Burial Pit	Mound Fill	Oval	Length: 3.2 Ft. Width: 2.0 Ft.	A cache of galena nodules (F.S. 5) was recovered from the bottom of the pit.
5	Crematory Basin	Mound Fill	Round	Diameter: 2.0 Ft.	Pit filled with charcoal and calcined bone.
6	Refuse Pit	Subsoil	Round	Diameter: 2.1 Ft.	Located on SE edge of mound proper. Contained only flint chips.
7	Refuse Pit	Subsoil	Oval	Length: 1.4 Ft. Width: 1.2 Ft.	Outside mound.
8	Refuse Pit	Subsoil	Round	Diameter: 1.6 Ft.	Flint Chips.
9	Refuse Pit	Subsoil	Round	Diameter: 2.3 Ft.	Pit contained 6 flint chips, 1 hammerstone and a mass of charred hickory nuts.

TABLE 22. Continued.

<u>FEATURE</u>	<u>DEFINITION</u>	<u>PROVENIENCE</u>	<u>PIT SHAPE</u>	<u>PIT DIMENSIONS</u>	<u>ASSOCIATIONS/COMMENTS</u>
10	Refuse Pit	Subsoil	Round	Diameter: 2.1 Ft.	Flint Chips.
11	Refuse Pit	Subsoil	Round	Diameter: 3.3 Ft.	Pit fill contained flint chips and fired clay.
12	Refuse Pit	Subsoil	Round	Diameter: 3.5 Ft.	156 flint chips taken from fill.
13	Refuse Pit	Subsoil	Round	Diameter: 2.5 Ft.	Possible crematory basin. Bottom of pit lined with blue clay. Fill contained charcoal and pieces of fired clay.
14	Refuse Pit	Subsoil	Oval	Length: 5.8 Ft. Width: 3.9 Ft.	No associations.
15	Burial Pit	Subsoil	Rectangular	Length: 4.9 Ft. Width: 2.0 Ft.	A greenstone spade, F.S. 17, recovered from SE end of pit. Pit fill contained blue clay.
16	Burial Pit	Subsoil	Rectangular	Length: 5.9 Ft. Width: 1.6 Ft.	A greenstone spade (F.S. 33 and 34) was found in each end of pit.
17	Burial Pit(?)	Subsoil	Rectangular	Length: 4.2 Ft. Width: 2.4 Ft.	No associations. Shape and size suggest an infant burial.

TABLE 22. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	PIT DIMENSIONS	ASSOCIATIONS/COMMENTS
18	Burial Pit	Subsoil	Rectangular	Length: 4.2 Ft. Width: 1.8 Ft.	Three copper beads (F.S. 55) were recovered from near the pit center.
19	Burial Pit	Subsoil	Rectangular	Length: 7.4 Ft. Width: 3.0 Ft.	No associations.
20	Burial Pit	Subsoil	Rectangular	Length: 9.2 Ft. Width: 1.5 Ft.	A greenstone spade (F.S. 47) was recovered from this pit. Masses of charcoal were also found at each end of the pit. Pit fill contained blue clay.
21	Burial Pit	Subsoil	Rectangular	Length: 4.8 Ft. Width: 2.7 Ft.	A greenstone celt (F.S. 12) was found in the SE end of this pit while F.S. 13, a greenstone spade, was recovered from the opposite end.
22	Pit	Subsoil	Round	Diameter: 1.7 Ft.	Pit fill contained 4 hammerstones. This feature is possibly associated with Burial Three.
23	Refuse Pit	Subsoil	Round	Diameter: 2.3 Ft.	Pit fill contained flint chips and charcoal.
24	Crematory Basin	Subsoil	Round	Diameter: 2.5 Ft.	Pit fill contained blue clay, charcoal and pieces of fired clay. Three copper beads (F.S. 56) were found in the bottom of this pit.

TABLE . Continued.

<u>FEATURE</u>	<u>DEFINITION</u>	<u>PROVENIENCE</u>	<u>PIT SHAPE</u>	<u>PIT DIMENSIONS</u>	<u>ASSOCIATIONS/COMMENTS</u>
25	Cremation	Mound Fill	-	-	A small mass of charred human bones (Burial One) was recovered on the extreme northern edge of the mound. A greenstone celt (F.S. 1) was found in association. Surrounding earth exhibits no evidence of local burning.
26	Cremation	Mound Fill	-	-	A charred skull fragment and 3 teeth caps (Burial Two) were recovered from the mound fill. Body was apparently burned elsewhere and remains placed in mound.
27	Burial	Mound Fill	-	-	Extended burial (Burial Three) recovered from mound fill. Pit outlines could not be found. Two greenstone spades (F.S. 21 and 22) found near head, a copper reel (F.S. 25) near midsection, 3 copper beads (F.S. 55), and F.S. 26, another spade, found near feet.

TABLE . Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	PIT DIMENSIONS	ASSOCIATIONS/COMMENTS
28	Cremation	Mound Fill	-	-	Only traces of charred skeletal material recovered (Burial Four). Area around body had been subjected to fire. <u>In situ</u> cremation. No association.
29	Cremation	Mound Fill	-	-	Charred human skeletal material (Burial Five). <u>In situ</u> cremation. No associations.
30	Cremation	Mound Fill	-	-	Charred skull fragment (Burial Six) recovered in association with a greenstone spade (F.S. 40). Individual apparently cremated <u>in situ</u> .
31	Cremation	Mound Fill	-	-	Charred skull fragments (Burial Seven). Cremated <u>in situ</u> .

Figure 14.  $Mg^{O67}$  - Horizontal Profile (From Andersen n.d.).

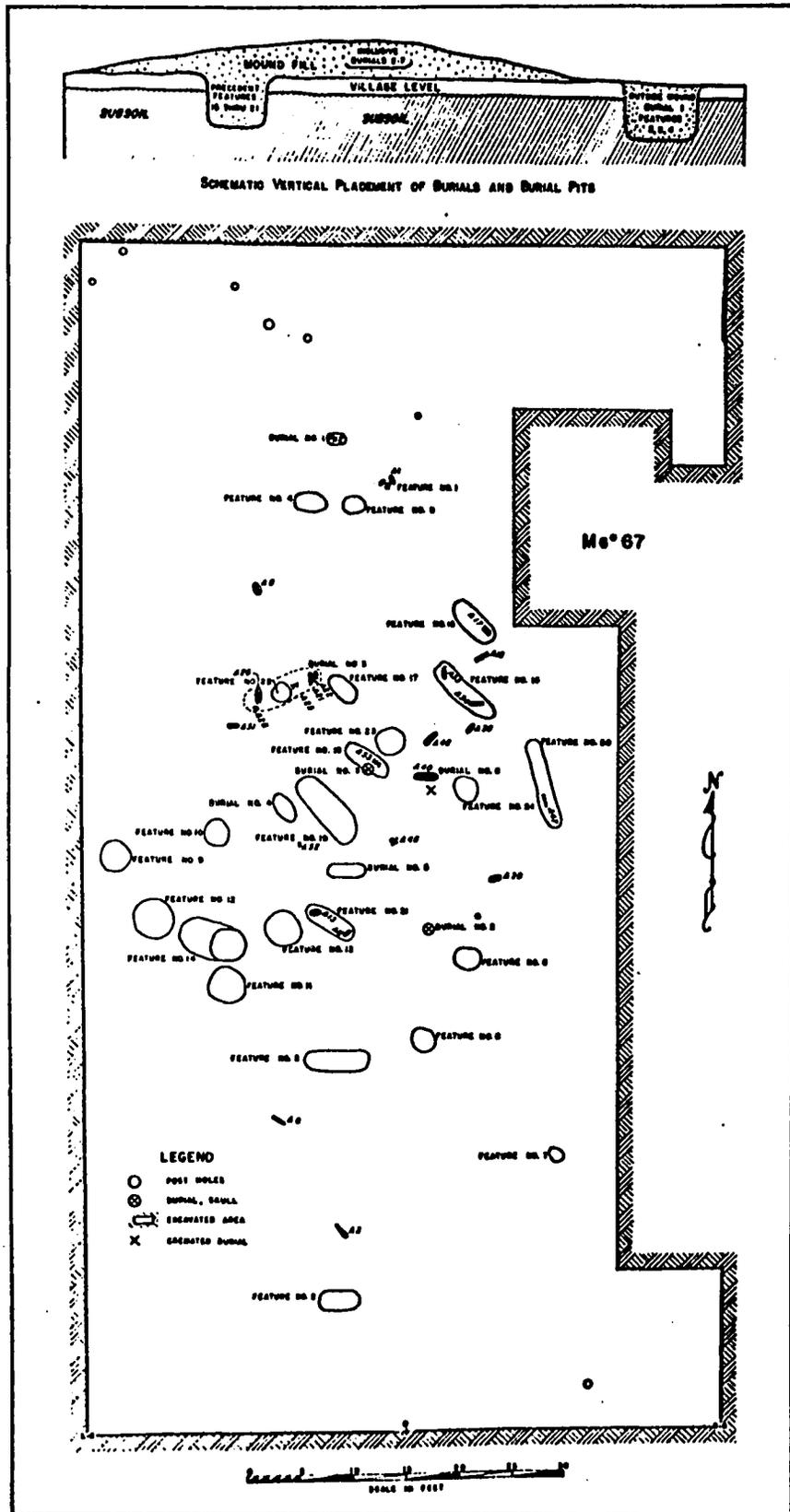


TABLE 23 - Mg<sup>0</sup>67 - GREENSTONE DIGGING IMPLEMENTS

<u>F. S. No.</u>	<u>LENGTH</u>	<u>WIDTH</u>	<u>THICKNESS</u>
2	230mm	117mm	21mm
6	350mm	121mm	24mm
13	245mm	108mm	24mm
18	255mm	110mm	28mm
21	285mm	128mm	22mm
22	333mm	141mm	23mm
26	335mm	151mm	25mm
33	368mm	147mm	20mm
34	335mm	140mm	30mm
39	250mm	117mm	32mm
40	435mm	140mm	31mm
41	340mm	124mm	25mm
42	290mm	121mm	24mm
<b>Mean :</b>	312mm	128mm	25mm
<b>Range :</b>	230-435mm	110-151mm	20-32mm

Greenstone Celts - Of the nine greenstone celts and one celt fragment recovered from this site, three were found in association with burials, two with an artifact cache, and five were in the mound fill. The nine complete specimens represent two formal types. The first is the polled variety commonly found in Copena mounds. The seven specimens of this type have long, narrow proximal ends and slightly contracting distal ends. All of these are bi-convex in cross-section. The remaining two specimens are relatively small (145-168mm in length) and are trianguloid in outline. The lateral edges of these implements are straight and they are flat in cross-section. Of the entire sample, only one celt exhibits any wear from use. The one fragment in the sample is of a third type, the grooved celt or axe. It was recovered from the surface of the mound. The exterior surface of this specimen is well ground and polished. Axes of this type are typically Late Archaic implements.

Copper Reel -An unusual copper reel shaped gorget occurred in association with Feature 27, an extended burial. The reel is apparently unfinished or is a crude local copy of the classic form. It is made from a rectangular sheet of copper 67mm x 51mm x 2mm. The sheet was made by laminating three thin pieces of copper together by hammering. The edges of the gorget are rough, unlike finished specimens that have smoothly ground edges. This specimen is the only unfinished copper reel-shaped gorget that has been found in the Tennessee Valley.

Copper Beads -Copper beads were found in two features. Three large round beads were found in Feature 22, a crematory basin. They were made from thick rolled sheets of copper and ranged in size from 11mm

TABLE 24 - Mg<sup>0</sup>67 - DIMENSIONS OF GREENSTONE CELTS

<u>F. S. No.</u>	<u>LENGTH</u>	<u>WIDTH</u>	<u>THICKNESS</u>
2-2	222mm	82mm	42mm
2-3	145mm	62mm	33mm
12	170mm	53mm	31mm
17	168mm	72mm	36mm
1	160mm	54mm	27mm
38	275mm	70mm	35mm
48	240mm	60mm	38mm
49	231mm	56mm	34mm
50	220mm	59mm	30mm
Mean:	215mm	63mm	33mm
Range:	145-275mm	53-82mm	27-42mm

to 19mm in diameter. Three smaller beads, tubular in shape, were found associated with Feature 27, an extended burial. They are small, 8mm in diameter and 5 to 8mm in length. A piece of two-strand fiber twins was preserved by the copper salts.

Manganese Dioxide - Two ground nodules of this mineral were recovered from the mound fill. They measured 41 x 32 x 10mm and 31 x 14 x 10mm. Grinding of this mineral produces a black pigment which was used in aboriginal times to make black paint.

Galena - A small cache of galena was found in the fill of the mound. The 10 pellets are all cubicle in shape. Only one of the specimens exhibits any sign of grinding. The nodules vary in size from 13 x 7mm to 25 x 17mm and weigh 125 grams.

Hematite - A small piece of red ochre was found in Feature 11. One edge of the specimen had been ground and a groove had been ground into one of the flat surfaces. The specimen measured 35 x 21 x 5mm.

Stone Vessel Fragments - Eleven sandstone and nine steatite vessel fragments were found in the mound fill. All of the sherds have smoothed interiors and rough exterior surfaces. Two steatite rims were in this sample. Both had flattened lips and one had a thin groove carved down the center.

Hammerstones - Twelve water worn cobbles were recovered which had one or more pecked surfaces. Several of these specimens also had surfaces flattened by grinding.

Mortars - Five large river cobbles or sandstone slabs were found. All had circular ground depressions on one or both faces. These depressions range from 110 to 140mm in diameter.

Ceramic Material - Nine sherds were recovered from the mound fill at this site. Seven of these were Long Branch Fabric Marked body sherds and the remaining two were of the Mulberry Creek Plain type.

#### SUMMARY

Both Mg<sup>O</sup>66 and Mg<sup>O</sup>67 are somewhat unusual in their lack of certain diagnostic traits, and by the presence of other traits that are rare in most other Copena mounds. Of the twenty-three burial pits which occurred in Mg<sup>O</sup>66 only two contained pillows of foreign clay. This trait, so common in the majority of Copena mounds, was completely absent at Mg<sup>O</sup>67. Objects of galena, copper and soapstone are noticeably scarce or absent.

While there were only ten rectangular burial pits present in Mg<sup>O</sup>67, eight cremations were found. Two, and possibly three, of these cremations were made in basin shaped pits. Of the remainder, four were in situ cremations on old mound surfaces, while two were apparently cremated elsewhere and the remains deposited in the mound at a later time. While the percentage of cremations to extended burials was proportionately high at this mound in comparison to others, this difference might be due to differential preservation.

In the summary section of the La<sup>O</sup>44 report the presence of large numbers of greenstone digging implements and galena nodules found unassociated in the mound fill was explained as possibly being the result of negative ideology on the part of the living towards the dead. In this hypothesis these artifacts were stored or left at the mound site after being utilized in mortuary sites. However, information recovered from the Penn Mounds indicates that while this

might be the case in certain instances, another explanation is equally viable.

In Mg<sup>0</sup>66 the remains of three cremated individuals were recovered. There were apparently reburials since the areas surrounding the charred skeletal material did not exhibit evidence of having been subjected to fire. Of the six crematory burials which occurred in the mound fill at Mg<sup>0</sup>67 four were in situ cremations. The remaining two burials were apparently cremated at other locations. Considering that poor preservation of skeletal material is so common in Copena mounds, this data suggests that at least some of the artifacts found "floating" in these mounds were originally accompaniments to crematory burials.

Both of the mounds investigated at the Penn site were constructed upon old habitation sites. Many of the refuse or midden pits found at both sites were the result of earlier occupations. A large amount of lithic material was incorporated into these structures when surface soil was gathered from adjacent areas for use in mound construction. Although the samples of chipped stone taken from the two excavation units were not available for study, original laboratory photographs indicate a wide variety of projectile point and tool types.

The great majority of these specimens appear to date to Late Archaic and Early Woodland occupations. Among the artifacts which can be placed into one or both of these contexts are the Benton, Cotaco Creek, McIntire and Wade projectile point types, stemmed and scrapers and reamers, drills, and biface blades. The stone vessel fragments as well as the fiber, sand, and limestone tempered pottery, date to these periods. The later Copena peoples apparently did not inhabit

this site but only visited it to bury their dead. Their village, or villages, although not located, must have been nearby, perhaps to the north in the fertile Moulton Valley.

#### 1. THE TURNEY MOUND (Mg<sup>O</sup>71)

This was a small conical burial mound in southwestern Morgan County on property owned by Mrs. Mollie Turney of nearby Hartselle, Alabama. The site was located on an 11° slope some 750 feet west of Flint Creek in the SE1/4, SW1/4, Section 7, Township 7 South, Range 4 West.

The mound was found in a wooded area 350 feet below the crest of a low hill overlooking the Flint Creek valley. Although the mound site had never been under cultivation, treasure seekers had dug three large pits near its center. One of these pits was 4 feet in diameter and over eight feet deep.

#### Excavation

Work began at Mg<sup>O</sup>71 on May 29, 1941 and was completed by the end of the following month. The site was excavated by a crew of thirty W. P.A. workmen under the supervision of Wayne K. Kraxberger. An area 55 feet by 45 feet was cleared around the mound and staked off into a five-foot grid system. Since the mound was small (35 feet in diameter and five feet high), trenches were begun on both the eastern and western sides. The vertical slicing technique was utilized to take the trenches down in six inch arbitrary levels to the subsoil surface. Vertical and horizontal profiles were drawn as the excavation progressed.

### Stratigraphy

Beneath the mound proper were two basement complexes. The first was a sandy reddish loam directly under the mound base. This subsoil stratum was sterile except where penetrated by burial pits. A bedrock component of fine grain, buff-colored sandstone was found beneath this sandy loam. Several large chunks of this material were found in the burial pits and in the mound fill. The mound proper was constructed of brown sandy loam intermixed with red clay. It also contained occasional small lenses of fine sand, charcoal, and sandstone.

### Features

Seven primary burial pits and four secondary interments were found in this mound. The subsoil burial pits contained no skeletal material and were given feature numbers. The secondary burials were found inclusive in the mound fill and in all four cases only skull fragments were recovered. Pit outlines could not be determined in the area of these fragments so these specimens were given individual burial assignments. The seven features and four burials are summarized in Table 25.

TABLE 25

#### Feature One:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 9.3 feet; Width: 2.9 feet

Pit Orientation - N-S

Skeletal Material - None

TABLE 25. Continued

Associations - Pillows of puddled foreign blue clay were found at each end of the pit. Charcoal was recovered from the bottom of this feature.

Feature Two:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 8.8 feet; Width: 3.5 feet

Pit Orientation - NW - SE

Skeletal Material - None

Associations - Puddled clay pillows were found at each end of this pit. A greenstone spade (F.S. 10) was found under the southeastern end of the pit. A greenstone celt, F. S. 9, and two copper beads were recovered from the opposite end of the pit.

Feature Three:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 8.2 feet; Width: 2.7 feet

Pit Orientation - NE - SW

Skeletal Material - None

Associations - Clay pillows were found at each end of the pit and a mass of blue clay was recovered from the center of the pit.

TABLE 25. ContinuedFeature Four

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 7.7 feet; Width: 2.4 feet

Pit Orientation - E - W

Skeletal Material - None

Associations - Clay pillows at each end of pit. A greenstone spade (F. S. 13) was found near the center of the pit and a deposit of charcoal was found lining the bottom of this feature.

Feature Five:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectangular

Pit Dimensions - Length: 6.5 feet; Width: 2.5 feet

Pit Orientation - E - W

Skeletal Material - None

Associations - Greenstone spade (F. S. 14) near eastern end of pit.

Charcoal was recovered from the bottom of this pit.

Feature Six:

Definition - Burial Pit

Provenience - Subsoil

Pit Shape - Rectanguloid

Pit Dimensions - Length: 5.1 feet; Width: 3.5 feet

TABLE 25. Continued

Pit Orientation - SE - NW

Skeletal Material - None

Associations - Pillow of clay in pit center. A greenstone celt was found on this mass of foreign clay.

Feature Seven:

Definition - Crematory Pit (?)

Provenience - Subsoil

Pit Shape - Oval

Pit Dimensions - Length: 4.2 feet; Width: 3.7 feet

Pit Orientation - E - W

Skeletal Material - None

Associations - A layer of charcoal and ash was found in the bottom of this pit. Two greenstone spades (F. S. 21 and 22) were found in the fill of this pit near the original surface.

Feature Eight:

This burial (Burial 1) was found in Square 15R1, 3.30 feet below stake 20.0. It consisted of a skull and six cervical vertebrae found in association with a greenstone celt and spade. Both the skeletal material and the celt had been placed under the large slab spade. The burial had apparently been made in a shallow depression lined with fine sand. Within two feet of the skull, and on the same sandy lense, were found four deposits of blue clay and two additional spades. According to the excavator, the skull was found face up with the top of the head to the east. The

TABLE 25. Continued

six cervical vertebrae were found in anatomical order. However, portions of the upper maxillary and mandible were found beneath the vertebrae. This, and evidence of fire on the sand lense, indicate a crematory burial.

Feature Nine:

A single skull (Burial 2) was found 2.35 feet below stake 20R2. There was no evidence of a pit near the skull. A greenstone celt, F. S. 16, was found beneath the skull.

Feature Ten:

A few skull fragments (Burial 3) were recovered 2.0 feet beneath stake 15L1. There was no pit outline present and no associations.

Feature Eleven:

Five and a half feet below stake 15-0 more skull fragments (Burial 4) were found. Again there were no pit outlines and no associations. It is possible that all three of these skulls found inclusive in the mound fill represent reburials.

Artifacts:

Greenstone Digging Implements: Thirteen greenstone slab spades and five fragments were recovered from Mg<sup>O</sup>71. The five fragments represent at least two additional implements. All of the complete specimens have rounded to tapered ends and parallel blade edges. The dimensions of these specimens are given in Table 26. The complete examples ranged in size from 220 x

102 x 30mm to 560 x 162 x 22mm. Ten of the thirteen specimens exhibited heavy wear on the distal or working edge, moderate wear along the blade faces and edges, and usually no wear at all on the proximal end. Two of the remaining specimens (F. S. 13 and 17) were large quarry blanks which had been roughly shaped by percussion flaking but not utilized. The last implement in this sample (F. S. 3) represented a finished spade but lack of wear on any of its edges indicates that it was never utilized.

Three of these 13 specimens were associated with Burial One, an apparent cremation. Five were found in burial pits. Features Two, Four and Five each contained one digging implement, while two more were found near the top of Feature Seven. The remaining five complete specimens and all of the fragments were recovered from the mound fill.

Greenstone Celts - Four greenstone celts were recovered from the mound proper, all in association with interments. All of these specimens are of the polled variety, having long, narrow proximal ends, rounded distal edges, and are bi-convex in cross-section. Three of these examples are relatively small and are not well made. While none of these three specimens show signs of wear, pecking marks and various flaws have not been ground away. The remaining specimen is more typical of Copena celts. It is long and narrow and has been finely ground and polished on all surfaces. It measures 286 x 61 x 40mm, while the other specimens measure 145 x 55 x 30mm,

TABLE 26. MG<sup>o</sup> 71 - GREENSTONE DIGGING IMPLEMENTS

<u>F. S.</u>	<u>LENGTH</u>	<u>WIDTH</u>	<u>THICKNESS</u>
3	284mm	126mm	22mm
4	475mm	133mm	30mm
6	300mm	116mm	34mm
7	320mm	127mm	32mm
10	334mm	121mm	29mm
13	490mm	177mm	17mm
14	312mm	113mm	21mm
16	280mm	102mm	34mm
17	560mm	162mm	22mm
19	370mm	159mm	20mm
20	330mm	137mm	21mm
21	293mm	110mm	17mm
22	220mm	102mm	30mm
<b>AVERAGE:</b>	351mm	130mm	25mm
<b>RANGE:</b>	220-560mm	102-177mm	17-34mm

179 x 60 x 28mm and 203 x 56 x 37mm. These four celts were recovered in association with Features Two and Six and Burials 1 and 11.

Galena - Only two galena nodules were recovered during the excavation of Mg<sup>0</sup>71. These specimens were both found unassociated in the mound fill. The first specimen, F. S. 18, had been ground into a sphere 36mm in diameter and weighed 145 grams. The second nodule was irregular in outline with ground facets. It measured 69 x 62 x 40mm and weighed over 800 grams.

Copper - Two small tubular copper beads were found in Feature Two in association with a greenstone spade and celt. Both beads were made from rolled sheets of copper and were 20mm in length and 10mm in diameter. The piece of sheet copper from which they were made was 1.5mm thick.

Chipped Stone Artifacts:

Projectile Points: Four projectile points and four fractured distal tips were recovered from the fill at Mg<sup>0</sup>71. The complete specimens can be described as follows:

Type: Hardaway

Number of Specimens: 1

Form and Manufacture: This is a small side-notched point with an incurvate base. The basal edge has been heavily ground and the blade edges are serrated.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
22	30mm	22mm	7mm

Type: Big Sandy

Number of Specimens: 2

Form and Manufacture: These are small to medium side-notched points. Blade edges are slightly excurvate and basal edges are incurvate to straight and lightly ground.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
24	50mm	21mm	8mm
25	30mm	20mm	6mm

PROVISIONAL TYPE 4 - One medium stemmed projectile point was recovered which could not be placed into an established type category. This specimen has excurvate blade edges, which have been finely serrated, and small shoulder tangs or barbs. The base appears to have been straight but has been fractured. This specimen possibly represents a variant of the Kirk Serrated type. It measures 69 x 33 x 7mm.

Biface Blades - Medium Triangular: Two triangular biface blades were recovered. Both have parallel blade edges and acute distal ends. The base is unfinished on one specimen and straight on the other. Both exhibit little pressure flaking and possibly represent projectile point blanks. These two specimen measure 47-77mm in length, 25-31mm in width, and 7-11mm in thickness.

Uniface Scrapers: Eight uniface tools were recovered from Mg<sup>0</sup>71.

These tools were classified into three scraper categories according to

formal and apparent functional attributes. Two were placed into a trapezoid end scraper category, five into a side scraper category and one into an ovoid uniface scraper category. All specimens were made from flakes and have steeply flaked working edges. Two of the side scrapers also have one acute end which resembles a reamer or borer bit. The trapezoid scrapers measured 32 x 25 x 7mm and 30 x 27 x 8mm, the ovoid scraper 48 x 37 x 11mm and the side scrapers range from 42-45mm in length, 23-35mm in width and 5-7mm in thickness.

#### SUMMARY

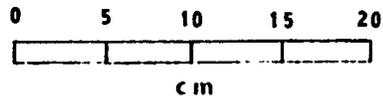
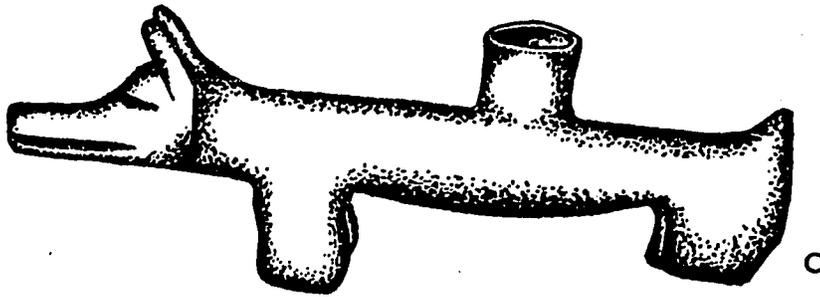
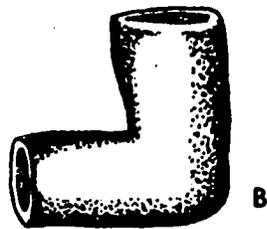
The Turney Mound appears to have been an isolated component of the Copena complex. Although a careful search of the adjacent areas was made no other mounds were located. The excavator did report that village debris was found near the crest of the hill above Mg<sup>O</sup>71. However, in the field report no mention was made concerning the nature of this material. It is also possible that the village site of the builders of this mound was located below the mound in the stream valley.

The mound itself appears to have been built over a period of time and in successive stages. There were seven primary subsoil burial pits. Of these, six were typical rectangular Copena burial pits. The seventh pit was oval in shape and contained a large amount of charcoal and ash. It is possible that this pit represents a crematory basin. Smaller amounts of charcoal were also found in Features One, Four, and Five. While cremation is again a possibility, these smaller deposits of charred material could represent the remains of fiber or bark matting so often found lining burial pits of this type.

Four secondary burials were recovered from the mound fill. All of these appear to be reburials or cremations. None of these inclusive burials appear to have been made in a prepared pit. Rather, they seem to have been placed into shallow basins and covered over with earth as mound construction progressed.

The projectile points and chipped stone blades and scrapers found in the mound fill are chance inclusions. Both the Hardaway and Big Sandy projectile points, and the uniface scrapers, date to the Early Archaic period. It is likely that the area near Mg<sup>0</sup>71 served as a temporary camp for some of the wandering bands of the Archaic period. The material remains of these encampments were apparently gathered up in the earth used to construct the mound.

**Figure 15. Copena Artifacts. A- Limestone Tempered Elbow Pipe. B,C - Steatite Pipes.**



### J. THE LEEMAN MOUND (Mg°62)

In the spring of 1940, while excavations were being conducted in Lawrence County, the presence of a conical burial mound in adjacent Morgan County was brought to the attention of the field supervisor. The site was visited and, since it appeared to be a component of the Copena complex, excavations were planned. After the investigations of mounds La°45 and La°46 were completed, the crew and field equipment were transferred to the new site.

The new mound, designated Mg°62, was situated on land owned by Hugh Leeman in Township 6 South, Range 3 West, Section 3, some eight miles east of Decatur. Before the construction of the Wheeler Dam, the site was located .5 miles south of the Tennessee River. However, at the time of excavation the impounded waters were only two hundred yards away from the site. The mound had been constructed on a low rise which stood approximately six feet above the surrounding valley floor, and consisted of two units, A and B, joined by a saddle-shaped central section.

#### Excavation

The site was covered with a dense secondary growth of brush and weeds. After the site area was cleared, the mound was found to be 10 feet high, covering an area 75 x 90 feet. The long axis of the mound ran in a NW by SE direction. The base line was established parallel to this axis and the site was staked off into a five-foot grid system. Excavations were then begun on opposite sides of the mound. Both the vertical

and horizontal excavation techniques were utilized to take each lateral trench down in half-foot levels to the sterile subsoil. Horizontal and vertical profiles were drawn as each trench was completed.

### Features

Forty features were recorded for this mound, 26 in Unit A and 14 in Unit B. The features in Unit A include 14 subsoil burial pits (primary burials), 8 secondary interments (including 4 possible reburials and a cremation), a circular subsoil pit, two caches of artifacts, and a charcoal concentration. Twelve of the features in Unit B were primary burial pits. The remaining two features consisted of a charred log and a mass of charcoal recovered from the mound fill. These 40 features are summarized in Table 27.

### Artifacts

#### Greenstone Digging Implements-

Fifteen greenstone slab spades and one fragment were recovered from this mound. Thirteen of these specimens were recovered from Unit A; one each in Features 17, 22, 27, 30 and 39, and eight apparently unassociated in the mound fill. The two examples recovered from Unit B occurred in association with burial pits. F.S. 70 was recovered from Feature 7 and F.S. 76 from Feature 8.

These implements are characteristically flat in cross section, with parallel to slightly tapered lateral edges and rounded distal and proximal ends. The majority of these digging tools had heavily worn distal, or working, ends. However,

Table 27 - Mg°62 - Features - Units A & B

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
1	Circular Pit	Subsoil	Circular	Diameter: 3.8 ft.	A projectile point, F.S. 18, was recovered from the pit fill. This specimen was placed into the Provisional Type 1 category.
2	Cache of galena pellets	Mound fill	-	-	Several small galena cubes were found near the northeast edge of Feature 4, a burial pit.
3	Artifact cache	Mound fill	-	-	Several galena nodules (F.S. 40) and a string of copper beads were found apparently unassociated in the mound fill. The beads were strung alternately, one long and one short.
4	Burial Pit	Subsoil	Rectangular	Length: 7.4' Width: 2.0'	Ninety-five galena pellets (F.S. 47) were found scattered along the floor of this pit.

Table 27 - Continued  
Unit A

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
5	Burial Pit	Subsoil	Rectangular	Length: 4.3' Width: 2.0'	Twenty-five galena pellets were found in the bottom of this pit. A post mold occurred near the SW edge of the pit.
6	Mass of charcoal	Mound fill	-	-	A small mass of charcoal was found in the mound fill. A greenstone celt, F.S. 45, was recovered 2.4 feet to the north at the same level. Possibly associated with Unit B.
9	Burial Pit	Subsoil	Rectangular	Length: 7.9' Width: 2.0'	A greenstone celt (F.S. 32) was recovered from the fill of this pit.
12	Burial Pit	Subsoil	Rectangular	Length: 4.7' Width: 1.6'	Small mass of puddled blue clay near western end of pit.

Table 27 - Continued  
Unit A

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
14	Burial Pit	Subsoil	Rectangular	Length: 7.8' Width: 2.0'	Pillows of blue clay were found at each end of this pit.
16	Burial Pit	Subsoil	Rectangular	Length: 7.7' Width: 2.2'	Pillows of blue clay at each end of pit. A galena nodule (F.S. 65) was found near the center of the pit.
17	Burial Pit	Mound Fill	Rectangular	Length: 5.5' Width: 2.0'	A greenstone spade, F.S. 85, was found near the eastern end of this pit. Pillows of blue clay occurred at each end.
22	Burial Pit	Mound Fill	Rectangular (?)	Length: 6.0' (?) Width: 2.0'	Portion of burial pit. Masses of charcoal occurred on each side of the pit. F.S. 96, a greenstone spade, was found in the mass of charcoal on the north edge of the pit.
26	Burial Pit	Subsoil	Rectangular	Length: 8.0' Width: 2.6'	No associations. Precedent to nearby Feature 31.

Table 27 - Continued  
Unit A

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
27	Burial Pit	Mound Fill	Rectangular	Length: 6.7' Width: 1.6'	Pillows of puddled yellow clay at each end of pit. Pit lined with charred bark. A greenstone hoe (F.S. 103) and celt (F.S. 102) placed alongside of pit.
28	Burial Pit	Subsoil	Rectangular	Length: 6.0' Width: 2.0'	Pillow of blue clay at southern end of pit. Intrudes into Feature 30.
29	Burial Pit	Subsoil	Rectangular	Length: 6.0' Width: 1.2'	Two masses of blue clay found near south end of the pit.
30	Burial Pit	Subsoil	Rectangular	Length: 9.5' Width: 4.7'	Pit rimed with red clay. Refilled with white sandy clay. Size suggests a multiple burial. A greenstone spade (F.S. 104) was recovered from this feature.
31	Burial Pit	Subsoil	Rectangular	Length: 7.2' Width 2.3'	No associations.

Table 27 - Continued  
Unit A

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
33	Burial Pit	Subsoil	Rectangular	Length: 7.0' Width: 2.0'	Pit contained a skull fragmented (Burial One) near the western end. A pillow of yellow puddled clay was found near the fragment.
34	Burial Pit	Subsoil	Rectangular	Length: 8.0' Width: 2.1'	A skull fragment (Burial Two) was found near a blue clay pillow in the western end of the pit. F.S. 36, a badly leached elbow pipe, was recovered from the pit fill.
35	Burial	Mound Fill	-	-	Several long bones fragments (Burial 3). Possible reburial.
36	Burial Pit	Mound Fill	Round	Diameter: 4.0'	Reburial. Long bones and skull fragments only (Burial Four). Puddled clay poured over skull. Blue clay pillow near top of skull. Two greenstone celts found in bottom of pit. Charred bark lining sides of pit.

Table 27 - Continued  
Unit A

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
37	Burial	Mound Fill	-	-	Several long bone fragments (Burial 5). Possible reburial.
38	Cremation(?)	Mound Fill	-	-	Mass of skeletal fragments in bed of charcoal. A fragmentary conch shell digger (F.S. 64) covered portions of skeletal material.
39	Burial	Mound Fill	-	-	Fragment of a skull (Burial 7) found in mound fill under a greenstone hoe (F.S. 68).
40	Burial Pit	Subsoil	Rectangular	Length: 6.8' Width: 1.9'	A small long bone fragment (Burial 10) and a mass of red clay were found near the NW end of the pit.

Table 27 - Continued  
Unit B

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
7	Burial Pit	Subsoil	Rectangular	Length: 7.5' Width 1.9'	Pillows of foreign blue clay at each end of the pit. A greenstone spade (F.S. 70) had been placed near the northern end of the pit. A hammerstone (F.S. 71) was found in the pit fill.
8	Burial Pit	Subsoil	Rectangular	Length: 8.2' Width: 3.1'	Blue clay pillows at each end of pit. Three galena nodules were placed near the center of the pit (F.S. 73-75). A greenstone spade (F.S. 76) and four additional galena nodules (F.S. 77-80) were found near the NE end.
10	Burial Pit	Subsoil	Rectangular	Length: 8.3' Width: 2.4'	No associations.
11	Burial Pit	Subsoil	Rectangular	Length: 7.5' Width: 2.4'	Pillow of blue clay near the northern end of the pit. Three galena nodules had been placed beside this pillow (F.S. 61-63).

Table 27 - Continued  
Unit B

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
13	Charred log	Mound Fill	-	Length: 5.5' Width: .9'	A mass of blue clay was found near the southern end of this charred log. The log was found 2 feet above Feature 7, a subsoil burial pit.
15	Burial Pit	Subsoil	Rectangular	Length: 5.2' Width: 1.9'	A pillow of blue clay was found at the southern end of this pit.
18a	Burial Pit	Subsoil	Rectangular	Length: 6.5' Width: 1.9'	A blue clay pillow was found at the NE end of this pit.
18b	Burial Pit	Subsoil	Rectangular	Length: 7.0' Width: 1.9'	A blue clay pillow occurred at the NE end of this pit.
18c	Burial Pit	Subsoil	Rectangular	Length: 7.3' Width: 2.8'	This pit contained two fragmentary skulls, one adult and one child. Pillows of blue clay, and greenstone celts (F.S.86 & 99) at head and feet. The bottom of this pit was lined with charred bark.

Table 27 - Continued  
Unit B

Feature Number	Definition	Provenience	Pit Shape	Dimensions	Associations/Comments
21	Mass of Charcoal	Mound Fill	-	Length: 3.0' Width: 1.4'	This mass of charred material occurred 1.9' north of Feature 23, a burial pit.
23	Burial Pit	Subsoil	Rectangular	Length: 8.6' Width: 2.5'	Galena pellets (F.S. 97) were found in the fill of this pit. A posthole occurred in the south-central portion of the pit.
24	Burial Pit	Subsoil	Rectangular	Length: 7.4' Width: 2.1'	No associations.
25	Burial Pit	Subsoil	Rectangular	Length: 6.6' Width: 1.6'	A mass of charred bark was found in the NW end of this pit, as was F.S. 101, a greenstone celt.
32	Burial Pit	Subsoil	Rectangular	Length: 3.4' Width: 1.7'	This pit contained Burial 8, the fragmentary remains of an adult. F.S. 69, a greenstone celt, was placed into the pit when the burial was made.

Figure 16. Mg<sup>62</sup> - Horizontal Profile (From Andersen n.d.).



four specimens exhibited only light wear while F.S. 104 was a large quarry blank which had not been utilized. Two additional specimens had concave depressions on one lateral blade edge. These depressions were quite battered and are possibly the result of chopping or cutting roots. The dimensions of all fifteen specimens are given in Table 28.

#### Greenstone Celts-

Nine greenstone celts were recovered from this site, five in Unit A and four in Unit B. All but one of these specimens (F.S. 45 from Unit A) occurred in burial association. The majority of these celts are of the polished variety, biconvex in cross-section with a long, narrow proximal end. However, three of the specimens are flat in cross-section, only lightly polished, and exhibit heavy wear. This last trait is unusual since the vast majority of celts recovered from Copena mounds do not appear to have been utilized. The dimensions of these nine celts are given in Table 29.

#### Galena-

Some 3696 grams (approximately eight pounds) of galena were recovered from this mound. In Unit A 1364 grams were found, with Features 4, 5, and 16 containing the bulk of this mineral. Unit B contained three burial pits which had galena as a mortuary offering. Unassociated caches of galena were recovered in the fill of both units. Most of these specimens were ground, irregular or cube-shaped nodules, which a galena bead and three discs were also recovered. The bead was disc-shaped, 16 x 18, 10mm, and had been drilled from both flat faces.

Table 28. Mg<sup>62</sup>- Greenstone Digging Implements.

F. S. Number	Length	Width	Thickness
29	390mm	120mm	23mm
31	229mm	80mm	26mm
33	360mm	130mm	29mm
34	410mm	163mm	21mm
54	300mm	100mm	30mm
68	307mm	104mm	30mm
70	416mm	176mm	19mm
76	459mm	146mm	37mm
85	323mm	126mm	32mm
89	340mm	127mm	23mm
94	334mm	105mm	22mm
96	363mm	147mm	20mm
98	330mm	126mm	32mm
103	415mm	135mm	34mm
104	485mm	176mm	19mm
Mean:	362mm	131mm	26mm
Range:	229-485mm	80-176mm	19-37mm

Table 29. Mg°62 - Greenstone Celts.

F.S. Number	Length	Width	Thickness
32	200mm	62mm	38mm
45	250mm	70mm	29mm
52	247mm	53mm	33mm
57	247mm	53mm	33mm
69	196mm	55mm	36mm
86	272mm	50mm	42mm
99	243mm	56mm	44mm
101	155mm	59mm	23mm
102	238mm	58mm	39mm
Mean:	228mm	57mm	35mm
Range:	155-272mm	50-70mm	23-44mm

#### Copper Beads-

A string of 34 small cylindrical copper beads were recovered from the mound fill in association with several galena nodules. This artifact cache was designated Feature 3. The cache was probably originally associated with a secondary burial which had disintegrated before the site was excavated. The necklace (?) consisted of alternate short and long beads strung on a double-strand twisted twine which had been preserved by the copper salts. The beads varied from 3 to 18mm in length to 2 to 3mm in diameter. They had been made by rolling a thin sheet of beaten copper. The edges of each individual bead had been subsequently ground.

#### Marine Shell-

A marine gastropod shell cup was found in association with Feature 38, a possible crematory burial. The columella and a portion of the whorl had been removed to form a dipper-like container.

#### Hematite-

A nodule of red ochre was recovered from the mound fill. Portions of the exterior surface had been ground. The specimen was 46mm long, 35mm wide and 11mm thick.

#### Elbow Pipe-

A small, badly leached, limestone elbow pipe was recovered from the fill of Unit A. This specimen had a flaring bowl and had been biconically drilled.

#### Chipped Stone-

Fourteen specimens of chipped stone were recovered from the mound fill. All appear to have been chance inclusions.

This sample included 9 projectile points, 1 expanded base drill, 1 medium triangular biface blade, two biface blade fragments and a single chip.

#### Projectile Points-

Provisional Type 1- Three straight stem projectile points were included in this lithic sample. All of them are medium in size, varying in size from 50 x 27 x 9mm to 52 x 25 x 11mm.

Provisional Type 4- Five stemmed projectile points with prominent shoulder barbs were recovered. Two of these points also have serrated lateral blade edges. They range in size from 40 x 25 x 8mm to 50 x 31 x 7mm.

Provisional Type 11- One lanceolate triangular point was placed in this category. It is medium in size (41 x 17 x 7mm) and is slightly asymmetrical in outline. The base is unfinished.

Biface Drill: Medium Triangular- This specimen has an acute distal end, excurvate blade edges and a rounded base. Since this example exhibits only percussion flaking, and does not appear to have been utilized, it is possibly a projectile point blank. It measures 52mm in length, 32mm in maximum width and 7mm in thickness.

Drill- A basal fragment of an expanded base drill was recovered. The basal edge is straight and has been thinned. The shoulders are rounded and the blade incurvate. The base is 32mm wide and 7mm thick.

Mortar- A large sandstone slab with a shallow circular

depression on a flat surface was recovered from the mound fill.

Grinding Stones- These are two river cobbles approximately the size of a man's fist. They exhibited heavy grinding on one or more surface.

#### Summary

The data presented in this report indicates that the Leeman Site was, in actuality, two separate mounds. Mound A, the larger and higher of the two units, appears to have been constructed first, and as the need arose additional burials were made in the adjacent area to the west of this structure. Unit B was apparently an incipient mound, since only primary burials had been made and a low mantle of earth constructed above them when the site was abandoned.

There is some indication that the secondary burials made in the fill of Unit A were primarily bundle burials or cremations. The caches of artifacts found "floating" in the mound fill of Unit A were probably originally mortuary accompaniments to additional burials which had been disturbed by aboriginal digging or had disintegrated due to natural agencies. The fact that no secondary burials were made in the fill of Unit B and the corresponding absence of unassociated artifacts in the mound fill substantiates this observation. The presence of charred logs and charcoal concentrations in both units indicate that fires were built on the site before or during construction, perhaps as a part of the burial ceremony.

K. THE ROBINSON SITE (Mg°63, Mg<sup>V</sup>64)

The Robinson Site was a village and adjacent mound located in Morgan County on a farm owned by T. J. Robinson. The site was situated on the northern bank of West Flint Creek, a tributary of Flint Creek which flows northward into the Tennessee River just upstream from the city of Decatur, some nine miles to the northwest. The legal location of this site is NW 1/4 Section 20, Township 65, Range 5W.

The site covered an area of approximately 360 feet in a north-south direction along the top of a ridge which terminates in a 30 foot bluff at the southern end, overlooking the West Flint Creek. The eastern side of the site is bounded by an old meander channel.

The mound, Mg°63, was found in a wooded area near the edge of the bluff at the southern end of the site. The village area, Mg<sup>V</sup>64, lay in a cotton field north of this wooded area. The village site was investigated after the cotton crop had been picked, approximately one month after the excavation of Mg°63 had been completed.

1. Mg°63

Mg°63 was a conoidal earth mound 8 feet high. The base of the mound was irregularly elliptical in outline and covered an area approximately 50 by 70 feet. The

major axis was north-south. This structure was erected on an irregular surface which, at the southern end, sloped toward the bluff. A portion of the mound fill extended down the slope of the bluff.

According to the excavation report, the dense growth of trees and brush covering the mound, and deeply rooted in the mound fill, had disrupted the stratigraphy and destroyed several burials. Further destruction was caused by treasure hunters who had dug four large pits near the summit. One of them, over ten feet in length and five feet in width, extended through the mound fill and into the subsoil base.

Mg°63 was constructed on a village layer, the southernmost extension of Mg<sup>V</sup>64. A lense of brown, sandy loam at the extreme southern end of the mound marked the first material deposited in erecting the mound. This sterile loam was carried in from beyond the village area. The physical location of this primary loading area caused further extensions of the mound to be made landward, covering more and more of the old village level. The fill used in the final stage or stages of mound construction was taken from the adjacent village midden. The fact that the village level underlying the mound was discernible in only a few profiles can be attributed to the blending of the mound fill with the parent village midden. Successive stages in the northward expansion of the mound are revealed in a . . . . . semicircular arrangement of burials on the northern side of

the structure. Small lenses of red clay were observed in the profile. These were the result of the aboriginal excavation of numerous precedent burial pits into the red clay subsoil.

Burials:

A total of 95 burials were encountered during the excavation of Mg°63. Of these, 20 were recovered from primary subsoil burial pits while 75 were found in the mound fill. Skeletal preservation at this site, in comparison to other Copena mounds, was especially good. Sex and age estimates could be made on the majority of these burials. This data, and other pertinent information, is summarized in Table 30.

Cultural Material:

Galena - Some 1835 grams of galena were recovered from this mound. This total can be divided on the basis of artifact type. Three large galena nodules were encountered in the mound fill. These three specimens were all heavily ground and range from 145 to 850grams, totalling 1555 grams. A ground galena disc, also recovered from the mound fill, measured 43 x 38 x 23mm and weighed 175 grams. The two remaining galena artifacts are a portion of a plano convex bar gorget fragment and a cylindrical bead. The bar gorget was heavily ground and measured 31 x 25 x 13mm. The bead, which had been biconically drilled was 27mm long and 23mm in diameter and weighed 70 grams.

