

**STUBBS MOUND IN  
CENTRAL GEORGIA PREHISTORY**

By  
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## **INTRODUCTORY NOTE**

This document is an edited version of my Master of Science thesis from the Florida State University Department of Anthropology in 1975. I have deleted a few sections, moved others to make the report clearer, and corrected a few typographic and grammatical errors. I have not attempted to bring it up to date with discussions of chiefdoms or political connections. My main goal is simply to produce a new edition that can be made more widely available to those interested in Lamar societies in Georgia and the surrounding states.

I lightly edited this version of the report in January of 2011.

## **ABSTRACT**

The Stubbs Mound site was excavated in southern Bibb County in central Georgia during the 1930s, with Arthur R. Kelly as Principal Investigator. The present work is the first extensive analysis of the excavated materials and recorded notes. A group of four house structures, two of which were burned, was located in the mound. Stratigraphic and artifact analyses lead to a refinement of central Georgia chronology and generates a possible cultural explanation for the origin of the Lamar culture in this area.

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## **INTRODUCTION AND ACKNOWLEDGEMENTS**

This manuscript is the result of work aided by a National Park Service contract. For 18 months I had the pleasant opportunity and task of working as a Graduate Assistant under several of a series of National Park Service contracts with the Anthropology Department of Florida State University. The contracts primarily involved analysis of the central Georgia archeological collections held by the Southeast Archeological Center of the National Park Service. The experience I gained by working with these collections has been an invaluable foundation for the work presented here. Several individuals played important roles in the research reported here and acknowledgments are due them. The first of these is Donald L. Crusoe, my mentor, major professor, and friend. He helped formulate the ideas here presented by stimulating discussions as well as logical questioning. To him I give my thanks. Hale G. Smith (Chief) was the Principal Investigator for this contract as well as a member of my committee. He simplified the research in many ways with his cheerful co-operation. Special thanks go to Arthur R. Kelly and Gordon R. Willey--the Principal Investigator and excavator of the site respectively. Both archaeologists were contacted and each eagerly discussed details of the operations as they remembered them. Without their efforts, of course, none of the data here presented would have been recovered.

Thanks are overdue to Tom Padgett, Curator of the National Park Service collections at the Southeast Archeological Center, who aided in many ways daily. While acting as a sounding board for my ideas he aided in their development and consolidation. George R. Fischer and John W. Walker, both on the staff of the Southeast Archeological Center, aided in the identification of certain artifacts, suggested further references, offered constructive criticisms, and freely offered of their expertise in central Georgia archeology. To both gentlemen I am deeply thankful.

Several former fellow graduate students at Florida State University aided in specific sections of the analysis by offering opinions based on their research. Chris Hamilton offered comments on the ceramics in addition to accompanying me on a visit to the site in March of 1975. George Hasemann aided in the burial analysis while David Swindell provided his expertise in simplifying the analysis of the faunal remains. Wayne Prokopetz offered overall comments and suggestions on the project. To all these people I offer my thanks.

Robert Dailey and the Dan Morse, Sr., Florida State University Department of Anthropology, offered suggestions on the few pathological human bones present in the collections. William Heard of the Florida State University Department of Biology identified the mollusc remains. Don Merritt aided with many aspects of the photographic work. Plates 2-9 are copied from old prints on file at the Southeast Archeological Center originally taken by the Works Progress Administration photographer Cecil Coke. I am responsible for all the figures except the burial drawings, which were excellently done in the 1930s by James Jackson.

## **SITE AND PROBLEM INTRODUCTION**

The Stubbs Mound and village are located in Bibb County, Georgia, on the west side of Tobesofkee Creek, 0.8 mile up the creek from its junction with the Ocmulgee River. The river itself is about 0.7 miles at its closest point due east of the site. This location is about 7.5 air miles

due south of Ocmulgee National Monument in Land Lot 258. Named for the owner in 1936, the site is presently being used just as it was in the 1930s to grow corn. Inspection of photographs taken during excavation with the present situation determined by on-site inspection shows that the field boundaries are almost unchanged near the site. Figures 1 and 2 as well as aerial photo Plate 1 pinpoint the site visually (area circled in black on Plate 1, which has east at the top of the plate). A swampy area beginning on the eastern edge of the mound at the tree line continues to Tobesofkee Creek and the Ocmulgee River to the east. A linear feature reported in the field notes to be an abandoned road bed is located just south of the site and runs in an east-west direction. Local informants told me in March of 1975 that it was the remains of a train bed from the nineteenth century that was not completed due to failure of the construction company. Examination of Plate 1 will reveal this feature. My impression of the feature from the ground tends to confirm this story as it is a massive structure with high walls and deep ditches in the area adjacent to the site.

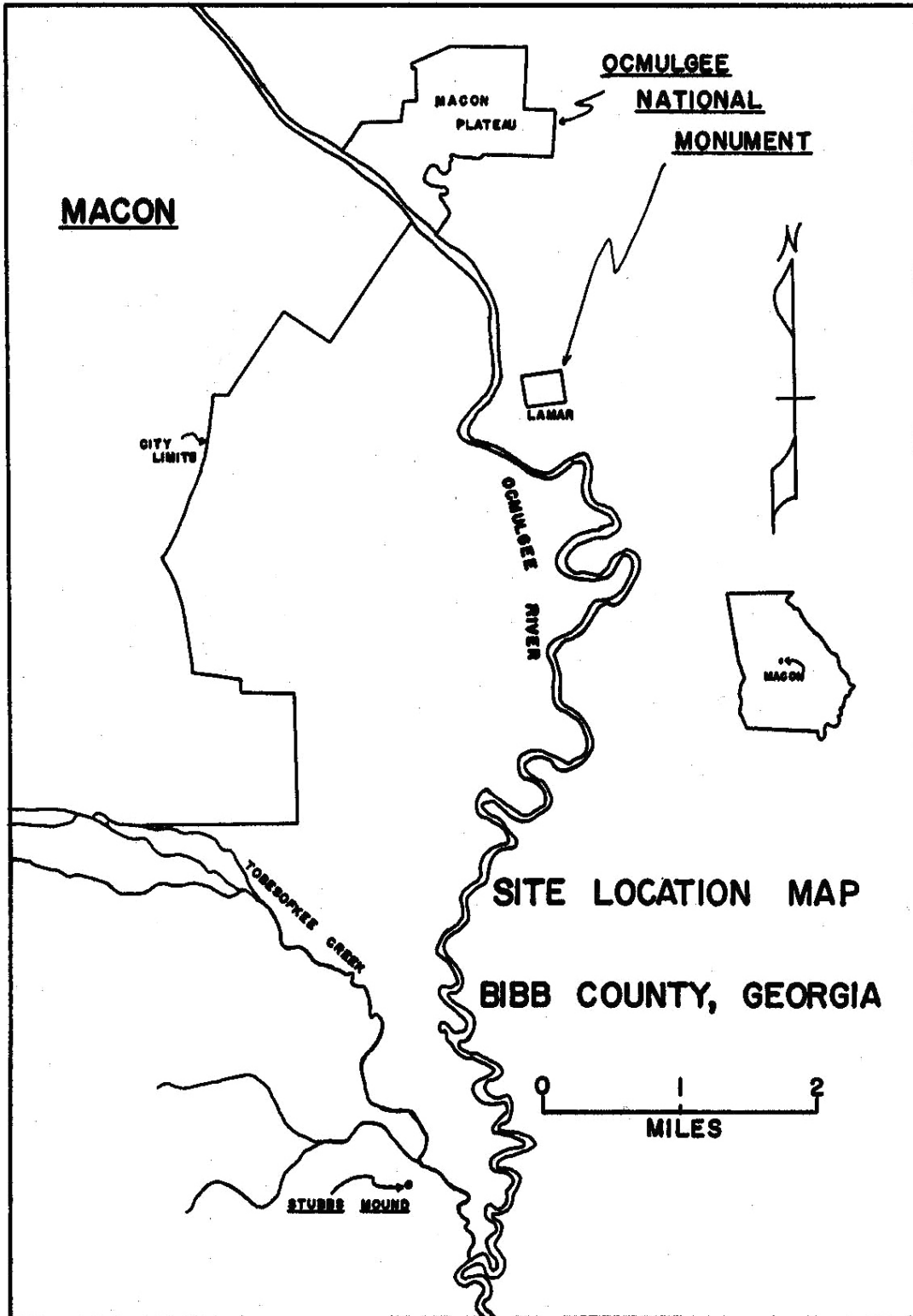
The site area is subject to apparent regular flooding, the vicinity having been recently inundated upon inspection in April, 1975. The average elevation of the site is about 270 feet above sea level. The elevation of this bottom land is fairly level for the entire area, but rises sharply about 0.5 mile to the west to an elevation of about 360-400 feet.

Although this study is primarily involved with the mound itself, artifacts are spread out in about a 10 acre area around the mound, mostly to the west. The farmer on the adjacent field to the south of the site told me of having a bucket full of arrowheads that came from his fields.

Excavations were carried out on the mound from August 6, 1936, to February 27, 1937, under Works Progress Administration auspices with breaks in this sequence primarily in September. The field crew averaged around 10-12 people, although it was considerably less at times. The excavations were under the field direction of Gordon R. Willey. Arthur R. Kelly was the Principal Investigator for the project in addition to his other duties around Macon.

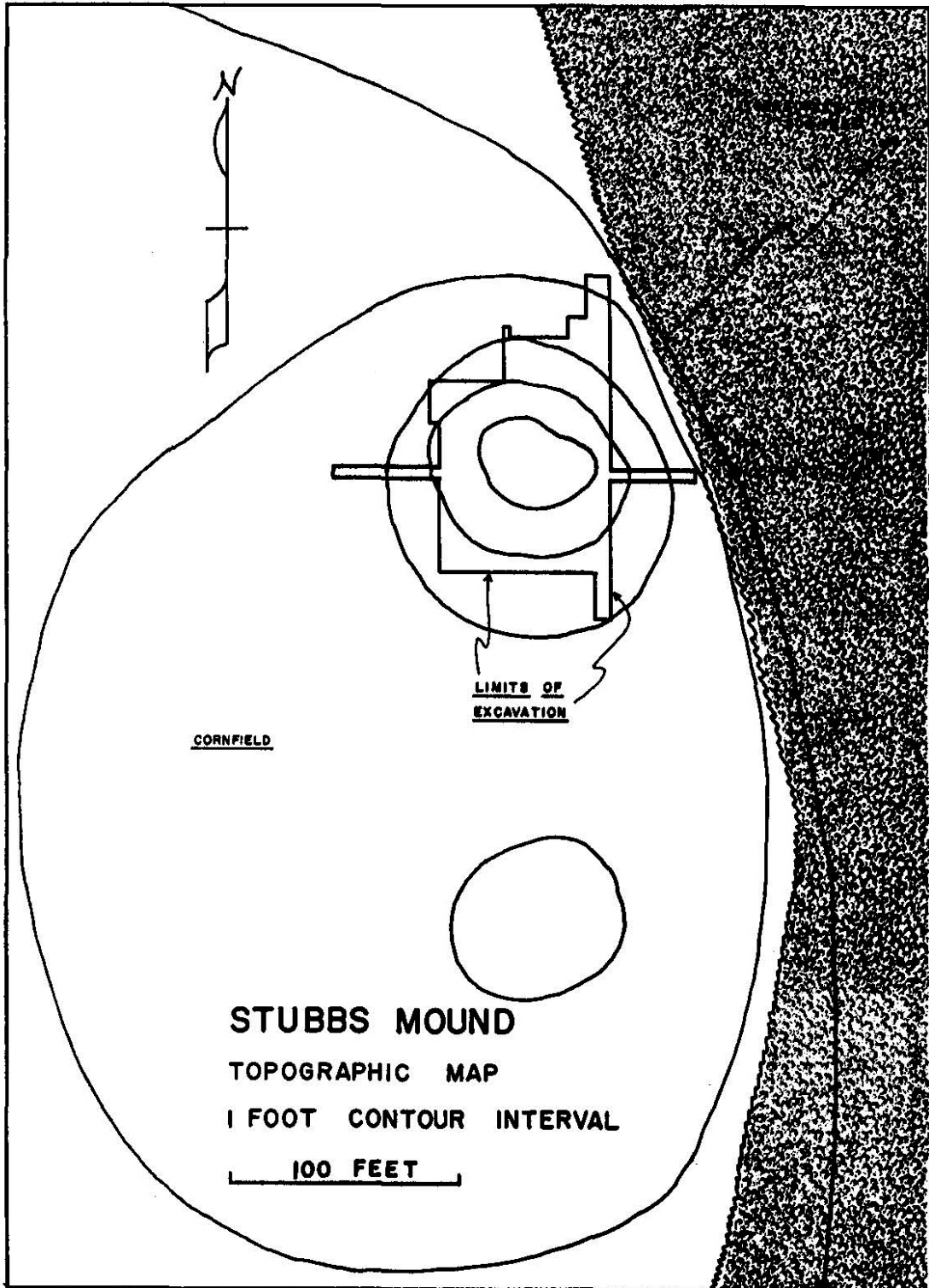
The results of the excavations have been briefly reported by Kelly (1938:34-37), but his work was necessarily superficial given the amount of other material he was reporting at the same time. Few other works citing the Stubbs Mound excavations have been found and it is hoped that this work will belatedly bring this important site back to light.

The importance of the Stubbs Mound site lies in its chronological placement in the central Georgia sequence. The origins of Lamar in central Georgia have been long debated, mostly without adequate data for confirmation of any given hypothesis. The ceramic changes seen at Stubbs Mound seems to suggest an origin for Lamar involving social interaction between two different groups in central Georgia sometime after A. D. 1000. Can the data from Stubbs Mound lead to a more detailed reconstruction of the origins of what is called Lamar in central Georgia prehistory?

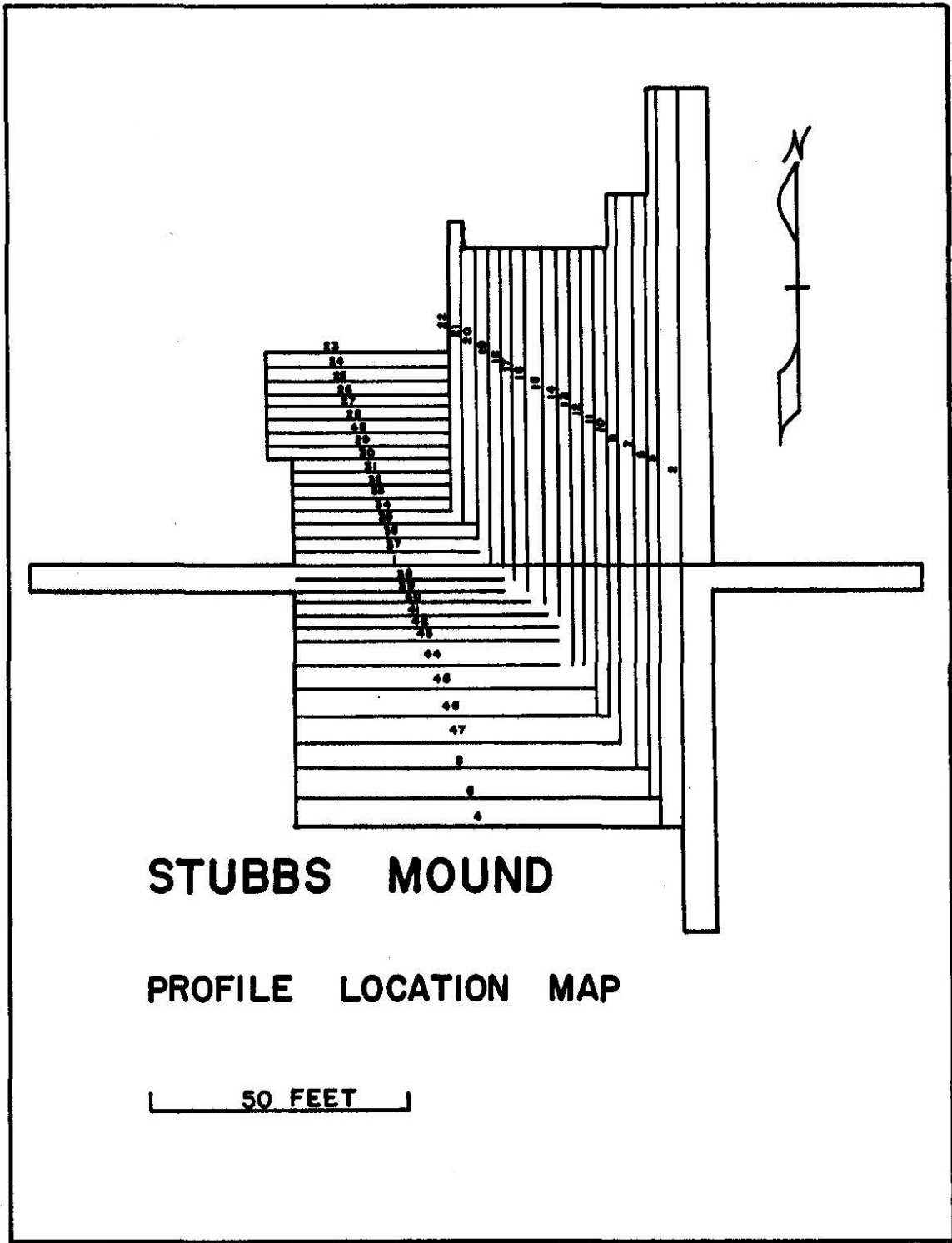


Site Location Map  
Figure 1

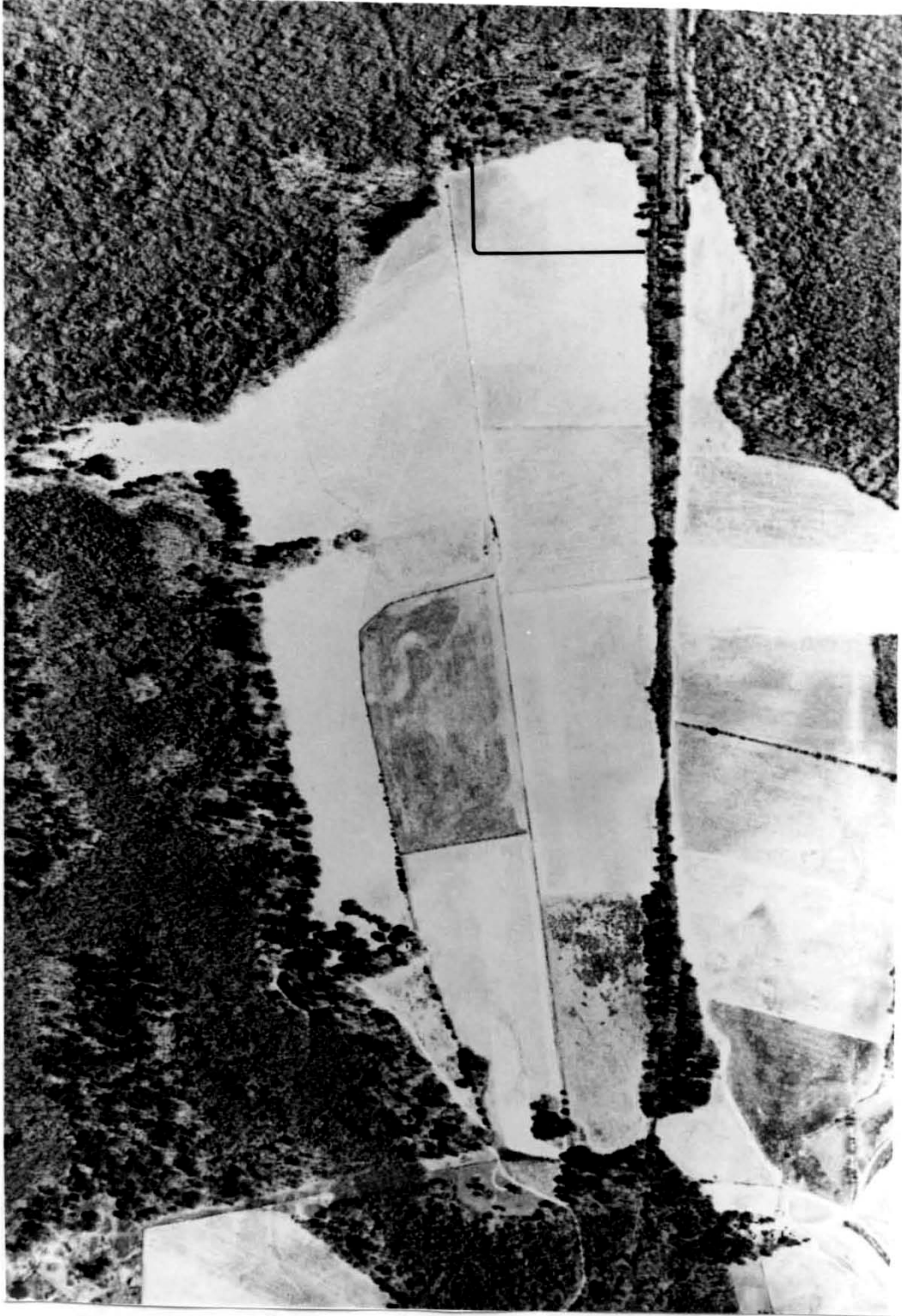




Topographic Map  
Figure 2



Profile Location Map  
Figure 3



Aerial View of Stubbs Mound Vicinity

Plate 1

## EXCAVATION METHODOLOGY

### Grid System

The grid system used on Stubbs Mound was somewhat similar to that used on the northern section of Macon Plateau (1Bi3). A detailed description of that system has been previously recorded (Williams and Henderson 1974:4-7). The Stubbs system used two reference control lines spaced 100 feet apart and running north and south. Each of the surveyed lines consisted of two parallel lines 10 feet apart laid out and called control trenches (though they weren't necessarily dug). Control number 1 (eastern most, close to the tree line) was referenced to a 1 inch by 1 inch steel spike at the base of a pine tree 75 feet further east in the woods. A third line, perpendicular to the two control lines, was surveyed east-west across the body of the mound and labeled the zero line or *zero offset*. A system of 10 foot squares was developed around these three surveyed lines. Points directly on the eastern and western sides of the two control trenches were labeled E and W, respectively. East-west offsets north or south of the zero offset were labeled as follows: north of the zero offset the even numbers were used (beginning with 2, in increments of 2, increasing toward the north) and south of the zero offset, in like fashion, odd numbers were employed (beginning at 1 and increasing toward the south). North-south lines parallel to the two control trenches were labeled with the letter R (right facing south) followed by increasing odd numbers from east to west. The top number used here was 17 as the next north-south line west was the eastern north-south line of Control Trench 2. The following examples should help make the complex system clearer. The point on the eastern edge of Control Trench 2 at a point 10 feet south of the zero offset would be labeled 2-E1. A point 10 feet south and 10 feet west would be 2-W3. A point 10 feet west of here would be 2-3R1. Finally, a point 10 feet east of 2-E2 would be referenced to Control Trench 1 and would be 1-2R17.

This complex system slowed research on the location of features and artifacts as would be expected. It is, however, a simple system of 10 foot squares with complex terminology for individual stakes in the system.

### Excavations

Taking a direct approach to the excavation of the low mound the initial excavation consisted of a 170 foot long 5 foot wide trench across the center of the mound. The east-west trench, running from station 1-E0 in the east to station 2-0R9 on the western side of the mound, was taken down initially to just beneath the plow zone. This long trench (the longest for the entire excavation) was designated Trench 0, as it was adjacent to the zero offset (see description of the grid system). Work on this trench began on August 6, 1936.

Patches of charred clay, midden deposits, areas of blue and yellow clay, as well as Burials 1 and 2 were quickly apparent upon examination of this trench floor. This trench was expanded horizontally both north and south of Trench 0 in the area around and just east of Control Trench 2. Plate 2 shows the area in consideration (looking east). The primary feature of interest in this area was a 2-3 inch thick area of yellow clay of roughly rectangular shape (see Figure 4). This was interpreted and recorded as House Floor 1.



Initial Excavations on Top of Mound  
Plate 2



North-South Trench (Looking South)  
Plate 3

The rest of the month of August, 1936, was spent expanding these trenches horizontally and to a depth of around 15 inches. This removed the plowed layers and some of the top midden. About fifteen 10 foot squares were opened in this area. Pits (features) number 1 through 7, as well as Burials 3 through 6 were located in this excavation area.

