Archaeological Testing of the Cedine Mound, Rhea County, Tennessee

By Nicholas Honerkamp

Research Contributions, Number Three

Jeffrey L. Brown Institute of Archaeology
University of Tennessee at Chattanooga
Chattanooga, Tennessee

1990

Preface

The third contribution to the Institute's research publication series focuses on an investigation of a small prehistoric mound in Rhea County, Tennessee. This project was the first half of a two-part UTC Field School in Archaeology carried out in the summer of 1989 (the other half consisted of a survey of the Citico Site in Chattanooga: see Research Contributions, Number Two). Supported by the Cedine Bible Mission (the mound's owner), a UTC Faculty Research Grant, and the Institute of Archaeology, this project provided practical planning information for the landowner's building expansion program as well as an exceptional educational opportunity for ten UTC students. While the mound was found to be devoid of significant remains--it had been previously disturbed by parties unknown--the excavation was a resounding success from practical and educational standpoints.

I would be remiss if I did not emphasize the combined generosity of the Cedine Bible Mission and the UTC Faculty Research Committee, which made possible the research reported here. I especially appreciate the help and warm hospitality shown to us by Jim Sutherland, who coordinated our stay at the Cedine summer camp. It has been a delight to work with him, from beginning to end. The ever-cheerful team of excavators included John Chambliss, David Clark, Leslie Click, Beth Fowler, Robby Mantooth, Rusty O'Daniel, Scott Smith, Chuck Wilder, and Supervisors Marshall Brewer and Tracy Little. I am also indebted to Ms. Fowler and Mr. Smith for reviewing an earlier version of this report.

Nicholas Honerkamp
Director

Abstract

A small prehistoric mound located in Rhea County, Tennessee, was tested prior to its removal due to construction of a dining facility at the Cedine Bible Mission Camp near Spring City, Rhea County, Tennessee. Under the direction of Dr. Nicholas Honerkamp, two weeks of fieldwork were carried out in May, 1989, by students enrolled in a University of Tennessee at Chattanooga (UTC) Archaeological Field School. Controlled excavation of 14 square meters in the central area of the mound revealed evidence of previous excavation in the form of a large pit dug to the pre-mound surface. Included in the fill of this pit was a high frequency of mussel shells and several large slabs of limestone; two limestone-tempered ceramic fragments and small amounts of charcoal were also recovered. Apparently the initiating burial or burials and accompanying grave goods (if any) had been been removed, and the looting pit had been quickly backfilled. Based on its location and assumed method of construction, this feature is thought to be associated with the Hamilton Mortuary Pattern described by Patricia E. Cole (1975).

Introduction

In January of 1989 the author was approached by representatives of the Cedine Bible Mission concerning the presence of a possible prehistoric mound located on Mission property. The Mission summer camp is situated on the west bank of Watts Bar Lake, about nine miles north and east of Spring City, Tennessee (Figure 1). Construction plans called for a dining hall to be built directly on the site of a small (approximately 6 m diameter by 1 m high) prehistoric mound. Earthen burial and platform mounds were once a common cultural feature of the Tennessee River valley landscape, and depending on the period of construction, they could contain burials of elite members of prehistoric society accompanied by elaborate grave goods (Chapman 1985:59-60). Several other mounds were previously recorded in the vicinity of this one (Calabrese 1976; Cole 1975; Schroedl 1978). Since construction is privately funded, the landowner was not legally obligated to investigate the mound prior to bulldozing it into oblivion. On a field inspection of the site made in February, 1989, the author noticed mussel shell fragments, flint chips, and two small limestone slab fragments eroding out of the mound, all of which were consistent with the presence of a prehistoric habitation. Although the Cedine Mission administration fully supported a scientific investigation of this intriguing feature, all available funds had been allocated for construction. The author applied for and received a UTC Faculty Research Grant to cover basic expenses of a systematic testing program at this site. The Cedine organization provided housing for the crew of nine students, a field supervisor, and the author. Field equipment was donated by the Jeffrey L. Brown Institute of Archaeology.