Mg°63. Table 30. Burial Data.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
1	Mound Fill	A	M	SE			Skull resting on large stone slab. An additional slab had been placed over the lower portion of the body. Fully flexed.
2	Mound Fill	A	F	NE			Fully flexed. Extreme Fronto-occipital skull deformation.
3	Mound Fill	?	?	S			Fully flexed. Skeletal material extremely fragmentary.
4	Mound Fill	A	M?	?			Disturbed by treasure hunter. Possible occipital deformation.
5	Mound Fill	A	M	E			Extended burial; on back. Fronto-occipital deformation.
6	Mound Fill	A	F	E			Partially flexed. Intrusive into Burial 7.
7	Mound Fill	?	?	?			Bundle burial. Remains disturbed and fragmentary.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
8	Mound Fill	A	M				Post-cranial material only. Disturbed by Burial 9. Partially flexed.
9	Mound Fill	A	M	W			Extended (?). Large stone slab over skull.
10	Mound Fill	A	M				Skull burial. A limestone bead (F.S. 4) found near head.
11	Mound Fill	?	?				Bundle burial. Skeletal material extremely fragmentary.
12	Mound Fill	A	F				Flexed burial. Lower extremities only.
13	Mound Fill	A	F	N			Partially flexed. Frontolambdoidal deformation.
14	Mound Fill	C		NE			Extreme fronto, possible occipital deformation. Plain limestone tempered sherds under skull. Extended.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
15	Mound Fill	A	M	E			Extended.
16	Subsoil	A	F				Fronto and vertical occipital skull deformation. Bundle burial. Multiple burial pit containing Burials 16, 17, 18, 19, 20 and 26. Burial 26 was the lowest burial. This extended burial was covered with 6" of sandy soil. Burial 19 had been laid over this floor and the remaining burials were placed over it.
17	Subsoil	A	M?				Occipital skull deformation. Bundle burial fronto-occipital skull deformation.
18	Subsoil	C					Bundle burial.
19	Subsoil	A	F	E			Extended burial. Possible occipital deformation.
20	Subsoil	A	F				Bundle burial. Skeletal material fragmentary.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
21	Mound Fill	C					Bundle burial. Very fragmentary.
21A	Mound Fill	A	M				Bundle burial. Fronto skull deformation.
22	Subsoil	A	M	N	Rectangular	Length: 6.9' Width: 1.9'	Extended. Occipital skull deformation. A yellow clay was used to line the pit. After the body was placed in the pit, more clay was used to seal the pit.
23	Mound Fill	C		N			Partially flexed.
24	Mound Fill	A	F	NE			Extended. Fronto-occipital skull deformation.
25	Mound Fill	A	F	E			Extended burial. Long bones covered with black pigment.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
26	Subsoil	A	M	E	Rectangular	Length: 7.5' Width: 2.4'	Fronto-occipital skull deformation. Extended, on back. A greenstone celt, F.S. 8, had been placed near the skull.
27	Subsoil	A	M	NE	Rectangular	Length: 6.2' Width: 1.9'	Extended. Fronto-occipital skull deformation.
28	Subsoil	A	F	NE	Rectangular	Length: 8.0' Width: 2.7'	Extended. Fronto deformation. Pillows of red clay at hands and feet.
29	Mound Fill	C		SE			Partially flexed. A limestone tempered pottery elbow pipe was found resting on the pelvis.
30	Mound Fill	A	F?				Skull burial. Seven copper beads, F.S. 11, near head.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
31	Mound Fill	A	M				Bundle Burial.
32	Mound Fill	A	?	S			Extended. Skeletal material extremely fragmentary.
33	Subsoil	C		E	Rectangular	Length: 6.7' Width: 2.0'	Possible occipital deformation. Extended.
34	Mound Fill	A	F	N			Extended. Bi-fronto-occipital skull deformation. Greenstone celt, F.S. 14, near head. Red clay pillow at feet.
35	Mound Fill	C		SE			Flexed. A greenstone spade, F.S. 13, was found near the head.
36	Mound Fill	A	M				Bundle burial. Occipital skull deformation.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
37	Subsoil	a	F	SE	Rectangular	Length: 5.6' Width: 1.0'	Extended, lying on back.
38	Subsoil	A	M	NE	Rectangular	Length: 8.4' Width: 2.0'	Extended, lying on back. Fronto-vertical occipital skull deformation. Clay pillows at head and feet. Log mold extending length of left side of pit. Entire burial covered with puddled yellow clay.
39	Mound Fill	C		NE			Extended.
40	Mound Fill	C		NE			Fully flexed. Possible Bi-fronto-occipital skull deformation.
41	Mound Fill	A	M				Skull burial.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
42	Mound Fill	A	F	E			Extended, lying on back. Bi-fronto-occipital skull deformation. A copper bead, F.S. 20, was found near the throat.
43	Mound Fill	A	M				Skull burial.
44	Mound Fill	A	F?				Bundle burial. Greenstone spade (F.S. 17) near pelvis.
45	Subsoil	A	F	SE	Rectangular	Length: 8.4' Width: 2.3'	Extended, lying on back. Body covered with puddled blue clay.
46	Subsoil	A	M	NE	Rectangular	Length: 6.8' Width: 1.9'	Mass of blue clay near thigh. Extended, on back. Extreme fronto-vertical occipital deformation. Skull vault and mandible covered with black pigment.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
47	Mound Fill	C		E			Extended.
48	Subsoil	A	M	S	Rectangular	Length: 7.3' Width: 2.1'	Extended, lying on back. Two copper ear spools (F.S. 24 and F.S. 25) lying near right side of head.
49	Subsoil	A	F?	SE	Rectangular	Length: 7.5' Width: 2.3'	Extended. Large limestone slab placed vertically into pit.
50	Mound Fill	A	M?	E			Fully flexed.
51	Mound Fill	A	M				Extended. Skull missing. Post cranial remains articulated.
52	Mound Fill	A	M	N			Extended, lying on back. Frontal and possible occipital deformation.
53	Mound Fill	A	M				Bundle burial. Associated with Burial 54.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
54	Mound Fill	a	M				Bundle burial.
55	Mound Fill	C					Skull burial.
56	Mound Fill.	A	F				Bundle burial. Fronto-lamboidal skull deformation. Associated with this burial was a greenstone spade (F.S.28).
57	Mound Fill	C					Disturbed by treasure seekers.
58	Mound Fill	A	M	SE			Burials 58, 59 and 60 placed side by side, heads to SE. Extended.
59	Mound Fill	A	M?	SE			
60	Mound Fill	A	M	SE			
61	Mound Fill	A	M	N			Partially flexed. Fronto-vertical occipital skull deformation. Arthritic lumbar vertebrae.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
62	Subsoil	A	F	E	Rectangular	Length: 5.8' Width: 1.7'	Extended. Slight Bi-fronto-lamboidal skull deformation.
63	Mound Fill	A	M	SE			Extended. Lower extremities missing. Upper portion of body articulated. Greenstone spade (F.S. 32) under torso.
64	Mound Fill	C		SE			Fully flexed. Possible Bi-fronto deformation. Greenstone spade (F.S. 31) under head.
65	Mound Fill	a	M	E			Partially flexed. Occipital skull deformation. Greenstone spade (F.S. 33) under head.
66	Mound Fill	a	F	S			Extended. Skeletal material extremely fragmentary.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
67	Mound Fill	A	M?	E			Possible occipital skull deformation.
68	Mound Fill	?	?	E	Rectangular	Length: 6.0' Width: 1.8'	Burial partially destroyed by stump removal. Puddle yellow clay pillow above and greenstone celt (F.S. 34) above head.
69	Mound Fill	A	M	SE			Partially flexed, face down. Fronto-occipital skull deformation.
70	Mound Fill	A	M				Skull burial.
71	Subsoil	A	M	E	Rectangular	Length: 6.1' Width: 1.6'	Extended. Possible occipital skull deformation.
72	Mound Fill	C		N			Extended. Fronto-occipital skull deformation.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
73	Mound Fill	A	?	SE			Partially flexed. Greenstone spade (F.S. 36) under head.
74	Mound Fill	C		E			Extended. Occipital skull deformation. Puddled yellow clay pillows at head and feet.
75	Mound Fill	C		SE			Partially flexed. Frontal skull deformation.
76	Mound Fill	A	F				Occipital skull deformation. Disturbed by treasure seeker.
77	Subsoil	a	M	E	Rectangular	Length: 7.5' Width: 2.4'	Extended. Bi-fronto-vertical occipital skull deformation. Pillows of puddled blue clay at head and feet. 151 shell beads (F.S. 38) on right shoulder, shell disc (F.S. 39) near throat.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
78	Mound Fill	A	M	E			Extended. Fronto-occipital skull deformation.
79	Mound Fill	A	M?	SE	Rectangular	?	Only lower extremities present. Portion of pit outline traced.
80	Mound Fill	A	F				Bundle Burial.
81	Mound Fill	C		E			Partially flexed.
82	Mound Fill	A	F	SE	Oval	Length: 4.2' Width: 1.2'	Partially flexed. Occipital skull deformation. Greenstone celt (F.S. 40) under head.
83	Mound Fill	A	M	NE	Rectangular	Length: 8.4' Width: 2.2'	Upper portion of burial destroyed by recent pit. Puddled yellow clay head rest.
84	Mound Fill	a	M?				Skull burial. Associated with multiple burial including Burials 88 - 93.

Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
85	Mound Fill	A	F	S			Slight frontal deformation. Extended.
86	Subsoil	A	F	SE	Rectangular	Length: 5.8' Width: 1.9'	Extended. Possible occipital deformation.
87	Subsoil	A	M	E	Rectangular	Length: 7.9' Width: 1.9'	Extended. Puddled blue clay pillows at head and feet. Greenstone spade (F.S. 42) under head.
88	Mound Fill	A	M				Bundle burial. Associated with multiple burial containing Burials 84 and 89-93.
89	Mound Fill	A	F				Bundle burial. Fronto-occipital deformation.
90	Mound Fill	A	F?				Bundle burial. Fragmentary.
91	Mound Fill	A	M				Bundle burial.

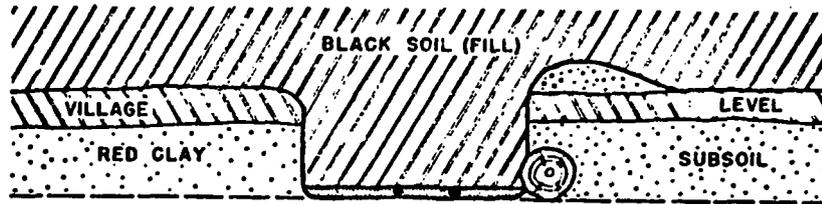
Mg°63. Table 30. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
92	Mound Fill	C					Bundle burial.
93	Mound Fill	A	M				Bundle burial. Long bones painted with black pigment.
94	Mound Fill	A	M	S			Extended. Fronto-occipital skull deformation. Blue puddled clay pillows at head and feet. Greenstone spade (F.S. 43) under upper pillow near head.
95	Mound Fill	?	?	SE	Oval	Length: 4.0' Width: 1.2'	Listed in original report as Feature 1. No skeletal material, disturbed by recent pit. Bottom of pit lined with charred bark. Greenstone celt (F.S. 29) and galena bead (F.S. 30) near SE end of pit.

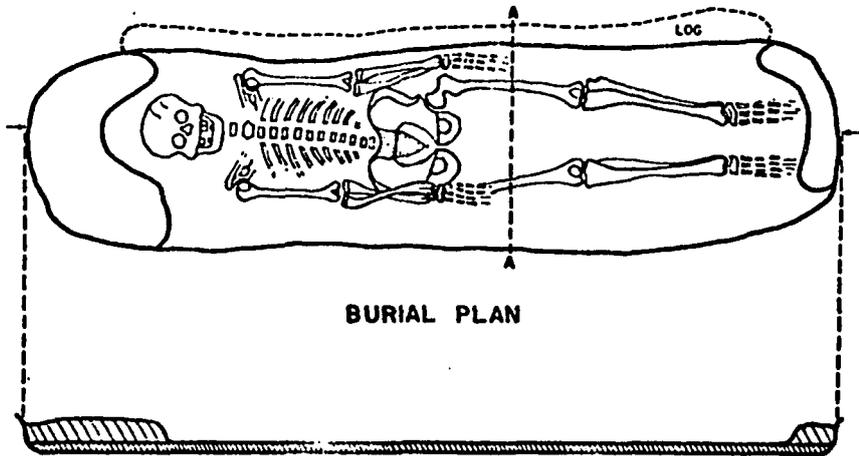
A = Adult, a = Adolescent, C = Child, M = Male, F = Female

Figure 17. Mg<sup>63</sup> - Burial No. 38 (From Andersen n.d.).

M6° 63  
BURIAL NO. 38



PROFILE SHOWING SECTION A-A OF BURIAL PIT AND STRATIGRAPHY



BURIAL PLAN

LONGITUDINAL CROSS SECTION



Copper - Twelve cylindrical beads made from rolled sheet copper were recovered from the mound during the course of excavation. Seven of these ornaments were associated with Burial 30 while one was found with Burial 42. The remaining four beads were encountered unassociated in the mound fill. These beads range in length from 13 to 20mm and in diameter from 7 to 18mm. Two cymbal shaped copper ear spools were found in association with Burial 48. These artifacts were stolen by vandals on New Years Day 1941 and were thus unavailable for study.

Greenstone Digging Implements - Eleven greenstone slab spades were recovered from this structure. Nine of these implements were found in association with burials. Of the remaining three specimens, two were found unassociated in the mound fill and one was collected from the surface. The dimensions and provenience data for these specimens is given in Table 31.

These implements are characteristically flat in cross section, with parallel to slightly tapered lateral edges and rounded distal and proximal ends. The majority of these digging tools had heavily worn distal, or working ends. However, F.S. 17, found in association with Burial 44 did not exhibit any wear at all and appears to be an unused quarry blank.

Greenstone Celts - Six greenstone celts were recovered from this mound. All were associated with burials. The dimensions and provenience data for these artifacts are given

Table 31 . Mg°63 - Greenstone Digging Implements

F.S. Number	Length	Width	Thickness	Provenience
13	331mm	112mm	30mm	Burial 35
17	376mm	151mm	19mm	Burial 44
28	230mm	100mm	24mm	Burial 56
32	215mm	105mm	30mm	Burial 63
33	237mm	122mm	26mm	Burial 65
35	250mm	123mm	32mm	Mound Fill
36	190mm	100mm	23mm	Burial 73
42	368mm	124mm	33mm	Burial 87
43	380mm	149mm	36mm	Burial 94
44	368mm	145mm	19mm	Mound Fill
823	320mm	96mm	36mm	Surface
Mean:	297mm	121mm	28mm	
Range:	190-380mm	96-151mm	19-36mm	

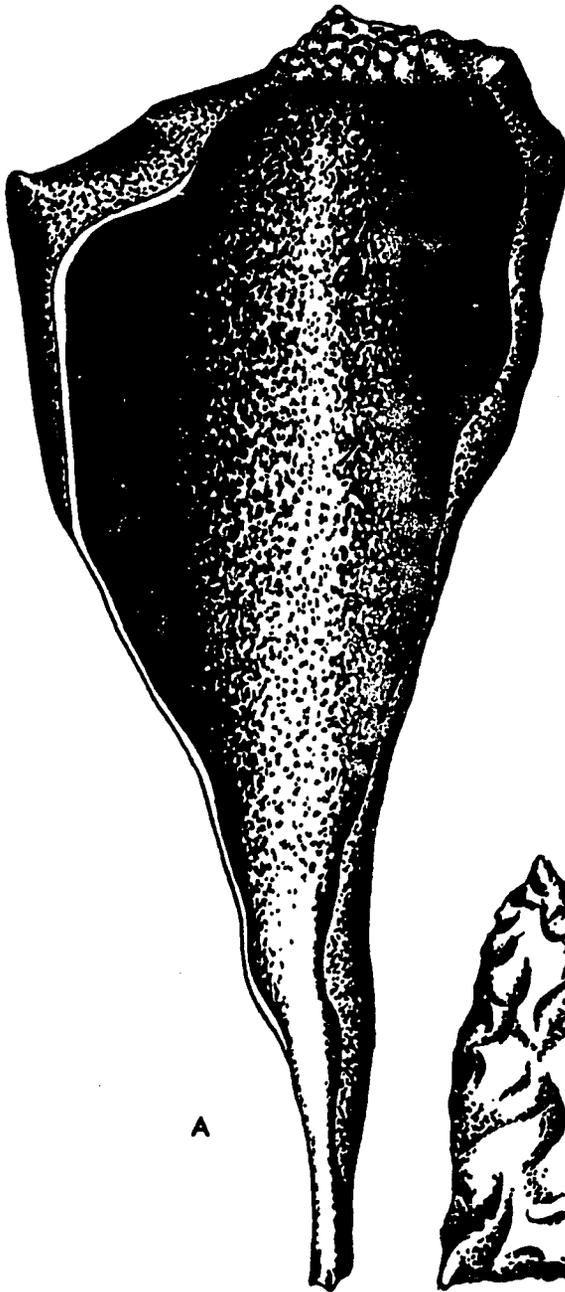
in Table 32. All of these celts are of the polished variety, bi-convex in cross-section with a long, narrow proximal end.

Shell Artifacts - Ornaments or utensils made from marine shell were not particularly numerous at this site. Only one burial, Burial 77, had mortuary offerings of shell placed with it. A string of 151 shell beads and a large disc gorget were found near the chest area of this burial. The vast majority (149) of these beads were disc shaped, ranging from 4 to 10mm in diameter and 2 to 5mm in thickness. The remaining two beads were cylindrical in shape, measuring 14mm in length and 7mm in diameter. The shell gorget, made from the whorl of a large marine univalve, was circular in outline with a central perforation (24mm in diameter). The outside diameter of this disc was 82mm. The edges had been heavily ground. A fragment of a whorl of a large marine univalve was recovered from the mound surface.

TABLE 32. Mg°63 - GREENSTONE CELTS

F. S. Number	Length	Width	Thickness	Provenience
8	225mm	54mm	3mm	Burial 26
14	233mm	67mm	45mm	Burial 34
29	218mm	57mm	39mm	Burial 95
31	213mm	65mm	32mm	Burial 64
34	158mm	58mm	34mm	Burial 68
40	160mm	54mm	38mm	Burial 82
Mean:	201mm	59mm	37mm	
Range:	158-233mm	54-67mm	32-45mm	

Figure 18. Copena Artifacts. A - Shell Cup.  
B - Galena Nodule. C - Copena  
Triangular Projectile Point.  
D - Copena Projectile Point.  
(A reduced 1/2, all others natural  
size).



Limestone Bead - A cylindrical limestone bead was recovered from Burial 10. The bead has been heavily ground and the ends are beveled. It measures 27mm in length and 12mm diameter.

Pottery - The fill of two burials contained fragments of ceramic vessels. Five sherds were found in the pit fill of Burial 9. These include one sand tempered Alexander Pinched sherd, two limestone tempered Mulberry Creek Pottery sherds and one Wright Check Stamped sherd. The Wright Check Stamped vessel fragment, a body sherd, is particularly significant because it is the only example of this type recovered from the entire site. Burial 28 contained one limestone tempered Long Branch Fabric Marked sherd in the fill. All of these specimens appear to represent chert inclusions.

Ceramic Elbow Pipe - A well made limestone tempered elbow pipe was found in direct association with Burial 29. This artifact represents only the second ceramic artifact ever found in association with a burial in a Copena mound. The pipe was found resting on the pelvis of a partially flexed child burial inclusive within the mound fill. The other ceramic artifact was recovered from Ma\*49 (reported in section). This was a disc made from a limestone tempered pottery sherd and was found in Feature 40 at that site. The secondary burial pit which also contained two copper earrings and a galena nodule. The stem and bowl of the pipe are round and square in cross-section and measure 97 and 77mm

Limestone Bead - A cylindrical limestone bead was recovered from Burial 10. The bead has been heavily ground and the ends are beveled. It measures 27mm in length and 12mm in diameter.

Pottery - The fill of two burials contained fragments of ceramic vessels. Five sherds were found in the pit fill of Burial 9. These include one sand tempered Alexander Pinched sherd, two limestone tempered Mulberry Creek Plain sherds and one Wright Check Stamped sherd. The Wright Check Stamped vessel fragment, a body sherd, is particularly significant because it is the only example of this type recovered from the entire site. Burial 28 contained one limestone tempered Long Branch Fabric Marked sherd in the pit fill. All of these specimens appear to represent chance inclusions.

Ceramic Elbow Pipe - A well made limestone tempered elbow pipe was found in direct association with Burial 29. This artifact represents only the second ceramic artifact ever found in association with a burial in a Copena mound. The pipe was found resting on the pelvis of a partially flexed child burial inclusive within the mound fill. The other ceramic artifact was recovered from Ma°49 (reported in this section). This was a disc made from a limestone tempered pottery sherd and was found in Feature 40 at that site, a secondary burial pit which also contained two copper ear-spools and a galena nodule. The stem and bowl of the elbow pipe are square in cross-section and measure 97 and 77mm

in length, respectively. The bowl ranges from 41-45mm in width and the stem 38-40mm. The bowl bore measures 32mm in diameter and the stem 24mm in diameter.

Village Midden - This mound was constructed over a portion of the old village midden comprising Mg<sup>V</sup>64. Numerous artifacts were recovered from this precedent stratum. These include chipped stone projectile points and tools, stone and ceramic vessel fragments, grinding stones, and shale abraders. However, since these artifacts are associated with the village midden and not with the mound proper, they are discussed in the following subsection on Mg<sup>V</sup>64.

## 2. Mg<sup>V</sup>64.

Mg<sup>V</sup>64 was a large multi-component habitation site. The village midden extended under Mg<sup>o</sup>63 on the southern fringe of the site and northward along the crest of the ridge for a distance of approximately 220 feet east-west, terminating at a steep slope on the eastern side and a more gradual slope on the western fringe.

The investigation of Mg<sup>V</sup>64 was begun on October 23, 1940 and continued until the middle of April, 1941. According to the original excavator's report (on file at Mound State Monument):

On the evening of February 19, 1941 all records on the investigation in progress and several hundred dollars worth of equipment belonging to the Alabama Museum of Natural History and W.P.A. was lost when a fire, attributed to vandals, destroyed the field office. Fortunately, only the material recovered from the excavation during the first 19 days in February was destroyed. All skeletal material, burial offerings, cultural material from the general excavation, and a complete set of photographs had been sent to the laboratory (in Birmingham) on January 29, 1940. The field superintendent who prepared most of the field records lost in this fire was able to supply from memory, with the aid of photographs, data on 13 of the 25 burials whose records had been lost.

The stratigraphy of this habitation site was composed of three layers, a village midden, a red, sandy clay subsoil and sandstone bedrock. The midden layer was .4 to 2.5 feet in thickness. In the eastern portion of the site the sand-

stone bedrock outcropped less than .4 feet below the surface. The midden stratum consisted of a sandy loam deposit containing an accumulation of cultural detritus (charcoal, animal bone, lithic material and ceramic vessel fragments). The upper .5 feet over most of the site had been disturbed by cultivation.

Burials - Seventy-five burials were excavated and recorded at this site. Skeletal preservation was generally poor. Sex and age data, when estimates could be made, are given in Table 33. A variety of burial types were present in this sample. A large portion of these burials were placed into small pits in a sitting or flexed position. The cultural affiliation of these burials will be discussed in the summary section of this report. Several Copena burials were also found in the village middle. One burial area, located forty feet north of Mg°63 contained several Copena interments, including Burials 4, 8, 9, 11, 12 and 13

Features - A large number of features were recorded for the village area. The majority of the 102 features excavated at this site were small (2-4 feet in diameter) round to oval pits, apparently originally excavated as storage or refuse receptacles. Several of these had been lined with limestone or sandstone slabs. A summary of the information recorded from these features is given in Table 34.

Mg<sup>v</sup> 64. Table 33.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
1	?	A	F				Records burned.
2	?	A	?				Records burned.
3	Subsoil	A	M				Partially flexed. Intrusive into Burial 4. Associated with Burial 5. Copena ?.
4	Subsoil	A	M	NW	Rectangular	Length: 6.5' Width: 1.8'	Extended. Skull vault painted with black pigment. Near S end of mound. Steatite elbow pipe ("killed") (F.S. 2) near head, greenstone celt (F.S. 3) near left shoulder. Copena ?.
5	Subsoil	A	M		Oval	?	Pit intrusive into Burial 4. Bundle burial. Copena ?.
6	Subsoil	A	M	E	Oval	?	Flexed.
7	Subsoil	A	M?				Skull fragments only.
8	Subsoil	C		E	Rectangular	Length: 4.1' Width: 1.6'	Extended. Greenstone spade (F.S. 7) under head. Copena ?.

Mg<sup>V</sup> 64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
9	Village Midden	C		SE	Rectangular	Length: 4.0' Width: 1.5'	Extended. Extreme fronto-occipital deformation. Olivilla beads (F.S. 9) near throat, shell fragment (F.S. 11) near head. "Killed" steatite elbow pipe (F.S. 12) and 39 galena nodules (F.S. 16) scattered over body. One Wright Check Stamped sherd. Copena.
10	Village Midden	I I					Records burned.
11	Village Midden	A	F				Disturbed by plow. "Killed" Copper reel (F.S. 15) and galena nodules (F.S. 16) associated with remains. Extended. Copena.
12	Subsoil	A	M	S	Rectangular	Length: 7.2' Width: 2.0'	Intrusive into Burial 22. No deformation. Extended. Greenstone spade (F.S. 21) near head. Copena.

Mg<sup>V</sup>64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
13	Subsoil	A	M	NE	Rectangular	Length: 6.5' Width: 2.2'	Extended. Frontal and possible occipital deformation. Arthritic lipping on all vertebrae. Marine shell cup (F.S. 22) near head. Copena.
14		J	?				Frontal skull deformation. Records burned. Probably Copena.
15	Subsoil	C	M	W	Round	?	Partially flexed. Possible fronto-occipital skull deformation. Copena ?.
16		C					Records burned.
17		A	M				Records burned.
18	Subsoil	A	M	SE	Rectangular	Length: 6.2' Width: 2.0'	Extended. Possible bi-fronto-deformation. Copena.

Mg<sup>V</sup>64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
19		C					Records burned.
20	Subsoil	A	F	SE	Rectangular	Length: 5.9' Width: 2.0'	Extended. Copena.
21	Subsoil	A	F	SW	Oval	Length: 3.8' Width: 2.1'	Flexed. No deformation. Steatite vessel (F.S. 24) over upper torso.
22		A	M				Slight occipital. Records burned.
23	Subsoil	A	F	SE	Rectangular	Length: 6.0' Width: 2.1'	Extended. Arthritic lipping on all vertebrae. "Killed" steatite elbow pipe (F.S. 25) and marine shell fragments (F.S. 26) near head. Copena.
24		C					Records burned.

Mg<sup>v</sup> 64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
25		A	M?				Possible occipital. Records burned.
26	Subsoil	A	?	N	Round	Diameter: 2.0'	Sitting burial.
27	Midden	A	M	S	Oval	Length: 3.7' Width: 2.8'	Fully flexed. No deformation. Body covered with sandstone rocks.
28	Subsoil	C		N	Round	Diameter: 2.3'	Sitting burial.
29	Midden	A	F		Oval	Length: 3.5' Width: 2.8'	Multiple burials. Associated with Burials 30, 31, 32 and 62. One McKelvey Plain sherd in pit fill.
30	Midden	A	M				No deformation.
31	Midden	A	F?	S			Partially flexed.

Mg<sup>V</sup>64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
32	Midden	?	?	W			Sitting burial.
33	Midden	?	?		Round	Diameter: 2.6'	Only traces of skeletal remains.
34	Midden	C	?	W	Round	Diameter: 2.7'	Limestone slab placed over burial. Fully flexed. Fill contained one Wheeler Plain sherd.
35	Subsoil	A	F	W	Round	Diameter: 2.5'	Sandstone fragments placed over body. Fully flexed.
36	Midden	A	M	E	Round	Diameter: 2.9'	Fully flexed.
37	Subsoil	A	F	E	Round	Diameter: 2.2'	Sitting burial.
38	Midden	?	?		Rec- tang- ular	Length: 7.0' Width: 2.1'	Reburial. Skeletal remains only in E half of pit. Skeletal material destroyed by fire. Copena ?.

Mg<sup>V</sup> 64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
39	Midden	?	?	E	Rectangular	Length: 9.0' ? Width: 3.0' ?	Skeletal material destroyed by fire. (2/19/41). Copena ?.
40	Midden	I		W			Partially flexed.
41	Midden	A?	M				Bundle burial. Associated with mass of charcoal.
42	?	?	?		Oval	Length: 4.2' Width: 2.5'	Skeletal material destroyed by fire, 2/19/41.
43	?	?	?		Oval	Length: 4.8' Width: 2.2'	Skeletal material destroyed, 2/19/41/
44	? ?	?	?		Oval	Length: 5.0' Width: 2.3'	Partially flexed. Skeletal material destroyed, 2/19/41.

Mg<sup>V</sup>64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
45	Midden	?	?		Oval	Length: 2.0' Width: 1.4'	Cremation. Skeletal material destroyed, 2/19/41.
46	Subsoil	A	M		Round	Diameter: 1.9'	Sitting burial. Pit lined with stone, including three sandstone vessel fragments.
47	Midden	A	M	E	?		Partially flexed. Associated with Burial 48. One Cox Fabric Marked Sherd (clay-grit).
48	Midden	A	F		?		Lower extremities only, found lying over Burial 47. Reburial?
49							Skull fragments only. Disturbed by plow.
50	Midden	A	M	?			Fully flexed. Portion of body covered by a sandstone vessel. (F.S. 100).
51	Subsoil	?	?		Round	Diameter: 2.6'	Traces of skeletal material. Probably a fully flexed interment.

Mg<sup>V</sup>64. Table 33. Continued.

Burial Numner	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
52	Midden	A	F	SW	Round	Diameter: 2.0'	Sitting burial. Several sandstone rocks in bottom portion of burial pit.
53	Midden	?	?		Round	Diameter: 2.1'	Cremation. Two copper beads (F.S. 107) and a small fragment of fabric preserved by copper salts. Copena.
54	Subsoil	A	M	W	Round	Diameter: 2.2'	Fully flexed, partial cremation.
55	Midden	?	?	E	Oval	Length: 2.1' Width: 1.6'	Fully flexed.
56	Midden	?	?		Round	Diameter: 2.1'	Sitting burial. 1 Cox Fabric Marked sherd in pit fill.
57	Midden	A	M	N	Round	Diameter: 2.2'	Fully flexed. Burials 57-60 grouped together in SE portion of village area.

Mg<sup>v</sup> 64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
58	Midden	A	M	N	Round	Diameter: 1.9'	Sitting burial.
59	Midden	A?	F	N	Round	Diameter: 1.9'	Fully flexed.
60	Midden	A?	M	N	Round	Diameter: 2.0'	Fully flexed. One Mulberry Creek Plain sherd in pit fill.
61	Midden	?	?	SE	Round	Diameter: 1.9'	Sitting burial.
62	Midden	A?	F	SE			Associated with multiple interments including Burials 29-32.
63	Midden	A?	M	NE			Fully flexed.
64	Midden	A?	F		Oval	Length: 3.3' Width: 1.8'	Possibly a sitting burial.

Mg<sup>v</sup> 64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
65	Midden	A?	F		Round	Diameter: 1.8'	Fully flexed
66	Midden	A	?		Round	Diameter: 1.7'	Skull only.
67	Subsoil	A?	F		Round	Diameter: 1.8'	Sitting Burial.
68	Midden	A?	M	W	?		Fully flexed.
69	Subsoil	A	?	N	Round	Diameter: 2.2'	Fully flexed.
70	Midden	A	?	NE	Round	Diameter: 2.1'	Fully flexed.
71	Midden	a	M	E	Round	Diameter: 2.2'	Fully flexed.
72	Midden	a	?	N	Rec- tang- ular	Length: 7.9' Width: 3.8'	Skull only. Burial pit lined with charred logs and large sandstone slabs.

Mg<sup>V</sup>64. Table 33. Continued.

Burial Number	Provenience	Age	Sex	Orientation Of Head	Pit Shape	Pit Dimensions	Associations/Comments
73	Midden	?	?				Partial cremation. 1 Plain sand tempered sherd.
74	Midden	A?	F	S	Round	Diameter: 2.1'	Sitting burial.
75	Subsoil	A	M				Sitting burial. Steatite and sandstone vessel (F.S. 249 and 250) placed over burial.

A = Adult, a = adolescent, C = Child, J = Juvenile, I = Infant, M = Male, F = Female.

Table 34. Mg<sup>V</sup>64. Feature Data.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
1	Oblong	Length: 6.0' Width: 4.0' Int. Depth: .3'	1 Little Bear Creek Projectile Point, traces of fauna remains.
3	Midden/ Round 3.	Length: 1.8' Width: 1.2' Int. Depth: .75'-1.4'	Records Lost.
4	Midden	Length: 2.8' Width: 1.6' Int. Depth: .90'	Records Lost.
5	Midden/ Oval	Length: 3.4' Width: 2.6' Int. Depth: .65'	1 Cotacoo Creek Projectile Point.
6	Midden/ Oval	Length: 6.8' Width: 4.0' Int. Depth: .75'-1.2'	Large oval midden pit surrounded by eight post molds. Western end of pit deeper (circular depression). 1 Elora; 1 Provisional Type 4.
7	Midden/ Round	Dia.: 1.9'-2.2' Int. Dep.: .4'-1.75'	1 Provisional Type 4, 1 Provisional Type 1A, 2 McKelvey Plain sherds.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
8	Circular	Diameter: 1.8' Int. Depth: .8'	Intentionally destroyed (reconstructable) sandstone vessel (F.S. 34) lining pit sides and bottom. 1 Adena, 1 Provisional Type 1A - possible burial pit.
9	Midden/ Fire Basin	Diameter: 5.25' Int. Depth: .75'	In the center of this large circular pit was a fire basin 2.0' in diameter and .25' deep. This basin contained charred animal bone, charcoal and fire cracked stones. 1 Hamilton, 2 drills, 1 reamer, 1 Ovoid Biface Blade.
10	Midden/ Oblong	Length: 2.5'-5.0' Width: 1.5'-2.1' Int. Depth: 1.3'-1.5'	Records lost.
11	Midden/ Circular	Diameter: 2.4' Int. Depth: .8'	Records lost.
12	Midden/ Circular	Diameter: 2.2' Int. Depth: .9'	Records lost.
13	Midden/ Oblong 2	Length: 2.8'-4.7' Width: 1.5'-2.0' Int. Depth: .75'-.9'	1 Hamilton, 1 Reamer.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
14	Midden/ Conical	Diameter: 4.8' Int. Depth: .8'	1 Drill, 5 post holes in semi-circular arrangement around pit.
15	Oblong	Length: 8.0' Width: 2.3' Int. Depth: 1.0'	Possible burial pit.
16	Midden	Length: 7.5' Width: 3.0' Int. Depth: 1.2'	Bottom of one pit lined with sandstone slabs.
17	Midden	Length: 6.0' Width: 5.1' Int. Depth: 2.1'	1 O'Neal Plain sherd, 2 Wades, 2 Provisional Type 1A, 1 Drill, 9 limestone and sandstone slabs, 182 chips, 1 hammerstone, and fauna remains.
18	Circular	Diameter: 5.1' Int. Depth: 3.0'	3 large limestone slabs, 1 Little Bear Creek, 1 slate abrader.
19	Rock group		Large mass of limestone and sandstone slabs in village midden. 1 McIntire point.
20	Oval	Length: 4.69' Width: 3.60' Int. Depth: 1.45'	1 Hammerstone, 3 flakes.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
21	Oval	Length: 3.7' Width: 2.8' Int. Depth: 1.3'	Lined with sandstone slabs, 1 Ovoid Biface Blade, 2 Hammerstones.
22	Midden/ Oval	Length: 3.7' Width: 2.8' Int. Depth: .3'	
23	Midden/ Circular	Diameter: 3.6' Int. Depth: 1.2'	Deer scapula and other fauna fragments. 9 Hammerstones charcoal.
25	Midden/ Irregular	Length: 5.0' Width: 3.5' Int. Depth: .7'	Group of unworked stone in middle of pit. 1 Wheeler Plain sherd in pit fill, 31 Long Branch Fabric Marked, (1 vessel) lying on stones in bottom of pit. A portion of a human burial occurred in the northern end of the pit (Burial 41), 1 Buzzard Roost Creek, 1 Provisional Type 2.
26	Midden/ Circular	Diameter: 3.0' Int. Depth: 1.6'	1 Reamer.
27	Midden/ Circular	Diameter: 4.2' Int. Depth: 3.35'	10 Chips.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
28	Oval	Length: 6.25' Width: 3.2' Int. Depth: 2.8'	
29	Midden/ Circular	Diameter: 3.8' Int. Depth: 2.5'	Records lost.
30	Rock Group		Group of sandstone slabs in village midden.
31	Midden/ Circular Two	Diameter: A-2.0' B-3.1' Int. Depth: A-2.0', B-1.0'	A. Basin shaped-charcoal in fill, 1 McKelvey Plain. B. vertical pit walls (1.0' deep), 1 drill.
32	Midden/ Irregular	Length: 5.0' Width: 3.6' Int. Depth: 1.4'	1 McKelvey Plain sherd, charred fauna remains, charcoal.
33	Oval	Length: 3.0' Width: 2.0' Int. Depth: .6'	Charred fauna remains (unidentifiable) 1 Flint River Brushed, and 4 McKelvey Plain.

Table 34. Continued...

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
34	Irregular Two	Length: 1.2'-1.4' Width: 1.0'-.9' Int. Depth: .3'-.6'	A- 2 Drills, 2 Mulberry Creek Plain, 1 Long Branch Fabric Marked. B- 2 McKelvey Plain.
35	Irregular	Length: 12.0' Width: 5.9' Int. Depth: 4.35'	3 Wheeler Plain, Hematite Pendant (F.S. 85), 2000 flint chips, 7 steatite vessel fragments, 711 sandstone slabs, 4 sandstone vessel fragments, 174 fauna fragments (mostly deer), 2 Little Bear Creek, 4 Wade, 6 Provisional Type 1A, 5 Provisional Type 4, 4 Kays, 1 Flint Creek, 2 Provisional Type 2, @ Provisional Type 9, 3 stemmed drills, 1 stemmed reamer, 2 triangular biface blades, 1 ovoid biface blade, 1 biface end scraper, 1 biface blade (long, narrow), a pile of deer bone in the center of the pit.
36	Midden/ Irregular	Length: 11.0' Width: 9.0' Int. Depth: 1.65'	235 stone slabs, 52 limestone slabs, 300 flint chips, occasional charcoal and charred bones, 1 Provisional Type 1A, 1 Provisional Type 2.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
37	Midden/ Rectangular	Length: 5.1' Width: 3.4' Int. Depth: 2.0'	Pit fill contained three hammerstones, 3 sandstone slabs, 46 chips, and charred fauna remains.
38	Midden/ Circular	Diameter: 3.0' Int. Depth: 1.2'	Charcoal and charred animal bone, 1 hammerstone, 4 Long Branch Fabric Marked sherds, 1 Provisional Type 4.
39	Midden (3)	Length: 11.0' Width: 4.6' Int. Depth: 2.35'	3 intruding midden pits, 2 circular (2.6', 3.1') and 1 rectangular, 1 drill.
40	Circular	Diameter: 3.5' Int. Depth: 2.25'	1 backed knife.
41	Midden, Circular Double	Diameter: A-3.6' B-3.4' Int. Depth: 2.1'	Two intruding circular midden pits, 48 chips, deer remains, 1 Copena triangular, 2 river cobbles.
42	Circular	Diameter: 2.25' Int. Depth: 1.9'	1 stemmed drill.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
43	Oval	Length: 4.5' Width: 3.0' Int. Depth: 2.0'	4 river cobbles (grinding and hammerstones).
44	Oval	Length: 2.5' Width: 1.8' Int. Depth: 1.5'	
45	Oval	Length: 4.40' Width: 2.8' Int. Depth: 1.8'	37 chips, 5 sandstone slabs, 1 Little Bear Creek, 1 Provisional Type 9, 1 Provisional Type 4.
46	Circular	Diameter: 2.3' Int. Depth: 1.8'	58 chips.
47	Circular	Diameter: 2.5' Int. Depth: .5'	12 chips, 1 river cobble, 21 sandstone rocks.
48	Circular	Diameter: 1.8' Int. Depth: .4'	Filled with sandstone, 1 biface end scraper.
49	Circular	Diameter: 2.0' Int. Depth: 1.6'	19 blackened and charred sandstone cobbles.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
50	Burial/ Oval	Length: 3.5' Width: 2.7' Int. Depth: .6'	Fragment of a human skull, 6 river cobbles, Burial pit.
51			Sandstone vessel found scattered over 1.8' area in village midden ( complete vessel).
52	Circular	Diameter: 2.8' Int. Depth: 1.55'	Charred pit sides, 1 McKelvey Plain sherd, 1 Provisional Type 1A.
53	Circular	Diameter: 3.7' Int. Depth: 2.0'	Lined with sandstone and limestone slabs, 30 chips.
54	Circular	Diameter: 3.3' Int. Depth: 2.5'	11 flint chips, Bottom of pit lined with 38 sandstone rocks (1.5-5") and 4 limestone rocks (2-3").
55	Circular	Diameter: 4.2' Int. Depth: 1.65'	22 sandstone rocks, 18 limestone rocks, 7 chips, charcoal, 1 Bluff Creek Simple Stamped sherd, 1 Provisional Type 1.
56	Circular	Diameter: 2.5' Int. Depth: .6'	Bottom lined with sandstone and limestone slabs. Charcoal; slabs were stained with red ochre, gray ash and charred area, 1 Provisional Type 1 Projectile Point. Cremation?

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
57	Circular		1 sandstone vessel fragment, charred animal bone, 1 river cobble.
58	Midden	Diameter: 4.0' Int. Depth: 3.6'	Rectangular pit 11.0 long with deep circular pit in the NW end. Deer antler and fauna remains, 1 hammerstone. Pit lined with sandstone and limestone slabs.
59	Circular	Diameter: 2.4' Int. Depth: .5'	
60	Circular	Diameter: 2.8' Int. Depth: 1.0'	Fauna remains, 1 river cobble, 1 Reamer, 1 Biface end scraper.
61	Oblong	Length: 6.0' Width: 2.7' Int. Depth: .5'	3 Mulberry Creek Plain sherds, 1 McKelvey Plain sherd.
62	Circular	Diameter: 1.5' Int. Depth: .5'	2 Flint River Brushed sherds, one mass of foreign blue puddled clay.
63	Circular	Diameter: 2.0' Int. Depth: .5'	1 Wade, 1 Hammerstone, 1 stemmed drill, 28 chips.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
69	Circular	Diameter: 2.5' Int. Depth: 1.3'	Bottom of pit lined with sandstone.
70	Diorite Axe		Broken diorite (3 pieces), 4th piece missing, in village midden.
71	Irregular	Length: 10.0' Width: 9.1' Int. Depth: 3.25'	Concentration of deer bone, 405 sandstone rocks, 365 chips, 16 limestone rocks, 1 Provisional Type 1A, 1 Copena Triangular, 1 Provisional Type 2, 1 Wheeler Plain sherd, 1 Mulberry Creek Plain, 3 Long Branch Fabric Marked sherds, 3 Flint River Brushed, 10 McKelvey Plain, 2 Plain shell, 2 sandstone vessel fragments.
72	Oval	Length: 4.5' Width: 3.0' Int. Depth: 1.2'	Charred cane, 2 McKelvey Plain, 2 Mulberry Creek Plain.
73	Circular	Diameter: 3.0' Int. Depth: .75'	Pit lined with rocks; charcoal, sides of pit blackened by fire.
74	Circular	Diameter: 2.5' Int. Depth: 1.3'	Animal bone, fired clay, charcoal, 67 chips, 3 limestone slabs, 2 sandstone slabs.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
64	Oval	Length: 4.0' Width: 2.0' Int. Depth: 2.25'	Charred area in northern end of pit, bottom and sides of pit fired. Grinding stone, slabs of fired clay, one Pickwick point.
65	Midden Multiple	Diameters: A-3.0'; B-1.9'; C-2.2'; D-2.8' Int. Depth: 1.0'-2.5'	Pits A and D dug to sandstone bedrock. Pits B and C lined with sandstone and limestone slabs. 73 chips, 2 Mulberry Creek Plain, 1 Flint River Cord Marked, 2 McKelvey Plain, 1 Cotaco Creek, 1 Reamer.
66	Oval	Length: 3.5' Width: 2.2' Int. Depth: 1.75'	Pit lined with limestone and sandstone slabs, 2 grinding and hammerstones.
67	Irregular	Length: 6.5' Width: 4.0' Int. Depth:.35'	Charcoal and fired clay area, 4 McKelvey Plain, 2 sandstone vessel fragments, charred bone, 19 Bluff Creek Simple Stamped sherds.
68	Circular Two	Diameters: A-1.5'; B-3.0' Int. Depth: A- .5'; B- .8'	Pit B contained charcoal and fired clay.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
75	Reinforced Post Mold	Diameter: 1.0' Int. Depth: 1.2'	A post mold showing reinforcement by means of sandstone slabs arranged vertically around the outer portion of the mold.
76	Circular	Diameter: 2.5' Int. Depth:.85'	
77	Oval	Length: 7.0' Width: 5.8' Int. Depth: .7'	Lined with sandstone and limestone slabs, entire area blackened, charcoal and ash, fauna remains. 8 McKelvey Plain sherds, 2 Drills.
78	Circular	Diameter: 3.0' Int. Depth:1.2'	Bottom of pit lined with sandstone rocks and charcoal.
79	Circular	Diameter: 32.' Int. Depth:1.05'	Bottom of pit lined with sandstone and limestone rocks. 1 Mulberry Creek Plain, 3 McKelvey Plain, 1 Provisional Type 1, 1 triangular biface blade.
80	Circular	Diameter: 2.5' Int. Depth: .65'	Bottom of pit lined with sandstone and limestone rocks.
81	Circular	Diameter: 2.5' Int. Depth: 1.4'	Limestone and sandstone rocks in bottom of pit. 2 Wheeler Plain, 18 O'Neal Plain, 77 Mulberry Creek Plain, 2 McKelvey Plain, 5 Drills, 1 Wade, 1 Bradley Spiked, 1 Flint River Spiked, 1 Provisional Type 2.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
82	Midden/ Irregular	Length: 8.2' Width: 4.8' Int. Depth: 2.8'	Animal bone, 9 McKelvey Plain, 1 Provisional Type 1A, 1 Flint Creek, 1 Reamer, 1 Provisional Type 2, 1 Provisional Type 5.
83	Oval	Length: 3.0' Width: 2.7' Int. Depth: 1.0'	Post mold in south end of the pit, 16 sandstone rocks, average size 1x3". 26 flint chips.
84	Circular	Diameter: 2.7' Int. Depth: .3'	2 grinding and hammerstones, 1 Provisional Type 4.
85	Circular	Diameter: 1.10' Int. Depth: .6'	
86	Circular	Diameter: 3.5' Int. Depth: .85'	Animal bone, 1 Provisional Type 1A, 1 Reamer, 1 backed knife.
87	Circular	Diameter: 2.8' Int. Depth: .3'	23 sandstone vessel fragments.
88	Circular	Diameter: 3.2' Int. Depth: .3'	4 fauna fragments, 2 Mulberry Creek Plain, 1 Triangular biface blade, 1 Provisional Type 4, limestone and sandstone rocks in bottom of pit.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
89	Circular	Diameter:2.20' Int. Depth: 1.1'	Deer remains and rocks in pit bottom.
90	Oval	Length: 4.4' Width: 4.0' Int. Depth: 2.0'	Sandstone blocks in bottom of pit, animal bone, antler, 1 sandstone vessel fragment, 1 Provisional Type 1, 2 drills, 1 Provisional Type 2.
91	Irregular	Length: 4.2' Width: 2.6' Int. Depth:.35'	1 river cobble, 1 Wheeler Plain, 1 sandstone vessel fragment, 1 Provisional Type 1A, 2 Provisional Type 4, 1 McIntire, 1 Kays, 1 Coosa Notched, 1 Provisional Type 2, 1 stemmed drill, 1 triangular biface blade, 2 backed knives, 11 large sandstone rocks, 18 limestone rocks, and 72 flint chips.
92	Reinforced Post Mold	Diameter:1.0' Int. Depth:1.2'	2 McKelvey Plain, sandstone slabs placed vertically around mold.
93	Oval	Length: 4.7' Width: 5.2' Int. Depth:1.2'	Log mold in bottom of pit. 79 flint chips.
94	Circular	Diameter: 2.5' Int. Depth:.6'	1 distal tip of a chipped stone projectile point.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
95	Oval	Length: 3.1' Width: 2.4' Int. Depth: .85'	
96	Circular & Post Molds	Diameter: 2.0' 4.2' x 2.0' Int. Depth: 1.25'	A. was a circular pit., B. oval shaped depressions, circular pit in the center. 4 post molds on south and eastern sides of pit. 286 chips, 2 Provisional Type 1A.
97	Circular	Diameter: 3.0' Int. Depth: 1.35'	1 Pedernalis.
98	Circular	Diameter: 1.5' Int. Depth: 1.0'	1 Provisional Type 9.
99	Group of post molds		Burial 75 under sandstone vessel fragments.
100	Semi-cir- cular group of post molds	Diameter: .6-1.0' Int. Depth: .75' (average)	2 McKelvey Plain sherds.

Table 34. Continued.

Feature Number	Pit Type/ Pit Shape	Pit Dimensions	Associations/Comments
101	Circular	Diameter: 2.5' Int. Depth: .5'	Pit lined with sandstone slabs.
102	Post Mold	Diameter:.75' Int. Depth: 1.0'	Filled with sandstone and limestone slabs.

CERAMIC MATERIAL

## Fiber Tempered Ware -

Wheeler Plain (Heimlich 1952:8): Eight thick (9 to 16mm) fiber tempered sherds were recovered from Mg<sup>V</sup>64 which had a plain surface finish. One rim sherd was in this sample. The rim was straight with a flattened lip 8mm wide. One body sherd had a high sand content in its paste.

Wheeler Dentate Stamped (Sears and Griffin 1950): One body sherd was placed into this category. The sherd was 11mm thick and had a series of rectangular impressions randomly applied upon its exterior surface.

Wheeler Simple Stamped (Sears and Griffin 1950): A body sherd bearing a series of stamped parallel lines on its surface was recovered from the village area. The lines were apparently applied with a sharp straight edge tool.

## Sand Tempered Ware -

O'Neal Plain (Haag 1939:5; Heimlich 1952:10-11): The 119 sand tempered sherds recovered from this site constitute 6% of the total ceramic sample. Of these, 107 were plain sand tempered ware. Two rim sherds and five podal supports were present in this sample. One of the rims was straight with a rounded lip, while the other sherd had an everted rim with an interior fold 4mm wide. The podal supports ranged from 20mm to 40mm in diameter at the vessel base and from 11mm to 23mm high.

Columbus Punctated (Heimlich 1952:12): Five of these sherds were recovered. Two types of punctations are present on

these sherds, finger nail impressions and tool marks leaving a stab and drag impression. Two sherds also have incised lines separating a zoned area of punctations from the remaining plain finish vessel surface.

Sauty Cord Impressed (Heimlich 1952:12-13): Two cord impressed body sherds were placed into this category. One is a fragment of a base, 8mm thick, from a flower-pot shaped vessel.

Alexander Pinched (Heimlich 1952:12): Two small, thin body sherds decorated with rows of pinch marks occurred at Mg<sup>V</sup>64. Both of the sherds were approximately 6mm thick.

Alexander Incised (Heimlich 1952:12): One small body sherd was placed into this type. The exterior surface of the sherd had been decorated with a pair of parallel lines 10mm to 13mm apart.

Benson Simple Stamped (Heimlich 1952:14): One body sherd was recovered which had been impressed with parallel line stamping. Some over stamping occurred in one corner of this specimen.

Unidentified Stamped : One unusual sand tempered sherd was found at Mg<sup>V</sup>64 which defies traditional classification. The vessel surface had been decorated with a series of concentric circles forming parallel bands. Each individual unit is formed by an outer circle and an inner circle. The outer circle is 24mm in diameter while the inner circle measures 14mm in diameter. The outer circle of each unit exhibits edge marks as if they were rolled on. This circle

is not always closed suggesting that a curved-edge tool was used. The inner circle was applied separately by impressing a hollow tool edge (cane or reed?) to the plastic clay. The raised area (land) inside this inner circle has been decorated in several different ways. One land is plain, another pinched, while a third has been impressed with a small reed (4mm in diameter).

Limestone Tempered Ware -

Mulberry Creek Plain (Haag 1939:9; Heimlich 1952:15-17):

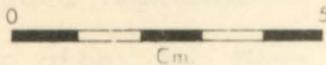
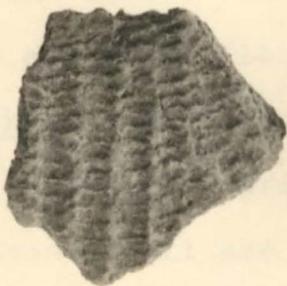
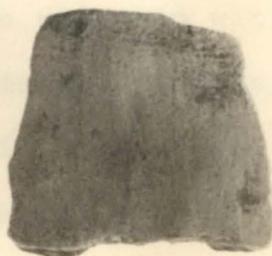
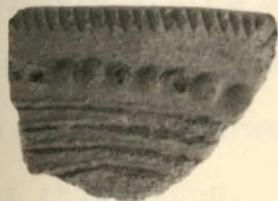
There was a total of 393 limestone tempered sherds (19%) in the pottery sample. Of these, 301 or 76%, had a plain surface treatment. There were 13 rims and one small podal support present in this sample. Eleven of the rims are straight while the remaining two are flared. Lip treatment is divided almost equally between flattened forms (7) and rounded forms (6). The one podal support is small (16mm x 11mm at the base and 7mm high) and wedge shaped.

Long Branch Fabric Marked (Haag 1939:10; Heimlich 1952:

17): This was the second most popular limestone tempered ware at this site. The 57 sherds bearing a fabric impression on their surfaces comprise 14% of this temper group. All of the specimens in this sample are body sherds which have been impressed with a fabric containing large stiff warp elements and a fine weft.

Flint River Cord Marked (Heimlich 1952:19): Nineteen cord marked sherds were placed into this category. Two of these are rim sherds with vertical cord marking extending

Plate 7. Early Woodland Ceramic Types. Top Row, left to right, Wheeler Plain (1), Wheeler Dentate Stamped (2), Wheeler Simple Stamped (3). Middle Row, Alexander Incised (1), Alexander Pinched (2), O'Neal Plain (3). Bottom Row, Benson Fabric Marked (1), Long Branch Fabric Marked (2), Mulberry Creek Plain (3).



Cm.

up to the vessel lip. Both of these rims are straight, one has a flattened lip and the other a rounded and smoothed lip. These sherds all show some degree of smoothing, ranging from very light (3) to heavy (9).

Bluff Creek Simple Stamped (Heimlich 1952:18): Stamped impressions of a parallel lined paddle occurred on sixteen sherds in the limestone tempered group. All of the specimens in this sample were body sherds.

Clay-Grit Tempered Ware -

McKelvey Plain (Heimlich 1952:21): Approximately 78% of the pottery sherds recovered from Mg<sup>V</sup>64 were tempered with clay-grit. Two finish types were present in this sample, plain and cord marked. The 1463 plain sherds constitute 91% of this group. The 56 rim sherds present in this sample vary from straight (42) to everted (24). Lip treatment ranges from rounded (49) to flattened (7). Three bases were found in this ceramic sample. All are rounded and are approximately 11mm thick. Two vessel types are represented, open bowls and small flaring rimmed jars.