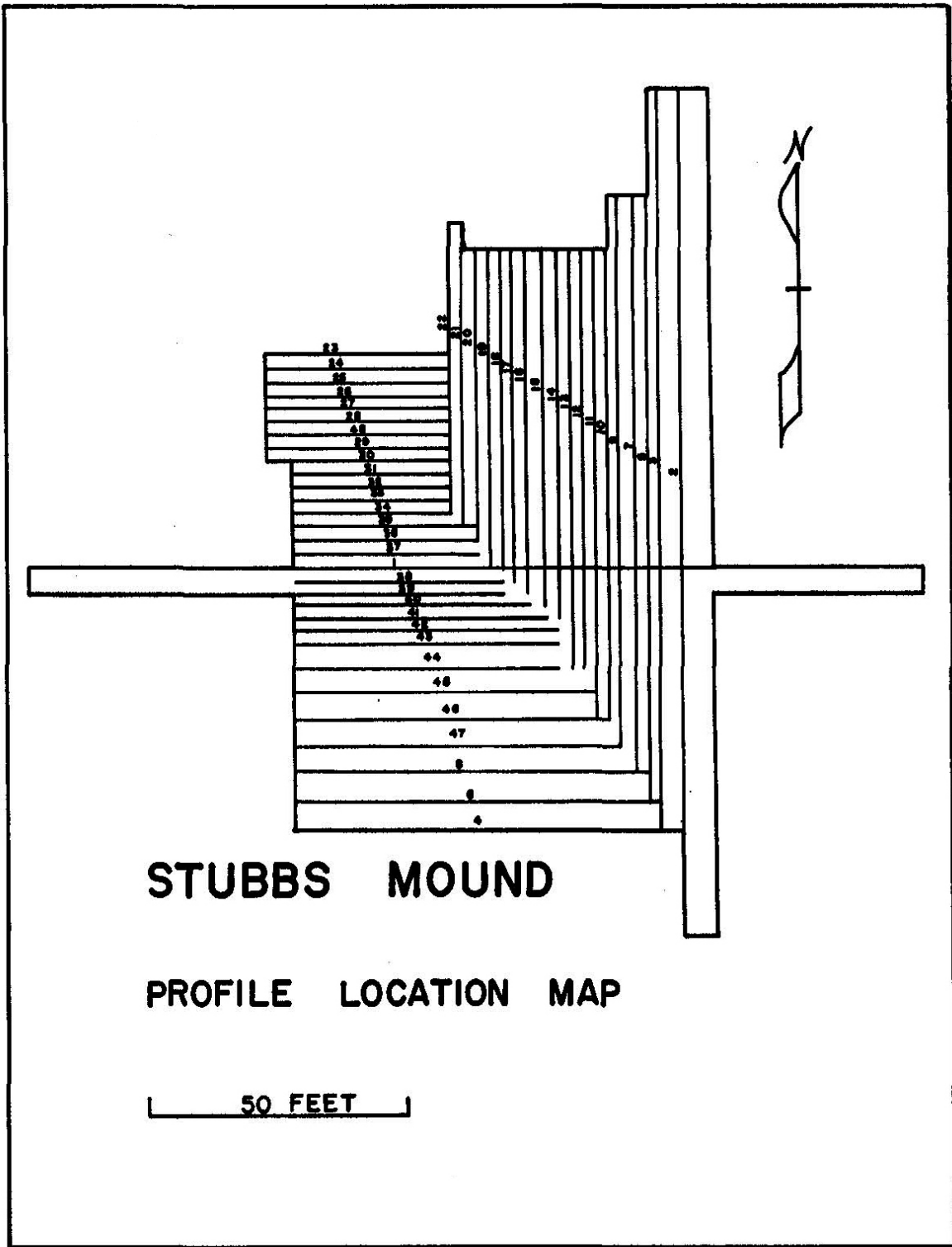
To get a better understanding of the stratigraphy, a north-south trench was started on the eastern edge of the mound. This 6 foot wide trench was located west of the 1-R5 grid line. Excavation was begun in both the northern and southern directions simultaneously in 10 foot increments. Artifacts were separated by artificial levels within natural levels where apparent. The trench was excavated to sterile red clay base throughout its 160 foot length. Burials 7 through 16 were located at various depths in the trench, mostly concentrated between stations 1-0R5 and 1-3R5. Plates 3 (looking south) and 4 (looking north) illustrate the 6 foot wide trench during excavation.

Following the completion of this north-south trench in early October, an east-west trench was excavated on the southern side of the site. This 5 foot wide trench was laid out just north of Offset 9.

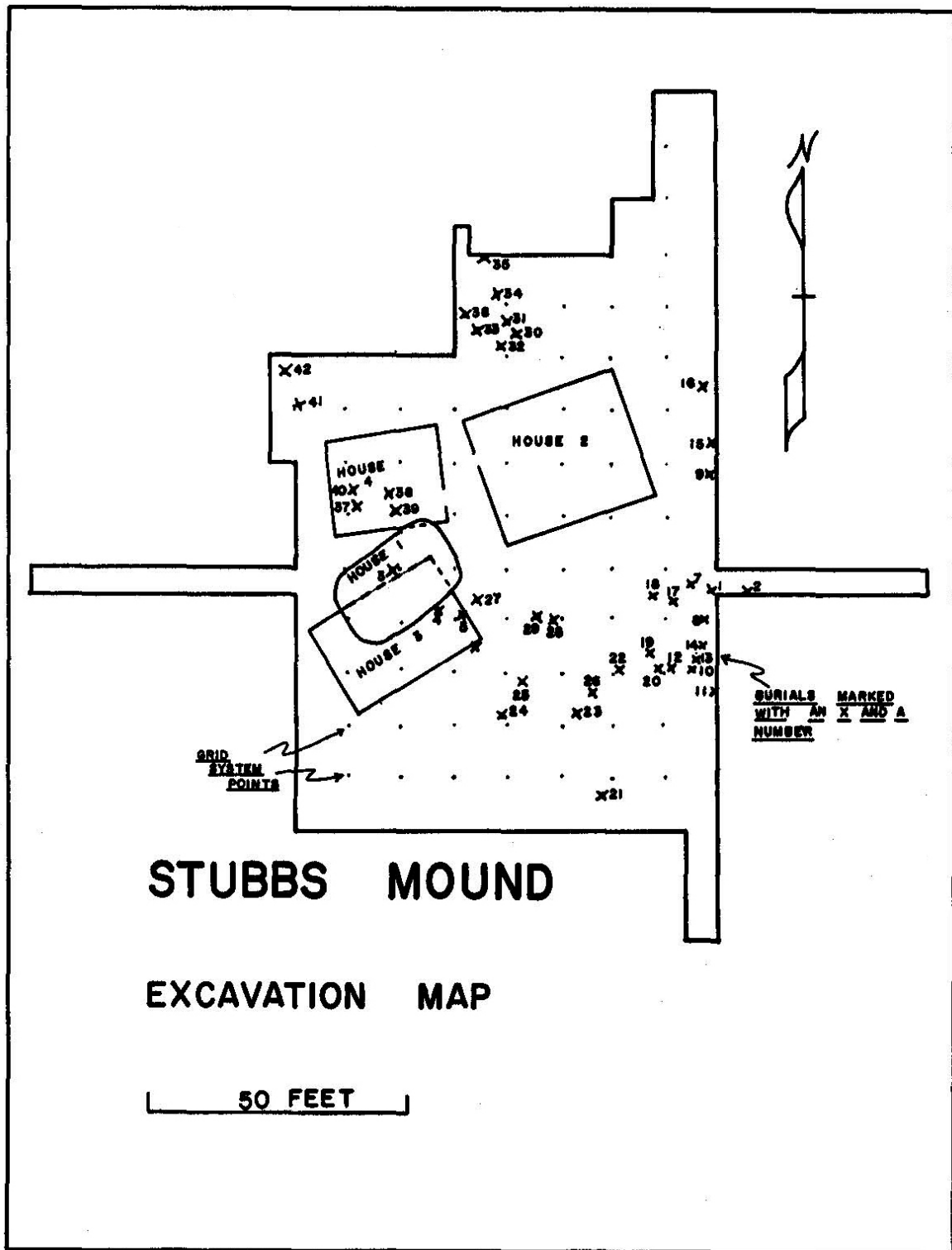
The method of excavation for the remainder of the project involved the use of vertical cuts in an alternating fashion, first cutting west from the previous north-south trench, and then north from the southern east-west trench. All the cuts made west from the 160 foot long north-south trench were 2.5 feet wide except for the first one that was 4 feet wide. The first six cuts to the north of the east-west trench were 5 feet wide, while the remaining cuts were 2.5 feet wide. All trenches were taken to sterile soil except where house structures or burials were located. Plate 5 (looking south) shows structure 2 emerging from the westward 2.5 feet cuts. In those cases, the feature was left intact as a unit to be excavated by horizontal excavation. Profiles for the western edge of each north-south cut and the northern edge of each east-west cut were recorded. The location of these profiles is recorded in Figure 3. It should be noted that the numbers for the individual profiles were given after excavations were completed and do not represent the order in which they were dug.

Large areas of the site were back filled soon after excavation was completed and records made. Although Figure 4 does show the limits of excavation, the entire area was never exposed all at once. Detailed records of the three other structures located in the mound were made upon completion of primary excavations. The necessary measuring and photographing of these features was one of the last things done on the site. Final back filling was completed by the end of February, 1937.

Although the body of the mound was virtually completely excavated, the middens extend in all four directions intact from the limits of excavation. Given the large number of interments found in the southeastern and northwestern portions of the site, additional excavations in these areas would undoubtedly reveal more evidence of burials. It should be pointed out that few excavations were undertaken in the fields around the mound. What few were done revealed no structural evidence. No scatters of fired clay or concentrations of artifacts were seen in the field during my inspection, even though conditions were ideal for looking (freshly plowed and rained on). There is also no data at all about the possibility of a palisade around the site.



Profile Location Map  
Figure 3



Excavation Map  
Figure 4





North-South Trench (Looking North)  
Plate 4



North-South Trench Expansion (Looking South)  
Plate 5

## Stratigraphy

The horizontal excavations carried out in the early portions of the project revealed some confusing data on the natural stratigraphy. To help clarify the nature of the mound structure the 6 foot wide north-south trench west of line 1-R5 described in the section on excavations methods was excavated near the eastern edge of the mound. Upon the completion of this trench an analysis was made of the western wall of this trench (Profile 2 in the SEAC files). The notes for October 7, 1936 point out that "the stratigraphic picture at Stubbs will be very complicated" (SEAC 63:47). To aid in the stratigraphic interpretation, a numbering system for the various levels observed in this cut was set up. That list is reproduced here with notes on the various levels and discussion to follow (See Table 1).

These levels obviously do not all occur on top of each other at any point on the site. As few as 3-4 occur in many portions of the site. Figures 11 and 12 in the back of this report give typical profiles from different locations on the site and are identified by profile numbers referenced to the profile map, Figure 3. Levels 6A, 7, 8, 10 and 11 can be virtually dismissed as they occurred as only small pockets in the one long initial profile and disappeared as this profile was cut further west.

**TABLE 1**

<b>Level #</b>	<b>Description</b>
1	Plowed soil
2	Water laid tan sand
3	Mixed midden and red clay
4A	Pure rich midden
4B	Mixed midden and sandy soil, northern side
4C	Mixed midden and sandy soil, southern side
5	Red clay
6A	Water laid clay
6B	Water laid sand and clay
7	Water laid midden and clay
8	Midden
9	Blue clay
10	Tan sand
11	Clay and midden
12A	Rich bottom midden, northern side
12B	Rich bottom midden, southern side
13	Transition midden and red clay
14	Undisturbed red clay
15	Yellow clay

Levels 2 and 9, while slightly more extensive, were also fairly rare. The A, B, and C designations on the two major middens, 4 and 12, were devices to separate for collection purposes

the material from the northern and southern side of the center east-west line, to check for horizontal differences in the distributions of artifact types within a given midden.

Level 1, the plowed soil, was handled as one unit throughout the site though there were observable differences in it prior to excavations. The red clay band on the northern end of the site (Level 5) was conspicuous in the plowed surface. The notes point out that the corn growth in this area was noticeably poorer than in the rest of the field.

Level 2, a water-laid tan sand, was present as out wash only on the northern fringes of the mound (see Profile 9 on Figure 12). This level is probably sand washed off the mound as an adjunct to the destruction of the upper mound levels by extensive plowing. It is also possible that some of this sand is the result of the flooding of Tobesofkee Creek. It was apparent from my inspection of the site that deposition of this kind must be considered. A low, wide gully extends roughly around the site on its western edge. This shallow depression runs north-south through the fields and apparently forms a flood pathway through the fields. Level 2 is apparently of minimal analytical significance, however, the few artifacts in it being very mixed.

The base soil for the area is Wickham Sandy Loam (USDA 1965). This level (14) was not dealt with extensively in the excavations. No deep pits were put into it. This bottom sterile level was variously described in the notes as red sandy clay, red clay loam, greasy red clay, and basal red clay. This led to some short term confusion as there are culturally important levels of red clay in the mound itself.

Level 13 is a rather arbitrarily defined level consisting of the transition zone from the bottom midden into the sterile red clay. It apparently did contain some midden and covers the entire excavated area.

There are two main middens on the site, Levels 4 and 12. These are typical black earth middens with associated artifacts and food debris. The top midden of the two, Level 4, was divided into 3 parts. The main center part, 4A, was believed to have been relatively undisturbed. Level 4B on the north and 4C on the south were the results of mixing with materials from Level 12 below on the feather edges of the mound. The material in Levels 4B and 4C therefore contain material from both middens. The bottom midden, Level 12, was divided into 12A (north) and 12B (south). Again, the center east-west grid line was the dividing line. Level 12 stops by definition where it joins Level 4A above the edges of the mound from Levels 4B and 4C. The line of demarcation between the two main middens was sometimes vague but Level 6B, a level of water laid sand and clay often separated the two (see profile 9, Figure 12).

Level 5 and Level 3 are related areas of red clay, the difference being that Level 3 has some midden mixed in with it while Level 5 is relatively pure red clay. Both levels are associated with Structure 2 and are discussed in relation to it.

Level 9 and Level 15, blue clay and yellow clay, respectively, are levels primarily associated with Structure 1. Level 15 is interpreted as the floor of that structure, while the blue clay may have been part of the roof structure. Other minor areas of blue clay may have been used to cover some burials but this is not certain.

Of primary importance is the fact that there were no levels that could be interpreted as an intentional mound elevation stage such as one would have expected. The implications of this are that the Stubbs Mound is not a true mound in the usual sense of the word in the eastern United States, but rather a large accumulation of midden and house floors much in the manner of a middle-eastern tell. It should be pointed out that this is the same type of construction postulated

by Kelly (1938:27) for the Swift Creek site a few miles north on the eastern bank of the Ocmulgee River. Kelly's original report also stated his belief upon initial examination of the data that Structure 2, the heavily burned house, was built on "a low rectangular, ramped house mound" (1938:35) similar to those found at Macon Plateau in Mound D and the McDougal Mound. My examination of the profiles and notes, however, indicate that there was no artificial house mound at all, but just the thin floor set on midden Level 12. The section on this structure gives more specific descriptive data.

The mound was reported to be about 10 feet high originally. At the time of excavation, however, it was only 3.5 to 4 feet high. The upper portions were plowed in an attempt to fill in the swamp to the east of the site. We can only speculate about the structures of the upper levels, but the evidence from the basal portions suggests a slow accretionary history rather than an artificially elevated, basket loaded structure for the mound. The implications of this for central Georgia history will be expanded further in the section on the proposed Stubbs phase.

## STRUCTURAL REMAINS AND BUILDING SEQUENCE

### Structure 1

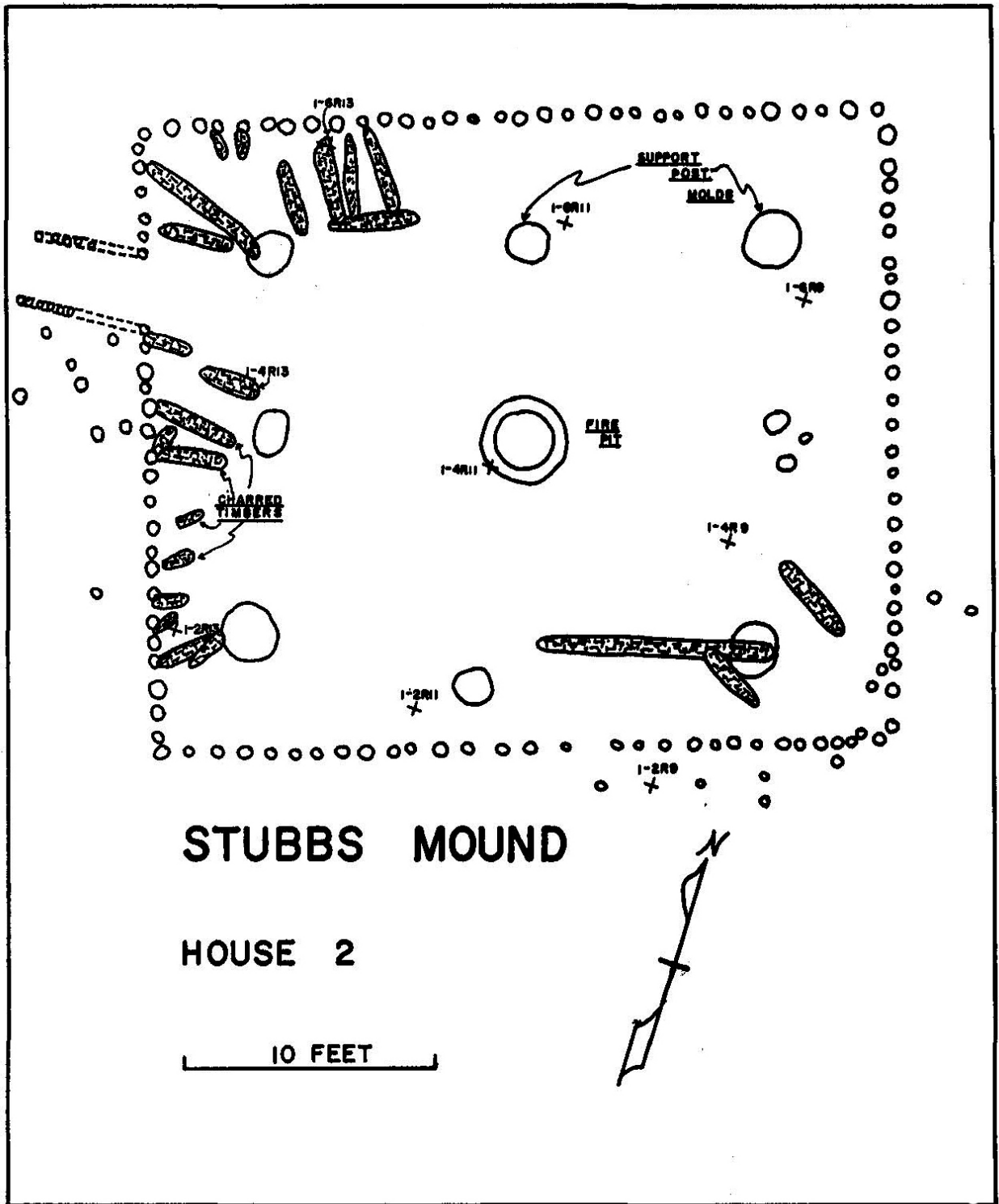
The feature recorded as House 1 in the notes was located near the center of the site (see Figure 4) at a depth of just over 1 foot beneath the plowed surface. In form the feature appeared to be a rectangular pattern of yellow clay generally about 2-4 inches thick. It measured approximately 25 feet by 15 feet with the long axis oriented in a northeastern to southwestern direction. Although scattered post molds were reported, apparently no patterns of any type were discerned. No drawings of these few scattered post molds are now available. The yellow clay is interpreted in the notes as a floor. In some places a thin (2-3 inch) layer of blue clay was found over the floor and was suggested to be part of a collapsed roof structure (SEAC 63:11). No artifacts were found in this blue clay and very little was found on the yellow clay floor (Level 15). Burial 3 was intrusive through the floor from an apparent upper level removed by plowing. A level of red clay covered the blue clay intermittently. This was removed early in the excavations. It may represent a mantle of a subsequent enlargement of the mound, but this is unknown. Profile 38, Figure 11 illustrates the yellow floor in reference to other adjacent levels.

Given the general regularity and profusion of post molds in the other three features interpreted as structures it seems unusual that no pattern was present around Structure 1 if this was a house. Perhaps the plowing disrupted the pattern, but there is still some doubt about the real nature of this yellow clay floor. The orientation and size are about the same as Structure 3, south of this feature and earlier (see Figure 6). It is possible that the yellow material was a portion of the collapsed upper parts of house 3, but I believe they were separate structures. The removal of up to two thirds of the height of the mound by farming prior to the excavations confused possible interpretations of this structure.

### Structure 2

Structure 2 was the best preserved structure at Stubbs Mound, because of its complete burning. This structure was also the most complex architecturally. The floor plan is shown in Figure 5 and Plate 6. The structure was initially thought by Kelly to have been situated on a low house mound (Kelly 1938:35), but analysis of the profiles clearly shows the 3-4 inch thick prepared clay floor to have been placed directly on midden Level 12A as discussed above. The post walls were remarkably straight, the individual posts being 5-7 inches in diameter with centers spaced about 1 foot apart. The slightly longer southeastern and northwestern walls of this rectangular structure were just under 30 feet in length while the shorter sides were 25 feet in length.

It is here concluded that this structure was apparently an earth-covered building. There are several lines of evidence leading to this conclusion. First, and perhaps most important, is the existence of several massive post holes found on the floor of the structure arranged in a rectangle around the larger center fire pit (see Figure 5 and Plate 9). Second, Profile 9 (Figure 12) shows an area of red clay (Level 5) on both the northern and southern sides of the structure rising to cover the structure. These basal



Structure 2 Floor Plan  
Figure 5



Structure 2  
Plate 6



Structure 3  
Plate 7

remnants have been truncated by plowing, but the upward angle is still evident. Third, charred roof timbers found in place on the floor show evidence of a structure involving a log placed along the length of the building on top of the massive center support posts. Leaner poles, many also found in place on the floor, were then placed at an angle over these center support logs, down and overlapping the low vertical log wall on the perimeter of the floor. Fourth, the large center posts in Figure 5 averaged just under 2 feet in diameter and were buried to an average of 2.5 feet below the floor level. Such massive center posts would be necessary only if they were to support a heavy load, such as an earth mass. The type of construction outlined here also allows for a center smoke opening in the roof at the peak over the central basin hearth. This feature (Plate 9) was 2.5 feet in diameter, 13 inches deep and had a raised rim about 6 inches wide and 3 inches high.

The entrance to Structure 2 was a passageway on the northern side of the western wall. The 3 foot wide passage did not exit exactly perpendicular to the western wall, being angled slightly northward (see Figure 5). The structure of the passageway included small vertical posts forming the side walls of the passage with their bottoms placed on a horizontal sill-like log set in a small trench under each wall. This short double wall trench type arrangement was traced for about 6 feet from the western wall of Structure 2 before it became lost in the area of Structure 4.

The floor of Structure 2 was apparently clear of midden debris; only a few sherds were located on it. There were no features on the floor other than the central hearth and the support posts. It is believed that some of the center posts, mainly those in the center of each wall, were added as braces for the four main horizontal roof timbers sometime after the initial construction, as they were not on the average as deeply set as the four corner posts. Level 6B, water laid clay and sand, was apparently washed onto the outskirts of the earth dome by rains during the functional period of Structure 2.

Several obvious parallels in the construction of Structure 2 and the famous Macon Earthlodge eight miles to the north are apparent. The similarities included: large center posts supporting large roof timbers, red clay roof covering, raised rim central fire pit, lack of midden or burials on the floor, and a narrow entrance passage with small posts lining the way (both 2.5 feet wide). Obvious differences exist, however, the primary ones being the fact that the major Macon Earthlodge (also the five other less well known ones at that site) is circular while Structure 2 is rectangular, and that the outlining post wall at Structure 2 (probably not above 3-4 feet above the floor level) is replaced by a formed clay wall in the structure on Macon Plateau.

Rectangular earthlodges are known, however, in Georgia, but they apparently aren't common. The mound at the Wilbanks site in Cherokee County (9CK5) contained a structure of this type according to Sears' 1958 monograph. His structure, however, was different in several ways from Structure 2. The Wilbanks structure lacked center posts, had a horizontal buttress type log outer wall, and no entrance passage was noted. On the Macon Plateau Mound A & B Plateau several circular earthlodges were excavated between the two mounds. At least one of these was a circular structure with an outer post wall (SEAC 138:91). Kelly has located several circular earthlodges in extreme northwestern Georgia in recent years in the Carters Dam area. (Kelly personal communication). The importance of Structure 2 at the Stubbs site will be expanded in the later section on the proposed Stubbs phase.