The mound site is located on former timber- and farmland that is now covered in pastura. Cedar and sassafras trees were growing out of the feature (Figure 2), and a brass-and-concrete TVA survey marker with the inscription "SG 13" was present at the top of the mound. According to the USGS Ten Mile Quadrangle reproduced in Figure 1, the mound occurs between 880 and 900 feet above mean sea level. At the time of the fieldwork the mound was approximately one meter high, but bulldozing around the perimeter of the feature may have exaggerated this height somewhat. The mound did not seem to be seriously disturbed by pothunters; no obvious depressions were apparent on its surface. In addition, the Cedine organization had prevented digging in the mound after 1950, when the property was acquired. Taken together, these two facts led the archaeologists to believe that they would be excavating a "pristine" prehistoric site. Such a research opportunity is becoming increasingly rare given the accelerating rate of urban development and looting in Tennessee.

According to Jim Sutherland of the Cedine organization, the mound is the only survivor of a group of three; the other two small mounds were plowed away. Despite this, local residents report that the site has no history of significant artifact "finds."

Methodology

Using UTC students enrolled in the ANTH 335 Archaeological Field School, the author directed the mound investigation during the first half of the May, 1989. After cutting down and removing all of the trees growing on the mound, a grid was established using a transit and chain. The grid, consisting of stakes set at two meter intervals, was oriented toward magnetic north and tied into an extant Mission building. Each stake was numbered according to its position north and east of an imaginary "0" point to the southwest of the site. Stake lines were placed so as to bisect the mound in two directions (Figure 3). Excavation units were designated according to the southwest stake coordinate. A composite map of the site was made showing the grid coordinates and the mound contours (Figure 4). Vertical control was achieved through the use of a transit and stadia rod.

A research strategy employing penetrating excavations was followed for this project (Figure 5). Two units, designated as 198N/198E and 196N/200E, were dug to sterile in an attempt to (1) recover artifacts useful in determining the mound's function as well as its construction period; (2) locate possible burials; and (3) provide stratigraphic evidence that would aid in the interpretation of the mound construction sequences. Both units measured 2 x 2 meters square, and most of the fill from each unit was sifted using screens fitted with 1/2-inch mesh. A third 2 x 2 (196N/198E) and a 1 x 2 meter unit (200N/198E) were dug without screening in order to clarify stratigraphic relationships. The units were dug in arbitrary 10 cm levels, and natural zone changes were noted. The horizontal and vertical proveniences of all recovered artifacts were recorded, and significant features were photographed and mapped.

Data generated during the two weeks of fieldwork were processed and analyzed during the remainder of the summer; students participated in this phase of the project for one week. All artifacts were washed, dried and cataloged at the Institute's Archaeology Laboratory on the UTC campus. Artifact frequency and weights were entered into a computerized data base according to their horizontal and vertical locations (i.e., unit and level numbers). Maps, photographs, and field notes were checked and correlated, and background information on the prehistory of the Watts Bar Lake vicinity was reviewed. Several of these tasks were performed by the students as part of individual projects.

Results

Excavation of a total of 14 square meters of the Cedine mound site resulted in the recovery of 33.77 kg of fresh water shell (no frequency was calculated for this category), 45 limestone fragments weighing 33.00 kg, and only 2 ceramic fragments weighing 19 grams. The sherds were limestone tempered and undecorated. As such, they provide little chronological information. One of the sherds was accompanied by reliable provenience information, as it was found in Level 7 and Level 11 of 198N/198E. The other sherd was recovered when a temporary baulk between 196N/200E and 196N/198E was removed.

