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A synthesis of the Late Woodland Mason Phase in the Normandy and Tims Ford Reservoirs in Middle Tennessee

Betty J. Duggan
University of Tennessee - Knoxville

To the Graduate Council:

I am submitting herewith a thesis written by Betty J. Duggan entitled "A synthesis of the Late Woodland Mason Phase in the Normandy and Tims Ford Reservoirs in Middle Tennessee." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Anthropology.

Charles H. Faulkner, Major Professor

We have read this thesis and recommend its acceptance:

Gerald F. Schroedl, Paul W. Parmalee, Walter E. Klippel

Accepted for the Council:
Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Accepted for the Council:

Vice Chancellor
Graduate Studies and Research

A SYNTHESIS OF THE LATE WOODLAND MASON PHASE IN THE NORMANDY AND TIMS FORD RESERVOIRS IN MIDDLE TENNESSEE

A Thesis

Presented for the

Master of Arts

Degree

The University of Tennessee, Knoxville

Betty J. Duggan

December 1982

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Finally, I would like to dedicate my Master's thesis to the two people who taught me the most over the years, my parents, the late Ted F. Duggan and the late Edna Ensley Duggan.

ABSTRACT

From ca. 600 A.D. to 1100 A.D. Late Woodland groups occupied the upper Duck and Elk River valleys in the Eastern Highland Rim Physiographic Section in Middle Tennessee. These Mason phase peoples lived primarily on the older alluvial terraces where they exploited a wide range of locally available resources from three types of habitation loci: base camps, seasonal encampments and task-specific stations. Artifactual and floral data suggest that these people were Woodland hunter-gatherers who were familiar with horticultural practices.

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CHAPTER I

INTRODUCTION

The purpose of this thesis is to examine Late Woodland archaeological remains in the contiguous upper Elk and Duck River valleys of Middle Tennessee. The study area is confined primarily to those portions of Bedford, Coffee and Franklin counties, Tennessee, that are now inundated by the Tims Ford (Elk River) and Normandy (Duck River) reservoirs (Figure 1). More than a decade of field and laboratory research conducted by the Department of Anthropology, The University of Tennessee, Knoxville, has resulted in the publication of numerous archaeological site reports and general culture historical summaries for these areas (cf. reports of the Normandy Archaeological Project). Information gathered in these studies specifically related to Late Woodland sites has served as a basis for this thesis which seeks to compare, synthesize and interpret Late Woodland archaeological data in the upper Elk and Duck River valleys. Artifactual, culture contextual, site setting, floral and faunal studies are used to re-evaluate Late Woodland activities in the two reservoir areas. While previously published reports document individual occupations, no comprehensive comparative work dealing with all available Late Woodland data has been compiled prior to this thesis.

The local manifestation of Late Woodland period activities is represented by the Mason phase which was originally defined on the basis of data recovered from the Mason site (40FR8) in the Tims Ford Reservoir

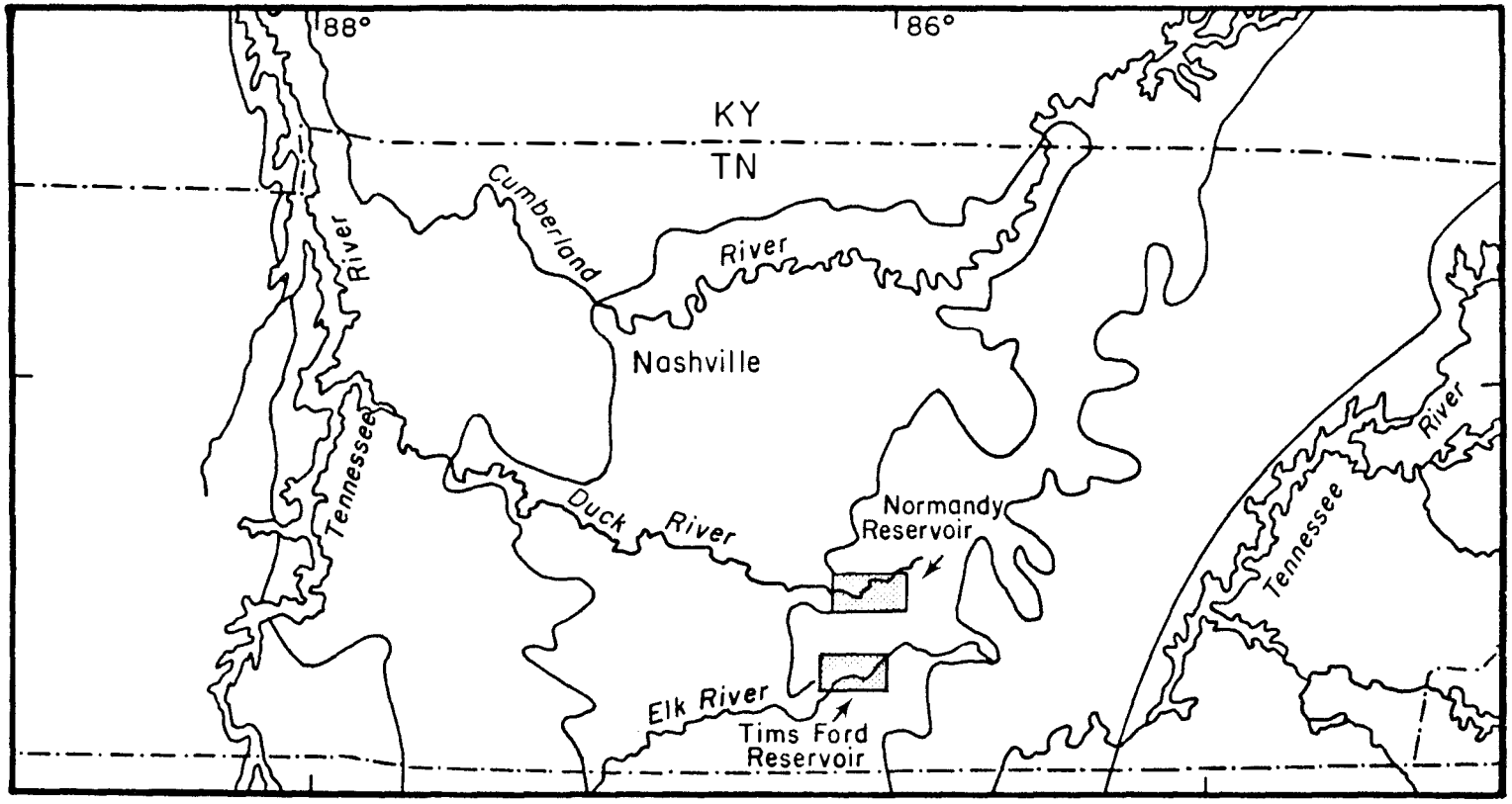

Figure 1. Location of the Normandy and Tims Ford Reservoirs.

(Faulkner 1968). Distinctive characteristics of this site included Hamilton triangular projectile points/knives, bone tools, sandstone digging implements, large bell-shaped storage pits, pit burials and a wide variety of floral and faunal remains. Particularly distinctive were the chert tempered ceramics (e.g., Elk River series), especially those sherds with a knot-roughened/net impressed surface treatment recovered from the site. All of these traits were incorporated in the original definition of the Mason phase, but two traits, chert tempered ceramics and Hamilton triangular points, became temporal markers for later excavations and analyses in the adjacent Normandy Reservoir. Radiocarbon dates indicate that these artifacts were used by local Late Woodland peoples for at least 500 years between A.D. 600 and A.D. 1100.

As stated previously, data used in this thesis were collected during archaeological salvage operations prior to the inundation of the Normandy and Tims Ford reservoirs. In both reservoirs an effort was made to locate, test and/or excavate those archaeological sites which would be impacted most directly by the impoundment of the two rivers. Two major goals of these investigations were to develop a local chronological framework and to examine intra-site (community) patterning, with an especial focus on the Middle Woodland period sites. Data collection techniques were consistent within, but not between, reservoirs. In the Normandy Reservoir all features were processed through .25 inch and finescreen mesh, while a variety of techniques, including screening, shovel sorting and flotation, were used to recover feature contents in the Tims Ford Reservoir sites. Excavation units were

placed intuitively within the sites on the basis of previous testing results in order to maximize data recovered.

Several hypotheses concerning Mason phase settlement patterns in the study area have been presented as possible explanations for the spatial distribution of archaeological materials recovered during the Normandy and Tims Ford investigations. Faulkner and McCollough (1973) note the apparent decrease in the number of Late Woodland sites when compared to the intense Middle Woodland occupation of the same area. They have suggested that population decrease or a change in settlement pattern was the reason for the smaller number of Late Woodland sites. Concerning the geographical distribution of Late Woodland sites, Faulkner (1978:Personal Communications) has suggested that the ephemeral Late Woodland remains in the Duck River Valley, as opposed to the more intensely occupied sites in the Elk River Valley, argue for environmental exploitation centered around base camps in the Elk River Valley with subsidiary task-specific occupations reaching into the neighboring Duck River Valley. Faulkner (1968) has also suggested that possibly an intrusive group of people was responsible for the archaeological remains at Late Woodland sites. This would perhaps explain the apparent overlap in time of Late Woodland and Mississippian cultural groups in the study area: one could have a situation with two distinct social groups simultaneously exploiting the upper Elk and Duck River valleys. Butler (1980) has posited that the archaeological sites represented in the upper Elk and Duck River valleys may, themselves, be only subsidiary hunting and gathering stations for larger, more permanently-occupied Late Woodland sites in adjacent areas which have not as yet been formally surveyed.

All of these hypotheses are viable, but conflicting, explanations for the archaeological data base which unfortunately cannot be addressed adequately until investigations specifically designed to yield settlement pattern information have been carried out in and around the vicinity of the study area.

The basic assumption of this thesis is simple: human beings use culture to adapt to their environment. Culture is viewed as learned patterned behavior and environment refers to both the physical (natural) and cultural (social) surroundings of human beings. Implicit in this definition of culture and environment are the assumptions that patterned behavior used by human beings in both type of environments can be observed indirectly in the archaeological record and that an isolated study of either habitat does not present a complete picture of human behavior. For analytical purposes the natural and cultural setting of Mason phase sites is first examined separately. In Chapter II the physical setting of Late Woodland sites in the study area is examined. Chapter III deals with material culture remains on an intra-site basis. Data presented in these two chapters are then summarized in Chapter IV and interpreted in Chapter V.

CHAPTER II

THE NATURAL ENVIRONMENT AND SITE LOCATION

The placement of human settlements is not a random process. Classically, basic life-sustaining needs must be met wherever humans congregate. The availability of water, food and protection from the elements and predators are essential considerations in the location of short- or long-term occupation sites. Realizing the importance of such factors in site placement, this chapter deals with the natural environment of the upper Elk and Duck River valleys and the physical surroundings of Late Woodland archaeological sites within them.

A. THE NATURAL ENVIRONMENT*

Physiography and Geology

The upper portion of both the Duck and Elk rivers is within the Interior Low Plateau physiographic province as defined by Fenneman (1938). The general boundaries of this province are the Tennessee River on the west and south, the Cumberland Plateau to the east and the edge of the glacial drift to the north. The Interior Low Plateaus may be further divided into four sections based on geologic structure: the Highland Rim, the Nashville (Central) Basin, the Bluegrass and the Shawnee sections. While the upper Duck and Elk River valleys (Figure 2)

*Unless indicated, previously published environmental data from the following sections are drawn from Faulkner and McCollough (1973).

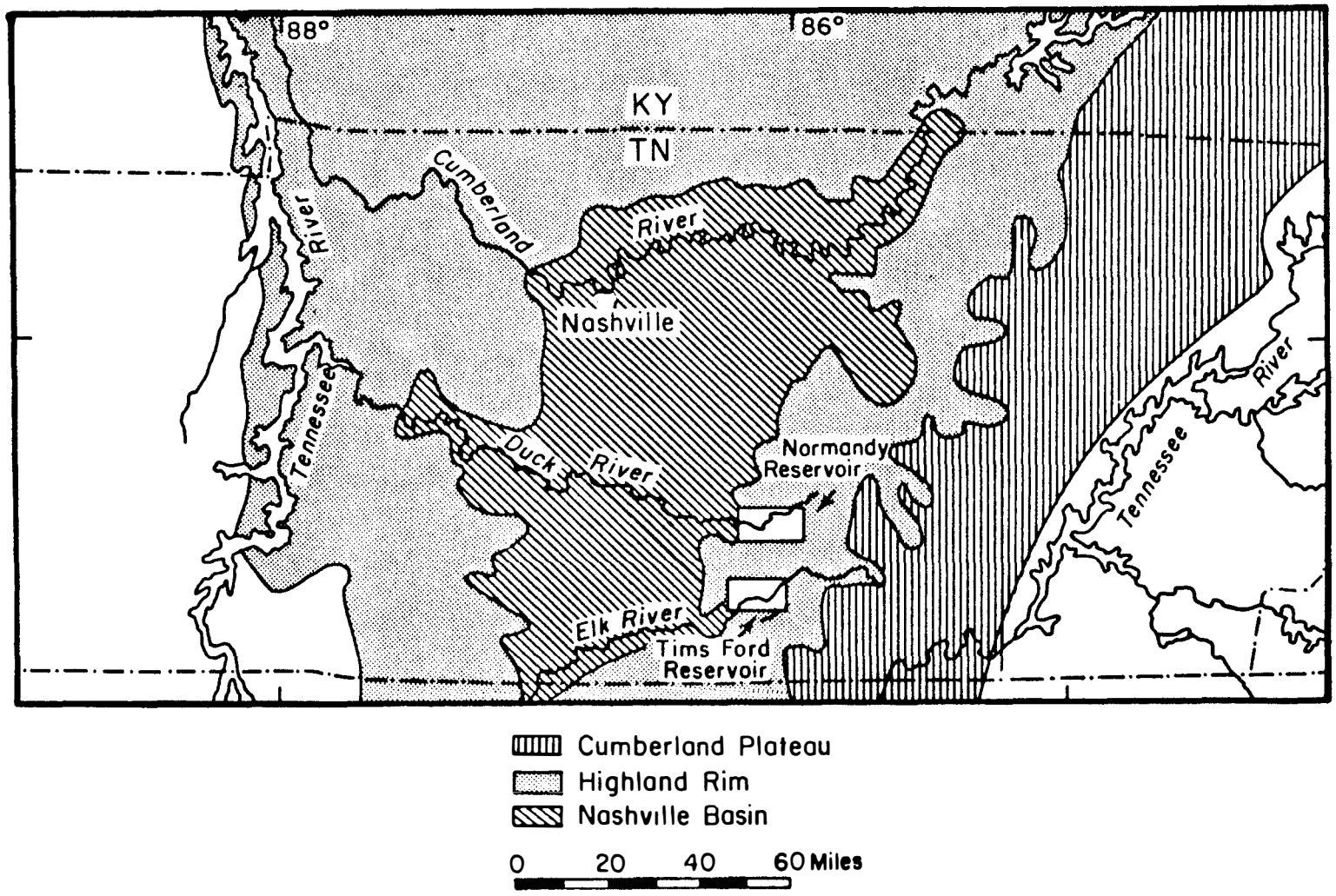

Figure 2. Physiographic Provinces of Middle Tennessee and the Study Area.

lie within the eastern margin of the Highland Rim, the valley floors are considered to be extensions of the Nashville Basin section (Love et al. 1959:88). The Highland Rim is the low, highly dissected plateau, underlain by Mississippian strata, which encircles the Nashville Basin. It is characterized by gently rolling to hilly topography between sharply incised valleys, fully mature large streams and patches of cedar glades. The eastern margin of this plateau, which includes the study region, is an eastwardly dipping limestone bench varying in width from 10 to 15 miles that has as its western boundary the Nashville Basin and the Cumberland Plateau as the eastern boundary. Moving from west to east across the eastern margin of the Highland Rim, one encounters first the underlying Fort Payne chert geologic formation nearthe Nashville Basin and later Mississippian period limestones and shales as one moves closer to the Cumberland Plateau.

Stream patterns in the study area are dendritic with several streams forming the headwaters of the two rivers. The sources of the Duck River all lie within the Highland Rim. These include the Little Duck River (major source) and Crumpton, Carroll and Riley creeks. The headwaters of the Elk River are to be found in a number of small streams which flow out of coves in the western escarpment of the Cumberland Plateau. Major streams which empty into the Elk River within the Tims Ford Reservoir area include Boiling Fork Creek, Hurricane Creek, Little Hurricane Creek, Town Creek and Kitchen Creek.

Climate

Climatic conditions in the eastern Highland Rim area are characterized as humid, mesothermal (Koppen 1931; Strand et al. 1973).

This indicates that mild seasonal changes and an abundant rainfall supply are typical. Temperatures range from a daily average of near 40°F in January to 80°F in July with an average annual temperature of 59.3°F. Seasonal rainfall studies indicate that March is the wettest month and September and October the driest months with the average annual precipitation being about 54.17 inches (TVA 1972:18; Strand et al. 1973:6; Love et al. 1959).

Soils

The edaphic resources of the upper Duck River Valley vary considerably from rich alluvial deposits in the floodplains to low fertility silts in the upland areas (Love et al. 1959). Agriculturally productive silt loams belonging to the Huntington series occur on the floodplains. The soils of the adjacent older alluvial terraces are also productive, but less so than the Huntington soils. First terrace soils are generally the well-drained Armour silt loam, while second terrace soils fall into the Etowah series of silt loams. Upland soils tend to be low fertility silts which belong to the Montview or Dickson series. Soils in the upper Elk River Valley are very similar to those in the upper Duck region: Huntington series in the floodplains and the Armour-Etowah-Cumberland series on the terraces (Fox et al. 1958).

Vegetation

The upper Duck and Elk rivers are included in the Carolinian Biotic Province as defined by Dice (1943). This is the great deciduous forest which lies along the Atlantic coast extending inland to the eastern boundary of the prairies (Dice 1943:16). Looking more

specifically at the community structure found within this forest, one finds that the study area falls within an ecotone or edge area (Love et al. 1959) transitional between Braun's (1950) Mixed Mesophytic and Western Mesophytic forests. The dissected eastern Highland Rim proper, as part of the Mississippian Plateau, is included in Braun's Western Mesophytic forest region (1950:125). Plant communities typical of this forest are particularly evident in the valley floor of the upper Duck and Elk River basins (Love et al. 1959). However, the vegetation of the slopes and uplands quite often more closely resembles that of the Mixed Mesophytic forest (Braun 1950:152).

Plant Resources

Faulkner and McCollough (1973) defined four resource zones in the upper Duck River Valley. Based on vegetational communities and land forms, these zones included the valley floor (floodplain), older alluvial terraces, valley slopes and bluffs and the uplands. These biogeographic zones were seen as discrete foraging areas with each being more productive during a given season(s) (cf. Faulkner and McCollough 1973:11-34). More recently, Crites (1978) has offered a slightly different view of plant community structure in the upper Duck River valley. He stratifies the area into three zones based on slope angle, exposure, substrata composition, photosensitivity and effects of plant sociability. The three zones contrasted with those of Faulkner and McCollough are valley floor (floodplain, older alluvial terraces, slope bases and exposed lower valley slopes), the dissected upland vegetation area (upper valley slopes and ridges) and the oak barrens

(flat Highland Rim) (Crites 1978:17). Crites' scheme offers a complex plant community mosaic with each zone yielding a variety of edible plants throughout the year, though in varying seasonal quantities.

Regardless of the vegetational stratification one choses to follow, it is clear that the upper Duck River Valley, and the adjacent upper Elk Valley, have an abundance of edible plant life. Taken as a whole, the region produces over 40 species of trees and 55 species of herbs, shrubs and grasses which contain edible fruits, tubers and greens and/or domestically usable parts.

Faunal Resources

Faunal resources in the study area are rich and abundant. Cleland (1966: Appendix G) enumerates 303 vertebrates which are commonly found in the Carolinian Biotic Province. Both Faulkner and McCollough (1973) and Robison (1978) have compiled listings of fauna specific to the upper Duck River Valley.* Species represented include 15 gastropods, 46 pelecypods, 122 fish, 34 amphibians, 12 turtles, 22 snakes, 213 birds and 44 mammals. Most of these species would have been potential food sources, but taking into account seasonal availability, meat yield, and procurement time and technique required, certain species would have been favored over others.

Lithic Resources

Abundant sources for cherts, shales and sandstones exist within or near the upper Duck and Elk valleys (Faulkner and McCollough 1973;

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*Most of the species listed were drawn from the Final Environmental Statement: Duck River Project (TVA: 1972).

Cobb and Faulkner 1978; Wilson 1970). The most readily accessible sources of chert occur in the Fort Payne formation, a Mississippian age cherty limestone. Outcrops occur in a number of circumstances, including ridges and hilltops, hill slopes and creek beds. Two other formations, Cannon and Warsaw, provide additional sources of chert. Shales and sandstones also occur in the Warsaw formation. In addition, shale is available in the Chattanooga formation which underlies the Fort Payne chert. Nearby, at the base of the Cumberland Plateau escarpment, high quality cherts outcrop in the St. Louis formation and sandstone, quartz, chalcedony and hematite are found on the Cumberland Plateau and its western escarpment.

B. LATE WOODLAND SITE ENVIRONMENTS

Sites selected for inclusion in this section were chosen on the basis of the presence of diagnostic Late Woodland artifacts (i.e., Hamilton projectile points/knives and/or chert tempered or mixed chert tempered ceramics). While there are problems with using these artifacts as temporal indicators, at present their use proved to be the most consistent and reliable source for comparison of contemporaneity.