### **Structure 3**

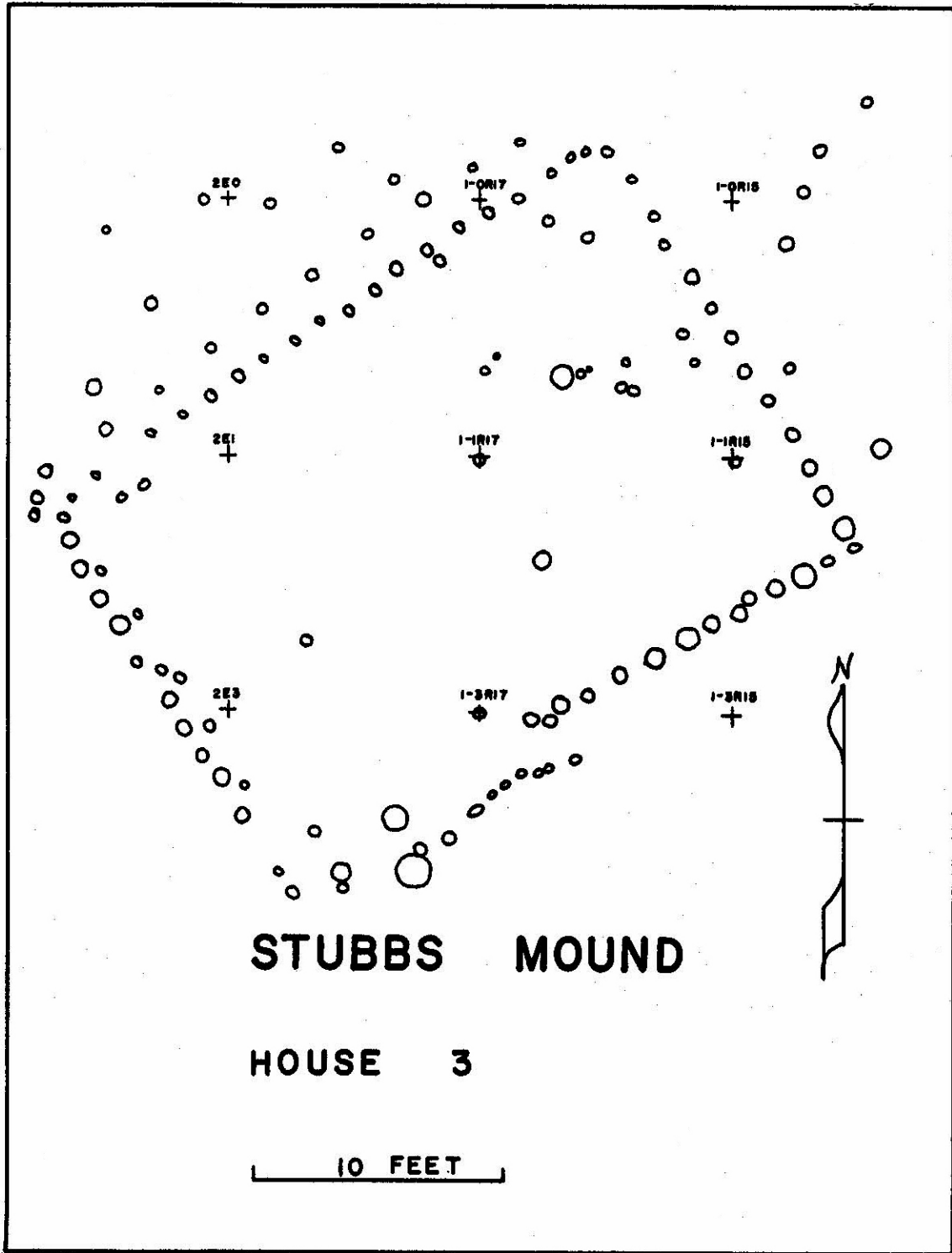
The feature designated as Structure 3 was the most southwestern of the structures at Stubbs Mound. Figure 4 shows its location, while Figure 6 gives the post pattern as recorded. The post mold pattern was all that was left of this building since it was unburned and consequently poorly preserved.

The outside dimensions were 26 feet by 20 feet, the long axis being in the northeastern-southwestern direction. The post molds forming the walls were 5 to 7 inches in diameter and averaged 14 inches apart. The corners were complete and no evidence of a wall trench was present. There were no features or fire pits found on the level where the posts first appeared. The posts first were evident in Level 12B, the bottom midden level. As shown in Profile 38 (Figure 11) this is partially beneath the yellow clay defined as the floor of Structure 1. The close vertical relationship of these two features is, of course, not complete as horizontal excavations show. Plate 7 shows Structure 3 after it has been taken through levels 12B and 13, and shows therefore only the basal portions of its post molds.

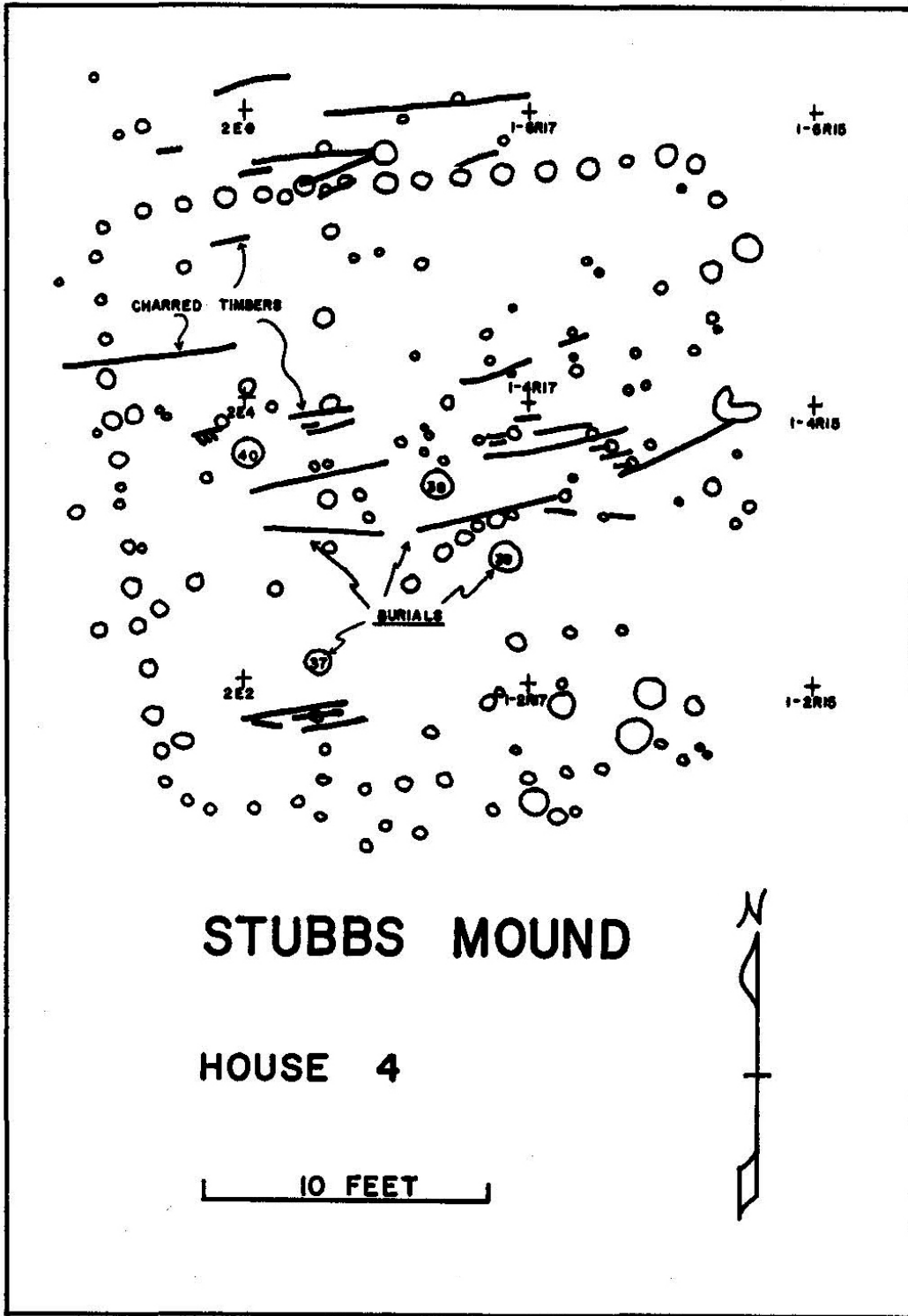
Of interest in comparative analysis is the partially overlapping southeastern wall of Structure 3. This is apparently the doorway area. A similar structure of about the same size was recently described from the Macon Middle Plateau (Prokopetz 1974:63). The overlap in the wall of that structure (Post House 8) covers the entire length of the building. As on Macon Plateau there was no evidence of wall trenches at Stubbs Mound. The northwestern wall of Structure 3 is apparently paralleled by a second wall with posts spaced a little over 2 feet apart. Whether this wall is part of the original structure (porch, veranda, etc.), a repair of the structure, or related to another undetected structure is unknown. There are several post molds scattered through the interior of the structure, although no pattern is evident. Because the structure was unburned and the because of the absence of a prepared floor, the identification of any artifacts from the structure is conjectural at best and none are therefore reported.

### **Structure 4**

The post pattern of Structure 4 was not as well defined as the other structures at Stubbs Mound, although there is no difficulty in seeing it. The building is roughly square and rotated slightly west of north (all north arrows are apparently magnetic as of 1936), the sides being about 21 feet. Figure 7 shows that there is a rash of extra post molds both inside and along the walls of the structure. The main pattern, however, is unmistakable. A moderate amount of charred roof timbers was found lying in an east-west direction, located as indicated on the figure. The floor level of the structure was on Level 12A, the same as Structure 2. Sections of the mixed midden and red clay (Level 3), which covered the floor of Structure 1, also covered portions of the burned roof debris of Structure 4. Levels 12A and 13 were intact beneath the floor of Structure 4. The position of a doorway for the structure is vague. The most probable point of entrance was on the southern portion of the eastern wall. The entrance passageway for



Structure 3 Floor Plan  
Figure 6



**STUBBS MOUND**

**HOUSE 4**

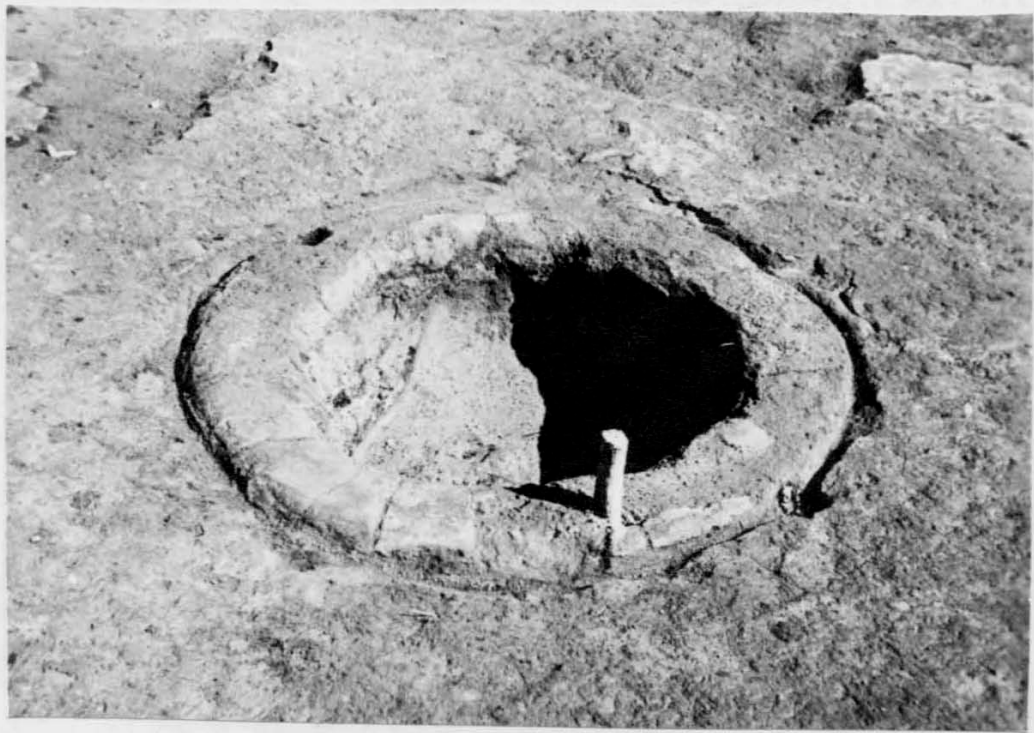
**10 FEET**



Structure 4 Floor Plan  
Figure 7



Structure 2 (Foreground) and Structure 4 (Background)  
Plate 8



Structure 2 Central Fire Pit  
Plate 9

Structure 2 apparently terminates in the northern portion of the eastern wall of Structure 4. One possible interpretation of this is that the two structures may have coexisted and been connected by the passageway. Alternatively, Structure 2 may have antedated Structure 4, and the entrance passageway for Structure 2 may have opened to the outside where Structure 4 was later built.

The posts in the wall of Structure 4 averaged between 5 and 7 inches in diameter and were spaced 16 to 18 inches apart. Just as in the other structures at Stubbs Mound, there was no evidence of wall trenches. The structure was apparently a simple post structure with wattle and daub walls. The roof timbers described above as lying in one direction only seem to suggest a flat roof structure, although this is not certain. No evidence of a gable log was recorded from the roof debris. The rear structure in Plate 8 illustrates Structure 4 during excavation. Profile 29, Figure 11, illustrates the floor in reference to other adjacent levels.

### **Mound Construction Stages**

The following is a summary of the events during the construction of the Stubbs Mound as seen from the excavation data at hand. The lowest level of occupation, Level 13, has a higher proportion of what are normally considered earlier ceramic types--fiber tempered and fabric marked classes. There is no mention of Level 13 being a separate midden; it is constantly described as the transitional zone from Midden 12 above into the sterile base, Level 14. There was no discernable break from Level 13 to Level 12. Fiber tempered pottery is found in small quantities on almost every site in the Macon vicinity from my inspection of the Southeast Archeological Center collections at Tallahassee. Although it is generally conceded to have disappeared in coastal Georgia by 800 to 1000 B.C., the possibility of its lasting until much later in central Georgia should be investigated. It is not inconceivable that the idea of making fiber tempered pottery as a minor specialty ware lasted until the time of Christ in central Georgia. It is almost always associated with Early Swift Creek types on sites where the latter occurs. It seems reasonable at this time, however, to follow tradition and ascribe most of these sherds from Level 13 to an earlier period (first millennium B.C.) having no direct connections with the main occupation at Stubbs Mound.

Midden 12, the lowest true midden level, was deposited next. Indications are that it covered the entire area of the mound and extended into the surrounding village area on all sides. Apparently the first structure to be built was Structure 3. This was placed on Midden 12 during its deposition. Evidence is that no more than one of the four structures was extant at any one time. The second structure was Structure 2, the postulated earthlodge. Structure 4 and Structure 1 followed in that order. Over Structure 1 a thin red clay level, which also covered parts of Structure 2 and Structure 4, was apparently placed. Midden Level 4 covered almost all the mound surface under the plow zone. It apparently began collecting after structure 4 was abandoned, but its relation to Structure 1 is unclear. It seems apparent, however, that the three main structures (2, 3, and 4) were late in the Level 12 midden deposition, but antedated the midden 4 deposition. Level 4, of course, was covered by the plow zone at the time of excavation. As reported before, the upper 5 to 6 feet of the mound were intentionally plowed away by farmers in the years prior to the excavations to fill low ground east of the mound. A conservative estimate would allow another four or more structures in this upper destroyed section.

It should be emphasized here that the overall construction of the mound was one of accumulated midden and house floors and not one of intentional artificial fill type. In this respect

the Stubbs Mound is most similar to the Swift Creek site described by Kelly in 1938 as having "a mushroom growth by accretion of soils" resulting from constant inhabitation of a small area (Kelly 1938:27). The implications of this similarity between the two sites will be explored further in the section on the Stubbs phase.

## FEATURES AND BURIALS

### Features

This section refers to the few pits located during the early horizontal excavations on the mound. It is primarily descriptive in nature although a few general comments will be offered in summary.

Pit 1 was located just northwest of stake 1-1R17. It was oriented in a SE-NW position and was about 30 inches in length. It was intrusive through the top red clay over Structure 1 and was first located at a depth of 12 inches below the surface. The fill was described as a dark midden.

Pit 2 was located about 8 feet east of Pit 1 near stake 1-1R15. It was circular with a diameter of 44 inches; it subsequently was found to contain Burial 4. It was also apparently intrusive through the red clay and the edge of the yellow clay floor of Structure 1. The fill contained small charcoal pieces and some dark organic matter. The pit was located 12 inches below the surface.

Pit 3 was located in the middle of the ten foot square labeled by stakes 2-E0 and 1-0R17 on the southern side. This dark area was intrusive through the top of the red clay and contained several potsherds, all heavily grit tempered and either plain or stamped. The pit was 7 inches below the surface.

Pit 4 was found 12 inches below the surface just northwest of stake 1-0R15. The pit was 37 inches in diameter and contained midden and red clay. It was apparently intrusive through the yellow clay floor of Structure 1, but not the red clay capping.

Pit 5 was located 14 inches below the surface just northeast of stake 1-1R15. It was reported to be 45 inches in diameter and eventually turned out to contain Burial 5. Of prime significance, the notes mention that "a grain of charred corn was found near the surface" (SEAC 63:12). The pit lay off the edge of the yellow floor. The burial was at a depth of 16 inches below the top of the pit. Several sherds were also recovered from the pit fill.

Pit 6 was located as a midden concentration in a red clay area over the south-west corner of Structure 2. It seems probable that this was simply a point where the red clay was thinner or shaved slightly deeper and the initial roof debris of Structure 2 was revealed. No further documentation is warranted on this pseudo-pit.

Pit 7 was an oblong pit 27 inches by 22 inches, located just south of Pit 5. It was first seen at a depth of 13 inches below the surface. It seems probable that Pit 7 is a southern extension of Pit 5 as the two join together at a depth of 22 inches below the surface.

Pit 8 was located some 40-50 feet southeast of stake 1-7R9. The pit was 47 inches by 43 inches and turned out to contain Burial 21. The pit went down 18 inches below the midden into the subsoil at this southern edge of the mound.

Although never given the status of a pit, a small intact vessel was found at a location in the midden about 1-2 feet east of Pit 7. The vessel is no longer in the collections but was described as being "a small, whole vase of stamped ware with a relatively wide neck, marked shoulders, a flat bottom, and a straight undecorated rim" (SEAC 63:23). It was reported to be 5 inches high, 5 inches maximum diameter, and 3.5 inches wide at the mouth. It contained a tooth crown and some calcined bone, apparently a cremation (no burial number assigned).

Following the termination of horizontal excavations and the initiation of vertical profile cuts as the major excavation technique, no further pits were located from above. Instead, when a

feature was located it would be revealed in a profile and was then designated as a pocket. The following descriptions of the few pockets located is again primarily descriptive.

Pocket 1 showed up only on Profile 2 just north of the center east-west line. It was described as a deposit of ash and midden and was relatively small.

Pocket 2 was just below Pocket 1 and it also was only in Profile 2. The midden-ash fill was similar to number 1 and it seems possible that this was just a deep extension of Pocket 1. The profile of Pockets 1 and 2 looks like a large post, but this is speculative.

Pocket 3 was also an ash deposit showing up on Profile 2 just south of Offset 1. It was surrounded by midden Level 4A and was about 1 foot in diameter.

Pocket 4 was a deposit of midden with some sherds and artifacts located just north and below Pocket 3, again on Profile 2. It seems probable that this and possibly Pocket 3 were associated with one or more of the many burials found in this area (see Figure 4).

Pocket 5 first showed up on Profile 2, but was also visible on Profile 3. This thin red clay layer was located on the eastern edge of what later became Structure 2. This and Pocket 6, another thin red clay pocket just north of Pocket 5 on Profile 3 were probably associated with the inside edge of the red clay that formed the basal portions of the original earth plating over Structure 2 on its eastern edge.

Pocket 7 was initially noticed on Profile 3 as a charcoal area. This pocket turned out to be the roof debris for Structure 2 and was extended to include the roof debris for Structure 4. This pocket therefore turned out to be a very extensive area and would have been better conceived as a level of the site. This of course could not have been determined before-hand and we are left with Pocket 7 as a very extensive area of the northern section of the site.

Pocket 8 was a small oblong area of midden showing up in Profile 5 just north of the east-west 0 line. There was no real depth to this small pocket.

Pocket 9 was defined but its location is in doubt. Apparently it consisted of the remnant of some blue clay originally called Level 9 in Profile 2, which was located in Profile 5, but this is uncertain. No artifacts were located in Pocket 9.

In summary, it may be seen that most of the pits defined in the early horizontal excavations were intrusive pits from upper levels of the mound that were destroyed prior to excavation. Most of the pockets found by vertical profiling, with the exception of number 7 (the roof debris to Structures 2 and 4), proved to be small, relatively insignificant variations on the profiles obtained. The fact that no pockets were enumerated after the first five profiles of the 48 for the site were completed seems to indicate that a better grasp for the stratigraphy was gained through time and the expected minor fluctuations in the profiles were not given the status of pockets.



## Burials

Forty-two identified human burials were located during the excavations on Stubbs Mound. Figure 8 through 10 are drawings of some of these burials. Table 2 summarize most of the data available from the notes, photographs, and personal examination of the remains still present in the collections. A number of items, particularly skulls, known to have been excavated, have disappeared from the collections over the years. With a few unusual exceptions, the bone preservation at Stubbs Mound was very poor. The many blanks in the table are indicative of lack of data. In many cases neither sex nor age could be determined. Often a few teeth were the only remains. Absence of burial goods, when it was recorded as such, is the origin of the *no* entries in Table 2 as opposed to the blank entries where no data at all is available.

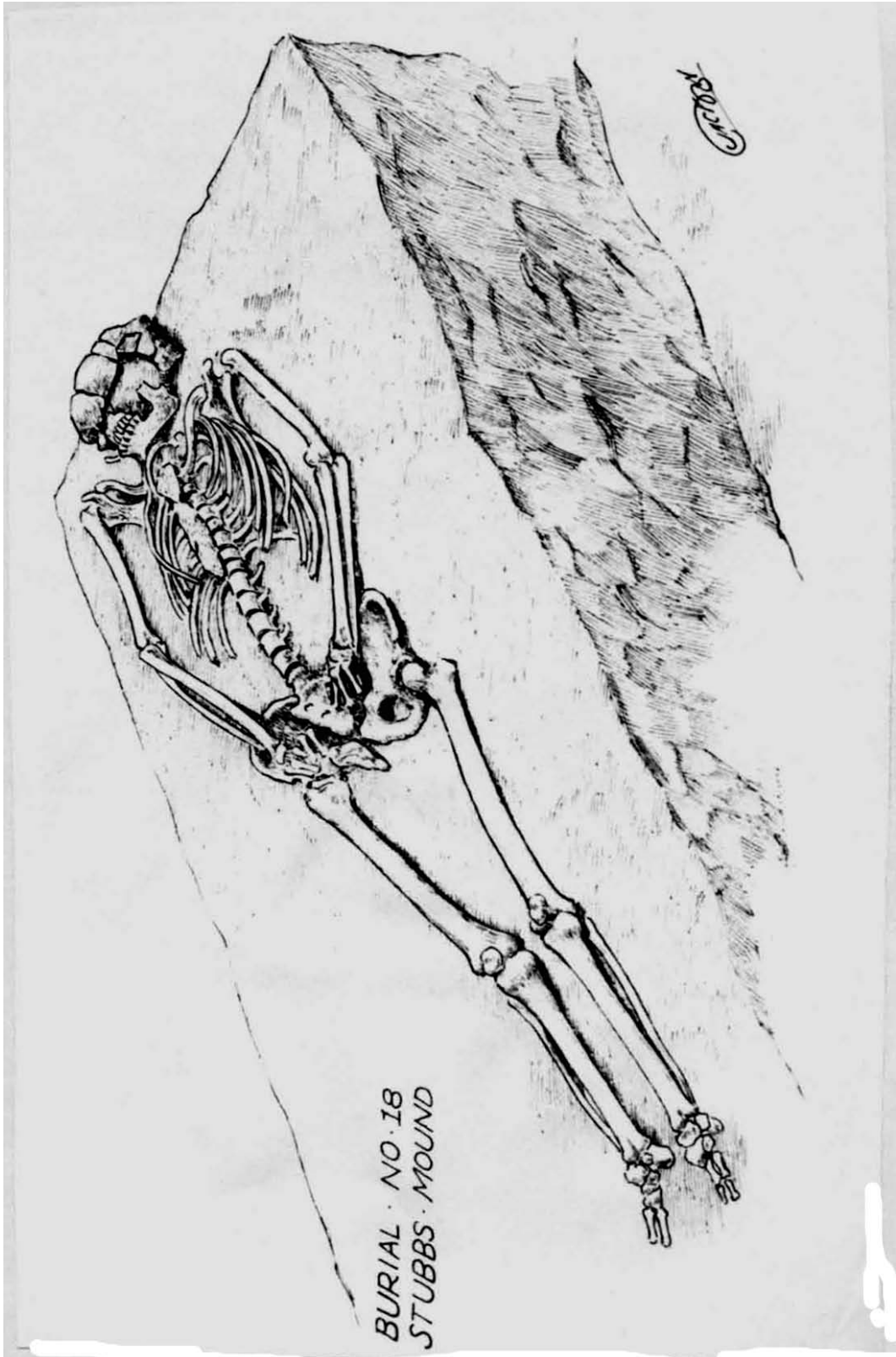
Examination of Figure 4 shows the locations of all the burials in relation to the structures and the limits of excavation. In general, the burials surround Structure 2 and may be associated with it. There is an apparent clustering of burials into three major sub-areas. The largest of these is southeast of Structure 2, while there is another on the other side of this structure (numbers 30-36). The third cluster is in the western portion of the site northwest and southeast of Structure 1. It was hoped that an attribute analysis would yield some explanation for this clustering, but the data are too incomplete to allow for a decent analysis.

It is noted, however, that the cluster northwest of Structure 2 was the only one that contained no grave goods with any burial. The orientation of the burials in all cases was apparently random. Lack of data on sex prevents any judgments on this attribute except that both males and females appear equally represented and distributed. The vast majority of the burials for which position could be determined were flexed and generally lay on the right side. A few burials were only semi-flexed while three were possibly cremated according to the field notes. One burial (number 18) was in an extended position on the back (Figure 8), while another three or four were recorded as possible bundle burials. Adults, adolescents, and children were all present and equally distributed over the mound.

Grave goods consisted of shell beads with Burials 8, 12, 17 and 28 (all ages represented, sex unknown); conch columella ear pins with Burials 7 and 16; copper ear spools with Burial 38 (adult) and Burial 39 (child); celts with Burial 8 (adolescent) and Burial 25 (adult male). Burial 25 (Figure 10) also had a human effigy pipe, and Burial 21 (bundle) had 1 projectile point and 1 ceramic disc. The majority of individuals with grave goods were adults, with the proportions of adolescents and children being about equal. Hints of status differentiation are present as well as ascription of status, but the sample is too small for adequate analysis.