Almost all of the mussel shell (30.98 kg) and limestone fragments (24.60 kg) came from 198N/198E. These figures account for 91.7% and 74.5%, respectively, of the recovered total. The lower levels of the unit were most productive, with slightly more than half the shell and over 80% of the limestone recovered from levels 9 through 11. Small amounts of scattered charcoal were noted throughout the mound. No osteological remains of any kind were discovered. Several of the limestone fragments were in the form of slabs, with the largest measuring approximately 56 cm by

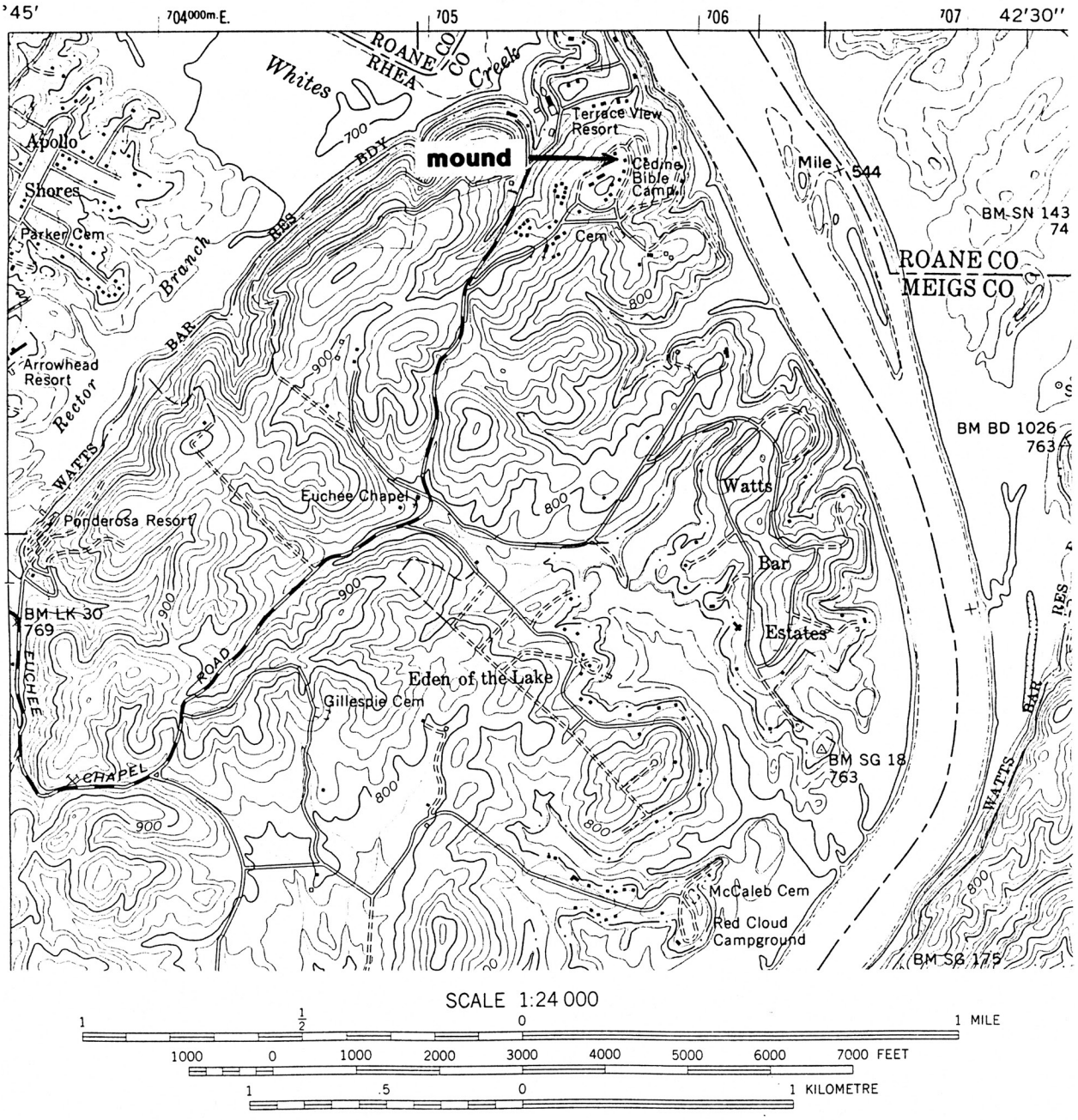

Figure 1. Vicinity Map, Cedine Mound Project. From USGS 10 Mile Quadrangle, 7.5 Minute Series, 1973.

