1980

The Early and Middle Archaic Periods: A Perspective from Eastern Tennessee

Jefferson Chapman

University of Tennessee - Knoxville

Follow this and additional works at: https://scholarworks.umass.edu/anthro_res_rpt19

Part of the Anthropology Commons


Retrieved from https://scholarworks.umass.edu/anthro_res_rpt19/10

This Article is brought to you for free and open access by the Anthropology Department Research Reports series at ScholarWorks@UMass Amherst. It has been accepted for inclusion in Research Report 19: Proceedings of the Conference on Northeastern Archaeology by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact scholarworks@library.umass.edu.
THE EARLY AND MIDDLE ARCHAIC PERIODS:  
A PERSPECTIVE FROM EASTERN TENNESSEE

Jefferson Chapman  
Department of Anthropology  
University of Tennessee/Knoxville

Twenty years ago the presence of Archaic period cultures in eastern Tennessee was in doubt. Lewis and Kneberg (1957:20) observed that:

Although in the Southeast in general and Archaic culture period separates the Paleo-Indian horizon from the Woodland, in eastern Tennessee the evidence of Archaic culture is rare, except in the Cumberland Plateau area.

With the publication of Joffre Coe's (1964) work at the Hardaway and Doerschuk sites and the stratigraphic sequences Broyles (1966, 1971) recorded at St. Albans, many lithic implements began to be recognized as evidence for Archaic period occupation in the eastern Tennessee area.

The loci for Early and Middle Archaic period sites, however, continued to be deflated hill top sites or those exposed by TVA reservoir erosion. Archaeological salvage excavations in the Nickajack Reservoir (Faulkner and Graham 1966:120) suggested that Early and Middle Archaic components were buried in the alluvial terraces, but time, money and focus on later components permitted little more than their recognition.

The inception of the Tellico Reservoir Project by the Tennessee Valley Authority in 1967 and the subsequent mitigation efforts by the University of Tennessee for the next eleven years, have yielded data of considerable importance to archaeological research in the east. The Archaic period research conducted as a part of this project has implications for northeastern archaeology and for this conference.
The lower Little Tennessee River valley is situated approximately 30 miles south of Knoxville in portions of Loudon, Monroe, and Blount Counties in eastern Tennessee. The river from Mile 33 to its confluence with the main Tennessee River at Lenoir City comprises the area of the proposed TVA Tellico Reservoir. The study area is situated in the Ridge and Valley Physiographic Province. For the last 40 miles, the river flows through a valley of narrow floodplains and rolling hills, bisecting several ridges. The floodplains are composed of two to three alluvial terraces: the first of these is a recent, active floodplain along some stretches of the river; there is a first terrace, approximately 10-15 feet in elevation, which formed 7,000-10,000 years ago; a second terrace, approximately 10-20 feet above the first is apparently around 30,000 years old. The river channel has been essentially stable for the last 9,000-10,000 years.

The hills and ridges adjacent to the flood plain are composed of shales, siltstones and limestone and average 100-300 feet higher than the floodplain. The ridges are dissected by many small drainages and along the slopes of the limestone ridges, chert of varying grades is eroded out as residuum. The region is characterized by a temperate deciduous forest, situated towards the eastern edge of the mixed mesophytic forest and adjacent to the oak-chestnut forest of the Blue Ridge Province.

It should be kept in mind that the archaeological investigations conducted in the lower Little Tennessee River valley and described below, were a part of a program to mitigate the impact of the Tellico Reservoir. The concomitant temporal and fiscal restraints that are inherent in mitigation efforts must be kept in mind.

ARCHEOLOGICAL INVESTIGATIONS

Excavations and testing in the first terrace sediments along the lower Little Tennessee River between 1973 and 1978 have altered and expanded considerably our understanding of the Archaic period in eastern Tennessee. Employing a tractor backhoe to excavate short, exploratory trenches (Chapman 1976a, 1977:1-11), over 60 subsurface Archaic period sites have been recorded (Chapman 1978). Of these, limited excavations have been conducted on ten of the larger sites.