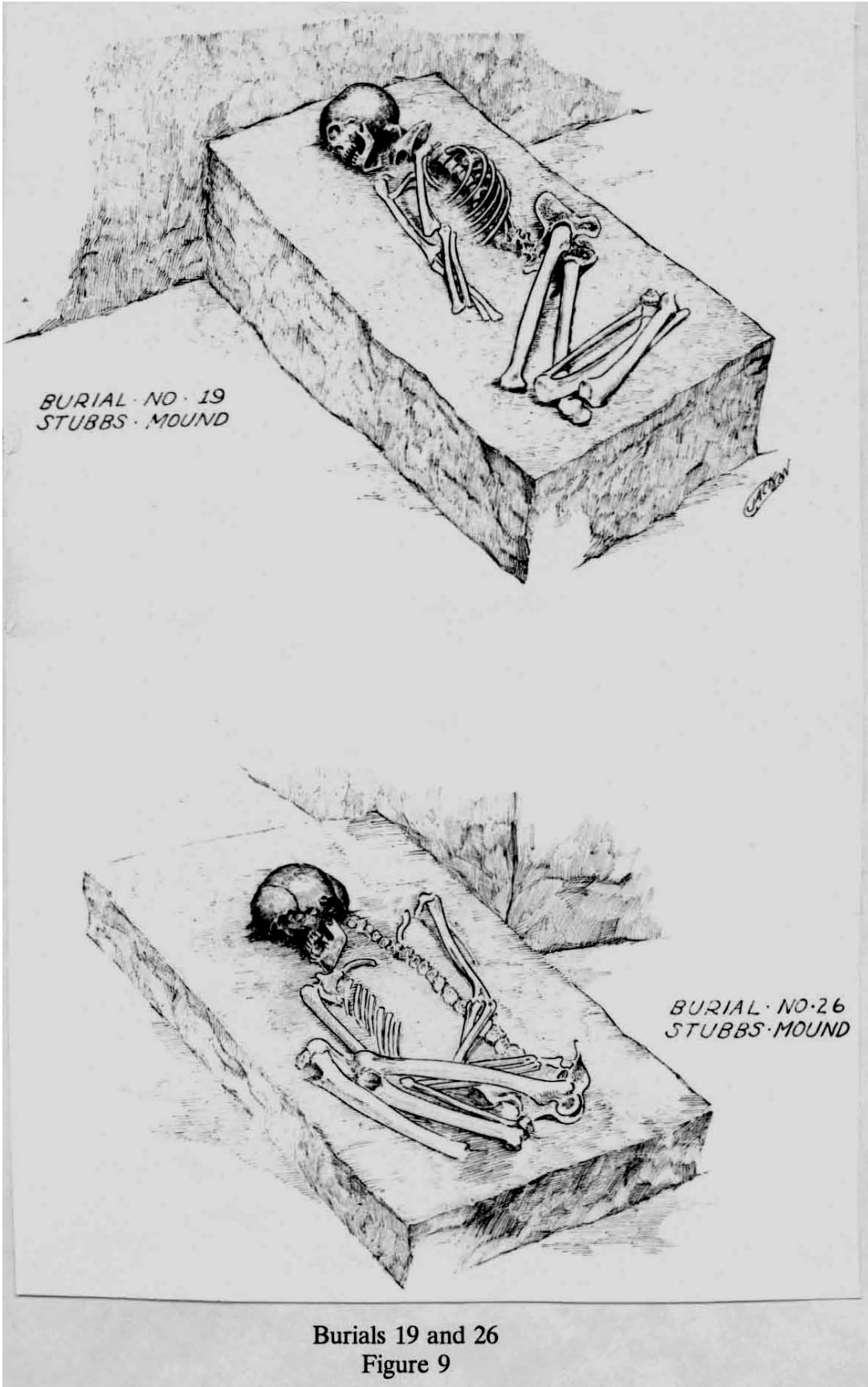
The level the burial was associated with is listed as found in the notes, but it should be pointed out that these assignments are of relatively poor accuracy as it was often difficult to tell where a burial pit started and how deep it was.

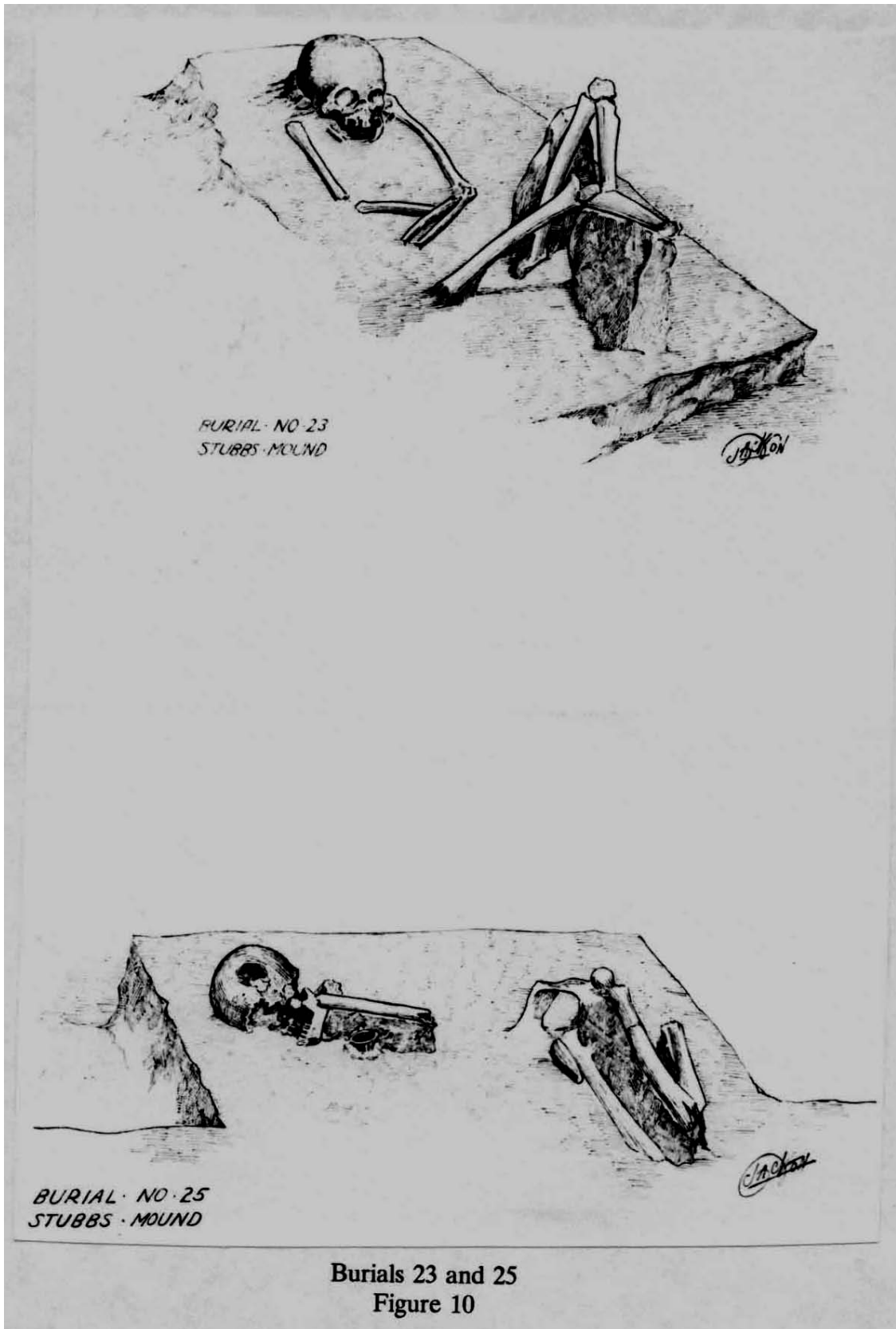
Pathologies in the Stubbs population were not particularly common based on the few specimens remaining. Burial 22, an adolescent female, had extensive caries, although none were observed in any other burial. The skull associated with this same burial was asymmetrical, the right rear portion of the cranium being larger than the left side.



BURIAL · NO · 18  
STUBBS · MOUND

Burial 18  
Figure 8





Whether this is due to cradle board deformation or premature suture closure on one side is uncertain. A localized area of sharp-edged periostitis was present on the right parietal bone of this same skeleton. The 15 millimeter diameter area was probably the result of an adjacent soft tissue infection (Morse, personal communication).

The skull associated with Burial 5, an adolescent male, had a generalized osteosclerotic thickening and roughening over the entire exterior aspect of the vault. The possibility of a treponematosi infection cannot be dismissed.

BURIAL	SEX	AGE	POSITION	HEAD TO	LEVEL	GOODS
1	-	-	-	-	4A?	-
2	-	CHILD	-	NW	-	YES
3	M	ADULT	FLEXED	NW	-	-
4	-	-	-	-	-	-
5	M	ADOLESCENT	FLEXED	-	-	NO
6	-	CREMATION	-	-	-	-
7	-	CREMATION?	-	-	-	YES
8	-	ADOLESCENT	FLEXED	-	5	YES
9	-	-	-	N	-	-
10	-	-	-	-	-	-
11	-	-	-	-	12	-
12	-	-	-	-	13	YES
13	-	ADULT?	-	-	-	-
14	-	-	-	-	-	-
15	-	-	-	E?	-	-
16	-	ADOLESCENT	SEMI-FLEXEDSE	12A?	YES	-
17	-	CHILD (8-12)	SEMI-FLEXEDNE	13	YES	-
18	-	ADULT	EXTENDED NE	12B	-	-
19	M	ADULT	SEMI-FLEXEDW	12B	-	-
20	-	CHILD (ca. 6)	BUNDLE OR - 12B FLEXED?	-	-	-
21	-	-	BUNDLE	N	13 (Pit 8)	YES
22	F	ADOLESCENT	BUNDLE OR SW FLEXED?	4A	NO	-
23	-	ADULT	FLEXED	W	12B	NO
24	-	ADULT	FLEXED	E	12B	NO
25	M	ADULT	FLEXED	E	12B	YES
26	F	ADULT	FLEXED	W	4A	NO
27	-	ADULT	FLEXED	N	13	NO
28	F?	ADULT	FLEXED	NE	12B	YES
29	-	ADOLESCENT	FLEXED	W	12B	NO
30	-	ADOLESCENT	FLEXED	SW	13	NO
31	-	ADULT	FLEXED	NE	13	NO
32	-	CHILD (5-8)	-	W	5	NO
33	F?	ADULT (OLD)	FLEXED	W	13	NO
34	-	ADULT	FLEXED?	N	13	NO
35	-	ADOLESCENT	FLEXED	N	13	NO
36	-	ADULT	FLEXED	N	13	NO
37	-	ADOLESCENT?	FLEXED	SW	13	NO
38	-	ADULT	FLEXED	SW	3	YES
39	-	CHILD?	-	-	3	YES
40	-	ADOLESCENT?	FLEXED	-	3	NO
41	-	ADOLESCENT	FLEXED	NE	HOUSE 4 FLOOR?	NO
42	F?	ADULT	BUNDLE	SW	12A	NO

TABLE 2

## LITHIC ANALYSIS

The lithic artifactual material from Stubbs Mound has been divided into the following groups and will be described and analyzed in that order. The groups are projectile points, drills, blades, chipped axes, cores, ground stone, hammer stones, mortars, and steatite. Debitage is present in the collection, but has not been analyzed for this project.

### **Projectile Points**

A total of 292 chipped stone projectile points and fragments was recovered in the Stubbs Mound excavations. Of these almost half were from either surface or uncertain provenience and were not analyzed. Visual comparison, however, revealed no forms in these collections not found in the 157 points from known proveniences that were typed. No detailed individual analyses of the points such as edge wear, were undertaken. The prime source for the typological work done was that of Cambron and Hulse (1964). Additional comparative data were obtained from the Bulletins of the Oklahoma Anthropological Society (1958, 1960, 1968, 1971). A total of 28 different point forms was recognized in the material from Stubbs Mound. The distribution by level and point types found (alphabetically arranged) are summarized in Table 3.

Several observations must be made in order to make the data meaningful. First is the matter of the large number of types. A careful effort was made to conform to the published descriptions. The chart does not represent the perspective of a splitter--there just are a tremendous variety of point forms present. The significance of this will be brought out later. It should be noted, however, that the single point called a Snyder's point is called that simply because that shape best fits the point in question. I will not interpret the presence of this point to have anything to do with Hopewell. Provisional Type 1 of Cambron and Hulse has been divided into three varieties on the basis of stem width relative to the blade width. A total of 46 points was in these three categories. Notes on dating are discussed at the end of this section.

As previously noted, the levels of primary chronological significance are Level 13 (the transition zone), Level 12 (the bottom midden), and Level 4 (the top midden). Level 1, the plow zone, also yielded a fair number of projectile points. Table 4 presents the same data rearranged in the following manner: Levels 2, 3, 5, and P7 are omitted as the quantity of material present is minimal; the types have been rearranged from most recent to oldest (according to Cambron and Hulse). Also, percentages of types by level are included. It will be noted that a few patterns are present in this seriation chart. The most obvious patterns show the Decatur and Gary points decreasing in frequency from bottom to top; the Maples peaking in the middle; and the Flint River Spike, Jacks Reef corner notched, and Madison points increasing in frequency from bottom to top. In all cases, of course, the quantities by type and level are small and the patterns may be more apparent than real.

PROJECTILE POINT TYPE	LEVEL									TOTALS
	1	2	3	4	5	12	13	P7		
Appalachian	0	1	0	0	0	2	0	0	3	
Candy Creek	1	0	0	0	0	0	0	0	1	
Coosa Notched	0	0	0	1	0	0	0	0	1	
Dalton, Colbert	0	0	0	1	0	0	0	0	1	
Decatur	1	0	1	0	0	2	6	0	10	
Ellis	0	0	0	3	0	0	0	0	3	
Flint River Spike	3	0	0	2	0	0	0	1	6	
Gary	0	0	0	0	0	3	6	1	10	
Halifax Side Notched	1	0	0	0	0	0	1	0	2	
Hamilton	2	0	0	1	0	4	2	0	9	
Jacks Reef Corner Notched	0	1	0	2	0	1	1	1	6	
Ledbetter	0	0	0	0	0	2	0	1	3	
Limestone	0	0	0	2	0	0	0	0	2	
Little Bear Creek	0	0	0	0	0	0	1	0	1	
Madison	2	0	0	2	0	0	0	0	4	
Maples	0	0	1	0	0	11	5	2	19	
Morrow Mountain	0	0	0	1	0	0	1	1	3	
Morrow Mountain, Rounded Base	0	0	0	0	0	3	0	0	3	
Motley	0	0	0	0	0	0	1	0	1	
Pine Tree	1	0	0	1	0	0	1	1	4	
Rheems Creek	0	0	0	0	0	1	2	0	3	
Savannah River	0	0	0	3	0	0	0	0	3	
Snyders ?	0	0	0	0	0	0	1	0	1	
Wade	3	1	0	2	0	1	1	1	9	
White Springs	0	0	0	1	0	1	1	0	3	
Provisional 1a-Narrow Stem	1	0	0	0	0	5	2	0	8	
Provisional 1b-Medium Stem	3	0	1	4	1	14	2	0	25	
Provisional 1c-Wide Stem	1	1	0	2	0	5	4	0	13	
TOTALS	19	4	3	28	1	55	38	9	157	

Table 3



PROJECTILE POINT TYPE (Youngest to Oldest)	LEVEL								Totals
	1		4		12		13		
	N	%	N	%	N	%	N	%	
Madison	2	14.3	2	9.1	0	0.0	0	0.0	4
Flint River Spike	3	21.3	2	9.1	0	0.0	0	0.0	5
Jacks Reef Corner Notched	0	0.0	2	9.1	1	3.3	1	3.6	4
Hamilton	2	14.3	1	4.5	4	13.3	2	7.1	9
Ellis	0	0.0	3	13.6	0	0.0	0	0.0	3
Halifax Side Notched	1	7.1	0	0.0	0	0.0	1	3.6	2
Snyders	0	0.0	0	0.0	0	0.0	1	3.6	1
Coosa Notched	0	0.0	1	4.5	0	0.0	0	0.0	1
Little Bear Creek	0	0.0	0	0.0	0	0.0	1	3.6	1
Wade	3	21.4	2	9.1	1	3.3	1	3.6	7
Ledbetter	0	0.0	0	0.0	2	6.7	0	0.0	2
Candy Creek	1	7.1	0	0.0	0	0.0	0	0.0	1
Savannah River	0	0.0	3	13.6	0	0.0	0	0.0	3
Motley	0	0.0	0	0.0	0	0.0	1	3.6	1
Limestone	0	0.0	2	9.1	0	0.0	0	0.0	2
Gary	0	0.0	0	0.0	3	10.0	6	21.4	9
Appalachian	0	0.0	0	0.0	2	6.7	0	0.0	2
Maples	0	0.0	0	0.0	11	36.7	5	17.9	16
White Springs	0	0.0	1	4.5	1	3.3	1	3.6	3
Morrow Mountain	0	0.0	1	4.5	0	0.0	1	3.6	2
Morrow Mountain, Rounded Base	0	0.0	0	0.0	3	10.0	0	0.0	3
Pine Tree	1	7.1	1	4.5	0	0.0	1	3.6	3
Decatur	1	7.1	0	0.0	2	6.7	6	21.4	9
Dalton, Colbert	0	0.0	1	4.5	0	0.0	0	0.0	1
<b>TOTALS</b>	<b>14</b>		<b>22</b>		<b>30</b>		<b>28</b>		<b>94</b>

Table 4

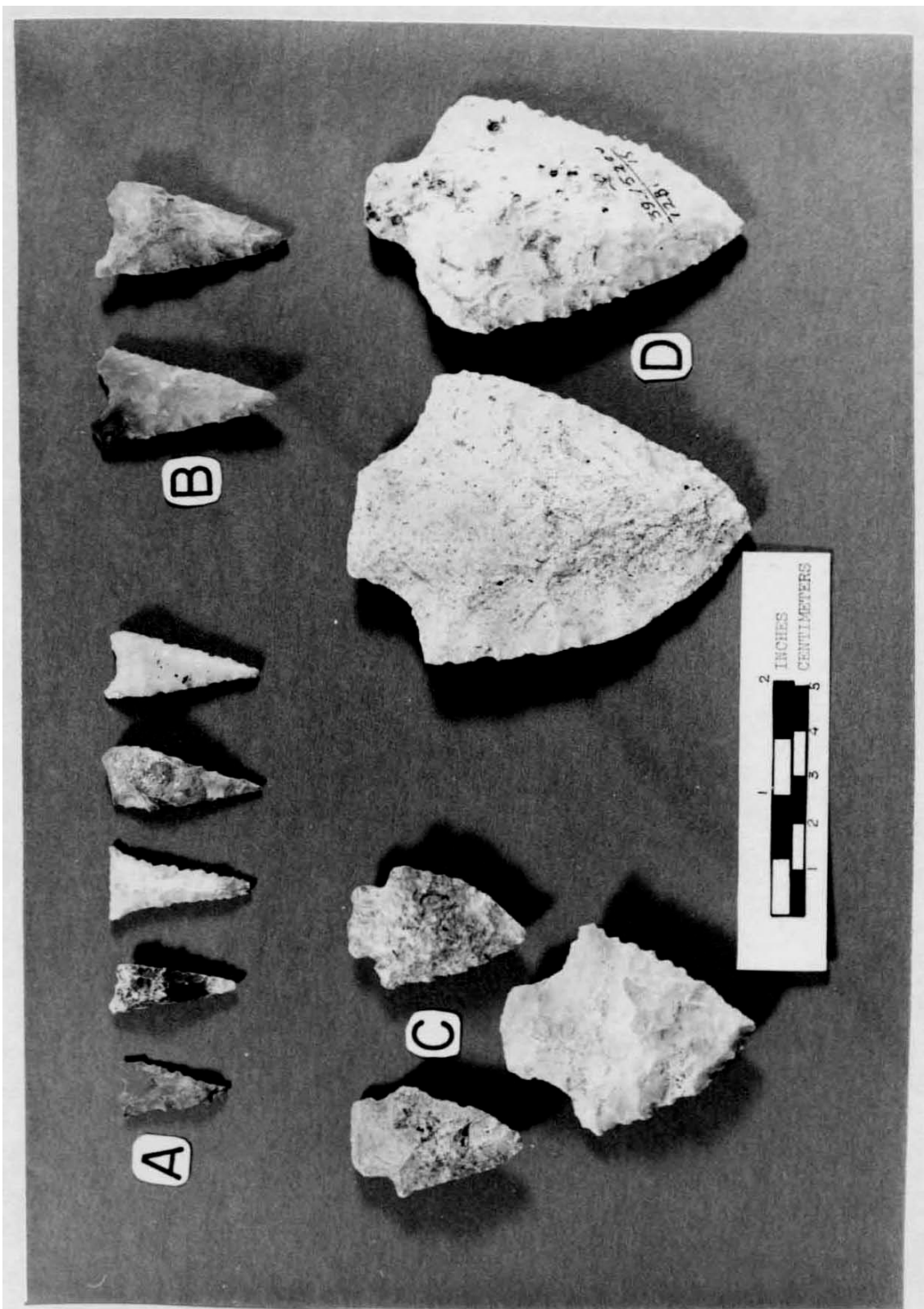
The traditional interpretation of a collection of points such as that found at Stubbs would be one of a long term occupation from early archaic times through the Mississippi period. The problem in this interpretation, however, is twofold. First, there was no recognizable Archaic or early-middle Woodland midden under the major ceramic midden levels. Level 13, the transition zone, was a subjective change from Midden 12 into undisturbed sterile red clay. The second problem involves the fact that levels 12 and above, which must date after at least A. D. 1100 (by ceramic observations) have large proportions of the earlier point types. Can we explain this away as just the mixing of earlier levels by the people forming the main occupation at Stubbs Mound, and if so, where are the points used by the people forming midden Levels 12 and 4? A few late point forms were found but the quantity is out of proportion to the intensity of other later materials (post-1100 A. D.) from the site. A similar problem was found in the analysis of the material from the Lamar site (Smith 1973). It seems improbable that projectile points were not utilized extensively in central Georgia in mature Mississippian times. This is, it appears, in agreement with Swindell's hypothesis on Lamar subsistence (Hamilton, Lauro, Swindell 1975:49a-e).

I believe a better explanation for the facts observed is that the people in the post-1100 A. D. period in central Georgia were heirs to a long Archaic-Woodland tradition of stemmed and notched projectile points and were still making several of these forms during the main occupation of the Stubbs site. The point types found on all other known Lamar period sites in central Georgia have similar projectile point inventories. This is not to say that there was no Archaic occupation at Stubbs Mound--there probably was--but we cannot be certain about the date ranges, particularly end dates, for many of these Archaic and Woodland points in central Georgia.

A wide range of cherts were used in the points from Stubbs site. Generally, though, the tan through pink (thermally altered) colors of the Coastal Plain cherts predominate, and all were very mottled. Quartz and quartzite accounted for less than 10 percent of the material. Patination of the materials was rather light, ranging from none to only light traces. It should be noted that there are an estimated 15,000 chert chips and debitage in collections. Present day surface reconnaissance reveals this debitage to be the most common artifact on the surface of the surrounding field. This large quantity of waste flakes is indicative of the actual manufacture of the projectile points at Stubbs Mound. No studies of edge wear on the waste flakes was undertaken, but Lauro's work on waste flakes from the Cowart's Landing site 2 miles south of Stubbs Mound showed that almost 30 percent of the flakes were modified (Hamilton, Lauro, and Swindell 1975). It would seem reasonable that flakes from Stubbs would show similar use-wear, but this is unproven.

One final note: approximately 80 percent of the projectile points from Stubbs Mound were unbroken (or only lightly damaged). This unusually high percentage is relatively rare. The fact that so many points were present at the site is also note worthy. Farmers still pick up points in the area and one, Otis Edge, reports that he has a bucket full of arrowheads from the vicinity of Stubbs Mound (Personal Communication).

Plate 10 illustrates typical points from Stubbs Mound. Number 10A illustrates the small Madison triangular arrow points; 10B shows the related Hamilton points. Plate



Projectile Points  
Plate 10

10C shows the common small stemmed points, and 10D shows the large stemmed points of the Maples-Savannah River genre.

An analysis of the remaining lithic tool assemblage follows. The importance of this aspect of the lithic technology in aiding reconstructions of hunting-gathering seasonal activities activity rounds has been emphasized by Ingmanson and Fischer (1966) for the central Georgia area.

### Drills

A total of 21 flint drills and fragments was located during the excavations (Table 5). It should be noted that no micro wear studies were performed to warrant the use implication of drilling. The term is used here as a simple form-descriptive term. With one exception, all the drills (where form was recognizable) were stemmed, the stem sides and base being straight. A single drill was simply a long narrow blade with a slight enlargement at the base, but not a true stem. The drills ranged in length from 45 to 70 millimeters, while the tips were from 2-4 millimeters in diameter. Half of the fragments located were just the distal tips of the complete tool broken off from the body. The distribution of the drills and fragments by level is as follows.

**TABLE 5**

Level	1	4	6B	12	13	P7
Drill	0	1	2	5	0	2
Drill Tip	2	4	0	2	3	0

Conclusive evidence that drills were probably used on the site comes from the wooden ear spool cores and the shell beads. The same range of chert materials was found among the drills as in the projectile points. Fairbanks (1956) says that the stemmed drill form is not associated with the Macon Plateau focus of early Mississippian, but with an Archaic tradition. The fact that these occur in good context with midden Levels 12 and 4 at Stubbs is evidence that they were still being used then (compare with notes on occurrence of Archaic points in Stubbs context above.)