Mulberry Creek Cord Marked (Heimlich 1952:21): There were 133 cord marked sherds in the clay-grit tempered group. Six rim sherds were present. All are straight; four have flattened lips and two are rounded. Four of these latter sherds have horizontal cord impressions extending up to the vessel lip while the other two have vertical impressions.

Shell Tempered Ware -

Plain Shell (Heimlich 1952:22-23): Seven sherds, including a lug handle, were found to have been tempered with crushed shell. All are quite crude with large amounts of coarsely crushed shell. They vary in thickness from 6mm to 8mm. The lug handle is 50mm long, 29mm wide and 12mm thick.

CERAMIC ARTIFACTS

Pottery Pipe: A broken elbow pipe of fired clay was recovered from the plow zone. The pipe paste was tempered with clay-grit. The bowl orifice is 38mm in diameter with a rounded lip 8mm thick. The bowl is 74mm high and is broken off at the stem juncture.

Table 35. MgV64. Pottery From Features.

Feature Number	Wheeler Plain	O'Neal Plain	Mulberry Creek Plain	Long Branch Fabric Marked	Flint River Brushed	Bluff Creek Simple Stamped	Flint River Cord Marked	McKelvey Plain	Plain Shell
7								2	
17		1							
25	1								
31				31				1	
32								1	
33					1			4	
34			2	1				2	
35	3								
38				4					
52								1	
55									
61			3					1	
62					2				
65			2				1	2	
67						19		4	
71	1			3	3			10	2
72								2	
77								8	
79								3	
81	2	18	1					2	
82			77					9	
88			2						
91	1							2	
92			1					2	
100								2	
TOTAL	8	19	91	39	6	20	1	56	2

PROJECTILE POINTS

The lithic sample from the village area contained 970 identifiable projectile points. These specimens were classified into 33 established types and six provisional categories. Approximately sixty percent of these points were basal fragments.

Paleo-Indian:

Type: Cumberland (Cambron and Hulse 1964:30)

Number of Specimens: 1

Plate: 8

Form and Manufacture: This is a mid-section fragment with broad flutes on both faces. Typical collateral flaking is present from the flute to the blade edge. Blade edges are recurvate. Width of channels varies from 11mm to 13mm.

Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
530	76mm	31mm	10mm

Early-Middle Archaic:

Type: Palmer (Cambron and Hulse 1964:92)

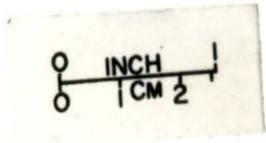
Number of Specimens: 1

Plate: 8

Form and Manufacture: This is a small corner notched point.

The basal edge is straight and lightly ground. The blade edges are serrated but not as deeply as on more classic examples.

Plate 8. <sup>v</sup> Mg 64 - Projectile Points. Top Row,  
left to right, Cumberland (1), Pine  
Tree (2), Palmer (3), Ecusta (4).  
Middle Row, Kirk Serrated (1), Morrow  
Mountain (2), Morrow Mountain Round  
Base (3), LeCroy (4). Bottom Row,  
Lost Lake (1), Pedernalis (2), Buzzard  
Roost Creek (3), Pickwick (4).



Dimensions  
Type: LeCros  
Number of Sp...

## Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
326-8	38mm	24mm	6mm

Type: Ecusta

Number of Specimens: 1

Plate: 8

Form and Manufacture: This is a small side notched point. The blade edges are beveled and serrated. The basal edge is excurvate and has been thinned. The distal tip is broken.

## Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
503-33	29mm	24mm	7mm

Type: Lost Lake (Cambron and Hulse 1964:46)

Number of Specimens: 1

Plate: 8

Form and Manufacture: This is a medium to large, corner-notched point. The blade edges are serrated and have been beveled on one edge of each blade face, producing a rhomboid cross-section. The basal edge is incurvate and has been thinned and heavily ground.

## Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
150	68mm	28mm	8mm

Type: LeCroy

Number of Specimens: 2

Plate: 8

Form and Manufacture: These two specimens are medium, bifurcated-stemmed points. Both exhibit heavy basal grinding and have broken distal tips.

Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
397-52		31mm	6mm
432-18		33mm	6mm

Type: Morrow Mountain (Cambron and Hulse 1964: 80)

Number of Specimens: 3

Plate: 8

Form and Manufacture: These are medium sized points with rounded bases and excurvate blades.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	56-61mm	27-29mm	7-9mm

Type: Morrow Mountain Rounded Base (Cambron and Hulse 1964:81)

Number of Specimens: 1

Plate: 8

Form and Manufacture: This is a medium stemmed point with a broad rounded base and excurvate blade edges. The basal edge has been thinned and ground.

Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
326-3	68mm	44mm	13mm

Type: Kirk Serrated (Cambron and Hulse 1964:63)

Number of Specimens: 3

Plate: 8

Form and Manufacture: These are medium, straight-stemmed points with heavily serrated blade edges. Two of these specimens have ground basal edges.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	58mm	25-27mm	6-8mm

Type: Pine Tree Corner Notched (Cambron and Hulse 1964:96)

Number of Specimens: 2

Plate: 8

Form and Manufacture: The two specimens placed into this category are medium in size, with incurvate, serrated blade edges. The stem is expanded, with a thinned and ground, straight basal edge. Only the measurements of the one complete specimen are given below.

Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
503-34	39mm	30mm	7mm

Type: Benton Stemmed (Cambron and Hulse 1964:11)

Number of Specimens: 11

Plate: 10

Form and Manufacture: These are medium to large stemmed points with beveled stem edges.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	46-59mm	27-29mm	7-8mm

Type: Buzzard Roost Creek (Cambron and Hulse 1964:16)

Number of Specimens: 10

Plate: 8

Form and Manufacture: These are medium to large bifurcated stemmed points. Blade form on these examples ranges from recurvate to slightly excurvate.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	58-68mm	28-35mm	7-8mm

Type: Abbey (Cambron and Hulse 1964:1)

Number of Specimens: 3

Plate: 10

Form and Manufacture: These are medium stemmed points with incurvate, beveled blade edges.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	50-61mm	40-43mm	7-10mm

Late Archaic-Early Woodland -

Type: Motley (Cambron and Hulse 1964:39)

Number of Specimens: 1

Plate: 10

Form and Manufacture: This is a medium, expanded stem point with broad side notches. The basal edge is excurvate.

Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
404-2	47mm	24mm	8mm

Type: Flint Creek (Cambron and Hulse 1964:44)

Number of Specimens: 9

Plate: 10

Form and Manufacture: These are medium to large, stemmed projectile points. Eight of the nine specimens have straight stems while the remaining specimen has an expanded base. All of these specimens exhibit the characteristically finely serrated blade.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	47mm	24mm	8mm

Type: Cotaco Creek (Cambron and Hulse 1964:27)

Number of Specimens: 42

Plate: 10

Form and Manufacture: These are medium to large, stemmed points with rounded shoulders and straight blade edges. Stems are usually straight but a few specimens have an expanded base.

Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	42-61mm	36-42mm	6-11mm

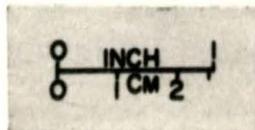
Type: Elora (Cambron and Hulse 1964:40)

Number of Specimens: 7

Plate: 10

Form and Manufacture: This is a medium to large stemmed point. These specimens are thick in cross-section and have unfinished bases.

Plate 9. Mg<sup>V</sup>64 - Projectile Points. Top Row,  
left to right, Copena Triangular (1),  
Camp Creek (2,3), Little Bear Creek  
(4). Middle Row, Madison (1,2), Hamilton  
(3,4). Bottom Row, Bradley Spiked (1,2),  
Limestone (3), Coosa (4).



## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	58-71mm	35-41mm	10-12mm

Type: Limestone (Cambron and Hulse 1964:74)

Number of Specimens: 12

Plate: 9

Form and Manufacture: These are medium stemmed points with tapered shoulders and incurvate basal edges.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	37-42mm	24-29mm	7-9mm

Type: Little Bear Creek (Cambron and Hulse 1964:67)

Number of Specimens: 26

Plate: 9

Form and Manufacture: These are medium to large, straight-stem points. The blade edges are usually excurvate and the basal edges are straight.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	63-76mm	26-30mm	8-11mm

Type: Kays (Cambron and Hulse 1964:59)

Number of Specimens: 18

Plate: 10

Form and Manufacture: These are medium to large straight stem points with excurvate blades.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	57-71mm	27-33mm	8-10mm

Type: Pickwick (Cambron and Hulse 1964:94)

Number of Specimens: 18

Plate: 8

Form and Manufacture: These are medium to large points with straight to tapered stems, recurvate blade edges and expanded shoulders.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	68-84mm	38-50mm	9-11mm

Type: Gary (Cambron and Hulse 1964:47)

Number of Specimens: 5

Plate: 10

Form and Manufacture: These are medium, stemmed points with a contracted, rounded base.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	56-63mm	21-33mm	8-10mm

Type: Pedernalis (Cambron and Hulse 1964:93)

Number of Specimens: 4

Plate: 8

Form and Manufacture: These are medium to large points with a bifurcated stem. One specimen has an incurvate blade while the remainder have straight to excurvate lateral edges. Grinding is present on the basal edge of one of these examples.

**Dimensions:**

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	45-52mm	26-31mm	6-7mm

Type: Adena (Cambron and Hulse 1964:2)

Number of Specimens: 2

Plate: 10

Form and Manufacture: These are medium to large points with excurvate blade edges and rounded stems. One specimen is a basal fragment.

**Dimensions:**

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
35-1	68mm	32mm	8mm

Type: Wade (Cambron and Hulse 1964:110)

Number of Specimens: 205

Plate: 17

Form and Manufacture: These are medium, stemmed points with exaggerated shoulder barbs. The stem is more commonly straight but 30% of the specimens in this sample had an expanded stem. The basal edges of these points range from straight to deeply incurvate (31 specimens). Blade edges are straight to excurvate. In all cases, one broad, deep flake was removed from the basal corners of each face to form the shoulder barbs.

**Dimensions:**

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	38-63mm	29-53mm	7-10mm

Type: Camp Creek (Cambron and Hulse 1964:17)

Number of Specimens: 1

Plate: 9

Form and Manufacture: This is a medium triangular point with an incurvate, thinned base.

Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
496-6	34mm	22mm	5mm

Type: Copena Triangular (Cambron and Hulse 1964:26)

Number of Specimens: 2

Plate: 9

Form and Manufacture: These are medium triangular points with parallel blade edges. One specimen has a straight basal edge while the other example has a slightly incurvate basaledge which has been lightly ground. Only the measurements of the one complete specimen is given.

Dimensions:

<u>Catalog No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
193-17	51mm	24-29mm	6-8mm

Type: Coosa Notched (Cambron and Hulse 1964:24)

Number of Specimens: 4

Plate: 9

Form and Manufacture: These are small to medium, shallow side notched points. All have broken distal tips.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:		17-20mm	7-9mm

Type: Bakers Creek (Cambron and Hulse 1964:8)

Number of Specimens: 5

Plate: 10

Form and Manufacture: These are medium, expanded stem points. Two of these specimens have an excurvate basal edge while the remaining three have straight edges.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	44-64mm	23-25mm	7-8mm

Type: McIntire (Cambron and Hulse 1964:77)

Number of Specimens: 45

Plate: 10

Form and Manufacture: These are medium, expanded stem points. The blade edges are straight to excurvate and the basal edges on most examples are straight, but incurvate on a few specimens.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	50-61mm	32-36mm	9-10mm

Late Woodland - Mississippian -

Type: Bradley Spiked (Cambron and Hulse 1964:15)

Number of Specimens: 4

Plate: 9

Plate 10. Mg<sup>v</sup> 64 - Projectile Points. Top Row, left to right, Flint River Spiked (1), Motley (2), Elora (3), Benton Stemmed (4). Middle Row, Adena (1), Abbey (2), Cotaco Creek (3), McIntire (4). Bottom Row, Flint Creek (1), Gary (2), Bakers Creek (3), Kays (4).

Name and Number

with

Measurements:

Type

Number

Plate

Form and

Use

Type

Number

Plate

Form and

Type

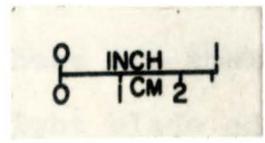
Number

Type

Number

Plate

Form and



**Form and Manufacture:** These are medium spike-shape points with a contracting stem.

**Dimensions:**

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	44-56mm	14-16mm	6-8mm

**Type:** Flint River Spiked (Cambron and Hulse 1964:68)

**Number of Specimens:** 7

**Plate:** 10

**Form and Manufacture:** These are small to medium, narrow lanceolate points with a thinned, rounded base.

**Dimensions:**

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	31-45mm	13-16mm	6-9mm

**Type:** Hamilton (Cambron and Hulse 1964:58)

**Number of Specimens:** 10

**Plate:** 9

**Form and Manufacture:** These are small triangular points with incurvate blade edges and incurvate basal edges.

**Dimensions:**

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	21-36mm	14-23mm	4-6mm

**Type:** Madison (Cambron and Hulse 1964:53)

**Number of Specimens:** 10

**Plate:** 9

**Form and Manufacture:** These are small thin triangular points with straight blade edges and base.

## Dimensions:

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
Range:	22-27mm	14-17mm	3-6mm

Type: Provisional Type 1 (Cambron and Hulse 1964:117)

All undifferentiated straight stem points which could not be placed into an established type were placed into this category. These specimens probably date to a Late Archaic-Early Woodland occupation at this site. The 171 points of this type range in length from 39-72mm, from 23-57mm in width and 7-12mm in thickness.

Type: Provisional Type 1A

The 141 specimens placed into this sub-type appear formally and technologically related to the Wade point type. They seem to represent Wade points that have had the shoulder barbs broken and retouched, or which lack the exaggerated barb. The length of these specimens ranges from 39-56mm; the width from 21-32mm; and the thickness range is from 6-8mm.

Type: Provisional Type 2 (Cambron and Hulse 1964:118)

All small to medium expanded stem points which did not conform to an established type were placed into this category. They are probably related to Late Archaic-Early Woodland types. The 154 points placed into this provisional type range from 31-67mm in length, 24-46mm in width and 7-11mm in thickness.

Type: Provisional Type 4 (Cambron and Hulse 1964:118)

These are undifferentiated stemmed points with shoulder barbs. They appear to be associated with the Late Archaic or Early Woodland occupation at this site. The 118 specimens placed into this category have the following range of dimensions:

Length: 37-81mm; Width: 29-50mm; Thickness 7-10mm.

Type: Provisional Type 5 (Cambron and Hulse 1964:119)

Twenty-three medium to large stemmed points with serrated blade edges were placed into this provisional type. They range in length from 41-111mm, in width from 20-35mm and from 6-10mm in thickness.

Type: Provisional Type 9 (Cambron and Hulse 1964:120)

All small to medium side notched points which did not conform to a named type description were assigned to this type. The range of dimensions were as follows: Length: 33-56mm; Width: 17-26mm; Thickness: 6-11mm.

Type: Provisional Type 11 (Cambron and Hulse 1964:121)

Eleven medium triangular points were placed into this provisional category. The majority appear to be unfinished, exhibiting only percussion flaking. The length ranges from 39-60mm, the width from 16-27mm and the thickness from 6-9mm.

#### OTHER CHIPPED STONE

Drills- The drills from this site were divided into three formal types and a residual category. The first drill type was characterized by an expanded base.

Table 36 M964. Projectile Points From Features.

Feature Number	Little Bear Creek	Cotaco Creek	Elora	Adena	Hamilton	Made	Provisional Type 1A	Provisional Type 4	McIntire	Keys	Coosa Notched	Bradley Spiked	Flint River Spiked	Copena Triangular	Federnalis	Pickwick	Flint Creek	Buzzard Roost Creek	Provisional Type 1	Provisional Type 2	Provisional Type 5	Provisional Type 9	Provisional Type 11
1	1																						
5																							
6		1																					
7			1																				
8				1																			
9					1																		
13					1																		
17						2																	
18	1						2																
19								1															
25																							
35	2					4	6	5	4								1		2	1	1		
36							1	1															
38																							
41														1									
45		1																					
52							1																
55																							
63						1																	
64																							
65																							
71																							
79																							
81							1						1										
82							1	1					1										
84																							
86							1	1															
88								1															
90																							
91							1	2	1	1	1												
96																							
97							2																
98																							
TOTAL	5	2	1	1	2	8	18	13	5	1	1	1	1	2	1	1	2	1	9	9	2	1	2

The 32 examples placed into this category have long, narrow (21-51mm) shafts or bits and expanded bases. The basal edge on these specimens ranges from straight to rounded and is usually thinned for hafting. The second category contains 14 straight base drills. These implements vary from 35-71mm in length and lack a discernible hafting area or base. Both ends of these drills appear to have been utilized. The third type contains 46 stemmed drills, the majority of which appear to be modified projectile points. Length on these specimens ranges from 35-73mm with the shoulder width varying from 25-39mm. Eleven broken bits (distal ends) were placed into a residual category. All exhibit some wear on the distal tip. These range in length from 32-58mm.

Stemmed Reamer - There were 32 specimens placed into this artifact category. Of these, 20 were straight stemmed while the remaining 12 had expanded bases. All of these artifacts have a short bit (2-5mm) on the distal end formed by pressure flaking. This short bit exhibits heavy wear on all specimens and appears to have been utilized as a reaming or boring tool, perhaps as primary instruments in starting drill perforations. As such, they perhaps represent a component of a tool kit which also contained drilling implements. The range of length measurements is from 32-69mm; the width from 23-35mm; the thickness 8-12mm.

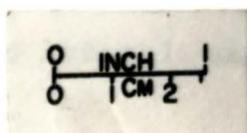
**Stemmed Knives** - Ten stemmed artifacts with asymmetrical blades were assigned to this artifact type. All exhibit fine wear, usually on the one excurvate lateral edge. Other than the wear patterns, these specimens are identical to some of the Provisional Type 1 and 2 projectile points.

**Stemmed Scrapers** - The 65 examples of this tool type all appear to be reworked projectile points. The distal or working end of these scrapers vary from straight to excurvate. Wear, perhaps from use as hafted end scrapers, is evident on several of the specimens. Recognizable projectile point types include the Benton Stemmed, Adena Narrow Stemmed, Elora, and Kays. This indicates a Late Archaic to Early Woodland placement for the tools.

**Biface Blades (Triangular)** - Ninety-four specimens were assigned to this category. These blades have parallel to excurvate lateral edges, acute distal ends and straight to rounded bases. They range in size from a small form (50-60mm in length) to a medium size variety (67-90mm, in length). Although some of these blades could represent preforms for projectile points some exhibit fine retouching along the lateral edges and probably represent finished tools.

**Biface Blades (Ovoid)** - The 24 examples of this tool type range in length from 62-126mm. Both distal and

Plate 11. Mg<sup>v</sup> 64 - Chipped Stone Artifacts. Top Row, left to right, Drills (1,2,3), Stemmed Knife (4). Middle Row, Stemmed Scrapers (1,2), Spokeshave (3), Backed Knife (4). Bottom Row, Biface Blades: Long, Narrow (1), Medium Triangular (2), Asymmetrical (3).



Proximal ends are rounded and blade edges are excurvate. One of these specimens (F.S. 41) was recovered in association with Burial 35, a fully flexed adult female. It is made from a grayish-brown chert and was formed by percussion flaking. The blade edges and one of the rounded ends exhibits heavy wear, extending across the blade faces. This particular specimen measures 126mm x 56mm x 14mm.

**Biface Blades (Asymmetrical)** - These 23 specimens are similar in form to the Backed Knife category. However, where the Backed Knives have only one worked lateral blade edge, these tools have both blade edges pressure flaked. All have acute distal ends and straight to round bases. Dimensions are Length: 57-81mm, Width: 24-42mm, Thickness: 7-14mm.

**Biface Blades (Long, Narrow)** - Eight long, narrow, thick, percussion flaked blades were assigned to this category. Basal edges are straight to rounded and distal ends are acute. It is possible that these artifacts served as piercing rather than cutting implements. Dimensions are Length: 41-62mm, Width: 32-46mm, and Thickness: 7-15mm.

**Backed Knives** - This type is represented by twenty-four asymmetrically shaped biface blades. The excurvate blade edge has been sharpened by fine pressure flaking. The other lateral edge is usually straight

and has not been modified. Six of these specimens have rind still attached to this flat straight edge. The form of these blades suggests that they were utilized as knives. Dimensions range from 67-94mm in length, 23-36mm in width and thickness was from 7-21mm.

**Flint Hammers** - Twenty specimens of this tool type were recovered. These are ovoid bifacially flaked chert nodules with extremely battered edges. This wear pattern suggests that they were utilized as flaking implements or shredding tools for fibrous tubers or other type of flora. A large number of these tools was recovered from 1Mg77, a predominantly Early Woodland village (Nielsen 1972:42). Dimensions ranged from 42-47mm in length, 32-51mm in width and in thickness from 20-31mm.

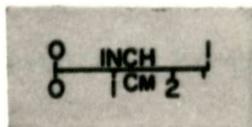
**Spoke Shaves** - Seven specimens with a concave scraper edge (ca. 17mm wide and 2-4mm deep) chipped into one of the blade edges were found at Mg<sup>V</sup>64. Four of these tools are uniface blades and three have been bifacially chipped. All have one other worked edge which might have served as a knife or scraper.

**Uniface Trapezoid Scrapers** - The six examples of this tool were all made from thick, plano-convex, flakes. All have broad, steeply beveled working edges. Dimension ranges are Length 41-74mm, width 22-46mm, and thickness 9-12mm.

Plate 12. Mg<sup>V</sup>64.- Chipped Stone Artifacts. Top Row, left to right, Ovoid Biface Blade (1), Flint Hammers (2,3). Bottom Row, Biface End Scraper (1), Uniface Side Scraper (2), Uniface Trapezoid End Scraper (3).

Half face

Biggin



**Uniface Side Scraper** - All 24 of these implements were made from thick, plano-convex flakes. One edge on each specimen has been retouched and in some cases exhibits wear.

**Digging Implements** - Three complete and five fragmentary chipped stone spades were recovered from Mg<sup>V</sup>64. One complete specimen and a proximal fragment were made from limestone, while two complete and four fragmentary specimens were made from greenstone. All of the greenstone specimens were found in or near Copena burials. Specimen 21, found in association with Burial 12 measured 285mm x 126mm x 21mm. Specimen 8, the complete limestone spade had dimensions of 236x102x35. All of these implements exhibited wear on the distal end and along the lateral blade edges.

**Large Biface Blade** - A long bifacially chipped biface blade was recovered which appears to have been made from a foreign chert. The blade measures 255mmx66mm and varies in thickness from 13-37mm. One end of the blade has been thinned and exhibits some polish. The material from which the blade was made is a chocolate brown chert with white or grey specks or bands similar to Duck River flint.

**Residual** - This category includes all unidentifiable worked stone which could not be placed into one of the

Table 37. Mg<sup>v</sup>64. Chipped Stone Tools From Features.

Feature Number	Drills	Reamers	Triangular Biface Blades	Backed Knives	Biface Blades: Ovoid	Biface End Scrapers	Biface Blades Long, Narrow	TOTAL
6					1			1
9	2	1			1			4
13		1						1
14	1							1
17	1							1
21					1			1
26		1						1
31	1							1
34	2							2
35	3	1	2		1	1	1	9
39	1							1
40				1				1
42	1							1
48		1				1		1
60		1				1		2
63	1							1
65		1						1
77	2							2
79			1					1
81	5							5
82		1						1
86		1		1				2
88								1
90	2		1					2
91	1		1					2

above tool types. Included in this category are 162 distal ends of projectile points or biface blades and 1200 flint chips. Approximately 204 of these chips appear to have been utilized. Four large chunks of chert with random, broadflake scars appear to have been cores and were also placed into this residual category.

#### PECKED AND GROUND STONE

Steatite Elbow Pipes - Three of these massive pipes occurred in association with Copena burials (4, 9, and 23). All appear to have been intentionally "killed" during the burial ceremony. All three have been finely ground and polished. Bowl height varies from 84-98mm and stem length ranges from 84-120mm.

Celts - Three greenstone celts or axes were recovered. All are fragmentary but seem to represent full grooved Late Archaic-Early Woodland forms. The distal end on the two more complete specimens is battered from use.

Diorite Axe - A large diorite axe was recovered from the village area. The implement has been finely ground and has a three-quarter groove. The axe blade exhibits no wear but the proximal end has been battered. The axe measures 185mm in length, 113mm in width and 76mm thick. The groove is 21mm wide.

Atlatl Weight - A small, rectangular atlatl weight was found unassociated in the village midden. It had

been broken while in the process of being drilled. The manufacturing technique probably included the following steps: 1) the stone was shaped by grinding and polishing, 2) perforations were begun at each end with a solid pointed object, 3) drilling began with a hollow reed and sand abrasive and proceeded nearly the length of the weight until one face of the artifact was fractured. The weight measures 33mm x 24mm x 17mm.

Medicine Tube - A ferruginous sandstone tube-like formation was recovered which had been modified. One end of the hollow tube had been flattened and the exterior ground and polished. The tube had been broken but measured 72mm in length.

## SUMMARY

From the information recovered during the excavation of the Robinson Site, it appears that this location was extensively utilized as a habitation site for thousands of years. The use of this site for camps or villages began during the earliest known period of aboriginal occupancy of the Tennessee Valley area, the Paleo-Indian, and continued without any major interruption until the beginning of the Middle Woodland period. At this time the site was abandoned as a living area and used exclusively for mortuary purposes. The site was again occupied as a habitation locale during the Late Woodland period and was finally abandoned after a brief occupation during the Missippian period.

The one fluted point recovered from the site, a Cumberland, suggests that this location was first visited during the Paleo-Indian period. This is the only artifact recovered during the investigation of this site which can definitely be placed into this temporal unit. As such, it probably represents the physical remains of a temporary encampment.

The site was intermittently occupied in the succeeding millenia after the end of the Pleistocene epoch. Several of the projectile points recovered from the excavation

of this site (Palmer, Pine Tree, Lost Lake, Ecusta, Kirk, LeCroy, and Morrow Mountain) date to this Early-Middle Archaic period. Again, the paucity of cultural material that can be associated with these early traditions indicates that this site was utilized only for temporary hunting or gathering stations during this time.

The first major occupation of the Robinson Site took place during the succeeding Early Woodland period, in the latter portion of the first millenium B.C. The large quantity, and diversity of cultural material which can be placed into this Early Woodland assemblage indicates an extensive use of this location by larger, more sedentary, groups of people. This occupation can be functionally termed a multiple-activity base camp or settlement where a variety of maintenance and subsistence activities were conducted. The majority of the stemmed projectile points, drills, reamers, knives, and scrapers recovered during the investigation of this site can be associated with this occupation. Likewise, the fiber, sand, and limestone tempered ceramics (with the exception of the few stamped limestone tempered and cord marked sherds), as well as the stone vessels described in this report, can be assigned to this period. Burials were made in the village area at this time. They are typically fully flexed or sitting interments occasionally associated with stone vessels or vessel fragments. The functional and cultural significance of this occupation are more thoroughly discussed in Section III of this paper.

## L. THE WALLING SITE (Ma<sup>V</sup>33, Ma<sup>o</sup>49)

### 1. The Walling Village Ma<sup>V</sup>33.

This was a village site located on a low knoll in the bottomlands, 600 yards north of the Tennessee River in Madison County, Alabama. The site is one mile downstream from Whitesburg Bridge (Webb and DeJarnette 1948a) and is located in Section 24, Township 5 South, Range 1 West. It was first discovered in 1932 during an archaeological site survey program conducted by the Alabama Museum of Natural History. The geographical position of this site is shown on the survey map in the Wheeler Basin Report and the site is briefly described in the survey section (Webb 1939:95).

Some 237 sites were located in the Wheeler Basin area, but time and resources allowed testing and excavation of only nineteen. In 1939, after the completion of the Guntersville Basin project, excess funds allowed a return to the Wheeler Basin area. Several sites not inundated by the construction of the dam were being destroyed by frequent flooding. Among those chosen for salvage operations were seven sites located in Madison County within a two mile radius of the Whitesburg Bridge on the old Whitesburg Pike, ten miles south of Huntsville. The following sites in this area were investigated: Ma<sup>V</sup>10, an extensive shell mound (Webb and DeJarnette 1948a), Ma<sup>o</sup>31, a Mississippian burial mound, Ma<sup>V</sup>31 and Ma<sup>o</sup>32, a Mississippian village and substructure mound, Ma<sup>o</sup>49, a Copena

burial mound, Ma°50, another Mississippian temple mound, and Ma<sup>V</sup>33, a small habitation site.

Ma<sup>V</sup>33, known as the Walling Site after the name of the previous property owners, covered an area, oval in shape, approximately 550 feet long by 400 feet wide. The site lay in a cultivated field at the time of discovery and its presence was recognized by a dark stain in otherwise light sandy soil. A large amount of lithic and ceramic material was found on the plowed surface of the village area. Ma°50, one of the Mississippian substructure mounds in this area, was located on the southwestern portion of the site. Cultivation and subsequent erosion had apparently destroyed most of the village midden. However, when test trenches were put down a portion of the midden was found to have been preserved by the mound. This midden consisted of a dark layer of loam 6 to 8 inches thick. Cultural material including projectile points and ceramic debris, were found in this layer and several postholes and pits were found to extend from this midden into the subsoil. Lithic and ceramic samples were collected from the surface, plowzone, test trenches, and from a layer of the mound (Fill III) which consisted of earth dug from the old village area.

#### Site Environment

The Walling Site was located on a knoll in the broad bottomlands formed by the Tennessee River. While the site is situated in the Tennessee Valley proper it

is only a short distance (one to two miles) from extensions of the Cumberland Plateau. The valley itself is basically an undulating fluvial environment, with longitudinal chert ridges paralleling the river. Harper (1913; 1945) believes this region was originally an oak-hickory forest which also contained such species as poplar, sweetgum, birch, walnut, chestnut and sassafras among others.

The nearby Cumberland Plateau outlier also known as the Coal Region Plateau, is a hilly limestone area with peaks up to a thousand feet, noted for its deep ravines and high bluffs. In general the area can be considered to be a dry oak-pine forest in addition to such species as dogwood, chestnut, locust, hemlock, beech, poplar, holly, and others (Harper 1913; 1945).

#### The Excavations

This site was excavated by W.P.A. labor under the direction of H. Summerfield Day. The intent of these excavations was to determine the nature of the construction of the Mississippian mound. It was only by accident that a portion of the old midden was uncovered. Two test trenches were put down on the western and northern sides of the mound. Both trenches were five feet wide. Trench A was 55 feet long and Trench B was 70 feet long. Both were carried to the subsoil. The stratigraphic sequence encountered in these trenches consisted of:

- A. Plowzone
- B. Mound Fill IV - Sterile soil.
- C. Mound Fill III - This layer was constructed of old village midden and contained large amounts of cultural debris.
- D. Mound Fill II - This fill was constructed of sterile bright yellow clay identical to the deep subsoil underlying the upper red clay subsoil. This layer represented the second stage of mound construction. Upon it two structure patterns, one rectangular and one circular, were found.
- E. Mound Fill I - This was the primary mound fill representing the first stage of construction. The layer was built directly on top of the old village midden. It was 1.3 to 1.8 feet thick and was constructed of sterile red-clay subsoil.
- F. Village Midden - This was the original surface layer prior to mound construction. It was 6 to 8 inches deep and contained a large amount of cultural debris.
- G. Bright Red Subsoil - This layer was sterile except where it was penetrated by postholes and pits extending down from the village midden.
- H. Bright Yellow Clay Subsoil - This was a

completely sterile layer lying over the chert bedrock.

Features:

In Trench B two features and five postholes were found. These were encountered at the top of the red clay subsoil in squares 50R40 and 50R45. The features were both oval basin-shaped midden pits 1.5-2.0 feet in diameter and 1.0-1.5 feet in interior depth. One of these features exhibited evidence of having had a fire built within it and can be considered to have functioned as a roasting pit or hearth. Both pits contained village debris. The postholes are .6-.9 feet in diameter and .7 to 1.2 feet deep. They form a roughly semi-circular line but the area excavated was so small that it is not known if these postholes are a portion of a larger pattern.

Lithic Material

Over twelve hundred specimens of chipped stone were recovered from this site. Some of these artifacts were recovered from the test trenches and some were surface finds. Unfortunately there was no context recorded for these specimens. Therefore all of the lithic material has to be treated as a surface collection. This sample contained a total of 502 complete and fragmentary projectile points. These specimens were placed into 13 established types and 5 provisional categories according to their formal attributes. Since the projectile point sample was so large individual measurements of some of

the more numerous point types were not made.

Projectile Points

Type: Palmer (Coe 1959; 1964; Cambron and Hulse 1964:A67).

Number of Specimens: 1

Plate: 13

Form and Manufacture: This is a small corner-notched projectile point with a serrated blade. The basal edge is slightly incurvate and has been thinned and ground. The distal tip is broken.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
1	-	26mm	6mm

Type: Morrow Mountain (Coe 1959; 1964; Cambron and Hulse 1964-A61).

Number of Specimens: 1

Plate: 13

Form and Manufacture: The one specimen of this type recovered from Ma<sup>V</sup>33 is a medium, stemmed point with a rounded, heavily ground base.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
2	46mm	26mm	7mm

Type: (Kneberg 1956).

Number of Specimens: 2

Plate: 13

Form and Manufacture: These are medium-sized projectile points with a bifurcated base and serrated blade edges. One specimen is fragmentary, having both the distal tip and one auricle broken. Only the dimensions of the more complete specimen are given below.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
4	46mm	26mm	7mm

Type: Hardaway (Coe 1959; 1964; Cambron and Hulse 1964:A46).

Number of Specimens: 2

Plate: 13

Form and Manufacture: Small to medium, side-notched points with an incurvate basal edge. The basal edge is ground on both specimens.

Blade edges are slightly serrated.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
5	38mm	22mm	6mm
6	43mm	24mm	6mm

Type: Big Sandy (Kneberg 1956; Cambron and Hulse 1964).

Number of Specimens: 2

Plate: 13

Form and Manufacture: These are medium, side-notched points. Both specimens have a straight basal edge which is lightly ground. One specimen has been broken longitudinally and its dimensions are not given.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
8	39mm	19mm	7mm

Type: Copena Triangular (Webb and DeJarnette 1942).

Number of Specimens: 7

Plate: 14

Plate 13. Ma<sup>V</sup>33 - Projectile Points. Top Row, left to right, Palmer (1), Big Sandy (2), LeCroy (3), Morrow Mountain (4). Middle Row, Hardaway (1), McIntire (2), Benton (3), Limestone (4). Bottom Row, Provisional Type 1 (1), Provisional Type 2 (2), Provisional Type 4 (3), Provisional Type 9 (4).

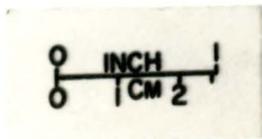


Plate 14. Ma<sup>V</sup>33. - Projectile Points. Top Row, left to right, Copena Triangular (1), Bakers Creek (2), Nolichucky (3), Bradley Spiked (4). Middle Row, Provisional Type 11c (1,2), Madison (3,4). Bottom Row, Provisional Type 11a (1,2), Provisional Type 11b (3,4).

Form and Material

Associated find

Blade edges

Dimensions

Cat. No.

1

Type

Material

Blade edges

Dimensions

Cat. No.

2

Type

Material

Blade edges

Dimensions

Cat. No.

3

Type

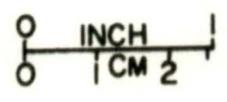
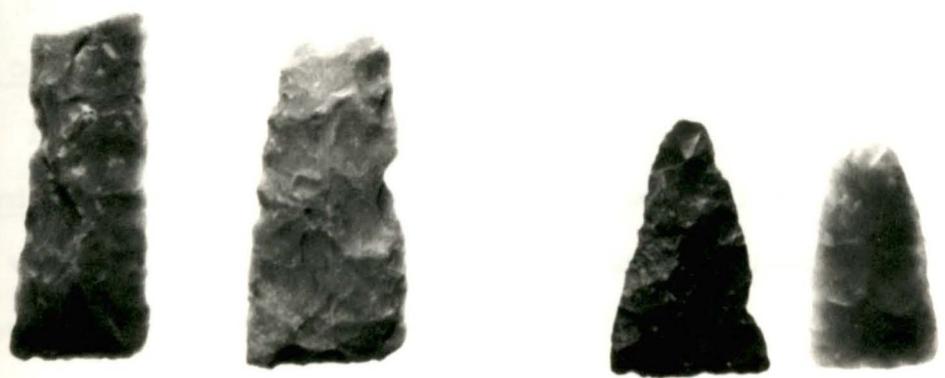
Material

Blade edges

Dimensions

Cat. No.

4-15



Form and Manufacture: Small to medium, side-notched points with an incurvate basal edge. The basal edge is ground on both specimens. Blade edges are slightly serrated.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
5	38mm	22mm	6mm
6	43mm	24mm	6mm

Type: Big Sandy (Kneberg 1956; Cambron and Hulse 1964).

Number of Specimens: 2

Plate: 13

Form and Manufacture: These are medium, side-notched points. Both specimens have a straight basal edge which is lightly ground. One specimen has been broken longitudinally and its dimensions are not given.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
8	39mm	19mm	7mm

Type: Copena Triangular (Webb and DeJarnette 1942).

Number of Specimens: 7

Plate: 14

Form and Manufacture: These seven specimens were all medium triangular points with parallel blade edges. All have straight basal edges and only two do not exhibit basal thinning.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
9-15	Range: 50-52mm	23-34mm	7-8mm

Type: Bradley Spiked (Kneberg 1956; Cambron & Hulse 1964: A-14).

Form and Manufacture: These are small to medium, straight stemmed points with a narrow spike-shaped blade. Basal edge is straight to excurvate and is unfinished on some of the specimens.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
16-38	Range: 36-53mm	12-17mm	6-10mm

Type: Limestone (Cambron and Hulse 1964: A105).

Number of Specimens: 2

Plate: 13

Form and Manufacture: This type is characterized by an incurvate base, tapered shoulders and a straight to slightly excurvate blade edge.

Both examples are medium in size.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
39	38mm	26mm	7mm
40	37mm	29mm	8mm

Type: Nolichucky (Kneberg 1957; Cambron & Hulse 1964:A64).

Number of Specimens: 2

Plate: 14

Form and Manufacture: Both of these points have an incurvate hafting area and straight, thinned basal edges.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
41	35mm	20mm	8mm
42	41mm	21mm	9mm

Type: Bakers Creek (DeJarnette, et. al. 1962).

Number of Specimens: 4

Plate: 14

Form and Manufacture: These are medium, expanded-stemmed points. Basal edges are straight and thinned. All specimens have broken distal tips.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
43-46	Range: -	21-23mm	6-7mm

Type: Madison (Scully 1951; Cambron and Hulse 1964:A60).

Number of Specimens: 24

Plate: 14

Form and Manufacture: These are small, thin triangular points. Basal edges are straight to slightly incurvate.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
47-70	Range: 17-19mm	26-29mm	3-5mm

Type: Benton (Kneberg 1957)

Number of Specimens: 17

Plate: 13

Form and Manufacture: These medium-sized points have straight bases and steeply beveled stem edges.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
78-87	Range: 48-57mm	25-36mm	8-10mm

Type: McIntire (Cambron and Hulse 1964:A106).

Number of Specimens: 18

Plate: 13

Form and Manufacture: These are expanded-stem points with a straight base and excurvate blade edges.

Dimensions:

<u>Cat. No.</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
88-105	Range: 48-56mm	29-34mm	7-9mm

PROVISIONAL TYPES: (Cambron and Hulse 1964: 117-122).

PROVISIONAL TYPE 1: All straight-stem projectile points which could not be placed into an established type were put into this provisional category. A total of 155 specimens were placed into this type. The range of dimensions for the measurable specimens is as follows: Length: 35 - 66mm; Width: 16 - 42mm; Thickness: 6-11mm.

PROVISIONAL TYPE 2: There were 113 projectile points with expanded stems which could not be placed into an established type category. They have the following range of dimensions: Length: 37-63mm; Width: 19-32mm; Thickness: 6-9mm.

PROVISIONAL TYPE 4: Nineteen specimens were placed into this category. These are all stemmed points with shoulder barbs or tangs. They have the following dimensions: Length: 27-60mm; Width: 16-27mm; Thickness: 6-10mm.

PROVISIONAL TYPE 9: Fifteen small to large side-notched projectile points were placed into this provisional type. They have the following range of dimensions: Length: 27-60mm; Width: 16-27mm; Thickness: 6-10mm.

PROVISIONAL TYPE 11: All triangular projectile points which could not be placed into an established type were put into this category. Since there is a great range in size and form these projectile points have been divided into 4 sub-types:

PROVISIONAL TYPE 11A: These are long narrow triangular points similar to Type 11-A at the Wright Village. The ten specimens placed into this category have the following range of dimensions:

Length: 40-63mm; Width: 17-22mm; Thickness: 6-8mm.

PROVISIONAL TYPE 11B: These are medium triangular points similar to the Camp Creek and Greenville types. They compare favorably to Provisional Type 11E points recovered from the Wright Village. Fifteen specimens were placed into this sub-type.

They have the following dimensions: Length: 31-38mm, Width: 16-21mm; Thickness: 5-7mm.

PROVISIONAL TYPE 11C: Fourteen small triangular points were placed into this sub-type. They are similar in size and form to the Mississippian triangular points but are thicker and more crudely made. They perhaps represent unfinished Madison points.

They have the following measurable proportions: Length: 30-34mm; Width: 13-19mm; Thickness: 5-7mm.

PROVISIONAL TYPE 11D: Fifty-six small to medium triangular projectile points were placed into this category. Many of these are fragmentary or unfinished. They have the following range of dimensions: Length: 33-62mm; Width: 19-35mm, Thickness: 5-7mm.

Other Chipped Stone Artifacts:

Drills: There were 22 examples of this tool type recovered from

Ma<sup>V</sup>33. Ten specimens had an expanded-stem base, three had

triangular bases and one a side-notched base. Three drills were made from small triangular points. Two of these have use polish on the distal tips. Five broken bits, some heavily worn, were also recovered.

Stemmed Scrapers: Eight examples of this tool type were recovered.

These are all stemmed projectile points with round distal ends which were apparently utilized as end scrapers. Three of the specimens exhibit heavy wear polish on the scraper edge.

Stemmed Knives: Six stemmed points with asymmetric blades were placed into this tool type. All show wear on the excurvate blade edge. One example is finely serrated and another has an acute distal end well worn from use, apparently as a perforator.

Stemmed Perforators: Two stemmed specimens had narrow short bits at the distal end. Both distal tips exhibit wear. These tools were probably used as perforators since they lack the characteristic "twist" of a drill bit.

Biface Blades: These are medium to large bifacially chipped blades.

Most of the specimens are distal or basal fragments. The more complete specimens suggest a trianguloid shape with acute distal ends, parallel to slightly excurvate blade edges and straight to excurvate basal edges. Few specimens exhibit any pressure flaking. The majority have been shaped by percussion only. There were 53 distal ends, 12 midsections, 44 basal fragments and 10 complete specimens in this sample. They have the following measurable dimensions: Length: 70-120mm; Width: 27-42mm; Thickness: 10-17mm.

Small Triangular Blades: Fourteen specimens were placed into this category. These are bifacially chipped small triangular blades which exhibit only percussion flaking. There is a strong possibility that these are actually preforms for triangular projectile points. Measurements: Length: 49-60mm; Width 26-32mm; Thickness: 11-16mm.

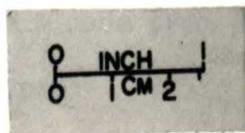
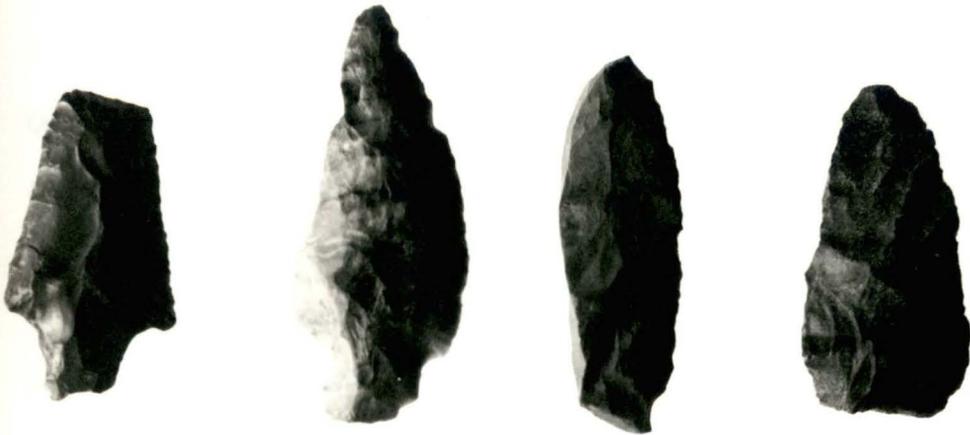
Small Asymmetrical Blades: The 26 specimens placed into this category all have acute distal ends and straight to excurvate basal edges. The asymmetric form suggests that these specimens functioned as knives. Several of the examples do exhibit wear on the excurvate blade edge. Measurements: Length: 53-61mm; Width 14-19mm; Thickness: 7-10mm.

Backed Knives: Eight specimens were placed into this category. All are small to medium bifacially chipped blades with one unfinished blade edge. Rind is still attached to the unfinished edge on three examples. Four specimens have wear on the worked blade edge which suggests they were used as cutting implements. Measurements: Length: 55-74mm; Width 16-26mm; Thickness: 9-17mm.

Spoke Shaves: Four biface blades with a concave depression on one blade edge were recovered. The depression surface on all examples exhibits retouching and wear characteristic of a scraping edge. This indicates that these tools were used as spoke shaves.

Uniface Blades: Four long, narrow unifacially chipped blades were recovered. One example is especially noteworthy since it

Plate 15. Ma<sup>V</sup> 33 - Chipped Stone Tools. Top Row, left to right, Stemmed Scraper (1), Stemmed Knife (2), Backed Knife (3), Medium Biface Blade (4). Middle Row, Small Asymmetrical Biface Blade (1), Drill (2), Medium Triangular Biface Blade (3), Uniface Blade (4). Bottom Row, Core (1), Trapezoid Uniface End Scraper (2), Spokeshave (3).



appears to be a multi-purpose tool. This blade is 92mm long, 25mm wide, and 9mm thick. Both blade edges are steeply flaked. One blade edge is concave and appears to have been utilized as a spoke shave or scraper. The other blade edge apparently served as a knife or a scraper. One end of the blade has been chipped to form a graver while the other end has a short perforator bit. Both blade ends exhibit use polish.

Uniface Trapezoid Scrapers: Five small unifacially chipped tools, trapezoid in shape, were recovered. All appear to have been utilized as end scrapers.

Residual Biface: All bifacially chipped stone which could not be identified was placed into this residual category. Of the 360 specimens most appear to be distal tips or mid-sections of projectile points or biface blades.

Pecked and Ground Stone:

Digging Implements: There were 14 fragmentary digging implements recovered from this site. Three of the specimens are made from limestone while eleven are greenstone. The more complete specimens suggest parallel blade edges, rounded to straight proximal ends and a slightly broader distal or working end. All specimens with blade or distal edges exhibit heavy wear. The largest specimen recovered, a proximal fragment, measures 162mm x 94mm x 30mm.

Celts: Twenty-six celt fragments were recovered. Three are limestone while the remainder are made from greenstone. These specimens represent two celt types:

A. Polled celt - These are thick, bi-convex celts with a long narrow proximal end. The 20 fragments of this type are all heavily ground and the distal or working edges all show wear.

B. Trianguloid Celt - These are smaller celts, triangular in shape, and are flat in cross-section. The proximal end is more narrow than the working distal end but this difference is not as extreme as on the polled variety.

Hammerstones: Thirteen river cobbles recovered from Ma<sup>V</sup>33 had one or more pecked surfaces which suggests that they were utilized as hammers.

Anvil Stones: Two types of these artifacts were recovered. Type A have circular depressions on one or both flat surfaces. These depressions suggest that these stones were stationary and served as anvils. These types are often referred to as nutting stones. Type B are large river cobbles with one or more pecked, but not ground surfaces. Twelve of the 18 specimens recovered were placed into the Type A category while the remainder were Type B examples.

Grinding Stones: These are fist size river cobbles with one or more flat surfaces heavily ground. This suggests they functioned as mullers or pebble manos. Fourteen examples of this artifact type were recovered from Ma<sup>V</sup>33.

Ceramic Material:

A total of 1090 sherds were recovered from this site. Of these, 879 or 80% were limestone tempered. Sand, clay-grit, and shell tempered sherds made up the remaining 20%. Provenience data for the ceramic

sample is given in Table 38.

Limestone Tempered Ware:

Mulberry Creek Plain (Haag 1939:9; Heimlich 1952:15-17):

This was the most popular type of pottery at this site. The 453 sherds of this type recovered from Ma<sup>V</sup>33 constitute 51% of the limestone tempered group. The majority of these specimens were body sherds, while 26 rims and seven podal supports were present in the study sample. Most of these sherds have a smoothed finish but approximately 16% appear to have been scraped by a paddle edge of some sort. Rims are straight to slightly flaring and rim lips are flattened or occasionally rounded. Only one rim sherd bore any decorative treatment. Small fingernail punctations were applied across the lip of this rim sherd. One body sherd had been decorated with a line of small rectangular punctations.

Flint River Cord Marked (Heimlich 1952:19):

This was the second most numerous type recovered from Ma<sup>V</sup>33. A total of 211 sherds of this type were found in the study sample. This type accounts for one-fourth of the limestone tempered pottery from this site. Twenty rim sherds were recovered. All of these have a cord marked finish up to the rim, which has been smoothed. Rim treatment is simple, most have been rounded and are slightly everted.

Bluff Creek Simple Stamped (Haag 1939:12; Heimlich 1952:18):

Eighty-seven sherds of this type were recovered from Ma<sup>V</sup>33. All specimens have been impressed with rows of parallel lines thought to have been made with a carved paddle die. No rim sherds were found in the study sample. However, more complete vessels from other sites in the valley region indicate that the most common vessel form was a wide

mouth jar with a smoothed or plain rim area (Heimlich 1952:18).

Wright Check Stamped (Haag 1939:12; Heimlich 1952:17-18):

This type represents 5% of the limestone tempered sherds recovered from this site. All of the 46 specimens in this sample were body sherds. Most of the sherds (30) were subsequently smoothed after the check stamped impressions were applied.

Pickwick Complicated Stamped (Haag 1939:14; Heimlich 1952:18):

Only three body sherds of this type were recovered. All were impressed with a curvilinear carved-paddle motif.

Flint River Brushed (Heimlich 1952:10):

Twenty-nine of these sherds were recovered. Of these, 24 are body sherds bearing only a brushed finish. However, 5 sherds, including a rim, also bear rows of fingernail punctations. The one rim sherd is straight with a flattened lip and has a smoothed area 35mm wide below it. Two of the body sherds also have a smoothed area above the row of fingernail punctations and heavy brushing below it.

Harris Rocker Stamped (Heimlich 1952:20):

Nineteen sherds of this type were recovered from Ma<sup>V</sup>33. This is especially interesting since only three of these sherds have previously been reported from the Tennessee Valley region of Northern Alabama. These three specimens all came from Ms<sup>O</sup>80 in the Guntersville basin. One of these sherds also bore a line of reed punctations. All of the examples recovered from Ma<sup>V</sup>33 were body sherds. Five of the sherds have decorations which suggest zoning. Two have a line of semi-lunar punctations above the rocker stamping. One sherd has a row of incised lines (2mm long) above the rocker

stamping and another has two inversed rows of rocker stamping bordered by an incised horizontal line. Also, one body sherd is cord-marked, similar in all aspects to Flint River Cord Marked, but has a row of rocker stamped decorations secondarily applied over this finish. This combination suggest the contemporaneity of cord-marking and rocker stamping at this site. The small number of sherds bearing a rocker stamped motif found in the region indicates that these specimens probably represent trade vessels.