Using this method 41 sites containing Late Woodland artifacts (Figures 3 and 4) were found to occur among the total number of archaeological sites located by formal survey in either reservoir. It should be kept in mind, however, that the sampling purposes and strategies were different for the Normandy and the Tims Ford archaeological projects. The much lower number of Late Woodland sites found in the Tims Ford Reservoir is due more to the urgency of salvage

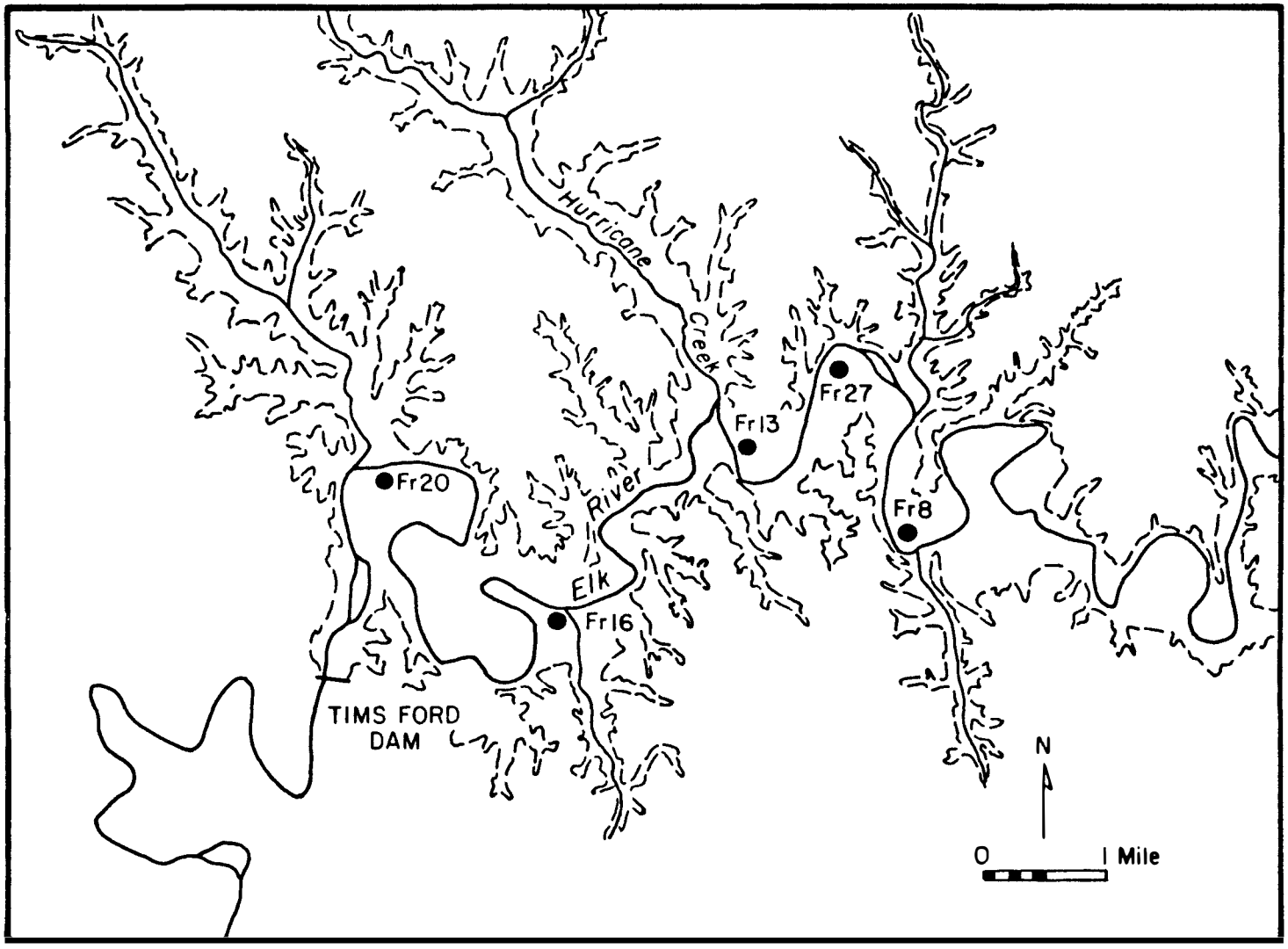

Figure 3. Tims Ford Reservoir Sites Containing Late Woodland Diagnostic Materials.

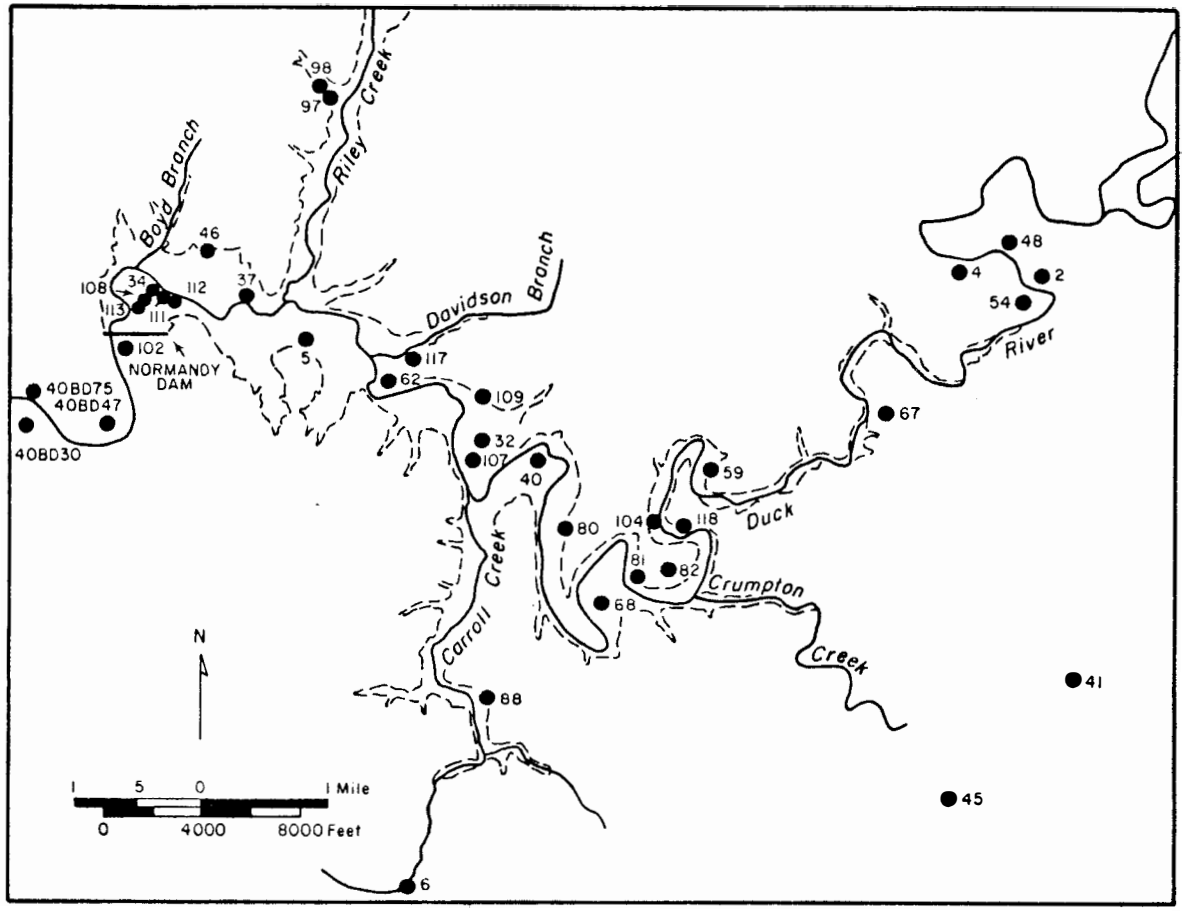

Figure 4. Normandy Reservoir Sites Containing Late Woodland Diagnostic Materials.

archaeological work than to real differences in the utilization of the valleys by aboriginal groups.

In order to ascertain common site selection characteristics, the physical environment of each site was examined. Table 1 provides a summation of a series of observations about the physical environment of each site. Results are discussed below by category.

Biogeographic Zone

The first problem addressed was that of the accessibility of resources. Placement of a given site in one of the four biogeographic zones proposed by Faulkner and McCollough was the primary method used to do this. Results were as follows: Zone 1, floodplain sites (n=2); Zone 2, older alluvial terrace sites (n=33); Zone 3, valley slopes and bluffs sites (n=2); and, Zone 4, upland sites (n=4). Using Crites' vegetational zones which cross-cut the biogeographic zones, similar results are observed: Vegetation Zone 1 sites (n=37); Vegetation Zone 2 sites (n=2); and, Vegetation Zone 3 sites (n=2).

Soil Associations

Late Woodland sites were found to occur on four soil types: silt loams (Group 1 sites, n=30); cherty silt loams (Group 2 sites, n=6); rocky soils or steep soils (Group 3 sites, n=3); and, silty clay loam (Group 4 sites, n=2). Of these soils, those on which Group 1 sites and Group 4 sites occur are the most fertile agriculturally. Group 2 sites are located on soils which are useful agriculturally, but subject to erosion. Some of the soils on which Group 3 sites are found (Mimosa

TABLE 1

LATE WOODLAND SITE CHARACTERISTICS IN THE NORMANDY AND TIMS FORD RESERVOIRS

Site No.	Biogeographic Zone 1	2	3	4	Vegetational Zone 1	2	3	Soil Series	Approx. Elevation	Approx. Distance to Nearest Stream	Type of Stream MC	T	Distance to Nearest Late Woodland Site
40BD30		X			X			Wolftever* (G1)	810'AMSL (G1)	400' (G3)	X		.25 km (G2)
40BD47		X			X			Wolftever/* Etowah(G1)	800'AMSL (G1)	400' (G3)	X		.90 km (G3)
40BD75		X			X			Wolftever* (G1)	800'AMSL (G1)	50' (G1)	X		.25 km (G2)
40CF2		X			X			Armour/ Pace (G1)	950'AMSL (G2)	200' (G2)	X		.30 km (G2)
40CF4		X			X			Etowah (G1)	960'AMSL (G2)	200' (G2)	X		.60 km (G3)
40CF5		X			X			Armour (G1)	820'AMSL (G1)	1200' (G5)	X		.80 km (G3)
40CF6		X			X			Lobeville (G1)	990'AMSL (G2)	75' (G1)	X		2.50 km (G5)
40CF32		X			X			Armour (G1)	840'AMSL (G1)	950' (G4)	X		.10 km (G2)
40CF34		X			X			Armour (G1)	815'AMSL (G1)	300' (G3)	X		0+ km (G1)

TABLE 1 (continued)

Site No.	Biogeographic Zone 1	2	3	4	Vegetational Zone 1	2	3	Soil Series	Approx. Elevation	Approx. Distance to Nearest Stream	Type of Stream MC	T	Distance to Nearest Late Woodland Site
40CF37		X			X			Armour (G1)	815'AMSL (G1)	100' (G1)	X		.80 km (G3)
40CF40		X			X			Armour (G1)	842'AMSL (G1)	200' (G2)	X		.60 km (G3)
40CF41				X			X	Greendale (G2)	1,020'AMSL (G3)	0'+ (G1)		X	2.10 km (G5)
40CF45				X		X		Greendale (G2)	975'AMSL (G2)	0'+ (G1)		X	2.10 km (G5)
40CF46			X		X			Mimosa (G3)	900'AMSL (G2)	400' (G3)		X	.70 km (G3)
40CF48		X			X			Cookville (G4)	970'AMSL (G2)	100' (G2)	X		.60 km (G3)
40CF54		X			X			Bodine/ Montview(G2)	960'AMSL (G2)	200' (G2)	X		.30 km (G2)
40CF59		X			X			Armour/ Huntington (G1)	870'AMSL (G1)	300' (G3)	X		.70 km (G3)
40CF62		X			X			Armour (G1)	820'AMSL (G1)	200' (G2)	X		.25 km (G2)

TABLE 1 (continued)

Site No.	Biogeographic Zone 1	2	3	4	Vegetational Zone 1	2	3	Soil Series	Approx. Elevation	Approx. Distance to Nearest Stream	Type of Stream MC	T	Distance to Nearest Late Woodland Site
40CF67				X			X	Montview (G1)	980'AMSL (G2)	280' (G2)	X		2.00 km (G5)
40CF68		X			X			Armour (G1)	870'AMSL (G1)	500' (G3)	X		.40 km (G2)
40CF80		X			X			Pace (G2)	860'AMSL (G1)	600' (G4)	X		1.00 km (G3)
40CF81		X			X			Armour (G1)	870'AMSL (G1)	200' (G2)	X		.20 km (G2)
40CF82				X			X	Cookville (G4)	1,025'AMSL (G3)	1100' (G5)	X		.20 km (G2)
40CF88		X			X			Huntington (G1)	860'AMSL (G1)	0'+ (G1)		X	1.85 km (G4)
40CF97		X			X			Pace/Mimosa (G2)	860'AMSL (G1)	0'+ (G1)		X	0+ km (G1)
40CF98		X			X			Pace (G2)	850'AMSL (G1)	0'+ (G1)		X	0+ km (G1)
40CF102		X			X			Armour/ Etowah (G1)	830'AMSL (G1)	400' (G3)	X		.60 km (G3)
40CF104	X				X			Huntington/ Lindside(G1)	850'AMSL (G1)	0'+ (G1)	X		.25 km (G2)

TABLE 1 (continued)

Site No.	Biogeographic Zone 1	2	3	4	Vegetational Zone 1	2	3	Soil Series	Approx. Elevation	Approx. Distance to Nearest Stream	Type of Stream MC	T	Distance to Nearest Late Woodland Site
40CF107	X				X			Huntington (G1)	820'AMSL (G1)	500' (G3)	X		.10 km (G2)
40CF108		X			X			Armour (G1)	820'AMSL (G1)	500' (G3)	X		0+ km (G1)
40CF109		X			X			Dellrose (G1)	880'AMSL (G1)	500' (G3)	X		.50 km (G2)
40CF111		X			X			Armour (G1)	820'AMSL (G1)	100' (G1)	X		0+ km (G1)
40CF112		X			X			Armour (G1)	820'AMSL (G1)	100' (G1)	X		0+ km (G1)
40CF113		X			X			Armour (G1)	814'AMSL (G1)	200' (G2)	X		0+ km (G1)
40CF117		X			X			Rockland/ Mimosa (G3)	840'AMSL (G1)	80' (G1)		X	.25 km (G2)
40CF118		X			X			Huntington (G1)	870'AMSL (G1)	200' (G2)	X		.25 km (G2)
40FR8		X			X			Cumberland/ Etowah (G1)	850'AMSL (G1)	700' (G4)	X		2.20 km (G5)
40FR13		X			X			Cumberland/ Etowah (G1)	800'AMSL (G1)	200' (G2)		X	1.50 km (G4)

TABLE 1 (continued)

Site No.	Biogeographic Zone 1	2	3	4	Vegetational Zone 1	2	3	Soil Series	Approx. Elevation	Approx. Distance to Nearest Stream	Type of Stream MC	T	Distance to Nearest Late Woodland Site
40FR16			X		X			Rockland (G3)	925'AMSL (G2)	300' (G3)	X		2.90 km (G5)
40FR20		X			X			Cumberland/ Etowah(G1)	800'AMSL (G1)	200' (G2)	X		3.00 km (G5)
40FR27		X			X			Cumberland/ Etowah(G1)	800'AMSL (G1)	400' (G3)	X		1.50 km (G4)

*Bedford County soil associations are being reassessed. The soil association for these sites is the Armour-Arrington-Lynville (Capshaw) group. (Steve Feldman 1982: Personal communication.)

series) are relatively fertile, but others (Rockland series) are too steep and rocky to be productive agriculturally.

Elevation

For purposes of analysis the sites were divided into three groups: Group 1 sites (800'-900' AMSL), Group 2 sites (900'-1000' AMSL) and Group 3 sites (1000'-1100' AMSL). Thirty of the sites may be classified as Group 1, nine as Group 2 and two as Group 3.

Distance to Nearest Stream

The results of this category have been divided into five analytical divisions. Twelve sites are included in Group 1 (0'-100'), 12 in Group 2 (100'-300'), 12 in Group 3 (300'-500'), three in Group 4 (500'-1000') and two in Group 5 (1000'+).

Type of Nearest Stream

The nearest stream category is binomial with the sample being stratified into main river channel (MC) or tributary (T) stream. At 33 of the archaeological sites the nearest stream was the main channel (Duck or Elk River), while eight sites were located more closely to a tributary stream. Several of the sites were located near the confluence of a tributary and a main channel or were between the main channel and a tributary.

Distance to the Nearest Late Woodland Site

In the Normandy Reservoir, Group 1 (0+ km) included seven sites, Group 2 (.10-.50 km) 14 sites, Group 3 (.50-1.00 km) ten sites, Group 4 (1.00-2.00 km) three sites and Group 5 (2.00-3.00 km) seven sites.

The Tims Ford sites all fell within Group 4 (n=2) and Group 5 (n=3). As mentioned earlier, the much greater distance between sites in that river valley is probably reflective more of sampling error than real Late Woodland site location strategies in the Tims Ford site sample.

C. SUMMARY OF SITE ENVIRONMENT DATA

Late Woodland biogeographic data suggest that sites were being located primarily on the older alluvial terraces (80%). Most of the sites (73%) occurred on fertile silt loam soils, which may reflect a conscious choice related to food production activities (cf. Resource Utilization, Chapter IV) or merely that silt loams occur more frequently on the terraces. Seventy-three percent of the sites had elevational readings between 800'-900' AMSL. Possibly this reflects a preference for lower terrace occupation. Most of the remaining sites (22%) were on higher alluvial terraces between 900'-1000' AMSL.

There was no difference between the number of sites occurring in Groups 1-3 in the Distance to Nearest Stream category. This suggests that distances of up to 500' from the nearest stream mattered very little. Distances over 500', however, seldom occurred (12%). Eighty percent of all the Late Woodland sites were located along the main river channels. While the cut-off point of 500' and the high percentage of river terrace sites may be a reflection of sampling bias, the fact that sites were found at varying distances of up to 500' from the nearest stream and that sites in other biogeographic zones did occur in the sample, suggests that this spacing may have some cultural validity.

Slightly more Late Woodland sites occurred at a distance of .10-.50 km from each other than at any other distance. Seventy-six percent of the sites were spaced between .10-1.00 km apart.

Several trends are evident in the previously discussed data. Most of the sites were situated on centrally located alluvial terraces which had fertile silt loam soils. They were located anywhere from 0-500' from the nearest stream, usually on the main river channel, and seldom occurred at a greater distance apart than 1 km (except in the Elk River Valley sites discussed previously). A small number (14%) of Late Woodland sites occurred in the valley slopes and bluffs zone and the uplands.

CHAPTER III

THE CULTURAL ENVIRONMENT AND SITE CONTENT

As suggested in the previous chapter, there are numerous archaeological sites in the upper Duck and Elk River valleys which contain Late Woodland period cultural markers (i.e., projectile points and ceramics). While useful indicators for time affiliation and environmental studies of site location, these isolated artifacts provide limited contextual information concerning site function, either individually or collectively within a settlement system. In order to elucidate the kinds of activities performed at a given site, only those archaeological sites which yielded subsurface evidence of Late Woodland occupations were utilized in this chapter. These included the following formally tested or excavated sites: 40FR8, 40CF5, 40CF32, 40CF37, 40CF81, 40CF108, 40CF111 and 40CF118. While several of these archaeological sites contained midden deposits, none of these stratagraphic deposits could be assigned with any confidence to Late Woodland activities. Therefore, the raw data used and most of the observations made in this discussion are based on material remains recovered from features attributed to Late Woodland occupations.

Discussions in this chapter are presented first by site and then by site content. Major topics considered for each site are Background and Setting, Radiocarbon Dates, Resources, Material Culture Remains and Summary. In order to understand the format and the terminologies used

in these sections, a few brief introductory comments are now presented regarding each topic.

The Background and Setting discussion provides the reader with the major reference sources for each site. It also gives a brief description of the immediate site location, cultural periods represented at the site and the extent and intrasite location of Late Woodland materials recovered.

In the Radiocarbon Dates section, the presence or absence of radiocarbon dates is discussed. Comments or qualifications concerning dates are presented where applicable.

Three subjects are covered in the Resources section: plants, animals and lithic raw materials. A brief summary of the kinds of flora and fauna recovered from the site is given and is followed by a discussion of seasonality of occupation where such may be inferred from the analysis of the previously presented data. The method of determining seasonality used is that of presence or absence of indicator species. Monks (1981) has presented a detailed evaluation of this widely used procedure. Certain caution should be taken when interpreting seasonality from floral and faunal remains alone. Thus, assignments made in this section are considered tentative at best and are qualified in light of material culture remains in the site summary discussion.