### Blades

A cache of 18 oval flint blades was located in the top of level 13 near the center of the site. These blades were roughly flaked and ranged from 6.4 to 9.8 centimeters in length. They were from 4.9 to 6.3 centimeters in width, and thickness was from 1.5 to 2.0 centimeters. The blades were arranged together in about a 1 foot diameter pile. No discernable pit was reported. The proportions of length to width were very regular from one to another. It seems possible that these were blanks to be used for processing into finished artifacts. The relative absence of large size chipping debris on the site coupled with the large quantity of small chips tends to support this hypothesis. Apparently, the blanks were made at some quarry site away from the village, brought in, and finished as needed by an artisan. The blank edges were totally unworked. The material was relatively heavily patinated light tan chert, similar to some of the low grade materials found at Macon Plateau.

### **Chipped Axes**

A total of 11 chipped stone axes or choppers was recovered. Eight of these were of a tan-yellow chert, while three were of metavolcanic materials. These varied from 8.2 to 18.2 centimeters long with a mean length of 11.0 centimeters. The weights ranged from 118 grams to 1490 grams with most being under 500 grams. The form of these choppers was that of a bifacially flaked axe with a chipped center depression girdling the axe for hafting into a forked stick handle. The cross section form was flat on one side and convex on the other. Although two showed severely battered blade edges, most of these were still relatively sharp. Fairbanks states that these chipped choppers were the typical choppers on Swift Creek sites (1956:42). The small size and sharp edges on most of them suggest butchering activities rather than horticultural ones, but this is unknown. The significance of Fairbanks' statement is important for the development of Stubbs phase.

### **Core Tools**

Twenty-one artifacts were designated as core tools. These are probably pounding tools of some sort rather than waste cores. They actually are very similar to the chipped axes described above except for the lack of the flaked girdle hafting depression. These objects were all bifacially flaked. They ranged in length from 6.0 centimeters to 11.3 centimeters with a mean of 8.8 centimeters. The weights ranged from about 100 to 870 grams. Many of these artifacts had the same flattened-convex form [called trianguloid by Fairbanks (1956:42)] as the chipped axes described above, although several of them were chipped in a biconvex form. These are also assigned to the Swift Creek period by Fairbanks (1956:42).

### **Ground Stone**

There are three groups of artifacts classified here as ground stone. The first of these consists of a ground and polished steatite banner stone fragment. The fragment is broken across the drilled hole (as usual). The artifact fragment is symmetrically tapered to a rounded point. These objects are common from archaic through woodland periods (Fairbanks 1956:42). The 5.5 centimeters long fragment was found in Level 13.

The second class of ground stone objects was that of celts and celt fragments. There were three whole celts and nine fragments recovered from Stubbs Mound. Two of the three intact celts were recovered from burials. Burial 8 (adolescent) contained the largest of these. This artifact was 20.5 centimeters long and 6.5 centimeters wide. It was thin, being only 2 centimeters thick. Except for size, the celt with Burial 25 (adult male) was very similar. The measurements for it were 14.5 centimeters long and 5.4 centimeters wide (this is on display at Ocmulgee National Monument). Neither of these two celts show any wear. Both were highly polished and made of greenstone. The third celt from Stubbs Mound was of a different form than those from the burials. This one measures 12.2 centimeters long, 6.1 centimeters wide, and 4.4 centimeters thick.

Being thicker it, of course, weighs more (581 grams). The polishing is not as completely or carefully done and, most revealing, the blade edge is thoroughly battered and broken from use. The poll end shows only slight use. This was obviously an axe that was heavily used. There are nine other fragments of celts present in the collections, two thirds of which are not well polished. This is predicted if the dichotomy between highly polished celts for ceremonial/burial use and less

well polished celts for actual cutting use is valid. No fragments of monolithic axes were found. Celts of the types found are generally associated with Mississippian culture (Fairbanks 1956:34) in the nuclear southeast.

The final class of ground stone artifacts is that of stone discs or discoidals. A total of 15 of these items was recovered. Five of these were of well polished greenstone. The diameter range was from 28 to 42 millimeters with a mean of 34.8 millimeters, and the range of thickness was from 15 to 27 millimeters with a mean of 20.6 millimeters. The edges were all well rounded and all sides were slightly convex with the exception of one specimen (the largest) having a concave pit in one side. A larger single stone disc was of quartz. This fragmentary disc measured 60 millimeters in diameter and 29 millimeters in thickness. It also had a concave depression in one side. Nine other rough circular stone discs were present.

Most of these were made from rough sedimentary rock, the edges being formed into circular shape, while the sides received no grinding at all. These rough discs ranged from 32 to 51 millimeters in diameter with a mean of 40.9 millimeters; thickness varied from 13 to 22 millimeters with a mean of 16.8 millimeters. In comparison to the well polished greenstone discs described above these discs were larger in diameter but thinner. No biconcave discoidals were located at Stubbs Mound. The small, flat-faced discoidals were present in Mound C at Macon Plateau, but were not the predominant type (Fairbanks 1956:45). The stone discs were also found in eastern Tennessee. Lewis and Kneburg state that they are associated with the Dallas component at Hiwassee Island (1946:121). Identical discs are shown in Plate 25 of the Peachtree Mound report from North Carolina (Setzler and Jennings 1941). The function of these small discs is generally assumed to have some association with games, but this is uncertain. They don't seem to be associated with South Appalachian tradition sites before A. D. 1000.

### **Hammer Stones**

Seven stones were classified as hammer stones. These stones were about 7 centimeters in diameter and weighed between 400 and 500 grams. The evidence for their having been used as hammers involves the fact that at least one edge of these stones was usually battered and broken. Some of these may have also served as grinding stones from time to time. Two of the stones had very slight pits or indentations on one side. These are not typical nutting stones, but are suggestive. I believe that these stones were general purpose hammers, grinders, etc., of a multi-use design, but this is untested. It would be useless to try to assign these general purpose items to any one period.

### **Mortar**

One large shallow mortar was located at Stubbs Mound. The sedimentary slab was 28 centimeters by 23 centimeters, with a central depression 14 centimeters wide and 2 centimeters deep. Fairbanks says these are more characteristic of Swift Creek in central Georgia (1956:53). Lewis and Kneburg associate these with Hamilton in eastern Tennessee (1946:118). They are also present at the Peachtree Mound in North Carolina (Setzler and Jennings 1941).

### **Steatite**

A total of 26 fragments of modified steatite or soapstone was recovered. Twenty-four of these were from steatite vessels. They came from all levels of the mound. Six of these

fragments were rim sherds. The rims were simple straight ones with four having rounded lips and two having a flattened lip. One of the flattened rim fragments also had a repair hole 3 centimeters below the lip. The hole was drilled from both inside and outside and was 14 millimeters in diameter at the exterior portions of the fragment and 10 millimeters in diameter at the center of the 22 millimeter thick fragment. One body fragment also has a similar repair hole. The range of thickness for all the steatite vessel fragments was from 12 to 22 millimeters with a mean of 15.7 millimeters. Vertical and diagonal tooling marks were present on the exterior aspect of most fragments, just as was found at the Ocmulgee Bottoms (Nelson, Swindell, Williams 1974). No decoration in the form of engraving was present. One body sherd showed an angle of close to 90 degrees, undoubtedly a fragment from near the bottom of a vessel.

Steatite vessels are almost always interpreted as dating from late archaic to early woodland times. Fairbanks, however, points out that they may last to as late as the Swift Creek period (1956:42). Steatite is rare on the Macon Plateau site. It is associated with the Hamilton and Candy Creek phases of eastern Tennessee (Lewis and Kneburg 1946:118). It is also present at Cowart's Landing, a good late Swift Creek and Lamar site in central Georgia (Hamilton, Lauro, Swindell 1975:30). It would seem that steatite vessels were possibly utilized for a good while into the centuries A. D. and not confined to the Late Archaic-Early Woodland.

One steatite fragment seems to be a fragment of a tubular object, possibly a banner stone or pipe fragment. Another small carved fragment has two or three engraved lines and a few small punctates. This 58 millimeter long object may be an effigy of some sort.

## CERAMIC ANALYSIS

The most common cultural items from Stubbs Mound were potsherds. These sherds were analyzed with the prime purpose of chronological elaboration for the central Georgia area. Alternate questions addressed with the ceramic data involve the implications of the presence of both Mississippian and Southern Appalachian ceramic tradition material at the site. Some 6500 sherds were analyzed in preparation of this section of the analysis. This number represents only about one-third of the total number of sherds in the collections of the Southeast Archeological Center from Stubbs Mound. More than half of the available sherds, however, were from either unknown or questionable proveniences. This includes many sherds collected from the surface with no horizontal designation. None of these were analyzed due to the obvious problems of mixing. Also, no sherds were analyzed from excavations prior to the implementation of the numbered levels for the various site strata in October of 1936. These sherds were given simply a descriptive level at the time and correlation of the depth and specific location with the strata scheme (see Table 1) was found to be impractical. No sherds from Levels 4B or 4C were analyzed because these levels represented the mixing of midden Level 12 with midden Level 4A at the northern and southern feather edges of the site.

Museum lots of sherds were selected for analysis from two horizontal areas. First, and most important, midden levels were selected for analysis if they were outside the area of the houses, so as hopefully not to be disturbed by those features. This applies primarily to Levels 1, 4A, 12, and 13. These units held the most hope of yielding significant chronological sequences. They formed the basic site stratigraphy outside the structures as Profile 23, Figure 11, and Profile 9, Figure 12 illustrate. The second area of interest was that of the floor levels of the houses.

Over 200 separate lots of sherds from varying levels and locations were visually analyzed and classified. A 150 watt flood lamp with a reflector was used at a low angle on all samples to aid in separating the plain and lightly stamped sherds, since this is not an easy task on many late prehistoric ceramic collections from the Southern Appalachians. The raw data collected were compiled into contingency table form through the use of a computer and the program Crosstabs contained in *Statistical Package for the Social Sciences* (Nie et al. 1975). This program calculated all the percentages and compiled the chi square statistic. [The appropriate measures of association, Lambda, Kendall's Tau C, and Gamma, were also calculated for the data but aren't dealt with here as the results were inconclusive.]

The major problem in the grouping of sherds from Stubbs Mound lay in the two main ceramic types--Lamar Complicated Stamped and Swift Creek Complicated Stamped. Using the type descriptions for these two types (Haag:1939), it became apparent that many sherds from Stubbs Mound had attributes of both of these types. The following section will compare the two types, with an emphasis on their respective differences.

As mentioned above, the definition for these two types was set in print in 1939 by Jennings and Fairbanks in the newsletter of the Southeastern Archaeological Conference. There is no doubt that Swift Creek Complicated Stamped has temporal priority over Lamar Complicated Stamp (Kelly 1938). The types are basically similar in that both are sand/grit tempered complicated stamped wares. The differences as described below are gleaned from the type descriptions. The temper of Swift Creek Complicated Stamped is a fine to medium sand, the resulting paste being quite homogenous. Lamar Complicated Stamped, however, has a



substantial amount of larger grit particles and less sand than Swift Creek. The paste of Lamar is also less homogenous than Swift Creek. It has been observed in the background research for this section that often the larger tempering particles of Lamar are rounded grains of reddish quartz sand up to 1 millimeter in size. Lamar Complicated Stamped sherds are generally thicker than Swift Creek sherds. The Lamar sherds range from 6 to 10 millimeters thick while the Swift Creek sherds are only 4 to 7 millimeters thick.

The principal difference between the ceramic types involves the stamping itself. The usual description for Swift Creek Complicated Stamped speaks of the designs applied from a "carefully cut and precisely applied stamp" (Haag, ed. 1939:1). Over stamping is minimized and a general appearance of neatness and aesthetic expertise is evident. The stamping of Lamar Complicated Stamped, however, is "poorly executed and carelessly applied" (Haag, ed. 1939:3). Considerable over stamping is evident and designs are often too obliterated to recognize. It is assumed that many or most of the classic Swift Creek stamps were made of wood. The grain of the wood can often be seen in the grooves of the resulting sherds (Joseph R. Caldwell, personal communication). At least two stamps made of pottery were found at the Lamar site, and it is possible that the loss of decorative expertise was partially due to a change in paddle stamp style--wood to ceramic. On close examination of the two types, it is apparent that the lands and grooves of Swift Creek Complicated Stamped are wider than those of Lamar Complicated Stamped. Also, the lands and grooves of Swift Creek wares are generally flat while those on Lamar sherds are generally rounded or peaked.

The interior and exterior of a Swift Creek sherd are generally the same color, with the exterior rarely darker. On Swift Creek sherds the earth colors--browns, reds, and oranges--predominate, while Lamar Complicated Stamped sherd colors are more in the dark grey to black range on the exterior, although some browns do occur. The interior of most Lamar sherds is smoothed very well, apparently intentionally, while the interior surface of Swift Creek sherds are not finely smoothed.

In terms of rim form and style, the Swift Creek sherds vary from a scalloped shaped unmodified lip in early Swift Creek, to a small rim fold in Middle Swift Creek, and finally to a wide fold up to 1 inch wide in late Swift Creek times. The time span for this continuum is generally estimated to be from about A. D. 0 to approximately A. D. 1000. Lamar rim forms are very distinctive, and in many cases the most diagnostic mode of identification for a small collection of sherds. The rim style is generally called a folded rim, but it seems that in many cases either an extra strip has been added, or a thicker coil was used on the last coil. This thickened area is nearly always modified by either finger or fingernail pinching, notching with a stick or other tool, or punctates with a hollow reed. There is a good bit of variation in these modified rim strips, but as a group they are quite distinctive.

The most common vessel shape for Lamar Complicated Stamped is a globular jar with a flaring rim and a slight neck restriction. Other shapes are flaring rim deep jars without restriction and simple bowls. Although data is rarer for the Swift Creek vessel forms, the most common style seems to be a conoidal jar with either straight sides or with a slight barrel shape.

In summary, both types are curvilinear complicated stamped wares or jar forms, but differ considerably in paste characteristics, rim form, stamping technique and quality, and thickness. On given sites, the two are easily separable. They comprised two distinct assemblages at the Cowart's Landing site (Hamilton, Lauro, Swindell 1975)

As mentioned, however, it was found that many sherds from Stubbs Mound caused problems in terms of typing in that they had attributes of both types. Many, for instance, showed stamping and rim treatment similar to Lamar on a paste similar to Swift Creek.

The type-variety system seems the most logical way to handle the problem of the overlapping of Swift Creek and Lamar ceramics, if we are to still utilize typologies as a basis for chronological investigation. The following statement from Philip Phillips explains why this is true.

Perhaps the greatest advantage is that varieties can be formulated for the investigation of particular problems, or for the expression of their solutions. On the theory that they do not have to be as readily sortable (in the form of sherds) as types, they permit us to handle the difficult problem of intergrading variation through time and area (Phillips 1970:25).

He adds that "...the type-variety concept permits expansion and refinement of classification with the least amount of disturbance to existing formulations." (Phillips 1970:26).

In terms of broad trends, the majority of the ceramic material from Stubbs Mound is more closely related to the post-1000 A. D. central Georgia manifestations (Macon Plateau and Lamar) than the pre-1000 A. D. ones (Swift Creek, etc.). In order to aid explanation, as well as allow more accurate recording of my potsherd counts, Lamar Complicated Stamped (Haag, ed. 1939:2) is here divided into two varieties on the basis of temporal arrangement. The two named varieties are Lamar Complicated Stamped Variety Lamar (the established variety) and Lamar Complicated Stamped Variety Tobesofkee. The Tobesofkee variety is the earlier of the two and represents the material described above which overlaps with both Swift Creek Complicated Stamped and Lamar Complicated Stamped Variety Lamar. The latter variety is best represented at the Cowart's Landing site (Hamilton, Lauro, Swindell 1975). The famous Lamar site (Kelly 1938; Smith 1973) seems to have both types present although Variety Lamar definitely predominates. Variety Lamar is present at Stubbs Mound but is not as common as Variety Tobesofkee. These comments will be expanded following the presentation of the ceramic charts.

The next major ceramic problem for Stubbs Mound involves the plain potsherds. Examination of the literature and initial collection inspection revealed all the following types as possible plain types from the site: Lamar Plain (Haag 1939), Bibb Plain (Fairbanks 1956), Halstead Plain (ibid), McDougal Plain (ibid), Mossy Oak Plain (Woodland Plain) (ibid), as well as the early fiber tempered plain. Later results hint that Lake Jackson Plain could possibly be included in this group. The fiber tempered plain wares were easily separable and caused no identification problems. No Halstead Plain was found and so this can be eliminated from consideration. Lamar Plain, of the four remaining types, is the most distinguishable and was separated as such. Much of what is closer to Lake Jackson Plain was probably counted here, however. The remaining three types, Bibb Plain, McDougal Plain, and Mossy Oak Plain, are usually distinguishable on large sherds, but not so on small ones. Since the vast majority of the sherds from Stubbs Mound were less than half dollar size, any attempt to accurately separate the three would be highly subjective. For purposes of my analysis the three were lumped together under the non-descript term other plain. In actual analysis it was often difficult to even decide whether a given sherd was Lamar Plain or other plain. If a sherd were thicker, less sandy, more

gritty (particularly with large reddish grit particles irregularly distributed) and darker in color, it was assigned to the Lamar Plain category. The other sandier, thinner, rarely shell tempered sherds were assigned to the other plain category.

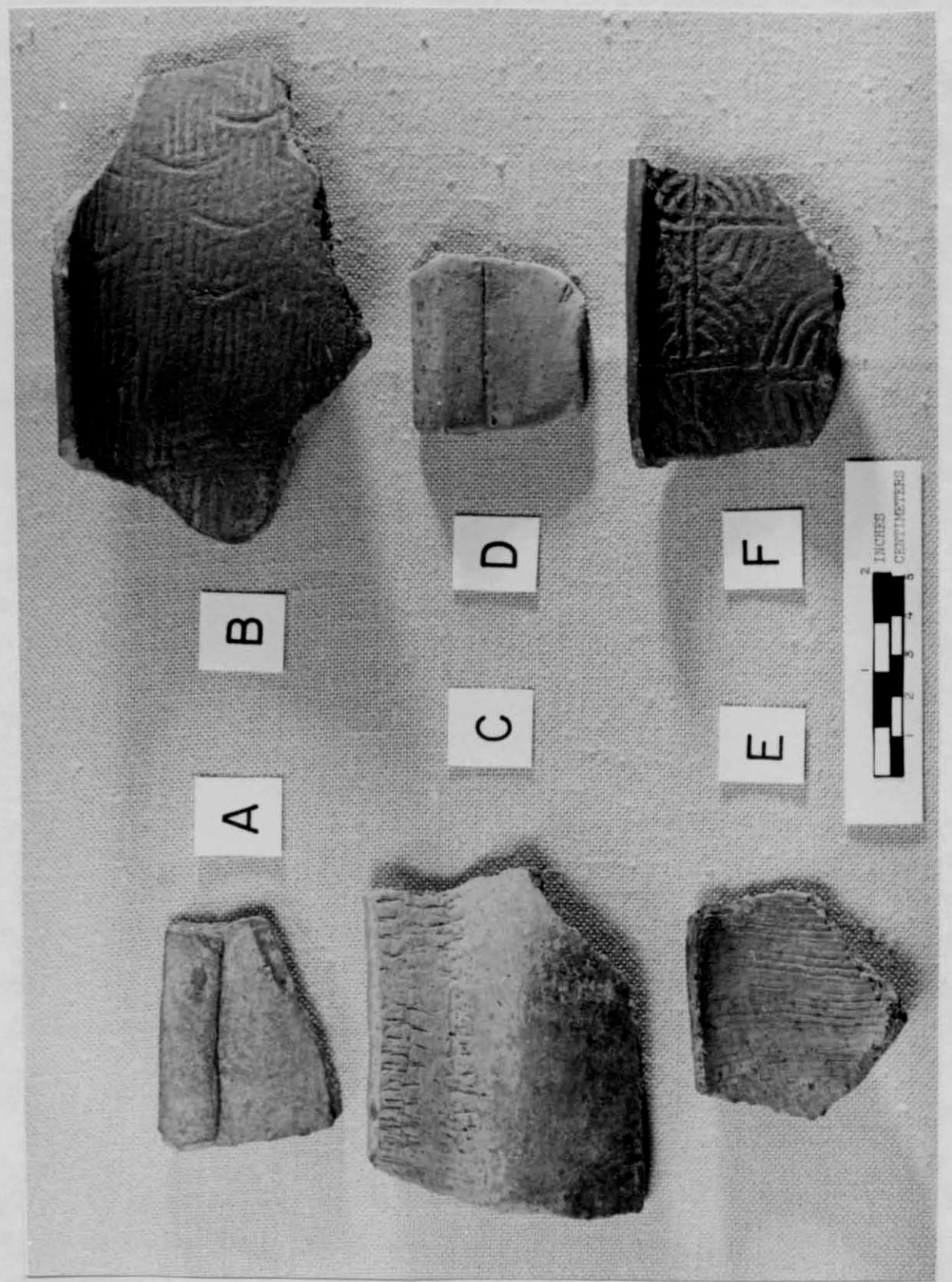
The type-variety system could offer a solution to the problem of central Georgia plain wares, but this is a problem for the future. The dichotomy in plain pottery set up here did yield patterns (see Table 10).

Following are the ceramic tables. The data on them were consolidated and all computations (percentages, totals, chi squares, etc.) were done through the use of the Florida State University computer facilities.

Table 6 lists all the potsherds analyzed by level and ceramic types. It will be noticed that the list includes about the same wide range of types found at the Lamar site (Smith 1973). The relatively large proportion (5 percent) of Early Woodland types (such as Stallings, Deptford and Dunlap) is not altogether unexpected at any given site in central Georgia.

Plate 11 illustrates some of the rarer types found in the analysis. Sherd A is a good example of a late Swift Creek Complicated Stamped sherd with a wide folded rim. Sherd B is a large rim sherd of Woodstock Complicated Stamped, a type that is very rare in central Georgia. Sherd C is a rare type (only 3-4 sherds seen in collections) with vertical rocker stamping around the rim of a bowl, which was then partially obliterated. This is not an Middle Woodland rocker stamped sherd. The paste is about the same as Lamar paste. Sherd D is a Weeden Island Plain rim, now known to be not uncommon on the Coastal Plain all the way to the Fall Line (Jack Walker, personal communication). Sherd E is a combed ware known to be present at the Lamar site also. Finally, Sherd F is a clear example of Savannah Complicated Stamped. It should be remembered however that although Savannah and Etowah Complicated Stamped sherds are present in central Georgia, they are far from common, bordering on rare. This is, of course, quite different from northwestern and northeastern, as well as coastal Georgia where these types are far more common. When present in central Georgia the types show no





Selected Sherds  
Plate 11

temporal priority over each other. Fairbanks (1950) has set up the traditional sequence of Etowah to Savannah to Lamar for Georgia. Fairbanks' data on Etowah, however, was all from northwestern and northeastern Georgia. Recent publication of the Groton Plantation excavations on the Savannah River in South Carolina between Augusta and Savannah (Stoltman 1974) reveals that in this part of the state Etowah sherds, when present, tend to be on top of Savannah sherds. This leads to the conclusion that the Etowah-Savannah (Wilbanks)-Lamar sequence may be valid only for northern Georgia. There may be no priority in central Georgia except that the rare Etowah and Savannah materials seem to coincide with the transition and formation of classic Lamar.

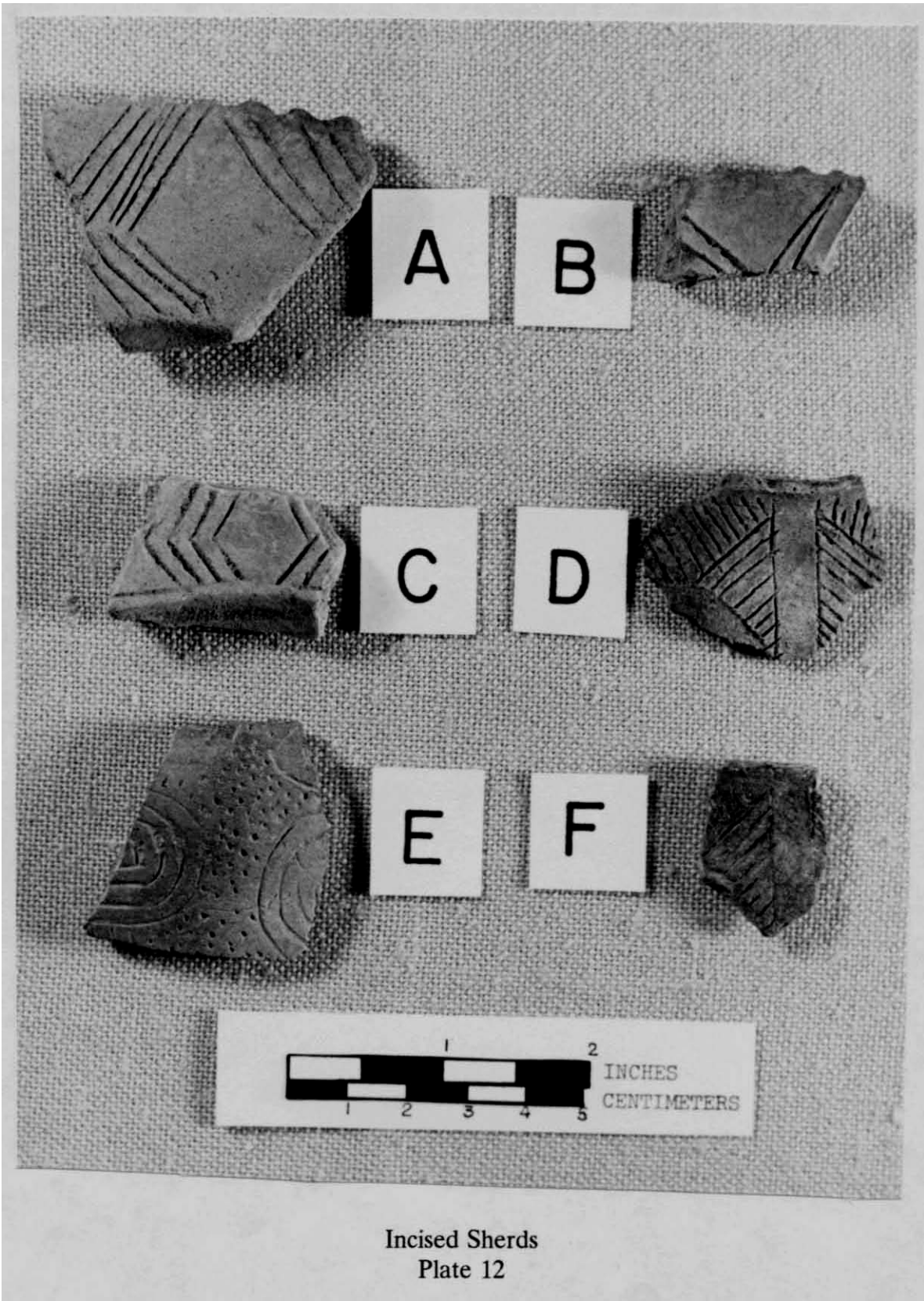
Plate 12 illustrates several incised sherds out of normal context in central Georgia. Sherds A-C are parallel diagonal incised lines on the inside of a flaring rim bowl with notched lips. There sherds are most similar to the illustrations of Marsh Island Incised from the Lake Jackson site (Griffin 1950:105). Sherd E is similar to Safety Harbor Incised in the same report (Griffin 1950: Figure 38, Number 7).