Limestone Tempered-Residual: Twenty-eight badly leached sherds were placed into this category. All appear to have a stamped finish but their poor condition prohibits identification.

Sand Tempered Ware:

The 160 sherds of this temper group were classified into five types. This sample represents 14% of the total sherd count.

O'Neal Plain (Haag 1939:5; Wimberly and Touretelot 1941:22;

Heimlich 1952:10-11):

This type represents 60% of the sand tempered sherds recovered from this site. Of the 96 sherds recovered, 6 are rim sherds. Rim treatment is simple, four have straight rims with rounded lips, two others have slightly everted rims which have slight folds or "burrs." One rim has been decorated with a row of fingernail punctations. One complete base of a small jar was recovered. This base has a rounded bottom and four wedge-shaped podal supports. The podal supports are set like the corners of a rectangle - 32mm apart - on the short side and 42mm apart on the long. The base is 9mm thick. The podal supports are set like the corners of a rectangle - 32mm apart - on the short

side and 42mm apart on the long. The base is 9mm thick. The podal supports average 10mm in length, 14-17mm wide on the narrow side and 25-31mm wide on the long side at the vessel base.

Sauty Check Stamped (Heimlich 1952:14):

Thirty-one sherds of this type were recovered, constituting 19% of the sand tempered ceramic sample. Nine rims were recovered. Two of these sherds have added rim strips 23mm wide which also bear grid impressions. The remainder of the rim sherds have everted to slightly inverted rims with rounded lips. The grid impression of these sherds is bold and seldom smoothed.

Benson Simple Stamped (Heimlich 1952:14):

Twenty-three, or 14%, of the sand tempered sherds were simple stamped. One rim sherd was recovered. The rim is straight with a rounded lip and has horizontal parallel lines impressed to within 5mm of the vessel mouth. One sherd has been cross stamped forming a diamond shaped motif. Stamping has been smoothed over on 40% of the sample.

Sauty Cord Impressed (Heimlich 1952:12):

Eight sand tempered body sherds with a cord impressed finish were recovered. Two of the sherds have been subsequently smoothed.

Alexander Incised (Heimlich 1952:12):

One body sherd of this type was recovered. It bears portions of a curvilinear geometric pattern formed by two incised lines. The lines are 2mm wide and 5mm apart. This pottery type, along with Alexander Zoned Stamped, possibly have Hopewellian affinities.

Unidentified Rim - One unusual sand tempered rim was recovered which

could not be placed into a local type. The rim itself is straight with a round lip. The area below the rim has been decorated with cross hatching. This type of incised decoration is a common trait on Hopewellian pottery.

Clay-Grit Tempered Ware:

McKelvey Plain (Heimlich 1952:21):

Fifteen sherds of this type were recovered. All are body sherds.

Tchefunte Plain (?) (Ford and Quimby 1945:52-54):

One vessel base with two small rounded podal supports was tentatively placed into this type. The paste appears to be clay tempered with small amounts of sand and vegetal matter. The vessel surface has been roughly smoothed. The base is flat with the podal supports set 23mm apart. The podes are approximately 7mm long and 10-12mm wide at the base. The base itself is 7mm thick. This is a fairly common pottery type in the Lower Mississippi Valley. The presence of this specimen at Ma<sup>V</sup>33 is probably due to trade with the Mississippi area during Early Woodland times.

Alligator Bayou Stamped (Willey 1949: 372-373):

One body sherd has been tentatively placed into this type. The sherd is tempered with clay and fine sand. It has been decorated with a wide (5mm) incised line. Perpendicular to this line are rows of roulette stamping. This type of motif is found on Hopewellian vessels in the Santa Rosa - Swift Creek phase in northwest Florida and in the Marksville and Troyville phases in the Lower Mississippi Valley. This specimen is the only known sherd of this type found in the Tennessee Valley region of Northern Alabama. As such, it probably represents

trade contacts with one of the Southeastern Hopewellian centers.

Shell Tempered Ware:

Plain Shell: Fourteen body sherds tempered with crushed shell were recovered. All have a smoothed finish.

Plain Shell - Salt Pan (Heimlich 1952:26): Four thick, crude sherds of this type were found. This type is not as common as the Langston Fabric Marked salt pan ware which also occurred at this site.

Langston Fabric Marked (Heimlich 1952:26): Sixteen of these sherds were recovered. These are thick (9-13mm) sherds representing sub-rectangular or round, flat-based salt pans. Rims are all everted with slight folds. Lips are rounded. Three weaving variations are represented on these sherds. All have a warp of twisted or braided fibers. The weft, also of twisted fibers, range from a thin twine to a heavy cord. The distance between the warp elements varies from 8-25mm.

SUMMARY

The cultural material recovered from the Walling Village indicates that this site was visited numerous times during the Archaic, Woodland, and Mississippian cultural periods. The site appears to have been a favored locality during prehistoric times, due mainly to two environmental factors. First, the site was located upon a knoll in the otherwise flat bottom land. This would have allowed adequate drainage for a camp site. Secondly, the knoll was in close proximity to a limestone dome which was the source for several springs, providing a reliable water source.

The site appears to have been visited periodically during the

first half of the Archaic Period. These earliest inhabitants made and left behind the Hardaway, Palmer, LeCroy, Big Sandy and Morrow Mountain projectile points. The numerous uniface tools found during the surface collection and in the test trenches were probably associated with these occupations. These early visits were more than likely limited to overnight encampments by small bands of hunters and gatherers.

The next occupation falls within the Late Archaic Period and is more extensive, reflecting a more effective adaptation to the forest environment and concomitant increases in population density. The material remains of this occupation includes the Benton, McIntire and Limestone projectile points, and probably a number of the stemmed points placed into the provisional categories. The stemmed end scrapers, knives, perforators and drills appear to cluster in the Late Archaic levels at other sites in the valley and can probably be attributed to this occupation at Ma<sup>V</sup>33. The presence of these tools indicates such activities as hide preparation, the manufacturing and repairing of tools and weapons, and the modification of bone and wood.

During the Late Archaic, base camps were usually made on the river's edge. There is some indication that occasional flooding drove the inhabitants back from the river for short periods of time. This settlement might represent such a temporary refuge. It is also possible that this was a specialty or seasonal work camp.

An Early Woodland occupation is difficult to establish at this site. The continuity between Late Archaic and Early Woodland lithic assemblages precludes any separation based upon projectile point or chipped stone tool types. The early fiber tempered ware was not present at this site. Neither was the early fabric-impressed limestone

ware. The Tchefunte Plain vessel base, and perhaps some of the sand tempered sherds, can be placed into this time interval, but the significance of these few specimens cannot, at the present time, be determined.

The major settlement of Ma<sup>V</sup>33 occurred during the succeeding Middle Woodland Period. During this time the major ceramic complex consisted of limestone tempered vessels with a variety of finish types. The presence of a large number of plain and cord-marked sherds is significant. Plain ware supplanted fabric-marking as the dominant finish type in this series during the initial stages of the Middle Woodland and continued to increase proportionately until, in at least some portions of the valley, it became the dominate type.

A similar situation is seen in the relationship of the check-stamped and cord-marked wares. While cord-marking is at times associated with early fabric impressed wares in other regions, its appearance in the Middle Tennessee Valley coincides with the ascendancy of the later Southern Appalachian stamped wares in the area. At the Wright Village, where check stamping was the dominant finish technique, cord-marked pottery was extremely rare. This situation appears reversed at the Walling site where cord-marked sherds constitutes 25% of the limestone tempered series and check stamped sherds only 5%. This, and the presence of a number of brushed sherds (also a late time marker), places this occupation at a time during the latter portion of the Middle Woodland Period.

While a portion of the sand tempered ware recovered from Ma<sup>V</sup>33 could date to an Early Woodland occupation, it is also possible that

some of these sherds represent the remains of trade vessels. Two of these types, the Sauty Check Stamped and Sauty Cord Marked, are quite rare in the valley, and when present are usually associated with the later limestone temper series (sand-tempered cord marked sherds were recovered from the Wright Village). Concerning these two types, Heimlich states that: "The check-stamp, in its fineness is not comparable to that on limestone tempering . . . The similarity of the micaceous paste of these two types to examples in Georgia and Florida suggest the possibility of trade (1952:38)."

Sauty Check Stamped sherds were recovered from the McQuorquodale Mound along the Lower Tombigbee in south Alabama. This site appears to be a Middle Woodland burial mound. Mortuary offerings include ground nodules of galena and greenstone celts. The occurrence of these sherds and some of the exotic materials used as burial goods in this mound suggest the possibility of trade between the Tennessee Valley and the southern Alabama coastal plain region. A few limestone tempered sherds found in Clarke and Mobile counties (Winberly 1960) and the occurrence of Mulberry Creek Plain and Pickwick Complicated Stamped sherds at a site on the Middle Tombigbee River (Nielsen Personal Communication) support this conclusion.

The Harris Rocker Stamped sherds, the cross-hatched sand-tempered rim and the one Alligator Bayou Stamped sherd, can all be placed into a Middle Woodland context and reflect contact with Hopewellian cultures. The brushed limestone tempered rims also have Hopewellian stylistic overtones. The few clay-grit sherds could also represent trade material, although it is possible that this type is

associated with the Mississippian occupation.

Projectile points which can be assigned to this occupation include the Copena Triangular, Bakers Creek, Nolichucky, and Bradley Spiked, as well as the specimens placed into the Provisional Type 11-A and 11-B categories. As with the Wright Village lithic sample, medium triangular points were profusely represented. Also in common with the Wright Village are the greenstone digging implements and celts. Contemporaneity of the village and mound is indicated by the presence of these greenstone spades and celts and limestone tempered pottery at both sites. Plain limestone tempered sherds were found in the fill of Ma<sup>O</sup>49 and a pottery disc made from a Mulberry Creek Plain vessel fragment was recovered in association with a Copena burial.

The ceramic and lithic material recovered from this site indicate that it served as a permanent or semi-permanent base camp during the late Middle Woodland. The exotic pottery described above, and the greenstone tools, indicate interaction with other regions. It is therefore possible that the Walling Village functioned as a small regional trade center during this time. Since ceramic vessels were not utilized as burial offerings in the Copena mounds any vessels which did accompany the exotic mortuary goods along trade routes should be found in the village area.

The site area was apparently abandoned before the Late Woodland period since the clay-grit Mulberry Creek Cord Marked and Wheeler Check Stamped types were not found. The next occupation of the site occurred during the Mississippian Period when a substructure mound was built at the edge of the site. Stratigraphic data indicate that this

TABLE 38 - MA<sup>V</sup>33

TYPE	SURFACE	TRENCH A ALL LEVELS	TRENCH B PLOWZONE	TRENCH B MOUND FILL THREE	TRENCH B OLD MIDDEN	TOTAL
Mulberry Creek Plain	139	212	44	32	26	453
Flint River Cord Marked	94	60	11	27	19	211
Bluff Creek Simple Stamped	11	45	12	15	4	87
Wright Check Stamped	9	13	8	9	7	46
Flint River Brushed	21	2			1	24
Harris Rocker Stamped	8	10			1	19
Pickwick Complicated Stamped		3				3
O'Neal Plain	49	29	5	13		96
Sauty Check Stamped	2	15	1	13		31
Benson Simple Stamped	7	2	5	9		23
Sauty Cord Marked	2	4	2			8

TABLE 38. Continued.

TYPE	SURFACE	TRENCH A ALL LEVELS	TRENCH B PLOWZONE	TRENCH B MOUND FILL THREE	TRENCH B OLD MIDDEN	TOTAL
Alexander Incised	1					1
McKelvey Plain	8				7	15
Alligator Bayou Stamped		1				1
Tchefunte Plain	1					1
Plain Shell	13			1		14
Salt Pan Ware				20		20
<b>Total</b>	<b>382</b>	<b>396</b>	<b>88</b>	<b>139</b>	<b>65</b>	<b>1070</b>

mound was built in four stages. Upon the second stage a circular and later a rectangular structure were built. Two additional layers of fill were added to the mound when these structures were destroyed. The cultural remains from this occupation include the Madison projectile points and shell-tempered plain and salt pan ware. This mound was apparently a component of a Mississippian complex which also included an additional substructure mound and nearby village.

## 2. The Walling Mound (Ma<sup>O</sup>49)

This burial mound was located near the center of the eastern boundary of Section 24, Township 5 south, Range 1 west, in Madison County on the estate of Luke Walling. It was one mile southwest of Farley, Alabama and .6 mile north of the Tennessee River. The mound was situated near a large limestone dome which rose sharply out of the otherwise flat bottomland. Several springs were present near the base of this limestone outcrop at the time that Ma<sup>O</sup>49 was excavated. Numerous sites, representing several thousand years of prehistory, were found during the survey of the adjacent areas. The presence of this dome is apparently the major reason for such an intense aboriginal occupation of this relatively small area. The dome probably served as a landmark and water source for the former inhabitants of these sites. One of these nearby sites was Ma<sup>V</sup>33, a Middle Woodland habitation site possibly associated with this mound structure. The mound itself was a low conical structure 80 feet in diameter and 5 feet in maximum height.

### Excavation

When the mound area had been cleared of brush and small trees

a test trench was put down along its southern periphery. This work was begun during the first week of March, 1941. The mound structure exposed in the vertical profile of the test trench, and the recovery of a greenstone spade fragment, indicated to the field supervisor, H. Summerfield Day, that this was a component of the Copena burial complex. In view of these findings the field personnel decided that a more thorough investigation of this site was in order.

The entire site was staked off into a five-foot grid system with axes on approximately the cardinal points. Excavations were begun in the north-south trench along the western side of the mound. The vertical slicing technique was utilized to excavate each succeeding trench. All features were excavated and recorded as soon as they were exposed and vertical and horizontal profiles were drawn at the completion of each five foot wide trench.

#### Stratigraphy

The mound structure at Ma<sup>049</sup> was built upon a low knoll. Underlying this knoll was a bright red clay which became increasingly yellow towards the limestone bedrock. Between this red clay stratum and the mound proper was an old humus level. This original surface layer was also composed of red clay but leaching and exposure had turned its hue from a bright red to a faded pink. The mound fill varied little from this humus level and this at times made the exact definition of the base line difficult.

Throughout the mound were lenses of scattered bright red subsoil. These micro-strata were the result of refilling the subsoil burial pits with surface soil. The subsoil fill of these burials was

left around the rim of the pit and covered with the faded red surface soil as mound construction progressed. Other than the presence of primary and secondary burials, and these scattered lenses of pit fill, there were no other observable indications of stratigraphy in the mound.

### Features

A total of fifty-four features were recorded for Ma<sup>O</sup>49. Forty-nine of these have been interpreted as Copena burial pits, four as intrusive Mississippian burials, and one feature as a roasting pit or crematory basin. All of these features have been summarized in Table 39.

The Copena burial pits were easily distinguishable by their form and manner of construction. These were all relatively long, narrow pits, ranging in size from two feet to over eight feet in length. The average pit of this type was 6.2 feet in length and 2.0 feet wide.

Over seventy-five percent of the Copena burials had either a lining of clay or pillows of the same material at one or both ends of the pit. The clays used in burial preparation were foreign to the site. While their source is unknown, the excavator reported that the only other area in the vicinity where the bright yellow clay was found was at Ma<sup>V</sup>33, the nearby village site. All of the Copena burials had been refilled with leached surface earth while the bright red subsoil fill was left scattered about the pit rim.

### Artifacts:

Galena - Lead sulphide was the most common exotic material at this site.

TABLE 39. SITE MA<sup>49</sup> - FEATURE DATA.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS
1	Roasting Pit	Subsoil	Round	Diameter: 3 Ft.	Several fire cracked stones in dark pit fill. Possible crematory basin.
2	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft. Width: 2.0 Ft.	Small deposits of bright yellow clay at each end of pit.
3	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft. Width: 2.5 Ft.	Deposits of yellow foreign clay at each end of pit. Galena nodule, F.S. 7 found near the eastern end of the pit.
4	Burial Pit	Subsoil	Rectangular	Length: 6.5 Ft. Width: 2.5 Ft.	Deposits of yellow clay at each end of pit. Cache of galena nodules near center of pit.
5	Burial Pit	Subsoil	Rectangular	Length: 7.5 Ft. Width: 2.6 Ft.	Greenstone celt (F.S. 6) found near southeastern end of pit. Two galena nodules (F.S. 5) near pit center. Two post holes were found on each side of the pit near the NW end.
6	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft. Width: 2.6 Ft.	No associations.

TABLE 39. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS
7	Burial Pit	Subsoil	Rectangular	Length: 5.0 Ft.	Pit size indicates a child burial.
8	Burial Pit	Subsoil	Rectangular	Length: 2.7 Ft. Width: 1.2 Ft.	Pit size indicates an infant burial.
9	Burial Pit	Subsoil	Rectangular	Length: 3 Ft. Width: 1.5 Ft.	Pit size indicates a child burial.
10	Burial Pit	Subsoil	Rectangular	Length: 6.5 Ft. Width: 2.4 Ft.	No associations.
11	Burial Pit	Subsoil	Rectangular	Length: 4.0 Ft. Width: 1.7 Ft.	A projectile point (F.S. 11) was recovered in the mound fill.
12	Burial Pit	Subsoil	Rectangular	Length: 7.1 Ft. Width: 2.5 Ft.	Pillows of yellow clay at each end of burial pit.
13	Burial Pit	Subsoil	Rectangular	Length: 6.5 Ft. Width: 2.5 Ft.	No associations.
14	Burial Pit	Subsoil	Rectangular	Length: 3.5 Ft. Width: 1.3 Ft.	Pit size indicates a child burial.
15	Burial Pit	Subsoil	Rectangular	Length: 5.5 Ft. Width: 2.5 Ft.	Yellow clay deposit in NW end of pit. Galena nodule, F.S. 10, near center of pit.

TABLE 39. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS
16	Burial Pit	Subsoil	Rectangular	Length: 6.8 Ft. Width: 2.2 Ft.	Feature 16 was precedent to Feature 15 since the walls of the latter intruded into the former.
17	Burial Pit	Intrusive	Rectangular	Length: 5.0 Ft. Width: 2.1 Ft.	Fragmentary remains of a child. Pit lined with 7 large limestone slabs. Mississippian burial.
18	Burial Pit	Subsoil	Rectangular	Length: 6.5 Ft.	A greenstone spade (F.S. 21) was recovered from the SW end of the burial pit.
19	Burial Pit	Subsoil	Rectangular	Length: 4 Ft. Width: 1.5 Ft.	Small deposit of yellow clay near southern end of pit. F.S. 15, galena bodule, was found near the center of the burial pit.
20	Burial Pit	Subsoil	Rectangular	Length: 7.1 Ft. Width: 1.9 Ft.	No associations.
21	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 2.1 Ft.	Yellow clay deposits at each end of pit. F.S. 16, a greenstone spade was recovered from the center of the pit.

TABLE 39. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS.
22	Burial Pit	Mound Fill	Rectangular	Length: 6.0 Ft.	A greenstone spade, F.S. 19, was recovered from the eastern end of the pit.
22A	Burial Pit	Subsoil	Rectangular	Length: 7.4 Ft. Width: 2.6 Ft.	This burial pit was found directly beneath, and precedent to, Feature 22. No associations.
23	Burial Pit	Subsoil	Rectangular	Length: 6.8 Ft. Width: 2.4 Ft.	A small deposit of yellow clay was found in the eastern end of the pit. A nodule of galena, F.S. 14, had been placed near this pillow.
24	Burial Pit	Subsoil	Rectangular	Length: 8.5 Ft. Width: 2.5 Ft.	Yellow clay deposits at both ends of pit. F.S. 17 greenstone celt was placed in the SE end of the pit and 2 galena nodules (F.S. 18) were found near the center.
25	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft. Width: 2.5 Ft.	Pillows of clay at both ends of pit. Two pieces of galena, F.S. 20, were found in the eastern of the pit.

TABLE 39. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS
26	Burial Pit	Subsoil	Rectangular	Length: 2.7 Ft. Width: 1.4 Ft.	Pit size indicates an infant burial.
27	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 1.5 Ft.	No associations.
28	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft. Width: 2.1 Ft.	Layer of white clay on pit bottom. Intrusive to Feature 20.
29	Burial Pit	I-trusive	Oval	Length: 4.8 Ft. Width: 3.0 Ft.	Fragmentary remains of a child. The pit refilled with same bright red clay. Intrusive to Feature 18. Mississippian burial.
30	Burial Pit	Subsoil	Rectangular	Length: 6.8 Ft. Width: 2.4 Ft.	Yellow clay pillows in each end of pit. A galena nodule, F.S. 24, was found near NE end of pit.
31	Burial Pit	Subsoil	Rectangular	Length: 4.2 Ft. Width: 1.8 Ft.	Thin layer of sand on pit bottom. This initial layer covered with one inch lense of white clay.
32	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 2.5 Ft.	Deposit of yellow clay in western end of pit.

TABLE 39. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS
33	Burial Pit	Subsoil	Rectangular	Length: 5.5 Ft. Width: 2.5 Ft.	Pit bottom lined with a 2 - 3 inch thick layer of foreign blue clay. Deposits of yellow clay at each end of pit.
34	Burial Pit	Subsoil	Rectangular	Length: 6.5 Ft. Width: 1.5 Ft.	Greenstone spade, F.S. 25.
35	Burial Pit	Subsoil	Rectangular	Length: 4.9 Ft. Width: 1.5 Ft.	Cache of cyanite crystals in NE end of pit.
36	Burial Pit (?)	Subsoil	Rectangular	Length: 2.0 Ft. Width: 1.0 Ft.	Possibly an infant burial.
37	Burial Pit	Subsoil	Rectangular	Length: 3.0 Ft. Width: 1.5 Ft.	Pit size indicates an infant burial.
38	Burial Pit	Subsoil	Rectangular	Length: 2.5 Ft. Width: 1.5 Ft.	Yellow clay pillow in northern end of pit. Infant burial.
39	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 2.0 Ft.	Deposits of white clay at each end of pit.
40	Burial Pit	Mound Fill	Rectangular	Length: 6.5 Ft. Width: 2.0 Ft.	Deposits of blue clay at each end of pit. A cache of artifacts was found near the center of pit. Among these are two copper earspools (F.S. 28 and 30)

TABLE 39. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS
					a galena nodule (F.S. 35) and F.S. 29, a perforated pottery disc made from a limestone tempered Mulberry Creek Plain sherd. The walls of this pit intruded into Feature 39.
41	Burial Pit	Intrusive	Oval	Length: 4.0 Ft. Width: 2.9 Ft.	A large number of limestone slabs were found above this feature. The area surrounding the pit was disturbed by aboriginal activity but the vertical pit profile indicated that this was an intrusive feature. The condition and distribution of the skeletal remains indicates a re-burial. Mississippian.
42	Burial Pit	Subsoil	Rectangular	Length: 3.5 Ft. Width: 1.9 Ft.	Deposits of blue clay at each end of pit. A galena nodule (F.S. 32) was found near the center of the pit. Infant burial.
43	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 2.0 Ft.	No associations.
44	Burial Pit	Subsoil	Oval	Length: 2.5 Ft. Width: 1.8 Ft.	Pit size indicates an infant burial.

TABLE 39. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS
45	Burial Pit	Subsoil	Rectangular	Length: 7.5 Ft. Width: 3.0 Ft.	Pit lined with blue clay. Pillows of same material at each end. F.S. 36, a galena nodule was found near the center of the pit.
46	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft. Width: 2.0 Ft.	Three deposits of blue clay - one in the pit center and one at each end. Two fragments of a steatite bowl were found in the pit fill. One of these articulates with another similar sherd found 4 feet away in the mound fill.
47	Burial Pit	Intrusive	Rectangular	Length: 9.6 Ft. Width: 3.0 Ft.	Pit lined with limestone slabs. A shell tempered water jar was found near the head at the eastern end of the pit. Mississippian.
48	Burial Pit	Subsoil	Rectangular	Length: 6.2 Ft. Width: 2.4 Ft.	No associations.
49	Burial Pit	Subsoil	Rectangular	Length: 5.9 Ft. Width: 2.1 Ft.	No associations.

TABLE 39. Continued.

FEATURE	DEFINITION	PROVENIENCE	PIT SHAPE	DIMENSIONS	ASSOCIATIONS/COMMENTS
50	Burial Pit	Subsoil	Rectangular	Length: 6.0 Ft. Width: 1.9 Ft.	Deposits of yellow clay at each end of pit. A galena nodule (F.S.41) and a greenstone spade (F.S. 42) were recovered near the center of the pit.
51	Burial Pit	Subsoil	Rectangular	Length: 6.4 Ft. Width: 2.5 Ft.	A galena nodule (F.S. 44) was recovered from the SE end of this pit. This pit is precedent to Feature 50.
52	Burial Pit	Subsoil	Rectangular	Length: 7.5 Ft. Width: 2.7 Ft.	Deposits of white clay at each end of pit.
53	Burial Pit	Subsoil	Rectangular	Length: 7.0 Ft. Width: 2.6 Ft.	Deposits of blue clay at each end of pit. A galena nodule (F.S- 46) and a copper pendant (F.S. 47) were found near the SE end of this pit.
54	Burial	Intrusive	-	-	Skull fragments only. No indications of a pit outline. Two shell tempered vessels, a water jar and a bowl, were found beside the skull. Mississippian.

Nodules or caches of galena occurred 18 times. Of this number 16 occurrences were in burial association, while the two nodules were recovered from the mound fill. The majority of these nodules had been ground, usually into a sphere or disc. Several nodules were impure, having chalcedony inclusions. The size range for the entire sample was 21-93mm in length, 29-86mm in width and 27-58mm in thickness. The weight of the individual specimens ranged from 160 grams to almost five pounds, with the average nodule weighing approximately 350 grams. Total weight for these specimens was 17.2 pounds.

Greenstone - A total of nine greenstone artifacts were recovered during the excavation of Ma<sup>0</sup>49. Three of these were celts and the remaining six were slab digging implements or spades.

Celts - Three celts of the polled variety were recovered. Only one of these specimens has the classic form and dimensions of this type. This specimen, F. S. 17, is made of dark grayish green schist. It has an exaggerated, long, narrow proximal end and is biconvex in cross-section. Although the extreme proximal end exhibits battering or has been left unfinished, the remaining surfaces are well ground and polished and show no signs of wear from use. This specimen is 315mm long, 60mm in maximum width, and 43mm thick. The second example is similar to the above specimen except in size. It is much smaller, measuring 193mm x 51mm x 41mm. The remaining celt was apparently not finished when it was placed into the mound. It has all the formal characteristics of the polled variety except it was not ground and polished over all its surfaces. Both faces of the celt exhibit numerous pecking marks which have not been completely obliterated by grinding.

This specimen measures 234mm x 58mm x 45mm. All three of these specimens were found in burial association.

Digging Implements - Five greenstone slab spades were recovered in association with burial pits at Ma<sup>O</sup>49. One other greenstone specimen, a large, thin fragment was found in the initial test trend. This fragmentary is probably a portion of another spade. All of the complete examples have parallel blade edges and rounded ends. Four of the specimens have been utilized and exhibit heavy wear on the distal end. The remaining specimen is apparently a quarry blank. It is larger than the utilized specimens and there is no sign of wear on any of its surfaces. This unfinished specimen measures 440mm in length, 160mm in maximum width and 41mm thick. The remaining specimens range from 323 x 123 x 31mm to 415 x 115 x 32mm.

Copper - Two burial pits contained grave goods made from native copper. Three halves of copper cymbal-shaped earspools were recovered from Feature 40 in association with a pottery disc, made from a Mulberry Creek Plain sherd, and a galena nodule. Each copper section was approximately 37mm in diameter. A section of two-strand twisted twine was found wrapped around the inside of two of the sections. This twine had been preserved by the copper salts and had probably at one time served as padding between the spools and the earlobe.

A cylindrical copper pendant was recovered from Feature 53. It was made of a piece of sheet copper wrapped around a clay core. A small perforation had been made at one end of the specimen. The pendant is 113mm long and 11 mm in diameter.

Steatite - Six steatite sherds, all from the same vessel, were

recovered from Ma<sup>O</sup>49. Two of these specimens were found in the fill of Feature 42 while the remaining sherds were found in the mound fill four feet away. These specimens apparently represent chance inclusions in this mound.

Chipped Stone - Nine specimens of flaked stone were found in the mound fill during the excavation. Four projectile points were recovered. Three of these have straight stems and the fourth has an expanded stem. The remaining five specimens are distal ends of projectile points or biface blades. None of these specimens were particularly diagnostic and could be placed into either Late Archaic or Early Woodland contexts. In either case they appear to be chance intrusions, probably gathered up in the surface earth used for mound fill.

Ceramic Material - Three complete vessels, one pottery disc and three unassociated sherds were found in Ma<sup>O</sup>49. The three vessels are all plain, shell-tempered Mississippian ware. They were associated with two intrusive post-Copena Mississippian burials found just below the mound surface.

The pottery disc, found in Feature 40 was 29mm in diameter and 6mm thick. It has a central perforation and its edges have been ground smooth. The disc was made from a Mulberry Creek Plain sherd. Pottery artifacts are extremely rare in Copena burials. The occurrence of this specimen in a burial pit in association with copper earspools and a galena nodule suggests the contemporaneity of the mound and the nearby village site, Ma<sup>V</sup>33, where limestone tempered pottery was the predominant temper type. Two sherds of the same ware were found in the mound fill. A third pottery sherd, tempered with plant fiber, was also

found in the fill. This sherd probably represents a portion of an Early Woodland Wheeler Plain vessel.

Cyanite Crystals -A small cache of cyanite (Kyanite) crystals were found in Feature 35. They exhibited no evidence of having been worked or altered from their natural state.

#### SUMMARY

The Walling Mound appears to have been a burial component of the Copena complex that was built over a fairly extensive period of time and in successive stages. This statement is supported by the presence in the mound of both primary and secondary interments, including five cases of later burial pits intruding into earlier ones. The recovery of steatite fragments from the same vessel, both in a burial pit and in the mound fill a few feet away, indicate that at least some of the pits were filled during the construction of the mound.

Of the 49 Copena burial pits found in this mound, 16 or 36% were under 5.5 feet in length. Although skeletal material was absent in the majority of these pits, their size indicates that they represent juvenile burials. Fifty-percent of these small pits contained no grave goods, while the remaining eight pits, six contained deposits of foreign clay, three contained galena as a burial offering, and the remaining two contained a small greenstone celt and a cache of cyanite crystals. These percentages of artifacts and clay deposits for this first group are slightly lower on the average than those for the next group (pits 5.6 - 6.9 feet in length), and these are in turn lower than those for the third group, burial pits over seven feet in length. Fourteen burials (23%) were placed into this third group. Seventy

percent of these pits contained deposits of foreign clay. The five burial pits in this group that contained burial goods had a combined total of seven large galena nodules, two greenstone celts, and a copper pendant. While there does not appear to be any striking differences in the distribution of grave goods or elaborateness of burial preparation between these three groups, a trend can be discerned.

Using only pit size as a criterion, it appears that, on the whole, the larger the burial pit the more elaborate the preparation. If it is assumed that the first pit size group represents only children, the second females and a few males, and the third only adult males, then another trend appears. Children received less elaborate burials than did adult females, and in turn, adult females received less elaborate treatment than adult males. While the possibilities that these calculations present are almost limitless, their significance is minimal due to their speculative nature. However, since identifiable skeletal material is not available for these burials, speculation is the only alternative.

It has been stated earlier in this paper that the nearby Middle Woodland village, Ma<sup>V</sup>33, was probably associated with this mound. Besides being in close proximity to one another, they share several important traits in common. Among these are significant numbers of diagnostic greenstone slab spades and polished celts, deposits of foreign yellow clay and plain limestone tempered pottery. Perforated pottery discs similar to the one found at Ma<sup>O</sup>49 have also been recovered from Lu<sup>V</sup>65 in Lauderdale County and Ms<sup>O</sup>80 in Marshall County. Both of these latter sites appear to have been, like Ma<sup>V</sup>33, Copena villages.

M. THE McDONALD SITE (Ms<sup>V</sup>147, Ms<sup>o</sup>147)

The McDonald Site, a village and adjacent burial mound, was situated on the uplands bordering the eastern shore of Guntersville Lake in Marshall County, Alabama. The legal location of the site is SE 1/4, SE 1/4, Section 9, Township 75, Range 4E. It was excavated by a WPA crew under the direction of Carl Miller in March 1940.

The village midden covered an area of 360 feet by 200 feet and was found to have an average depth of .4 feet. The long axis of the site ran in a N-S direction. The mound was estimated to be slightly over one foot in height and 80 feet in diameter. It occupied a promitory at the north end of the site. Immediately to the north and west was a steep, wooded slope leading to the edge of Guntersville Lake, about 40 feet below the crest of this small bluff.

The village midden extended from the mound down the southern slope of the promitory along the crest of a saddle-shaped ridge. The entire area had been under cultivation for a considerable length of time and the midden had been thoroughly disturbed by the plow. However, the majority of the burial pits and features dug into the subsoil were left intact. While a considerable portion of the village area was investigated, excavation had barely begun on the mound when the field supervisor was recalled to begin salvage work in another area of the state. The work on the mound

was then discontinued and the trenches backfilled. At this time, only a small test pit had been completed through the central portion of the structure.

### Burials

- A large number of burials were reported for the site. There were two major types of burial positions, flexed and extended. In the test pit excavated on the mound at the northern edge of the site, four extended burials were encountered. In the same general area of the northern portion of the site as the mound, 25 additional extended burials were excavated. The majority of these village midden burials can be associated with the burial mound. On the southern portion of the site, 24 flexed burials were encountered. These do not appear to be related to the extended burials on the other side of the site or in the mound. For reasons discussed in the summary of this site report, it can be suggested that this group of burials were associated with the people who utilized this area as a habitation site and left the village debris as proof of their occupancy. Data on all of the burials recovered during the excavation of this site is given in Table 40 A-C (see also Figure 19 for the spacial distribution of these interments).

### Features

Forty-eight features were recorded for Ms<sup>V</sup>147. These can be divided into two types on the basis of formal and functional attributes. The first type, numbering some 37 features, were circular to oval basin shaped

pits, dug .45 to 3.8 feet into the subsoil. They range in diameter from 1.0 - 5.2 feet and were probably originally excavated as storage or refuse receptacles. The second type of feature encountered at this site consists of 11 fire hearths or roasting pits. In general, these were shallow basins dug .4 to 1.5 feet into the subsoil and ranged from 1.7 to 6.0 feet in diameter. All contained fire cracked stones and otherwise exhibited some evidence of having been subjected to fire. All of the features recorded for Ms<sup>V</sup>147 are summarized in Table 41 A-B.

Table 40A - Extended  
Burials - Village Area - Copena

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
28	Subsoil below village midden	Rectangular	Length: 3.2' Width: 1.3'	-	C	Teeth caps lying on clay pillow. Skull to the NW. The clays used in Copena burials at this site were foreign to the immediate area.
29	Subsoil	Rectangular	Length: 3.6' Width: 1.7'	-	C	Skull fragments in NW end of pit. Clay pillows at head and feet.
30	Subsoil	Rectangular	Length: 5.6' Width: 1.2'	-	C	Fragmentary skeletal remains. Child lying on back, Head to the NE. Greenstone digging implement under skull.
31	Subsoil	Rectangular	Length: 6.8' Width: 1.6'	M	A	Skeletal remains in good condition, lying on back, head to NE. Skull - Fronto and vertical occipital deformation. Small limestone nodule under chin. Clay pillows at head and feet. The mandible of this skull was painted black. Reburial?

Table 40 A - Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
32	Subsoil	Rectangular	Length: 7.0' Width: 1.7'	M	A	Remains were in good condition, lying on back, head to the NE. Diseased tibia. Burials 31 and 32 had been placed into a single pit.
33	Subsoil, below Burial 31	Rectangular	Length: 5.6' Width: 1.3'	F	A	Skeletal remains in good condition, head to the SW, lying on back. Skull was turned face down. Post cranial remains in articulation. In smaller pit under Burials 31 and 32.
35 36	Subsoil	Rectangular	Length: 7.0' Width: 1.7'	M F	A A	Two burials were found in this pit. Burial 35 was an adult male, lying on back, skull to west. Burial 36, was an adult female, lying beside and over Burial 35. The skulls were placed side by side. Pit was parallel to Burial 38.

Table 40A - Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
37	Subsoil	Rectangular	Length: 5.3' Width: 1.4'	M?	J	Remains in poor condition, lying on back, head to NW. Clay pillows at head and feet. Possibly associated with Burial 43.
38	Subsoil	Rectangular	Length: 6.4' Width: 1.4'	M	A	Remains in poor condition, lying on back, skull to the East. Skull exhibits both fronto and vertical occipital deformation. Clay pillows at head and feet.
41	Subsoil	Rectangular	Length: 7.5' Width: 2.0'	M	A	Skeletal material in good condition, head to the North, lying on back. No skull, post cranial remains in articulation. Yellow clay pillows at both ends of the pit.
42	Subsoil	Rectangular	Length: 7.7' Width: 2.3'	M	A	Head to the North. Fronto-occipital deformation. Yellow clay pillow at each end of the pit.

Table 40 A - Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
43	Subsoil	Rectangular	Length: 6.9' Width: 2.1'	M?	J	Skeletal preservation poor. Head to NE. Burial completely encased in a foreign grey clay. A pillow of the same material had been constructed at each end of the pit.
46	Subsoil	Rectangular	Length: 4.7' Width: 1.7'	-	C	Teeth caps only. Skull to the North. Cache of 200 galena cubes found in the middle of the burial pit.
48	Subsoil	Rectangular	Length: 7.5' Width: 1.8'	M?	A	Skeletal preservation poor. Skull to the north. Clay pillow at head only.

Table 40 B - Extended Burials  
Village Area - Probable Copena Burials

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
9	Subsoil	Rectangular	Length: 5.8' Width: 1.9'	F	A	Preservation good; head to NE; lying on back, head turned to left side. Associated with Burials 21 and 22. Pit fill contained five Long Branch Fabric Marked sherds, five Mulberry Creek Plain and one Wright Check Stamped sherd.
21	Subsoil	Rectangular	Length: 5.6' Width: 1.5'	F?	A	Remains fragmentary, head to the NE, lying on back.
22	Subsoil	Rectangular	Length: 5.7' Width: 1.2'	M	A	Poor skeletal preservation, head to NE, lying on back. Occipital deformation.
34	Subsoil	Rectangular	Length: 4.0' Width: 1.4'	F	A	Skeletal remains very fragmentary, head to the SW. Partially flexed (?).

Table 40B - Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
39	Subsoil	Rectangular	Length: ? Width: ?	F?	A	Skeletal remains fragmentary, head to SW. According to the excavators report this burial had been disturbed by the plow and was removed by a worker before it could be drawn.
40	Subsoil	Rectangular	Length: 4.2' Width: 1.1'	-	C	Remains fragmentary, head to the N. Found in area of Copena burials.
49	Base of Midden	Rectangular	Length: 6.0'? Width: 1.6'	M	A	Skeletal material fragmentary, head to north. Fronto-occipital deformation. Burials 49-53 grouped together. Pit for Burial 49 intrusive into pit containing Burials 50 and 51.
50 51	Subsoil	Rectangular	Length: c.a. 4' Width: 1.8'	-	C C	Skeletal material fragmentary, but the skeletal remains of two children are represented.

Table 40 B - Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
52	Subsoil	Rectangular	Length: ? Width: ?	M	A	Remains fragmentary, head to the NW. Pit intrusive into Burial 53.
53	Subsoil	Rectangular	Length: ? Width: ?	F	A	Skeletal preservation poor. Possible Fronto-occipital skull deformation.

Table 40 C - Extended  
Burials in Copena Mound

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
56	Subsoil	Rectangular	Length: 5.2' Width: 1.9'	-	C	Skeletal preservation poor, head to north. Marine shell vessel lying near pelvis. Pit directly over Burials 57, 58, 59 in center of mound.
57	Subsoil	Rectangular	Length: ? Width: ?	M	A	Burials 57, 58, and 59 found in same deep subsoil pit under center of mound. Heads of Burials 57 and 58 at the NE end of the burial pit. The burials were not drawn because the field supervisor was transferred to South Alabama.
58	-	-	Length: ? Width: ?	F	A	
59	-	-	Length: ? Width: ?	M	A	Fronto-occipital skull deformation; marine shell vessel under skull and 37 shell beads near chin. Skull SW.

Table 41 Ms<sup>v</sup> 147  
Flexed Burials - Village Area

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
1	Village Midden	Oval	Length: 1.7' Width: 1.1'	-	I	Skeletal material very fragmentary, head to the north.
2	Base of village midden	Oval	Length: 4.0' Width: 2.2'	M	A	Skeletal preservation poor, fully flexed, head to SW. Steatite vessel fragment in bottom of pit.
3	Subsoil	?	No outlines recorded	F	A	Remains fragmentary, partially flexed, head to the W.
4	Midden	?	No outlines recorded	F	A	Remains fragmentary, partially flexed, head to the N.
5	Subsoil	?	No outlines recorded	?	A	Remains fragmentary, partially flexed, head to the N.

Table 41- Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
6	Subsoil	Round	Length: 3.7' Width: 3.1'	M	A	Remains fragmentary, fully flexed, head to the N.
7	Subsoil	Round	Diameter: 2.5'	M	A	Remains fragmentary, fully flexed, head to the E. A Provisional Type 1 projectile point, an expanded base drill fragment and 2 steatite vessel fragments were found in the fill of the burial pit.
8	Subsoil	Round	Diameter: 2.2'	M	A	Skeletal preservation poor, burial fully flexed, head to the E. Fragments of a steatite vessel found lining the pit. Complete vessel present, possible intentionally "killed" mortuary offering.

Table 41 - Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
10	Base of village midden	Oval	Length: 2.5' Width: 1.4'	-	C	Remains fragmentary, skull in the southern end of the pit.
11	Subsoil	Oval	Length: 3.4' Width: 2.7'	F	A	Skeletal preservation poor, head to SW.
12	Subsoil	Oval	Length: 1.7' Width: 1.2'	-	C	Skeletal material very fragmentary.
13	Midden	Rectangular	Length: 2.8' Width: 1.5'	M	A	Remains fragmentary, fully flexed, skull to N.
14	Midden	Rectangular	Length: 3.6' Width: 1.8'	M	A	Remains fragmentary, head to SE.

Table 41- Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
15	Midden	Oval(?)	Length: ? Width: ?	-	C	Burial disturbed by plow.
16	Base of plow zone	Oval	Length: 3.5' Width: 2.6'	-	C	Only traces of skeletal material.
17 18	Subsoil	Rectangular	Length: 4.7' Width: 1.7'	M M	A A	Skeletal preservation poor, both fully flexed, lying on right side, heads to the N.
19	Subsoil	Oval	Length: 2.7' Width: 1.7'	F?	A	Remains fragmentary.
20	Subsoil	Round	Diameter: 2.2'	M	A	Skeletal preservation poor, lying on left side, head to the N.

Table 41 - Continued

Burial Number	Provenience	Pit Shape	Pit Dimensions	Sex	Age	Associations/Comments
23	Subsoil	Oval	Length: 2.1' Width: 1.3'	-	C	Large rock placed near body, remains fragmentary.
25	Base of village midden	Oval	Length: 3.3' Width: 2.4'	-	C	Remains fragmentary, head to SE. Pit also contained Burial 26.
26	-	-	-	?	A	Remains fragmentary.
44	Midden	?	?	F?	A	Burial disturbed by plow.
45	Subsoil	Rectangular	Length: 4.6' Width: 1.7'	M?	A	Remains fragmentary, head to NE.
47	Subsoil	Oval	Length: 3.5' Width: 2.1'	M?	A	Skeletal remains fragmentary, head to SW. Four asymmetrical biface blades in bottom of pit. Made from the same dark grey chert.

Table 41 A - Feature Data  
 Ms<sup>V</sup>147 - Circular - Oval Basin Shaped Pits

Feature Number	Dimensions	Interior Depth	Associations/Comments
4	2.3 x 1.9	.45'	Filled with mussel shell
5	2.8 x 2.6	.30'	Fauna remains; iron object; 3 LBFM sherds; 9 plain shell tempered sherds.
6	1.3 x 1.3	.50'	Fired clay; 2 LBFM sherds
10	2.1 x 1.7	.65'	Dark soil
11	4.0 x 3.0	1.20'	Dark soil
12	1.1 x 1.1	.45'	Dark soil
13	2.1 x 1.3	.85'	Dark soil
14	1.0 x 1.0	1.20'	Dark soil
15	2.1 x 2.1	.95'	Dark soil
16	1.2 x .85	.55'	Dark soil
17	2.5 x 2.1	.85'	Dark soil
18	2.4 x 1.7	.45'	Dark soil
19	1.3 x 1.3	.65'	Dark soil
20	1.5 x 1.5	.50'	Dark soil
21	2.6 x 1.9	.55'	Dark soil
22	2.6 x 2.1	.45'	Dark soil
23	2.3 x 1.55	.75'	1 unworked steatite fragment
24	3.2 x 2.8	.65'	F.S. 45, and expanded base drill
25	3.1 x 1.8	.55'	1 triangular biface blade fragment; 3 utilized flakes
27	2.8 x 2.6	.65'	11 plain shell, 3 McKee Island Brushed
29	4.5 x 3.2	.85'	Dark soil
30	4.3 x 2.5	1.20'	None
32	3.9 x 3.7	3.80'	Bottom of pit lined with river cobbles.
33	3.9 x 3.5	.45'	Dark soil
34	5.4 x 3.0	.50'	Dark soil, 2 LBFM sherds
35	2.2 x 2.2	.85'	Dark soil
36	5.2 x 2.6	.85'	Dark soil
37	1.5 x 1.5	.50'	Broken fauna remains; 3 LBFM; 1 MCP
38	2.6 x 2.3	.90'	Broken fauna remains; 1 LBFM; 2 MCP
39	3.6 x 1.7	.50'	Dark soil
40	2.3 x 2.1	.50'	2 MCP sherds
41	1.3 x 1.2	.50'	1 LBFM; 2 MCP sherds
45	3.4 x 2.4	.60'	
46	3.8 x 3.7	1.00'	
47	2.4 x 2.4	.90'	Fauna remains; 2 LBFM sherds
49	2.1 x 1.7	.50'	Dark soil
50	4.6 x 3.9	.75'	Dark soil

LBFM - Long Branch Fabric Marked

MCP - Mulberry Creek Plain

Table 41B Ms<sup>V</sup>147 Feature Data  
Fire Hearths and Roasting Pits

Feature Number	Pit Shape	Dimensions	Associations/ Comments
* 1	Shallow Basin	3.4 x 2.4'	139 fire cracked stones; 16 plain shell tempered sherds
* 2	Shallow Basin	2.5 x 2.0'	Charred area; 94 fire cracked stones; 3 plain shell tempered sherds
* 3	Shallow Basin	1.7 x 1.7'	Charred area; 13 fire cracked stones; 1 steatite fragment; 1 P.T. 1 Projectile Point; 1 plain shell tempered sherd
7	Circular Pit	3.1 x 3.1'	Dark soil; fire cracked stone; 2 projectile points, 1 Greenville and 1 P.T. 5
8	Oval Pit	3.6 x 3.0'	30 fire cracked stones
9	Oval Pit	2.6 x 2.1'	39 fire cracked stones
28	Circular Pit	2.0 x 1.9'	32 fire cracked stones; 1 LBFM sherd
* 31	Shallow Basin	3.0 x 3.4'	4 plain shell tempered sherds; charred fauna remains; fire cracked stone
* 42	Oval Pit	4.7 x 3.8'	6 shell tempered sherds; fauna remains; brass artifacts
* 44	Circular Pit	6.3 x 6.0'	Fire cracked stone; 1 LBFM sherd; 22 plain shell tempered sherds
48	Circular Pit	3.4 x 3.4'	Fire cracked stone

\* Mississippian

Table 42 Ms <sup>V</sup> 147  
 Spacially Segregated Groups of Copena Burials

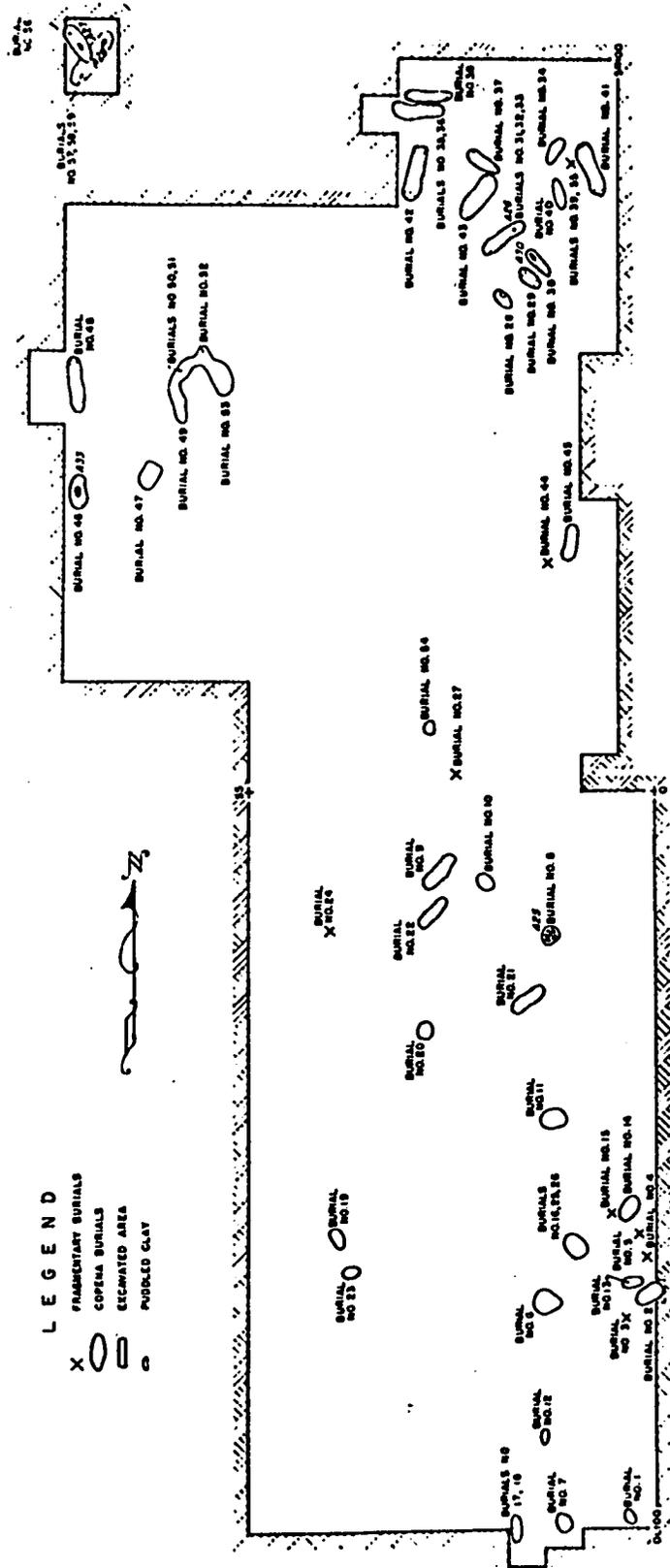
Burial Number	Age/Sex	Approximate Age	Skull Orientation	Skull Deformation	Associations/Comments
31	A/M	40	NE	F & O	Mandible painted black
32	A/M	23	NE		
33	A/F	24	SW		
38	A/M	40	E	F & O	Clay pillows at each end
35	A/M	24	W		
36	A/F	23	W		
59	A/M	38	SW	F & O	Marine cup and beads
57	A/M	27	NE		
58	A/F	30	NE		
49	A/M	40	NW	F & O	
52	A/M	35	N		
53	A/F	22	NW	F(?)	
50+51	C	-	NE		Possibly precedent
22	A/M	23	NE	O	
21	A/F	24	NE		
9	A/F	25	NE		
41	A/M	25?	N	No skull	Clay pillows at each end
34	A/F	28	SW		
39	A/F	23	SW		

A - Adult; C - Child; M - Male; F - Female; F - Fronto; O - Occipital

Table 43 Ms<sup>V</sup> 147 - Copena Burials - Correlation of Age  
and Sex Data With Pit Dimensions

Burial Number	Age/Sex	Pit Length	Pit Width	
28	Child	3.2	1.3	
29	Child	3.6	1.7	Children: 7 Burial Pits Length: Mean: 4.4', Range: 3.2-5.6' Width: Mean: 1.5', Range: 1.1-1.9'
30	Child	5.6	1.2	
40	Child	4.2	1.1	
46	Child	4.7	1.7	
50/51	Children	4.0	1.8	
56	Child	5.2	1.9	
37	Juvenile/Male	5.3	1.4	
43	Juvenile/Male	6.9	2.1	
9	Adult/Female	5.8	1.9	Females: 4 Burial Pits Length: Mean: 5.2', Range: 4.0-5.8' Width: Mean: 1.6', Range: 1.3-1.9'
21	Adult/Female	5.6	1.8	
34	Adult/Female	4.0	1.4	
39	Adult/Female	?	?	
53	Adult/Female	?	?	
58	Adult/Female	?	?	
36	Adult/Female	7.0	1.7	
33	Adult/Female	5.6	1.3	
31	Adult/Male	6.8	1.6	Males: 8 Burial Pits Length: Mean: 6.6', Range: 5.7-7.7' Width: Mean: 1.7', Range: 1.2-2.3'
32	Adult/Male	7.0	1.7	
38	Adult/Male	6.4	1.4	
35	Adult/Male	7.0	1.7	
59	Adult/Male	?	?	
57	Adult/Male	?	?	
49	Adult/Male	6.0	1.6	
52	Adult/Male	?	?	
22	Adult/Male	5.7	1.2	
41	Adult/Male	7.5	2.0	
42	Adult/Male	7.7	2.3	

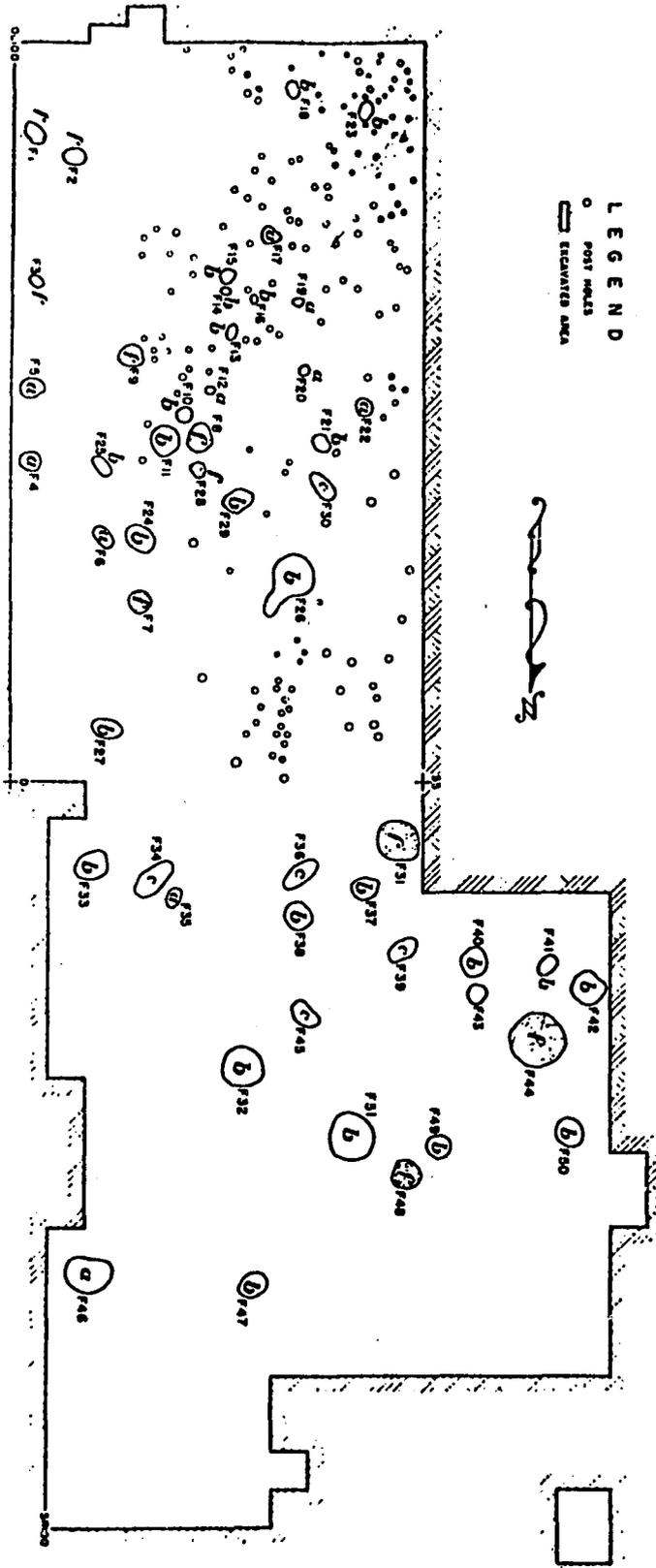
Figure 19. Ms<sup>V</sup>147 - Horizontal Profile - Burials.