Raw material procurement patterns for each site are also detailed in this section. Discussions are based on raw material types present, as well as the relative location of the sources for those raw materials in relation to the given site. Raw material types and source locations (Table 2) are based on those presented by Faulkner and McCollough (1973)

TABLE 2

RAW MATERIAL TYPES

Type	Description	Source
A	Blue-gray and tan chert	Local
B	Pink chert	Local
C	Gray banded chert	Local
D	Fossiliferous chert	Local
E	Oolitic chert	
F	Blue-green nodular chert	Near-exotic
G	Dover chert	Exotic
H	Novaculite	Exotic
I	Vein quartz	Near-exotic
J	Quartzite	Near-exotic
K	Chalcedony	Near-exotic
L	Horse Mountain agate	Near-exotic
M	Other cryptocrystalline quartz	
N	Other cryptocrystalline quartz	
O	Limestone	Local
P	Chattanooga shale	Local
Q	Mudstone-siltstone	Local
R	Fine-grained sandstone	Local
S	Medium- to coarse-grained sandstone or conglomerate sandstone	
T	Black hematite	Near-exotic
U	Steatite	Exotic
V	Green slate	Exotic
W	Banded slate	Exotic
X	Igneous rock	Exotic
Y	Other	
Z	Other	

and Penny and McCollough (1976). The scheme is tripartite in design. Locally derived materials are defined as those available within the reservoir areas and near-exotics as those materials which may be procured within a radius of 20 to 30 miles. Exotic raw material types are lithic varieties that occur beyond this distance.

The Material Cultural Remains sections include information on feature types present and the contents of those features. The term feature is used here to denote any nonportable culturally modified item or facility found in archaeological context. Seven analytical categories of Late Woodland feature types have been defined for purposes of this report (Table 3). Where appropriate these functional types have been subdivided into finer classifications based on morphological differences. Criteria for inclusion in a major feature type are described below.

Type 1 (multi-use basins and pits)

For the most part, the exact function of these features is either indeterminate, or at best, speculative. Where functions have been indicated by the original analysts, these features have usually been thought to be storage and/or refuse facilities. Kleinhans (1978) has suggested that some such installations may have originally been clay borrow pits.

Eight morphological subtypes (1a-1h) are included in this feature category. If morphology and function are assumed to be related, then possibly eight or more functional types may be represented by Type 1 features. Minimally, two morphological types, shallow basins and deep pits, which probably had different functions, are included.

TABLE 3

FEATURE CLASSIFICATIONS

Type	Function	Subtypes
1	Multi-use pits and basins	
		a. Shallow circular basins
		b. Shallow oval basins
		c. Shallow irregular basins
		d. Deep bell-shaped pits
		e. Deep circular pits with straight sides and flat bottoms
		f. Deep oval pits with straight to sloping side and flat bottoms
		g. Deep pits with sloping sides and rounded bottom
		h. Deep irregular pits
2	Earth ovens	
3	Fire hearths	
4	Culturally modified natural features	a. Tree tip-ups
		b. Tree falls
5	Human burials	
		a. Pit or basin burial with flexed adult
		b. Pit or basin burial with flexed subadult or infant
		c. Shaft-and-chamber burial with flexed adult
		d. Shaft-and-chamber burial with flexed subadult or infant
		e. Other
6	Animal burial	
7	Structures	
		a. Circular pattern
		b. Oval pattern
		c. Rectangular or square pattern
		d. Other

Type 2 (earth ovens)

These large facilities have usually been assumed to be cooking and/or roasting installations. The pit walls are characterized by heavy firing and the contents quite often include large quantities of limestone and wood charcoal.

Type 3 (fire hearths)

Fire hearth is used here to indicate a shallow feature which exhibits evidence of in situ firing. These may be a subtype of the earth oven category and may have been used as campfires or processing facilities.

Type 4 (culturally modified natural features)

Two morphological subtypes are included in this feature type: tree tip-ups (cradle knolls) and tree falls. In all examples indicated in this study, these natural phenomena show evidence of cultural usage by Late Woodland peoples.

Type 5 (human burials)

The human burials present in the sample have been divided by receptacle type and age at death of the individual into a series of subtypes (5a-5e).

Type 6 (animal burials)

Animal burials are defined here as the deliberate placement of articulated animal remains within a prepared receptacle. This may be a secondary use of the facility. The random occurrence of butchered animal remains found in a feature context is excluded from this category.

Type 7 (structures)

Structure is used to denote the presence of postholes which are aggregated in such a way as to suggest the pattern or outline of a building or shelter.

The ceramic classification utilized in this report (Table 4) is similar to the one devised for use on the Normandy Project (Faulkner and McCollough 1974:43). Original type definitions correspond exactly since no reanalysis of any ceramic material was initiated. The number designations assigned to each type category, however, do not correspond to Faulkner and McCollough's scheme. Since several temper types presented in this study either have not been identified in Normandy Reservoir sites or have not, as yet, been assigned a formal type number, it was decided to use a numbering system which would have immediate relevance to this work. Only ceramic types represented in identified Late Woodland features in the Normandy and Tims Ford reservoirs have been included in this classification scheme. Type definitions not included in the Normandy reports were originally defined in the Mason site report (Faulkner 1968).

Inclusion in a given type is based primarily on the tempering agent observable in the ceramic remains and secondarily on the surface treatment of the item. Thus, excluding Type 11 which is a functional type, this classification scheme is morphological in nature.

Faulkner and McCollough's lithic classification scheme (1973) used for the Normandy Project is followed in this thesis. One addition has been included, however. The designation 300 has been used to indicate unmodified flakes from the Mason site (40FR8) which were never

TABLE 4

CERAMIC TYPES

Type	Description
1a	Shell tempered residual plain
b	Shell tempered plain
2	Shell/grit-tempered plain
3a	Clay tempered plain
b	Clay tempered cordmarked
4a	Clay/grit tempered residual plain
b	Clay/grit tempered plain
5a	Chert tempered residual plain
b	Chert tempered plain
c	Chert tempered cordmarked
d	Chert tempered knot roughened-net impressed
e	Chert tempered check stamped
f	Chert tempered simple stamped
6a	Chert/sand tempered residual plain
b	Chert/sand tempered plain
c	Chert/sand tempered simple stamped
7a	Chert/limestone tempered residual plain
b	Chert/limestone tempered plain
c	Chert/limestone tempered cordmarked
d	Chert/limestone tempered knot roughened-net impressed
8a	Limestone tempered residual plain
b	Limestone tempered plain
c	Limestone tempered cordmarked
d	Limestone tempered knot roughened-net impressed
e	Limestone tempered brushed
f	Limestone tempered simple stamped
g	Limestone tempered check stamped
h	Limestone tempered fabric marked
9a	Sand tempered residual plain
b	Sand tempered plain
c	Sand tempered punctate
10	Clay pipe fragments

broken down into more refined morphological types. Table 5 presents a list of these lithic types and a brief description of each. Only those lithic tool types present in Late Woodland context in the study sample are listed. Within each site discussion are summary tables of lithic and raw material types present, as well as statements concerning the activities indicated by the lithic tools which occur. Table 6 summarizes the lithic activities indicators used. While Faulkner and McCollough (1973) developed this scheme to be used in percentage calculations, it is used here only in a presence/absence context.

Since the vast majority of modified bone found in Late Woodland context in the two reservoirs was recovered at the Mason site, it was decided to use the classification scheme developed by Faulkner (1968) in the original Mason report. Numerical type designations have been added by this author in order to facilitate tabulations (Table 7). The types are largely functional in nature; however, several morphological types are included to cover bone recovered which had obviously been modified, but was not assignable to a functional category.

A summary section for each site provides a final discussion of the information presented under each of the above-mentioned subjects (e.g., Background and Setting, etc.). Its ultimate aim, then, is to present an integrative statement concerning individual site function.

A. MASON SITE (40FR8)

Background and Setting

Faulkner (1968) reported the findings of salvage excavations at the Mason site. Data presented in this summary are drawn from this

TABLE 5

LITHIC TYPES
(after Faulkner and McCollough 1973)

Type	Description
Primary Lithics	
1	Hammerstone
2a	Crude subconical core
b	Flat core
c	Discoidal core
d	Amorphous core
3	Core trimming flake
4	Flat flake
5	Bifacial thinning flake
6	Utilized flake
7	Miscellaneous retouched flake
300	Unsorted unworked flake
Unifacial Implements	
8	End scraper on flake
10	Side scraper on flake
14	Notched flake
16	Denticulate flake
17	Perforator
18	Graver
19	End and side scraper
21	End scraper/graver
22	Notched flake/graver
23	Miscellaneous unifacial implements
Bifacial Implements	
24	Miscellaneous thick biface: amorphous form
25	Thick biface: blank, roughout
26	Knife, including asymmetrical knife
27	Preform: knife
28	Core scraper
29	Chopping tool
30	End scraper
31	Chisel
32	Side scraper
36a	Drill
b	Perforator
37	Graver
38	Burinated biface
42	Miscellaneous bifacial implements
Projectile Points/Knives	
43	Small triangular, thin narrow excurvate blade
45	Small triangular, thin narrow incurvate blade
46	Small triangular, thin narrow straight blade

TABLE 5 (continued)

Type	Description
Projectile Points/Knives (continued)	
47	Small triangular, thick narrow straight blade
48	Medium triangular, thin straight blade
49	Medium triangular, thick straight blade
50	Pentagonal
51	Medium triangular, thick excurvate blade
52	Large triangular, thick excurvate blade
53	Medium-large triangular, straight-excurvate blade
54	Medium-large triangular, thick straight-excurvate blade
55	Medium-large triangular, straight elongate blade
58	Unidentifiable broken triangular
59	Narrow thick lanceolate
60	Narrow thick lanceolate stemmed
61	Narrow thick lanceolate expanded stemmed
62	Narrow thick lanceolate side notched
66	Medium-large wide shallow side notched
67	Medium-large shallow side notched, narrow blade
68	Medium-large shallow side notched, asymmetrical blade
78	Small-medium short straight stemmed
80	Small-medium narrow expanded stemmed, slight barb, narrow blade
81	Medium straight-expanded stemmed, barbed, wide blade
88	Medium contracting stemmed, narrow blade, weak shouldered
89	Medium short straight-rounded stemmed, weak shouldered, narrow blade
90	Medium short rounded stemmed, strong shouldered
92	Medium contracting-rounded long stemmed, narrow blade
96	Medium short stemmed, unfinished base
98	Medium straight stemmed, narrow blade
100	Medium short straight stemmed, narrow blade
101	Medium straight stemmed, narrow blade, strong shouldered
103	Medium-large straight stemmed, narrow-wide asymmetrical blade, strong shouldered
104	Medium-large straight-expanding stemmed, strong shouldered, wide blade
107	Asymmetrical stemmed knife
110	Medium-large straight-expanded stemmed, crude base, thick blade (undifferentiated stemmed)
111	Unidentifiable broken stemmed and notched
112	Medium-large corner removed, wide blade
113	Medium-large corner removed, wide stemmed
114	Small-medium corner removed
116	Medium-large short rounded base, wide blade
122	Large corner notched, straight base
125	Medium corner notched, straight base
138	Unidentifiable broken distal ends
139	End scraper, reworked on projectile point/knife
140	Perforator, reworked on projectile point/knife

TABLE 5 (continued)

Type	Description
Ground Stone Implements	
144	Pitted cobble, Type b
145	Pitted cobble, Type c
149	Ground and battered cobble, Type a
150	Ground and battered cobble, Type b
151	Quartzite abrader
153	Worked siltstone
154	Ground and faceted hematite
155	Worked black shale
156	Celt, green slate (greenstone)
157	Celt, igneous rock
162	Worked steatite
176	Worked limonite concretions
225	Digging implements

TABLE 6

ACTIVITIES INDICATED BY LITHIC TOOL TYPES
(after Faulkner and McCollough 1973:70-71)

Activity	Tool Type(s)
Hunting	TT 43-140, 161
Butchering	TT 16, 26-27, 29, 35
Woodworking	TT 14-16, 22, 28-29, 31, 34-35, 41, 155-160
Hide Working	TT 8-13, 17-22, 28, 30, 32, 36b, 37, 39-40
Bone Working	TT 14-16, 18, 21-22, 34-35, 37-41, 151, 153-154
Plant Food Processing	TT 1, 16, 26-27, 29, 35, 141-150, 153
Primary Flint Working	TT 1-7

TABLE 7

MODIFIED BONE TYPES
(after Faulkner 1968)

Type	Description
1	Double-tapered bone point
2	Broken point
3	Bone awl
4	Bone scrapers or beamer
5	Blunt-bitted tool
6	Fish hook
7	Fish hook residue
8	Microbone tool
9	Bone or shell bead
10	Worked canine tooth
11	Worked bone
12	Antler flaker
13	Worked antler tine
14	Cut and worked antler
15	Turtle shell bowl
16	Worked turtle shell

publication unless otherwise indicated. Features and artifacts from this site were used by Faulkner to delineate the local Late Woodland Mason phase.

The Mason site was located on a second terrace about 700' from the right bank of the Elk River. Although approximately 30 acres were covered by lithic, ceramic and faunal debris, the main occupation area appeared to be confined to an area of ca. 200' x 200'. Excavations revealed that no intact midden deposits were present, but feature contents indicated at least two Mason and one Early Woodland activity areas, as well as a small Late Woodland cemetery.

Radiocarbon Dates

Two radiocarbon dates are available from Late Woodland features at the Mason site. Feature 15, a large bell-shaped pit, was dated at A.D. 770 ± 85 years (GX0778) and carbonized material from Feature 9, a similar facility, yielded a date of A.D. 890 ± 90 years (GX0777). Both of these dates fall within the time range generally expected for Late Woodland occupations in the Middle South.

Resources

Plants. No information concerning botanical species present in Late Woodland features was available at the time of the publication of the original Mason site report (Faulkner 1968). David McMahan, a graduate student in the Department of Anthropology, The University of Tennessee, Knoxville, is, however, presently preparing a Master's thesis on Late Woodland plant utilization in the eastern Highland Rim. The

botanical species for Features 7, 9, and 15 listed in Appendix I were compiled by this author from preliminary analysis data from flotation samples provided by Mr. McMahan.

The Late Woodland inhabitants of the Mason site were exploiting a very large variety of plant species (cf. Appendix I) including at least 25 varieties of fruits, seeds and nuts, as well as 13 species of trees. Only one plant (cleavers) in this array clearly represents a species which is available in early spring. All of the others are the remains of plants which are harvested primarily in the summer or fall months, but which could have been prepared for storage and extended use. The tree species present as charred wood may have been utilized in a variety of ways: cooking and heating fuel, tool and utensil manufacture or health maintenance activities.

Animals. A varied fauna is also characteristic of the Late Woodland feature contents on 40FR8. At least 33 species of animals (Parmalee 1968) including 15 mammals, three birds, two amphibians and eight fishes were identified (cf. Appendix I). All but two of these species were considered edible or usable by aboriginal groups. Twenty of the 33 species do not reoccur in Late Woodland context at any of the other sites discussed in this chapter.

Lithic raw materials. A reanalysis of finished tool types occurring at the Mason site was carried out by this author. This discussion does not include raw material analysis of 9,449 unworked flakes or 345 utilized flakes. Thirteen varieties of lithic materials were found in the Mason site Late Woodland features (Table 8). Locally

TABLE 8

LITHIC RAW MATERIALS FROM LATE WOODLAND FEATURES*—40FR8

Type	Source	Number	Percentage
A	Local	106	38.00
B	Local	28	10.00
D	Local	2	0.70
F	Near-exotic	61	22.00
J	Exotic	1	0.40
L	Near-exotic	1	0.40
M	Local	50	18.00
O	Local	7	3.00
P	Local	2	0.70
Q	Local	2	0.70
S	Near-exotic	1	0.40
X	Exotic	2	0.70
Y	Unknown	15	5.40
Total		278	100.00

*This analysis is of finished tools from the Mason site and does not include 9,794 flakes which have not been reanalyzed using the Normandy Lithic Classification scheme.

derived lithic raw materials account for seven of these types (Types A, B, D, O. P, Q, S), near-exotics for three (Types F, J, L) and exotics for one (Type X). By percentage the distribution is as follows: local (53.5%), near-exotic (22.8%) and exotic (0.7%). Near-exotic sources would have been available within a 20 to 30 mile radius, while the igneous rock (exotic) may have been imported from the Blue Ridge or Piedmont physiographic provinces (Faulkner and McCollough 1973:60).

A number of specimens are classified as belonging to the "Other" categories (Types M and Y) which represent lithic raw materials of uncertain geographic origins. Most of the items included in the Type M category are a black vitreous chert, probably comparable to several local and near-exotic types identified by Cobb and Faulkner (1978) as occurring in a late Middle Woodland context in the Elk River Valley. Specimens included in the Type Y raw material category are almost exclusively digging tools or adzes which are made of a compressed siltstone/sandstone.

Material Culture Remains

Features. Five feature types were represented at the Mason site, as well as several subtypes (Table 9). Multi-use pits and basins accounted for 18 features, earth ovens for one, fire pits for two features and human burials for four features. Feature 12 showed evidence of having been used possibly for burial and as a fire pit at various times. A complete summary of individual feature contents can be found in Appendix I of this report. Discussions of artifact types present in Mason site features appear below.

TABLE 9

LATE WOODLAND FEATURE CLASSIFICATION—40FR8

Feature Number	Type/Subtype	Function
1	1b	Multi-use basin
4	3	Fire hearth
6	1g	Multi-use pit
7	1g	Multi-use pit
8	1a	Multi-use basin
9	1d	Multi-use pit
10	1d	Multi-use pit
12 (Burial 1)	1/3/5a	Multi-use pit, fire hearth and human burial
15	1d	Multi-use pit
18	1a	Multi-use basin
21	1f	Multi-use pit
22	2	Earth oven
24	1f	Multi-use pit
25	3	Fire hearth
26	1e	Multi-use pit
29	6	Animal burial
30	1d	Multi-use pit
31	1g	Multi-use pit
32	1a	Multi-use basin
33	1b	Multi-use basin
36	1a	Multi-use basin
38	1a	Multi-use basin
40	1a	Multi-use basin
Burial 2	5b	Human burial
Burial 3	5a	Human burial
Burial 4	5e	Human burial

Ceramics (Figure 5). The ceramic assemblage from Late Woodland features at the Mason site (Table 10) consists of 5,173 sherds representing five temper types: shell (1.4%), clay/grit (0.53%), chert (90.5%), limestone (7%) and sand (0.04%). Three surface treatments from chert tempered ceramic remains dominate the assemblage. Plain surfaces are found on 25% of these sherds, cordmarking on 41% and knot roughening and/or net impressing on 10%.

Lithics (Figures 6 and 7). Late Woodland features at 40FR8 yielded a total lithic content of 10,074 pieces of modified stone (Table 11). Primary lithics (n=9,828) are the most prevalent types present. The remaining lithics (n=246) are made up of Unifacial Implements (n=30; Finished Tool Percentage*=12%), Bifacial Implements (n=71; FTP=29%), Projectile Points/Knives (n=129; FTP=52%) and Ground Stone Implements (n=16; FTP=7%). These tool types represent activities ranging from hunting (Types 45-138), butchering (Types 16, 26, 27), woodworking (Types 14, 16, 22, 28, 29, 31, 155, 157), hideworking (Types 8, 10, 17-19, 21-22, 28, 30, 32, 37), boneworking (Types 14, 16, 18, 21, 22, 37-38, 151-154) to plant food processing (Types 16, 26-27, 144-150, 153). The presence of tools interpreted as digging implements (Type 225) may indicate horticultural activities, the gathering of roots and tubers for food or the excavation of subsurface facilities.

Modified bone (Figure 8). Fifteen varieties of modified bone were present in a Late Woodland context at the Mason site

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*Referred to as FTP from this point forward.

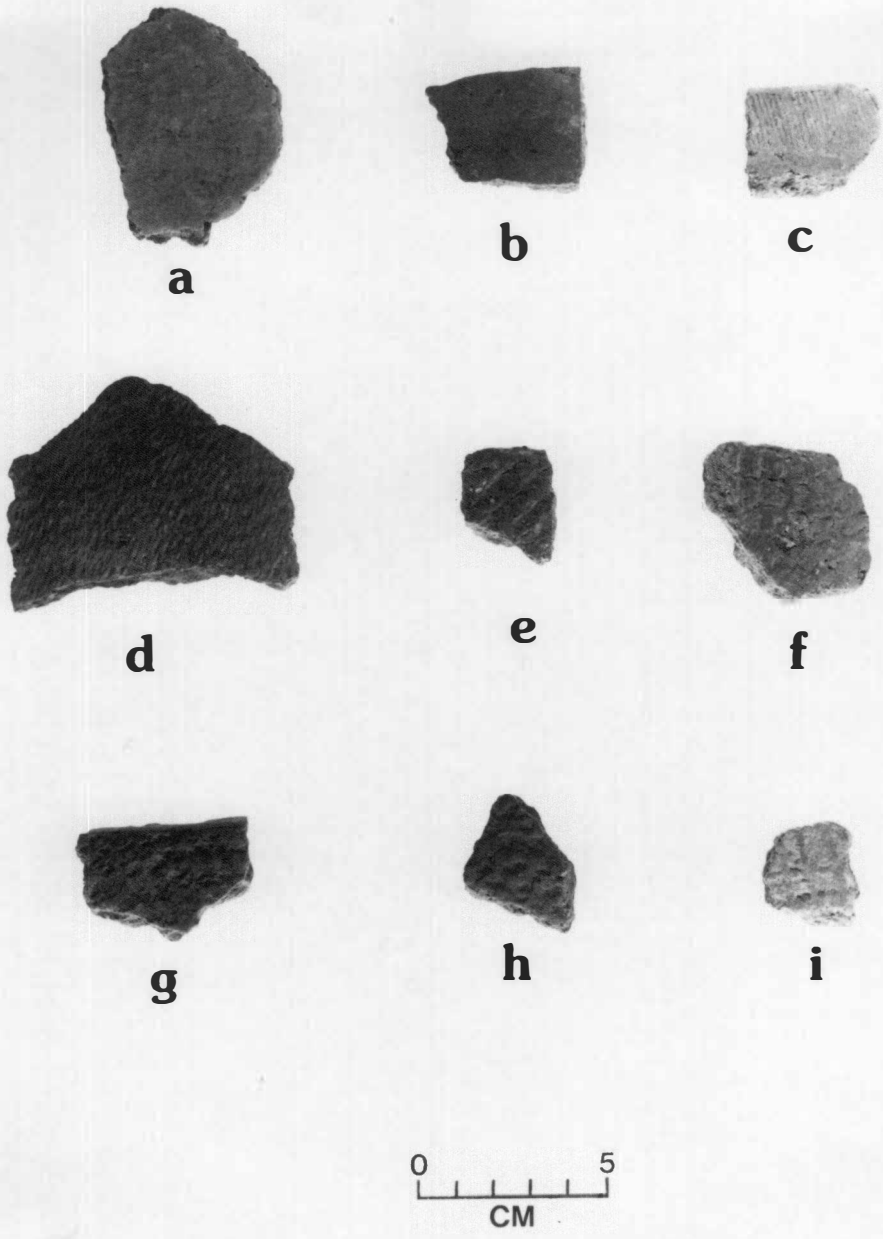

Figure 5. Late Woodland Ceramic Types from the Mason Site (40FR8). a-b: chert tempered plain (Type 5b); c-d: chert tempered cordmarked (Type 5c); e-g: chert tempered knot roughened-net impressed (Type 5d); h-i: chert tempered check stamped (Type 5e).