At the Rose Island site (40MR44) over 2400 square feet of buried, stratified Early Archaic period horizons extending over one acre were investigated in 1973-74 (Chapman 1975). In 1975, investigations at the Icehouse Bottom site (40MR23) were directed at over 8.0 feet of stratified Early and Middle Archaic cultural horizons and between 1300-1800 square feet of this two acre site were exposed (Chapman 1977; Chapman and Adovasio 1977; Cridlebaugh 1977). The same year, limited test excavations sampled over 7.0 feet of stratified Early and Middle Archaic occupations at the Patrick site (40MR40) and two buried Middle Archaic cultural horizons at Harrison Branch (40MR21)(Chapman 1977). At the Calloway Island site (40MR41), a buried Early Archaic LeCroy
component was identified and partial excavation (1400 square feet) showed the cultural horizon and its substrata to be one to three feet thick (Chapman 1977, 1979). In 1976, a deeply stratified site over 15.0 feet deep and covering almost four acres was discovered at the Bacon Farm (40LD35); limited excavations (c. 1000 square feet) focused on stratified occupational surfaces over two feet thick containing Kirk Corner Notched type (Coe 1964) points (Chapman 1978). Providing comparative Middle Archaic material, over 2400 square feet of a sealed Morrow Mountain I component (Coe 1964) were investigated at the Howard site (40MR66) (Chapman 1979).

Although evidence of Late Archaic period occupation has been found at the base of several Early Woodland components, backhoe testing located two buried sites of this time period with stratigraphically sealed middens. Limited testing at the Bacon Bend site (40MR25) exposed an occupation associated with the Savannah River complex (Coe 1964) and at the Iddins site (40LD38) an excavation area of 3650 square feet yielded abundant data pertaining to the Late Archaic of the second millennium BC.

As Late Archaic period manifestations are abundant in the northeast as well as southeast, the significance of our research for this conference lies in the extensive data from the lower Little Tennessee River valley pertaining to the Early and Middle Archaic periods. From my perspective there are three areas of significance with implied implications for archaeological research in the northeast. These areas are site location and excavation strategy, artifact assemblages, and chronology.

SITE LOCATION

Investigations in the lower Little Tennessee River valley have shown that Early and Middle Archaic period sites are quite numerous and are, for the most part, buried in the alluvial terraces of the floodplain. This situation is not unique to the study area and the presence of buried alluvial sites has been known for at least the last 30 years (cf. Coe 1964:8-13); Broyle's (1966, 1971) excavations at the St. Albans site have illustrated how dramatic this stratification could be. Our experience has demonstrated that the backhoe is one of the most effective means of locating and testing these sites and our success has produced concomitant changes in the way we view Early and Middle Archaic period settlement (Chapman 1976b).

The implications of our success for northeastern archaeology should be obvious. Buried Early and Middle Archaic period sites, such as the Russ site, have been shown to be present in the flood plains of the Upper Susquehanna River (Funk 1977). I am not suggesting that river valleys in the northeast are identical in their geomorphology to those in the southeast; alluviation does not appear to be as great in the northeast. But until this frequency is determined, the distribution of Early Archaic sites may or may not be as thin as previously thought. Even taking into account different geochronologies, terrace remnants may well be preserved in the floodplains of many drainages in the northeast.
Dincauze and Mulholland (1977:454) have clearly expressed the potential for site locational bias:

The elusiveness of cultural data from the 10th to the 7th millennia BP has been historically conditioned by special problems of discovery and recognition, which must be overcome before prehistorians can measure or assess relative population densities. Many, perhaps most, of the sites occupied between 10,000 and 8,000 BP were situated in relationship to landscape features now vanished, buried, or inundated. They lie under alluvium or slope wash, under water off shore, and in isolated or eroded upland locations. Claims for the absence of Early Archaic sites need to be demonstrated by either carefully defined or intensive surveys. Later sites are progressively less hard to find because the locations have been altered less and many were utilized repeatedly throughout succeeding times.

Our investigations in the lower Little Tennessee River will hopefully stimulate more research in this area.

**ARTIFACT ASSEMBLAGES**

Over 180,000 artifacts have been recovered from the six major stratified Early and Middle Archaic sites in the lower Little Tennessee River valley. Of this total, 91% of the artifacts are classed as debitage, but as they were recovered in situ, they afford opportunities for the study of lithic technology and raw material sources. Over 7000 chipped or ground stone implements have been recovered from these sites and within this total are approximately 1200 classifiable projectile points.