Figure 2. The Cedine Mound Prior to Fieldwork. Facing northeast.

Figure 3. Initiation of Fieldwork. The trees shown in Figure 2 have been removed. Note the north-south grid line that bisects the mound. Facing north.

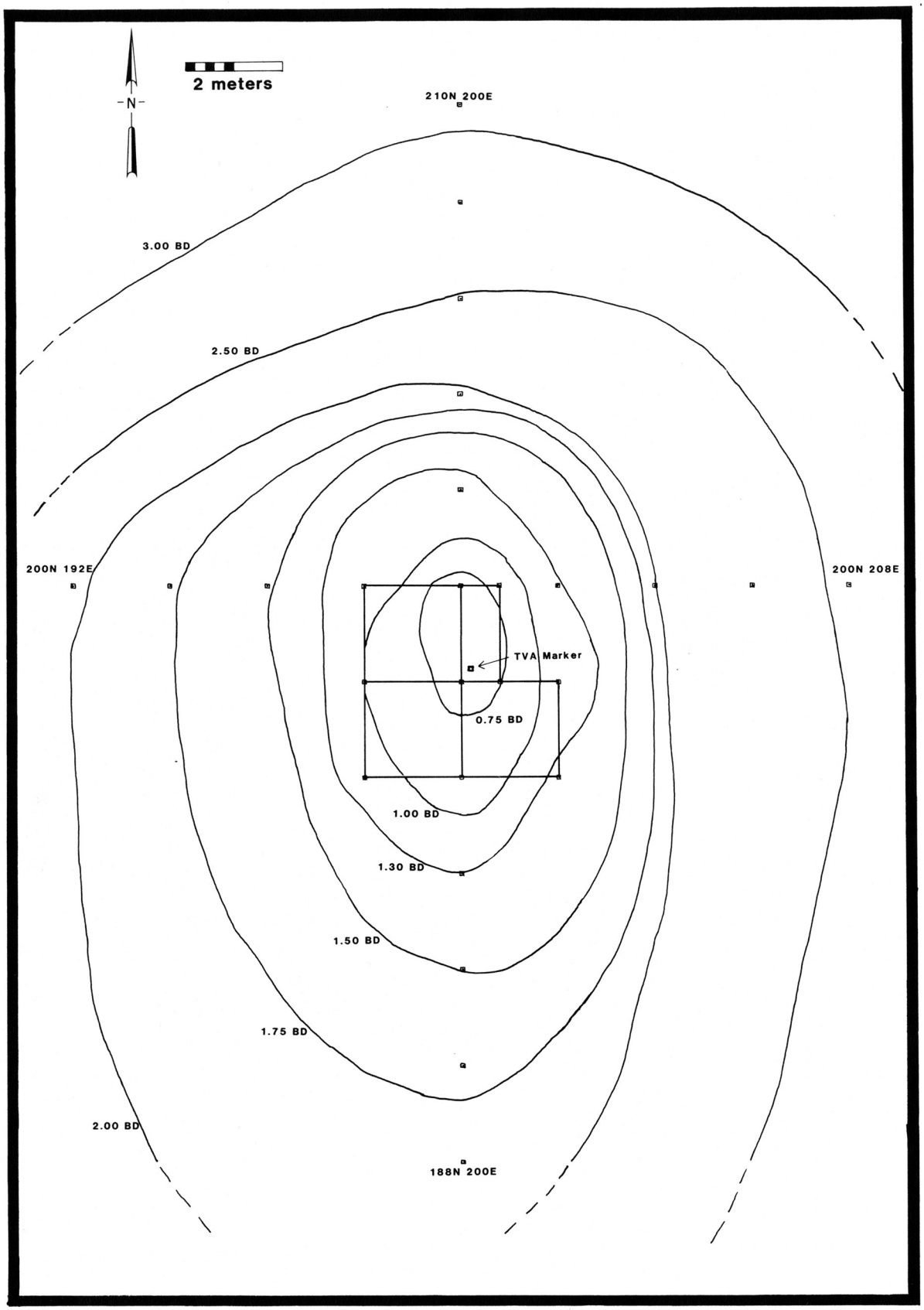

Figure 4. Mound Contours and Plan of Excavations. Contour intervals are measured in meters below datum (BD).