TABLE 10

CERAMICS FROM LATE WOODLAND FEATURES—40FR8

Type	Number	Percentage
1a	21	0.40
b	57	1.00
4a	5	0.10
b	22	0.43
5a	732	14.00
b	1285	25.00
c	2114	41.00
d	527	10.00
e	26	0.50
f	1	0.02
8a	102	2.00
b	230	4.00
c	14	0.30
d	2	0.04
e	27	0.50
g	3	0.06
h	3	0.06
9b	2	0.04
Total	5,173	100.00

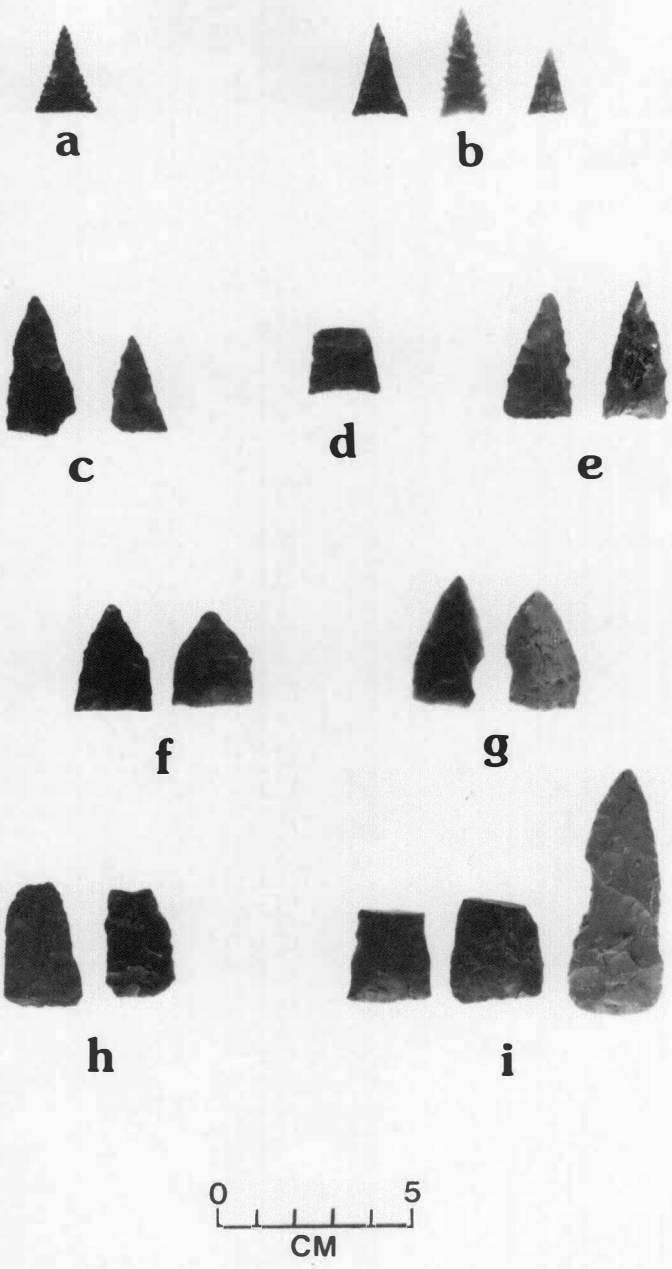

Figure 6. Projectile Points/Knives from Late Woodland Features at the Mason Site (40FR8). a: Type 45; b: Type 46; c: Type 47; d: Type 48; e: Type 49; f: Type 50; g: Type 51; h: Type 54; i: Type 55.

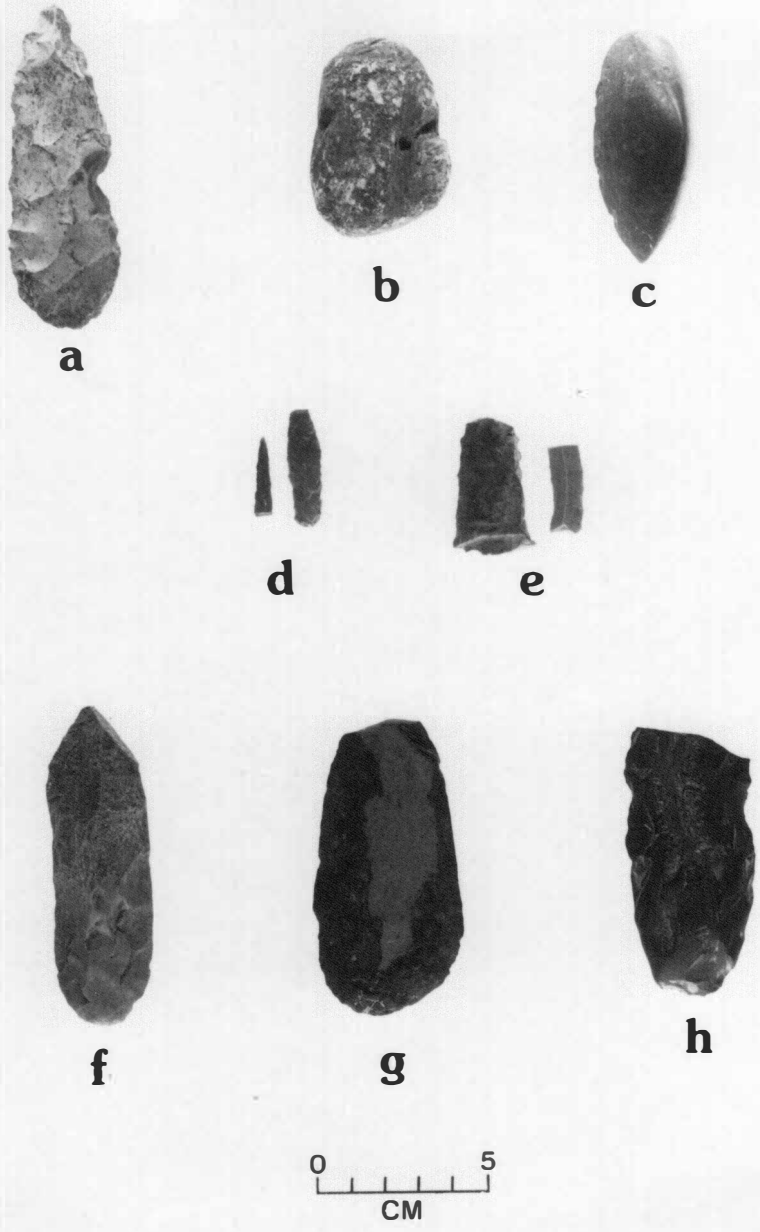

Figure 7. Select Lithic Tools from Late Woodland Features at the Mason Site (40FR8). a: Type 26; b: Type 151; c: Type 157; d: Type 36a; e: Type 10; f: Type 31; g-h: Type 225.

TABLE 11

LITHICS FROM LATE WOODLAND FEATURES—40FR8

Tool Type	Raw Material Type A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Total (n)
Primary Lithics																											
2a	4	3				1							1														9
b						1																					1
c	3					1							1														5
d	3	1				12							3														19
6																											345*
300																											9,449*
Unifacial Implements																											
8	1												1														2
10	3	1				2							1														7
14	4												2														6
16	2																										2
17	2	1				1																					4
18	1	1																									2
19	1												2														3
21						1																					1
22	1					1																					2
23													1														1
Bifacial Implements																											
24	7					4																					11
25	13	7											3														23
26						2							2														4
27	1																										1
28																									2		2
29																									2		2
30		1																									1
31	1																								8		9

TABLE 11 (continued)

Tool Type	Raw Material Type																									Total (n)
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
32	1					3							1														5
36a	1					2							1														4
37						1																					1
38	1																										1
42	2	1				1							2													1	7
Projectile Points/Knives																											
45	5	1				4							6														16
46	7					3							2														12
47	2																										2
48	5					2							1														9*
49	5					1																					6
50						1																					3*
51	1					2							2														5
54	2												1														3
55	2					1																					3
58	3			1		1							2														7
60	1																										1
78										1																	1
80	1																										1
81				1																							1
89	1																										1
90		1																									1
110	1												1														2
111	1	2				2						1	2														8
112	1					1																					2
114	1																										1
122	1					1																					2
138	14	8				8							12														42

TABLE 11 (continued)

Tool Type	Raw Material Type A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Total (n)
Ground Stone Implements																											
144															1												1
145															1												1
149																											1
150															1												1
151															2		1		1								4
153																	1										1
154																									1		1
155																2											2
157															1									2			3
225															1												1
Total (n)	106	28		2		61				1		1	50		7	2	2		1					2		15	10,074

*Raw Material Type unavailable for some specimens.

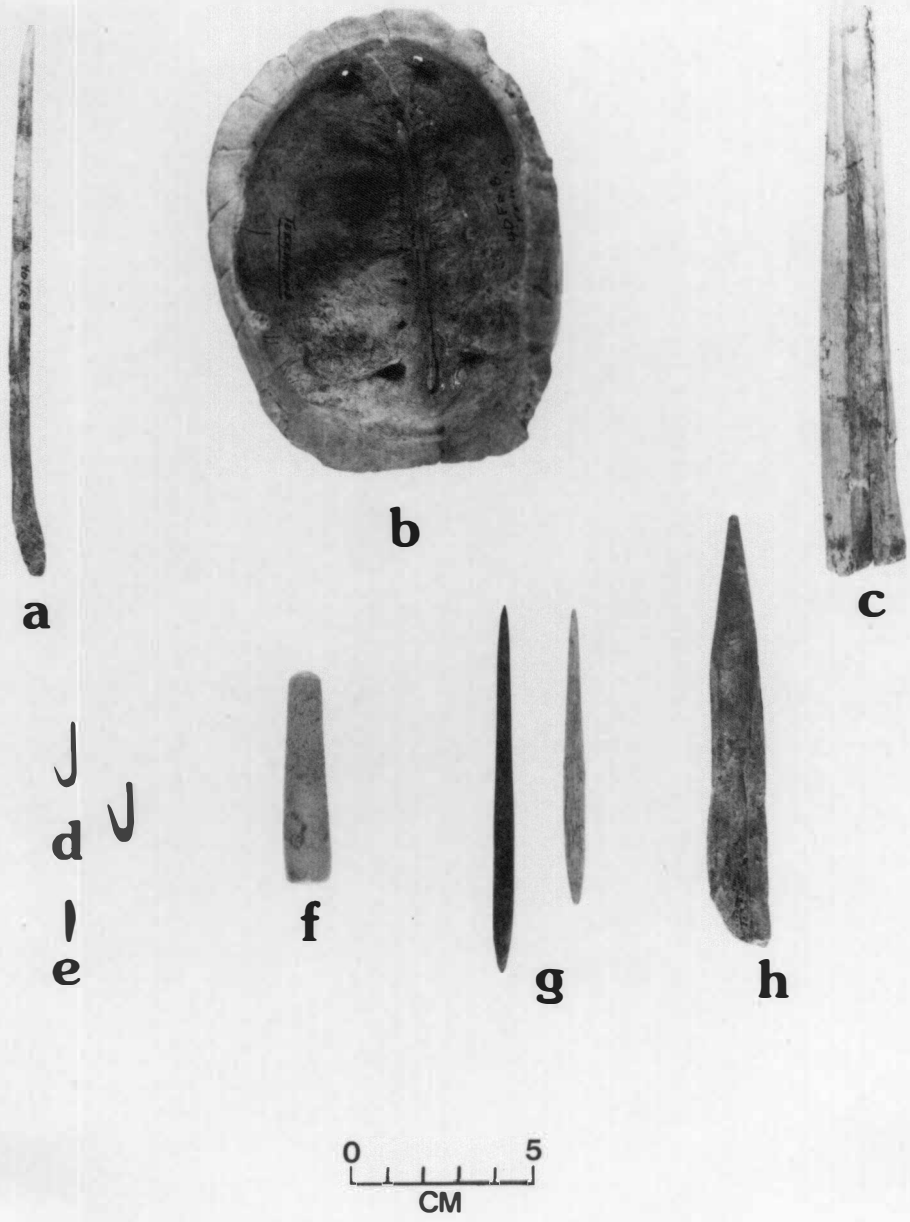

Figure 8. Select Bone Tools from Late Woodland Features at the Mason Site (40FR8). a: awl (Type 3); b: turtle shell bowl (Type 15); c: scraper or beamer (Type 4); d: fish hooks (Type 6); e: microtool (Type 8); f: antler flaker (Type 12); g: double-tapered points (Type 1); h: awl (Type 3).

(cf. Appendix I). The majority of this bone is identifiable only as worked bone (n=96), cut and worked antler (n=8), worked antler (n=5) or worked turtle shell (n=2). Two examples, a microbone (Type 8) and a blunt-bitted tool (Type 5), were obviously complete tools, but no definite function could be assigned to these artifacts. The remainder of the modified bone consisted of whole or broken tools with recognizable functions: double-tapered bone points (n=12), broken points (n=16), bone awls (n=7), bone scrapers or beamers (n=3), fish hooks and fish hook residue (n=18), antler flaker (n=1) and turtle shell bowls (n=1). In addition, one bead (Type 9) made from a long bone was found in Feature 9.

Summary

An examination of the data recovered from 40FR8 indicates that a variety of activities took place at this site. The large assemblage of lithic tools, ceramics and bone tools attests to this, as do the presence of twenty-two utilitarian features and four human burials.

Despite the fact that the floral remains of only three features have been analyzed to date (Features 7, 9, and 15), an array of 25 species of plants and trees has been identified. The occurrence of at least one plant which is available in the spring, as well as numerous summer and fall wild foods which could have been prepared for storage and a large number of multi-use pits and basins which could have served as storage facilities, suggests the possibility of year-round habitation at the Mason site. This suggestion is further strengthened by the presence of several cultigens (maize, squash, chenopodium and sunflower)

which could have been harvested and stored for winter consumption. Faunal remains recovered from 23 features represent all of the major animal food groups. Several of the species present (i.e., certain turtles and fish) have well-defined seasonal behaviors such as congregational hibernation and spawning which may indicate easier harvesting during certain seasons: in this case, winter for the turtles and spring for certain fish.

Although several postholes were observed during the excavation at the Mason site, no clear-cut evidence of habitation structures was recovered. While this tends to weaken the argument for full-time occupation, the presence of four Mason burials, two adult males and a minimum of two subadults, suggests recurrent or extended use of the site. Radiocarbon dates from Features 9 and 15 put the Mason site Late Woodland occupation between A.D. 700 and A.D. 890 with an average date of A.D. 795, a time which is within the standard deviation of either reading.

The Late Woodland inhabitants of 40FR8 were primarily exploiting floral, faunal and lithic raw material resources which were locally available. Slightly over 20% of their lithic raw materials can be classified as near-exotics and even these could have been procured within a day's journey of the site. Only one implement, an igneous celt, indicates an obvious trade item.

Faulkner (1968:127) has suggested that the Mason site may have functioned as a base camp from which seasonal forays were conducted or as a short-term permanent occupation site for a family group which was abandoned when local resources became scarce. A re-examination of the

floral, faunal, technological and feature evidence suggests to this author that the Mason site could have been a year-round habitation site for a group of Late Woodland people, perhaps some form of Late Woodland family unit. The presence of a separate burial area (Burials 1, 2, 3) and the intrusion of several pits and basins into one another (Features 18 and 20, 25 and 30, Burial 1 and Feature 12) may indicate an occupation of some duration or several discrete Late Woodland occupations at the Mason site.

B. PARKS SITE (40CF5)

Background and Setting

The Parks site (40CF5) was initially tested and reported by McCollough and DuVall (1976). Subsequent excavations are described by Faulkner and McCollough (1982a) and Brown (1982). Previously published information presented here is drawn from these sources.

The site was situated on a narrow terrace of the Duck River. Cultural materials ranging in time from the Archaic to Mississippian periods were present over an estimated area of 25-30 acres. At least four horizontally discrete occupation zones (Areas A-D) were obvious within these greater confines. The 29 Late Woodland features occurred within Area B in the proximity of two midden concentrations in the northwestern part of the site.

Radiocarbon Dates

A single radiocarbon date of A.D. 1075 ± 50 years is available for the Late Woodland occupation at the Parks site. Two Mississippian

Banks phase features from 40CF5 yielded readings which were somewhat earlier than this date.

Resources

Plants. Eight species included in the fruits, nuts and seeds category and sixteen varieties of trees (Crites 1978; David McMahan 1982: personal communication) were identified in a Late Woodland context at 40CF5 (cf. Appendix II). All of the former are species which could have been harvested during the summer or fall months. The array of tree species at 40CF5 is the most varied collection identified in Late Woodland context in the study area. Whether this is the result of selective cultural behavior connected with specific activities or is a factor of the nonselective use of the prehistoric environment is not known. All of the types of wood could have been used if necessary for heating and cooking and many would have been suitable for the manufacture of tools and utensils. Several species present may have been used for their medicinal qualities.

Animals. Six major animal groups (Robison 1982), all containing at least some edible species, were found in Mason phase features at 40CF5 (cf. Appendix III). There are 11 varieties of mammals, an indeterminate number of bird and fish species, at least three types of reptiles and four species of amphibians, as well as nine gastropod species in the sample. Excluding unidentifiable bird and fish remains, a minimum of 12 of these species are known to have been exploited aboriginally as food sources. Several of the other species (small

rodents and frogs/toads) might have been used as food, but could be present because of accidental entrapment in open features. This is the most varied Late Woodland faunal assemblage among the Normandy Reservoir sites and is surpassed only by the Mason site assemblage in the entire study area. Another interesting facet of the Parks site faunal collection is the presence of the marine gastropod species Olivella cf. jaspidea in a Late Woodland feature. This is a trade item.

Lithic raw materials. Although the Late Woodland feature contents at 40CF5 include a wide variety of lithic raw materials (i.e., 13 varieties), approximately 97% of the specimens are of locally derived types (Table 12). Near-exotics (Types F, I-L) account for about 3% of the sample and unknown types for less than 0.5% (Types M and N). All of the lithic raw material types found at the Parks site in Mason features could have been procured within a radius of 30 miles and the majority within an even smaller range.

Material Culture Remains

Features. Three major types of features were associated with the Late Woodland occupation at the Parks site: multi-use pits and basins (n=20), burials (n=13) and structural remains (n=4). Table 13 shows a breakdown of subtypes. Individual feature contents are found in Appendices II and III and a summarization by artifact types appears below.