As Gruber (1978) has recently and appropriately pointed out, projectile points are not people or cultures. However, the large in situ stratified samples of artifacts have permitted us to evaluate the validity of historic types and to begin to address the definition of lithic assemblages (Kimball 1976, 1978, n.d.). These assemblages are minimally defined as all of the artifacts from a discrete stratigraphic context and, as such, they represent the demonstrated synchronic residues of extinct cultural systems. This dimension of anthropological endeavor is the focus of much of our current and future research. Certain comments about artifact classes that have been generated from our research up to this time are appropriate.

Based on samples of over 800 corner notched and bifurcate base points from stratified contexts, there appear to be four clusters or discriminated groups of Early Archaic projectile point forms that have stratigraphic and statistical integrity when a SPSS discriminant statistical test is applied to continuous variable measurements of the hafting elements within assemblage contexts. The earliest of these clusters (Kirk Corner Notched, Lower Variety) is composed of large,
deeply corner notched specimens with straight to excrurate ground bases (Chapman 1977:50-51). The second cluster (Kirk Corner Notched, Upper Variety) is composed of a range of corner notched forms in which much of the previously assumed variety is a function of blade resharpening or rejuvenation (cf. Chapman 1977:41-48, 1978:50-54). Points ascribable to the Palmer Corner Notched (Coe 1964:67), Kirk Corner Notched (Coe 1964:69), Kirk Corner Notched, Large Variety (Broyles 1971:65), and Kirk Corner Notched, Small Variety (Broyles 1971:63) types are not discriminated in this analysis and are nowhere distinctly separate stratigraphically.

The third discriminated group is that typified by the St. Albans Side Notched type (Broyles 1966:23). There is again a range in the execution of the points in this cluster and the point is viewed as an intermediate between the Upper Kirk Corner Notched group and the succeeding LeCroy Bifurcated Stem cluster; the MacCorkle Stemmed type (Broyles 1971:71) is subsumed in this category. Straight stemmed points with a notched base that are generally manufactured on a flake comprise the fourth cluster. These points are assigned to the LeCroy Bifurcated Stem type (Lewis and Kneberg 1955:79; Broyles 1966:26) and mark the beginning of a long series of stemmed point types.

Kanawha Stemmed (Broyles 1966:27), Kirk Stemmed (Broyles 1971:67), Stanly Stemmed (Coe 1964:35), and Morrow Mountain I Stemmed (Coe 1964:37) type points have been recovered in this sequence from stratified contexts post-dating the LeCroy type points (Chapman 1977, 1978, 1979).

The implications for the northeast of the large projectile point sample from eastern Tennessee are essentially two-fold. First, the chronological sequence of these Early and Middle Archaic types has been confirmed and the associated radiocarbon dates are compatible with similar associations reported elsewhere. Second, there is considerable variation in the projectile point type cluster morphology within a single assemblage from a site. In areas such as the northeast where site affiliation has frequently been based on single or small samples of points, variants may be misconstrued or misinterpreted.

Within the Early and Middle Archaic lithic assemblages, it is important to note the large number of ad hoc implements representing only slightly modified flakes and blades; formalized chipped stone tool types are relatively infrequent. Stratified sites have also afforded the opportunity to confirm the association of milling stones and ground stone celts within Early Archaic Kirk Corner Notched contexts. Over 1000 Early and Middle Archaic period features have been recorded at the six major sites investigated. From many of these features flotation samples composed of over 2000 grams of carbonized plant remains have been recovered. Analysis suggests, not unexpectedly, that there was a collecting focus principally on acorns and hickory nuts.
Table 1. Radiocarbon dates from Early and Middle Archaic period sites in the lower Little Tennessee River valley. All dates are uncorrected, based on a 5570 yr half-life and referenced to the year A.D. 1950.