**LEGEND**  
 X FRAGMENTARY BURIALS  
 O COPENA BURIALS  
 □ EXCAVATED AREA  
 ▨ PUDDLED CLAY

0 10 20 30 40 50 60 70  
 SCALE IN FEET

Figure 20. Ms<sup>V</sup>147 - Horizontal Profile - Features.



LEGEND  
 ○ POST HOLE  
 ▨ EXCAVATED AREA

0 10 20 30 40 50 60 70  
 SCALE IN FEET

### Ceramic Material

The following ceramic sample is composed of all specimens recovered during the excavation of the village midden. Pottery sherds recovered from features or burial pit fill were not included in this sample. These latter specimens, when context was recorded, are listed according to individual feature or burial. This village midden collection totaled some 675 specimens, which have been divided into the following types.

#### Limestone Tempered Ware:

Long Branch Fabric Marked (Haag 1939:10; Heimlich 1952:17):

The 419 sherds of this type that were recovered from the village midden constitute 62% of the total ceramic count. The vast majority of these sherds occurred at the southern end of the site.

The surface finish on these vessel fragments can be divided into two types. The first consists of broad stiff warp elements and a fine weft. The second, and more rare type, appears to be almost net impressed. The fabric used in this latter type of surface treatment was made from a loosely twined material having a grid-like appearance.

Eleven rim sherds were present in this sample. Rims are straight (6) to slightly everted (5) with flattened or rounded lips.

Mulberry Creek Plain (Haag 1939:9; Heimlich 1952: 15-17)

This was the second most popular pottery type at this site. The 206 sherds of this type constitute 30% of the village midden pottery. Many of these sherds appear to have been originally fabric impressed and then subsequently smoothed. Fourteen rim sherds were recovered. Ten of these sherds have straight rims while four are folded and slightly flared. Two small, rounded podal supports were also recovered.

Wright Check Stamped (Haag 1939:12; Heimlich 1952: 17-18):

The twelve sherds of this type constitute less than 2% of this ceramic sample. All of these specimens have small to medium rectangular grids. There were no rims or podal supports recovered. These twelve grid impressed sherds were recovered from the northern end of the site.

Flint River Brushed (Heimlich 1952:10):

Only one limestone tempered sherd with a brushed finish was found in the pottery collection from this site. This specimen was a small body sherd with brush lines randomly applied across the exterior surface.

Bluff Creek Simple Stamped (Haag 1939:18; Heimlich 1952:18):

There was only one specimen of this type recovered. It is a body sherd with parallel stamped grooves. The stamping appears to have been lightly applied or partially smoothed.

Sand Tempered Ware:

O'Neal Plain (Heimlich 1952:10-11):

There were six sand tempered plain sherds in the study sample. One of these specimens was a rim sherd. The rim is everted with a rounded lip.

Benson Fabric Marked (Heimlich 1952:13):

Two sherds of this type were found. Both have fabric impressions similar to the stiff warp, fine weft Long Branch type. On the interior of one of these sherds a geometric pattern was incised into the surface while the clay was plastic. The pattern consists of six parallel lines, a jagged line, a straight line, two jagged lines, a straight line and another jagged line. This motif is somewhat reminiscent of the geometric patterns on some of the Alexander Incised vessels (Heimlich 1952:13).

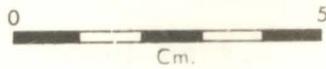
Kirby Complicated Stamped (Heimlich 1952:13):

One small sand tempered sherd with rectilinear stamping was recovered. The geometric patterns on the surface of this specimen is composed of horizontal parallel lines intersected by a series of diagonal parallel lines.

Alexander Pinched (Heimlich 1952:12):

Two sherds were placed into this category. One is decorated with parallel rows of pinch marks. The other sherd has been decorated with random fingernail punctations.

Plate 16. Late Woodland Ceramic Types.  
Top Row, left to right, McKelvey Plain  
(1), Mulberry Creek Cord Marked (2),  
Wheeler Check Stamped (3). Bottom  
Row, Flint River Brushed (1),  
Mulberry Creek Plain (2, 3).



Clay-grit Tempered Ware:

McKelvey Plain (Heimlich 1952:21):

The excavator reported that four sherds of this type were recovered from the village midden. These specimens could not be located when this present study was undertaken.

Wheeler Check Stamped (Heimlich 1952:22):

Two body sherds stamped with a grid impression were assigned to this type. The grid is similar to that found on Wright Check Stamped vessels but is somewhat larger.

Shell Tempered Ware:

Plain Shell (Heimlich 1952:22-24):

Eighteen plain sherds were recovered which have been tempered with medium amounts of crushed shell. The thickest sherd in this sample was 6mm wide. The one rim sherd of this type had a curved, everted rim and an undecorated flattened lip.

Moundville Incised (Heimlich 1952:24):

On rim sherd with finely crushed shell tempering and decorated with incised lines was recovered. The rim is straight and the lip is rounded. This specimen was decorated with parallel incised lines running horizontally and diagonally across the vessel neck.

Lithic Material

Projectile Points - The lithic sample from Ms<sup>V</sup>147 contained 128 identifiable projectile points and 53

Table 44.  
Ms<sup>V</sup>147 - Pottery From Features

Feature Number	Plain Shell	McKee Island Brushed	Long Branch Fabric Marked	Mulberry Creek Plain
1	16			
2	3			
3	1			
5	9		3	
26	1		9	5
27	11	3		
28			1	
31	4			
34			2	
37			3	1
38			1	2
41			1	2
44			1	
47			2	
<b>TOTAL</b>	<b>67</b>	<b>3</b>	<b>23</b>	<b>10</b>

unidentifiable projectile point fragments. The identifiable specimens were divided into twelve established types and four provisional categories. The majority of these specimens were taken from the plowzone and village midden. The few specimens found in features are noted in the individual type descriptions.

Type: Copena

Number of Specimens: 2

Plate : 17

Form and Manufacture: Both of these specimens are medium triangular projectile points with recurvate blade edges. Specimen 113-137 is a basal fragment while Specimen 75-3 has a corner of the basal edge broken. Both specimens have a slightly incurvate basal edge which has been thinned and lightly ground.

Dimensions:

Catalog No.	Length	Width	Thickness
113-137	-	30mm	7mm
75-3	62mm	26mm	9mm

Type: Copena Triangular

Number of Specimens: 11

Plate: 17

Form and Manufacture:

These are medium triangular points with parallel lateral edges. Only two of these specimens have measurable lengths. The remainder are basal fragments. All basal edges have been thinned, three are straight

while the remainder are slightly incurvate. Three of these examples have lightly ground bases.

Dimensions:

Catalog No.	Length	Width	Thickness
47-1	-	22mm	9mm
50-2	-	23 <del>mm</del>	6mm
88-3	-	23mm	7mm
101-10	-	28mm	8mm
101-12	-	23mm	8mm
113-36	-	28mm	7mm
113-96	-	30mm	6mm
113-110	52mm	24mm	7mm
113-113	-	25mm	6mm
113-123	-	30mm	7mm
113-131	<u>47mm</u>	<u>28mm</u>	<u>8mm</u>
Mean:	49mm	26mm	7mm

Comments: All of these specimens came from the general excavation or surface collection except 50-2. This specimen was found in the fill of Burial 37, a Copena burial. Also in this pit fill were a Provisional Type 1 projectile point, a retouched biface scraper and a greenstone celt fragment.

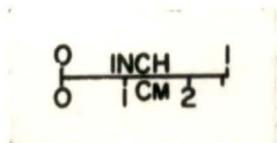
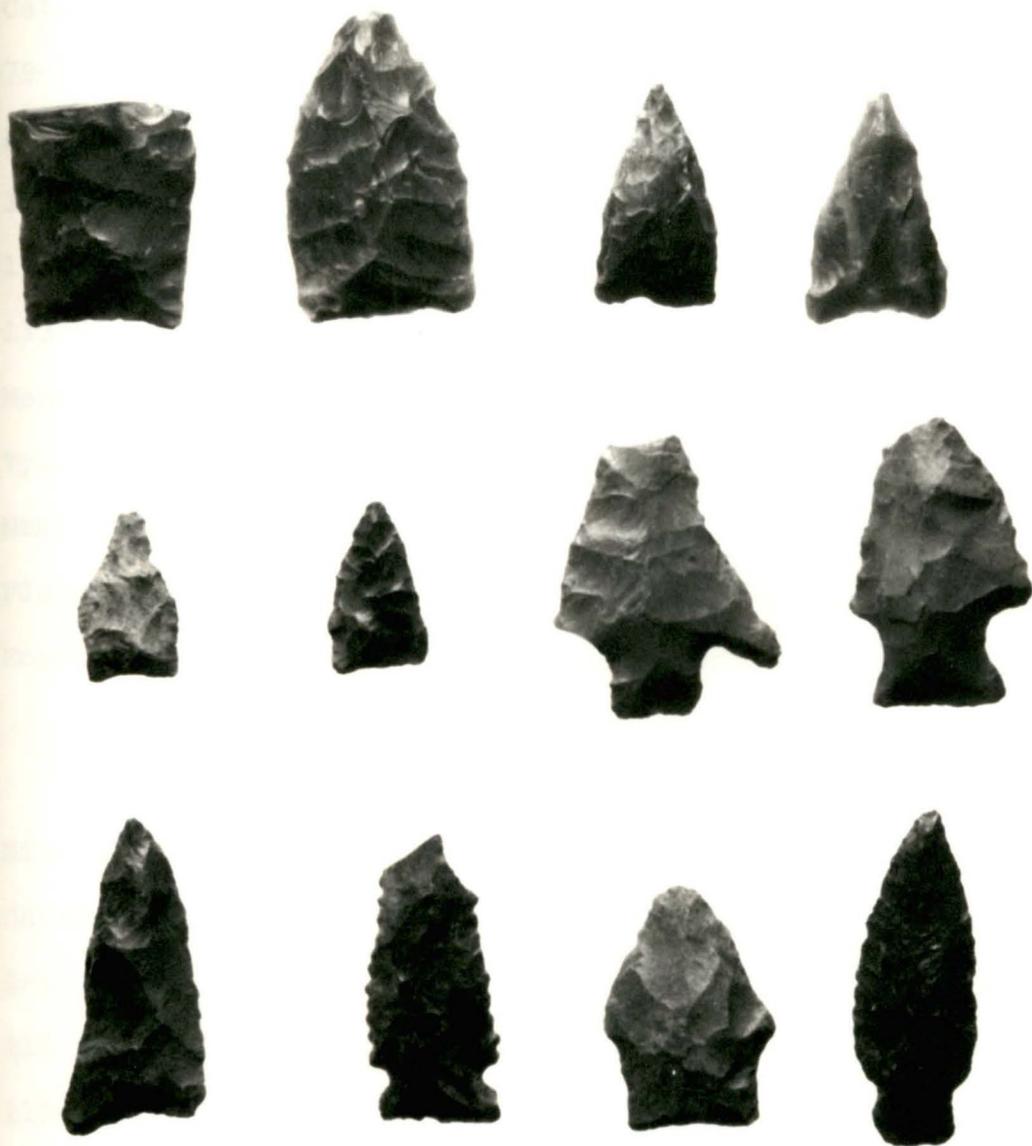
Type: Camp Creek

Number of Specimens: 5

Plate : 17

Form and Manufacture: These are small to medium triangular

Plate 17. <sup>v</sup>Ms 147 - Projectile Points. Top Row, left to right, Copena (1), Copena Triangular (2), Greenville (3), Camp Creek (4). Middle Row, Jacks Reef Pentagonal (1), Madison (2), Wade (3), McIntire (4). Bottom Row, Candy Creek (1), Sublet Ferry (1), Limestone (3), Flint Creek (4).



points with incurvate bases and straight lateral blade edges. Only two complete specimens were present in this sample.

Dimensions:

Catalog No.	Length	Width	Thickness
79-1	-	23mm	7mm
82	38mm	20mm	6mm
113-3	-	24mm	6mm
113-4	-	21mm	6mm
113-38	<u>35mm</u>	<u>21mm</u>	<u>7mm</u>
Mean:	36mm	22mm	6mm

Type: Greenville

Number of Specimens: 3

Plate: 17

Form and Manufacture: All of the specimens in this sample are medium triangular points with straight basal edges and parallel to straight lateral edges.

Dimensions:

Catalog No.	Length	Width	Thickness
1-1	34mm	19mm	8mm
113-12	-	19mm	7mm
113-157	<u>-</u>	<u>20mm</u>	<u>6mm</u>
Mean:	34mm	19mm	7mm

Type: Candy Creek

Number of Specimens: 2

Plate: 17

**Form and Manufacture:** Both of these specimens are medium in size, with recurvate lateral edges, incurvate basal edges and auriculate basal corners. Specimen 87 has a fractured distal tip.

**Dimensions:**

Catalog No.	Length	Width	Thickness
87	45mm	21mm	8mm
113-146	<u>49mm</u>	<u>22mm</u>	<u>8mm</u>
Mean:	49mm	22mm	8mm

**Type:** Sublet Ferry

**Number of Specimens:** 3

**Plate:** 17

**Form and Manufacture:** These are medium, serrated, side-notched points. The basal edge is straight and has been thinned on two of the three samples.

**Dimensions:**

Catalog No.	Length	Width	Thickness
14	46mm	22mm	8mm
113-29	45mm	20mm	7mm
101-2	<u>46mm</u>	<u>21mm</u>	<u>9mm</u>
Mean:	46mm	21mm	8mm

**Type:** Flint Creek

**Number of Specimens:** 3

**Plate:** 17

**Form and Manufacture:** These are medium, serrated stemmed points. All three specimens have excurvate blade

edges. The stem has been formed by corner notching on one example and by a combination of corner and side notching on the other two. Specimen 113-143 has a broken distal tip.

Dimensions:

Catalog No.	Length	Width	Thickness
56	52mm	19mm	7mm
113-156	51mm	29mm	7mm
113-143	-	<u>25mm</u>	<u>6mm</u>
Mean:	52mm	24mm	7mm

Type: McIntire

Number of Specimens: 3

Plate: 17

Form and Manufacture: These specimens are medium in size with expanded bases. The basal edges are straight and thinned. Two of the points have broken distal tips. The fractured tip on Specimen 113-108 has been retouched.

Dimensions:

Catalog No.	Length	Width	Thickness
113-108	49mm	36mm	10mm
113-134	-	28mm	11mm
113-152	<u>51mm</u>	<u>30mm</u>	<u>10mm</u>
Mean:	50mm	31mm	10mm

Type: Wade

Number of Specimens: 1

Plate: 17

**Form and Manufacture:** This is a medium-sized point with exaggerated shoulder barbs. Measurements are not given for this specimen since both the distal tip and one of the shoulder barbs have been fractured.

**Type:** Limestone

**Number of Specimens:** 2

**Plate:** 17

**Form and Manufacture:** These are medium stemmed points with incurvate bases and tapered shoulders. Specimen 56-1 is a basal fragment.

**Dimensions:**

Catalog No.	Length	Width	Thickness
56-1	37mm	26mm	9mm
113-103	-	28mm	9mm

**Type:** Jack's Reef Pentagonal

**Number of Specimens:** 1

**Plate:** 17

**Form and Manufacture:** This is a small pentagonal point with parallel halving edges and an incurvate base.

**Dimensions:**

Catalog No.	Length	Width	Thickness
105-6	26mm	16mm	3mm

**Type:** Madison

**Number of Specimens:** 2

**Plate:** 17

**Form and Manufacture:** These are small, thin triangular points. Basal edges are straight to slightly incurvate.

## Dimensions:

Catalog No.	Length	Width	Thickness
101-1	26mm	15mm	4mm
113-2	<u>21mm</u>	<u>15mm</u>	<u>6mm</u>
Mean:	24mm	15mm	5mm

Type: Provisional Type 1

Number of Specimens: 50

Plate: 18

Form and Manufacture: These are all medium, straight stem projectile points. Twenty-eight of these specimens are basal fragments.

## Dimensions:

	Length	Width	Thickness
Range:	40-60mm	20-35mm	6-14mm

Type: Provisional Type 2

Number of Specimens: 22

Plate: 18

Form and Manufacture: These are medium stemmed points with expanded bases. Thirteen of these specimens are basal fragments.

## Dimensions:

	Length	Width	Thickness
Range:	40-57mm	22-35mm	6-11mm

Type: Provisional Type 4

Number of Specimens: 8

Plate: 18

Form and Manufacture: These are medium stemmed points with shoulder barbs. Four of these are basal fragments.

**Dimensions:**

	Length	Width	Thickness
Range:	34-42mm	31-34mm	6-9mm

Type: Provisional Type 5

Number of Specimens: 7

Plate: 18

Form and Manufacture: All medium, stemmed projectile points with serrated blade edges which did not conform to an established type were placed into this category. Four of these specimens are basal fragments.

**Dimensions:**

	Length	Width	Thickness
Range:	40-51mm	14-24mm	6-8mm

Type: Provisional Type 9

Number of Specimens: 2

Plate: 18

Form and Manufacture: These are medium, side notched points.

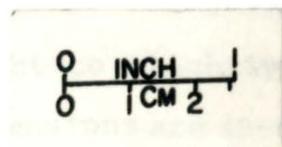
**Dimensions:**

	Length	Width	Thickness
Range:	45-59mm	19-29mm	6-7mm

**Other Chipped Stone**

Drills - Eleven complete and fragmentary examples of this tool type were recovered. Other than four broken bits, the specimens can be divided into three types. Three expanded base drills were in this sample. The

Plate 18. Ms<sup>V</sup> 147 - Projectile Points and Chipped  
Stone Artifacts. Top Row, left to right,  
Provisional Type 1 (1,2), Provisional Type  
2 (3), Provisional Type 5 (4). Middle  
Row, Provisional Type 9 (1), Drills (2,3),  
Borer (4), Backed Knife (5). Bottom Row,  
Ovoid Biface Scrapers (1,2), Medium  
Biface Blade (3).



basal edges on these examples are straight to slightly incurvate. The one complete specimen of this type measures 41mm x 20mm x 5mm. One fragmentary stemmed drill with shoulder barbs and one triangular base drill were also recovered. The latter specimen measures 40mm x 19mm x 7mm.

#### Digging Implements -

Greenstone - One complete greenstone spade was recovered from this site. Fifteen fragmentary examples and chips were also recovered. These were all recovered from the northern end of the site near the mound. The one complete example was recovered from under the skull of Burial 30, a Copena interment. This specimen measured 340mm x 123mm x 25mm. It exhibited heavy ware on the distal end. An additional specimen, a distal fragment, measured 131mm x 100mm x 23mm.

Limestone - Three limestone digging implements were also recovered. Two are complete specimens while the third is a distal fragment. They are similar in form to the Greenstone implements but are smaller. The two complete specimens have the following dimensions: 176mm x 73mm x 24mm; 163mm x 90mm x 18mm.

#### Triangular Biface Blades (Plate 18)

There were 28 fragmentary and complete blades which were placed into this category. All of these specimens have straight to slightly rounded bases and acute distal ends. Dimensions are 43-65mm x 22-46mm x 10-22mm.

### Ovoid Biface Scrapers (Plate 18)

Twenty-three ovoid biface tools were placed into this type. All exhibited only percussion flaking. Both proximal and distal ends were rounded. Wear patterns along the edges of some of these specimens suggest that they were utilized as scrapers.

### Asymmetrical Biface Blades (Plate 18)

These are medium biface blades with acute distal ends and asymmetric lateral edges. Six of these blades were recovered. The shape of these tools suggests use as knives. Dimensions: Length: 48-62mm; Width: 21-34mm; Thickness: 7-13mm.

### Borers (Plate 18)

Three examples of this tool type were recovered from Ms<sup>V</sup>147. All of these specimens have a rounded base and an acute distal end. The edges of these tools are finely pressure flaked. The distal end of each tool exhibits wear but lacks the characteristic twist of a drill bit. Dimensions: Length: 41-54mm; Width: 25-34mm; Thickness: 8-12mm.

### Utilized Flakes

Twenty-one flakes exhibiting wear on one or more edges were recovered. They were probably used in cutting or scraping activities.

### Unidentified Worked Flint

Forty-two specimens were placed into this residual category. They appear to be fragmentary blade or core

fragments, waste spalls and chips which lack diagnostic forms or wear patterns.

#### Other Stone Artifacts

##### Stone Vessels:

Feature 43 - In square 60R30 a group of stone bowls was encountered. There were three vessels, with the largest bowl covering the smaller ones. There were no associated burials or pits. The excavator stated that "these were more of a cache of pots than anything else".

Sandstone Bowl - (FS 20) - This vessel was the smallest recovered from Feature 43. While broken, it was reconstructable. It is made of a medium, coarse, tan sandstone. Dimensions: Diameter of mouth: 110mm; Height of vessel: 85mm; Thickness of vessel walls: 13mm; Thickness of vessel base: ca. 25mm.

Manufacture: All tool marks have been ground away from the exterior surface of the vessel. The interior of the vessel has likewise been smoothed except for one portion of the body. This area exhibits parallel tool marks or grooves. The grooves average 2mm in width and the lands 4mm. The rim is plain and slightly incurvate. The lip of the vessel has been smoothed and rounded.

Small Steatite Vessel - (FS 21) - This was a small ovoid steatite bowl. Some of the sherds are missing

so it is only partially reconstructable. Dimensions: Diameter of mouth: 156mm; Thickness of walls: 11mm; Thickness of base: 7mm; Height of vessel: 95mm. Manufacture: The vessel has straight walls and a flat base. The interior surface has been smoothed. The exterior surface is rough, showing the tool grooves and gouges. The vessel seems to have been worked by at least two different tools. One tool left grooves 3mm to 5mm wide. This seems to have been the method of thinning and shaping the vessel walls. A second tool seems to have been smaller and was used for a final thinning and shaping. The grooves left by this instrument are 1mm wide. They form a band around the vessel where the walls meet the base on the exterior. They are also found on the exterior walls in several isolated areas. The rim is straight and the lip is rounded. A portion of the rim exhibits polish but otherwise the vessel is undecorated.

Large Steatite Vessel - (FS 22) - This was the largest of the stone vessels from this group. It was found inverted over the two smaller vessels. Dimensions: Diameter: ca. 265mm; Height: ca. 180mm; Thickness of wall: 17mm.

Manufacture: This vessel had straight sides and a slightly rounded base. Interior walls have been smoothed but show parallel tool marks (again two

sizes - large and small). Exterior walls have not been smoothed and exhibit a small to medium vertical series of grooves, apparently applied in the final shaping of the vessel. The rim is slightly expanded and straight. The lip has been flattened and decorated with a series of triangular incisions. One portion of the lip is smooth, giving the appearance of having been broken and repaired by grinding.

Burial 8 - Lining the bottom of this pit containing a flexed burial was a broken, perhaps intentionally "killed" steatite vessel. The vessel is very similar to the large vessel of Feature 43 described above.

Dimensions: Maximum Diameter: 485mm; Minimum Diameter: 445mm; Wall Thickness: 20mm; Height: ca. 285mm.

Manufacture: This specimen exhibits the same treatment as FS 22. The interior walls are smoothed, the exterior walls show medium vertical tool marks. The vessel is ovoid in shape with straight walls and a slightly rounded base. The rim is straight. The lip is decorated with a series of triangular incisions identical to those of FS 22.

#### Stone Vessel Fragments

There were 20 steatite vessel fragments recovered from this site. Of these, three are rim sherds. The body fragments are all smoothed on the interior surface and rough on the exterior. Thickness of these specimens ranges from 8mm to 13mm. Three of these specimens

were found in association with flexed burials (Burial 2, FS 15; Burial 7, FS 115; and Burial 34, FS 31).

The rim sherds are all straight with flattened lips. One of these fragments is very thick, measuring some 30mm. Another of these rim sherds has a hole 6mm in diameter drilled through it from the interior. It is known that at times, broken steatite vessels were repaired by drilling two holes in the vessel and binding the broken portions together with a strap or twine.

There were also three sandstone vessel fragments recovered. These fragments are 17mm thick. The interior is smoothed and the exterior left rough, showing tool marks. One of these fragments appears to have been reworked. It is rectangular in shape (40mm x 54mm) and has been ground on the outside and on two edges.

Reworked Steatite - One steatite vessel fragment was recovered that had apparently been reworked. It is roughly rectangular in shape (41mm x 23mm). Grooves have been cut on the two shorter ends. It could have been used as a weight of some sort, but its actual function is problematical.

Celts - There were three groundstone celt fragments recovered. All are made from greenstone. Two of the fragments appear to be shank fragments. Both have rounded distal ends.

Hammerstones - Six river cobbles (sandstone and quartzite) have battered edges and pecking marks.

They were apparently utilized as hammers.

Galena - Six fragments of galena were recovered from the site other than the specimens associated with burials. All exhibit grinding on one or more surfaces. The largest specimen, roughly cubical, is 41mm wide and 51mm long and weighs 382 grams. The combined weight of the other five specimens is 212 grams. The galena associated with Burial 46 weighed 2105 grams or approximately five pounds. The larger specimens in this cache exhibited surface grinding.

Hematite - Two worked hematite specimens were recovered from the site during general excavations. One piece is a light porous red fragment showing slight grinding. The other specimen is a dense heavy (193 grams) nodule 61mm long and 29mm thick. The nodule is rounded on one end and has 3 ground facets coming to a point at the other end. The nodule is a dull black. One of the facets exhibits some pitting and a red powder still adheres to the bottom of these pits.

Manganese dioxide (pyrolusite?) - Three dull black nodules of this light mineral were recovered from the northern end of the site near the Copena Mound. All of these specimens exhibit some grinding on their surfaces. When these specimens are ground a black powder is produced. This suggests that these nodules

were used to produce black pigment. The occurrence of this mineral at this site may have some correlation to Burial 31, a Copena burial. The excavator reported that the mandible of this adult male had been painted black. The largest of the three specimens is 60mm in length, 50mm in width and 26mm in thickness. It weighs 71 grams.

Utilized Bone - Four unidentifiable pieces of worked bone were present in the museum sample. Two of these have rounded ends and exhibit some polish. These latter specimens were possibly used in flint knapping activities.

Shell Cups - Two marine shell cups were recovered from Burials 56 and 59 in the Copena Mound. A portion of the whorl and columella have been removed from each specimen.

Shale Abraders - Two pieces of shale were found which exhibit grooving or grinding on their surfaces. One specimen is rectangular (73mm x 58mm x 10mm) and has a groove 5mm wide and 40mm long on one face. The reverse side has been ground. The second specimen is 76mm long, 44mm wide and 7mm thick. Both faces have been ground and show a pinkish hue or have small red specks adhering to the surface. An experiment was attempted with one edge of this specimen. When the dense hematite nodule found at this site was rubbed against the shale a bright pink powder was produced.

This suggests that these shale abraders were used in producing pigment. An analogous use for shale abraders, utilized in connection with hematite in the production of pigment, has been noted for the mid-western Adena culture (Dragoo 1963:103-105).

Historic Material:

Brass Button - Three specimens made of brass were recovered from Ms<sup>V</sup>147 in Feature 42, an oval midden pit. The first appears to be a button. It is round, 31mm in diameter and 1mm thick, and has a small ring soldered onto the center of the reverse side. The obverse side has been polished and engraved with a line forming a circle 1.5mm from the outer edge. Between this inner circle and the outer edge of the button are a series of dots spaced .5mm apart. In the center of the inner circle is an unidentified motif formed by 3 to 4 roughly circular series of larger more crudely applied dots. Apparently this inner design was secondarily applied.

Brass Pendant - This second brass artifact is a portion of a perforated trapezoid pendant. The upper corner of the pendant has been broken. The specimen is 45mm long, 38mm in maximum width and 2.5mm thick. The perforation is 5mm in diameter.

Trigger Guard - A broken brass trigger guard, probably from a rifle or a shotgun, was also recovered in Feature 42. The guard has been broken on both the

stock and barrel ends. Three secondary perforations were made in the guard, apparently in an attempt to repair the weapon. Two of these perforations were made near the stock end of the guard while a single hole was drilled at the opposite end.

Copper - Three pieces of sheet copper were found in the area of Feature 42. All appear to be of European manufacture. Two roughly trianguloid sheets of cut copper and one small isosceles triangle (similar in form to the Madison Projectile Point) constituted this sample. The largest piece of this scrap copper was 125mm in length and 60mm in maximum width. The small triangular specimen was 42mm long and 22mm wide at the base.

#### Shell Tempered Vessel

The fragmentary remains (reconstructed) of a shell tempered jar were also found. The form and appearance of this vessel are unlike any of the other shell tempered sherds from this site. It can be described as follows:

Paste:

Method of Manufacture: Coiling. A clay base approximately 105mm in diameter and 13mm thick was first made before the vessel construction was begun.

Temper: A heavy amount of coarsely crushed shell.

Color: Tan to grey.

**Surface Treatment:** The vessel has been scraped or roughly smoothed.

**Vessel Shape:** Large mouthed jar. Diameter of mouth is 285mm.

**Rim Treatment:** An added strip has been applied to the rim. The strip has been notched by fingernail impressions along the lower end. Rim is slightly excurvate with a rounded lip.

**Comments:** The form and manufacture of this vessel compare favorably with the type Overhill Plain described by Gleason (1969:61-64). It is known to have been found in the Chickamauga area of the Tennessee River Valley where it has been associated with historic Cherokee materials. For these reasons, this vessel is being tentatively associated with the historic material found at Ms<sup>V</sup>147.

### SUMMARY

From the information recovered during the excavation of Ms<sup>V</sup>147 it appears that this site was first, and most extensively occupied during the Early Woodland period. The large amount of cultural material assignable to this period suggests that the major portion of the village midden was laid down at this time.

All of the sand tempered and limestone tempered ceramic material (with the exception of the few limestone tempered stamped and brushed sherds) can be placed into this Early Woodland assemblage. Likewise the majority of the projectile points (Copena Triangular, Camp Creek, Greenville, Candy Creek, Sublet Ferry, Flint Creek, McIntire, Wade, Limestone, and most of the provisional types) can also be assigned to this period.

Recent excavations in the Nickajack Reservoir in the Upper Gunter'sville Basin have revealed sites with similar Early Woodland components:

...There is evidence that the earliest Woodland horizon in the Nickajack Reservoir is characterized by a predominance of fabric-marked pottery with limestone tempered plain vessels being second in frequency. Other characteristics include steatite vessels, broad stemmed and notched projectile points, and the evidence of intensive mussel collecting on certain sites. The date of 340 BC on the Westmoreland-Barber site probably

dates this unnamed complex although it probably existed for several centuries before the beginning of the Christian Era (Faulkner and Graham 1966a; 1966b:73).

Other similarities between the Early Woodland sites in the Upper Gunter'sville Basin and Ms<sup>V</sup>147 in the Lower Gunter'sville Basin region include stone vessels (sandstone and steatite) and flexed burials in the village area. The 24 flexed burials recorded for this site, several associated with stone vessels or vessel fragments, can be assigned to this occupation.

The chronological and cultural significance of this Early Woodland habitation site is further, and more fully, discussed in Section III of this paper. However, in summary, this site appears to have functioned as a multiple-activity base camp during this period. Evidence of a variety of maintenance activities was recovered. The broken projectile points, finished and unfinished chip stone tools, and numerous flakes, suggest that the manufacturing and repairing of weapons and implements constituted a major activity at this site during this period. The numerous grinding and anvil stones, storage and fire pits, and ceramic and stone vessels indicate female related activities such as food preparation and cooking. It would seem that sometime before the advent of the Middle Woodland period, which began in this area during the first centuries AD, this location was abandoned as a habitation site. Hypotheses concerning this, and similar occurrences are proposed in Section III

During the Middle Woodland period this site was visited but its function appears to have changed. Instead of being utilized as a village site, the peoples living during this succeeding period visited the site only to bury their dead. Thus there was a change in the functional use of this site from maintenance to mortuary activities.

The Copena Mound and associated burials were products of this Middle Woodland utilization. Cultural material, other than the mortuary goods associated with the extended burials, which can be assigned to this period, are the carved-paddle stamped limestone tempered sherds and perhaps some of the medium triangular projectile points. Although it was impossible to determine the special distribution of these projectile points, all of the limestone tempered stamped pottery sherds were found in the area of the extended burials at the northern end of the site near the mound.

A large habitation site, designated Ms<sup>o</sup>80, was excavated across the river on the western bank during the Gunterville Basin survey (Webb and Wilder 1951:102-113) and a component of this site can be assigned to the Middle Woodland period. At that site, check stamped limestone tempered ceramics were the most numerous stamped type; as was true at Ms<sup>v</sup>147. This habitation site is more thoroughly discussed in the next section. However, its spacial

position near several Copena burial mounds, and the cultural placement of the artifacts recovered, does strongly suggest that it served as a village of the peoples who constructed the Copena mounds in the vicinity, perhaps including the burial mound at Ms<sup>V</sup>147.

The Copena burials excavated at this site are fairly typical of the types of interments found at other components of this manifestation. Although a detailed analysis of these burials is beyond the scope of this present study, certain hypotheses were proposed, and to an extent, tested.

First of all, this site represents one of the few cases where skeletal preservation of Copena burials was good enough to allow estimates of age and sex to be made. In the preceding sub-section on the Walling Mound (Ma<sup>o</sup>49), where the condition of the skeletal material was poor, the following hypothesis was proposed, namely, that there is a correlation between the size of the burial pits and the age and sex of the individual interred. At that site 16 or 36% of the 49 Copena burial pits were under 5.5 feet in length, 19 or 47% ranged from 5.6 to 6.9 feet, and 14 or 23% were over 7.0 feet in length. It was suggested at that time that the first group represented infants or children, the second group adult females and a few males, and the third group only adult males.

The burials at Ms<sup>V</sup>147 were rearranged to test this hypothesis. Table 43 represents the recombination of these burials. Seven burial pits constituted the sample of child

interments at the site. The mean length of these pits was 4.4 feet and the mean width 1.5 feet. The length of these pits varied from 3.2 to 5.6 feet while the width ranged from 1.1 to 1.9 feet.

Two juvenile males were also included in this sampling. The size of the two pits into which they were placed varies considerably (5.3 versus 6.9 feet). The exact age or stature of these could not be determined and it is not known whether the difference in pit size indicates physical or cultural (pre-puberty versus post-puberty?) factors.

The second group in Table 43 represents adult female burials. Of the eight individuals in this sample only four were utilized in computing the mean or range of dimensions of the burial pits in this group. Three of the burials not utilized were disturbed by cultivation and accurate measurements of the pit dimensions were not possible. The fourth burial (Burial 36) not used in this calculation was omitted because it was recovered from the same pit as Burial 35, an adult male. The remaining four burial pits have a mean length of 5.2 feet and a mean width of 1.6 feet. Length varies from 4.0 - 5.8 feet and width ranges from 1.3 to 1.9 feet.

The third group is composed of 11 burials in which adult males were interred. Dimensions were not available for three of these pits. The remaining eight burial pits had a mean length of 6.6 feet and a mean width of 1.7 feet. Pit length varies from 5.7 to 7.7 feet and pit width varies

from 1.2 to 2.3 feet. Although the sample of burial pits from this site is quite small, two observations can be made from these calculations:

1. There does not appear to be any significant variation in the width of burial pit in relation to the age or sex of the individual interred.
2. There does appear to be a gross variation in pit length according to the age and sex of the individual interred.

It was also noted that at this site certain of the Copena burial pits appeared to form non-random, spacially distinct groupings. These burials were rearranged in Table 42 according to their spacial distribution. It can be seen that six distinct groups of burials can be differentiated on this basis (see Fig. 19 also). In four cases there are groups of two adult males and one female. Each of these groups contains one older adult male with extreme fronto and occipital skull deformation. In three of these cases the oldest adult male has received some sort of added burial elaboration.

In the other two groups listed in Table 42 a young adult male has been interred with two adult females. In each of these cases the male has either a more elaborate burial preparation or exhibits skull deformation. These combinations of burials would appear to indicate rank or status differences between certain males and other adult

males and females. As with the size of the burial pits, age and sex does seem to be a factor in the amount of care and elaboration prescribed for an individual in this mortuary system.

While these simple observations are intriguing, detailed analysis of these burials will have to await future research. However, since skeletal remains are entirely lacking in the vast majority of Copena mounds, this author believes that the data obtained from Ms<sup>V</sup>147 and the few other mounds where reconstructable skeletal samples were recovered, should, and will have to be utilized in any future attempt to delineate Middle Woodland social structure in the Tennessee Valley. The current analytical use of statistics and computer science to generate models and to facilitate the analysis of archaeological data could prove to be invaluable tools in forming testable hypotheses concerning the cultural behavior reflected in this burial system.

The cultural material recovered from Ms<sup>V</sup>147 also indicates that this site was inhabited during later cultural periods. Again, however, the function of this locale appears to have changed. During these succeeding occupations this site was apparently used for small temporary encampments. The one limestone tempered brushed sherd and the few clay-grit tempered sherds recovered probably represent the physical remains of such a temporary camp during the Late Woodland period.

Likewise, the few shell-tempered sherds and small triangular projectile points recovered during the excavation of this site suggest that a temporary camp was made on this ridge during the Mississippian Period. The large shell tempered vessel and the metal fragments discussed in this report were confined to only a small area on the site. The small amount, and limited spacial distribution, of this material suggest that a small social unit, perhaps only a nuclear family, camped on this site during the Historic period, in the closing phase of the aboriginal occupancy of this region.

### SECTION III

#### COPENA: NEW DATA, INTERPRETATIONS AND CONCLUSIONS

##### A. BURIAL MOUND COMPLEX

According to Deetz (1967:9) there are three major levels of archaeological study, "the collection of data through excavation (observation), the integration of the data recovered by placing it in time and space and ordering it according to some type of classification which will permit comparison with similar data (description), and the drawing of inferences from the patterns seen in the integrated data which serve as explanations of the patterns in cultural terms (explanation)." In regard to the archaeological research into the Copena manifestation a great amount of time has been spent on the first two levels of study described above. In contrast, little effort has been expended upon the explanatory level. As discussed in Section I, this lack of inference into the cultural meaning of this manifestation is more a product of the state of archaeological research strategy and goals in the area than oversight of the principle investigators.

Even though over thirty of the Copena mound structures have been excavated, summary integrations of the existing data have been extremely brief and widely dispersed

in a number of reports published over the past thirty years. The purpose of this subsection will be to review the existing data, and in light of this present study, to describe this total corpus of information in a summary form. Three major cultural dimensions will be discussed in relation to the mound complex. First, the spacial distribution of these mounds will be delineated, second a brief structural analysis of this type of mortuary unit will be made, and finally, the temporal placement of this cultural phenomenon will be discussed. Until such a body of data is brought together, the formulation of explanatory inferences will prove difficult, if not impossible.

The Copena burial mounds are spacially confined to a limited area of the Tennessee Valley proper. Burial mounds of this type were first encountered by C. B. Moore during his survey of the Tennessee River in Hardin County, Tennessee, and going up river the last group of these structures were found in lower Marshall County, Alabama just above the great bend near Guntersville (Moore 1915). The mounds investigated by Moore, and the structures excavated during the three subsequent surveys conducted in conjunction with the T.V.A. were located in close proximity to the major waterway. However, one of the mounds investigated by Fowke (1928), the Alexander mound, and the majority of the structures reported in Section II of this study, were located well back from the Tennessee River along small

tributaries. The presence of these latter mortuary sites indicates a wider spacial distribution of this burial complex, throughout the entire Middle Tennessee Valley, than had previously been observed during the former investigations (Map 6 ).

The burial mounds themselves are typically low, relatively small conoidal structures constructed of sand and clay. A summary statement concerning the construction techniques utilized during the building of these mounds was contained in DeJarnette's 1952 article on Alabama archaeology:

Before beginning the actual mound construction, Copena adherents usually buried separately several individuals (precedent burials) in long, oval pits. They would shape each pit with care and make the bottom level; then they would floor the bottom with a layer of clay, spreading the clay by puddling it. Sometimes they would shape a low clay 'pillow' and foot rest. They would then lower the body (in an extended position, face upward) into the grave, and after placing with the body carefully arranged burial offerings, they would often completely seal both body and offerings with another layer of clay. Sometimes they would place small logs on either side of the body; at other times they might cover the body with bark.

Leaving piled beside the grave the earth they had thrown up in digging it, they would bring sand and clay from elsewhere to refill the grave. After they had made in this manner a number of closely grouped burials the Copena people began the actual mound construction, bringing sand and clay to cover all the graves in the group, and covering also the heaps of earth that had been piled up in digging the precedent graves. As they deposited the sand and clay, and before any definite

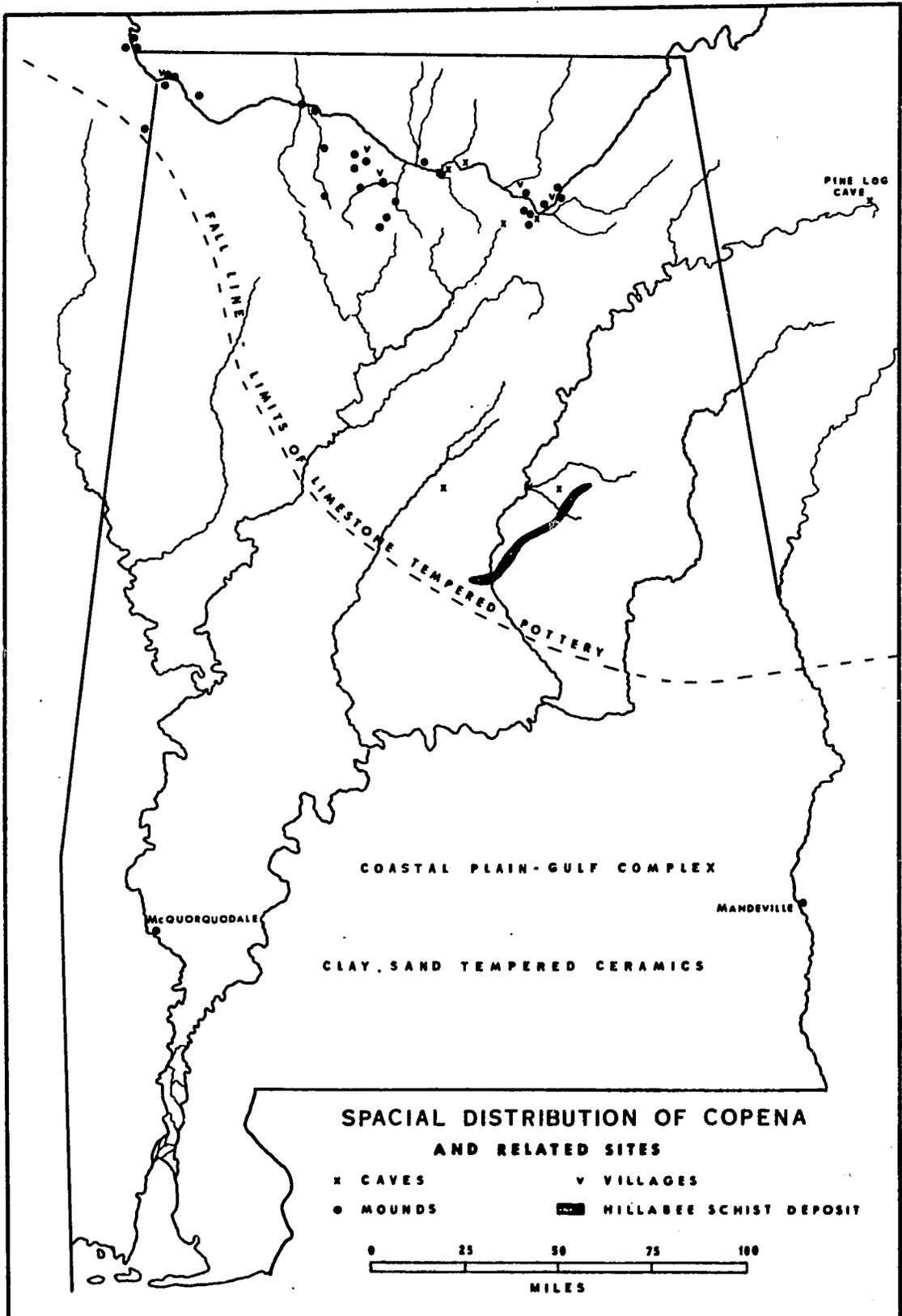
mound had been formed, they would add other burials (inclusive burials). In making these inclusive burials they sometimes flexed the body fully, sometimes extended it, sometimes laid down lone heads or skulls, or disarticulated body members or bones. Sometimes they laid down the burned fragments of bodies that had been cremated.

When their deposits of sand and clay had accumulated to a moderate size, mound construction was completed with a final capping of sand and clay, after which no further burials (no intrusive burials) were added (1952:278).

The above observations concerning the construction techniques utilized in building the Copena mounds appears to be an accurate summary description. This is due in large part to the (probably unconscious) thoughtfulness of the Copena peoples. The mortuary sites they left behind, those described previously, and those reported in this study, reveal the full spectrum of construction stages. They range from precedent burial areas upon which no mound was yet constructed, to incipient mounds where only a few precedent burials had been made and a low mantle of earth constructed over them, to intermediate stages containing small numbers of both primary and secondary burials, to completed mounds sometimes containing over a hundred primary and secondary burials and capped with a final layer of clay and sand.

The variation in mound size observed during the investigation of these structures is most probably the result of two major factors, the length of time in which the mortuary site was utilized and the size of the social group participating in the funerary activities at the site.

**Map 6. Spacial Distribution of Copena and Related  
Sites**



Faulkner, in a recent statement comparing Copena to the Illinois Havana Hopewell and the Ohio Scioto Hopewell manifestations, made the following observations concerning mound size and distribution and social organization:

It has been recently suggested that Hopewellian complexes were on different levels of societal organization (Struever 1965:212-214). For example, Havana Hopewell mounds are distributed over long stretches of river valley and are grouped into small clusters containing few status burials, whereas Scioto Hopewell mounds are restricted to certain areas within planned earthworks and the mounds contain numerous status burials and elaborate artifacts made by specialized craftsmen (Struever 1965:213). Copena mounds are scattered along the Tennessee River between three and five miles apart and contain simple tombs with few burials that have been provided with exotic grave goods (Butler 1968:18). Struever's (1965:213) suggestion that the Illinois mounds served smaller local communities and were constructed by kin groups rather than a regional work force probably applies as well to the Copena mounds. It is likely that the level of societal organization in Copena was closer to that found in the Havana tradition than that characterizing Scioto Hopewell (1970:109).