Ceramics. The total number of ceramic sherds recovered in Mason features at the Parks site was 523 pieces (Table 14). Five tempering

TABLE 12

LITHIC RAW MATERIALS FROM LATE WOODLAND FEATURES—40CF5

Type	Source	Number	Percentage
A	Local	4,559	49.00
B	Local	1,754	19.00
C	Local	2,769	29.00
D	Local	34	0.40
E	Local	7	0.07
F	Near-exotic	240	3.00
I	Near-exotic	15	0.20
J	Exotic	2	0.02
K	Near-exotic	5	0.05
L	Near-exotic	2	0.02
M	Unknown	9	0.10
N	Unknown	2	0.02
Q	Local	1	0.01
Total		9,399	100.00

TABLE 13

LATE WOODLAND FEATURE CLASSIFICATION—40CF5

Feature Number	Type/Subtype	Function
17 (Burial 1,2)	1f/5b, 5a	Multi-use pit, human burials
19 (Burial 3)	1f/5b	Multi-use pit, human burial
20	1e	Multi-use pit
22 (Burial 4)	1b/5a	Multi-use basin, human burial
23	1a	Multi-use basin
24	1g	Multi-use pit
25 (Burial 6)	1a/5e	Multi-use basin, human burial
26	1a	Multi-use basin
27 (Burial 8a,b,c)	1d/5a,b	Multi-use pit, human burials
28 (Burial 5,7)	1e/5b,5a, 5a	Multi-use pit, human burials
29	1a	Multi-use basin
32	1a	Multi-use basin
33	1a	Multi-use basin
36	1g	Multi-use pit
38	1g	Multi-use pit
39 (Burial 9a,b, 10)	1e/5a,5e	Multi-use pit, human burials
40	1a	Multi-use basin
44 (Burial 11)	1e/5e	Multi-use pit, human burial

TABLE 13 (continued)

Feature Number	Type/Subtype	Function
51	1g	Multi-use pit
53	1a	Multi-use basin
58	1a	Multi-use basin
62	1c	Multi-use basin
82	1a	Multi-use basin
99	1a	Multi-use basin
106	1g	Multi-use basin
112 (Burial 12)	1e/5a	Multi-use pit, human burial
135	1a	Multi-use basin
136	1g	Multi-use pit
150	1h	Multi-use pit
Structure 5A	7c	Structure
Structure 5B	7c	Structure
Structure 6	7a	Structure
Structure 7	7b	Structure

TABLE 14

CERAMICS FROM LATE WOODLAND FEATURES—40CF5

Type	Number	Percentage
3a	2	0.40
b	2	0.40
5a	159	30.00
b	38	7.00
c	43	8.00
d	5	1.00
e	1	0.20
6a	1	0.20
b	2	0.40
c	1	0.20
7a	1	0.20
b	1	0.20
c	1	0.20
8a	208	40.00
b	22	4.00
c	16	3.00
d	1	0.20
e	1	0.20
f	15	3.00
g	2	0.40
h	1	0.20
Total	523	100.00

agents are found in the sample: chert (47%), chert/limestone (0.8%), limestone (51%), chert/sand (0.8%) and clay (0.8%). Although a number of surface treatments were observed, none account for more than 8% of the total count. Residual plain sherds (all tempers combined) are the most frequently encountered sherds in the sample (81%).

Lithics. Late Woodland features at 40CF5 yielded 9,399 pieces of lithic debris and tools (Table 15). The overwhelming majority, 9,266 items, belong to the former category and only 133 to recognizable tool types. A breakdown into major analytic types present yields the following: Primary Lithics (n=9,399), Unifacial Implements (n=21; FTP=16%), Bifacial Implements (n=20; FTP=15%), Projectile Points/Knives (n=91; FTP=68%) and Ground Stone Implements (n=1; FTP=0.8%). Activities possibly indicated by the presence of these tool types include hunting (Types 43-138), butchering (Types 16, 26, 27), woodworking (Types 14, 16, 31), hide working (Types 8-10, 17, 19, 32, 36b), bone working (Types 14, 16, 18, 153) and plant food processing (Types 16, 22, 26, 153).

Modified bone. Seven bone awls (Type 3) were found in Feature 40 in association with a piece of worked black shale. The awls were all pointing in the same direction and arranged in an orderly row on the surface of the stone. Robison (1982:553) suggests that this may be a basketry or hide working tool kit. The only other modified bone from 40CF5 Mason phase features was a single piece of worked bone found in Feature 136.

TABLE 15

LITHICS FROM LATE WOODLAND FEATURES—40CF5

Tool Type	Raw Material Type A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Total (n)
Primary Lithics																											
2a	4																										4
2d	3		1																								4
3	1147	730	583	16	3	111			7	1	4	1	1														2,604
4	2937	941	1833	15	2	101			8	1	1	1	7	1													5,848
5	311	53	257	2	2	15																					640
6	84	19	58			5																					166
Unifacial Implements																											
8	1	1	2																								5
10	1	1		1																							3
14	3	1	2			1																					7
16	1		1																								2
17	1	1																									2
18													1														1
19	1																										1
Bifacial Implements																											
24	2	1																									3
25	4		1																								5
26	2					1																					3
27	2																										2
31																											1
32	2		1																								3
36a			2																								2
36b	1																										1
Projectile Points/Knives																											
43	1																										1
45	1		3			1																					5
46			3																								3
48	6	1	2																								9
50			1																								1
51	1																										1
52	1		2																								3
53						1							1														2
54	1		1																								2
56	1		1																								2
58	2		5																								7
59	1																										1
61	2		1																								3
65	1																										1
67	1																										1
92	2																										2
100	1																										1
101	2																										2
103		•																									1
111	4	1	2																								7
112	1																										1
113			1																								1
138	20	3	6			3																					32
139/116		1																									1
140/52	1																										1
Ground Stone Implements																											
153																	1										1
Total (n)	4559	1754	2769	34	7	240			15	2	5	9	2				1										9,399

Summary

The Parks site contained the largest and most varied Late Woodland assemblage recovered in the Normandy Reservoir. The intensity of the Late Woodland occupation is surpassed only by that at the Mason site in the adjacent Elk River Valley.

Structural remains were in evidence at 40CF5. Four house patterns have been tentatively assigned to the Mason phase occupation at the site: Structure 5A and 5B were rectangular, Structure 6 was circular and Structure 7 oval in planview.

Burials also attest to the stability of the Late Woodland occupation. A total of 15 Mason burials, including two adult males, four adult females, two adults (sex indeterminate) and seven subadults is present. All of the burials occurred in multi-use pits or basins with most of the bodies having been placed within the grave in a flexed position. The clustering of these graves in the northwestern part of the site again suggests a discrete cemetery area, such as was evident at the Mason site.

The floral and faunal assemblages from the Mason phase features indicate that the inhabitants were exploiting a wide variety of locally occurring plants. Two cultigens, squash and gourd, were also represented in the floral remains, as were wild plant species indicative of summer and fall harvesting. Many of the floral species present could have been prepared for storage and later use. The occurrence of mammals, birds, reptiles, amphibians, fishes and gastropods at the site are further reminders that the inhabitants of 40CF5 were utilizing a large variety of food sources.

The intensity and diversity of Late Woodland activities at the Parks site are demonstrated by the quantity and kinds of lithics, ceramics, modified bone, floral and faunal species, burials, structures and feature types occurring at the site. All of this evidence suggests a relatively stable population which was perhaps experimenting with horticultural practices. Food and raw material remains present indicate that these people were usually exploiting locally available resources. Except for one quartzite flake and one marine gastropod, no evidence for long distance trade was present at 40CF5.

Evidence suggests that a rather intense occupation of the Parks site occurred during the Mason phase. This was probably on the order of a larger population which occupied the site during the summer and fall months or, perhaps, on a full-time basis.

C. EOFF I SITE (40CF32)

Background and Setting

The Eoff I site (40CF32) excavations are described by Faulkner (1977). Background information and feature data presented here are drawn from that discussion.

40CF32 was a first terrace site situated at the transition between the wider valley of the lower reservoir zone and the narrower upper reservoir valley. It was also located advantageously across the main channel from the confluence of Carroll Creek and the Duck River. Carroll Creek connects with Rock Creek to form a natural route between the Duck and Elk River valleys. In theory, prehistoric inhabitants would have, therefore, had access to both valleys.

Although the Eoff I site covered an area approximately 1500' by 1000', at least three areas of more intense activity were observed within these boundaries. Cultural periods represented by diagnostic artifacts ranged from the Late Archaic to Late Woodland. During initial reconnaissance (Faulkner and McCollough 1973), it was thought that Area A, a 250' by 250' locus near the northern extreme of the site, and Area C, an 800' by 300' concentration at the southern boundary of 40CF32, represented the most intensive Late Woodland activity. Subsequent excavations in Area A revealed seven possible Late Woodland features. Field observations led Faulkner and McCollough (1973:169) to believe that Area A was on the periphery of a very intense Late Woodland occupation area. No features attributable to the Mason phase were found in Area C testing.

Radiocarbon Dates

One radiocarbon date is available from a feature attributed originally to Late Woodland activities at 40CF32. A date of A.D. 1155 ± 55 years (UGa-1545) was obtained from Feature 18. Despite the fact that the only diagnostic material in the feature pertains to the Late Woodland period, Faulkner and McCollough (1973:170) feel this date is more in line with Mississippian occupations in the upper Duck River area.

Resources

Plants. Only two species of plant foods and two of wood charcoal have been identified from Late Woodland context at 40CF32 (cf. Appendix IV). Of the plant foods, hickory nuts and maize would have been

available for immediate consumption from mid-summer to late fall. The presence of maize (Zea mays), if not intrusive, would indicate that horticultural activities were taking place at the Eoff I site. The wood charcoal remains, hickory and cane, represent species which could have been used for tool making (both species), basketry (cane), food (cane), as well as cooking or heating.

Animals. No faunal remains were recovered from Late Woodland features at 40CF32.

Lithic raw materials. Only four raw material types were present in Mason features at 40CF32 (Table 16). Of these, three types are locally derived (Types A, B, C) and one is a near-exotic (Type F). Type A accounts for 78% of the lithic materials utilized, Type B for 15% and Types C and F for 4% each. The near-exotic type could have been procured within a twenty to thirty mile radius, while the other types would have been available within a much shorter distance.

Material Culture Remains

Features. Six of the seven features at the Eoff I site assigned to the Late Woodland occupation were subtypes of Type 1, multi-use pits and basins (Table 17). Feature 1, which contained Late Woodland diagnostics, was unassignable to a definite functional or morphological type because of natural disturbance. Individual feature contents from 40CF32 are found in Appendix IV. Major artifact groups recovered from Mason features are discussed below.

TABLE 16

LITHIC RAW MATERIALS FROM LATE WOODLAND FEATURES—40CF32

Type	Source	Number	Percentage
A	Local	21	78.00
B	Local	4	15.00
C	Local	1	4.00
F	Near-exotic	1	4.00
Total		27	100.00

TABLE 17

LATE WOODLAND FEATURE CLASSIFICATION*—40CF32

Feature Number	Type/Subtype	Function
1	1?	Multi-use pit or basin?
13	1a	Multi-use basin
14	1a	Multi-use basin
16	1a	Multi-use basin
18	1a	Multi-use basin
22	1a	Multi-use basin
23	1a	Multi-use basin

*All features listed are from Area A of 40CF32.

Ceramics. Seven sherds (Table 18) were found in a Late Woodland context at 40CF32: chert tempered (71%) and limestone tempered (29%). Recognizable surface treatments include plain (5b) and cordmarked (5c and 8c).

Lithics. A total of 27 pieces of lithic debitage came from Mason features at the Eoff I site (Table 19). All belong to the category Primary Lithics and are indicative of primary flint working activities. No recognizable finished tools were present. However, the seven Type 6 (utilized) flakes encountered could have been used for a variety of tasks.

Modified bone. No modified bone was present in the Late Woodland sample from 40CF32.

Summary

The small number of Late Woodland features at the Eoff I site (n=7), along with the extremely small artifact count, seem to indicate that Mason phase activity on the site was very limited. This conclusion is strengthened by the fact that at least six of the seven features are shallow basins which suggest that they all served a similar function and/or were installed during a specific occupational episode. Floral remains do occur, but are represented by only two species of food plants and two species of wood charcoal. The presence of nuts and maize may indicate late summer to fall utilization of the site. A single radiocarbon date of A.D. 1155, if correct, would place the occupation very late in the local Late Woodland sequence.

TABLE 18

CERAMICS FROM LATE WOODLAND FEATURES—40CF32

Type	Number	Percentage
5a	1	14.00
b	2	29.00
c	2	29.00
8c	2	29.00
Total	7	100.00

TABLE 19

LITHICS FROM LATE WOODLAND FEATURES—40CF32

Tool Type	Raw Material Type																										Total (n)
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
Primary Lithics																											
2d	1																										1
3	6	2																									8
4	9	1																									10
5	1		1																								2
6	5	1				1																					7
Total (n)	22	4	1			1																					28

This interpretation of 40CF32 as a single occupation, task specific site during Late Woodland times is based entirely on data recovered during excavations. If Faulkner and McCollough (1973:169) are correct in their belief that Area A, where the features discussed here occurred, was on the periphery of an intense but unexcavated Mason occupation, this author's assessment would have to be modified substantially. If that proved to be the case, then the similarity of the features might, instead of indicating a limited function site, represent only a specific activity area within the site.

D. JERNIGAN II SITE (40CF37)

Background and Setting

Results of the initial testing program at the Jernigan II site (40CF37) were reported by McCollough and DuVall (1976). Based on testing recommendations, subsequent excavations were initiated in 1974. Data included in this discussion of 40CF37 are drawn primarily from the interpretations of this second phase of work (Faulkner and McCollough 1982b).

40CF37 was a first terrace site located on the right bank of the Duck River in the lower portion of the Normandy Reservoir. A maximum of two acres at this locus was covered by a surface scatter of aboriginal occupational debris, with a core area of approximately one acre showing evidence of more intense activity. This multicomponent site yielded surface evidence, subsurface features and remnant middens which indicated repeated usage of the area from Late Archaic to Late Woodland times. Late Woodland occupation appeared to be most intense in the western half

of 40CF37. Test Stratum 7, a disturbed remnant midden which extended along the western extreme of the site, also contained Late Woodland diagnostic material.

Radiocarbon Dates

Radiocarbon dates were obtained from two Late Woodland features at the Jernigan II site. Carbonized material yielded a date of A.D. 700 ± 115 years (UGa-1034) and A.D. 1190 ± 170 years (UGa-1035) from Feature 55 (Burial 9). Faulkner and McCollough (1982b:310) feel that these two features are contemporaneous since they represent a very unique burial practice in the upper Duck and Elk River valleys.

Resources

Plants. At least four species of plants and seeds and four species of wood charcoal are represented in the Mason features at 40CF37 (cf. Appendix V). Of the three types of nutshell recovered, all would have been available during the fall (September-November/December). The one seed species, Vitis spp., would have been available from August through October. All of the plant foods and wood charcoal found in Late Woodland features at the Jernigan II site would have been available near the site vicinity, as well as in any of the other resource procurement zones of the upper Duck Valley (Shea 1978; Crites 1978). Besides the obvious uses of food and fuel sources, some of these plants and woods could have been used for the production of tools, household utensils and dyes.

Animals. Other than intentionally interred human osteological remains, the only bone recovered from Late Woodland features at the site that was identifiable to the species level was that of Moxostoma (redhorse). This fish could have been procured year-round in the nearby Duck River (Robison 1978). Remains of indeterminate species of fish and mammals were also present.

Lithic raw materials. The raw materials represented in the Late Woodland lithic assemblage at 40CF37 include six types (Table 20). Types A, B, and C, all local materials, account for 35%, 15% and 48% of the lithics, respectively. Near-exotic raw materials (Types F and I) make up 1.4% of the assemblage and the remaining 1% is represented by Type G (Dover chert). Dover chert is classified as an exotic. Its closest known source to the study area is in Stewart County, Tennessee (Faulkner and McCollough 1973:57).

Material Culture Remains

Features. Three types of Late Woodland features were present at 40CF37: multi-use pits and basins, human burials and structures (Table 21). The total number of Mason features identified was very low (n=4). Feature contents are discussed below by artifact type and a listing of individual feature contents is found in Appendix V.

Ceramics. The dominant temper type present in the ceramic sample recovered from Late Woodland features (Table 22) at the Jernigan II site is chert (96%). Limestone tempered sherds make up the remaining 4%. Surface treatments which are in the majority are plain and cordmarked.

TABLE 20

LITHIC RAW MATERIALS FROM LATE WOODLAND FEATURES—40CF37

Type	Source	Number	Percentage
A	Local	323	35.00
B	Local	134	15.00
C	Local	439	48.00
F	Near-exotic	9	1.00
G	Exotic	1	0.10
I	Near-exotic	4	0.40
Total		910	100.00

TABLE 21

LATE WOODLAND FEATURE CLASSIFICATION—40CF37

Feature Number	Type/Subtype	Function
2 (Burial 1)	5c	Human burial
19	1e	Multi-use pit
55 (Burial 9)	5d	Human burial
Structure 1	7c	Structure

TABLE 22

CERAMICS FROM LATE WOODLAND FEATURES—40CF37

Type	Number	Percentage
5a	32	31.00
b	35	34.00
c	26	25.00
d	5	5.00
8a	2	2.00
b	2	2.00
Total	102	100.00

Lithics. Late Woodland features at 40CF37 contained 924 pieces of lithic remains (Table 23). Primary Lithics are in the majority with 911 items. Unifacial Implements account for three pieces (FTP=23%), Bifacial Implements for three (FTP=23%) and Projectile Points/Knives for seven (FTP=54%). Possible activities indicated by the presence of these finished tools and debitage include primary flint working (Types 2a-6), hunting (Types 51-138), butchering (Type 25), woodworking (Type 28), hide-working (Types 8, 10, 19, 28) and plant food processing (Type 28).

Modified bone. No modified bone was present in the Mason features excavated at 40CF37.

Summary

Only four features were identified as Late Woodland facilities at the Jernigan II site. Although the amount of evidence for Mason phase activity was very limited, the kinds of evidence present, a structure and two burials, argue for longer term use of the site than as a single visit exploitation camp.

Most of the Late Woodland activity seemed to be confined to the western half of 40CF37. Rebuilding of habitation structures in this part of the site had produced a concentration of postholes. In order to discern any possible Late Woodland structures in this area, posthole size data collected from a Mason structure at Ewell III (40CF118) were compared with posthole measurements at 40CF37. This analysis defined a loosely constructed, oval house pattern measuring 31' on the

TABLE 23

LITHICS FROM LATE WOODLAND FEATURES—40CF37

	Raw Material Type																									
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Total (n)
Primary Lithics																											
2a			1																								1
3	104	29	137			4			4																		278
4	180	95	252				1																				542*
5	30	8	37			2																					77
6	4	1	5			3																					13
Unifacial Implements																											
8			1																								1
10	1																										1
19			1																								1
Bifacial Implements																											
25	1																										1
28			1																								1
Projectile Points/Knives																											
51			1																								1
55																											1*
116	1																										1
138	2	1	3																								5
Total (n)	323	134	439			9	1		4																		924*

*Raw Material Type unavailable for some specimens.

north-south axis and 21' east-west (Faulkner and McCollough 1982b:202, 309). Although features affiliated with several cultural periods occurred within or near this structure, the presence of Feature 19, a Mason feature, near its center and the occurrence of a chert tempered sherd in one of its postholes suggested a Late Woodland affiliation. Feature 19, a deep, circular Mason phase pit, was interpreted to be a central basin hearth.

The other two Late Woodland features found on the site were burials. Both were of a type referred to as a shaft-and-chamber mode of mortuary disposal. In this type of burial a vertical shaft is first excavated and then a chamber in which the body is placed is dug off to the side. Found sealed inside the chamber portion of Feature 2 (Burial 1) were the remains of a 16 to 21 year old female lying on her right side in a flexed position. The chamber of Feature 55 (Burial 9) contained the skeleton of an infant who died sometime between birth and the age of six months. The body had been placed on its left side in a semiflexed position. The presence of shaft-and-chamber burials in a Late Woodland context at the Jernigan II site might be the earliest occurrence of this burial mode found to date in the Southeast (McCollough and DuVall 1976:50).

Based on the small number of Mason features, the types of features present, flora and fauna represented, ceramic types and construction manner of Structure 1, Faulkner and McCollough (1982:177,311) suggest a short-term, warm-weather occupation by a small residential group for 40CF37 during the Late Woodland periods. Radiocarbon dates from the site suggest an occupation between A.D. 700 and A.D. 1190.

Faulkner and McCollough (1982b:310), however, feel the occupation occurred earlier than A.D. 985 based on a comparison with the Ewell III Late Woodland ceramics.

A re-examination of the feature data by this author does not substantially alter the conclusions offered in the original site report (Faulkner and McCollough 1982b). However, though low in numbers, the presence of a structure, burials and tool types which could have been used for a range of activities, might indicate a more permanent occupation: perhaps a summer-fall camp which was reoccupied by a small kin group over a period of time. While the arboreal seed crops found in the Late Woodland features argue for a fall occupation, this might be extended to include late summer based on the occurrence of grape (Vitis spp.) which is available from August through October. Floral and faunal species, as well as raw material types, suggest that the Mason inhabitants of 40CF37 were exploiting locally available resources.

E. WISER-STEPHENS I SITE (40CF81)

Background and Setting

Testing results from the Wiser-Stephens I site (40CF81) are reported by McCollough and DuVall (1976). The subsequent excavations which ensued are presented by Davis (1978). The latter work is the primary source for published information used in this discussion of 40CF81.

The Wiser-Stephens I site was located on a narrow older alluvial terrace in the upper zone of the Normandy Reservoir. Immediately east

of 40CF81 were the uplands and to the west the floodplain of the Duck River.

Cultural remains spanning Late Archaic to Late Woodland occupations were concentrated in an area approximately 100' by 100' near the southern end of the terrace. Late Woodland activities were represented by 18 features, most of which were located within or near Feature 3, a prehistoric tree fall.

Radiocarbon Dates

No Late Woodland radiocarbon dates are available for the Wiser-Stephens I site.

Resources

Plants. The Late Woodland floral assemblage (Crites 1978) at 40CF81 (cf. Appendix VI) contains three species of nuts, two kinds of seeds (grape and spurge) and five varieties of wood charcoal. The nuts would have been available in the fall months and the grapes in the late summer. Spurge, which has medicinal properties, reaches maturity from spring through autumn. The presence of wood charcoal indicates a variety of activities including heating, cooking, tool manufacture and/or medicinal use.

Animals. The faunal remains contained in Mason features at the Wiser-Stephens I site (cf. Appendix VI) represent a very narrow spectrum. One mammal, an indeterminate number of turtle species and five species of aquatic gastropods have been identified. Only the mammal (white-tailed deer) would have yielded appreciable quantities of meat.