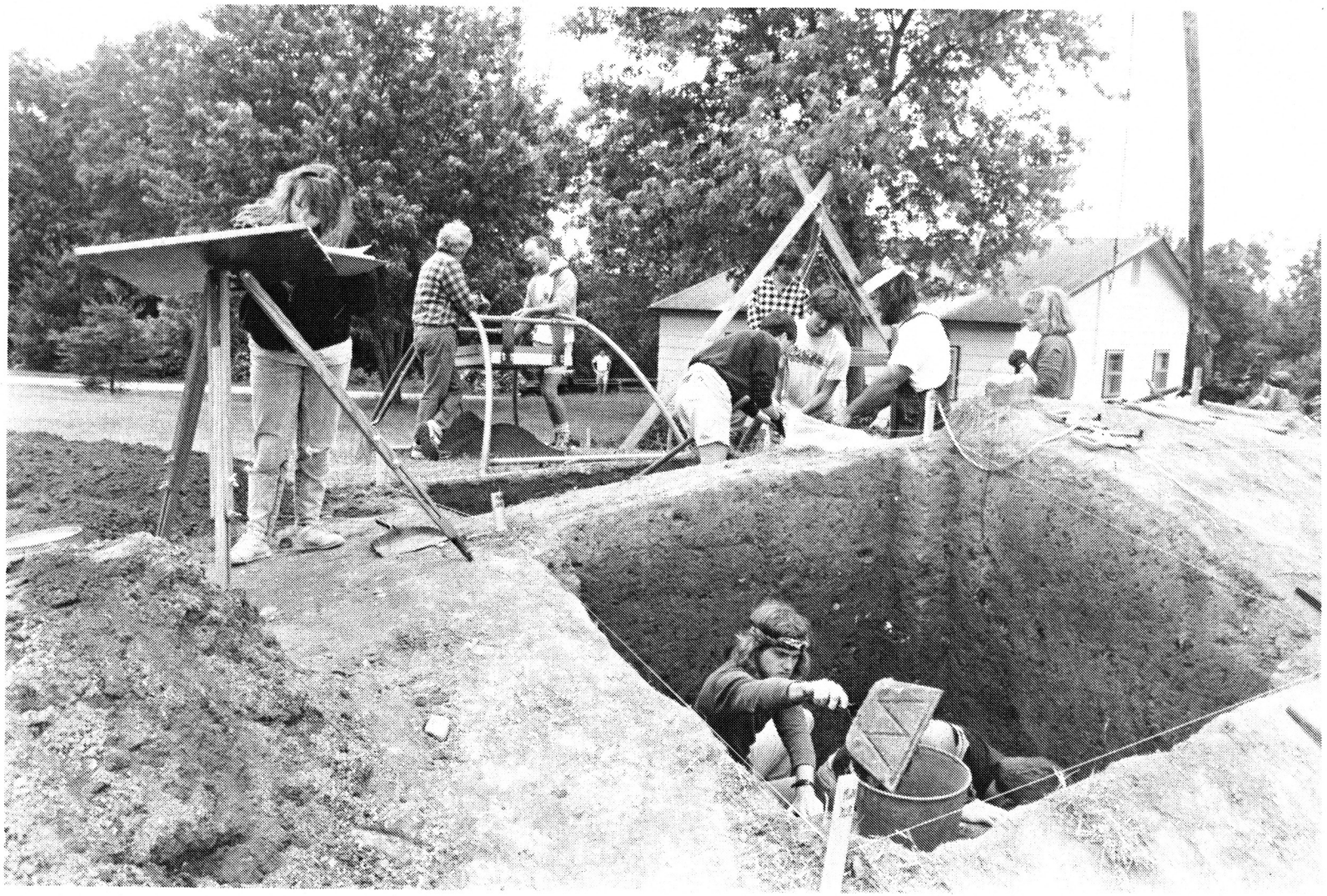

Figure 5. Excavation of the Cedine Mound. 196N/200E appears in the foreground. Facing northwest.