It will also be noticed from Table 6 that some red filmed sherds were located. These are filmed on the inside and out of a plain ware that is relatively smooth. Red filming is known for Bibb Plain and this is possible the best identification.

Table 7 is a selection of data from Table 6 to include only those types with moderate quantities of sherds in only the three Levels--4A, 12, and 13. Other than the plow zone (Level 1), these are the only levels that could be expected to yield significant chronological data. Level 1 was utilized in this chart initially, but it was found to be severely mixed and was therefore not used for the final seriation analysis. The computed chi-square value for this contingency table is 606.8 (with 14 degrees of freedom). This yields a probability of essentially zero (the computer program prints out zero for probabilities less than 1:50000) for the distribution having been due to chance alone. It will be noted that the fiber tempered, Dunlap Fabric Marked, and Deptford Check Stamped all decrease in percentages through time. The plain types show no pattern in this particular chart. Of particular interest are the absolute percentages of Lamar Bold Incised (Haag, ed. 1939). This easily recognizable type has a total percentage of only 0.8 percent, ranging from 0.2 percent in Level 13 to 1.1 percent in Level 4. This type averaged approximately 14 percent for Cowart's Landing site (Hamilton, Lauro, and Swindell 1975) and around 6 percent for the Lamar site (Smith 1973). These are significant differences and it appears that time is the best explanation of these differences. If, as other evidence indicates, Stubbs Mound is older than Cowart's Landing, then an increase in the popularity of Lamar Bold Incised is seen in this sequence. The Lamar site intermediate percentages indicate that either the site was occupied between the time of Stubbs and Cowart's, or, more likely, it was occupied during both time periods and the reported percentages are an average of the earlier and later portions of this continuum of increasing popularity.

LEVEL	Lamar Stamped v. Lamar		Lamar Stamped v. Tobaccofree		Lamar Plain		Other Plain		Lamar Bold Incised		Deptford Check Stamped		Dunlap Fabric Marked		Fiber Tempered		TOTALS
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
4	359	15.5	1058	45.8	200	8.7	623	26.9	26	1.1	9	0.4	9	0.4	28	1.2	2312
12	91	5.1	520	29.1	146	8.2	847	47.4	9	0.5	76	4.3	18	1.0	79	4.4	1786
13	21	4.2	124	24.9	47	9.4	198	39.8	1	0.2	37	7.4	11	2.2	59	11.8	498
TOTALS	471	10.2	1702	37.0	393	8.6	1668	36.3	36	0.8	122	2.7	38	0.8	166	3.6	4596

Selected Pottery Types and Levels  
Table 7



Incised Sherds  
Plate 12



Table 8 compares only the two varieties of Lamar Complicated Stamped with the three main levels. It is apparent that the Lamar variety increases in percentage from bottom to top while the Tobesofkee variety decreases from bottom to top. This is exactly as expected if the Tobesofkee variety reached its peak of popularity earlier in time than the Lamar variety. Overall, the Tobesofkee variety outnumbers the later Lamar variety by 3:1 at the Stubbs Mound site.

LEVEL	v LAMAR		v TOBESOFKEE		TOTALS
	N	%	N	%	
4	359	25.3	1058	74.7	1417
12	91	14.9	520	85.1	611
13	21	14.5	124	85.5	145
TOTALS	471	21.7	1702	78.3	2173

**Table 8**  
**Lamar Complicated Stamped Varieties**

Table 9 lumps all the stamped sherds together and compares this with all the plain sherds lumped together with the exception of fiber tempered plain). This shows an increase of stamped ware from bottom to top with an accompanying decrease in plain wares from bottom to top. This may be interpreted as showing the decrease in popularity of Mississippian ceramic attributes as Lamar as a phenomena is developed, although the interaction was integral to the development of what became Lamar. This idea is expanded in the section on Stubbs phase. The chi-square value for Table 9 is 271.4 (with two degrees of freedom), again giving a probability of occurrence by chance alone of virtually zero.

LEVEL	STAMPED		PLAIN		TOTALS
	N	%	N	%	
4	1417	63.3	823	36.7	2240
12	611	38.1	993	61.9	1604
13	145	37.2	245	62.8	390
TOTALS	2173	51.2	2061	48.7	4234

**Table 9**  
**Stamped and Plain Pottery**

Table 10 is a comparison of the Lamar Plain type with the category explained above as other plain. These types, as with the other tables, are compared by the various levels in the site. The results are not clear, but the general trend is toward a decrease in other plain and an increase in Lamar Plain as we proceed from bottom to top, although other plain predominates throughout. This is also expected and parallels the pattern in Table 10 of the two varieties of Lamar Complicated Stamped, even to the relative percentages. The chi-square value for this table is 26.9 (with two degrees of freedom). The probability of this arrangement having been due to chance is close to zero.

LEVEL	LAMAR			OTHER		TOTALS
	N	%	N	%		
4	200	24.3	623	75.7	823	
12	146	14.7	847	85.3	993	
13	475	19.2	199	80.8	245	
TOTALS	393	19.1	1668	80.9	2061	

**Table 10**  
**Plain Pottery**

Data pertaining to rim sherds in addition to data on loop handles, lugs, nodes and peaks are collected together again by all analyzed levels in Table 11. Table 12 consolidates the rim sherd data just from Levels 4, 12, and 13 just as was done for the general ceramic data. The four rim treatments selected for further analysis were the fingernail pinched, fingernail or stick notched, cane or dowel punctate, and a notched lip. The first three of these have collectively been called the Lamar rim strip. This style of rim decoration is probably the most obvious identification mark for Lamar ceramics. The table shows the pinched variety to be the most common of the three at Stubbs Mound, followed by the notched and finally the punctate. The punctate form increases toward the top, while the simple notched lip decreases. The pinched and notched rim strip types show no apparent patterning through time. Chi-square for the table is 7.3 (with six degrees of freedom). This yields a probability of 0.29 for this distribution having been due to chance, indicating that no real patterns are present in this data.

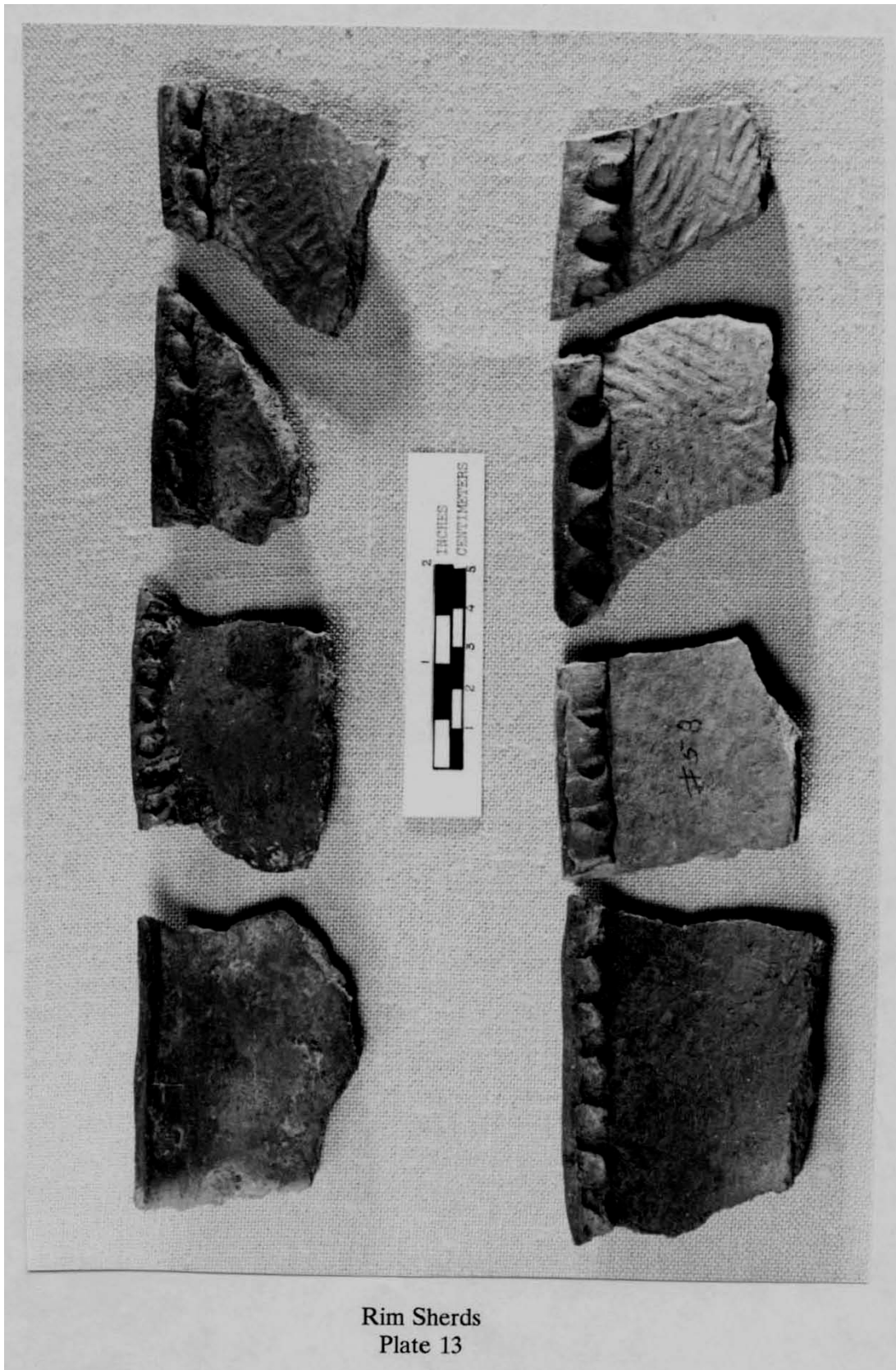
The origin of the classic Lamar rim strip has been often considered, although no good evidence is published. On the basis of data at the Stubbs Mound it appears that the origin was something similar to the arrangement of rim sherds in Plate 13. The original form is probably a simple, plain unmodified rim somewhat similar to the Etowah and Savannah rims. The idea of notching or modifying the lip apparently originated as a Mississippian element at sites such as Rood's Landing (Caldwell 1955). Plate 13 should be read as two rows going from left to right and top to bottom. The widest rim strips

LEVEL	Pinched		Notched		Punctate		Notched		Plain		Flat		Loop		Wide		Thin		Early		Lug		Peaked		Misc.		TOTALS
	Notched	Pinched	Lip	Lip	Punctate	Lip	Lip	Lip	Lip	Lip	Lip	Lip	Handle	Fold	Fold	Fold	Fold	Fold	Notched	Notched	Handles	Handles	Nodes	Nodes	Misc.	Misc.	
1	10	16	1	16	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	47
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4A	29	62	8	51	5	8	6	3	1	3	1	6	6	3	3	3	1	8	1	8	2	2	0	0	0	0	164
5	2	2	1	2	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
6A	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
6B	1	3	1	2	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
9	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
10	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12	19	21	9	114	1	9	0	0	0	0	0	9	0	0	0	0	1	0	0	0	0	3	5	0	0	182	
13	2	4	1	24	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
15	0	2	2	8	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
P7	4	3	4	22	0	4	0	0	0	0	0	2	0	1	1	0	1	1	0	0	1	4	0	1	1	42	
Floor 2	0	0	5	6	0	5	0	0	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Floor 4	0	0	2	7	0	2	0	0	7	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
TOTALS	68	115	34	254	9	34	6	4	254	6	19	4	19	4	4	4	4	4	1	10	10	10	5	1	1	540	
PERCENT	12.6	21.3	6.3	47.0	1.7	6.3	1.1	0.7	47.0	1.1	3.5	0.7	3.5	0.7	0.7	0.7	0.7	0.7	0.2	1.9	1.9	1.9	0.9	0.2	0.2	0.2	100

All Rim Types and Levels  
Table 11

LEVEL	PINCHED		NOTCHED		PUNCTATED		NOTCHED LIP		TOTALS
	N	%	N	%	N	%	N	%	
4	62	59.6	29	27.9	5	4.8	8	7.7	104
12	21	42.0	19	38.0	1	2.0	9	18	50
13	4	57.1	2	28.6	0	0.0	1	14.3	7
TOTALS	87	54.0	50	31.1	6	3.7	18	11.2	161

Modified Rim Types and Levels  
Table 12



Rim Sherds  
Plate 13

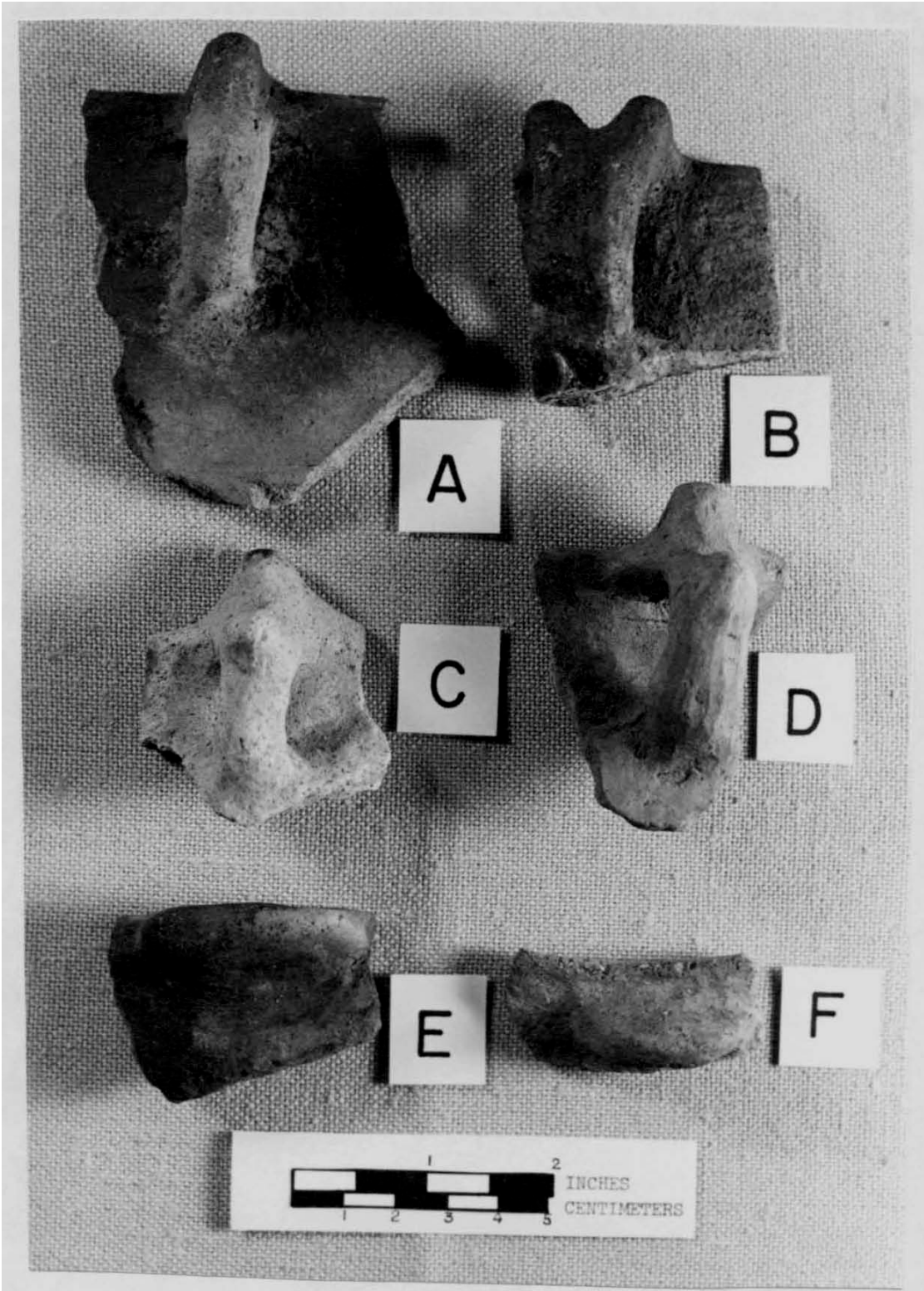
from Stubbs are not nearly as wide as those from Cowart's Landing, although no actual measurements have been made. One implication of this sequence is that the late Swift Creek folded rim was not a prime element in the origin of the Lamar rim strip. The early stages of the suggested development are simply a light pinching of the body of the vessel just below the lip. This idea of pinching was probably easier if the last coil was oversize or if an extra strip was added around the rim as a playground for notching, pinching, etc. The punctate treatment was never very popular even later (Hamilton, Lauro, Swindell 1975:17).

In Table 13 all the rims from Table 12 are lumped together under the heading modified and opposed in a contingency format to the simple, unmodified rims. As is apparent, the modified rims increase in percentage from bottom to top, while the unmodified rims decrease drastically in popularity. Chi-square for Table 13 is 50.5 (with two degrees of freedom): this gives a probability of this distribution having been due to chance as zero. Thus the increasing popularity of the modified or Lamar rim strip is documented.

LEVEL	MODIFIED		SIMPLE		
	N	%	N	%	TOTALS
4	104	67.1	51	32.9	155
12	50	30.5	114	69.5	164
13	7	22.6	24	77.4	31
TOTALS	161	46.0	189	54.0	350

**Table 13**  
**Modified and Simple Rim Sherds**

Plate 14 A through D illustrates the types of loop handles found at Stubbs Mound. These attributes are classic indicators of Mississippian contact as mentioned above. They are very common at the Macon Plateau site as well as Brown's Mount (Kelly 1938). They are also common along the Chattahoochee drainage at sites such as Rood's Landing, and around Tallahassee at the famous Lake Jackson site (Griffin 1950). In fact, the loop handles from Stubbs Mound show more similarities to the Chattahoochee Valley loop handles than those from Macon Plateau in terms of paste and size. This is in agreement with the general lack of Macon Plateau ceramics at Stubbs Mound. Fragments of one vessel with a minimum of seven loop handles were found. This was similar to one from Rood's Landing. The entire assemblage reported by Caldwell as the Intermediate Level is also present at Stubbs (Caldwell 1955:Figure 6).



Loop Handles and Lugs  
Plate 14

Plate 14 E and F are examples of solid lug type handles on the rims of plain bowls. These are probably stylized appendages for some animals. A good selection of vessels with these Mississippian appendages is found in *Sun Circles and Human Hands* (Fundaburk and Foreman 1957:Plates 121-124.)

Plate 15 illustrates more vessel appendages of different styles. A is probably an owl [either Great Horned (*Bubo virginianus*) or Screech (*Otus asio*)] adorno, and B is most similar to an alligator. Both heads were perched on the rims of vessels. This type of effigy is inevitably associated with actual Mississippian occupation.

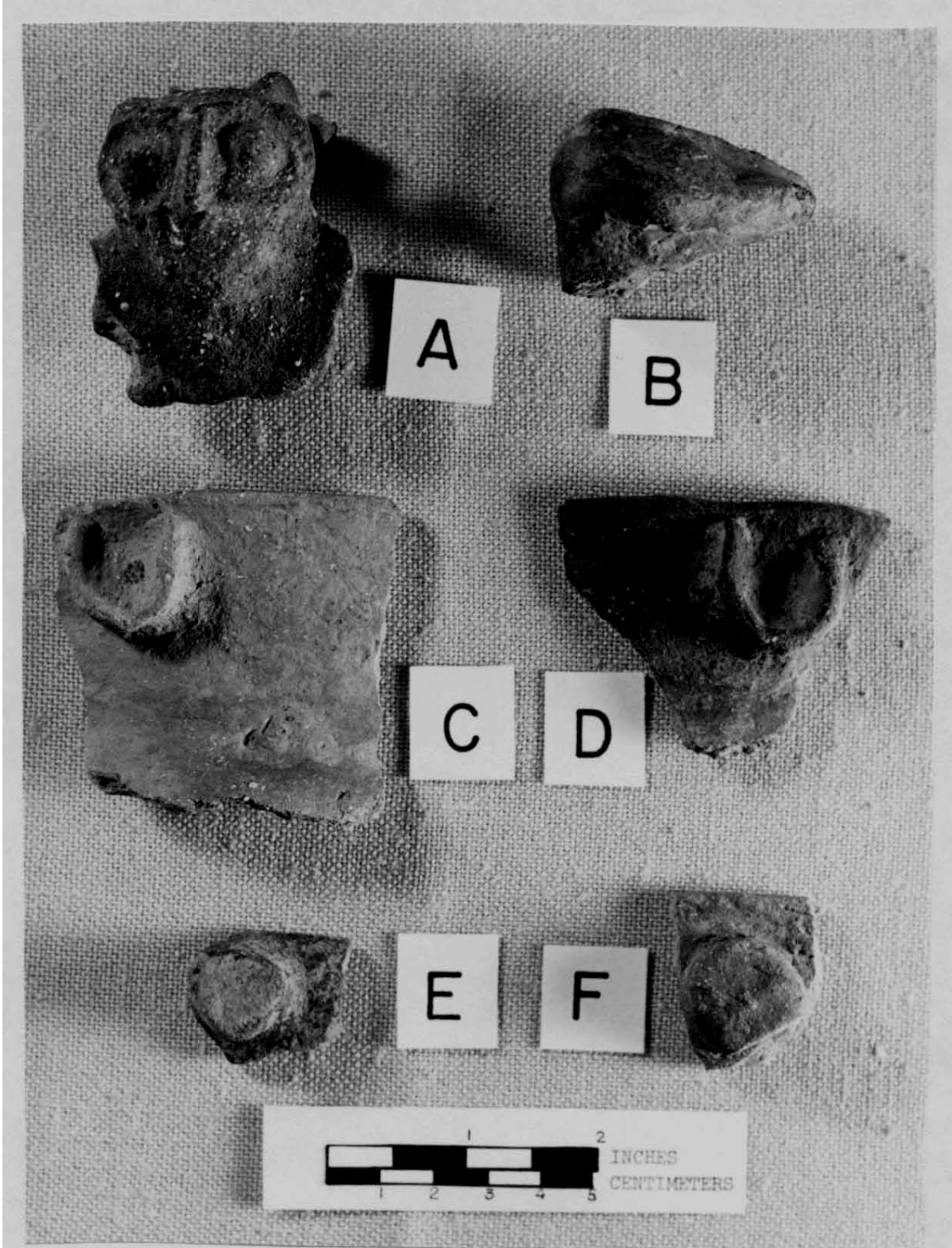
Plate 15 C and D are upturned loops of clay molded to the outside and just below the lips of plain vessels. The form is vaguely similar to stylized frog legs on effigy vessels from Alabama. They are also similar to the ears on hooded blank face water bottles from Macon Plateau. In any event, they seem to be a Mississippian manifestation. E and F are flattened nodes projecting and perpendicular to a sherd, just below the plain rim. It should be mentioned that neither C and D or E and F probably have served as handles, due to minimal projection.

Plate 16 shows the only reconstructed vessels from Stubbs Mound still in the collections of the Southeast Archeological Center. Vessels A and B differ only in size. They are plain bowls, with notched lips just like those found at Rood's Landing (Caldwell 1955b) and Lake Jackson (Griffin 1950). Vessel C is a complicated stamped vessel with four peaks, each of which has a small round node. Vessels of this shape are known to occur in the Dallas phase of eastern Tennessee (Lewis and Kneberg 1946:Plate 60G).