<table>
<thead>
<tr>
<th>Associated Projectile Point Type</th>
<th>Site</th>
<th>Sample #:</th>
<th>B.P.</th>
<th>B.C.</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kirk Corner Notched (Lower var.)</td>
<td>Icehouse Bottom</td>
<td>GX4126</td>
<td>9435 ± 270</td>
<td>7485</td>
<td>Chapman 1976c, 1977:161</td>
</tr>
<tr>
<td>Kirk Corner Notched (Lower var.)</td>
<td>Icehouse Bottom</td>
<td>GX4127</td>
<td>9175 ± 240</td>
<td>7235</td>
<td>Chapman 1976c, 1977:161</td>
</tr>
<tr>
<td>Kirk Corner Notched (Lower var.)</td>
<td>Icehouse Bottom</td>
<td>I-9138</td>
<td>8715 ± 140</td>
<td>6765 **</td>
<td>Chapman 1976c, 1977:162</td>
</tr>
<tr>
<td>Kirk Corner Notched (Upper var.)</td>
<td>Icehouse Bottom</td>
<td>GX4125</td>
<td>9350 ± 240</td>
<td>7400</td>
<td>Chapman 1976c, 1977:161</td>
</tr>
<tr>
<td>Kirk Corner Notched (Upper var.)</td>
<td>Patrick Site</td>
<td>GX4122</td>
<td>9410 ± 290</td>
<td>7460</td>
<td>Chapman 1976c, 1977:161</td>
</tr>
<tr>
<td>Kirk Corner Notched (Upper var.)</td>
<td>Rose Island</td>
<td>GX3564</td>
<td>9330 ± 250</td>
<td>7380</td>
<td>Chapman 1975:211,1976c</td>
</tr>
<tr>
<td>Kirk Corner Notched (Upper var.)</td>
<td>Rose Island</td>
<td>GX3565</td>
<td>9110 ± 145</td>
<td>7160</td>
<td>Chapman 1975:211,1976c</td>
</tr>
<tr>
<td>Kirk Corner Notched (Upper var.)</td>
<td>Bacon Farm</td>
<td>GX4707</td>
<td>9105 ± 190</td>
<td>7155</td>
<td>Chapman 1978:28</td>
</tr>
<tr>
<td>Kirk Corner Notched (Upper var.)</td>
<td>Icehouse Bottom</td>
<td>I-9137</td>
<td>8525 ± 355</td>
<td>6575 **</td>
<td>Chapman 1976c, 1977:162</td>
</tr>
<tr>
<td>Kirk Corner Notched (Upper var.)</td>
<td>Rose Island</td>
<td>GX3169</td>
<td>8060 ± 350</td>
<td>6110 **</td>
<td>Chapman 1975:211,1976c</td>
</tr>
<tr>
<td>St. Albans Side Notched</td>
<td>Rose Island</td>
<td>GX3167</td>
<td>8800 ± 270</td>
<td>6850</td>
<td>Chapman 1975:211,1976c</td>
</tr>
<tr>
<td>St. Albans Side Notched</td>
<td>Rose Island</td>
<td>GX3168</td>
<td>8700 ± 300</td>
<td>6750</td>
<td>Chapman 1975:211,1976c</td>
</tr>
<tr>
<td>St. Albans Side Notched</td>
<td>Rose Island</td>
<td>GX3598</td>
<td>8660 ± 180</td>
<td>6710</td>
<td>Chapman 1975:211,1976c</td>
</tr>
<tr>
<td>LeCroy Bifurcated Stem</td>
<td>Rose Island</td>
<td>GX3597</td>
<td>8920 ± 325</td>
<td>6970 **</td>
<td>Chapman 1975:211,1976c</td>
</tr>
<tr>
<td>Kirk Stemmed</td>
<td>Rose Island</td>
<td>GX3563</td>
<td>8020 ± 190</td>
<td>6070</td>
<td>Chapman 1975:211,1976c</td>
</tr>
<tr>
<td>Stanly Stemmed</td>
<td>Patrick Site</td>
<td>GX4121</td>
<td>7810 ± 175</td>
<td>5960</td>
<td>Chapman 1976c, 1977:164</td>
</tr>
<tr>
<td>Morrow Mountain I Stemmed</td>
<td>Howard Site</td>
<td>GX4704</td>
<td>7225 ± 165</td>
<td>5305</td>
<td>Chapman 1979:81</td>
</tr>
<tr>
<td>Morrow Mountain I Stemmed</td>
<td>Icehouse Bottom</td>
<td>GX4124</td>
<td>6995 ± 245</td>
<td>5045</td>
<td>Chapman 1976c, 1977:164</td>
</tr>
</tbody>
</table>