28 cm and 6 cm thick. All slab fragments are irregularly shaped. They were found in situ at various angles, as shown in Figure 6, and only the fragment appearing in the south wall of 198N/198E was laying flat.

Only a single cultural feature was discovered in the mound. This consisted of a trench excavation 1.0 to 1.5 m wide and extending at least 1.5 m deep from the mound surface. As illustrated in the composite map shown in Figure 7, it was oriented in a northwest to southeast direction. When first encountered in Units 198N/198E and 196N/200E, the fill from this trench was thought to be part of the original mound construction, while undisturbed remnants of the mound in the northeastern and southwestern corners of the units were erroneously identified as the edges of pits. This interpretative confusion was cleared up only after the profile shown in Figure 8 became visible. The initial difficulty in recognizing the trench excavation resulted from poor visibility--the edge of the trench is extremely hard to distinguish. In addition, the trench fill itself showed indistinct stratification, meeting our expectations for deposits associated with the mound construction.

The locations of some of the larger slabs in clear association with the trench are shown in Figure 7. The seemingly random angles that these fragments were lying in suggests they were haphazardly thrown into the trench as it was being backfilled. The faint edge of the trench indicates that this feature was rapidly filled after it was dug. Erosional deposits resulting from the trench standing open for any length of time would have left more obvious stratigraphic signatures. Also supporting the quick-fill sequence are the profiles illustrated in Figures 8 and 9, both of which exhibit acute angles. These two profiles clearly show that the bottom of the trench belled outward, at least in this area of the mound. Severe slumping would have occurred had not the trench been quickly filled. A small amount of slumping did occur within the trench fill itself as seen in the center of the wall in 196N/200E (see Figure 8).

Discussion

The trench appearing in the Cedine Mound apparently represents a looting event. An unusual aspect of this feature is that it was backfilled soon after it was dug, thus preserving the original contours of the mound and presenting an undisturbed appearance to our enthusiastic eyes. The mound itself contained small amounts of mussel shell and limestone, and very little else. Both of these materials are associated with mound construction. In her synthesis of the Hamilton Mortuary Pattern in eastern Tennessee, Patricia Cole states that

> Materials other than soil also appear in the mound fill. Sometimes limestone slabs were used to cap construction stages or simply occurred sporadically in the fill. In other mounds layers of mussel shell seemed to serve the same purposes. In some instances charred logs also were included as construction stage delimiters or as retainers for mound fill. Only the use of logs, however, was common to most of the mounds, perhaps because the availability of limestone and mussel shells is geographically restricted. (1975:84)

John Walthal (1980:107) also mentions mounds of this type in his summary of the Burial Mound III period (A.D. 600-1000) for Alabama: "Small conical earthen mounds. . . are characteristic of this time. Layers or pavements of stone or shell were constructed over individual burials or over the entire structure."

Although stratigraphic data are largely absent, the Cedine mound did not appear to be stratified, indicating a single phase of construction. Its modest size is also consistent with this suggestion. No burials, initiating or otherwise, were found, and presumably the trench excavation was responsible for this conspicuous absence. The limited distribution of the limestone and shell in the backfilled trench suggests that these materials were originally associated with a concentrated

Figure 6. In Situ Limestone Slabs, 196N/198E. Mussel shell fragments are scattered about in the floor of this unit. Scale in 10 cm zones; facing south.