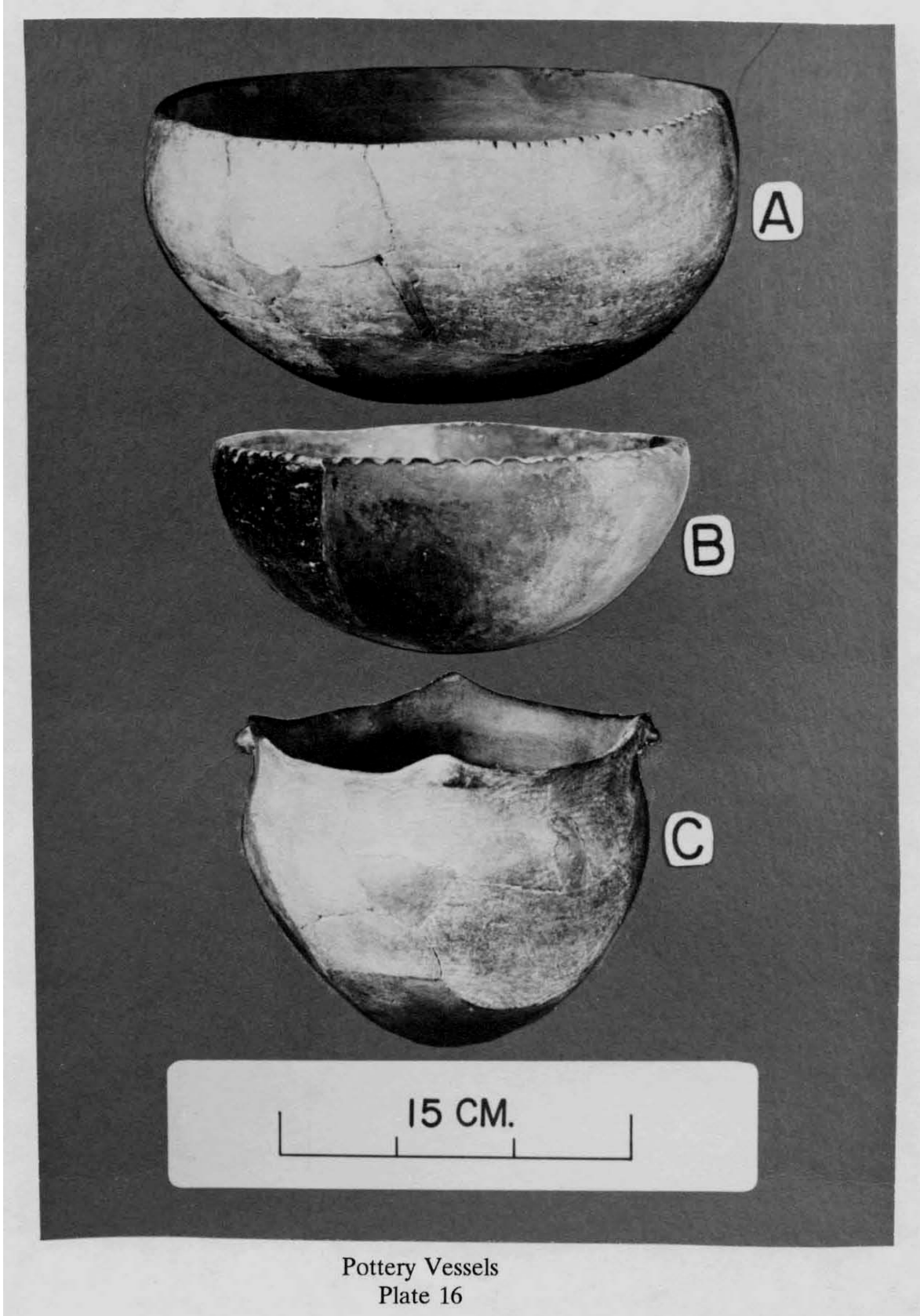
Although not illustrated, a total of eight check stamped tetrapods was located on the site. Five of these were in Level 12, two in Level 4, and one in Level 1. These Deptford related items were not unexpected, given the fact that Deptford materials accounted for two percent of all sherds.

In summary, the ceramics from the Stubbs Mound show a commingling of traditional Southern Appalachian stamped wares with classic Mississippian ceramics. This commingling of ceramic elements is evidence for one small part of what was apparently an overall interaction between these two groups of people. The interaction revealed by the ceramic data gives hints of the origins of what has been traditionally called Lamar in central Georgia. Certainly two ceramic traditions are present. It is my contention that Lamar may be seen developing, ceramically at least, at Stubbs Mound.





Effigies and Nodes  
Plate 15



Pottery Vessels  
Plate 16

## MISCELLANEOUS ARTIFACTS

### Pipes

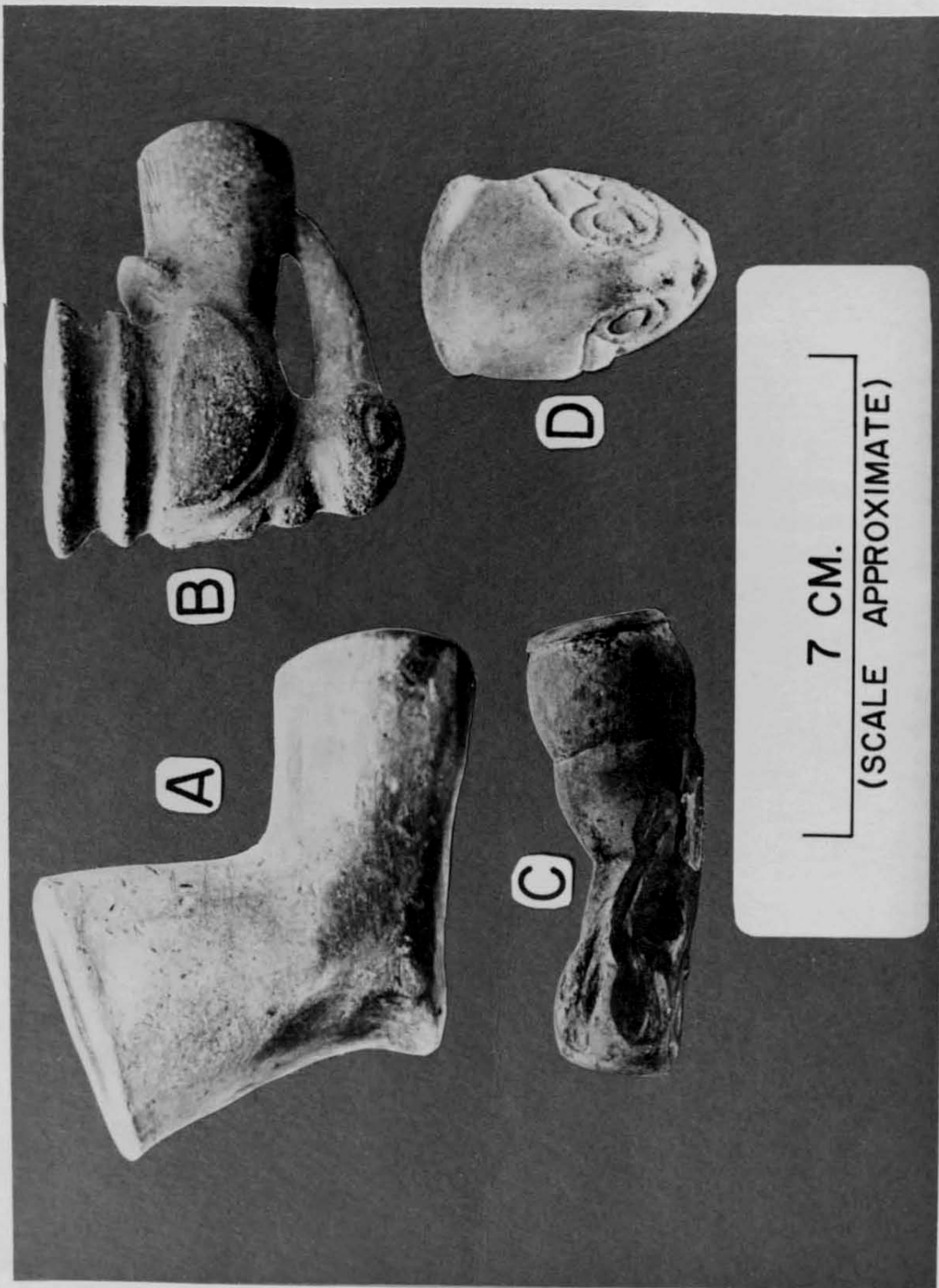
A total of 29 clay elbow pipes and fragments was located during the excavations at Stubbs Mound. These are broken into the following groups and quantities. There were four intact pipes (three now in the museum at Ocmulgee National Monument), four bowl rim fragments, two bowl fragments below the rim, three angle fragments, eight stem fragments and eight intact stem sections. The fourth whole pipe is now missing from the collections, but photos and descriptions are available. With a few exceptions, the pipes are significantly different from those from typical Lamar sites such as Lamar (Smith 1973), Cowart's Landing (Hamilton, Lauro, and Swindell 1975), Tugalo (Williams and Branch 1978), and Peachtree (Setzler and Jennings 1941). The pipes from Stubbs Mound are tempered with moderate amounts of fine to medium sand as opposed to the temperless paste of the sites mentioned above. As a result of the presence of the tempering material, the polish typical of Lamar pipes is absent in the Stubbs specimens. Only three or four specimens have even a poor polish. The thin walled cloud blower form is absent with one exception, a pipe with a stylized human face.

The bowls average 3.5 centimeters in diameter, and are considerably thicker than Lamar pipes. No pinching or notching of the bowl was present at Stubbs. The stems average 2 centimeters in diameter. The color of the clays used varied from reds to tans with some dark and light greys. There seems to be more color variation in the Stubbs specimens than in those from the Lamar site, which are grey to black in general. In addition to the face effigy pipe, there is one other human? face with two distinct weeping eye motifs present (Plate 17D) (Waring and Holder 1945).

One small angle fragment had what appears to be cone punctates or nodes with incised circles around them. The only other pipe with decoration is one with an elaborately stylized human? effigy (Plate 17B). One intact pipe (Plate 17A) is of the bulky, stubby form to be identified with the Macon Plateau component at the Funeral Mound (Mound C) on the Macon Plateau site (Fairbanks 1956:Plate 21). Only 5 of 14 recognizable stem distal ends were of the enlarged bulb type often said to be a penis effigy (Plate 17C). It should be noted that a few (ca. 10 percent) of the specimens from the Lamar site do resemble those from Stubbs Mound. No stone pipes or fragments were located at the Stubbs Mound. The significance of these similarities and differences will be more fully explored in the sections on Stubbs phase.

### Shell Artifacts

Most of the shell artifacts from Stubbs Mound were from burials. The few that were not could have been displaced from burials by disturbances. There were two basic types of shell artifacts: beads and knobbed pins. The knobbed pins fall into two size categories (see Plate 18C). The first of these, the larger of the two categories, averages about 11 centimeters long. Only three of this type were located, all from Burial 17. The head diameters of these were about 2.5 centimeters. The material was probably Busycon (perversum?). Two of the three are on display at Ocmulgee National Monument. The smaller of the two size categories of pins averages about 6 centimeters in length, with a



Pipes and Fragments  
Plate 17

head diameter of 2 centimeters. Six of this type were located, two with Burial 7, one each with Burials 16 and 17, and two from an unspecified location. There are, therefore, a total of nine shell pins from Stubbs Mound. Shell pins of the types found here are associated with the Dallas phase of eastern Tennessee. Lewis and Kneberg (1946:130) suggest that small pins are associated with children and large pins with adult burials. While this may be true, the data from Stubbs does not support this hypothesis as Burial 17 (8-12 years old) has both small and large pins. The pins were generally located near the ears in the burials and it seems probably that they were ear pins.

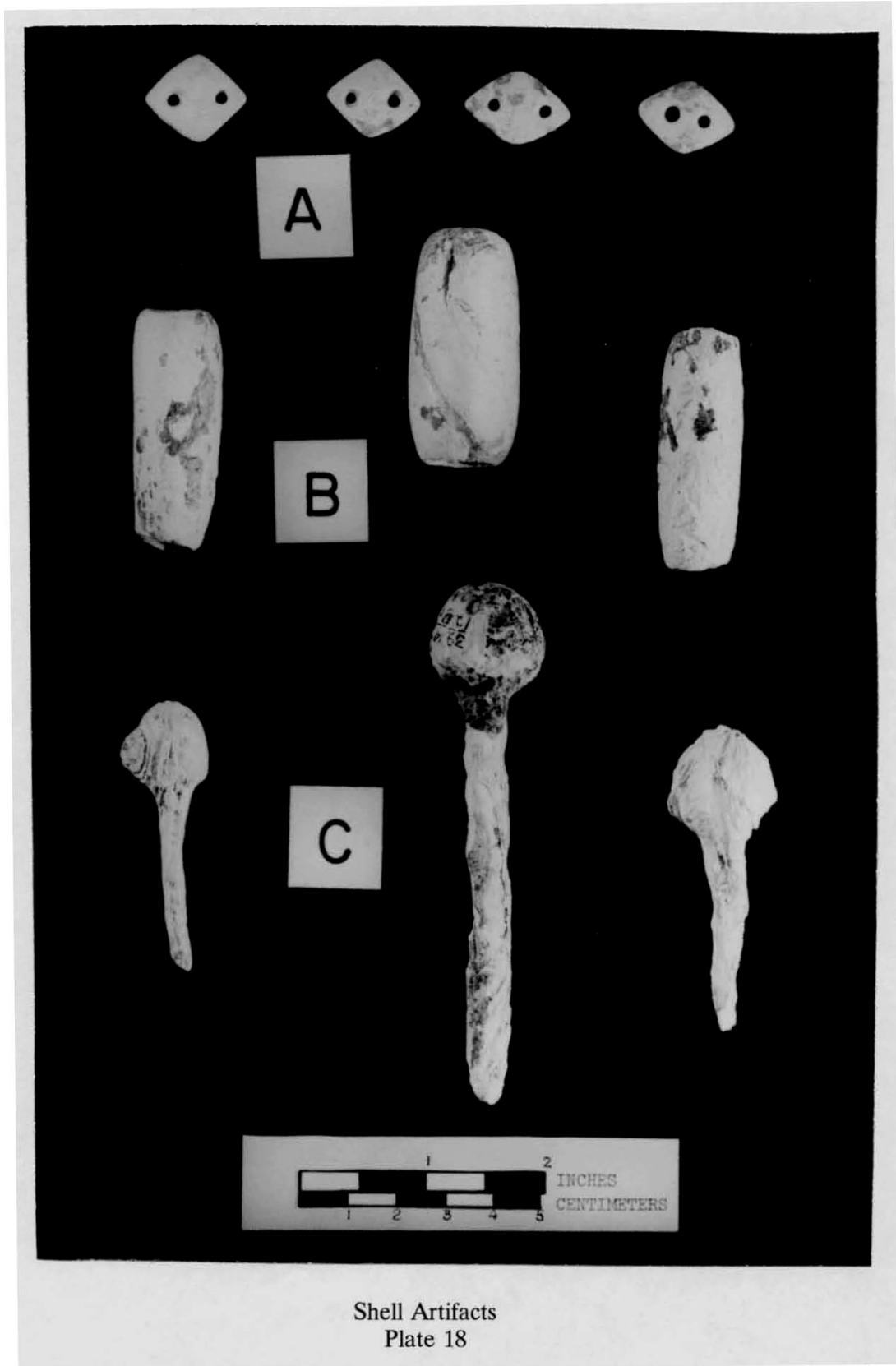
Three types of shell beads were located during the excavations. The simplest type was small, generally spherical bits of shell that were perforated and strung. They ranged in size from 5 millimeters to 12 millimeters, most being between 5 and 8 millimeters. Thirty of these beads were recovered from Burials 8, 12, and the surface. The second type of bead is a much larger, generally elongated bead, probably cut from a conch columella. These were generally about 5 centimeters long in the few whole specimens and just under 2 centimeters in diameter. A total of 35 of these beads, mostly fragmentary, was located from Burials 17 and 28, as well as general midden and surface collections. Plate 18B shows specimens from Burial 17 of this bead type. The final type, shown in Plate 18A consists of 30 beads from Burial 17, are diamond shaped ones that are approximately 2.0 centimeters long by 1.5 centimeters wide. They all have two holes drilled in them, centered about 8 millimeters apart. The 2 millimeter diameter holes were drilled from both sides as evidenced by the wear pattern of the holes. All these were together around the neck of the child burial.

The shell beads described above are also markers for the Dallas phase in eastern Tennessee. No long conch columella cores, common in the Macon Plateau materials (Fairbanks 1956:46) and later Hamilton phase (Lewis and Kneburg 1946:127) of eastern Tennessee, were found. Also, none of the marginella shells or conch dippers found in the Funeral Mound at Macon Plateau were found (Fairbanks 1956). Shell pins and beads were found at the Lamar site (Smith 1973:63). The beads from Lamar were apparently of both the small and large types described above. Although shell gorgets are common on Dallas sites and one was found at the Lamar site (Smith 1973:65), no evidence of any shell gorgets was found at Stubbs Mound.

In summary, shell ear pins and shell beads of three types were the most common type of grave goods found at Stubbs Mound. The styles are generally similar to those of the Dallas phase of eastern Tennessee. They are, as such, fairly good as sociotechnic and perhaps ideotechnic artifacts (Binford 1962:219) associated with Mississippian culture. They were to be included in the evolving Lamar culture.

### **Miscellaneous**

The two most important items in this category are ear spools. The first of these was found near adult male Burial 19 (but not in it according to the notes). It is of wood only, with no copper attached. There are no green stains on the item either. The fortuitous preservation of wood is extremely rare in such cases. This object was 3.4 millimeters in diameter and 7 millimeters thick. The tapered center hole was 6 millimeters in diameter on one side and 3 millimeters on the other. This results from the



use of a tapered flint drill tip used only from one side of the object. A groove 1 millimeter deep encircles the edge of the disc. The wood appears to be cypress.

The second disc is slightly larger and more fragmentary. The estimated diameter is 42 millimeters. This disc retains a copper disc on one side of the wood with the same outlines as the wooden core. This copper covered disc was located near the skull of adult Burial 38. Other than diameter, the disc was the same as the one above in thickness and outer groove form. This type of copper disc is illustrated by Lewis and Kneburg (1946 Plate 85A) and is assigned to the Dallas phase. These types of ear spools have also been found at the Peachtree mound (Setzler and Jennings 1941).

Adult Burial 13 had another unusual example of fortuitous preservation, a thin plank of possible cypress. The fragment as now preserved in the collections measures 30 centimeters in length, 6.6 centimeters width and 1.1 centimeters in thickness (at its thickest point). Photographs of the burial at the time of excavation indicate that the specimen was originally over 60 centimeters long. The plank was placed over the head, centered, and ran at right angles to the length of the semi-flexed burial. It is possible that the plank was part of a burial covering of some sort. The plank was trimmed on one end with a knife or other cutting tool indicating that the piece was not an accidental natural occurrence.

### **Pottery Discs**

The data on these items is analyzed in the following edited version of a paper originally written for an Florida State University statistics course in 1974. One fact of importance is that the discs from Stubbs Mound are slightly smaller than those from the Lamar site. It appears that the discs became larger through time after their introduction. The significance of this is explored in the section on Stubbs phase. Discs are not present at early South Appalachian Tradition sites (Swift Creek, etc.) nor at Macon Plateau. They appear with the development of early Lamar in central Georgia. A total of 185 discs from Stubbs Mound was used in this study, as these were all that were easily located at that time.

One artifact type of interest to archaeologists investigating the pre-historic groups of the eastern United States is called a pottery disc. These discs are small, circular shaped objects made from the broken fragments of a pottery vessel. There are no clear descriptions of the function of these items in the many early explorer accounts of the Indians. However, there are references to several games played by them though most are not described. Most authorities now believe these discs found on archeological sites represent gaming pieces, but practically no systematic analysis of these items has ever been undertaken. This paper deals with the pottery discs excavated in the 1930s from two roughly temporally equivalent sites in central Georgia known as the Lamar site and the Stubbs site. Data for the Lamar site is from the report of Smith (1973), which presents data on disc diameter, decoration, and edge treatment for a sample of 355 discs. A sample of 185 discs from the Stubbs site was analyzed for this paper.

The research objectives of this paper are three in number. First, are there significant differences in size (diameter) between the discs from the two sites? Second, are there significant differences in the proportion of decorated to plain discs between the two sites? Third, could the proportion of plain to decorated discs from a given site be equal to 0.5 (within a given limit of significance) as would be expected if the discs were indeed functional gaming pieces where each of the (2) participants had an equal chance of winning (such as checkers)?

The biggest obstacle to reaching the objectives involved the lack of the population variance ( $s^2$ ) for the Lamar sample. Only  $\bar{x}$  (the mean) and  $n$  were given in that data set (Smith 1973). This basically affected only Problem 1, where  $s^2$  of Lamar would have allowed a two sample,  $\sigma^2$  unknown problem to be accomplished (Hayslett 1968). In all the work below  $\alpha=.05$  was chosen as the significance level.

### Objective 1

Only complete discs were used in this study. Let  $x$ , the diameter of a pottery disc, be our random variable of interest.  $X$  is approximately normally distributed (determined from a histogram) The theoretical population variance is unknown so this is a  $t$  test problem. The parameter being hypothesized about is  $\mu$ . (mean diameter in millimeters)

$H_0: \mu = 35.49$ (from Lamar data)	Stubbs $n = 119$
$H_1: \mu \neq 35.49$	Stubbs mean = 30.37
	Stubbs S. D. = 5.87

$$t_{n-1} = \frac{\bar{x} - \mu}{s/\sqrt{n}}$$

$$t_{118} = \frac{30.37 - 35.49}{5.87/\sqrt{119}} = -9.33$$

$-9.33 < -1.98$  so we reject  $H_0$ .

There is, therefore, a significant difference between the mean diameter of the discs from the two sites, those from Stubbs being smaller.

### Objective 2

The problem here, comparison of incidence of decorated versus plain discs for the two sites can be set up as a Binomial Model with  $\pi$  = proportion of decorated discs. For this study, decorated discs are those from stamped or incised sherds. This is a two sample problem with  $\pi_1$  = proportion from Lamar and  $\pi_2$  = proportion from Stubbs.

$H_0 : \pi_1 - \pi_2 = 0$	$\alpha = .05$
$H_1 : \pi_1 - \pi_2 \neq 0$	Stubbs discs (total) = 190



decorated = 84  
 Lamar discs (total) = 355  
 decorated = 185

$$z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{\hat{p}(1-\hat{p}) \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

where:  $x_1 = 190$        $\hat{p}_1 = \frac{x_1}{n_1}$   
 $x_2 = 84$

$n_1 = 355$        $\hat{p}_2 = \frac{x_2}{n_2}$   
 $n_2 = 185$

$z = 1.786$

and

$$\hat{p} = \frac{X_1 + X_2}{n_1 + n_2}$$

-1.96 < 1.786 < 1.96 so we fail to reject H<sub>0</sub> (the null hypothesis). Thus the probability of a disc from Lamar being decorated is the same as one from Stubbs Mound being decorated.

**Objective 3**

To test whether the probability of a disc being decorated from any site is 0.5, we must work a separate problem for each site. The following two binomial problems, one sample, are worked with a significance level ( $\alpha$ ) of .05.

Stubbs Problem:  
 H<sub>0</sub> = 0.5  
 H<sub>1</sub> ≠ 0.5

Total = 185  
 Decorated = 84

$$z = \frac{\hat{p} - \pi}{\sqrt{\frac{\pi(1-\pi)}{n_1}}}$$

(decorated)

where: 84

$$\hat{p} = \frac{84}{185} = .4541$$

n = 185 (discs)

$$z = -1.329$$

Lamar Problem:

$$H_0 : \pi = 0.5$$

$$H_1 : \pi \neq 0.5$$

Total = 355

Decorated = 190

$$z = \frac{\hat{p} - \pi}{\sqrt{\frac{\pi(1-\pi)}{n}}}$$

(decorated)

where: 190

$$\hat{p} = \frac{190}{355} = .5352$$

n = 355 (discs)

$$z = +1.333$$

Both z values are between -1.96 and 1.96 (.05 significance limits), so we fail to reject  $H_0: \pi = 0.5$ . This suggests that the game theory for the data in hand appear valid.

One major problem in this line of reasoning, however, involves the question of what is the proportion of decorated pottery sherds for the whole site from which the people selected pieces to be converted into pottery discs. A sample of 28,795 sherds yielded a proportion of .5732 decorated sherds. If we take this (.5732) as a more accurate estimate of  $\pi$ , then the proportion of decorated Lamar discs becomes:

$$H_0: \pi = .5732 \quad (\text{Binomial model})$$

$$H_1: \pi \neq .5732 \quad \alpha = .05$$

Total discs = 355

Decorated discs = 190

$$z = \frac{\hat{p} - \pi}{\sqrt{\frac{\pi(1-\pi)}{n}}}$$

where:  $\hat{p} = \frac{190}{355} = .5352$   
 $n = 355$

$z = -1.450$

$z$  is less than  $-1.96$ , the  $.05$  significance level limit. Thus we fail to reject  $H_0$ : that  $\pi = .5732$ , the same as the general population of sherds. This means that if people had randomly selected trash sherds from Lamar they would have selected proportions close to  $.5$ . We thus have the unusual situation then that  $\hat{p}$  for the Lamar site ( $190/355$ ) is significant at the  $.05$  level for both  $\pi = 0.5$  and  $\pi = .5732$  (the same holds for Stubbs Mound). We cannot, then, on the basis of these facts say that  $0.5$  figure (in accordance with the game theory) is an altogether acceptable hypothesis and must await further site data.