Lithic raw materials. Eleven raw material types were present in the Late Woodland feature assemblage at 40CF81 (Table 24). The overwhelming majority of these types are locally derived materials (98%), while near-exotics account for slightly more than 1% of the sample and raw materials of an unknown geographical origin make up the remaining 0.5%.

Material Culture Remains

Features. Late Woodland features excavated at the Wiser-Stephens I site may be classified into four types: multi-use pits and basins (n=15), earth ovens (n=1), culturally modified natural features (n=1) and structures (n=1). Table 25 presents a complete listing of features by subtypes where appropriate. A summary of feature contents by artifact category follows this section and a listing of individual feature contents may be found in Appendix VI.

Ceramics. Chert tempered ceramics (81%) account for the major portion of the sherds recovered in a Late Woodland context at 40CF81 (Table 26). The remainder of the 923 sherds belong to three temper types: chert/limestone (11%), limestone (8%) and sand (0.11%). Plain surfaces are dominant in all temper types, with cordmarking the second most common surface treatment.

Lithics. Lithics from the Late Woodland assemblage at 40CF81 total 5,264 items (Table 27). Primary Lithics account for 5,181 pieces, Unifacial Implements for 17 (FTP=21%), Bifacial Implements for 19 (FTP=23%), Projectile Points/Knives for 39 (FTP=47%) and Ground Stone

TABLE 24

LITHIC RAW MATERIALS FROM LATE WOODLAND FEATURES—40CF81

Type	Source	Number	Percentage
A	Local	3,733	71.00
B	Local	1,326	25.00
C	Local	119	2.00
F	Near-exotic	43	0.80
I	Near-exotic	2	0.03
K	Near-exotic	11	0.20
M	Unknown	16	0.30
N	Unknown	6	0.10
P	Local	4	0.08
S	Near-exotic	2	0.03
Z	Unknown	2	0.03
Total		5,264	100.00

TABLE 25

LATE WOODLAND FEATURE CLASSIFICATION—40CF81

Feature Number	Type/Subtype	Function
2	1b	Multi-use basin
3	4b	Culturally modified natural feature
16	1a	Multi-use basin
19	1a	Multi-use basin
30	1a	Multi-use basin
31	1b	Multi-use basin
32	1a	Multi-use basin
33	1a	Multi-use basin
38	1b	Multi-use basin
39	1a	Multi-use basin
40	2	Earth oven
43	1a	Multi-use basin
45	1a	Multi-use basin
48	1a	Multi-use basin
50	1a	Multi-use basin
54	1a	Multi-use basin
85	1a	Multi-use basin
87	1g	Multi-use basin
Unnumbered Structure	7	Possible structure
Unnumbered Structure	7	Possible structure

TABLE 26

CERAMICS FROM LATE WOODLAND FEATURES—40CF81

Type	Number	Percentage
5a	341	37.00
b	178	19.00
c	164	18.00
d	60	7.00
7a	26	3.00
b	57	6.00
c	15	2.00
d	4	0.40
8a	61	7.00
b	15	2.00
g	1	0.10
9d	1	0.10
Total	923	100.00

TABLE 27

LITHICS FROM LATE WOODLAND FEATURES—40CF81

Tool Type	Raw Material Type A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Total (n)
Primary Lithics																											
1	1																										1
2a	1												1														2
b	2	5																									7
d	24	5				1							1	1													32
3	1268	717	14			13							3	1					1								2017
4	1876	497	62			18					11		4														2468
5	308	55	28			9							1	2													403
6	178	32	7						1				2	1													221
7	25	5																									30
Unifacial Implements																											
8	2					2																					4
10	8	2																									10
14	1																										1
16		1																									1
17	1																										1
Bifacial Implements																											
24	10	2											2														14
25	1		1																								2
28	1		1																								2
36a														1													1
Projectile Points/Knives																											
45						1							1														2
46	3		1																								4
49	1																										1
54	1																										1

TABLE 27 (continued)

Tool Type	Raw Material Type																									Total (n)
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
58	1	2																									3
98	1																										1
111	3	1	1																								5
138	15	2	3										1														21
140	1																										1
Ground Stone Implements																											
149																			1								1
155																2											2
156									1																		1
176																										2	2
225																2											2
Total (n)	3733	1326	119			43			2		11		16	6		4			2							2	5,264

Implements for 8 (FTP=10%). Tools such as these suggest a range of possible activities including hunting (Types 45-140), butchering (Type 16), woodworking (Types 14, 16, 155), hide working (Types 8, 10, 17), bone working (Types 14, 16), plant food processing (Type 16) and primary flint working (Types 1-6). The presence of tool type 225, shale tools, which have been interpreted as digging implements, may suggest plant food gathering, incipient horticultural activities or the preparation of features which required subsurface excavations.

Modified bone. Five pieces of modified bone were found in Late Woodland features at 40CF81 (Appendix VI). Two awls (Type 3) are the only complete bone tools identified. Three pieces of worked bone (Type II) are also present in the assemblage.

Summary

Most of the 18 Late Woodland features excavated at the Wiser-Stephens I site were located within or in the vicinity of Feature 3, a tree fall. Several types of features indicating a variety of activities were present on the site, including multi-use basins, an earth oven, a culturally modified natural feature and two possible structures. No radiocarbon dates are available from 40CF81 to indicate its exact placement within the Late Woodland Period. Plant species present suggest that the site was occupied during the late summer and fall seasons, and, perhaps, during the spring as well. Lithic and bone tools which occur suggest that a range of activities took place at the site. The presence of two possible structures (no numbers assigned) and numerous features all point to rather heavy utilization of 40CF81.

F. BANKS III SITE (40CF108)

Background and Setting

Information concerning the excavation of the archaeological remains at the Banks III site (40CF108) was reported by Faulkner and McCollough (1974). Published data used in this site discussion are drawn from that report.

Banks III was one of six sites comprising the larger Banks complex. This suite of sites was located on the left bank of the Duck River in the lower reservoir zone across the main channel from the confluence of Boyd Branch. The sites were scattered along a terrace for about 1500 feet. 40CF108 comprised a discrete occupation area about 100' by 150' near the western perimeter of this cluster. Although Late Archaic to Mississippian style artifacts were present, testing revealed a particularly heavy Woodland occupation. Late Woodland period impact on the Banks III site, however, was minimal. Of 120 features excavated, only five were assigned a tentative Mason phase affiliation.

Radiocarbon Dates

No radiocarbon dates for the Late Woodland occupation at 40CF108 are available.

Resources

Plants. Two species of nuts, maize and unidentified wood charcoal fragments were recovered from Late Woodland context at 40CF108 (cf. Appendix VII). Maize matures from July to October and the nut species would have been ready for consumption from September through December.

Animals. Although animal bone was present in the Mason features at the Banks III site, no species identifications were possible. At least part of the faunal assemblage, however, is represented by mammal bone fragments.

Lithic raw materials. Locally available raw materials were the dominant material types recovered from Late Woodland context at 40CF108 (Table 28). Taken as a group, locally derived materials make up 86% of the lithics found in the sample. The remaining 14% of the lithics is composed of Type F (12%) and Type I (2%) specimens, both near-exotics.

Material Culture Remains

Features. The five features attributable to a Mason phase occupation at the Banks III site may be classified into two major feature types (Table 29): multi-use pits and basins (n=2) and culturally modified natural features (n=3). Faulkner and McCollough (1974:415) have tentatively suggested that Feature 69, classified here as a Type 1f pit, may have served as an earth oven. Appendix VII and the ensuing discussion of artifact categories present information concerning individual feature content and the Late Woodland artifact assemblage from the site, respectively.

Ceramics. Four types of tempering are found in the ceramics recovered from Late Woodland features at the Banks III site (Table 30): shell (21%), chert (5%), chert/limestone (38%) and limestone (35%). Plain or residual plain surfaces are present on 97% of the sherds.

TABLE 28

LITHIC RAW MATERIALS FROM LATE WOODLAND FEATURES—40CF108

Type	Source	Number	Percentage
A	Local	20	47.00
B	Local	5	12.00
C	Local	10	23.00
D	Local	1	2.00
F	Near-exotic	5	12.00
I	Near-exotic	1	2.00
O	Local	1	2.00
Total		43	100.00

TABLE 29

LATE WOODLAND FEATURE CLASSIFICATION—40CF108

Feature Number	Type/Subtype	Function
3	4a	Culturally modified natural feature
35	4a	Culturally modified natural feature
40	4a	Culturally modified natural feature
69	1f(2?)	Multi-use pit
71	1f	Multi-use pit

TABLE 30

CERAMICS FROM LATE WOODLAND FEATURES—40CF108

Type	Number	Percentage
1a	23	13.00
b	14	8.00
5a	3	2.00
b	5	3.00
7a	9	5.00
b	58	32.00
8a	19	10.00
b	45	25.00
c	5	3.00
Total	181	100.00

Lithics. The lithic assemblage from Late Woodland features at 40CF108 consists of 45 lithic items (Table 31). Primary Lithics account for only six pieces, Unifacial Implements for three (FTP=8%), Bifacial Implements for 20 (FTP=51%), Projectile Points/Knives for 14 (FTP=36%) and Ground Stone Implements for two (FTP=5%). The tools present indicate a variety of possible activities, such as primary flint working (Types 2d-7), hunting (Types 46-138), butchering (Types 26-27), wood-working (Types 31, 155), hide working (Types 8, 17, 32) and plant food processing (Types 26, 27, 162).

Modified bone. No modified bone was present in the Late Woodland features identified at 40CF108.

Summary

Late Woodland occupation of the Banks III site appears to have been minimal and it should be noted that a Late Woodland affiliation of these features is, at best, very tenuous. Three of the features (all Type 4a) occur around Structure I, a Middle Woodland house. The other two features (Feature 69, Feature 71) are located slightly south of the main occupation at 40CF108 in what is now termed site 40CF113.

The five features attributed to Mason activities have very meagre contents: relatively few artifacts, three species of plants and fragments of charcoal and mammal bone. The presence of two species of nuts and maize may indicate a late summer to fall occupation. If all of the features are Mason installations, the presence of at least three feature types in such a small sample may suggest that a number of activities were being carried out. Lithic tool types also suggest a variety of

TABLE 31

LITHICS FROM LATE WOODLAND FEATURES—40CF108

Tool Type	Raw Material Type A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Total (n)
Primary Lithics																											
2d	3					1																					4
6	1																										1
7	1																										1
Unifacial Implements																											
8		1																									2*
17			1																								1
Bifacial Implements																											
24	1																										1
26	1		1			1																					3
27	5	2	2			2																					11
31	1																										1
32	2		1																								3
36a	1																										1
Projectile Points/Knives																											
46	1		1																								2
53			1																								1
59			1			1																					2
62			1																								1
80	1																										1
92		1		1																							2
107	1																										1
110		1																									1
125	1																										1
138			1					1																			2

TABLE 31 (continued)

Tool Type	Raw Material Type																									Total (n)
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
Ground Stone Implements																										
155																1										1
162																										1*
Total (n)	20	5	10	1		5		1								1										45*

*Raw Material Types unavailable for some artifacts.

activities. Given the paucity of all types of data and the lack of intrusion among the features, it is suggested that during Late Woodland times the Banks III site may have served as a short-term, late summer to fall campsite for a small group of people.

G. BANKS V SITE (40CF111)

Background and Setting

The background information for this section on the Banks V site is drawn from McCollough (1978) and raw data and interpretative comparisons from Cobb (1978), Kleinhans (1978), Robison (1978) and Shea (1978) which are found in Volume V of the Normandy Archaeological Project (Faulkner and McCollough 1978b).

As part of the larger Banks complex of sites (cf. 40CF32 Background and Setting section), 40CF111 lay, along with its sister sites, on a terrace on the left bank of the Duck River. The site was distinctive because of the rich sheet midden it encompassed. Excavations later linked this midden primarily to refuse from a late Middle Woodland Owl Hollow phase structure. The surface material, however, recovered from 40CF111 indicated at least limited activity through time by Paleo-Indian to Mississippian groups. The Late Woodland occupation at the Banks V site was represented by nine possible Mason features, most of which were located in the southeastern portion of the site.

Radiocarbon Dates

Radiocarbon dates were obtained from two isolated postholes assigned a Late Woodland affiliation. The results were dates of A.D. 670 ± 100 years (UGa-728) and A.D. 865 ± 90 years (UGa-730). Both

dates fall within the accepted Late Woodland range for the area, but it is interesting to note that the first date overlaps with one early Mississippian Banks phase date and the latter date with four Banks phase dates from 40CF111.

Resources

Plants. At least four varieties of nuts, three herbaceous plants and five kinds of wood were exploited by the Late Woodland inhabitants of 40CF111 (Appendix VIII). The nuts would have been available for immediate consumption from September to December and two of the plant foods (Asteraceae and cow lily) possibly throughout the year. The woods present at the site are species with parts which could have been used for heating, cooking, tool and utensil manufacture and/or medicinal use.

Animals. One small mammal (squirrel), one fish species, three reptiles (turtle and snakes) and one amphibian (toad) were the only faunal remains identifiable to the species level found in Mason features at the Banks V site (Appendix VII, Faunal Species). Small game predominates in this faunal assemblage.

Lithic raw materials. No raw material data are available for the lithics found in Late Woodland features at 40CF111.

Material Culture Remains

Features. Only two major feature types are represented among the nine Late Woodland facilities identified at the Banks V site (Table 32):

TABLE 32

LATE WOODLAND FEATURE CLASSIFICATION—40CF111

Feature Number	Type/Subtype	Function
32	1h	Multi-use basin
43 (Burial 2)	1b/5a	Multi-use basin and human burial
39	1b	Multi-use basin
67	1b	Multi-use basin
74-17 (Burial 74-1)	1b/5a	Multi-use basin and human burial
96	1b	Multi-use basin
109	1b	Multi-use basin
112	1b	Multi-use basin
160	1b	Multi-use basin
Structure III (Possibly Mason phase	7a	Structure
Structure IV (Possibly Mason phase)	7a	Structure

multi-use pits and basins and human burials. All except two features fall into the pit/basin category. Appendix VIII lists individual feature contents, while the following discussions detail the artifact assemblages recovered from Mason features at the site.

Ceramics. A variety of temper types was represented in the Late Woodland features at 40CF111 (Table 33). Limestone tempering occurs in 41% of the sherds, shell in 31%, chert in 23%, limestone/chert in 3% and sand in less than 1%. The major surface treatments by temper type are limestone tempered residual plain (18%), limestone tempered plain (22%), shell tempered residual plain (10%) chert tempered residual plain (8%) and plain (12%). In addition to household ceramic remains, clay pipe fragments were present in one of the features.

Lithics. A total of 3,603 pieces of lithic material was recovered from Late Woodland features at the Banks V site (Table 34). Major types represented are as follows: Primary Lithics (n=3,580), Unifacial Implements (n=6; FTP=26%), Bifacial Implements (n=5; FTP=22%), Projectile Points/Knives (n=12; FTP=52%) and Ground Stone Implements (n=0; FTP=0). A closer examination of these tools and debitage indicates a possible range of activities took place at 40CF111 including primary flint working (Types 2d-6), hide working (Types 8, 10), bone working (Types 16, 18), plant food processing (Type 27), hunting (Types 62-138), butchering (Types 16, 27) and woodworking (Type 16).

TABLE 33

CERAMICS FROM LATE WOODLAND FEATURES—40CF111

Type	Number	Percentage
1a	28	10.00
b	62	21.00
2	1	0.30
5a	24	8.00
b	36	12.00
c	10	3.00
d	1	0.30
7a	2	0.70
b	7	2.00
8a	52	18.00
b	63	22.00
c	3	1.00
9a	1	0.30
10	1	0.30
Total	291	100.00

TABLE 34

LITHICS FROM LATE WOODLAND FEATURES*—40CF111

Tool Types	Total (n)
Primary Lithics	
2d	2
3	897
4	2,393
5	175
6	113
Unifacial Implements	
8	3
10	1
16	1
18	1
Bifacial Implements	
25	3
27	2
Projectile Points/Knives	
62	2
66	1
68	1
78	1
96	1
104	1
111	1
138	6
Total (n)	3,605

*Raw Material Types were unavailable for individual specimens from this site.

Modified bone. The only modified bone from a Mason phase context at the Banks V site was found in the fill of a Late Woodland burial: two bone fish hooks were recovered in Feature 74-17 (Burial 74-1). In addition, three shell beads were found in Feature 4 (Burial 2).

Summary

A discrete locus of Late Woodland activity was present in the southeastern portion of the Banks V site. Nine features, two human burials and seven multi-use pits have been presented in this study as having a possible Late Woodland affiliation. The floral and faunal evidence from these features suggests the site inhabitants were exploiting small game, fall nut crops and two types of plants (Asteraceae and cow lily) which would have been potentially available during all the seasons. Radiocarbon dates suggest that the Late Woodland occupation took place between A.D. 670 and A.D. 865.

Additional data not presented in the previous site discussion further substantiate the intensity of Mason phase activity at 40CF111. At least six other Late Woodland features were present on the site. These are shown on a site plan map, but are not discussed by Kleinhans (1978:331). In addition, Kleinhans describes two circular structures (structures III and IV) as being possible Late Woodland facilities, but then dismisses the idea.

If the six features, two structures, two burials and the seven other features discussed in this report are all Mason installations, a fairly intense Late Woodland occupation of the Banks V site is indicated. If, however, only the burials and the seven multi-use pits are

affiliated with the Mason occupation, a much less intense use of the site is probable. At minimum, the Banks V site was some type of seasonal encampment. Maximally, it may have served as a more permanent type of occupation.

H. EWELL III SITE (40CF118)

Background and Setting

DuVall (1977) presents the findings of the initial testing program and consequent major excavations at the Ewell III (40CF118) site. That report is the primary source of published data for this summation and discussion.

The Ewell III site was located on a high terrace overlooking the floodplain of the Duck River. Cultural material remains were in evidence on the eroded floodplain and terrace foreslope, but the major concentration of prehistoric debris was confined to an area 200' by 600' on the terrace proper.

Diagnostic remains indicated occupation of the site from Early Archaic to Late Woodland times. Late Woodland activity was represented by feature installations, as well as by scattered diagnostic artifacts. Of the 105 features found at the site, 11 were attributed to the Late Woodland occupation. All of these features were located in the extreme northwestern section of 40CF118.

Radiocarbon Dates

Two radiocarbon dates are available from the Ewell III site. Both of these dates were obtained by dating materials recovered from

earth oven facilities. Feature 42, the central feature for Structure 8, yielded a date of A.D. 985 ± 70 years (UGa-972). The second date came from Feature 45, another earth oven located just outside the west wall of Structure 8. A comparable date of A.D. 970 ± 85 years (UGa-971) was obtained. These dates indicate that the Ewell III Mason phase occupation occurred during the latter part of the Late Woodland period in the study area.

Resources

Plants. A minimum of three kinds of arboreal fruits, one variety of seed (grape) and 10 types of wood charcoal (Crites 1978) were found in the Ewell III Late Woodland features (cf. Appendix IX). Grapes would have been available from late summer to early fall by which time the nut crops would have been mature. The wood charcoal is surprisingly varied when compared to the relatively narrow spectrum of plant foods found at the site. Of the minimum of 10 trees which occur in the sample, three are not found elsewhere in Late Woodland context in the study area. The presence of all of these species could indicate activities ranging from cooking to the manufacturing of canoes (e.g., tuliptree; Hamel and Chiltoskey 1975) and the preparation of medicinal remedies (e.g., five of the species).

Animals. Only two identifiable species of fauna (woodchuck and turkey) occurred in a Late Woodland context at 40CF118 (Appendix VIII, Faunal Species). Both are creatures which provide a relatively good meat to body weight yield.

Lithic raw materials. Five locally procured and four near-exotic raw materials were found to occur in Mason phase features at 40CF118 (Table 35). Type A accounts for most of the lithic assemblage (75%), with Type B (20%), Type C (3%) and P (0.01%) completing the local material array. The near-exotic types represent slightly more than 1% of the total percentage of raw material types present.

Material Culture Remains

Features. The Late Woodland features excavated at the Ewell III site may be classified into four types (Table 36): multi-use pits and basins (n=5), earth ovens (n=5), culturally modified natural features (n=1) and structures (n=1). Feature contents are presented in tabular form by feature number in Appendix IX. Artifacts recovered are discussed below by material category.

Ceramics. Two types of ceramic tempering agents are found in the sherds recovered from Mason features at this site (Table 37): chert tempered ceramics account for 66% and limestone tempered sherds for the remaining 44%. The dominant surface treatments by temper type are as follows: chert tempered plain (28%), chert tempered knot roughened-net impressed (23%), limestone tempered residual plain (18%) and limestone tempered plain (13%).