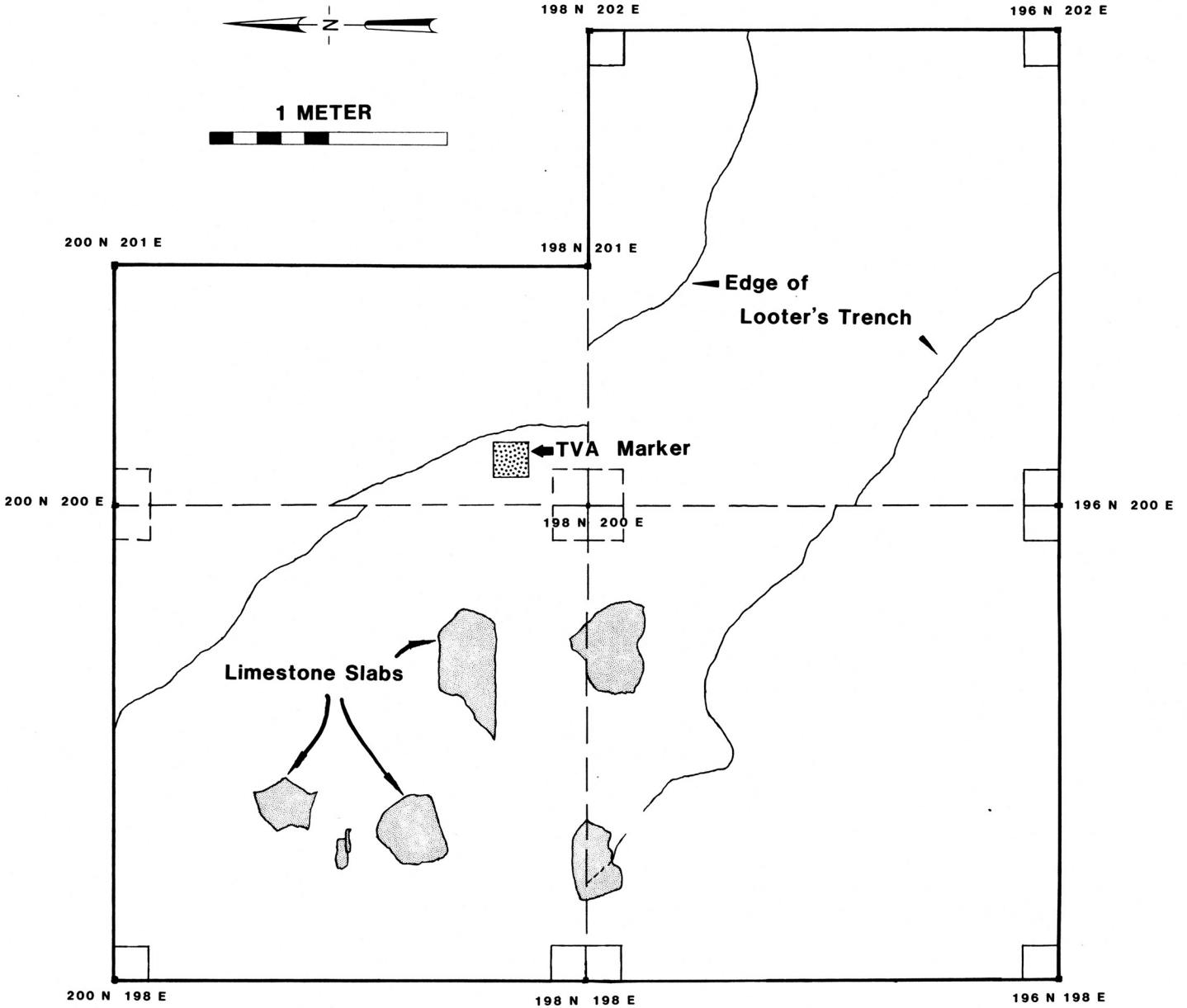

Figure 7. Composite Map, Cedine Mound Excavations. The non-contiguous edges of the trench result from mapping being done at different levels in each unit.

Figure 8. West Profile, 196N/200E. The barely visible intrusive trench angles downward from right to left. A small slumped area appears in the center part of the wall. The top scale is in 50 cm zones, while the bottom is in 10 cm zones.