One of the major problems concerning the cultural placement and interpretation of the Copena manifestation has been its temporal position. While there have been various attempts at determining a relative temporal placement for Copena it has become apparent that if the relationships between Copena and other prehistoric cultures are to be explained, a more precise chronological position is required. With this in mind, and with the knowledge that occasionally charcoal samples were saved during the T.V.A.-

W.P.A. excavations of Copena mounds, an effort was made to locate suitable samples for radiocarbon testing.

While carbon samples from a number of mounds were found among the cultural materials from these sites in storage at the repository at Mound State Monument, two specimens were selected because of several factors. First, assuming that there are both temporal and spacial markers within the burial system, it was desirable to test carbon samples from mounds geographically distant. Second, each of the samples chosen were associated with primary, subsoil burial pits and should date the initial phase of mound construction at each site. Finally, each sample was taken from a sheet of charred bark which had been placed around, or over, these burials. The fact that both samples were composed of charred bark added another control factor since charcoal derived from the inner rings of such slow growing trees as those of the oak family can be many years older than the bark of the same tree at the time of felling (Aitken 1961:100).

The first carbon sample tested was recovered from the Ross Mound, located in Section 12, Township 8N, Range 2E, approximately five miles west of Guntersville. This mound was excavated during the Guntersville Basin archaeological survey and is reported in the volume on that project (Webb and Wilder 1951:13-16). This mound was found to contain 130 burials, many with specially prepared graves containing puddled clay and exotic cultural material. One

of the extended burials, Burial 22, had been placed into a subsoil pit and subsequently covered with sheets of bark. This bark covering had then been fired, apparently as part of the burial ceremony. A sample of this charred bark was subjected to radiocarbon testing at the University of Georgia Geochronology Laboratory and yielded the following determination:

Sample Number UGa 400:  $1630 \pm 65$  B.P. (A.D.320)

The second carbon sample chosen for testing came from the Leeman Mound (Mg<sup>0</sup>62), which is reported in Section II of this present study. This mound was located in Morgan County some eight miles east of Decatur, Alabama. The mound structure consisted of two units, A and B, joined by a saddle-shaped central section. Unit A, the larger and higher of the two components, appears to have been constructed first, and as the need arose additional burials were made in the adjacent area to the west of this structure. Unit B was apparently only an incipient mound, since only primary burials had been made and a low mantle of earth constructed above these interments when the site was abandoned.

The carbon sample from this site was taken from a primary, subsoil burial pit beneath Unit A. This pit contained a bundle burial (Burial 4). Sheets of bark were used to line the bottom and sides of the pit. After the skeletal material and two accompanying greenstone celts were laid upon this bark lining, liquid clay was poured over the skull. A pillow of similar foreign blue clay was constructed near

the top of the skull. As a final act in the burial ceremony, the bark lining was set afire. The following determination was obtained from a sample of this charred bark:

Sample Number UGa 399:  $1575 \pm 75$  B.P. (A.D.375)

The first, and perhaps most obvious, question concerning these two radiocarbon determinations is, how do they compare with previous estimates based on relative chronologies? As stated in Section I, comparisons of the material culture recovered from the Copena mounds suggested to even the earliest investigators that this complex was somehow connected with the Hopewell sites in the Mid-West, and that these complexes were at least partial contemporaries.

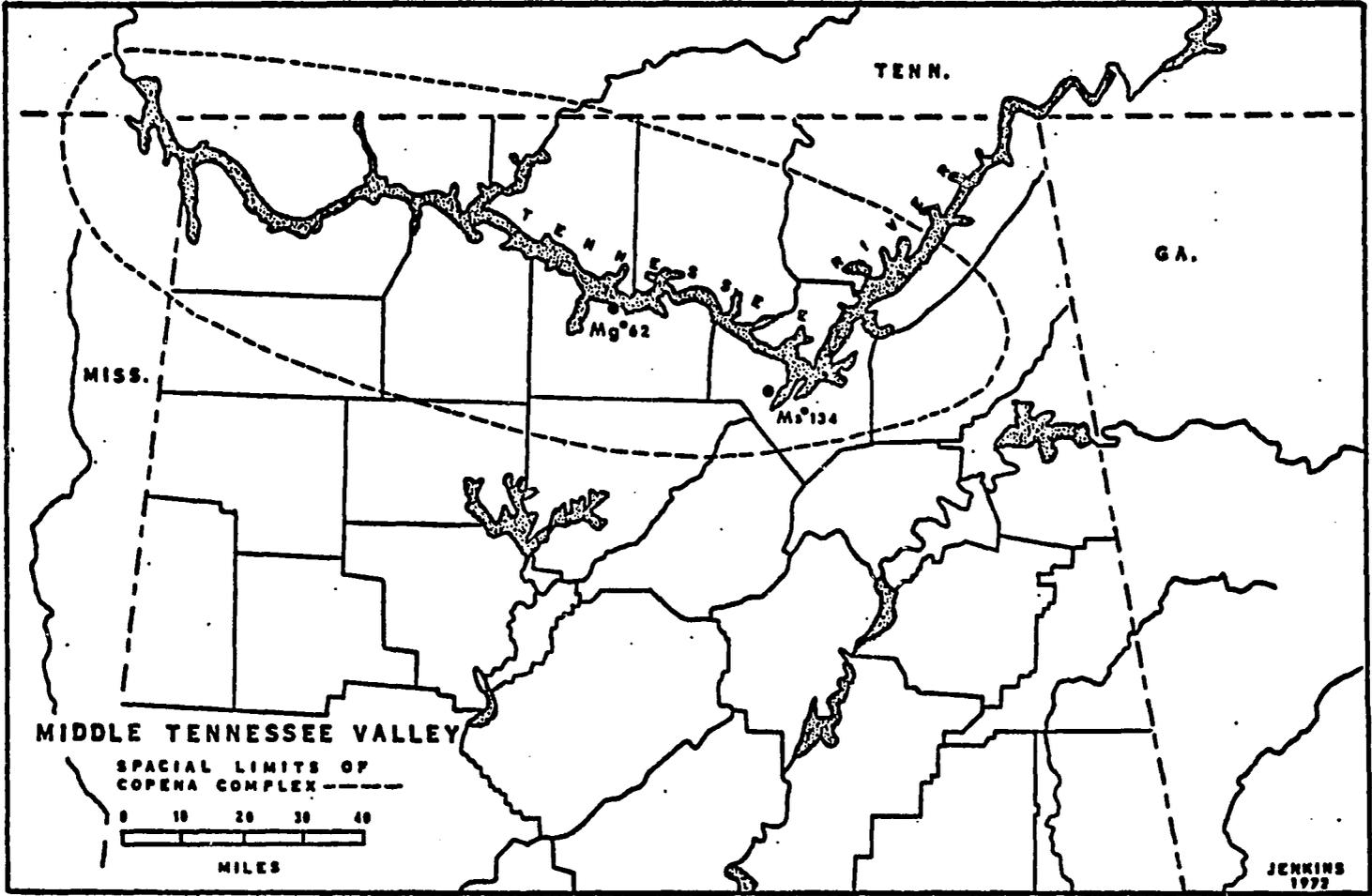
More recent authors have usually placed the Copena tradition into a chronological position equivalent to Middle, or Classic, Hopewell in Ohio (Prufer 1964:52; Willey 1966:250; Faulkner and Graham 1966b:76). The proponents of the hypothesis that the rise of Copena in northern Alabama was the result of a late Adena migration also placed a fully developed Copena mortuary tradition at approximately A.D. 1. Dragoo, in a recent re-evaluation of the Adena chronology, suggests that a recognizable Adena manifestation began at approximately 1000 B.C., continuing up to the beginning of the Christian era (Dragoo 1963:292-293). The only major exception to this chronological placement for Copena is seen in the publications by James B. Griffin. Griffin recognized the relationship between the makers of

the Tennessee Valley limestone-tempered ceramics and the Copena mounds during the late 1930's and has consistently associated Copena with the Hopewellian manifestation (Griffin 1945;1946;1952). In a recent synthesis he estimated a date of A.D. 300-400 for a fully developed Copena mortuary complex (Griffin 1967:177). Subsequent investigators (Faulkner 1970; Walthall 1972) and the radiocarbon determinations reported in this subsection, support all three of these conclusions.

The information now available indicates that the Copena complex is a somewhat later development than generally estimated. A temporal span of A.D. 150-500 is suggested for the Copena mortuary tradition. This temporal placement makes Copena a contemporary to the Late Hopewellian phase in Ohio and the Pike Hopewellian tradition in the lower Illinois Valley (Prufer 1964:52;1965:104; Struever 1965:219;1968:305). This later chronological placement for the development of Copena also supports the hypothesized relationship between Copena and the Mandeville Site on the Chattahoochee River in southwestern Georgia. One of the mounds at this ceremonial center contained a cremation associated with Copena-like mortuary goods, stone celts, a digging implement and galena nodules (Kellar and others 1962:351-352). A carbon sample from this cremation in Mound B produced a radiocarbon date of A.D. 420 (Crane and Griffin 1964:9).

In the report on the excavation of the Mandeville

**Map 7. Middle Tennessee Valley**



site the investigators hypothesized that "the Copena group served as middlemen in the trade network, between Hopewell to the north, and Mandeville and Crystal River on the south" (Kellar and others 1962:354). In regard to this theory Faulkner has made the following statement:

The Tennessee Valley of northern Alabama is approximately midway between the Gulf Coast and the Ohio Valley. It has been suggested that the route from the Gulf Coast of Florida to the Ohio Valley passed up the Chattahoochee to its headwaters in northwestern Georgia and then over the short distance to the Tennessee Valley in northern Alabama (Butler 1968:22). From here it would have been an easy trip to the Ohio Valley either via the water route of the western Tennessee Valley or overland through Middle Tennessee and Kentucky. Since no Hopewell affiliated cultures have yet been recognized in the western Tennessee Valley of Tennessee and Kentucky and a Hopewellian complex apparently related to Alabama Copena has now been identified in Middle Tennessee, the overland route appears to be the more likely at this time. In early historic times a major Indian trail passed through Middle Tennessee to the Tennessee River at Bridgeport, Alabama, where it met a network of track leading to Florida (Myer 1928:846-847). To the north, this trail passed through Nashville and connected with other trails that ran up to the Ohio River in the vicinity of Shawneetown in southern Illinois (Myer 1928, Plate 15). A similar route may have existed in Middle Woodland times (Faulkner 1970:106-107).

This author concurs with Faulkner in his belief that the trade route between the Copena heartland in the Middle Tennessee Valley and the Ohio Valley was most likely an overland route through Middle Tennessee, particularly through the Nashville area. It also seems likely that the

Chattahoochee River, as well as a portion of the Coosa River, both of which flow southward from headquarters in northwestern Georgia, served as riverine routes to the Florida coast. In his article, Faulkner described the Copena-like artifacts recovered from the Mandeville site along this route but he does not mention the complex of burial caves in northwestern Georgia near the headwaters of the Coosa River, between the upper Chattahoochee River and the Tennessee Valley. These caves are reported in the following subsection. Suffice it to say at the present time that diagnostic Copena materials have been recovered from them, including Copena projectile points, copper reels and beads and galena nodules. Faulkner also relates that:

Perhaps the route through Middle Tennessee was taken for other reasons besides ease of travel. Although galena found in Hopewell mounds is presumed to come from Missouri or Illinois (Prufer 1964:75), there may have also been other sources. One of these might be Middle Tennessee where mineralized veins contain small amounts of galena. It is said these veins were known to the Indians because the earliest settlers in the area found shallow pits over them which were subsequently worked on a commercial basis (Jewell 1947:1-2). This might explain the frequent occurrence of galena in Copena graves and the reason that the Hopewell trade route passed through Copena territory (1970:107).

There is, however, an alternative hypothesis for the existence of the intricate network of trails through Middle Tennessee between the Ohio and Tennessee Rivers. It has been suggested that through the Early Woodland period into

the Middle Woodland period in Illinois and Ohio that there was an increasing reliance upon plant foods (Struever 1968; Prufer 1965). By Middle Woodland times the Hopewell groups apparently had economies based upon the intensive harvest collecting of wild plant foods and maize cultivation (Struever 1968; Prufer 1965).

Wentowski has recently conducted research into the use of salt as an ecological factor in the prehistory of the Southeastern United States. In this study, she states that:

The importance of salt as a resource of environment has generally been neglected by anthropologists and archaeologists (Gilmore 1955:1015). Salt is involved in all three aspects of man's relationship to his environment.

First, salt is a product of the inorganic environment and technological methods for its extraction have to be devised. Second, the need for salt... is related to the percentage of animal and plant foods in the diet. Third, the physiological necessity for salt created by a primarily vegetarian diet made salt an item which was traded out of regions in which it was found, thus stimulating the formation of links between human communities (1970:2).

Concerning the need for salt in relation to subsistence, Wentowski observes that:

About one hundred years ago, Bunge (Dastre 1901:563) suggested that the craving for salt may have been related to the subsistence base of a people. He argued that people such as the Eskimo, who lived primarily on animal products, had little desire for salt. People in settled agricultural communities, who lived mainly on grains and

vegetables, had a great craving and physiological necessity for salt. He presented, to support his point, a cross-cultural survey of the use of salt by groups with different subsistence bases. His hypothesis of a correlation between salt use and vegetarian diet has stood up to the present day (Dauphinee 1960:412). The amount of salt needed by each human group would depend on the relative proportion of animal to vegetable food in the diet (1970:11).

The need for salt can also be correlated to the type of climate of the region inhabited by a cultural group. Salt lost through sweating is apparently a major factor in this correlation. In eastern North America the climate apparently played a role in the need for supplementary salt by indigenous peoples:

In North America a survey by Hunter (1940) revealed very little use of salt among peoples of the eastern Woodlands north of the Delawares. Hunter (1940:18) attributes this phenomenon to a diet which included a good balance between vegetable and animal foods. A map constructed by Driver (1961:73) shows the limit of recorded salt use by ethnographic cultures occurring just north of the Ohio Valley. He attributes the position of the boundary both to diet and to cooler climate (Wentowski 1970:13).

Unfortunately, in the humid Southeast salt is not preserved on archaeological sites. Therefore, the use or importance of salt during the Middle Woodland period cannot be demonstrated by direct evidence. However, it is known that later Mississippian groups, who practiced maize cultivation, extensively exploited salt springs and that salt was a major item of trade among these peoples (Wentowski 1970:18). It is therefore possible that the earlier Hopewellian

and related peoples, who also relied heavily upon plant foods, actively sought out salt sources and traded the mineral with other groups.

There is a certain amount of data available to support this hypothesis. Salt springs in Clark County, Alabama and in Ste. Genevieve County, Missouri do show evidence of having been extensively exploited by both Woodland and Mississippian peoples (Wentowski 1970:22;31). A major salt spring, French Lick, was located in Davidson County in central Tennessee near present-day Nashville (Wentowski 1970:36). This spring, which was used in the prehistoric era, is the nearest source for salt to the Copena region. The Clark County spring in south Alabama, though farther away, is also easily accessible from the Copena region by several river systems flowing southward from near the Tennessee Valley to the Gulf Coast. Middle Woodland cultures participating in the Hopewellian Sphere of Interaction were located in each of these two areas (Faulkner 1968; Wimberly and Tourtelot 1941). Burial mounds similar, both in construction techniques and cultural material used as mortuary goods, to the Copena structures have been investigated both in the Nashville area and in Clark County, Alabama (Jennings 1946; Wimberly and Tourtelot 1941). Although there is a lack of quantitative evidence on the use or importance of salt in the Hopewellian exchange network the data presented here do indicate that this mineral may have constituted a major, though perishable, trade

item during this time.

The hypothesis proposed by Faulkner concerning the riverine and overland trade route seems to be on firmer ground. Archaeological investigations in the area under consideration have revealed a series of related Middle Woodland sites along this route. Yet to be mentioned are three other phenomenon, near the overland trail through northeastern Alabama and Middle Tennessee, which may be of significance. First, there are surface and subsurface galena deposits in northeastern Alabama near Angel Station in Calhoun County (Pallister 1955:24). Like the Middle Tennessee veins the Alabama deposits also appear to have been quarried during aboriginal times. The Alabama source, though small in comparison to the extensive Joplin, Missouri area deposits, was nevertheless large enough to have been mined during the Civil War by the Confederate forces. This deposit is only a short distance (ca. 40 miles) over Sand Mountain from the Gunterville Basin.

Second, recent investigations in Franklin and Coffee Counties, Tennessee, near the northern Alabama border, have revealed a Middle Woodland complex exhibiting a strong relation to Copena. In this area several Middle Woodland villages have been located which, in regard to cultural material, compare favorably to the northern Alabama Copena villages described in this present study. Limestone tempered plain and carved paddle stamped pottery constitute the major ceramic types at these sites and medium triangular

projectile points, especially the Copena and Copena Triangular types, are comparatively numerous (Bacon n.d.). At two of these sites, 40 Cf 13 and 40 Cf 48, ceremonial objects similar to specimens recovered from the Copena mounds were found. These include large steatite elbow pipes, greenstone celts, ground hematite, a siltstone cone and a "spread wing bird effigy pipe" (Bacon n.d.).

In the same area in which these Tennessee Middle Woodland habitation sites were located is a site known locally as the Old Stone Fort. This site is located in Coffee County, Tennessee and was investigated in 1966 by the University of Tennessee (Faulkner 1967a). This "fort" is a stone and earth enclosure which encircles an area of 50 acres (Faulkner 1967a:4). It is similar in form to Ohio Hopewell enclosures which have been well known for over a hundred years (Prufer 1964). There is much conjecture concerning the function of these structures. Although diagnostic cultural material was not recovered during the 1966 investigation of this site, a series of four radiocarbon determinations indicate that it was built during the Middle Woodland period between A.D. 30 and A.D. 430 (Faulkner 1967a:33).

Although Faulkner was not aware, at the time of his investigation, of the Middle Woodland habitation sites in the area discussed above, he concluded that from the data available at that time that this enclosure was constructed by Hopewell-Copena related peoples (Faulkner 1967a:47-53).

Finally, it should also be noted that a similar stone and earth enclosure is located at DeSoto Falls in northeastern Alabama (Roberts 1949:18-21). This site consists of two semi-circular walls and a ditch enclosing a portion of a ridge above the Little River (Roberts 1949:20). Although this Alabama site has not been subjected to scientific examination the structural similarity between it and the Old Stone Fort in Tennessee, and the proximity of both to the Copena region and the hypothesized Middle Woodland trade route, suggest a cultural relationship between these two sites.

## B. BURIAL CAVES

Prehistoric burial caves, like Indian "burial grounds" and "lead mines," have long been a part of Southeastern folklore. The dark recesses of caves have, for ages, challenged man's curiosity and in response cave exploration has long been an exciting past-time in rural areas. This has been especially true of the limestone regions of the northern Alabama area. The early European settlers of this region, once homesteads and fields were built and cleared, began to explore the hundreds of caves and limestone sink-holes which abound in the area. In some of these caves human skeletal material was found which indicated that, like the earthen and stone tumuli which dotted the major river valleys, they had served as burial places for the ancient inhabitants of the land. These natural tombs caught the romantic fancy of the era and by the middle of the nineteenth century the Indian burial caves of the northern Alabama region were well known (Pickett 1851:153).

However, systematic exploration of these caves did not begin until the last decades of the nineteenth century when representatives of scientific societies and federal institutions began investigations of prehistoric sites in the Eastern United States. During one of these archaeological surveys Cyrus Thomas, Bureau of American Ethnology archaeologist, explored and reported a burial cave, Hampton Cave, near the city of Guntersville, Alabama. Sub-

sequent investigation of this cave during the 1930's revealed that the burials and cultural material recovered during these excavations were associated with the Copena burial mound complex.

When, in January of 1972, I began a study of Copena I was aware of the presence of this one burial cave but like many previous researchers considered this type of mortuary site interesting but relatively unimportant. Later that year I learned, through a conversation with A. R. Kelly, dean of Georgia archaeology, that similar burial caves had been discovered in Bartow County, Georgia near the headwaters of the Coosa River. Again, I found this to be interesting but more pressing work overshadowed any further thought about the connection between Hampton Cave and the Georgia burial caves. However, during the ensuing months the number of accounts of northern Alabama burial caves, both in the extant literature and in conversations with local professional and amateur archaeologists, multiplied to such an extent that they could no longer be ignored.

At that time I decided to attempt a systematic investigation of each such burial cave that was reported to me. I soon learned of over a dozen such caves but many had been looted or vandalized to such an extent, and their contents lost or dispersed, that they were of little scientific value. However, six of these burial caves had been carefully excavated and field notes and artifacts were available for study. These six mortuary sites are reported in the

following section of this paper. In each case an attempt was made to personally visit the sites in question and, playing the role of ethnographer, long interviews were conducted with the principle investigators. During the course of this research it quickly became clear that burial caves had played an important and culturally significant role in the Copena burial system.

### 1. HAMPTON CAVE (Ms<sup>C</sup>145)

Hampton Cave is located approximately one mile west of the city of Guntersville in Marshall County, Alabama. The cave has been a topic of local folklore for generations. During the early nineteenth century prehistoric burials were discovered in one of the small rooms adjoining the main passageway in the cave interior. In 1890 Cyrus Thomas, Bureau of American Ethnology archaeologist, visited the cave and filed the following report:

About a mile west of Guntersville is a cave known as Hampton Cave. Its floor is covered to the depth of 4 feet with fragments of human bones, earth, ashes and broken stones. This fragmentary condition of the deposit is chiefly due to the fact that they have been repeatedly turned over by treasure hunters. Much of the deposit has been hauled away in sacks for fertilizing the land. The number of dead deposited here must have been very great, for, notwithstanding so much has been removed, there is yet a depth of 4 feet, chiefly of broken human bones. A fine specimen of the copper, spool-shaped ornament supposed to have been worn in the ear was obtained here by Mr. James P. Whitman, who kindly presented it to the Bureau (Thomas 1890:284).

In 1939, as part of the W.P.A. - T.V.A. Guntersville Basin archaeological survey, Hampton Cave was again investigated (Webb and Wilder 1951: 24). The mouth of the cave was found to be situated some 200 feet above the valley floor on the side of a steep mountain. The entrance opening was small, measuring only 38 inches in width and 29 inches in height. The burial area was located in a small room

approximately 65 feet from the cave entrance.

The burial area was carefully excavated and much of the room fill was screened. During the excavation it was noted that, although not mentioned in Thomas' report, the human bone deposited in the cave had been subjected to fire suggesting that the ashes and calcined bone from many cremations had been repositied in the cave tomb. Besides the charred osteological material some 339 artifacts were recovered, as well as, numerous "chunks of foreign clay" (Webb and Wilder 1951:25).

The supervisor of the 1939 excavations, Carl F. Miller, concluded that from the results of his investigation the following observations could be postulated:

1. The site was used exclusively by Copena peoples.
2. The cave was used for mortuary purposes only.
3. The cave was never used as living quarters, as the nature of the cave makes it unsuitable for such purposes.
4. This site demonstrates that Copena people, besides using mounds as burial places, sometimes used natural caves in which to deposit their dead.
5. Cremations may have been dominant among some Copena groups.
6. This cave suggests the possibility that in some Copena groups the living occupied an area somewhat removed from the place of disposal of their dead (Webb and Wilder 1951:25-26).

#### CULTURAL MATERIAL

Copper - Several types of copper artifacts were recovered during the 1939 investigation of Hampton Cave. All of these specimens exhibited evidence of having been subjected

to fire, suggesting that they had been placed with the bodies before cremation. Among the sample of copper artifacts studied during the research for this present paper were three copper reel shaped gorget fragments (one perforated), 18 fragments of sheet copper, 70 cylindrical copper beads and 35 disc-shaped copper beads.

Marine shell - Fourteen shell fragments, representing at least six large marine univalve (Busycon sp.) cups or dippers, were found in the bone deposit. In addition to these larger marine shell fragments three types of shell beads were recovered, 3 olivella beads with apicular perforation, 16 columella beads and 46 disc-shaped shell beads. An unusual carved shell object, shaped like two adjoining rectangles, was also recovered. This specimen has been highly polished and notched along the outer edges and is 66mm long, 15mm wide and 3mm in thickness. Its function is problematical. It is illustrated in Plate 9A of the Guntersville Basin Report (Webb and Wilder 1951). As with the copper ornaments, the majority of these shell artifacts had been subjected to fire.

Galena - Galena cubes and nodules, some with heavily ground facets, constituted the most numerous class of artifacts recovered from the cultural deposit in Hampton Cave. These 102 specimens of galena weighed a total of 1480 grams.

Projectile Points - Thirteen projectile points and three distal ends of projectile points were found. Ten of these specimen are medium triangular varieties corresponding to

the Copena and Copena Triangular type descriptions. These specimens range in length from 32 to 53mm, in width from 19 to 25mm and in thickness from 5 to 8mm. The remaining three points are all medium straight stemmed types. One of these stemmed points appears to be a Wade variant with short shoulder barbs. The other two, one made from quartz crystal, have been fractured by being subjected to intense heat.

Pearl Bead - One bead made from a freshwater bivalve pearl was retrieved from the bone deposit. It has been bi-conically perforated with a fine drilling instrument.

Limestone Beads - These three specimens have been finely ground and polished and drilled from both ends for stringing. They range in length from 11 to 21mm, and in diameter from 4 to 10mm.

Limestone Digging Implement - This slab "hoe" has parallel blade edges and a worn, rounded distal end. It is similar in form to the more common greenstone digging implements recovered from Copena mounds and villages. It measures 350mm in length, 137mm in maximum width and 39mm in thickness.

Bear Canines - Three large bear canine teeth were found. One of these specimens, which probably functioned as a pendant, had been perforated.

Polished Bone - Two highly polished bone objects were in the cultural sample. Both were fragmentary but appear to represent a flat bone pin and a cylindrical bone awl.

Atlatl Weight - A fragment of what was once a "winged"

atlatl weight was also recovered. It had been highly polished and perforated through the center of the short axis.

## 2. ROCKHOUSE SPRING CAVE (Li<sup>C</sup>1)

During the Wheeler Basin archaeological survey, conducted in the 1930's prior to the construction of the Wheeler Dam on the Tennessee River, a massive limestone outcrop, known as Rockhouse Ledge, was investigated (Webb 1939:105). Several caves and rock shelters were located during this investigation which yielded cultural remains from prehistoric occupations. In addition to these sites at the base of the bluff a site was also found on the summit of the ledge. The sample of cultural material collected from this latter site included "flint projectile points, boatstones, discoidals, and greenstone spades" (Webb 1939:105).

In the late summer of 1955 a survey was begun by members of the Alabama Archaeological Society of the Rockhouse Ledge area, which is located in the SW quarter of the NW quarter, Section 34, Range 3 West, Township 5 South, approximately a quarter of a mile north of the Tennessee River in Limestone County (Knudsen and Radford 1957:1). Several of the larger caves and rock shelters, which had apparently been occupied during the prehistoric era, were investigated as well as a number of lesser caves which were too small for use as habitation sites.

In the depths of one of the small caves, some 150 feet from the entrance, the scattered remains of a human burial were encountered. Subsequent screening of the loose

soil in the burial area produced human teeth, copper and shell fragments and ornaments, and a medium triangular projectile point (Knudsen and Radford 1957:2). The nature of the cultural material found in the burial area of this cave indicated that these remains were associated with the Middle Woodland Copena mortuary tradition.

#### CULTURAL MATERIAL

Copper - Fragments of two copper reel-shaped gorgets, a small copper celt, and approximately fifty tubular copper beads were recovered from the burial area in Rockhouse Spring Cave (Knudsen and Radford 1957:6). The geological source for Copena copper ornaments has long been thought to be the large native copper deposits of the Keweenaw Peninsula area of Michigan (Jones 1939:19-20). Quantitative support was obtained for this hypothesis when samples of the Rockhouse Spring Cave copper were submitted to spectrographic examination. These Tennessee Valley specimens were "shown by emission spectroscopy to be identical in trace element composition with samples of native copper from the Lake Superior area..." (Carstens and Knudsen 1958:13).

Marine shell - Approximately fifty disc-shaped shell beads were recovered during the screening of the loose soil in the burial area.

Projectile Point - One medium triangular projectile point

was found in the burial area. This specimen conforms to the Copena Triangular type description (Knudsen and Radford 1957:4).

Botanical Specimens - During the process of cleaning the many copper beads from Rockhouse Spring Cave remnants of the bead string were found to have been preserved by the copper salts. According to Knudsen and Radford:

These bits of fibrous materials were carefully preserved and subjected to thorough analytical study using the techniques of optical microscopy and infrared spectroscopy. The results of the infrared studies show positively that the fiber is a cellulosic one, that is, it is of vegetable and not animal origin. The microscopic examination further established the fact that the fiber was a bast (or stem type) fiber like linen rather than a seed fiber such as cotton or milkweed floss. Microscopic comparison of the fiber with freshly prepared bast fiber from the Indian hemp plant (Apocynum cannabinum) show the two to be almost indistinguishable... Since Indian hemp is abundant along the Tennessee River, the identification of the bead fiber with this plant is almost certain (Knudsen and Radford 1957:2-3).

The manufacturing techniques used in the production of this prehistoric bead string were also commented upon in the Rockhouse Spring Cave report:

Certain details of yarn construction were readily discernable in the bits of fiber from the beads. The cord used to string the beads had been made by twisting together three separate strands of fiber, each containing 150-200 individual hemp fibers. The strands had been given a righthand twist of 2-3 turns per inch and then plied together with a lefthand twist of 2-3 turns per inch. The resultant cord had a finished diameter of about 1/8 inches...

It is of interest to note that the techniques used by the early Indian who made the bead cord are essentially the same as those used today for

preparing similar cords. The use of the principle of twist and counter-twist employed to make a stable cord with good tensile and elastic properties indicates that the early peoples understood well the best techniques for preparing cordage, and suggests that they may have produced lines and ropes of high quality... (Knudsen and Radford 1957:3).

### 3. McCALLA CAVE (Je<sup>C</sup>30)

In April, 1956 Robert Curren of Bessemer, Alabama was told that a group of local Boy Scouts on an outing near Five Mile Creek had found portions of a human skeleton near the mouth of a small cave overlooking a small tributary of the above stream. Since Curren had lived in the area all of his life he knew the location of this cave and decided to investigate it the following week. When Curren entered the cave he found that the entrance area and a large portion of the interior of the cave had been disturbed by treasure hunters and vandals. During this initial visit he found more skeletal material and a broken copper celt in the backdirt of a pit which had apparently been recently dug into the cave floor.

Realizing that the on-going vandalism would soon destroy any scientific information which the cave might still contain Curren decided to instigate a salvage project to save as much of the remaining data as possible. During the ensuing month Curren and two companions discovered approximately 26 burials lying in shallow graves or on the floor of the cave. A sample of the cultural material was sent to David L. DeJarnette, Director of Mound State Monument, for study and identification.

From the artifacts sent to the museum and the field notes supplied by Curren, DeJarnette concluded that McCalla Cave, which is located a few miles south of Bessemer in

Township 19S, Range 4W, Section 26, was utilized for mortuary purposes during the Middle Woodland period by peoples participating in the Copena burial system. At this time only one other burial cave of this nature had been reported. Hampton Cave (Ms<sup>C</sup>145) had been excavated during the Gunterville Basin Survey in the late 1930's (Webb and Wilder 1951). Although this cave was unique at the time it was excavated its geographical position in the Tennessee Valley in the heart of the Copena region indicated that the peoples participating in this burial system occasionally buried their dead in cave tombs.

However, McCalla Cave was even more unusual in that it was the first site reported to yield diagnostic Copena artifacts so far south of the Tennessee Valley. That the region surrounding the cave was occupied during the Middle Woodland period by peoples culturally affiliated with the Tennessee Valley was known from prior investigations in the area. During the excavation of the Bessemer site, a nearby multicomponent habitation and ceremonial site, limestone tempered complicated stamped pottery sherds (Pickwick Complicated Stamped) were recovered which are typical of this cultural period in the Tennessee Valley (DeJarnette and Wimberly 1941:97). Subsequent salvage investigations and survey projects in the area have revealed village sites which had as the dominant ceramic complex Mulberry Creek Plain and Wright Check Stamped limestone tempered pottery (Wimberly: Personal Communication). All three of these

pottery types have been recovered from village sites in the Tennessee Valley which have been associated with the Copena Complex (Webb and DeJarnette 1942; Griffin 1945; Walthall 1972a; 1972b).

The burials recovered during Curren's investigation of McCalla Cave were of two types, extended inhumations and cremations. The majority of these twenty-six burials had apparently been cremated elsewhere and brought to the cave in baskets to be deposited in small basin shaped pits or in selected corners of the interior rooms. Remains of plaited basketry and mats and pieces of woven fiber were found in association with several of the burials. Several of the extended burials had been either partially or wholly covered with foreign puddled clay. The recovery of a single pottery sherd (Mulberry Creek Plain) during the excavations might have a correlation with the use of liquid clay in this burial tradition. Pottery sherds have often been found in the fill of Copena mounds where puddled clay had been used as a part of the burial preparation and it is possible that these ceramic vessels were brought to the mortuary site to be used in the mixing and preparation of the liquid clay.

#### CULTURAL MATERIAL

Copper - The first artifact to be found in McCalla cave during the 1956 investigation was a ceremonially broken celt made of beaten sheet copper. This celt was unusual in its large size. The majority of celts recovered from Copena mounds range from three to six inches in length while this

specimen measured over eleven inches. A copper reel, perhaps the most diagnostic of all Copena artifacts, was also recovered from the interior of the cave. This specimen was approximately three inches square and was made from several sheets of beaten copper. Two types of copper beads were present in the sample collected during Curren's salvage project. The first type, represented by 60 specimens, was a barrel shaped variety ranging from a quarter of an inch to an inch in length. The second type, a small oval shaped bead, ranged from an eighth to a quarter of an inch in length. Twelve beads of this second type were found.

Galena - Several pounds of lead sulphide were recovered from the burial areas. The bulk of this mineral was in the shape of small cubes. Some of the larger specimens exhibited surface grinding.

Marine shell - Ten marine shell cups or dippers were recovered. These specimens were made by removing the columella from large marine univalves (Busycon sp.). Twenty large (1 to 1.5 inches) columella beads and approximately 400 small, disc-shaped beads were also present in the sample of cultural material taken from this cave.

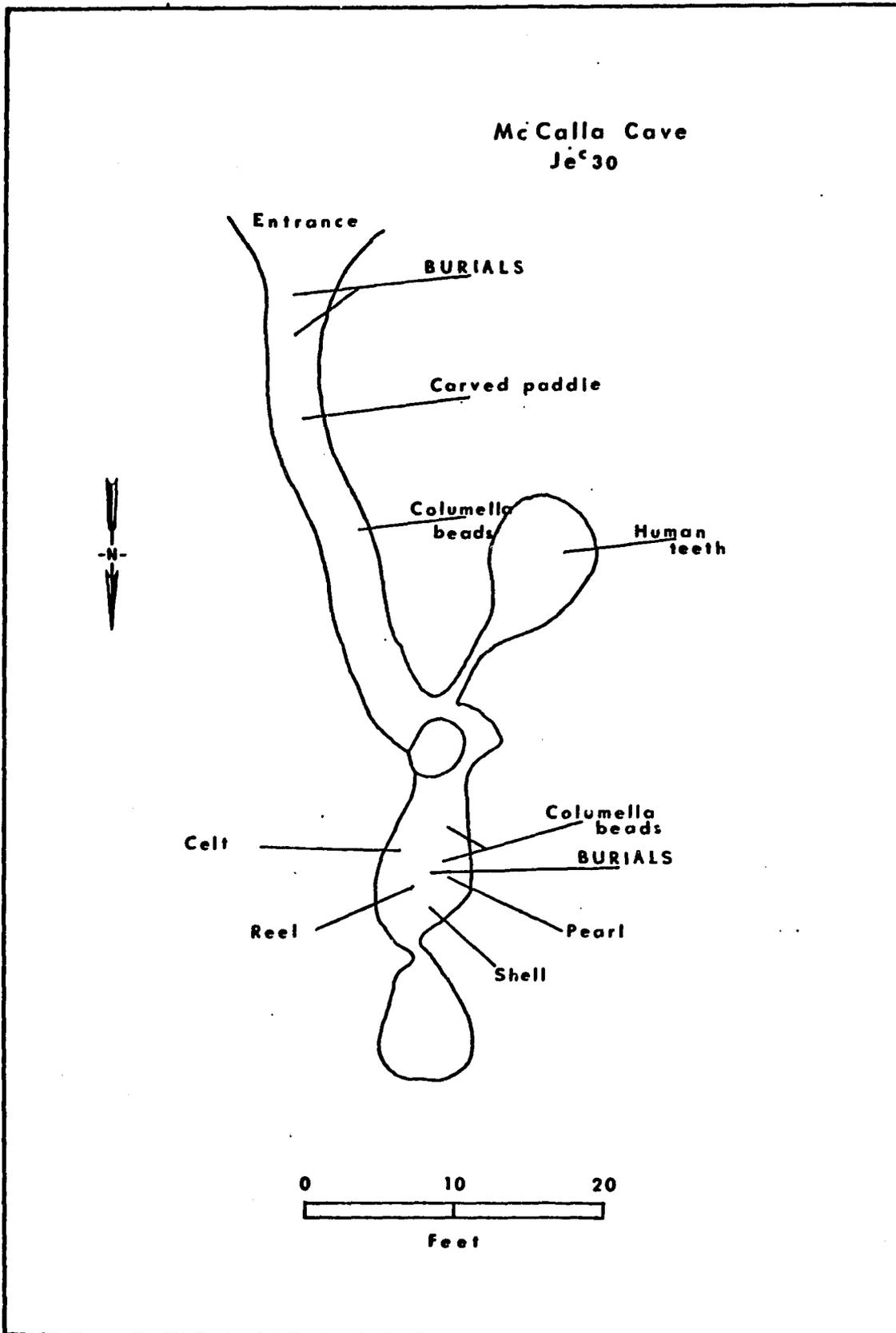
Pearl bead - One small pearl bead was found near an extended burial. A perforation had been made through this specimen.

Projectile Points - Five projectile points were found near the cave entrance. Two of these were medium triangular points corresponding to the Copena Triangular type description. Three stemmed points were also recovered. All were

straight stemmed but lacked sufficient diagnostic attributes to place them into an established type.

Botanical Specimens - Other than the plaited basketry and mat fragments and the pieces of fabric one other ethnobotanical specimen was reported which deserves comment. The charred distal end of what had once been a carved wooden paddle was found in a disturbed area in the main passageway. This fragment had a rounded end and was flat on one side. On this flat surface a series of lines had been carved into a grid pattern. It is possible that this specimen represents a fragment of a carved paddle used in the manufacturing of pottery. The grid carved into the paddle is similar to that found on Wright Check Stamped sherds.

**Map 8. McCalla Cave**



#### 4. ED SMITH CAVE (MgC76)

On Sunday, November 25, 1962 a group of soldiers from Redstone Arsenal in Huntsville, Alabama set out to explore Ed Smith Cave in southeastern Morgan County (Lawrence Cove Quadrangle, SE quarter of the SE quarter, section 8, Township 8 South, Range 1 West). According to a report submitted to this author by Jack Cambron, "All but two of the party stopped at a water crawl about one-half the length of the cave. Terry Faulkner, an Industrial Engineer from Little Rock, Arkansas, and Norm Vadner continued to near the end of the cave where Faulkner saw a human jawbone lying on a ledge. Superficial investigation of two rooms, about 15 x 20 feet and about 20 feet high disclosed about 10 human skulls partially embedded in a slope of stone and clay."

After this initial visit to Ed Smith Cave, David L. DeJarnette, Director of Mound State Monument, was contacted and a report concerning the human skeletal material found in the cave was sent to him. Shortly after this a team of University of Alabama archaeology students was sent to Morgan County, and accompanied by Jack Cambron and a party of Army personnel from Redstone Arsenal, entered the cave to further investigate the reported burials.

It was observed at that time that the burials had apparently been dropped through a former opening in the roof of the cave which was at the time of investigation blocked by large sandstone boulders. Whether or not the opening in

the cavern roof had been intentionally sealed could not be determined. Approximately 20 skulls were counted on the surface of the slope of eroded soil and stone. The investigators estimated that the remains of from 50 to 100 individuals were included in the debris and on the surface.

#### CULTURAL MATERIAL

Marine shell - Three cups or dippers made from large marine univalves (Busycon sp.) were recovered from the bone deposit. All of these specimens had been made by removing the columella and grinding the cut edges.

Copper beads - Four copper beads were found among the skeletal remains. Three of these were small barrel-shaped beads, while the fourth had been made by rolling an inch wide sheet of copper.

Stone bead - A tubular stone bead and two of the small copper beads were found inside one of the skulls taken from the cave. The stone bead had been drilled from both ends and had been finely ground.

Projectile points - Two medium triangular projectile points were recovered during the investigation of the burial rooms. Both were classified by Jack Cambron as belonging to the Copena Triangular variety.

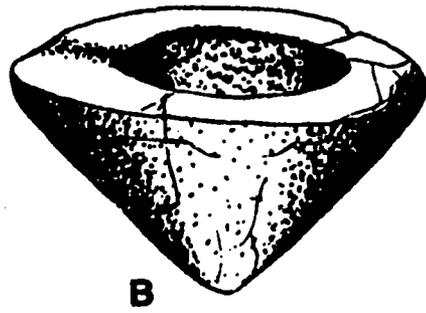
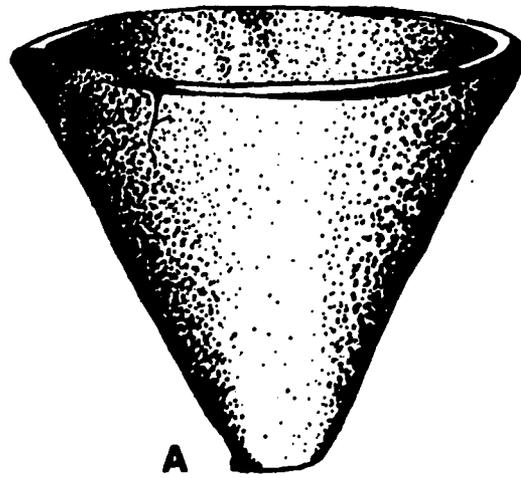
Siltstone Cone - A feruginous siltstone cone or cup was discovered in the burial area. This specimen was finely ground and measures 65mm in diameter and 41mm in height. This is the first artifact of this nature to be reported from a Copena mortuary site. A similar conical siltstone

cup was recovered from the McQuorquodale Mound in Clark County in the southern portion of Alabama (Wimberly and Tourtelot, 1941). The McQuorquodale Mound was a Middle Woodland mortuary structure which contained many Copena-like artifacts, including ground and faceted galena nodules, mica, polished greenstone celts, and copper earspools and beads (Wimberley and Tourtelot, 1941:9-13). Similar siltstone cups have been reported in burial context from Ohio Hopewell sites and also at the Crooks Site, a Marksville burial mound in Louisiana (Pruffer, 1961; Ford and Willey, 1940). Although the function of this particular type of artifact is not known, the recovery of specimens at Hopewellian sites and in related cultural complexes does appear to indicate that these cups were a trade item during the Middle Woodland period.

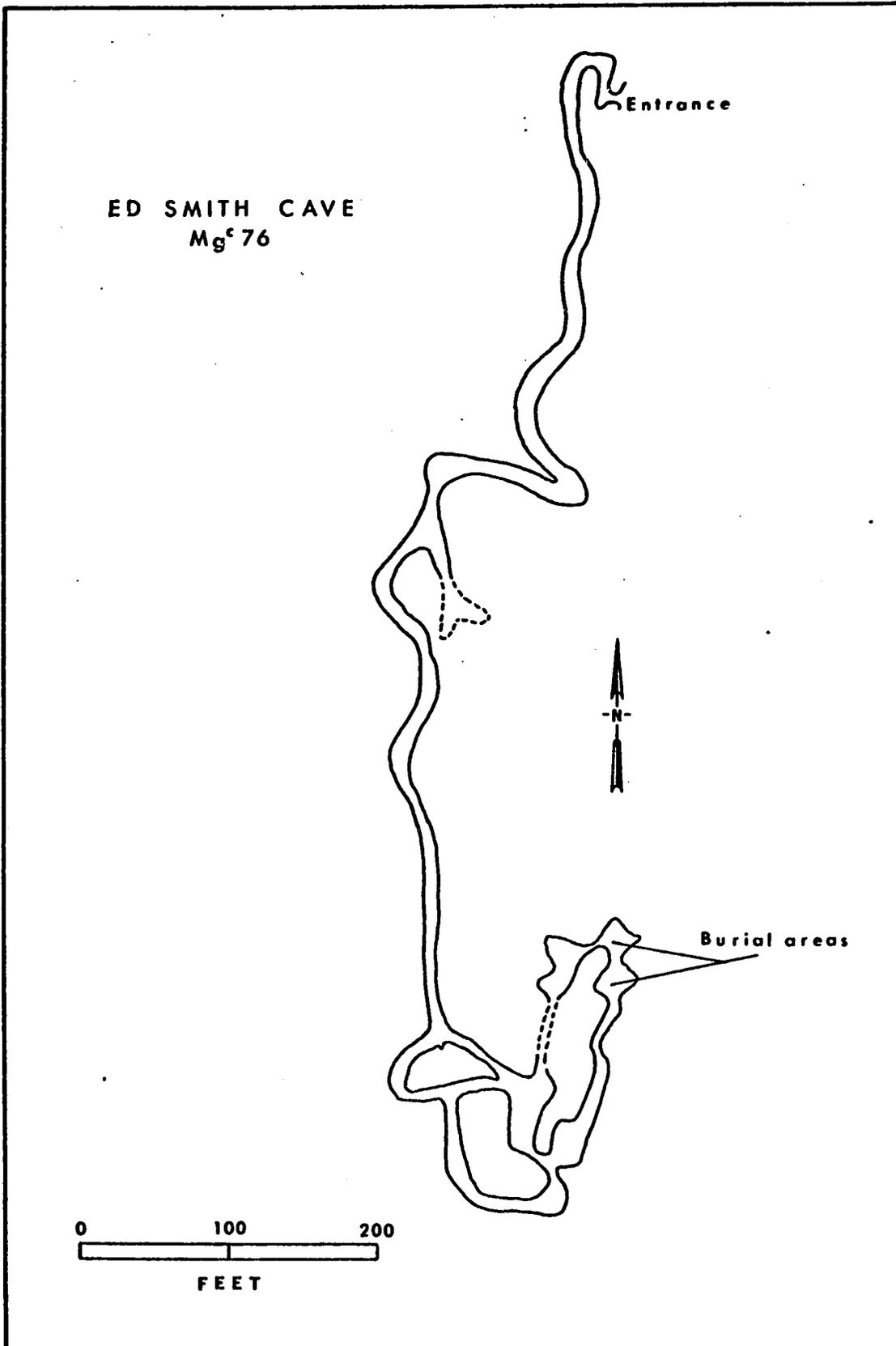
#### SKELETAL MATERIAL

Two human skulls recovered from Ed Smith Cave were brought back to the University of Alabama for study. A preliminary analysis of these skulls indicates that both exhibit extreme frontal and occipital deformation. Crania recovered from Copena burials at several mound sites indicate that this type of deformation was commonly practiced by the Copena peoples.

Figure 21. Siltstone cups: A McQuorquodale Mound;  
B. Ed Smith Cave (Natural Size).



**Map 9. Ed Smith Cave**



## 5. CAVE SPRINGS (Mg<sup>C65</sup>)

Cave Springs is a large limestone cavern located in Morgan County, Alabama. It is situated at the base of Mason Ridge one mile south of the Tennessee River and some 10 miles east of Decatur. The mouth of the cave is approximately 100 feet wide, forming a room 50 feet deep and 10 feet high. Two major passageways extend from this entrance room southward. A year-round spring flows through the main passageway out of the cave, winding its way through fertile bottom land, eventually emptying into the Tennessee River.

Archaeological excavations were conducted in the entrance room during the spring of 1940 by federal and state agencies working under the auspices of the W.P.A. and the Tennessee Valley Authority. The cultural material recovered during this investigation and the unpublished field notes are in storage and on file at Mound State Monument. More recently, in 1969, members of the Morgan County Chapter of the Alabama Archaeological Society conducted a summer dig in the front of the cave just outside the drip line (Moebes 1972:2). This investigation revealed a deep cultural deposit dating back to the Early Archaic period and indicated that the entrance room of the cave had been utilized as a place of shelter by prehistoric peoples for thousands of years.

Thomas F. Moebes, a life long resident of the Cave Springs area, was an active participant and field supervisor

during the recent Morgan County Chapter investigation of the cavern entrance area. During his youth Moebes spent many hours roaming the Mason Ridge area and exploring the numerous limestone caves and sinkholes which abound in the region. In 1935, while exploring the interior passageways of Cave Springs, Moebes discovered a group of aboriginal burials on a natural limestone ledge above the main corridor. Subsequent investigations of the many rooms and passageways within the cave revealed two additional burial areas.

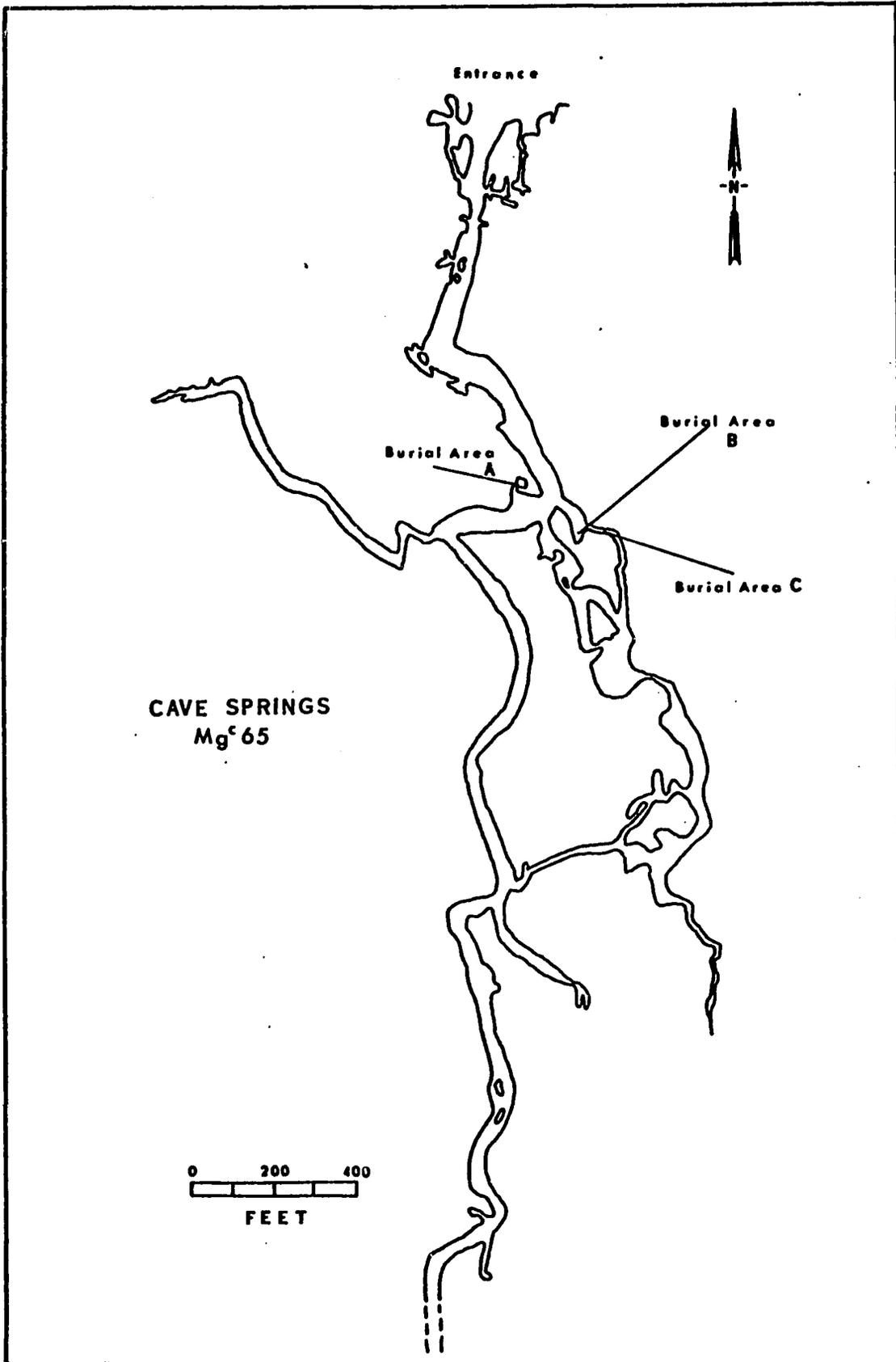
In November of 1972 I visited Moebes at his home to examine the archaeological materials which he had recovered from these burial areas almost forty years ago. The nature of these artifacts indicated that the burials found by Moebes almost a quarter of a mile back in the depths of the cave were the remains of individuals who had participated in the Copena burial tradition. Moebes then guided me into Cave Springs and to the burial areas. The burials still remain in position on the natural ledges upon which they were placed over 1200 years ago. However, time and the constantly damp environment have literally turned the bone and much of the accompanying botanical material into a wet powder.