* Denotes split samples  ** Denotes rejected assays
CHRONOLOGY

Our research places us in full agreement with Funk (1977:23) who states "...chronologically as well as typologically Early and Middle Archaic cultures of the Northeast parallel those of the Southeast." Or as Dincauze and Mulholland (1977:439) expressed it:

Believing that the radiocarbon dates are too imprecise to demonstrate any diffusional lag, we prefer the assumption of essential contemporaneity to the equally gratuitous assumption of lag, with the Northeast always seen as culturally retarded.

Radiocarbon determinations from carbonized wood and nutshell have established a series of dates for strata and their associated assemblages from different sites in the lower Little Tennessee River valley. These dates correlate closely with dates from the northeast from sites such as Russ (Funk 1977), Richmond Hill (Ritchie and Funk 1973) and Neville (Dincauze 1976) (cf. Chapman 1976c). Table 1 presents the radiocarbon dates pertaining to the Early and Middle Archaic periods in the lower Little Tennessee River. As projectile point types remain as "type fossils" and are the fabric by which we have and shall probably continue to develop chronologies for the earlier culture periods, the principal type or type clusters associated with the dated stratum are given in Table 1. This is a communicative convenience, not the definition of the cultures.

SUMMARY

The perspective from eastern Tennessee concerning Early and Middle Archaic periods suggests a greater population density than previously thought. In just over twenty years, we have moved from the position of little evidence for the Archaic period to the recognition of extensive occupation of the active alluvial terraces adjacent to the river margins. Upland ridge sites and deflated hill tops are now viewed as perhaps marginal and probably secondary to the flood plain sites. Scattered similar occurrences of buried sites suggest that this pattern may not be limited to the eastern Tennessee area. The scarcity of Early and Middle Archaic period sites in the northeast may be an historical problem of sampling. This paper does not mean to imply that the situations in the two areas are the same, only that future research designs should address the problem of potential buried sites.

The results of the lower Little Tennessee River valley research are beginning to provide a firm chronological and material culture perspective that should serve as the underpinnings for future research and interpretations elsewhere. To that end this paper has sought to briefly acquaint those active in research in the northeast with our research.
Acknowledgements: Funding for the University of Tennessee Tellico Archaeological Project has been provided through contracts with the Tennessee Valley Authority and the Heritage Conservation and Recreation Service, Department of the Interior (formerly National Park Service) with Dr. Alfred K. Guthe and Dr. Jefferson Chapman as Principal Investigators. Supplemental funds have been provided from the National Geographic Society and individual and corporate donors.
REFERENCES CITED

Broyles, Bettye J.

Chapman, Jefferson
1979 Archaeological investigations at the Howard (40MR66) and Calloway Island (40MR41) sites. Draft report prepared in partial fulfillment of Tennessee Valley Authority contracts: TV42163A and TV48317A and Heritage Conservation and Recreation Service Contract: C-5560 (78).

Chapman, Jefferson and James Adovasio

Coe, Joffre L.
1964 The formative cultures of the Carolina piedmont. Transactions of the American Philosophical Society, n.s 54 (5).

Cridlebaugh, Patricia A.
1977 An analysis of the Morrow Mountain component at the Icehouse Bottom site and a reassessment of the Morrow Mountain complex. Masters thesis, Department of Anthropology, University of Tennessee, Knoxville.

Dincauze, Dena F.
Dincauze, Dena F. and Mitchell T. Mulholland

Faulkner, Charles H. and J.B. Graham
1966 Westmoreland-Beard Site (40Mill), Nickajack Reservoir, Season II. Department of Anthropology, University of Tennessee, Knoxville. Funk, Robert E.

Funk, Robert E.

Gruber, Jacob W.

Kimball, Larry R.
n.d. An analysis of Early Archaic lithic assemblages from the Little Tennessee River Valley, Tennessee. Thesis proposal presented to the Department of Anthropology, University of Tennessee, Knoxville. (xerox)

Lewis, Thomas M.N. and Madeline Kneberg

Ritchie, William A. and Robert E. Funk