Figure 9. North Profile, 196N/200E. The bell-shaped fill of the trench is evident on the left half of the wall. Scale in 10 cm zones.

deposit or deposits, perhaps as a cap for the presumed burial(s). The small number of limestone slabs precludes their use as an integral part of the mound construction, as described by Chapman for the Middle Woodland period in the Ridge and Valley Province (1987). According to Coe the presence of both limestone and shell in the same mound is somewhat rare in east Tennessee. She suggests (1975:70) that the incorporation of limestone versus shell in mound construction is related to availability, while Chapman (1987:65) believes that slab construction has chronological significance. Data generated from excavation of the Cedine mound is ambiguous with respect to this question. Charcoal flecking may be associated with the charred logs that Cole speaks of, although no log fragments were noted.

Who may have dug the trench and when it was dug are difficult questions to answer. No modern artifacts were discovered that might provide a *terminus post quem* on the filling of the trench. The quick and complete backfilling of the disturbance is certainly not characteristic of Tennessee pothunters (or any where else in the U.S. for that matter). However, it *is* reminiscent of the indefatigable efforts of an early "researcher" into Tennessee's prehistory: Clarence B. Moore. Excavating every mound within hailing distance of the Gopher, the steamship used in his explorations along the Tennessee River in 1914-15, Moore privately published his findings in *Aboriginal Sites on the Tennessee River* (1915). In the introduction to this report he barely conceals his exasperation at being denied permission to dig by certain landowners with mounds located on their property:

> A few refusals were based on the fact that former diggers (doubtless treasure seekers, traders, or irresponsible natives) had not conformed to their agreements, but had decamped, leaving excavations unfilled and fields in disorder, behavior for which we (and one could not otherwise expect) had to suffer. (1915:181).

This almost gives looting prehistoric sites a bad name! For his own part, Moore was conscientious about backfilling his holes, and the Cedine mound trench was certainly backfilled with care. However, none of the locations and/or descriptions of mounds dug by Moore in the Spring City vicinity correspond closely to the Cedine mound. Thus the identity of the trench digger remains unknown.

Conclusions

Archaeological research at the Cedine Site has revealed remnants of a small previously disturbed mound. Containing shell and limestone slabs, the mound was otherwise almost completely devoid of other prehistoric artifacts. A large area of the feature had been trenched, presumably by unknown relic collectors, so that the absence of human remains is not particularly surprising. Based on its location, its limestone and shell components, and the two limestone tempered sherds found during the excavation, the mound most likely is associated with the Hamilton Mortuary Pattern defined by Cole (1975). The disturbed nature of the feature permits only a tentative attribution, however.

This research highlights an unfortunate fact of life for archaeologists in the United States: prehistoric sites are being destroyed at an alarming rate. The efforts of the Cedine Bible Mission to first preserve the site and then to properly investigate it stands in admirable contrast to the attitudes of many who are not conscious of the value of Tennessee's rich prehistory, a prehistory that has now all but vanished.

References Cited

Calabrese, F. A.
1976 *Excavations at 40RH6, Watts Bar Area, Rhea County, Tennessee.* Tennessee Valley Authority, Norris, Tennessee.

Cole, Patrica E.
1975 A Synthesis and Interpretation of the Hamilton Mortuary Pattern in East Tennessee. M.A. thesis, Department of Anthropology, University of Tennessee, Knoxville.

Chapman, Jefferson
1985 *Tellico Archaeology: 12,000 Years of Native American History.* The University of Tennessee Press, Knoxville.

1987 The Kittrell Mound and an Assessment of Burial Mound Construction in the Southern Ridge and Province. *Tennessee Anthropologist* 12(1):51-73.

Hatch, James W.
1976 The Citico Site (40HA65): A Synthesis. *Tennessee Anthropologist* 1: 74-103.

Moore, Clarence B.
1915 *Aboriginal Sites on the Tennessee River.* Journal of the Natural Sciences of Philadelphia 16:169-428.

Schroedl, Gerald F.
1978 *Excavation of the Leuty and McDonald Sites Mounds in the Watts Bar Nuclear Plant Area.* Tennessee Valley Authority Publications in Anthropology No. 15, Norris, Tennessee.

Walthal, John A.
1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama and the Middle South.* University of Alabama Press, University, Alabama.