The majority of the 18 burials in the 3 mortuary areas discovered by Moebes had been placed upon natural limestone shelves. Burial preparation consisted of three major steps. First, clean sand from the stream which flows

through the main passageway was poured and spread over the area upon which the body was to be placed. Secondly the burial, bound in an inner wrapping or garment of loosely woven fabric and an outer wrapping of split cane or bark matting, was placed on the prepared surface. The third, and final, step consisted of walling wet clay around and over the burial. A second group of burials in Burial Area B did not receive the more elaborate preparation accorded the majority of the interments. These four burials were simply placed into a natural trough along the southern wall of the mortuary area and covered with earth and large limestone slabs. There were no associations with this latter group of burials other than the fabric and reed materials.

Two of the burials in Burial Area C deserve some special comment. The first of these burials had as a mortuary accompaniment a coil of fiber rope. This rope, which measured  $3/4$  of an inch in diameter, had been placed near the skull. A second burial in this same area had a mass of fine powdered red ochre lying on the chest area indicating that possibly a bag of this material had been placed with the body. Moebes also related that when he first encountered this "red ochre burial" he found a wooden bow, four to five feet in length, and five cane arrows lying near the side of this interment. One projectile point, a medium stemmed variety was found with this burial, but not in association with the arrow shafts.

**Map 10. Cave Springs**



## CULTURAL MATERIAL

Copper - Small particles of copper sulphate were found in association with several of the burials, indicating that copper ornaments had originally been placed with the burials but had been removed by persons unknown at a date prior to 1935.

Marine shell - Four large marine univalve cups were found associated with an equal number of burials. One of these vessels is presently on loan to the University of Alabama for study. This specimen is illustrated in Sun Circles and Human Hands (Fundaburk and Foreman 1951:36, Plate 15).

Several large columella beads (1-1.5 inches in diameter), as well as a large number of oval and disc-shaped shell beads were also recovered from the burial areas.

Pearl Beads - Two small fresh water pearl beads were found in association with the burials. Both had been perforated.

Mica - Two sheets of mica were also recovered from the burial areas. These specimens are illustrated in Plate 16 of Sun Circles and Human Hands (Fundaburk and Foreman 1957: 37).

Red Ochre - A small mass (ca. 1 pound) of finely powdered red ochre was recovered from the chest area of a burial in Burial Area C.

Projectile Point - One medium stemmed point was recovered in association with the "red ochre" burial in Burial Area C. From Moebes' description it was apparently much like the

Wade projectile point type.

Platform Pipe - This pipe is perhaps the most significant artifact recovered from this burial cave and perhaps one of the most important archaeological finds in the entire Tennessee Valley region of northern Alabama. It is the only platform pipe ever to be reported in a Middle Woodland - Copena context. Unlike contemporary Hopewellian-related peoples in the Midwest and Southeast who made elaborate platform pipes the Copena adherents favored a large elbow-shaped variety. However, in view of the extensive trade networks established by Tennessee Valley Middle Woodland peoples to procure exotic artifacts for use in the Copena mortuary system, it seemed unusual that platform pipes of the type commonly used by contemporary Hopewellian groups in other areas were not recovered from Copena burial mounds.

While reading Sun Circles and Human Hands in the late summer of 1972 I saw two illustrations of the Cave Springs pipe (Fundaburk and Foreman 1957:21 and 132, Plates 6 and 79), and recognized that this was a typical Hopewellian pipe similar to several specimens recovered from burial mounds in Ohio. What especially interested me was the statement in the caption of these illustrations that this pipe had been found by Thomas F. Moebes in a cave in Northern Alabama. Thus began the correspondence with Moebes which eventually led to my visit to his home and the subsequent trip to Cave Springs in the fall of 1972. Moebes found the pipe in Cave Springs during one of his many

explorations of the main passageway area. It had apparently been ceremonially "killed" and scattered over an area covering 15 square feet. All but one small corner piece was recovered and the major portion of the pipe was reconstructed by Moebes.

The pipe has a rectanguloid flat base and a flat, flaring lip. The base measures 114mm in maximum length and 55mm in maximum width. The bowl is 56mm high and the lip measures 57 x 45mm. The pipe is made of white steatite and has been finely ground and polished. A double bird-like motif has been engraved on the bowl lip (Figure 22).

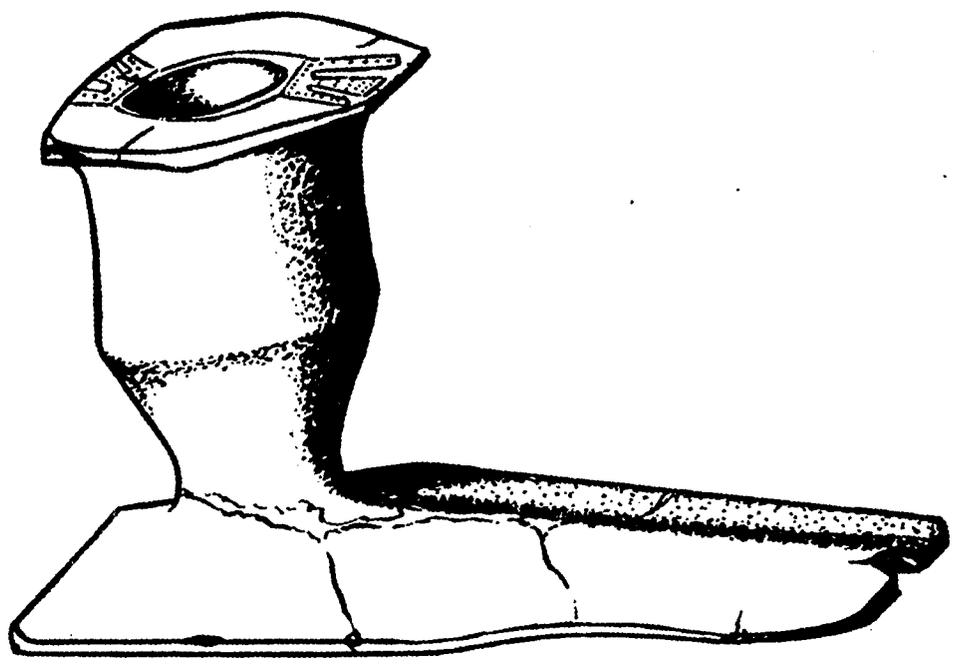
Botanical Specimens - Several types of botanical artifacts were observed in, and collected from, the three burial areas in Cave Springs. The presence of the coil of fiber rope and the wooden bow and cane arrows has already been discussed. The textiles and mats found with the burials in Cave Springs appear to be analogous to materials recovered from one of the Wright Mounds (La<sup>O</sup>63) in Lauderdale County:

Two so-called breastplates of copper were found... One of these plates...had next to it, on the underside, the textile shown in the center of the figure (Plate 185, figure 1), and above it on the outer side the matting shown on the right. This matting, made of flat fibers of bark about 1 inch wide, was woven both warp and weft 'under one and over four.' This weaving formula was probably necessary in view of the stiffness of the fibers to avoid breaking them by sharp bending.

The textile shown in the center of plate 185, figure 1, represents a coarsely woven cloth made of twisted fiber strings. The weft element consists of two parallel strings, each closely twisted from two separate elements. The warp is simple twining, which gathers up the twisted weft strands in pairs.

This cloth probably constituted a garment which was worn at the time of burial. The copper breastplate lay upon it, and the whole was covered with matting. The copper salts preserved both the textile and the matting where it was in contact (Webb and DeJarnette 1942: 157-158).

**Figure 22. Platform Pipe from Cave Springs**



PLATFORM PIPE FROM CAVE SPRINGS  
MS65

NATURAL SIZE

6. KYMULGA CAVE (Ta<sup>C</sup>105)

Kymulga Cave is a large, well known cavern located in Talladega County some five miles east of Childersburg, Alabama. It is situated in a trianguloid area of land bordered on the west by the Coosa River, on the north by Talladega Creek, on the south by Tallassehatchie Creek and on the east by Talladega Mountain. The location of the cave has been known to Europeans for over two hundred years. The oldest name carved into the interior walls of the cave is that of an Indian trader, I. W. Wright, who explored the cave in 1723. According to the Charleston Record Wright left Charleston in that year with ten pack horses loaded with goods to trade with the Indians, and never returned (Layton n.d.). The cave has been visited hundreds of times during the succeeding years and was even mined for saltpeter by the Confederate forces during the Civil War.

In the spring of 1964 Fred L. Layton purchased the cave and the surrounding property. In the following year, while Layton and his employees were constructing steps and walkways through the cave in preparation for opening the cavern as a tourist attraction, human skeletal material was unearthed on a ledge adjoining the main passageway. Layton contacted the University of Alabama and Joseph Benthall, an archaeologist who was at that time working just north of Childersburg on the Coosa River, visited the cave and excavated one of two burial areas.

The area investigated by Benthall contained the remains of five individuals, four adults and an infant. The burials had been placed on the floor of the room and subsequently covered with puddled clay. Two projectile points were found in association with these burials. Both are medium triangular points conforming to the type description of the Copena Triangular variety (Cambron and Hulse 1964:A-20a). The method of burial preparation, and the presence of the two medium triangular projectile points, indicated to Benthall that these were the remains of individuals who had participated in the Copena burial system.

However, the question still remained, what were Copena burials doing so far south of the Tennessee Valley? This author believes that now, with a certain amount of speculation, the answer may be forthcoming. It appears that the keys to this archaeological puzzle had already appeared in print at the time the Kymulga Cave burials were discovered.

During the 1959 Southeastern Archaeological Conference held at Chapel Hill, North Carolina, Lewis Larsen presented a paper on Middle Woodland Complexes in northern Georgia and adjacent areas (Larsen 1959). In this report Larsen defined the Greenville Complex, a cultural manifestation thought to cover a large geographical area encompassing northwestern Georgia, portions of northern and central Alabama and eastern Tennessee. In a discussion of components which he believed to belong to this cultural unit,

Larsen described the following site:

The first (manifestation) is centered in Talladega County, Alabama, along Talladega and Tallaseehatchee Creeks. One site (1-Ta-9) from which we have an excellent surface collection is also a single component site. Here we have two limestone tempered pottery types comprising over 98 percent of the total sherd count. They are Mulberry Creek Plain (74 percent) and Wright Check Stamped (25 percent). Associated with these sherds were 49 projectile points of which 40, or 82 percent, of the total can be classified as the Greenville point type. Other artifacts included the Greenstone celt with a tapering poll and greenstone hoes (Larsen 1959:55).

The cultural material collected at this site, the plain and carved-paddle stamped limestone tempered ceramics, the medium triangular projectile points, and the greenstone celts and digging implements, are characteristic of Copena habitation sites in the Tennessee Valley (Webb and DeJarnette 1942:173-178; Faulkner and Graham 1966; Walthall 1972a;1972b). These data suggest a correlation between this Copena-like habitation site and the Copena-like burials recovered from nearby Kymulga Cave.

Although subsequent intensive surveys have been conducted along the Coosa River between Talladega Creek and the Tennessee Valley no other village sites have been found in this intermediate area which produced similar ceramic and lithic assemblages (DeJarnette and others, n.d.).

What then is the reason for this single component habitation site, and a burial cave, containing Copena-like cultural materials and burials, in an area so far south of the Copena heartland in the Tennessee Valley region of

northern Alabama?

The following hypothesis is offered in reply to this question. It is suggested here that this habitation site was in fact a village occupied during the Middle Woodland period by Copena peoples who buried their dead in Kymulga Cave. It is further suggested that the reasons for the occupation of 1 Ta 9 lie both in the nature of the Copena burial system and in the natural resources contained in the Talladega Mountain area just east of the two sites in question.

The Copena mortuary tradition was centered around two basic elements, the ritual burial of the dead and the procurement of exotic artifacts to be placed with the dead. In order to obtain the required burial paraphernalia trade routes were established during the Middle Woodland period between the Tennessee Valley region of northern Alabama and Hopewellian complexes in the Midwest and Southeast. Exotic, or non-local artifacts found in burial association in Copena mounds include those made from Great Lakes copper, galena possibly from the Joplin, Missouri area, Gulf Coast marine shell, mica from the Appalachian region, and steatite and greenstone thought to come from the Hillabee schist formation in the central Alabama crystalline area (Jones 1939: 16-18).

Two of the most common materials utilized in the Copena burial system were steatite and greenstone. Unlike contemporary Hopewellian peoples who made elaborate platform

pipes the Copena adherents favored a large, elbow variety made from soapstone. Polled celts and digging implements were also frequently recovered from Copena mortuary structures. The greenstone used to make these two types of implements is a chlorite schist, green to gray in color and usually fine grained (Jones 1939:16). Walter B. Jones, former Alabama State Geologist, has noted the similarity between the Hillabee greenstone and the greenstone used to make Copena artifacts and believes that there is little doubt that the geological source of the raw material used in the manufacturing of these implements was the Hillabee schist formation (Jones 1939:16-17).

Likewise, steatite, or soapstone, is also abundantly available in the east-central Alabama region encompassing Chilton, Tallapoosa, Chambers, Coosa, Clay and Talladega Counties (Jones 1939:17; Mosley 1958:9). Numerous steatite quarries have been reported in this area which were utilized during the prehistoric era. Jones, commenting on the use of steatite in prehistoric times, states that:

Fragments of vessels made of this material are widespread, though seldom abundant, in the Tennessee Valley. In addition to its use in the manufacture of culinary vessels, such as pots and bowls, the latter up to 18 inches in diameter, the aborigines also used soapstone extensively for pipes. The soft and tough nature of the material made it very well adapted for the latter purpose, as is well proven by the size and elaborate design of some of the pipes which have been found (Jones 1939:17).

The common use of soapstone for the manufacturing of vessels during the Late Archaic and Early Woodland periods

in the Tennessee Valley and for making pipes during the Middle Woodland led Jones to make the following observation:

... it is apparent that the objects were at least 'roughed out' at the quarries, and either finished there or later at the villages. There is no evidence available to us whether the (Tennessee) Valley tribes went to the quarries by land or water. The relative abundance of the material in the Valley would make it obvious that trade alone could scarcely account for all of it. The Valley peoples must have both known of and visited the quarries of the Tallapoosa River area (Jones 1939:18).

In an article on the use of steatite by aborigines during prehistoric times, S. A. Mosley figured a map showing the limits of the crystalline area and the known steatite quarries in the east-central Alabama region (Mosley 1958:13). One of these soapstone formations is within an hour's walk of Kymulga Cave and a second could be reached by foot in a single day. The Hillabee schist deposit is likewise only an hour walk to the east of the cave.

In 1955 a seminar was held to discuss and delineate the archaeological classification of culture contact situations. At this meeting two types of intrusive elements were defined, "site units" and "trait units." The distinction between these two types of intrusive elements was stated in the following terms:

A site unit is a site, or an occupational level in a site, which is sufficiently homogeneous to be regarded as representing the culture of a single place at a single time... A trait unit is an object modified or transported by human agency, a stylistic or technological feature or complex, or a characteristic archaeological association...

In ethnological terms, a mission station, garrison, or colony established by the carriers of one culture in the territory of another would leave remains classified as an intrusive site-unit, while diffused traits or traded objects would appear archaeologically as intrusive trait units (Wauchope, ed. 1956:7-8).

Although Rouse (1958) has cogently demonstrated that prehistoric migrations are difficult, or even impossible in some cases, to prove, the data presented here do suggest that the village site described by Larsen (1 Ta 9) was an intrusive site unit in the east-central Alabama region. The factors supporting this conclusion can be summarized as follows:

1. Intensive archaeological investigations have been conducted in the adjacent areas both to the north and south of 1 Ta 9. No other site has been reported in these areas which has yielded a similar combination of cultural traits. Although the Coosa Valley area to the north was occupied by Woodland peoples who made Mulberry Creek Plain, and later, Flint River Brushed limestone tempered pottery, the absence of carved-paddle stamped ceramics and exotic materials on these sites indicates that these peoples did not actively participate in the Copena, or Hopewellian, sphere of interaction. Investigations of sites to the south of 1 Ta 9 have revealed Middle Woodland ceramic complexes associated with Gulf Tradition sand and clay tempered wares. Thus based on ceramic studies alone the pottery complex collected from 1 Ta 9 appears to be an intrusive element into the east-central Alabama region.

2. The numerous steatite vessels used by Tennessee Valley peoples during the Late Archaic and Early Woodland periods suggest that the route to the east-central Alabama crystal-line region was well known prior to Copena times. The recovery of diagnostic Copena artifacts from a cave in Bartow County, Georgia near the headwaters of the Coosa River further suggest that this waterway was utilized as a major trade route during the Middle Woodland period (Kelly 1964).

3. The homogeneity of the cultural material recovered from 1 Ta 9 indicates that this site was occupied for a limited time by a single cultural unit. Typical Middle Woodland sites in the Tennessee Valley characteristically yield plain finish ware as well as a number of carved-paddle stamped varieties. The presence of plain ware and only one type of carved-paddle stamped ceramics at 1 Ta 9 further substantiates an occupation of limited duration. The small number of burials found in Kymulga Cave also supports the idea of a small population living at 1 Ta 9 for a single season, or at most, only a few seasons.

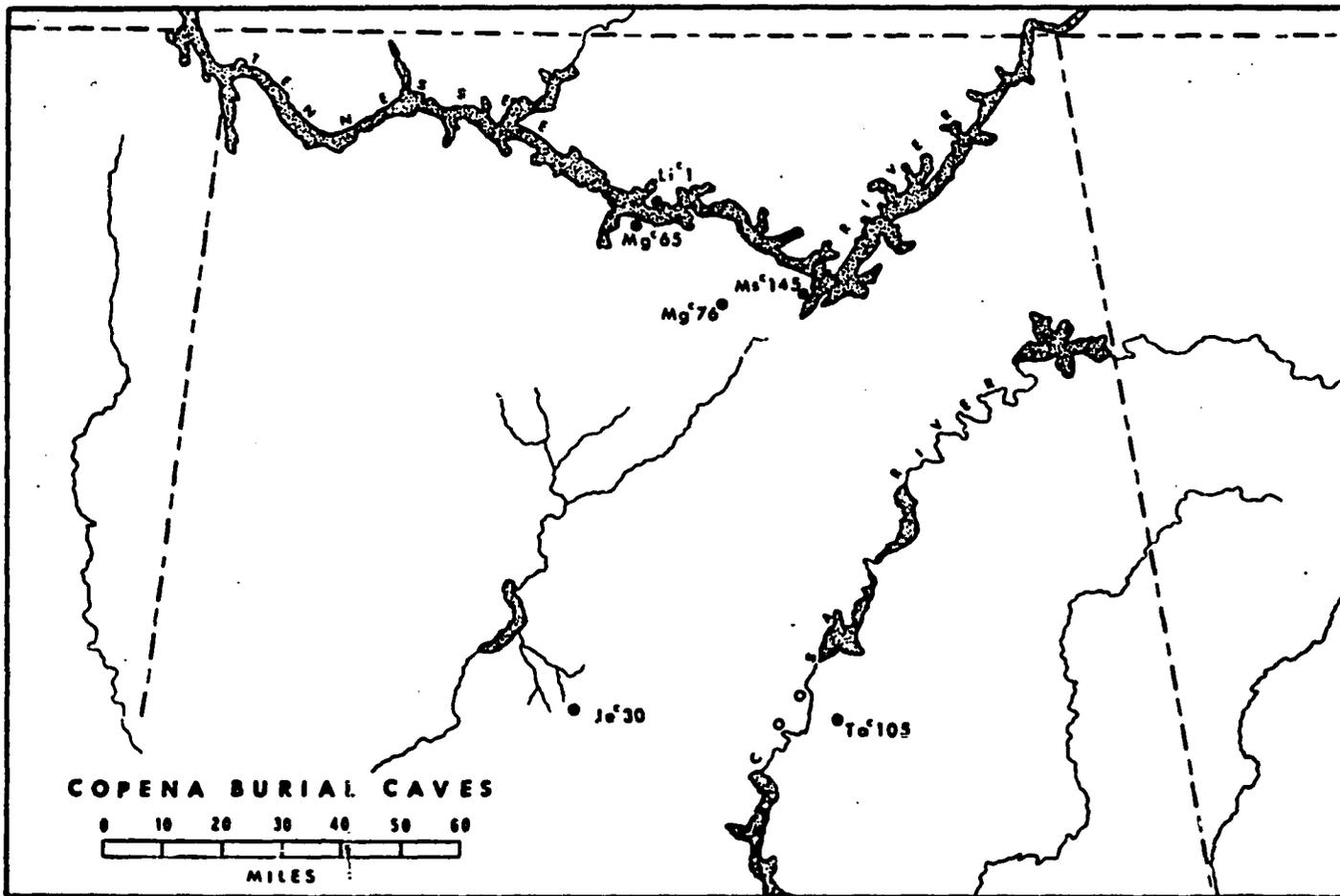
The data presented in this discussion strongly support the hypothesis that 1 Ta 9 was occupied by displaced Tennessee Valley Middle Woodland peoples participating in the Copena burial system. If this was indeed the case, then this village site could have functioned as a base camp during a procurement expedition for greenstone and steatite to be used in the manufacturing of implements utilized in the mortuary system. It is possible that the

occupants of this site actually quarried the raw material themselves or perhaps obtained these minerals through barter with the local populace. Contact between the local east-central Alabama cultures and the Copena peoples has been substantiated by reports of the recovery of a typical Copena reel-shaped gorget and a large steatite elbow pipe from Coosa Valley sites just south of 1 Ta 9 in Coosa County (Moore 1915:245-246; Nielsen 1972: Personal Communication).

Insight into the nature of the Copena economic procurement system has also been recovered from the mound structures themselves. Besides numerous finished greenstone digging implements found in burial association and in the mound fill, several large, unfinished quarry blanks have also been recovered. These specimens suggest that these implements were roughed out at the quarry site and transported in an unfinished state to Tennessee Valley village sites where they were then retouched to be used in the construction of the burial mounds. The presence of relatively large numbers of greenstone chips at several Copena villages may represent the waste materials from the final manufacturing stages of these digging implements. While there is evidence to support the local manufacture of this artifact class the absence of other, more rare, exotic materials at the village sites suggest that some artifacts were traded to the Copena peoples in a finished state. This is especially true of artifacts made from copper which had to be transported long

distances. While copper ornaments are frequently found in the mound structures there is a conspicuous absence of copper fragments or uncompleted copper artifacts at the village sites. Future, more intensive, studies of Copena mortuary goods may yield a more complete picture of the nature of the Hopewellian sphere of interaction. The data presented in this discussion do, however, clearly indicate that the Copena trade network was a complex, highly sophisticated, economic procurement system.

**Map 11. Copena Burial Caves**



## 7. SUMMARY

Prehistoric burial caves have long been known to exist in the lime-stone-based highland area of the Mid-South. Local folklore contains many stories concerning these caves but only a few occasions have sites of this nature been subjected to scientific examination. This lack of adequate investigation and reporting has greatly impaired any overall interpretation of the cultural significance of this type of mortuary unit. For every burial cave which has been properly investigated and reported countless others have been vandalized and looted to such an extent that they are no longer of scientific value. This situation is extremely unfortunate, for every case of careless vandalism which destroys an archaeological site robs not only science, but the present and future citizens of the area of important prehistoric resources, and leaves an irrevocable gap in our knowledge of man's past.

Utilizing the data currently available concerning this type of mortuary unit, we can first define a burial cave as a cave or a segregated portion of a cave spacially removed from contemporary living areas, and used exclusively for funerary purposes. The information gathered to date on this type of mortuary site in the Mid-South indicates that sites of this nature were most commonly utilized during the Middle Woodland period by Copena and related cultures. There are, however, a small number of sites that have been reported

in the area that conform to the above definition which can be dated to earlier or later cultural periods.

One such cave is Saltpeter Cave in Bedford County, Tennessee. The burials recovered from this cave date to the Late Archaic or Early Woodland period and were found in a small diverticulum leading from a large entrance room which had served as a habitation area (Owens 1972:190-195). The majority of these interments were apparently placed into shallow graves in a flexed position. The artifacts found in association with the osteological material were of two functional types, utilitarian and ornamental. Projectile points, atlatl weights and bone tools can be included in the first artifact class and the numerous shell beads and pendants found with the burials can be placed into the latter class.

Two additional burial caves, one in eastern Tennessee and one in North-central Alabama, have been reported which can be associated with Late Woodland manifestations. The Tennessee site, the Ausmus burial cave, located in Claiborne County, was excavated during the Norris Basin archaeological survey (Webb 1938:179-180). The remains of approximately twenty adults and children had been thrown or carelessly placed into this small cavern. The only artifacts found in the burial area were two small stone discoidals, a bone pin, and several shell beads. A similar cave ossuary was recently investigated by the University of Alabama in Jefferson County, Alabama. This

site, Pinson Cave (1 Je 20), contained the remains of over 90 individuals whose bodies had been thrown down an opening in the cave roof, or in only a few instances, placed on natural shelves in the cave interior (Oakley 1971). The cultural material recovered from the burial area indicated that this site was utilized during the Late Woodland period. Support for this cultural placement was obtained when a charcoal sample was submitted for radiocarbon analysis. This specimen, when tested, produced a date of A.D. 1040 (GAL-3420:  $910 \pm 80$  B.P.) (Oakley: Personal Communication). Like Ausmus cave, only a few artifacts were recovered from the burial chamber at Pinson Cave. Again, these artifacts can be placed into two functional classes, utilitarian (projectile points, stone tools and bone implements) and ornamental (shell beads and pendants).

The Copena burial caves reported in this paper present a very different situation when compared to these three funerary sites dating to precedent or succeeding periods. Most outstanding perhaps is the elaborate amount of preparation and care expended upon the majority of these burials, reflecting the overall increase in the importance of mortuary activities in the Middle Woodland cultural milieu. Another important characteristic of these Copena burials is the presence, and relative importance, of a third artifact class used as burial furniture. These objects, which can be termed socio-technic artifacts, were apparently not strictly utilitarian nor ornamental but served to differentiate

social rank or status. Common examples of this category of artifacts in other societies are a king's crown, a warrior's baton, a gentlemen's walking cane, etc. The copper artifacts, galena nodules, elbow pipes, shell cups, greenstone celts, etc. appear to have served similar functions in the Copena social hierarchy. The following statement concerning the utilization of this class of artifacts appears to be applicable to Copena as well as the cultural manifestations mentioned: "The presence of copper tools of essentially nonutilitarian form within such complexes as Adena, Hopewell, and Mississippian are most certainly explicable in terms of their socio-technic functions within much more complex social systems. Within the latter societies status grading was not purely on an egalitarian basis, and the non-utilitarian copper forms of status symbols would be formally commensurate with the ideological rationalizations for the various ascriptive status systems"(Binford 1962:221-222).

The list of selected traits presented in Table 45 has been prepared to facilitate comparison with the extensive trait lists constructed for the Copena burial mounds (Webb and Wilder 1951:274-275). From this compilation it is apparent that the majority of the artifacts associated with the cave burials, and the methods of burial preparation, are distinctive when compared to other prehistoric cultural manifestations in the Mid-South with the exception of the Copena burial mound complex, in which exact counterparts are found in almost every case. The only exceptions to

TABLE 45: SELECTED COPENA BURIAL CAVE TRAITS

TRAITS	Mg <sup>C</sup> 145	Mg <sup>C</sup> 65	Je <sup>C</sup> 30	Ta <sup>C</sup> 105	Mg <sup>C</sup> 76	Li <sup>C</sup> 1
Copper:	X*	X	X		X	X
reel	3		1			2
celt			1			1
beads	105		72		4	50
earspools	1					
Marine Shell:	X	X	X		X	X
Conch shell cups	6	4	10		3	
columella beads	16	X	20			
other beads	49	X	400			50
Projectile points:	X	X	X	X	X	X
Medium Triangular	10		2	2	2	1
Stemmed	3	1	3			
Other:						
Mica		X				
Galena	X		X			
Pearl beads	1	2	1			
Platform pipe		1				
Siltstone Cone					1	
Stone beads	3				1	
Burial Traits:						
Puddled Clay	X	X	X	X		
Fabric/matting		X	X			
Extended Burials		X	X	X		
Cremation	X		X			

\* Denotes presence

this observation are several types of artifacts not previously reported from the Copena mounds but which have been reported in contemporary burial traditions. These include the platform pipe from Cave Spring, the siltstone cup from Ed Smith Cave and the freshwater pearl beads from the Hampton, Cave Springs and McCalla sites.

The ethnobotanical remains reported from Cave Springs also add new insight to the method of burial preparation practiced by the Copena adherents. Preservation of bone and other perishable materials has proven to be extremely poor in the Copena mounds. Only in a few cases where textiles have come in contact with copper have such materials been preserved, and then in only fragmentary form. However, the burials in Cave Springs were preserved to the extent that the loosely woven inner bindings or garments, and the outer mats wrapped around the burials were still clearly recognizable. The preserved botanical materials recovered from the Wright Mound (Lu<sup>0</sup>63) indicate that the dead were also at times prepared in such a manner before being placed into this type of mortuary unit. Similar fragments of loosely woven coarse cloth, rope bindings, and matting have been reported in association with a burial in a small cave in Grainger County, Tennessee, suggesting that this method of preparing the corpse of inhumation was perhaps commonly practiced by other Woodland peoples as well (Polhemus n.d.:98).

It has also been mentioned in this report that a

complex of burial caves exists, or existed, in northwestern Georgia in and around Bartow County. Unfortunately little information is available concerning these sites, except that in one case, at Pine Log Cave, Copena-like artifacts, including copper reels, copper beads and Copena projectile points, were recovered (Kelly 1964:vii). According to A. R. Kelly some 30 to 40 of these caves have been found in the area but in each case treasure seekers or vandals had previously looted them, leaving at times only tantalizing fragments of human bone. It cannot presently be determined, with the limited amount of data available, whether or not this Georgia burial cave complex was the result of a migration of Copena peoples out of the Tennessee Valley or if strong trade relations with contemporary peoples produced this related subterranean burial manifestation. This latter hypothesis seems to be the more viable at present.

In conclusion, the following observations can be made:

1. The burial caves reported here appear to be related to the Copena burial system and, from the estimates of the number of individuals interred within them, seem to have played a significant role in this mortuary tradition.
2. Although an internal chronology has not yet been delineated for either the mound complex or the burial cave complex the similarity of burial furniture and burial preparation in each suggest that they were contemporaneously utilized. As reported in the previous subsection, radio-

carbon samples have recently been tested from two Copena burial mounds located in close proximity to the four Tennessee Valley burial caves reported here. A sample of charred bark from one of these burial structures, the Leeman mound, was tested and produced a date of A.D. 375 (UGa 399-1575 $\pm$ 75 B.P.) (Walthall 1972b). Within a two mile radius of this mound are Cave Springs, Rockhouse Spring Cave, and several Middle Woodland village sites including Mg<sup>V</sup>7, a habitation site found during the Wheeler Basin archaeological survey (Webb 1939:102 and Plate 113a). Likewise, a sample of charred bark was tested from the Ross Mound, located in Marshall County, Alabama near Hampton Cave and only a few miles to the east of Ed Smith Cave. This sample produced a date of A.D. 320 (UGa 400-1630 $\pm$ 65B.P.) (Walthall 1972b).

3. In terms of site utilization there appear to be two major possibilities concerning the function of these burial caves. First, that these caves were used as temporary places of storage until enough burials were accumulated to warrant the construction of a mound. Secondly, that they served as permanent repositories for the dead. The information available from the six Alabama burial caves tends to support the latter hypothesis. The burials found in each of these caves appear to have been prepared for permanent interment. The use of puddled clay to cover the burials and, in the majority of cases, the almost inaccessible location of the burial areas, indicate that the caves were to serve, like the

mounds, as the final resting place of the dead.

4. Several observations can be made concerning the spacial distribution of the burial caves reported in this subsection. First, the burial caves located in the Tennessee Valley proper are situated in the western portion of the Copena region. All four are located within easy walking distance of Copena mounds and known Middle Woodland village sites. Distributional maps of the location of natural caverns in Alabama reveal that caves are more numerous in this portion of the state than in any other area. The presence of burned cane scattered about on the floors of the interior passageways deep inside Cave Springs suggests that the prehistoric inhabitants of this area explored these caves utilizing bundled cane torches as a light source. The data presently available also indicate that burial caves were utilized over a greater geographical area than the burial mounds, which are confined to a limited area of the Tennessee Valley proper.

It has been suggested in this paper that the four Tennessee Valley caves were utilized as burial places by Middle Woodland Copena peoples as alternatives to burial mounds. Likewise, it has been hypothesized that the Kymulga Cave burials were also made by Tennessee Valley peoples during a visit of short duration to the crystalline area of Alabama. On the other hand, it appears that Jefferson County site, McCalla Cave, and the Georgia burial caves were utilized by local people participating in the Copena sphere of interaction.

### C. HABITATION SITES: SETTLEMENT AND SUBSISTENCE

In the first section of this present study two major problems concerning the interpretation of the Copena manifestation were delineated. The first concerned the temporal placement of the Copena burial complex and the second centered around its cultural relationships. This latter problem, the cultural position of this mortuary tradition, will be discussed in this subsection.

Recent investigators have concluded that the Copena burial tradition had its genesis in the Hopewellian Sphere of Interaction; that is, its development was the result of diffusion through trade with Hopewellian centers in the Middle West and in other areas of the Southeast (Faulkner 1970; Walthall 1972b). While there has been considerable controversy concerning the Hopewell-Copena relationship, studies of the temporal position and material cultural of each, and of the methods of mound construction and burial preparation exhibited in both traditions, leave little doubt that Copena is a local regional expression of the Hopewell phenomenon.

While this pan-regional mortuary tradition has received much attention in the past fifty years, only recently have intensive studies been initiated into the economic base and settlement patterns of the various Hopewell-related complexes. In other words, a large amount of time has been expended on the investigation of the ceremonial or ritual

aspect of this phenomenon and relatively little time has been spent on the secular. It was not until 1965 that a Ohio Hopewell village (spacially removed from a ceremonial center) was reported (Prufer 1965) and only in the last ten years have Illinois Hopewell villages been systematically investigated (Struever 1965;1968). Likewise, little effort was expended during the T.V.A.-W.P.A. archaeological survey in the Middle Tennessee Valley in locating and excavating village sites possibly related to the Copena burial mounds.

Only one habitation site, the Wright Village (LuV65), was investigated during this time with the express purpose of trying to shed light on the builders of the mound structures. Even though the cultural material recovered from this village site compared favorably with artifacts found in the nearby Copena mounds, a definite association between these two units was not forthcoming in the subsequent basin reports (Webb and DeJarnette 1942; Webb and Wilder 1951). Griffin, utilizing the data reported in these T.V.A. survey volumes, took the initiative: "... I am strongly inclined to view this complex as found at the Wright Village site as Copena. This conclusion has a corollary, namely, that the similar limestone tempered complex of a high proportion of Mulberry Creek Plain, and Wright Check Stamped, with a small proportion of Long Branch Fabric Marked, Bluff Creek Simple Stamped, and Pickwick Complicated Stamped when found at other sites and shell mounds will also belong to the Copena culture group and time period"

(Griffin 1945:232).

Griffin's conclusions concerning the relationship between the limestone tempered pottery complex found at the Wright Village and the Copena mounds were based upon a relative chronology conceived during the northern Alabama basin surveys of the 1930's. This relative chronology was constructed on the basis of ceramic seriation. Table 46 represents an updated version of this relative ceramic chronology. In this model the Woodland period is divided into three units, Early, Middle and Late. The ceramic temper groups and major pottery types are listed in the chronological order derived from information obtained during the controlled T.V.A. survey excavations (Griffin 1939; Haag 1942; Heimlich 1952). More recent excavations, and the data presented in the second section of this dissertation, have confirmed the validity of this sequence (DeJarnette and others 1962; Faulkner and Graham 1966b). The absolute dates listed in the far right column of Table 46 are derived from relative determinations based upon radiocarbon dates on similar ceramic types in other areas of the Southeast and upon directly associated charcoal samples tested by the radiocarbon method. These latter absolute determinations are more fully documented in Table 47.

Griffin's statement concerning the cultural relationship between the Wright Village and the Copena mounds was based upon the following observations:

- 1) One of the nearby Copena mounds, Lu063, was built

over a midden deposit containing Mulberry Creek Plain and Wright Check Stamped sherds. No other types of pottery were found under, or in, the fill of this structure. This combination of ceramic types is typical of the early stages of the Middle Woodland period before the introduction of simple and complicated stamping. Following the Law of Superposition this stratigraphic relationship implies that Lu063 was built after the initial development of the local Middle Woodland tradition. Likewise, the Wright Village was inhabited after this early Middle Woodland phase but before the rise in popularity of the limestone tempered brushed ceramics and later clay-grit ware which mark the beginning of the Late Woodland period in the area (Table 46).

2) The lithic sample recovered during the excavation of the Wright Village contained artifact types similar to specimens found in the Copena mounds in burial association. These include the Copena and Copena Triangular projectile point types, and greenstone polished celts and digging implements. At the time of Griffin's study no other habitation site had been reported from the Middle Tennessee Valley which shared such a large number of artifact types with the mound complex.

The information recovered from the burial mounds reported in this present study support Griffin's conclusions. Limestone tempered carved-paddle stamped ceramics were recovered from the fill of several of these mounds. Based upon the relative chronology presented in Table 46

TABLE 46. NORTHERN ALABAMA CERAMIC TYPES AND CHRONOLOGY

PERIOD	PHASE	CERAMIC TEMPER	MAJOR CERAMIC TYPES	DATES
Early Woodland	Early	Fiber	Wheeler Plain Wheeler Simple Stamped Wheeler Dentate Stamped Wheeler Punctate	800 (?)
	Middle	Sand	O'Neal Plain Alexander Pinched Alexander Incised Benson Fabric Marked	600 (?)
	Late	Limestone	Long Branch Fabric Marked Mulberry Creek Plain	340
				B.C. A.D.
Middle Woodland	Early		Mulberry Creek Plain Wright Check Stamped	322
	Middle		Bluff Creek Simple Stamped Pickwick Complicated Stamped (Curvilinear)	
	Late		Flint River Cord Marked Pickwick Complicated Stamped (Angular)	410
Late Woodland		Clay-grit	Mulberry Creek Plain Flint River Brushed McKelvey Plain Mulberry Creek Cord Marked Wheeler Check Stamped	625 800 (?)

the chronologically latest ceramic type found inclusive within the fill of any Copena mortuary structure was recovered from La<sup>O</sup>48 reported in Section II. The earth used in the construction of this mound contained 3 Mulberry Creek Plain sherds, 1 Wright Check Stamped sherd and 4 Pickwick Complicated Stamped sherds bearing an angular Napier-like motif. These latter 4 sherds exhibit a stylistic design which appeared during the late phase of the local Middle Woodland sequence. This pottery type has been dated to the fifth century A.D. in the Middle Tennessee Valley (Table 46).

Based upon relative calculations alone, a good case can be made for the contemporaneity, and association, of the Wright Village and the Copena mortuary sites. The two other habitation sites reported in Section II (La<sup>V</sup>47 and Ma<sup>V</sup>33) compare favorably to the Wright Village and can likewise be associated with the burial complex. The Wright Village, which yielded the full array of Middle Woodland ceramic types, was apparently occupied throughout this period. However, the Fox Creek Village (La<sup>V</sup>47) and the Walling Village (Ma<sup>V</sup>33) occupations appear to have been of shorter duration. The Fox Creek ceramic complex contained a proportionately large number of Pickwick Complicated Stamped sherds with a curvilinear motif. This carved-paddle stamped motif appears to have attained greatest popularity during the middle phase of the local Middle Woodland sequence and suggests that this site was settled after the initial occupation of the Wright Village but was abandoned

before the introduction of limestone tempered angular complicated stamped, cord marked, or brushed finish wares. The Walling Village ceramic sample contained a high proportion of the later cord marked ware and a smaller percentage of check stamped sherds. The early fabric marked sherds and the later complicated stamped and brushed ceramics were entirely absent. This suggests that this habitation site was occupied for a relatively brief time during the latter phase of the local Middle Woodland period.

This type of archaeological inference, based upon relative chronologies, is useful but limited in scope. Until this present study this was the only means for placing the Copena complex into its proper cultural position in the local prehistoric sequence. However, the two radiocarbon dates obtained as a part of the research conducted by this author offer an opportunity for comparison with absolute dates derived from tests on charcoal samples associated with some of the pottery types discussed in the preceding paragraphs.

Ten radiocarbon dates are listed in Table 47. These determinations have been selected on the basis of two criteria. First, all of the samples were taken from sites located in the Tennessee Valley area and second, each of the dates conforms to the relative chronological sequence delineated in Table 46. Three other radiocarbon dates from sites in the same area have been rejected because they do not agree with either the established relative chronology or

with other absolute dates on carbon samples associated with similar ceramic types (Table 48).

Two dates are available on late Early Woodland components at sites in the Upper Gunterville Basin. Both date the appearance of the limestone tempered plain finish and fabric marked ceramics in this area to the first three centuries B.C.

Five determinations are listed for the Middle Woodland period. All of these dates fall within the first five centuries A.D. Recently a date of A.D. 322 was obtained on charcoal recovered from a pit at Daugherty's Cave in the Upper Tennessee Valley area (Benthall: Personal Communication). This feature contained Wright Check Stamped pottery sherds. This date supports the contemporaneity of this type of ware and the Copena mounds from which we have the two dates (A.D. 320 and 375) reported in this present study. The two dates on the Pickwick Complicated Stamped ware with an angular motif probably date the closing phase of the Middle Woodland period in the area. These dates, A.D. 410 and A.D. 450 suggest that this tradition came to an end around A.D. 500.

This approximate terminal date of A.D. 500 for the Middle Woodland period in the Tennessee Valley area is supported by a radiocarbon date on a Late Woodland Hamilton-like component at the Westmoreland-Barber site in the Upper Gunterville Basin. The carbon sample tested yielded a date of A.D. 625. This sample was recovered from a pit containing

TABLE 47. SELECTED RADIOCARBON DATES: TENNESSEE VALLEY AREA

PERIOD	RADIOCARBON DATES	SITE	ASSOCIATIONS/COMMENTS
Early Woodland	340 GX0574:2290 $\pm$ 150 B.P. (Faulkner and Graham 1966a)	Westmoreland-Barber Tennessee	Charcoal Sample from pit on habitation site in upper Guntersville Basin. Asso- ciated with Long Branch Fabric Marked Sherds.
	150 2100 $\pm$ 200 B.P. (Griffin 1972)	Russell Cave Alabama	Dates Late Early Woodland Ceramics (Long Branch Fabric Marked). Upper Guntersville Basin.
B.C. A.D.	320 UGa399:1630 $\pm$ 65 B.P. (Walthall 1972b)	Ross Mound (MS <sup>o</sup> 134) Alabama	Copena burial in Marshall County mound. Lower Guntersville Basin
Middle Woodland	322 FSU3:1628 $\pm$ 70 B.P. (Benthall:Personal Communication)	Daugherty's Cave Virginia	Charcoal Sample from pit containing Wright Check Stamped Ceramics. Lower Tennessee Valley, Russell County, Virginia.
	375 UGa400:1575-75 B.P. (Walthall 1972b)	Leeman Mound (Mg <sup>o</sup> 62) Alabama	Copena burial in Mogan County, Alabama. Upper Wheeler Basin area.

TABLE 47. Continued

PERIOD		RADIOCARBON DATES	SITES	ASSOCIATIONS/COMMENTS
Middle Woodland	410	UW26:1540-70 B.P. (Hartney 1962)	Peter Cave Tennessee	Charcoal from cultural layer containing high % Mulberry Creek Plain, Wright Check Stamped and Pickwick complicated Stamped. Franklin County.
	450	No information available (Faulkner 1967b)	Russell Cave Alabama	Dates Pickwick complicated Stamped ceramics. Upper Guntersville Basin.
Late Woodland	625	GX0573:1325-105 B.P. (Faulkner and Graham 1966a)	Westmoreland-Barber Tennessee	Charcoal from pit containing Flint River Brushed and Mulberry Creek Plain Sherds and Hamilton projectile points. Upper Guntersville Basin.
	1020	M730:930-150 B.P. (Crane and Griffin 1961)	Alford Tennessee	Hamilton burial in Rhea County mound. Upper Tennessee Valley
	1040	GAL3420:910-80 B.P. (Oakley: Personal Communication)	Pinson Cave Alabama	Sample dates Late Woodland burial deposit associated with Hamilton projectile points.

TABLE 48. TENNESSEE VALLEY AREA RADIOCARBON DATES REJECTED AS NOT  
IN AGREEMENT WITH ESTABLISHED CHRONOLOGY

PERIOD	RADIOCARBON DATES	SITES	ASSOCIATIONS/COMMENTS
Middle Woodland	335 GX0780:2285±110 B.P. (Butler: 1968b)	Brickyard Tennessee	Feature 21. Contained charcoal and limestone tempered plain, fabric marked and check stamped sherds. Too early.
B.C.			
A.D.	264 UW56:1628±60 B.P. (Hartney 1962)	Peter Cave Tennessee	Charcoal collected 24 inches below surface. Associated with limestone tempered plain, check stamped and complicated stamped (angular motif) sherds. Too early.
	850 GX0575:1100±155 B.P. (Faulkner and Graham 1966b)	Lay Tennessee	Feature 5. Contained charcoal and limestone tempered simple stamped sherds. Too late.

limestone tempered plain and brushed sherds which are diagnostic of the local Late Woodland period. Two other dates, A.D.1020 and A.D.1040, from Late Woodland sites in East Tennessee and North Central Alabama suggest that this tradition continued for several hundred years and was, in some areas, contemporaneous with the Mississippian cultural tradition.

Based upon both the relative chronological sequence discussed above, and the absolute dates listed in Table 47, the following cultural sequence can be outlined for the Middle Tennessee Valley Woodland traditions:

Early Woodland (ca. 800 B.C. - A.D.1) - This period begins with the introduction of fiber tempered ceramics into the area. The lithic assemblages found on sites dating to this period appear to vary little from the Late Archaic lithic tradition. The Early Woodland sites excavated in the Middle Tennessee Valley area are characterized by fiber and sand tempered ceramics, and in the later phase by limestone tempered plain and fabric impressed ware (Table 46).

Middle Woodland (ca. A.D.1 - A.D.500) - During this period there was a proliferation of pottery styles reflecting an increase in culture contact with areas adjacent to the Tennessee Valley region. In the late Early Woodland period only two types of ceramic ware were made, plain and fabric impressed. The emergence of the Middle Woodland tradition in the area is marked by the appearance of Wright Check Stamped pottery, and later simple stamped, complicated

stamped and cord marked limestone tempered ceramics. During this time a basically northern burial tradition was introduced into the area. This mortuary complex was integrated into the local cultural system, producing the Copena manifestation.

Late Woodland (ca. A.D.500 - A.D.1000) - The Late Woodland period is marked by the decline of the Middle Woodland exotic pottery styles and a return to only two pottery types, limestone tempered plain ware and roughened, brushed finish ware. The elaborate amount of care expended upon the dead, which was an integral part of the Middle Woodland cultural milieu, was discontinued in this subsequent period. Burial mounds were not constructed in the area during this time and the dead were placed into small graves dug on or near the habitation site without mortuary offerings.

Although the above tripartite outline is brief, it is nevertheless useful. Utilizing these summaries as a base, sites, or components of sites, previously investigated in the Middle Tennessee Valley area can be assigned to each of these three Woodland periods. Once this has been done, settlement pattern studies can be made to help delineate subsistence activities and culture change.

The excavations conducted at the large shell mound sites on the banks of the Tennessee River in northwestern Alabama during the 1930's revealed evidence of extensive Late Archaic and Early Woodland occupations (Webb 1939; Webb and DeJarnette 1942). Large amounts of the Early Wood-

land fiber, sand, and limestone tempered ceramics were recovered from these sites (Griffin 1939; Haag 1942). However, the Middle Woodland carved-paddle stamped ceramics were found to be proportionately rare on these sites suggesting that the river banks in this area were not extensively utilized during this subsequent period. Two sites located back from the river in the interior valley, MgV64 and MsV147, reported in Section II, and a third site (MgV74) recently reported by Nielsen (1972) were also extensively utilized during the latter phase of the Early Woodland period, but like the shell mounds, these localities were not occupied as base camps during the Middle Woodland. During this latter period each of these three sites were visited but were used only for mortuary purposes. Several rock shelters have been investigated in the highland areas bordering the Middle Tennessee Valley (DeJarnette and others 1962; Clayton 1965;1967). These sites were likewise extensively occupied during the Early Woodland period but infrequently visited by Middle Woodland peoples.

Utilizing the vast amount of data which has been gathered over the past forty years on the Woodland occupations of the Middle Tennessee Valley a diachronic outline of the settlement-subsistence patterns of these peoples can be tentatively formulated. Recent studies of the fauna remains recovered from the Late Archaic-Early Woodland levels at the shell mound sites suggest that these localities were occupied during this time in the spring and

summer months (Curren: Personal Communication). The extensive dimensions and volume of these shell deposits indicate that fairly stable, Maximum Local Aggregates resided on these site loci during these seasons. The term Maximum Local Aggregate, in the context of this present discussion, can be defined as "the maximum number of people who together occupy a single settlement at some time during a total settlement cycle (Struever 1968:297)." The gathering of shell fish and floodplain flora appear to have been major economic endeavors during the occupation of these river bank sites. A large percentage of the mammalian fauna remains recovered from these shell deposits belong to deer, beaver and raccoon (Curren 1973), suggesting a hunting pattern largely confined to the riverine area. It is also likely that during the Early Woodland period simple horticulture, based upon indigenous cultigens, was practiced in the surrounding floodplain area during the growing seasons, which correspond to the seasonal settlement of these riverine orientated sites.

The three interior valley Early Woodland sites mentioned above (Mg<sup>V</sup>64, Ms<sup>V</sup>147, and Mg<sup>V</sup>74) were, before the construction of the Wheeler and Guntersville dams, located well back from the river. The spacial distribution of the late Early Woodland ceramics and lithic materials is fairly extensive at these sites suggesting that, while some dispersal of the maximum social units which occupied the shell mounds had possibly occurred, a fairly large social aggre-

gate, perhaps an extended family, occupied each of these localities. These sites are characterized by proportionately large numbers of plant processing implements (hammerstones, grinding stones and anvils) and scattered midden pits, firehearths and basin-shaped roasting pits. Although seasonality data is limited, the information available suggests that these sites were occupied during the early fall when the surrounding wet oak-hickory forest biome was at a maximum productive level.