Lithics. Lithic materials recovered in a Late Woodland context at the Ewell III site include 1,036 items (Table 38). Totals and percentages of the major lithic categories present are: Primary Lithics (n=1,015), Unifacial Implements (n=4; FTP=19%), Bifacial Implements

TABLE 35

LITHIC RAW MATERIALS FROM LATE WOODLAND FEATURES—40CF118

Type	Source	Number	Percentage
A	Local	772	75.00
B	Local	208	20.00
C	Local	28	3.00
D	Local	5	0.50
F	Near-exotic	10	1.00
I	Near-exotic	8	0.80
J	Exotic	1	0.01
K	Near-exotic	3	0.30
P	Local	1	0.01
Total		1,036	100.00

TABLE 36

LATE WOODLAND FEATURE CLASSIFICATION—40CF118

Feature Number	Type/Subtype	Function
7	1f	Multi-use pit
13	2	Earth oven
38	1h/2?	Multi-use pit
42	2	Earth oven
43	2	Earth oven
45	2	Earth oven
60	1a	Multi-use basin
61	1a	Multi-use basin
104	4a	Culturally modified natural feature
107	1b	Multi-use basin
108	2	Earth oven
Structure 8	7c	Structure

TABLE 37

CERAMICS FROM LATE WOODLAND FEATURES—40CF118

Type	Number	Percentage
5a	2	5.00
b	11	28.00
c	4	10.00
d	9	23.00
8a	7	18.00
b	5	13.00
c	1	3.00
Total	39	100.00

TABLE 38

LITHICS FROM LATE WOODLAND FEATURES—40CF118

Tool Type	Raw Material Type A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Total (n)
Primary Lithics																											
1	1																										1
2a		1																									1
d	2																										2
3	353	141	5	2					6		1																508
4	259	40	9	2		1			1		1																313
5	43	5	7			1			1																		57
6	101	20	5	1		5					1																133
Unifacial Implements																											
8	2																										2
10	1																										1
14	1																										1
Bifacial Implements																											
24	1																										1
25						1																					1
26	1																										1
28	1																										1
31	1									1																	2
36a	1																										1
b	1																										1
Projectile Points/Knives																											
50						1																					1
51						1																					1
53	1																										1
78	1																										1

TABLE 38 (continued)

Tool Type	Raw Material Type																											Total (n)
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
88	1																											1
138		1	2													1												3
Ground Stone Implements																												
155	1																											1
Total (n)	772	208	28	5		10			8	1	3					1												1,036

(n=7); FTP=33%), Projectile Points/Knives (n=9; FTP=43%) and Ground Stone Implements (n=1; FTP=5%). Finished tools present total 21 in number and represent various kinds of activities including primary flint working (Types 2a-6), hunting (Types 50-138), butchering (Type 26), woodworking (Types 14, 28, 31), hide working (Types 8, 10, 28, 36b), bone working (Type 14) and plant food processing (Types 1, 26).

Modified bone. No modified bone was recovered from Mason features at the Ewell III site.

Summary

A defined locus of Late Woodland activity was evident in the extreme northwest sector of the Ewell III site centering around Structure 8 and also around a tree fall. Twelve Mason phase installations were identified including multi-use pits and basins, earth ovens, one structure and a culturally modified natural feature. One curious aspect of the feature array is that the ratio of multi-use pits and basins (n=5) to earth ovens (n=5) is one to one. Such a high percentage of earth ovens does not occur at any other of the sites discussed in this chapter. This may indicate one of three things: (a) that a large group of people, probably more than one family group, used the site during one specific time, (b) that activities performed at the site required the use of a large number of earth oven facilities, and/or (c) that the site was reused on a number of occasions. The very closely spaced radiocarbon dates (A.D. 985 and A.D. 970) suggest option a or b, as does the lack of intrusion among the Mason features. DuVall's conclusions (1977:219) favor option a, but the small number of tools (n=21)

present might argue for the second option (b). The range of floral and faunal remains recovered at the site has a very narrow focus. Plant species present seem to indicate a late summer or fall habitation of the site.

CHAPTER IV

A SUMMARY OF MASON PHASE SITE ENVIRONMENT AND CONTENT

A. RADIOCARBON DATES

Nine radiocarbon dates are available from Mason Phase contexts within the Normandy and Tims Ford reservoirs (Table 39). These dates indicate that Late Woodland Mason phase occupations occurred primarily between A.D. 600 and A.D. 1100.

B. SITE ENVIRONMENT

The overwhelming majority (80%) of sites containing Mason phase diagnostics (cf. Table 1, p. 16) are located in the same general environmental setting. Depending on which divisional scheme one employs, this is the older alluvial terrace biogeographic zone (Faulkner and McCollough 1973) or the valley floor vegetation zone (Crites 1978). Only two sites in the floodplain zone and six in the valley slopes and bluffs or upland zones located in either survey contained Late Woodland artifacts. This concentration of Mason phase sites in one resource zone may be evidence of the optimal utilization of an advantageous "middle" ground to exploit numerous econiches or it may merely be the result of the sampling methods used to locate sites which were in maximum danger of being adversely impacted by impending reservoir construction. Regardless, the groups living at these locations enjoyed the immediate availability of a great variety of resources and easy access to other biogeographic zones which contained additional resource reserves.

TABLE 39

LATE WOODLAND RADIOCARBON DATES BY SITE

Site	Sample Number	Date	Range
40FR8	GX0778	A.D. 770 ± 85	A.D. 715-A.D. 855
	GX0777	A.D. 890 ± 90	A.D. 800-A.D. 980
40CF5	Unavailable	A.D. 1075 ± 50	A.D. 1100-A.D. 1210
40CF32	UGa-1545	A.D. 1155 ± 55	A.D. 1100-A.D. 1210
40CF37	UGa-1034	A.D. 700 ± 115	A.D. 585-A.D. 815
	UGa-1035	A.D. 1190 ± 170	A.D. 1020-A.D. 1360
40CF111	UGa-728	A.D. 670 ± 100	A.D. 570-A.D. 770
	UGa-730	A.D. 865 ± 90	A.D. 775-A.D. 955
40CF118	UGa-971	A.D. 970 ± 85	A.D. 885-A.D. 1055
	UGa-972	A.D. 985 ± 70	A.D. 915-A.D. 1055

C. RESOURCE UTILIZATION

Tables 40 and 41 provide a listing of the plant and animal species remains which occur in Late Woodland context at the eight sites discussed individually in Chapter III. A total of at least 28 species of edible plant foods, 29 types of wood charcoal, 20 mammals, 4 birds, 8 fishes, 9 reptiles, 3-5 amphibians, 13 gastropods and an assortment of unidentified plant debris, bone and shell was recovered from Mason features at these sites. Of course, not all of these plants and animals occurred at any one site, but the presence or absence of these species at a site may be indicative of site function and season of occupation in several cases.

Many of the plant and animal species represented in excavations at these eight sites would have been available in the general vicinity of any of the sites and all of the others would have been obtainable within a reasonable day's journey. The presence of cultigens, including maize, at 40FR8, 40CF5 and 40CF108 suggests that the Mason peoples were not only exploiting wild plant foods, but were familiar with horticulture.

Raw material types were available for lithic materials recovered from Late Woodland features at seven of the eight sites (Table 42). At five of these sites 96-97% of the raw materials utilized were locally derived. At another site, 40CF108, 86% of the lithics were manufactured from local materials. Only one site varied dramatically from this pattern of extremely high utilization of locally procured materials: 40FR8, where near-exotic types made up nearly 23% of the sample. This

TABLE 40

BOTANICAL SPECIES IDENTIFIED IN LATE WOODLAND FEATURES

Species Name	Common Name	40FR8	40CF5	40CF32	40CF37	40CF81	40CF108	40CF111	40CF118
Fruits, Nuts and Seeds									
Carya sp.	Hickory	X	X	X	X	X	X	X	X
Juglandaceae	Walnut family	X	X		X				X
Juglans spp.	Walnut	X	X					X	X
Juglans nigra	Black walnut				X	X	X	X	
Juglans cinerea	Butternut	X	X		X				X
Castanea dentata	Chestnut	X						X	
Quercus sp.	Acorn	X	X		X	X		X	X
Corylus sp.	Hazelnut	X	X						
Leguminosae (wild)	Locust/acacia (Pulse) family	X							
Gleditsia triacanthos	Honey locust	X	X			X			
Asteraceae	Composite family	X						X	
Cucurbitaceae	Squash/gourd family	X	X						
Lagenaria siceraria	Gourd	X	X						
Cucurbita pepo L.	Squash	X	X						
Helianthus annus L.	Sunflower	X							
Viburnum sp.	Blackhaw, Arrowwood, Mapleleaf, Wayfaring Tree family	X							

TABLE 40 (continued)

Species Name	Common Name	40FR8	40CF5	40CF32	40CF37	40CF81	40CF108	40CF111	40CF118
Vitis sp.	Grape	X			X	X			X
Potamogeton sp.	Pondweed	X							
Graminae	Grass family	X							
Heliotropium sp.	Forget-me-not family	X							
Croton sp.		X							
Rubus sp.	Raspberry, Blackberry, Dewberry family	X							
Chenopodium sp.	Lamb's quarters (pigweed)	X							
Galium trifidum	Cleavers (Bedstraw)	X	X						
Zea mays	Corn (maize)	X		X			X		
Passiflora incarnata	Maypops	X	X						
Polygonum erectus	Smartweed	X							
Diospyros virginiana	Persimmon	X							
Euphorbia maculata	Spurge					X			
Trifolium spp.	Clover							X	
Nuphar luteum subsp. macrophyllum	Cow lily							X	

TABLE 40 (continued)

Species Name	Common Name	40FR8	40CF5	40CF32	40CF37	40CF81	40CF108	40CF111	40CF118
Woods									
Carya sp.	Hickory	X	X	X	X	X		X	X
Juglandaceae	Hickory/walnut family		X						
Juglans spp.	Walnut	X	X						
Juglans nigra	Black walnut					X		X	
Castanea dentata	Chestnut	X	X						
Quercus sp.	Oak	X	X		X	X		X	X
Quercus alba	White oak	X	X		X	X			X
Quercus rubra	Red oak	X	X		X	X		X	X
Maclura pomifera	Osage-orange		X						
Vitis sp.	Grape	X							
Pinaceae	Pine/Cedar family	X							
Pinus sp.	Pine	X	X						
Juniperus virginiana L.	Eastern red cedar					X			
Cornus florida	Dogwood	X	X						
Fraxinus sp.	Ash	X	X						
Sassfras albidum	Sassfras	X	X						
Ulmus americana	Elm	X							
Diospyros virginiana	Persimmon	X	X						
Fagaceae	Beech, Chestnut, Oak family	X							

TABLE 40 (continued)

Species Name	Common Name	40FR8	40CF5	40CF32	40CF37	40CF81	40CF108	40CF111	40CF118
Fagus grandifolia	American beech							X	
Platanus occidentalis	Sycamore	X			X				X
Fabaceae	Honey locust, Kentucky coffeetree family		X						
Gleditsia triacanthos	Honey locust		X						
Gymnocladus dioicus	Kentucky coffeetree		X						
Kalmia sp.	Laurel		X						
Acer sp.	Maple		X					X	X
Prunus sp.	Cherry/Plum family							X	
Prunus serotina	Black cherry		X						
Arundinaria spp.	Cane		X						X
Arundinaria gigantea	Cane			X					
Carpinus caroliniana Walt.	Ironwood								
Liriodendron tulipfera	Tuliptree								X
Robinia pseudo-acacia	Black locust								X
Salix nigra	Black willow								X
Unidentified wood fragments				X		X	X		X

TABLE 41

FAUNAL SPECIES IDENTIFIED IN LATE WOODLAND FEATURES

Species Name	Common Name	40FR8	40CF5	40CF32	40CF37	40CF81	40CF108	40CF111	40CF118
Mammals									
Odocoileus virginianus	White-tailed deer	X	X			X			
Procyon lotor	Raccoon	X	X						
Sylvilagus floridanus	Eastern cottontail	X	X						
Marmota monax	Woodchuck	X							X
Castor canadensis	Beaver	X							
Didelphis marsupialis	Opposum	X							
Sciurus sp.	Gray/Fox squirrel	X	X						X
Lynx rufus	Bobcat	X							
Martes pennanti	Fisher	X							
Canis familiaris	Domestic dog	X	X						
Tamias striatus	Eastern chipmunk	X							
Mephitis mephitis	Striped skunk	X							
Ondatra zibethica	Muskrat	X							
Scalopus aquaticus	Eastern mole	X							
Oryzomys palustris	Rice rat	X							
Blarina brevicauda	Short-tailed shrew		X						
Reithrodontomys humulis	Eastern harvest mouse		X						

TABLE 41 (continued)

Species Name	Common name	40FR8	40CF5	40CF32	40CF37	40CF81	40CF108	40CF111	40CF118
Peromyscus spp.	White-footed mouse		X						
Myotis spp.	Myotis bat		X						
Microtus pinetorum	Pine vole		X						
Unidentifiable mammal bone		X	X	X	X	X	X	X	X
Unidentifiable large mammal bone		X							
Birds									
Meleagris gallopavo	Wild turkey	X							X
Grus canadensis	Sandhill crane	X							
Colinus virginianus	Bobwhite quail	X							
Passerine sp.	Perching birds	X							
Unidentified bird bone fragments		X	X						
Reptiles									
Terrapene cf. carolina	Box turtle	X	X			X			
Sternotherus odoratus	Musk turtle	X							
Trionyx sp.	Soft-shell turtle	X				X			
Chelydra serpentina	Snapping turtle	X							
Pseudemys/ Graptemys sp.	Map, sliders, cooters, sliders—turtles								

TABLE 41 (continued)

Species Name	Common Name	40FR8	40CF5	40CF32	40CF37	40CF81	40CF108	40CF111	40CF118
Turtle sp.		X	X						
Viperidae	Pit vipers	X							
Crotalidae	Rattlesnakes	X						X	
Colubridae	Most nonpoisonous snakes		X					X	
Elaphe obsoleta	Black rat snake	X							
Amphibians									
Rana sp.	Frog	X	X						
Bufo sp.	Toad	X	X					X	
Rana catesbeiana	Bullfrog		X						
Scaphiopus holbrooki	Eastern spade-foot toad	X	X						
Cryptobranchus allenganiensis	Hellbender		X						
Fish									
Moxostoma sp.	Redhorse	X			X				
Catostomidae	Sucker family	X						X	
Pylodictus olivaris	Flathead catfish	X							
Ictalurus sp.	Bullhead	X							
Ictalurus sp.	Channel and/or blue catfish	X							
Micropterus sp.	Bass	X							
Aplodinotus grunniens	Drum	X							

TABLE 41 (continued)

Species Name	Common Name	40FR8	40CF5	40CF32	40CF37	40CF81	40CF108	40CF111	40CF118
Amia calva	Bowfin	X							
Unidentified fish bone fragments		X	X	X					
Unidentified bone							X	X	
Gastropods									
Olivella cf. jaspidea			X						
Pupillidae			X						
Discus patulus			X						
Anguispira alternata			X						
Stenotrema fraternum			X						
Mesodon inflectus			X						
Triodopsis albolabris			X						
Goniobasis laqueata/ edgariana			X			X			
Pleurocera canaliculatum			X						
Campeloma sp.						X			
Pleurocera sp.						X			
Lithsasia sp.						X			
Anculosa sp.						X			
Unidentified Gastropods		X	X			X		X	X

TABLE 42

LATE WOODLAND LITHIC RAW MATERIALS BY SITE

Type	40FR8 (%)	40CF5 (%)	40CF32 (%)	40CF37 (%)	40CF81 (%)	40CF108 (%)	40CF111 (%)	40CF118 (%)
A	38	49	78	35	71	47	Not available	75
B	10	19	15	15	25	12		20
C	-	29	4	48	2	23		3
D	0.70	0.40	-	-	-	2		0.50
E	-	0.07	-	-	-	-		-
F	22	3	4	1	0.80	12		1
G	-	-	-	0.10	-	-		-
H	-	-	-	-	-	-		-
I	-	0.20	-	0.40	0.03	2		0.80
J	0.40	0.02	-	-	-	-		0.01
K	-	0.05	-	-	0.20	-		0.30
L	0.40	0.02	-	-	-	-		-
M	18	0.10	-	-	0.30	-		-
N	-	0.02	-	-	0.10	-		0
O	3	-	-	-	-	2		-
P	0.70	-	-	-	0.08	-		0.01
Q	0.70	0.01	-	-	-	-		-
R	-	-	-	-	-	-		-
S	0.40	-	-	-	0.03	-		-
T	-	-	-	-	-	-		-
U	-	-	-	-	-	-		-
V	-	-	-	-	-	-		-
W	0.70	-	-	-	-	-		-
X	-	-	-	-	-	-		-
Y	5.40	-	-	-	-	-		-
Z	-	-	-	-	0.03	-		-
Total (%)	100	100	100	100	100	100	-	100

difference is to be expected, however, since this site was located in the Elk River Valley as opposed to the Duck River Valley where the other sites occurred. At the time of reanalysis of the lithic tools from the Mason site by this author, no published information was available on the kinds of lithic materials occurring in the upper Elk Valley so the Normandy raw material typology was used. Cobb and Faulkner (1978) have since identified several variants of the local Fort Payne chert formations which occur in Elk River Valley. Some of these types may account for the apparent higher percentage of nonlocal raw materials at the Mason site.

D. MATERIAL CULTURE REMAINS

A total of 122 Late Woodland features was found at the eight sites discussed in Chapter III. Table 43 presents a comparative summary of feature types occurring at these sites. Each of the seven major types is discussed below.

Multi-Use Pits and Basins (Feature Type 1)

Multi-use pits and basins account for 75 (61%) of the 124 features found at the excavated sites. Several variants (1a-1b) are included within this feature type. Although subtypes have been separated on the basis of morphological characteristics (cf. Feature Types, Chapter III), in at least some of the subtypes morphological differences may be equated with functional differences. Minimally, the shallow basins (1a-1c) and deeper pits (1d-1h) probably represent separate functional types. Shallow basins are the most frequently occurring

TABLE 43

LATE WOODLAND FEATURE TYPES BY SITE

Feature Type	Site Number								Total
	40FR8 (n)	40CF5 (n)	40CF32 (n)	40CF37 (n)	40CF81 (n)	40CF108 (n)	40CF111 (n)	40CF118 (n)	
1a	6	11	6	-	12	-	6	2	43
b	2	-	-	-	3	-	-	1	6
c	-	1	-	-	-	-	-	-	1
d	4	-	-	-	-	-	-	-	4
e	1	1	-	1	-	-	-	-	3
f	2	-	-	-	-	2	-	1	5
g	3	6	-	-	1	-	-	-	10
h	-	1	-	-	-	-	1	1	3
2	1	-	-	-	1	-	-	5	7
3	2	-	-	-	-	-	-	-	2
4a	-	-	-	-	-	3	-	1	4
b	-	-	-	-	1	-	-	-	1
5a	2	6	-	-	-	-	2	-	10
b	1	3	-	-	-	-	-	-	4
c	-	-	-	1	-	-	-	-	1
d	-	-	-	1	-	-	-	-	1
e	1	6	-	-	-	-	-	-	7
6	1	-	-	-	-	-	-	-	1

TABLE 43 (continued)

Feature Type	Site Number								Total
	40FR8 (n)	40CF5 (n)	40CF32 (n)	40CF37 (n)	40CF81 (n)	40CF108 (n)	40CF111 (n)	40CF118 (n)	
7a	-	1	-	-	-	-	2(?)	-	3
b	-	1	-	-	-	-	-	-	1
c	-	2	-	1	-	-	-	1	4
d	-	-	-	-	2	-	-	-	2
Total	26	39	7	4	20	5	11	12	123*

*Feature type indeterminant (n=1).

Earth Ovens (Feature Type 2)

Seven earth ovens were identified at three of the eight Late Woodland sites excavated in the Normandy and Tims Ford reservoirs. The pit walls of these features show heavy firing and large quantities of burned limestone and wood charcoal are common contents of their fill. It is possible that some of the features designated in this study as multi-use pits and basins were actually used as earth ovens. Feature 38 from 40CF118 is an example of such a pit which had been so modified by noncultural activities as to be unassignable definitely to the earth oven category.

The presence of such substantial features as earth ovens may indicate a fairly intense occupation. Earth oven facilities co-occur with structures in some late Middle Woodland Owl Hollow phase sites (Cobb 1978).

Fire Hearths (Feature Type 3)

Two "fire hearths" were identified among the Late Woodland features at 40FR8. The assignment of the two features in question was kept because the original analysis (Faulkner 1968) separated this type of facility from larger "roasting pits" which were characterized as earth ovens in this report. However, the absence of this feature type at the other seven sites is most likely more apparent than real. In the Normandy Reservoir sites analyses similar features were probably placed in the earth oven or multi-use basin categories.

Culturally Modified Natural Features (Feature Type 4)

Naturally modified cultural features were found at three of the sites discussed in Chapter III. Tree tip-ups (i.e., cradleknolls) were found in the areas utilized by Mason populations at 40CF108 and 40CF118. In each case the natural feature contained multiple Late Woodland cultural facilities. At one site, 40CF81, a tree-fall had been used in a similar fashion. Cultural installations may have been deliberately placed in the disturbed soils of these natural features because they were more easily excavated than the compact undisturbed soils which surrounded them or because they opened up new areas in the forests for habitation.

Human Burials (Feature Type 5)

Twenty-one burials were excavated at four of the eight sites used in this study. Eighteen of the burials were in multi-use pits and basins and the remaining two were classified as shaft-and-chamber burials. Contained within the burial receptacles were the skeletal remains of four adult males, five adult females, four adults (sex indeterminant) and nine subadults. All of the individuals except for one infant and in cases where insufficient skeletal remains were present to determine body position, had been placed in the burial chambers in a flexed or semi-flexed position.

Since the use of pits and basins as burial receptacles seems to have been the primary manner for disposing of the dead among the Mason peoples, the occurrence of two shaft-and-chamber burials is especially interesting. Shaft-and-chamber burials are rare in the Southeast in this time period and have been in the past considered a late prehistoric or

historic burial practice, typically associated with Siouan and Cherokee groups (McCollough et al. 1979). Brooms (1980) also reports finding two burials of this type in a transitional Late Woodland-Mississippian context in central Alabama.