### Summary

There is a significance difference in diameter between Stubbs and Lamar pottery discs, those from Stubbs being smaller. There is no significant difference in the proportion of decorated to plain discs for the two sites. Although the proportion of decorated discs from Lamar is significant for  $\pi = 0.5$  (as would uphold the game theory) it is also significant for  $\pi = .5732$  (the proportion of decorated sherds for the whole site) and, therefore, this objective must await further site data before a conclusion can be reached.

## SUBSISTENCE

The subsistence pattern indicated by the data recovered from the Stubbs Mound excavations is primarily one of an efficient hunting and gathering base supplemented by a minimal agriculture. As a matter of fact, the only good data on the agricultural component is a reference in the field notes (SEAC 63:12) to a single kernel of charred corn found near the surface of Pit (Feature) 5. No other cultigens were recorded in the notes or are present in the collections. Modern flotation recovery techniques, however, could be expected to yield far better results.

Table 14 lists the results of the faunal analysis for the site. Table 15 summarizes the data. The only levels analyzed, for reasons outlined earlier, were Levels 4, 12, and 13. These levels together, however, form over 90 percent of the faunal collections available. 81.3 percent of the 374 bone fragments analyzed were from Level 4, while 13.0 percent and 6.1 percent were found in Levels 12 and 13, respectively. Since Level 13 is the oldest and Level 4 the most recent of the three, these differential percentages are understandable. The preservation of botanical materials in central Georgia is poor at best.

The identified animals from the site include white tail deer (*Odocoileus virginianus*), eastern box turtle (*Terrapene carolina*), opossum (*Didelphis marsupialis*) and wild turkey (*Meleagris gallapavo*). Deer bones form the largest portion of the collection--54 percent of the entire collection. A minimum of six individuals are present from Level 4, two from Level 12, and one from Level 13. Bones from all portions of the deer were represented in the collection, although the ratio of leg to body fragments is high, possibly indicating differential retrieval of sections of the deer to the site. Large numbers of the long bone fragments exhibited spiral transverse fractures, indicative of bone smashing for marrow extraction (Bonnichson 1973). Swindell has reported this feature as common at Cowart's Landing (Hamilton, Lauro, Swindell 1975:49e,f). Most of the artifacts described in the lithic analysis as core tools could have served well as bone smashers.

The only evidence of opossum was a single mandible fragment from Level 12. The possibility of the use of the carapace of the box turtle as a rattle was discussed in the Cowart's Landing report (*ibid*:49g). Two intact carapaces were found at Stubbs Mound, but not in association with burials. The remains of a minimum of four turkeys were recovered, three in Level 4 and one in Level 12, the most common bone being the humerus.

Notably absent were the remains of smaller mammals (rabbits, mice, etc.), reptiles, amphibians, fish, and small birds. It is possible that poor preservation is the reason for the lack of these species in the collection, although the lack of screening is the most likely cause. Some cultural selection may be in evidence here, however. There also were no bear remains, a species present at Cowart's Landing (*ibid*:49g).

**TABLE 14**  
**FAUNAL ANALYSIS**

**Level 4A**

White Tail Deer (*Odocoileus virginianus*)  
Antler - 7 (2 distal, 3 proximal, 2 body)  
Mandible - 9 (5 left, 4 right)  
Maxilla - 1  
Loose Teeth - 7 (6 molars, 1 premolar)  
Vertabrae - 5  
Rib Fragments - 10  
Scapula - 11 (4 left, 1 right, 6 fragments)  
Pelvis - 12 (6 left, 4 right, 2 fragments)  
Humerus - 9 (3 left, 6 right)  
Radius - 8 (4 left, 4 right)  
Ulna - 3 (1 left, 2 right)  
Metacarpals - 6 fragments  
Femur - 3 right fragments  
Tibia - 10 (4 left, 6 right)  
Metatarsal - 4 (3 left, 1 fragment)  
Calcaneous - 6 (3 left, 2 right, 1 fragment)  
Astragalus - 4 (2 left, 2 fragments)  
Phalanges - 4  
Long Bone Fragments - 50 (1 burned)

Unidentified Mammal  
Long Bone Fragments - 83 (2 burned)  
Flat Bone Fragments - 2 (1 burned)  
Vertebral Fragments - 4

Eastern Box Turtle (*Terrapene carolina*)  
Carapace - 2 whole, 20 fragments (1 burned)  
Plastron - 9 fragments

**Level 12**

White Tail Deer  
Scapula - 1 (right)  
Pelvis - 1 (left)  
Humerus - 3 (2 left, 1 right)  
Radius - 1 (right)  
Ulna - 1 (right)  
Metacarpal - 1 (left)  
Tibia - 1 (left)  
Metatarsal - 1  
Calcaneous - 1 (left)  
Astragalus - 1  
Long Bone - 6 fragments

Opossum (*Didelphis marsupialis*)  
 Mandible - 1 (left)  
 Unidentified Mammal  
 Long Bone - 12 fragments (5 burned)  
 Flat Bone - 1 fragment  
 Unidentified Turtle  
 Plastron - 1 fragment  
 Turkey  
 Humerus - 1 (left)  
 Tarsometatarsus - 1 (right)

**Level 13**

White Tail Deer  
 Mandible - 1 (right)  
 Loose Teeth - 3 ( 2 premolar, 1 molar)  
 Radius - 1 (left)  
 Tibia - 1 (right)  
 Calcaneous - 1 (left)  
 Long Bone - 7 fragments

LEVEL	BONE TYPE	SUB		TOTALS		
		TOTALS	N	%	N	%
4A	White Tail Deer		170	55.9		
	Unidentified Mammal	89	29.3			
	Eastern Box Turtle		31	10.3		
	Unidentified Turtle		1	0.3		
	Turkey	8	2.6			
	Unidentified Bird		5	1.6		
					304	81.3
12	White Tail Deer		18	38.3		
	Opossum		1	2.1		
	Unidentified Mammal	13	27.7			
	Unidentified Turtle		1	2.1		
	Turkey	2	4.3			
	Unidentified Bird		9	19.1		
	Unidentified Fish		3	6.4		
					47	12.6
13	White Tail Deer		14	60.9		
	Unidentified Mammal	3	13.0			
	Eastern Box Turtle		6	26.1		
					23	6.1
TOTALS					374	100.0

**TABLE 15**

In addition to the faunal species described above, small quantities of mollusc remains were recovered. The same species reported to be present from Cowart's Landing (ibid:49d) were present in the Stubbs collection. These include large and small clams (*Lampsilis* and *Elliptio*), water snails (*Campeloma*) and land snails (*Mesodon thyroideus*). All but the last of these four molluscs were definitely used on the site as they occur naturally only in the rivers. According to William Heard (personal communication), the location of Stubbs Mound is close enough to the mouth of Tobesofkee Creek to allow the presence of species common to both large and small streams. In other words, the site is at an optimum location for collecting different molluscs from two ecological niches.

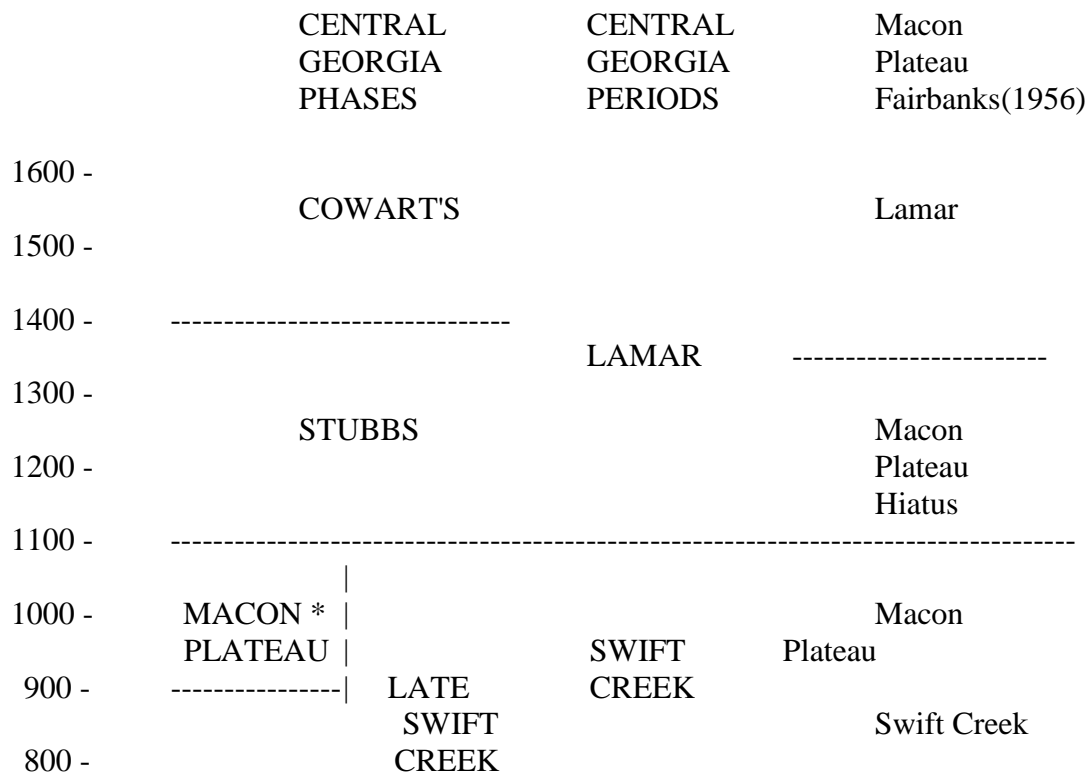
In balance, it would appear that Swindell's emphasis on a hunting and gathering season round of activities conjectured for the Cowart's Landing Lamar occupation is consistent with the meager data from Stubbs Mound. The traditional hunting and gathering subsistence base for the Southern Appalachian Tradition (Caldwell 1958) seems to have been continued with the addition of small to moderate use of cultigens, probably introduced by the Mississippian groups. It appears, however, that the degree to which cultigens were used was less than that of the major Mississippian groups to the west. Acceptance was minimal at first, the traditional methods continuing to be the preferred and adequate ones.

Although greater uses of cultigens were accepted as time went by, it seems possible that even during the major occupation of the Lamar site, the use of agriculture was not as extensive as at pure Mississippian sites such as Moundville and Cahokia. It has been said that since Lamar has large mounds, it must have had a large surplus of agricultural goods to support the work force. Caldwell has shown this to be not necessarily so. In reference to Adena-Hopewell he says, "It is risky, however, to argue from earthworks to agriculture" (1962:296). So it would seem for central Georgia.

## CONCLUSIONS ON CONTINUITY AND CHANGE: STUBBS PHASE

The data from Stubbs Mound add to our understanding of post-1000 A. D. central Georgia prehistory. In order to explain the data, however, some refinement is necessary in the chronology for the region. Most previous chronologies for central Georgia (e.g., Fairbanks 1956:11) have focused, logically, on the Macon Plateau site. This approach, however, tends to obscure the origins of Lamar. Table 16 is presented as a more detailed chronology for central Georgia for the period from 800 A. D. to 1650 A. D.

Table 16 has several implications. First, Macon Plateau is no longer regarded here as a full period in central Georgia prehistory. This does not mean that the Macon Plateau focus was not important in the overall development of central Georgia prehistory, but that elevating it to a full-fledged period serves to obscure rather than illuminate the past [the use of *periods* and *phases* are those presented by Willey and Phillips (1958) and best demonstrated by Phillips (1970)]. Macon Plateau is bracketed in time on the chart indicating that although it was important in determining the future developments in the area, it did not totally break the long standing South Appalachian tradition in central Georgia as a whole.



**TABLE 16**



What was happening was that a network of interactive relationships was set up between the indigenous Late Swift Creek population and the intrusive Mississippian group. Caldwell's 1962 observation is important here: "These arrivals [Mississippians] interrupted previous cultural continuities, and their survivors, if any, must have participated in the succeeding mixed cultural balances representing the fusion of Mississippian with the older regional traditions" (1962:299). The Late Swift Creek period is extended terminologically to a much later date than traditionally recognized. The production of several ceramic types during this time (Late Swift Creek, Napier, Mossy Oak, etc.) does not warrant the naming of separate periods or phases for each ceramic type. Etowah, as a ceramic type, is rare in central Georgia and does not form a period or phase there.

The concept of Lamar is expanded primarily in that the name is used for the period following the Swift Creek period. With Macon Plateau out of the picture as a period, the alternatives were: (1) to name a new period to cover Stubbs phase, (2) add a fourth grouping to Swift Creek (besides Early, Middle, and Late), or (3) expand Lamar to cover two phases. The last of these choices was considered the best at hand. What most southeastern archaeologists traditionally think of when they speak of central Georgia Lamar is here designated as the Cowart's phase of the Lamar period. The data now suggest that the Lamar site was occupied during both phases of the Lamar period, the heaviest occupation, however, having been in the later, or Cowart's phase. The name Cowart's was, of course, derived from the Cowart's Landing site--clearly a later Lamar site (Hamilton, Lauro, and Swindell 1975).

The emphasis in this discussion is upon the continuities of the South Appalachian tradition, even though modified by encroaching Mississippian populations. As Willey says, "There is good evidence that the Swift Creek communities continued coincident with and after the advent of the Macon Plateau intruders..." (1953:371). He adds "It [Lamar] is primarily the acculturative result of the Macon Plateau--Swift Creek culture contact." (1953:372). I am not sure that Macon Plateau was itself the main source of Mississippian ideas leading to Lamar culture, but the point is clear.

Stubbs phase is here seen as documenting the period of time during which the actual acculturation took place. Brief examination of the collections at the SEAC reveals at least six other sites in the Bibb County to Talbot County area, toward the west along the Fall Line, with similar materials. These are 1TR1 (Taylor County); 8TA8 (Talbot County); 16Bi22 (Scott site), 29Bi35 (Marshall Mill), and portions of Horseshoe Bend -- 10Bi16, and Lamar (2Bi7) (all Bibb County).

As pointed out in the ceramic section, the synthesis in northwestern Georgia involved the Woodstock, Etowah, and Savannah (Wilbanks) periods in that order as integral parts of the development of recognizable Lamar. It has been pointed out that at the Groton Plantation on the Savannah River, Etowah materials were generally above Savannah forms. In central Georgia, Woodstock, Etowah, and Savannah are all present in small quantities, but none has any temporal priority over the others. Stubbs phase is, then, coeval with the latter of these periods in northwestern Georgia, but they are not specifically applicable in central Georgia as period or phase names and to use them would be forcing the data.

An examination of the characteristics that define the Stubbs phase follows. The introduction and/or development of the marker ceramic type Lamar Bold Incised took place during this time as well as the Lamar rim strip. The ceramic data from Stubbs Mound back up both of these conclusions. Both of the attributes were fully developed by the time of the Cowart's phase.

The majority of the ceramics were complicated stamped, halfway between Swift Creek and Lamar Complicated Stamped on a development scale as explained in the ceramic section. This also was the time of the development of the elaborate pipes for which later Lamar is famous. The transition is from relatively coarse tempered and poorly styled early to middle Mississippian pipes to the highly stylized untempered pipes of Cowart's phase Lamar groups.

The subsistence base as well as the basic lithic assemblage during the Stubbs phase was essentially that of the earlier Swift Creek forms, with a beginning or important increase in the use of food production as an augmentation of the diet. Greater, but far from complete reliance on the harvest products was characteristic of the full Lamar adaptation of the following Cowart's phase. The mound construction type for Stubbs Mound is that of the Swift Creek mound reported by Kelly (1938), rather than the typical Mississippian mound.

In direct association, level by level with all these traits associated with the South Appalachian tradition, are a series of traits known to be typical of early to middle Mississippian culture on a pan-southeastern basis. This list includes loop handles on plain ceramic bowls, animal and human effigy adornos on the rims of plain, open bowls, and open bowls with simple notching of the outer edge of the flat lip. The pipe forms mentioned above, notably the stubby elbow pipe form, are a Mississippian element. The rectangular house type found at Stubbs, particularly the possible earthlodge, are a definite non-indigenous central Georgia form. Small triangular projectile points--the Mississippian arrow points--were present in small numbers at Stubbs Mound. The use of maize is generally thought to have been a Mississippian introduction in the Southeast, although this is perhaps debatable. The placement of burials around and close to the houses is more typically a Mississippian trait, as are the use of shell ear pins and columella beads for ornamentation and burial items. Also the polished stone celts are a definite Mississippian element.

Ceramic discs, discussed earlier, were not found in central Georgia prior to the Stubbs phase. They are absent from Macon Plateau, and may have been introduced from the west with some of the other Mississippian traits. They became larger in later Lamar times, another indicator of the development of Lamar.

One final point needing elaboration is the origin of incising as a ceramic decorating technique in central Georgia. After 1.5 years of daily working with the collections from central Georgia held by the SEAC, less than a handful of incised Macon Plateau sherds have come to light, and these are all the unusual Macon Thick type. The few other incised sherds found at Macon Plateau site are either Weeden Island sherds (Jack Walker, personal communication) or Ocmulgee Fields Incised, neither true early Mississippian wares. In summary, then, the Early Mississippian Macon Plateau site basically lacked incising. Later, however, we know that incising in arcades on the shoulders of jars became common on mature Mississippian vessels from Mississippi and Alabama (Moundville). The idea of incising was apparently a part of what might be called the second push eastward along the Fall Line. Slow expansion to the east on this band of highly fertile soils of Cretaceous origin from northern Mississippi through Alabama to Georgia seems a logical step for these full horticulture Mississippian peoples. Incising on their vessels may have developed in the Mississippi Valley area or ultimately in the gulf Weeden Island types. Barring independent invention, then, the origin of incising in central Georgia was probably a result of the second push eastward (the first being Macon Plateau itself) with possible input from the Coastal Plain Weeden Island culture, which was probably expanding into the area at about the same time.

McMichael and Kellar have set up a Rood Focus (phase) of early Lamar culture for the middle Chattahoochee River area of west central Georgia (1960:213). The two most important sites associated with the phase are the Rood's Landing site and the Singer site. Griffin points out, however, that Rood's phase "does not have anything to do with Lamar, except perhaps as a contemporary development on the Chattahoochee of Lamar developing somewhere else" (1962:74). The sites mentioned in the Rood's focus are almost pure Mississippian.

In brief conclusion, the Stubbs site is seen as a minor Mississippian center in central Georgia, occupied for a long time, and probably important in local political affairs. The village area of the site should be examined in the future.

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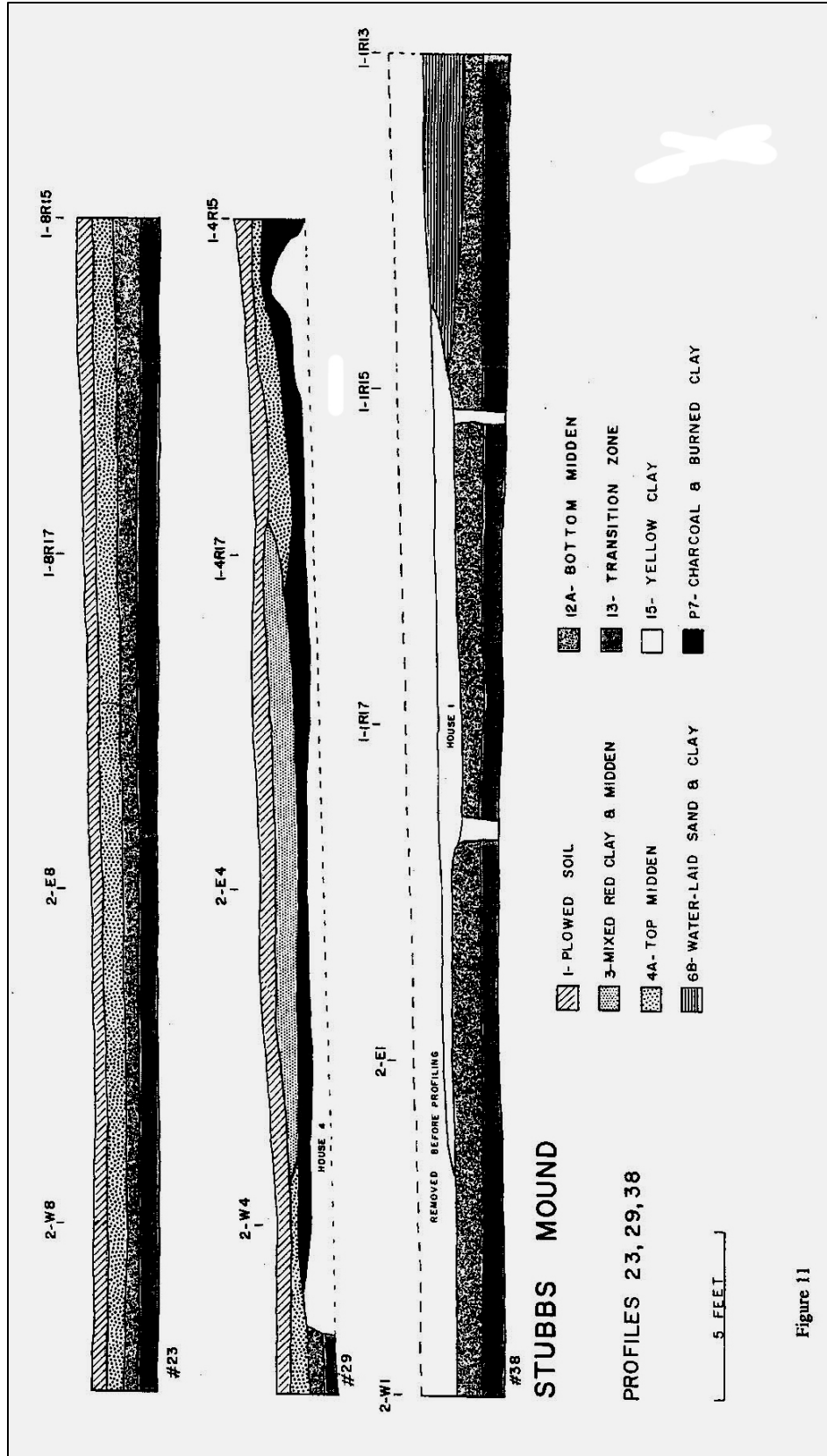


Figure 11

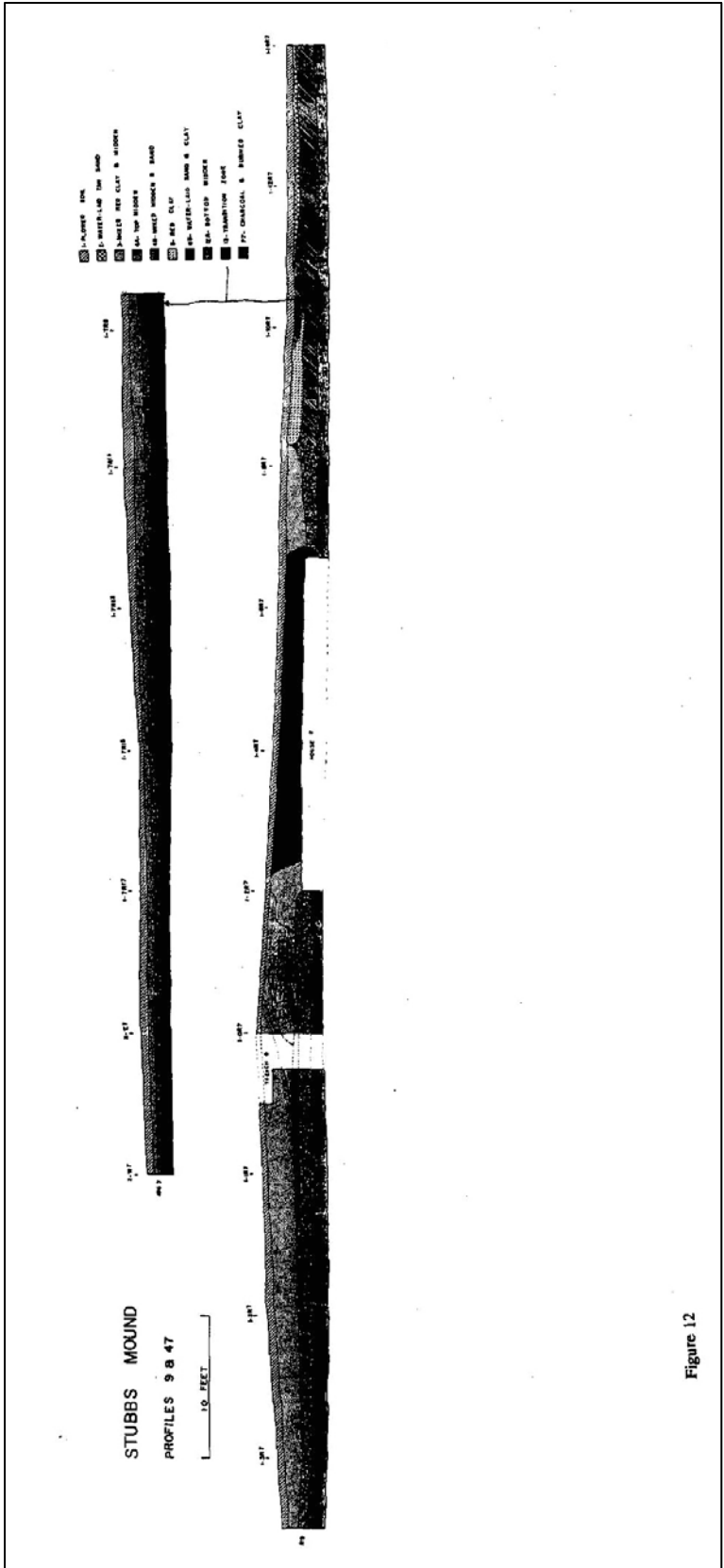


Figure 12