The excavation of bluff shelter sites situated in the highland areas bordering the valley reveal a third Early Woodland settlement type. These shelters are typically small and the living areas within them restricted. Of the nine rock shelters recently investigated on Sand Mountain in northeastern Alabama the maximum amount of floor space within the drip line to backwall areas ranged from 56 to 210 square meters (Clayton 1965;1967). The average maximum floor area in these shelters was approximately 130 square meters. However, at the time these sites were excavated the maximum floor to ceiling height ranged from only 1 to 2 meters. Although the interior height of these shelters was probably greater in aboriginal times the cultural and natural deposits in them were found to extend not more than a meter and a half in depth before bedrock was reached. This low ceiling factor would have diminished the usable floor space within these shelters by at least 40 percent. The vast majority of these shelters are lo-

cated in the narrow stream valleys which cut through the limestone and sandstone bedrock underlying the highland areas. The living areas outside these shelters, like the interior floors, were also restricted. The talus slopes extending from these shelters form a narrow belt only 6 to 20 meters wide between the overhang drip line and the streams below. Although larger bluff shelters exist in the Tennessee Valley (e.g. Stanfield-Worley) they are rare in comparison to these smaller natural formations.

The recent investigations of these highland shelters have revealed relatively deep Early Woodland cultural layers. These sites differ in two major respects from the interior valley, open-air sites discussed in the preceding paragraphs. First, the Early Woodland strata in these shelters are deeper and second, the spacial distribution of the occupational deposits is much more confined due to the physical nature of these shelters.

The number of plant processing implements reaches a maximum in the Late Archaic-Early Woodland strata at these sites (DeJarnette and others 1962; Clayton 1965;1967). Midden pits are likewise more numerous in these levels. This data indicates that the primary economic activity at these sites was the collecting and storage of the abundant natural plant foods available in these upland areas. Studies of the faunal remains from these Early Woodland occupational levels have revealed that deer remains constitute a high percentage of the total fauna sample,

indicating the use of this animal as a primary protein source. The nature of these Early Woodland bluff shelter cultural deposits and the restricted living areas at these sites indicate that they were frequently inhabited by small social units. This information suggests that a dispersal of the large social aggregates occupying the interior valley sites occurred in the late fall when nuts and seed foods became available for harvesting in the dry oak-hickory highland forest. It seems possible that the occupation of these rock shelters continued through the lean winter months until spring signaled a return to the river and the beginning of a new seasonal economic cycle.

Three habitation sites (LuV65, LaV47, and MaV33) exhibiting evidence of major Middle Woodland occupations have been discussed in Section II. To this small list of Middle Woodland villages may be added the Harris Site (Ms<sup>0</sup>80), a multi-component site excavated during the Gunterville Basin archaeological survey (Webb and Wilder 1951: 102-113). Unlike the three other habitation sites mentioned above, which are all located well back from the river, Ms<sup>0</sup>80 was situated on a natural levee of the west bank of the Tennessee River. However, the valley is quite narrow in this eastern region. The floodplain was relatively confined in the area of Ms<sup>0</sup>80 due to the proximity of southern extensions of the Cumberland Plateau, which rise steeply a mile to the west of the river. The spacial position of the Harris Site in the valley area is therefore

similar to the spacial positions occupied by the three other Middle Woodland villages, which are located in portions of the valley with much more extensive floodplain areas. All four of these sites are situated in the valley proper near the bordering highland areas.

The excavation of the Harris Site revealed two occupational levels. A shell midden layer 1.3 - 2.0 feet thick extended over the central portion of the site. The predominant ceramic types in this zone were the limestone tempered plain and brushed wares. A number of burial pits containing shell tempered pottery and a large number of post molds extended from this upper midden into the lower levels. This shell midden also contained many flat fire-burned areas, but no storage pits.

The lower occupational layer consisted of a dark sandy loam containing little or no shell. This stratum averaged 1.5 feet in thickness and was found to extend beyond the shell midden. The entire site covered an area 1200 feet north-south by 800 feet east-west. A much smaller amount of pottery was recovered from this lower cultural deposit. The major ceramic type recovered from this lower stratum was the limestone tempered Mulberry Creek Plain ware. Wright Check Stamped constituted the most common decorated type with smaller numbers of Bluff Creek Simple Stamped, Pickwick Complicated Stamped, Flint River Cord Marked and Long Branch Fabric Marked sherds also present. Some sixteen midden pits were found to originate from this

lower cultural deposit, extending into a lower, otherwise sterile stratum of yellow, river deposited sand.

The investigation of the Harris site revealed evidence that this locality was utilized during three cultural periods. All of the 82 burials excavated at this site had been placed into small pits extending through, or from, the upper shell midden. The majority of these interments appear to have been made during the Mississippian period while only a few can be associated with the Late Woodland occupation of the site.

There were no burials found in the excavated area which could be associated with the lower midden, which exhibited evidence of an earlier Middle Woodland occupation.

The cultural deposits at the Harris Site compare favorably with the upper levels of the Lay Site recently excavated in the Upper Gunter'sville Basin (Faulkner and Graham 1966b). This habitation site contained three cultural zones, a lower Late Archaic shell layer, a Middle Woodland dark humic midden and an upper Late Woodland shell deposit (Faulkner and Graham 1966b: 23-24).

The Middle Woodland stratum contained no shell. A large number of shallow midden pits extended from this layer into the lower Archaic shell deposit. The cultural material from this level included limestone plain and carved paddle stamped ceramics, a preponderance of medium triangular projectile points, and greenstone celts and celt fragments. Only four burials were discovered at this site which could

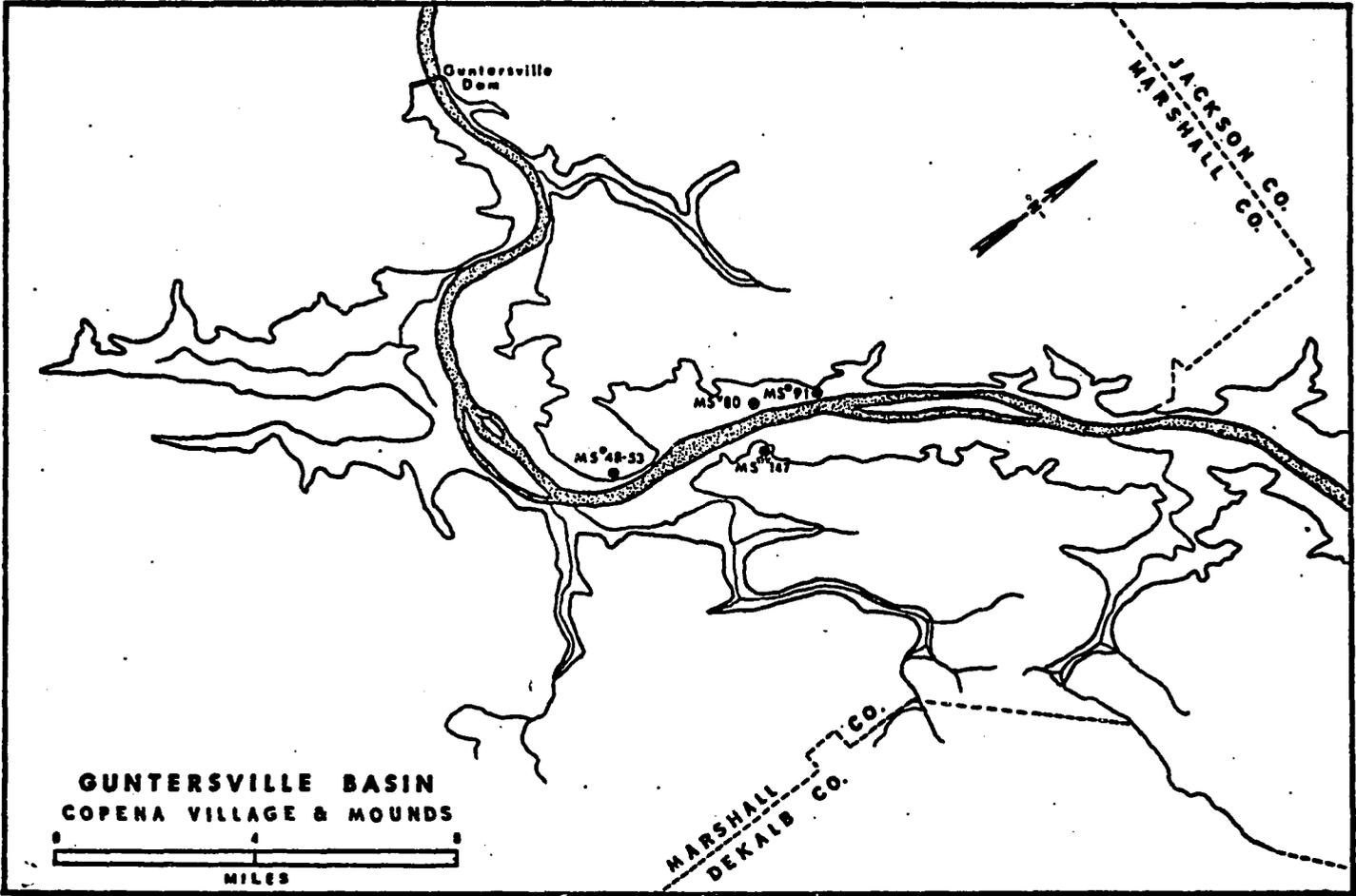
be associated with this Middle Woodland occupation. The upper Late Woodland shell deposit contained a large number of limestone tempered plain and brushed pottery sherds and small Hamilton projectile points.

The investigators of the Lay Site believe that the absence of shell in the Middle Woodland stratum indicates a change in economy from Late Archaic-Early Woodland times. Likewise, a second subsistence shift apparently occurred between the Middle Woodland and Late Woodland period when there was an apparent re-emphasis on shellfish collecting in this area (Faulkner and Graham 1966b 77-78). A similar subsistence change could be hypothesized for the Middle and Late Woodland occupations at the Harris Site.

The information collected from the Lay Site indicated that it was occupied during the Middle Woodland period by peoples culturally affiliated with the Copena manifestation. However, Copena mounds have not been found in the Upper Gunter'sville Basin and the majority of traits shared by the Lay Site and the Copena sites located downstream are largely of the domestic type. This suggests the contemporaneity of these villages but indicates that the Lay site was located on the fringe of the Copena territory, outside the limits of major Copena mortuary activities.

However, the Harris site was located downstream near several Copena mortuary structures (Map 12). This geographical position and the cultural material recovered from the Middle Woodland midden indicate that this locality

**Map 12. Guntersville Basin**



served as a habitation site for the Copena mound builders. Certain artifact classes found at the Harris site, which are absent at the Lay Site, are greenstone polished celts and digging implements, limestone tempered pottery pipe fragments, perforated and unperforated limestone tempered pottery discs, mica and graphite nodules. Similar artifact types have been recovered from the Copena villages and mounds reported in Section II. The presence of this diagnostic cultural material supports the conclusion that the Harris Site was once occupied by Copena peoples. Further supportative data for this observation is seen in the presence of Hopewellian-like rocker stamped limestone and clay tempered ceramic fragments recovered from the Harris Site. Three of these sherds were recovered from this site. One of these specimens also exhibits rows of hollow reed punctations. Out of over 500 archaeological sites excavated or recorded in the Middle Tennessee Valley only one other site has produced sherds of this type. This site is the Walling Village, reported in Section II, which has also been associated with the Copena burial tradition. Nineteen of these Harris Rocker Stamped sherds were recovered from this latter Middle Woodland site. Several of these specimens also exhibited rows of hollow reed punctations. The presence of these rare pottery sherds on these two sites suggests the contemporaneity of their Middle Woodland occupations and further strengthens their association with the Copena mortuary tradition.

Each of these four habitation sites share a similar material culture. They also share a similar spacial position within the Middle Tennessee Valley ecosystem. This geographical placement, on or near the valley edge in close proximity to the highland regions, does not appear to be random. Rather this site placement appears to be structured. Each of these sites represents a single functional settlement type, a multiple activity base camp, where a variety of general maintenance activities were carried out. The storage of vegetal foods appears to have been of economic significance at these habitation sites. Although seasonality data from these sites is scarce, the large number of storage facilities and post molds present at the majority of these site loci, and the small quantity of Middle Woodland artifacts on river edge sites or in the adjacent highland stream valleys, suggest that these were permanent villages occupied year round. The spacial position of these sites would have allowed exploitation of both the valley and floodplain, and highland ecological zones.

A structural comparison of the Early Woodland sites and settlement pattern with the Middle Woodland sites and settlement pattern delineated above reveals several differences in economic procurement activities and functional patterning between these two cultural systems.

The Early Woodland seasonal emphasis on shell fish collecting appears to have been of little importance in

Middle Woodland subsistence activities. Shell was significantly present in only one of the Middle Woodland components discussed in this study. Fresh water bi-valve remains were found in the midden fill and pits at the Wright Village in Lauderdale County. Although this site was situated well back from the river, this locality was still only about a mile from the extensive mussel beds in the shallow shoal waters of this portion of the valley. The major shell mounds are located in this section of the valley where shell fish are most plentiful. The Wright Village was apparently occupied for an extensive period, and though shell fish remains were present, the relatively small quantity of these remains in comparison to the extensive shell layers deposited on the shell mound sites, indicates that fresh water bivalves were a dietary supplement, not a major protein source, in the subsistence pattern of these later peoples.

It was also noted that during the Early Woodland period a number of semi-permanent camps were established in certain zones of the valley region. This type of seasonal movement is not reflected in the Middle Woodland settlement pattern delineated above. Rather it appears that during the Middle Woodland period certain localities were chosen as more permanent places of residence and seasonal movements of entire settlement populations appear to have been minimal at this time.

These data suggest a re-articulation of the local

economic system to the valley environment during the Early Woodland-Middle Woodland continuum. Information relative to this change in subsistence has been reported by Stuart Struever (1968) in his studies of Woodland subsistence-settlement patterns in the lower Illinois Valley region. Struever has noted a similar change in settlement patterns between the Early and Middle Woodland periods in the lower Illinois Valley. Faulkner has recently commented upon this analogous situation:

Stuart Struever (1964: 98-103) has suggested that there is a correlation between the location of Hopewellian complexes in the Riverine-Western Great Lakes area and the broad flood plains of the major rivers where annual floods created shallow backwaters and mud-flats ideal for the growing of seed plants such as Chenopodium and Amaranthus. Excavation of Middle Woodland sites in the lower Illinois Valley has also indicated that there was a shift in the subsistence-settlement system in Middle Woodland times, with a new subsistence base appearing called Intensive Harvest Collecting where selected high-yielding seed plants were extensively exploited and base settlements established on the edge of the flood plain where all harvestable natural foods were accessible (Struever 1968: 305-308).

Although the ecological situation during Middle Woodland times in the Tennessee Valley of northern Alabama has never been studied, the environment and settlement pattern may conform to the Illinois Valley model. In the Wheeler Basin the flood plain of the Tennessee was as much as six miles wide in some places (Webb 1939:13). The river was said to fluctuate as much as 50 feet and in some places it has been compared to coastal plain rivers with numerous swamps, sloughs, and oxbow lakes being found in the flood plain (Harper 1913:42). In Colbert County it was reported that the bottoms were subjected to annual flooding and 'each successive overflow brings fresh material from the uplands and deposits it on the surface (Smith and Waldrop 1911:565).' E. Lucy Braun

(1950:272) includes northern Alabama in the Oak-Pine Forest Region, although Harper (1913:42-43) felt the original floodplain forests were largely of the oak-hickory type. This would conform to the situation in the lower Illinois Valley where an oak-hickory forest was found on the upland edge of the floodplain (Struever 1968:291). This forest would have provided mast for large game animals and also an easily collected food for man. The Wright Village appears to be in the same ecozone as the base settlements in the southern Illinois Valley where both floodplain and valley-edge natural foods could be easily gathered (Faulkner 1970: 108-109).

The information presented in this present study suggests that the local northern Alabama Tennessee Valley Middle Woodland economy was based largely upon the intensive collecting of high yield natural plant foods and supplemented by ambush hunting of deer and other regional game animals. However, there is also a strong possibility that cultigens played a significant, though possibly minor, role in the Copena economic procurement system. There is increasing evidence supporting an indigenous Eastern North America agricultural complex, dating to Late Archaic-Early Woodland times, based upon goosefoot or lamb's quarter (Chenopodium sp.), pigweed (Amaranthus sp.), giant ragweed (Ambrosia trifida L.), sunflower (Helianthus annus L.) and marsh elder (Iva sp.) (Jones 1936; Struever 1962). However, the relative importance of these cultigens in the subsistence base of Eastern Middle Woodland cultures has not yet been quantified.

Recent investigations have also indicated that maize may have been of importance in certain Hopewellian economies. Maize has previously been recovered from Ohio Hopewell mortuary structures (Griffin 1960) and Prufer has recovered maize from the McGraw site, a Hopewell village in Ross County, Ohio, which has been dated by the radiocarbon method to the fifth century A.D. (Prufer 1965). Sears has also reported the presence of maize (pollen) at the Hopewell-related Fort Center Site in Southern Florida which dates to the first five centuries A.D. (Sears 1971). Although it has not yet been proven, there appears to be a strong possibility that the Hopewellian Sphere of Interaction was the vehicle for the initial diffusion of maize over the Eastern United States.

Maize has not been found at any Copena sites. Yet the presence of maize at contemporary Hopewell-related sites both to the north and south of the Tennessee Valley, and in view of the extensive trade networks connecting these three regions, it seems possible that maize may have been cultivated on a simple horticultural basis by Copena peoples. While the earlier indigenous cultigens did not apparently require intensive care (Many of these seed plants could be sown on mud flats and left until the harvest time), maize requires constant attention. Therefore a culture with a seasonal migratory economic procurement system would most likely be required to alter its seasonal scheduling system to fit the growing season of maize. However, if a perma-

ment base camp were established on a valley edge zone maize could be grown in the fertile bottom lands and would not conflict with the harvesting of nearby valley and highland natural foods. The location of the four Copena habitation sites discussed in this study would be ideal for both gathering and horticultural subsistence activities. Until further investigations (and proper retrieval methods) are conducted at Middle Woodland habitation sites in the Tennessee Valley the economic base of the Copena culture cannot be quantifiably delineated. Until such time, we can only rely upon analogy and in some cases, speculation.

However, one factor concerning the Copena economy seems clear. The Middle Woodland Copena subsistence base depended upon access to the Tennessee Valley flood plain ecosystem. The Copena area has already been delineated in the previous subsection. It was noted there that the Copena mounds and habitation sites were restricted to a limited, definable portion of the valley.

The first Copena mounds (going upstream) were located in southern Hardin County, Tennessee. Just downstream from this point, the river narrows and broad bottom lands are not again present until much further into the Lower Valley. Likewise, the last group of Copena mounds are found in the bottom lands in the Lower Gunterville Basin. Just upstream from these sites the valley narrows and high bluffs extend down to the river edge. From this data, it appears evident that the Copena heartland was

located in the areas of the Middle Tennessee Valley where broad bottom-lands were present.

Struever has discussed the development of the Middle Woodland tradition in the lower Illinois Valley and his statement appears to apply to the later Copena development as well as to Illinois Hopewell:

Archeological work in the major river valleys south of the western Great Lakes highlights a period of extensive cultural change during the final centuries before Christ. These events, indicating a shift to higher levels of cultural complexity, mark the advent of what has been described as Hopewell Culture...

The nature of the recognized culture change is threefold: (1) a rapid and marked increase in population; (2) development of complex ceremonial-mortuary activity reflecting increased status differentiation; and (3) an extension and intensification of 'interaction' between cultural groups scattered over much of eastern United States. This interaction involved movement of exotic raw materials (for example, obsidian) and selected artifact styles (for example, zoomorphic pipes) often between widely separated localities. Importantly, this synchronous emergence of style-sharing and raw material exchange over a wide area, of mortuary practices which reflect increasing status differentiation, and of rapid population expansion was confined to certain localities within the Illinois, Mississippi, and a few other major valleys within the Great Lakes-Riverine area. Contemporary cultural groups located outside these valleys apparently participated little or not at all in this interaction, and - more importantly - lack of evidence for both population increase and the distinctive Hopewellian mortuary forms suggests they remained on a lower level of complexity (cf. Struever 1965).

In short, the archaeological record for the Hopewellian manifestation during the Middle Woodland period suggests that

the three developments in the culture change were interrelated aspects of a single phenomenon largely restricted to a few river valleys... (Struever 1968:288).

Yet to be considered is why did the local Middle Tennessee Valley Woodland peoples begin to participate in the Hopewellian Sphere of Interaction, a participation which led to the development of the cultural manifestation we have named Copena? Unfortunately, there is not enough evidence, and possibly may never be enough evidence, to fully explain the genesis of this phenomenon. However, two factors discussed in this present study appear to have been of major importance in the emergence of this local Middle Woodland tradition.

First, from the data presently at hand it appears that economic change, or the potential for economic change, was a prime factor. The similarity between the lower Illinois Valley and the Middle Tennessee Valley environments has already been noted. There is also evidence to indicate that these Middle Woodland cultures were on a similar level of socio-economic complexity. There may have been certain social, political and economic prerequisites for the integration of the Hopewellian mortuary system into the local cultural system.

Second, the Middle Tennessee Valley area appears to have been located on at least two of the important north-south trade routes between the Mid-Western Hopewell centers and the southern centers in Mississippi, Louisiana, Georgia

and Florida.

Two major prehistoric trails passed through the Copena heartland (Myers 1928). The western route, the Natchez Trace, passed through northwestern Alabama. This trail connected the Nashville and southern Illinois-Ohio area with northeastern Mississippi and the Lower Mississippi Valley. The eastern trail, the Great South Trail, ran from Nashville to the Tennessee River at a point in Madison County, Alabama, and from there eastward to northwestern Georgia and the Coosa and Chattahoochee river systems.

An examination of the location of these trails as they passed through northern Alabama, and the spacial position of some of the Copena village sites discussed here indicate that these habitation sites were not randomly located in the edge area zone. The Wright Village and mounds are located on the Natchez Trace. Similarly, there are groups of Hopewell related burial mounds, including the Bynum and Pharr mound groups, located on this trace in nearby northeastern Mississippi. Likewise, the Walling Village and Mound (MaV33 and MaO49) are located near the point where the Great South Trail intersects the Tennessee River. The Harris Site, located in the Lower Gunterville Basin is also near the eastern route between Madison County and northwestern Georgia.

These correlations are intriguing. However, much more research is needed on the occurrence of Middle Hopewell-related sites along these major prehistoric arteries.

The information at hand does, however, suggest that these Copena Village sites were not accidentally located on these trails. Rather it appears that access to these inter-regional trade routes, and the exotic cultural materials which passed along them, were major motives for situating these sites on these particular localities. It also seems likely that these village sites served a dual purpose. The secular, subsistence related cultural material recovered from these sites indicates that they functioned as habitation sites. However, their position on, or near, these trails, and the exotic pottery and other non-local materials found on them, suggests that they served as local trade centers as well.

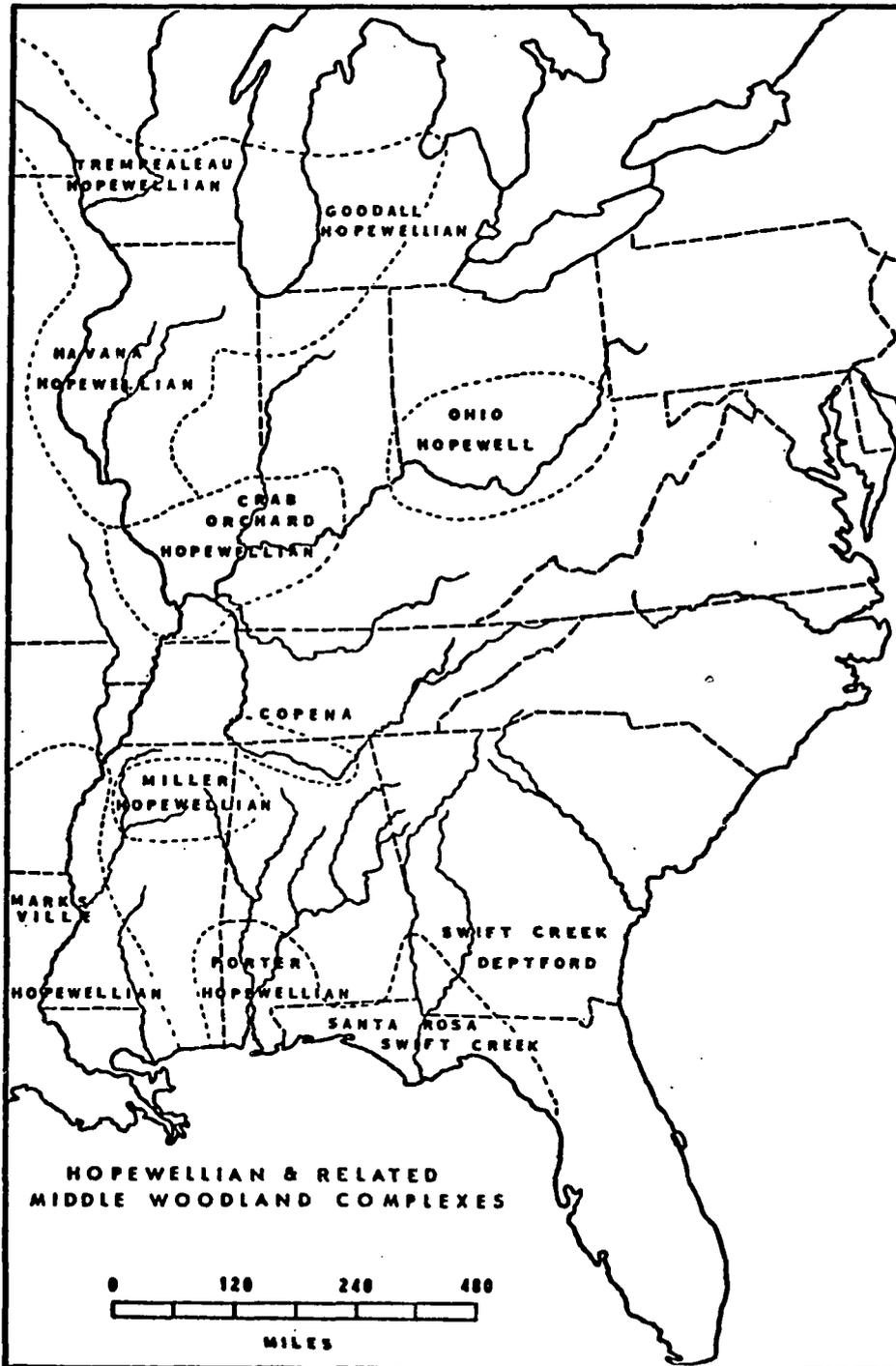
Although a fully detailed discussion of this final topic is beyond the scope of this study, a few closing words are needed concerning the demise of the Copena culture. It has been stated in this study that the Copena tradition was on the decline by around A.D.400 and extinct by ca. A.D.500. The question posed is, why? The answer must be complex, involving both internal and external historical and cultural phenomena. Only a simplification of this event, or series of events, can be offered at this present time.

It appears that the prime mover in the demise of Copena was an external factor. The Copena peoples relied on Hopewellian trade for burial paraphernalia used in the mortuary ritual. The burial system was centered around these exotic goods and depended upon a steady flow of trade.

However, the Copena burial complex was, figuratively speaking, built on sand, not solid, eternal rock. The major Ohio Hopewellian culture was breaking down by A.D.300. Many theories, from invasion, to plague, to "cultural fatigue," have been offered to explain the fall of this dominant Hopewell center (Prufer 1964: 64-74). In actuality it is not known why the decline occurred, all that is known is that it happened.

With the collapse of the major Hopewellian centers and the demise of Hopewellian Sphere of Interaction the flow of exotic mortuary goods must have at first slowly ebbed and finally ceased. The internal problems brought on by such a cessation of trade and culture contact are unknown but must have been great. After the final collapse of this interaction sphere the elaborate mortuary ritual was no longer practiced, burial mounds were no longer constructed, and a major shift in settlement patterns, and perhaps subsistence, occurred. The succeeding Late Woodland culture was drab in comparison, a prehistoric "Dark Age" which was not to flourish again until the beginning of the Mississippian period when elaborate mortuary customs were again practiced and mounds constructed.

**Map 13. Hopewellian and Related Middle Woodland  
Complexes (Adapted from Griffin, 1967)**



#### D. SUMMATION

During the Middle Woodland period, dating from approximately 300 B.C. to A.D. 500, there was an immense increase in the complexity and extent of local communication networks throughout the Eastern United States. This inter- and intra- regional involvement has been termed the "Hopewellian Sphere of Interaction." Although the mechanisms of this phenomenon are not yet clear, a widespread exchange network and perhaps religious or economic motivations (possibly including maize cultivation) were involved. This trade included the exchange of both raw materials and exotic finished goods, and it eventually led to style-sharing and to similarity of mortuary customs over an extensive area.

The major differences between the Early and Middle Woodland traditions in the Middle Tennessee Valley can perhaps best be explained as the result of increasing interaction between the local culture and Hopewellian centers in the Midwest and Southeast. The development of this local Middle Woodland tradition includes:

- 1) The introduction or development of a more effective economic base, 2) the introduction of a northern burial complex, and 3) changes in the material culture such as the introduction of carved-paddle stamped ceramics, a gradual shift to smaller, trianguloid projectile points, and an increase in the quantity and diversity of tools or ornaments made from exotic materials (greenstone, copper,

marine shell, steatite, etc.). The information now available suggests that the initial development of the Middle Woodland tradition in the Tennessee Valley region of northern Alabama began during the first centuries A.D. The radiocarbon determinations from the two Copena mounds indicate that this complex was a fully developed subsystem within this culture by A.D. 200-300.

The Copena culture appears to have been on the wane by A.D. 400, and extinct by approximately A.D. 500. A hypothesis has been offered in the final pages of this present study correlating the decline of this Middle Woodland cultural tradition with a breakdown of supportive regional trade networks. It has been further suggested that this cessation of Middle Woodland trade was directly related to the collapse of the major Hopewellian centers just prior to the middle of the first millennium A.D. The testing of this hypothesis awaits future investigations into the rise and fall of the cultural phenomenon which we have labeled the "Hopewellian Sphere of Interaction."

## BIBLIOGRAPHY

- Aitken, M. J.  
1961 Physics and Archaeology. Interscience Publishers. New York-London.
- Andersen, Harold V.  
n.d. Unpublished Manuscript. Mound State Monument.
- Bacon, Willard S.  
n.d. Unpublished Manuscript. Manchester, Tennessee.
- Binford, Lewis R.  
1962 Archaeology as Anthropology. American Antiquity. Vol. 28, pp. 217-225. Salt Lake City.
- Braun, E. Lucy.  
1950 Deciduous Forests of Eastern North America. The Blakiston Company. Philadelphia.
- Butler, Brian M.  
1968a Copena: A Re-evaluation. Unpublished Research Paper. Department of Anthropology, University of Tennessee. Knoxville.  
1968b The Brickyard Site (40 Fr 13). In Archaeological Investigations in the Time Ford Reservoir, Tennessee, 1966, Charles H. Faulkner (ed.). Department of Anthropology, University of Tennessee, Knoxville.
- Byers, Douglas S. (Editor)  
1967 The Prehistory of the Tehuacan Valley. University of Texas Press, Austin.
- Caldwell, Joseph R.  
1964 Interaction Spheres in Prehistory. In Hopewellian Studies, Joseph R. Caldwell and Robert L. Hall (eds.), pp. 133-143. Illinois State Museum Scientific Papers, Vol. 12.

## Cambron, James

- 1957 Some Early Projectile Point Types from the Tennessee Valley. Journal of Alabama Archaeology, Vol. III, No. 2.
- 1958 Some Early Projectile Point Types from the Tennessee Valley, Part II. Journal of Alabama Archaeology, Vol. IV, No. 1.

## Cambron, James and David C. Hulse

- 1960 The Transitional Paleo-Indian. Journal of Alabama Archaeology, Vol. VI, No. 1.
- 1964 Handbook of Alabama Archaeology, Part I, Point Types. Archaeological Research Association of Alabama, Inc.

## Cambron, James W. and Spencer A. Waters.

- 1961 Flint Creek Rock Shelter (Part II). Journal of Alabama Archaeology, Vol. VII, No. 1.

## Carstens, C. J. and J. P. Knudsen.

- 1958 An Archaeological Survey of the Rockhouse Ledge Area - Part II. Journal of Alabama Archaeology, Vol. 4, No. 2.

## Chang, K. C. (Editor)

- 1968 Settlement Archaeology. National Press Books. Palo Alto. California.

## Clayton, Margaret V.

- 1965 Bluff Shelter Excavations on Sand Mountain. Journal of Alabama Archaeology, Vol. 11, No. 1.
- 1967 Boydston Creek Bluff Shelter Excavations. Journal of Alabama Archaeology, Vol. 13, No. 1.

## Coe, Joffre L.

- 1959 Prehistoric Cultural Change and Stability in the Carolina Piedmont Area. Unpublished Dissertation. University of Michigan.
- 1964 The Formative Cultures of The Carolina Piedmont. Transactions of the American Philosophical Society, New Series, Vol. 54, Part 5. Philadelphia.

- Crane, H. R. and James B. Griffin.  
 1961 University of Michigan Radiocarbon Dates VI. American Journal of Science Radiocarbon Supplement, Vol. 3, pp. 105-125. New Haven.
- 1964 University of Michigan Radiocarbon Dates IX. American Journal of Science Radiocarbon Supplement, Vol. 6, pp. 1-24. New Haven.
- Curren, Cailup B.  
 1973 The Ethnozoology of Little Bear Creek Site - Ct. 8. Unpublished Masters Thesis. University of Alabama, University, Alabama.
- Dastre, M. A.  
 1901 Salt and Its Physiological Uses. Smithsonian Institution Annual Report for 1901, Separate No. 1351.
- Dauphinee, James A.  
 1960 Sodium Chloride in Physiology, Nutrition, and Medicine. In Sodium Chloride, Dale Kaufmann (ed.)
- Deetz, James.  
 1967 Invitation to Archaeology. The National History Press, Garden City, New York.
- DeJarnette, David L.  
 1952 Alabama Archeology: A Summary. In Archeology of Eastern United States, James B. Griffin (ed.), pp. 272-284. University of Chicago Press, Chicago.
- DeJarnette, David B., Bennie C. Keel, and Edward B. Kurjack.  
 n.d. Archaeological Investigations of the Weiss Reservoir of the Coosa River in Alabama. Unpublished Manuscript on file at Mound State Monument.
- DeJarnette, David L., Edward Kurjack and James W. Cambron.  
 1962 Stanfield-Worley Bluff Shelter Excavations. Journal of Alabama Archaeology, Vol. VIII Nos. 1. and 2.
- DeJarnette, David L. and Steve B. Wimberley.  
 1941 The Bessemer Site: Excavation of Three Mounds and Surrounding Village Areas Near Bessemer, Alabama. Geological Survey of Alabama, Museum Paper No. 17. University, Alabama.

Dragoo, Don W.

- 1963 Mounds for the Dead: An Analysis of the Adena Culture. Annals of the Carnegie Museum, Vol. 37. Pittsburgh.

Driver, Harold E.

- 1961 Indians of North America. University of Chicago Press, Chicago.

Fairbanks, Charles H.

- 1949 A General Survey of Southeastern Prehistory. In The Florida Indian and His Neighbors, John W. Griffin (ed.), pp. 55-75. Winter Park, Florida.

Faulkner, Charles H.

- 1967a The Excavation and Interpretation of the Old Stone Fort, Coffee County, Tennessee. Department of Anthropology, University of Tennessee, Knoxville.
- 1967b Tennessee Radiocarbon Dates. Tennessee Archaeologist, Vol. 23, No. 1. pp. 12-30. Knoxville.
- 1968 Adena in the Southeast. Paper read at the 1968 Eastern States Archaeological Federation Meeting, Ann Arbor, Michigan.
- 1970 Adena and Copena: A Case of Mistaken Identity. In Adena: The Seeking of an Identity, B. K. Swartz, Jr. (ed.), pp. 100-114. Ball State University, Muncie, Indiana.

Faulkner, Charles H. and J. B. Graham.

- 1966a Westmoreland-Barber Site (40 Mi-11) Nickajack Reservoir: Season II. Department of Anthropology, University of Tennessee, Knoxville.
- 1966b Highway Salvage in the Nickajack Reservoir. Department of Anthropology, University of Tennessee, Knoxville.

Ford, James A. and George I. Quimby.

- 1945 The Tchefunte Culture, An Early Occupation of the Lower Mississippi Valley. Society for American Archaeology, Memoir 2. Menasha.

- Ford, James A. and Gordon Willey.  
 1940 Crooks Site, A Marksville Period Burial Mound in LaSalle Parish, Louisiana. State of Louisiana Department of Conservation Anthropological Study No. 3.
- 1941 An Interpretation of the Prehistory of the Eastern United States. American Anthropologist, Vol. 43, pp. 325-363. Menasha.
- Fowke, Gerard.  
 1928 Archaeological Investigations - II. Forty-fourth Annual Report, Bureau of American Ethnology, 1926-1927, pp. 399-540. Washington.
- Fundaburk, Emma L. and Mary D. Foreman.  
 1957 Sun Circles and Human Hands. The Southeastern Indians - Art and Industry. Laverne, Alabama.
- Gilmore, Harlan.  
 1955 The Role of Salt as an Element of Cultural Diffusion. American Anthropologist, Vol. 57, pp. 1011-1015.
- Gleeson, Paul.  
 1969 Tellico Reservoir - Interim Report. Department of Anthropology, University of Tennessee. Knoxville.
- Goggin, John M.  
 1952 Space and Time Perspective in Northern St. John's Archeology, Florida. Yale University, Publications in Anthropology, Vol. 47. New Haven, Connecticut.
- Graham, J. B.  
 1964 The Archaeological Investigation of Moccasin Bend (40 Ha 63), Hamilton County, Tennessee. Department of Anthropology, University of Tennessee, Knoxville.
- Griffin, James B.  
 1939 Report on the Ceramics of the Wheeler Basin. In An Archaeological Survey of Wheeler Basin on the Tennessee River in Northern Alabama by William S. Webb. Bureau of American Ethnology, Bulletin 122. Washington.
- 1943 The Fort Ancient Aspect. University of Michigan Press, Ann Arbor.

- 1945 The Ceramic Affiliations of Ohio Valley Adena Culture. In The Adena People, by William S. Webb and Charles E. Snow, pp. 220-246. University of Kentucky Reports in Anthropology and Archaeology, Vol. 6, Lexington.
- 1946 Culture Change and Continuity in Eastern States Archaeology. In Man in Northeastern North American, Fredric Johnson (ed.), pp. 37-95. Papers of the Robert S. Peabody Foundation for Archaeology, Vol. 3, Andover.
- 1952 Culture Periods in Eastern United States Archeology. In Archeology of Eastern United States, James B. Griffin (ed.), pp. 352-364. University of Chicago Press, Chicago.
- 1960 Climatic Change: A Contributive Cause of the Growth and Decline of Northern Hopewellian Culture. Wisconsin Archaeologist. Vol. 41. No. 3, pp. 21-33, Lake Mills.
- 1967 Eastern North American Archaeology: A Summary. Science, Vol. 56, No. 3772, pp. 175-191.
- Griffin, John W.  
1972 Fiber-tempered Pottery in the Tennessee Valley. Florida Anthropological Society Publications, No. 6, pp. 34-36. Ft. Lauderdale.
- Guthe, Carl E.  
1952 Twenty-five years of Archeology in the Eastern United States. In Archeology of Eastern United States, James B. Griffin (ed.), pp. 1-12. University of Chicago Press, Chicago.
- Haag, William G.  
1939 News Letter, Southeastern Archaeological Conference, Vol. 1, No. 1. Mimeographed.
- 1942 A Description and Analysis of the Pickwick Pottery. In An Archaeological Survey of the Pickwick Basin in the Adjacent Portions of Alabama, Mississippi, and Tennessee, by William S. Webb and David L. DeJarnette. Bureau of American Ethnology Bulletin No. 129. Washington.
- 1961 Twenty-five years of Eastern Archeology. American Antiquity, Vol. 7, pp. 16-23. Salt Lake City.

- Harper, Roland M.  
1913 Economic Botany of Alabama. Geological Survey of Alabama, Monograph 8. University, Alabama.
- 1942 Natural Resources of the Tennessee Valley Region in Alabama. Geological Survey of Alabama, Special Report 17. University, Alabama.
- 1943 Forests of Alabama. Geological Survey of Alabama, Monograph 10. University, Alabama.
- Hartney, Patrick C.  
1962 Peter Cave, Tennessee. Tennessee Archaeologist, Vol. 18, No. 1, pp. 23-45. Knoxville.
- Heimlich, Marion D.  
1952 Guntersville Basin Pottery. Geological Survey of Alabama, University, Alabama.
- Hunter, Helen V.  
1940 The Ethnography of Salt in Aboriginal North America. Unpublished Masters Thesis, University of Pennsylvania.
- Jennings, Jesse D.  
1946 Hopewell-Copena Sites Near Nashville. American Antiquity, Vol. 12, No. 2, p. 126 Menasha.
- Jewell, W. B.  
1947 Barite, Fluorite, Galena, Sphalerite Veins of Middle Tennessee. State of Tennessee, Division of Geology, Bulletin 51. Nashville.
- Jones, Volney  
1936 The Vegetal Remains of Newt Kash Hollow Shelter. University of Kentucky, Reports in Anthrology and Archaeology, Vol. 3, No. 4 pp. 147-67.
- Jones, Walter B.  
1939 Geology of The Tennessee Valley Region of Alabama. In An Archaeological Survey of Wheeler Basin on The Tennessee, Bureau of American Ethnology, Bulletin 122.

- Kellar, James H., A. R. Kelly, and Edward V. McMichael.  
 1962 The Mandeville Site in Southwest Georgia.  
American Antiquity, Vol. 27, No. 3.  
 pp. 336-355. Salt Lake City.
- Kelly, A. R.  
 1964 Introduction. In Hopewellian Studies,  
 Joseph R. Caldwell and Robert L. Hall (eds.)  
 pp. vi-viii. Illinois State Museum  
 Scientific Papers, Vol. XII.
- Kneberg, Madeline.  
 1952 The Tennessee Area. In Archeology of Eastern  
United States, James B. Griffin (ed.),  
 pp. 190-198. University of Chicago Press,  
 Chicago.
- 1956 Some Important Projectile Points Found in the  
Tennessee Area. Tennessee Archaeologist,  
 Vol. XII.
- 1957 Chipped Stone Artifacts of the Tennessee  
Valley Area. Tennessee Archaeologist,  
 Vol. XIII, No. 1.
- Larsen, Lewis  
 1959 Middle Woodland Manifestations in North  
Georgia. Southeastern Archaeological  
Conference Newsletter, Vol. VI.
- Knudsen, J. P. and R. D. Radford.  
 1957 An Archaeological Survey of the Rockhouse  
Ledge Area - Part I. Journal of Alabama  
Archaeology, Vol. 3, No. 2.
- Layton, Fred L.  
 n.d. Kymulga Cave, History, Map, Information.  
 Childersburg, Alabama.
- Lewis, T.M.N. and Madeline Kneberg.  
 1946 Hiwassee Island. University of Tennessee  
 Press, Knoxville.
- 1957 The Camp Creek Site. Tennessee Archaeologist,  
 Vol. XIII, No. 1.
- 1959 The Archaic Culture in the Middle South.  
American Antiquity, Vol. XXV, No. 2. Salt  
 Lake City.

- Lewis, Thomas M. N. and Madeline Kneberg Lewis.  
1961 Eva, an Archaic Site. University of Tennessee Press, Knoxville.
- McKern, W. C.  
1939 The Midwestern Taxonomic Method as an Aid to Archaeological Culture Study. American Antiquity, Vol. 4, pp. 301-313.
- Moebes, Thomas F.  
1972 Cave Springs Dig. Manuscript submitted to the Editor, Journal of Alabama Archaeology.
- Moore, C. B.  
1915 Aboriginal Sites on the Tennessee River. Journal of the Academy of Natural Sciences of Philadelphia, Vol. XVI. Philadelphia.
- Mosley, Samuel A.  
1958 The Occurrence of Soapstone in Alabama and Its Use by the Indian. Journal of Alabama Archaeology, Vol. 4, No. 1.
- Myer, William E.  
1928 Indian Trails of the Southeast. Forty-second Annual Report, Bureau of American Ethnology, 1924-1925, pp. 727-857. Washington.
- Nielsen, Jerry J.  
1972 Archaeological Salvage Investigations on the Report of Way of Interstate 65 Morgan County Alabama, 1 Mg 74. Journal of Alabama Archaeology, Vol. XVIII, No. 2.
- Oakley, Carey B., Jr.  
1971 An Archaeological Investigation of Pinson Cave (1 Je-20). Masters Thesis on file at the University of Alabama Library. University, Alabama.
- Owens, Virgil S.  
1972 A Bedford County Cavern Investigation. Reprinted in Ten Years of Tennessee Archaeology, Vol. II, pp. 189-195. Knoxville.
- Pallister, Hugh D.  
1955 Index to the Minerals and Rocks of Alabama. Alabama Geological Survey, Bulletin 65.
- Pickett, Albert J.  
1851 History of Alabama, and Incidentally of Georgia, and Mississippi from the Earliest Period. 3rd Edition, 2 Vols. Walker and James, Charleston.

- Pickett, Albert J.  
 1851 History of Alabama, and Incidentally of Georgia, and Mississippi from the Earliest Period. 3rd Edition, 2 Vols. Walker and James. Charleston.
- Polhemus, J. H.  
 n.d. Preserved Fabric from a Grainger County Cave. Ten Years of Tennessee Archaeology, Vol. 1, p. 98. Knoxville.
- Prufer, Olaf H.  
 1961 The Hopewell Complex of Ohio. Unpublished Ph.D. dissertation, Peabody Museum, Harvard University.  
 1964 The Hopewell Complex of Ohio. In Hopewellian Studies, Joseph R. Caldwell and Robert L. Hall (eds.), pp. 35-84. Illinois State Museum Scientific Papers, Vol. 12.  
 1965 The McGraw Site. Scientific Publications of the Cleveland Museum of Natural History, Cleveland, Ohio.
- Ritchie, William A.  
 1944 The Pre-Iroquoian Occupations of New York State. Rochester Museum of Arts and Sciences Memoir, No. 1. Rochester.
- Roberts, Ralph G.  
 1949 Ancient Stone Fortifications at De Soto Falls, Little River, Alabama. Tennessee Archaeologist, Vol. 5, No. 2, pp. 18-21.
- Rouse, Irving  
 1958 The Inference of Migrations from Anthropological Evidence. In Migration in New World Culture History, R. H. Thompson (ed.), University of Arizona Press, Tucson.
- Rowe, Chandler W.  
 1952 Woodland Culture of Eastern Tennessee. In Archeology of Eastern United States, James B. Griffin (ed.), University of Chicago Press, pp. 199-206, Chicago.
- Schwartz, Douglas W.  
 1967 Conceptions of Kentucky Prehistory. University of Kentucky Press, Studies in Anthropology, 6.

Scully, Edward G.

- 1951 Some Central Mississippi Valley Projectile Point Types. Mimeographed publication, Museum of Anthropology, University of Michigan.

Sears, W. H.

- 1971 Food Production and Village Life in Prehistoric Southeastern United States. Archaeology, Vol. 24, No. 1, pp. 322-329.

Sears, William H. and James B. Griffin.

- 1950 Fiber-Tempered Pottery of the Southeast. In Prehistoric Pottery of Eastern United States, James B. Griffin (ed.) Museum of Anthropology Statement 6-50, Ann Arbor.

Smith, William G. and C. S. Waldrop.

- 1911 Soil Survey of Colbert County, Alabama. Field Operations of the Bureau of Soils, 1908, pp. 555-584. United States Department of Agriculture, Bureau of Soils Washington.

Struever, Stuart.

- 1962 Implications of Vegetal Remains from an Illinois Hopewell Site. American Antiquity, Vol. 27, No. 4, pp. 584-586. Salt Lake City.
- 1964 The Hopewell Interaction Sphere in Riverine-Western Great Lakes Culture History. In Hopewellian Studies, Joseph R. Caldwell and Robert L. Hall (ed.), pp. 85-106. Illinois State Museum Scientific Papers, Vol. 12.
- 1965 Middle Woodland Culture History in the Great Lakes Riverine Area. American Antiquity, Vol. 31, No. 2, pt. 1. pp. 211-223. Salt Lake City.
- 1968 Woodland Subsistence - Settlement Systems in the Lower Illinois Valley. In New Perspectives in Archaeology, Sally R. Binford and Lewis R. Binford (eds.). Aldine, Chicago.

Swanton, John R.

- 1918 An Early Account of the Choctaw Indians. Memoirs of the American Anthropological Association, Vol. V, No. 2, pp. 53-72.

- Thomas, Cyrus.  
1890 Mound Explorations. Twelfth Annual Report.  
Bureau of American Ethnology. Washington.
- Thurston, Gates T.  
1890 The Antiquities of Tennessee and the Adjacent  
States. R. Clarke and Company. Cincinnati.
- Walthall, John A.  
1972a Copena: Subsistence and Settlement, A  
Preliminary Report. Paper read at the  
Thirty-seventh Annual Meeting, Society for  
American Archaeology, Bal Harbour, Florida.  
1972b The Chronological Position of Copena in  
Eastern States Archaeology. Journal of  
Alabama Archaeology, Vol. XVIII, No. 2.  
n.d. Unpublished manuscript on file at Mound  
State Monument.
- Wauchope, Robert. (Editor)  
1956 Seminars in Archaeology: 1955. Memoirs of  
the Society for American Archaeology,  
No. 11. Salt Lake City.
- Webb, William S.  
1938 An Archaeological Survey of the Norris Basin  
in Eastern Tennessee. Bureau of American  
Ethnology, Bulletin 118.  
1939 An Archaeological Survey of Wheeler Basin on  
the Tennessee River in Northern Alabama.  
Bureau of American Ethnology, Bulletin 122.
- Webb, William S. and Raymond Baby.  
1957 The Adena People - No. 2. Ohio State  
University Press, Columbus.
- Webb, William S. and David L. DeJarnette.  
1942 An Archaeological Survey of Pickwick Basin  
in the Adjacent Portions of Alabama,  
Mississippi and Tennessee. Bureau of American  
Ethnology, Bulletin 129.  
1948a The Whitesburg Bridge Site MaV10.  
Alabama Museum of Natural History, Museum  
Paper 24, University, Alabama.

- 1948b The Flint River Site. Geological Survey of Alabama, Museum Paper 23.  
University, Alabama.
- Webb, William S. and William D. Funkhouser.  
1935 The Ricketts Site in Montgomery County, Kentucky. University of Kentucky Reports in Anthropology, Vol. 3, Lexington.
- Webb, William S. and Charles E. Snow.  
1945 The Adena People. University of Kentucky Reports in Anthropology and Archaeology, Vol. 6, Lexington.
- Webb, William S. and Charles G. Wilder.  
1951 An Archaeological Survey of Guntersville Basin on the Tennessee River in Northern Alabama. University of Kentucky Press, Lexington.
- Wentowski, Gloria J.  
1970 Salt as an Ecological Factor in the Prehistory of the Southeastern United States. Unpublished Masters Thesis, University of North Carolina, Chapel Hill.
- Willey, Gordon R.  
1949 Archaeology of the Florida Gulf Coast. Smithsonian Miscellaneous Collections, Vol. 113. Washington.
- 1953 Prehistoric Settlement Patterns in the Viru Valley, Peru. Bureau of American Ethnology, Bulletin 155. Washington.
- 1966 An Introduction to American Archaeology Volume One, North America. Prentice-Hall, Inc. Englewood Cliffs, New Jersey.
- Willey, Gordon R. and Philip Phillips.  
1958 Method and Theory in American Archaeology, University of Chicago Press, Chicago.
- Wimberly, Steve B. and Harry A. Tourtelot.  
1941 The McQuoquodale Mound: A Manifestation of the Hopewellian Phase in South Alabama. Geological Survey of Alabama, Museum Paper 19. University, Alabama.