Animal Burials (Feature Type 6)

Only one deliberately interred animal skeleton was found on a Mason phase site. The remains of a young dog were found in Feature 29 at the Mason site. However, the skeleton apparently was placed in the pit as a matter of routine waste disposal rather than as a ritualized burial.

Structures (Feature Type 7)

Ten structures were possibly associated with Late Woodland occupations in the study area. As many as three of these structures had a circular outline, one an oval planview and four a square to rectangular posthole pattern. The shape of two other possible structures was indeterminant. All the structures were single post dwellings. Several had at least part of a wall missing, which may have been a function of design or simply the result of historic plowing. Based on the rather great distance between postholes and the possibility of one open side, Faulkner and McCollough (1982:309) have suggested that such structures may have been lightly constructed, warm-weather shelters. Three house pattern types have been identified to date on Late Woodland Mason phase sites: round, rectangular and oval. If these house types are not temporally equivalent, then there appears to have been a change, or at least variability, in house designs during the Mason phase.

Feature Contents

Ceramics. Chert tempered ceramics predominate in Mason features at 40FR8, 40CF32, 40CF37, 40CF81 and 40CF118 (Table 44). At 40CF5 approximately 51% of the sample sherds were limestone tempered. Shell tempering occurred as a minority ware at three sites, 40FR8, 40CF108 and 40CF118 where there were also Mississippian occupations. Several other temper types were present in minute quantities. Some such as the clay tempered sherds at 40FR8 may have been from trade vessels, others like the sand tempered wares could have been present either because of trade or by component mixing through repeated use of the sites through time.

At the sites where chert tempered ceramics predominate, plain surfaces are the most common treatment, except at 40FR8 where cord-marking accounts for 41% of the surface treatment. Knot roughened-net impressions are the third most common surface treatment with the highest occurrence being at 40FR8 and 40CF118. Where limestone or shell tempered ceramics are present in the sample, the surface treatment is usually plain.

Lithics. There is a great disparity between the amount of lithic debitage found in Mason features at the eight sites (Table 45). These differences may be reflective of differing activities performed at the sites during the Late Woodland occupation. The greatest number of primary lithics occur on those sites which also exhibit other signs of more prolonged or intense Late Woodland usage.

TABLE 44

LATE WOODLAND CERAMICS BY SITE

Ceramic Type	Site Number							
	40FR8 (%)	40CF5 (%)	40CF32 (%)	40CF37 (%)	40CF81 (%)	40CF108 (%)	40CF111 (%)	40CF118 (%)
1a	0.40	-	-	-	-	13	10	-
b	1	-	-	-	-	8	21	-
2	-	-	-	-	-	-	0.30	-
3a	-	0.40	-	-	-	-	-	-
b	-	0.40	-	-	-	-	-	-
4a	0.10	-	-	-	-	-	-	-
b	0.43	-	-	-	-	-	-	-
5a	14	30	14	31	37	2	8	5
b	25	7	29	34	19	3	12	28
c	41	8	29	25	18	-	3	10
d	10	1	-	5	7	-	0.30	23
e	0.50	0.20	-	-	-	-	-	-
f	0.02	-	-	-	-	-	-	-
6a	-	0.20	-	-	-	-	-	-
b	-	0.40	-	-	-	-	-	-
c	-	0.20	-	-	-	-	-	-
7a	-	0.20	-	-	3	5	0.70	-
b	-	0.20	-	-	6	32	2	-
c	-	0.20	-	-	2	-	-	-
d	-	-	-	-	0.40	-	-	-
8a	2	40	-	2	7	10	18	18
b	4	4	-	2	2	25	22	13
c	0.30	3	29	-	-	3	1	3

TABLE 44 (continued)

Ceramic Type	Site Number							
	40FR8 (%)	40CF5 (%)	40CF32 (%)	40CF37 (%)	40CF81 (%)	40CF108 (%)	40CF111 (%)	40CF118 (%)
d	0.04	0.20	-	-	-	-	-	-
e	0.50	0.20	-	-	-	-	-	-
f	-	3	-	-	-	-	-	-
g	0.06	0.40	-	-	0.10	-	-	-
h	0.06	0.20	-	-	-	-	-	-
9a	-	-	-	-	-	-	0.30	-
b	2	-	-	-	-	-	-	-
c	-	-	-	-	0.10	-	-	-
10	-	-	-	-	-	-	0.30	-
Total (%)	100	100	100	100	100	100	100	100

TABLE 45

LATE WOODLAND PRIMARY LITHICS BY SITE

Site Number							
40FR8 (n)	40CF5 (n)	40CF32 (n)	40CF37 (n)	40CF81 (n)	40CF108 (n)	40CF111 (n)	40CF118 (n)
9,828	9,399	27	924	5,181	6	3,580	1,015

In all but three of the sites projectile points/knives were the most common lithic tool type (Table 46). This may suggest a heavy reliance on hunting, but it is also very likely that a number of these artifacts were used and reused in a variety of activities. Detailed use-wear analysis would be necessary to determine this, however.

The frequency of occurrence of unifacial implements, bifacial implements and projectile points/knives is very similar at all of the sites but two, 40CF108 and 40CF5. Ground stone was found infrequently in the features, but did occur at the more heavily occupied sites and at the three sites which contained evidence of maize and/or other cultigens.

Modified bone. The absence or low occurrence of bone at archaeological sites has been noted throughout the Normandy Reservoir. This has been generally attributed to lack of preservation due to acid soils. Whether the incredible difference in the number of bone artifacts (Table 47) found in the Elk River Valley site (40FR8) and the seven Normandy Reservoir sites is due purely to preservation factors is highly speculative, although studies of the soils present at each of the sites could help to clarify this question. If the disparity is due more to differences in site function, then the Mason site exhibits very little similarity to the Normandy sites in this particular artifact category, suggesting different activities took place at 40FR8. The one interesting similarity that did occur was the presence of bone artifacts or modified bone at three Normandy sites, 40CF5, 40CF31 and 40CF111, which appear to have been among the most intensely occupied Mason sites.

TABLE 46

LATE WOODLAND FINISHED TOOLS BY SITE

Tool Group	Site Number							
	40FR8 (%)	40CF5 (%)	40CF32 (%)	40CF37 (%)	40CF81 (%)	40CF108 (%)	40CF111 (%)	40CF118 (%)
Unifacial Implements	12	16	-	23	21	8	26	19
Bifacial Implements	29	15	-	23	23	51	22	33
Projectile Points/Knives	52	68	-	54	47	36	52	43
Ground Stone Implements	7	0.8	-	-	10	5	-	5
Total (%)	100	100	100	100	100	100	100	100

TABLE 47

LATE WOODLAND MODIFIED BONE BY SITE

Modified Bone Type	Site Number								Total (n)
	40FR8 (n)	40CF5 (n)	40CF32 (n)	40CF37 (n)	40CF81 (n)	40CF108 (n)	40CF111 (n)	40CF118 (n)	
1	12								12
2	16								16
3	7	7			2				16
4	3								3
5	1								1
6	5						2		7
7	13								13
8	1								1
9	1						3		4
10	-	-	-	-	-	-	-	-	-
11	96	1			3				100
12	1								1
13	5								5
14	8								8
15	1								1
16	2								2
Total (n)	172	8			5		5		190

CHAPTER V

CONCLUSIONS

A. MASON PHASE

Radiocarbon dates from Late Woodland archaeological sites in the Normandy and Tims Ford reservoirs suggest that the local Mason phase occupation occurred between A.D. 600 and A.D. 1100. Data on site content presented documents the use of at least three types of sites during this time: base camps, seasonal encampments and task-specific stations. While sites classified either as base camps or seasonal encampments may both contain several types of features which required considerable initial time and energy outlay (e.g., structures, storage, cooking or processing facilities, and burials), base camp occupations contained artifactual, faunal and botanical remains indicating a much heavier and longer term utilization of the site areas by Mason inhabitants than seasonal encampments. Task-specific stations yielded few types and numbers of Late Woodland artifacts. Where features are present, usually only one feature type is represented indicating that the range of activities carried out on the site was limited.

Three sites, the Mason site (40FR8), the Parks site (40CF5) and possibly the Wiser-Stephens I site (40CF81), probably served as semi-permanent or permanently occupied base camps. Seasonal encampments occurred at the Jernigan II site (40CF37), Banks III site (40CF108), Banks V site (40CF111) and Ewell III site (40CF118). All of these sites

appear to have been inhabited during the late summer or fall months. Eoff I (40CF32) appears to have functioned as a task-specific station possibly used for some type of floral or faunal processing. Mason phase task-specific stations have also been identified in studies not reviewed in this thesis. Butler (1980) reports a Mason phase collection and storage site, the Yearwood site (40LN16), on the Elk River south of the study area. In addition, the Tucker Rock Shelter (40FR16), located in the Tims Ford Reservoir, yielded artifacts which suggest that the site was used as temporary hunting camp during the Mason phase (Milligan 1968).

Floral and faunal remains from the eight Mason phase sites in the study area suggest the exploitation of a wide array of plants and animals. The presence of cultigens indicates that they were also familiar with simple horticultural practices. Large storage facilities indicate some sites were used for extended periods of time.

All of the eight excavated Mason phase sites were located along the Duck or Elk rivers on similar topographic features (e.g., lower elevation terraces) and soils (e.g., silt loams), but differed from each other in distance to the nearest stream, as well as in distance to the nearest identified Late Woodland site. Additional survey data reveals that although the majority of Mason phase sites were located on the older alluvial terraces, a small number of Late Woodland sites occurred on the floodplain, valley slopes and bluffs and in the uplands.

B. FUTURE MASON PHASE RESEARCH

While this thesis has provided a preliminary synthesis of Mason phase data, it has not been possible to explore many research questions pertaining to that phase. A number of problems of local and regional significance which should be addressed in future studies are outlined below.

1. A systematic above-pool survey of the study areas would help to assess sampling bias in previously collected data, as well as provide a basis for more detailed and sophisticated settlement pattern studies.

2. A comparative study of all chert tempered and mixed chert tempered ceramics from the Normandy Reservoir could refine the distinction between Mason phase ceramics and chert tempered ceramics which occur as minority types in other temporal contexts.

3. Preliminary stratigraphic studies from a rockshelter (40MU430) on the lower Duck River suggest a temporal separation between chert tempered ceramics and Hamilton projectile points (Hall 1982: Personal Communication). Any future excavation of Mason phase sites, such as the Powers Bridge site (40CF54) in the Normandy Reservoir, should be designed to carefully examine the stratigraphic relationship of these artifact types which have been used as Mason phase cultural markers.

4. The relationship of the Mason phase to the preceding Owl Hollow phase and the succeeding Banks phase should be clarified. A preliminary analysis of select features from two sites, 40CF108 and 40CF111, suggests the possibility of a developmental sequence from Woodland to Mississippian lifeways represented by the Owl Hollow, Mason

and Banks phases. Such a gradual transition has been documented in the Little Tennessee River Valley in eastern Tennessee (Kimball 1980; Boyd 1982).

5. All lithic and bone tools from Mason phase contexts should be subjected to microwear analyses to determine artifact function and, ultimately, to develop more refined site activity and site function models.

6. Reduction sequence studies on lithic debitage and tools could help to isolate manufacturing techniques unique to Mason phase occupations.

7. A study focusing on the relative importance of plants and animals in the diet of Mason phase peoples would clarify the importance of horticultural activities in the Mason lifeway.

8. Future surveys of the areas surrounding the Normandy and Tims Ford reservoirs should help to delineate the geographical limits of Mason phase activities. Recent studies indicate that chert tempered pottery, a Mason phase indicator, occurs as far west of the study area as the Columbia Reservoir on the lower Duck River (Walter Klippel 1982: Personal Communication; Charles Hall 1982: Personal Communication), to the southwest in Lincoln County, Tennessee, on the Elk River (Butler 1980) and to the northeast in Warren County, Tennessee (Kline 1978).

9. A comparative study of Mason phase lifeways with those of contemporary, contiguous Late Woodland cultural groups of the Tennessee Valley would provide a regional synthesis which ultimately could be used to understand the transition from Woodland hunter-gatherers to Mississippian agriculturalists.

10. While similarity in cultural traits does not necessarily indicate any direct ethnic affiliation, possible relationships between Mason phase groups and later Cherokee and Siouan groups should be explored. Shaft-and-chamber burials are found occasionally on both Mason phase sites and on prehistoric and historic Cherokee and Siouan sites (McCollough et al. 1979). Ceramics having a distinctive knot-roughened/net impressed surface treatment occur at Mason sites, as well as at some protohistoric and historic sites in North Carolina (Coe and Lewis 1952), Virginia (Holland 1970; Evans 1955) and Kentucky (Dunnell 1972).

As can be readily seen by examining the research problems outlined above, many questions remain to be answered about the Late Woodland Mason phase. It is hoped that this thesis will serve as a point of departure for future Late Woodland studies in the Middle Tennessee area.

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APPENDICES

APPENDIX I

TABLE I-1

LATE WOODLAND FEATURE CONTENTS—40FR8

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 1			
2a	A	1	5a	8	None	Unidentifiable bird bone fragments (UBBF)		
36a	M	1	b	15				
45	F	1	c	5				
48	F	1	d	4		Unidentifiable fish bone fragments (UFBF)		
122	F	1	8a	1				
138	F	1						
300	-	110				Unidentifiable large mammal fragments (ULMF)		
						Terrapene cf. *carolina*, Box turtle		
						Odocoilus virginianus, White-tailed deer		
						Procyon lotor, Raccoon		
						Moxostoma sp., Redhorse		
						Meleagris gallopavo, Wild turkey		

TABLE I-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 4			
300		1	None		None	ULMF		
					Feature 6			
6		1	5a	1	None	UBBF		
300		26	b	1		UFBF		
			c	1		ULMF		
			d	3		Odocoileus virginianus, White-tailed deer		
			8a	3				
			e	8		Sternotherus odoratus, Musk turtle		
					Feature 7			
6	-	1	5a	3	Fruits, Nuts and Seeds	Terrapene cf. carolina, Box turtle	11	1
18	B	1	b	1				
48	M	1	c	2	Carya spp., hickory nut shell	Sylvilagus floridanus, Eastern cottontail		
111	L	1	d	3	Juglandaceae, Walnut shell			
138	A	1				Odocoileus virginianus, White-tailed deer		
300	-	27			Quercus spp., acorn			
						Moxostoma sp., Redhorse		
					Gleditsia triacanthos, Honey locust	Catostomidae, Sucker family		
					Leguminosae (wild) Locust/Acacia family	Meleagris gallopavo, Wild turkey		

TABLE I-1 (continued)

Lithics			Ceramics		Botanical Species	Faunal Species	Modified Bone	
T	R.M.	n	T	n			T	n
					Feature 7 (continued)			
					Asteraceae, Composite family	*Marmota monax*, Woodchuck		
					Woods			
					Quercus rubra, Red oak			
					Juglans spp., Walnut			
					Pinus sp. Pine			
					Castanea dentata, American chestnut			
					Carya spp., Hickory			
					Cornus florida, Dogwood			
					Fraxinus spp., Ash			
					Sassafras albidum, Sassafras			

TABLE I-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 8			
6	-	2	5a	1		UBBF		
10	M	1	d	4		ULMF		
14	M	1	8a	1		Odocoileus virginianus,		
300	-	10				White-tailed deer		
					Feature 9			
2a	M	1	4b	3	Fruits, Nuts, and Seeds	UFBF		
c	A	3	5a	231		UBBF	1	3
d	A	2	b	458	Carya spp.,	Unidentifiable mammal	2	5
d	F	8	c	968	Hickory nut	bone fragment (UMBF)	3	3
6	-	101			shell		4	1
10	B	1	d	178				
	F	1	e	3		Odocoileus virginianus,	6	2
14	M	1	8a	29	Corylus sp.,	White-tailed deer	7	4
16	A	2	b	59	Hazelnut		8	1
21	F	1	c	8		Small rodent	9	1
22	F	1	d	1	Juglandaceae,		11	20
24	A	4	g	2	Walnut family	Meleagris gallopavo,	13	3
25	A	1	h	1		Wild turkey	14	2
	B	2			Juglans sp.,		16	1
	M	1			Walnut shell	Castor canadensis,		
31	Y	2				Beaver		
32	A	1			Juglans			
36a	A	1			cinerea,	Didelphis marsupialis		
38	A	1			Butternut shell	Opposum		
42	A	1						
	B	1			Quercus sp.,	Catostomidae,		
45	M	2			Acorn	Sucker family		
46	A	1						

TABLE I-1 (continued)

Lithics			Ceramics		Botanical Species	Faunal Species	Modified Bone	
T	R.M.	n	T	n			T	n
					Feature 9 (continued)			
					Leguminosae (wild), Locust/acacia family	Trionyx sp., Softshell turtle		
					Lagenaria siceraria, Gourd	Pseudemys/Graptemys, Turtle group		
					Vitis spp. Grape	Moxostoma sp. Redhorse		
					Viburnum spp., Blackhaw, Arrowwood, Mapleleaf, Wayfaring Tree family			
					Potamogeton spp., Pondweed			
					Graminae, Grass family			
					Heliotrophium sp. Forget-me-not family			
					Croton sp.			
					Rubus sp., Raspberry, blackberry, dewberry family			

TABLE I-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 9 (continued)			
48	A	1			Castanea dentata, American chestnut	Terrapene cf. carolina, Box turtle		
49	F	1						
51	A	1						
55	A	1			Cucurbita pepo L., Squash rind	Turtle sp.		
	F	1						
58	D	1				Marmota monax, Woodchuck		
60	A	1			Gleditsia triacanthos, Honey locust			
78	J	1						
138	A	7				Procyon lotor, Raccoon		
	B	1			Helianthus annuus L., Sunflower			
	F	3						
	M	6				Sciurus niger, Gray squirrel		
145	O	1			Woods			
149	Y	1						
151	S	1			Ulmus americana, Elm	Colinus virginianus, Bobwhite		
157	X	1						
300	-	1754						
					Diospyros virginia, Persimmon	Tamias striatus, Eastern chipmunk		
					Pinaceae, Pine/cedar family	Pylodictus olivaris		
						Oryzomys palustris, Rice rat		
					Quercus alba, White oak			
						Scaphiopus holbrooki, Eastern spade-foot toad		
					Quercus rubra, Red oak			

TABLE I-1 (continued)

Lithics			Ceramics		Botanical Species	Faunal Species	Modified Bone	
T	R.M.	n	T	n			T	n
					Feature 9 (continued)			
					Quercus spp., Oak	Frog/toad family		
					Juglans spp., Walnut			
					Feature 10			
2d	M	2					7	2
6	-	7	5a	19		UBBF	11	2
8	M	1	b	22		ULMF		
10	M	1	c	10		Terrapene cf. carolina, Box turtle		
36a	F	2	d	6				
45	B	1	e	1				
46	F	1	8a	4				
47	A	1	b	2		Odocoileus virginianus, White-tailed deer		
138	F	2						
225	0	1						
300	-	182						
						Rana sp., Frog		
						Didelphis marsupialis, Opposum		
						Procyon lotor, Raccoon		
						Chelydra serpentina, Snapping turtle		

TABLE I-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 10 (continued)			
						Catostomidae, Sucker family		
						Turtle spp.		
					Feature 12			
6	-	1	5a	1		UBBF		
14	A	2	c	1		ULMF		
25	A	2	d	5		Homo sapiens		
32	M	1	8b	6		sapiens,		
42	F	1	9b	1		Human		
45	A	1						
138	A	1						
300	-	22						
					Feature 15			
			4a	3	Fruits, Nuts, and Seeds	UMBF	1	7
2a	A	3	b	17		UBBF	2	6
	B	2	5a	284		UFBF	3	2
	F	1	b	464	Carya spp.,		6	1
6	-	106	c	708	Hickory nut	Odocoileus	7	2
8	A	1	d	142	shell	virginianus,	11	23
10	A	2	e	3		White-tailed	12	1
14	A	1	8a	18	Juglandaceae,	deer	14	2
17	A	2	b	32	Walnut family		15	1
	B	1	e	6		Procyon lotor,	16	1
	F	1	c	2	Quercus spp.,	Raccoon		
18	A	1	h	1	acorn			
19	A	1						

TABLE I-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone N
					Feature 15 (continued)			
19	M	2			Cucurbitaceae, Squash/gourd family	Didelphis marsupialis, Opposum		
23	M	1						
25	A	4						
26	M	1			Juglans cinerea, Butternut	Scuirus spp., Squirrel		
27	A	1						
					Asteraceae, Composite family	Castor canadensis, Beaver		
					Chenopodium spp., Lamb's quarters (pigweed)	Scalopus aquaticus, Eastern mole		
						Oryzomys palustris, Rice rat		
					Diospyros virginiana, Persimmon			
						Sylvilagus floridanus, Eastern cottontail		
					Galium trifidum Cleavers (bedstraw)			
						Terrapene cf. carolina Box turtle		
					Gleditsia triacanthos, Honey locust			
						Turtle spp.		
					Vitis spp., Grape	Sternotherus odoratus, Musk turtle		
					Zea mays, Corn			

TABLE I-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 15 (continued)			
138	B	5			Passiflora incarnata, Maypops	Meleagris gallopavo, Wild turkey		
	M	3						
144	O	2						
150	O	2			Polygonum erectus, Smartweed	Grus canadensis, Sandhill crane		
151	O	2						
153	Q	1						
154	Y	1			Woods	Scaphiopus holbrooki, Eastern spadefoot toad		
157	O	1						
300	-	1619			Quercus alba, White oak	Bufo sp., Toad		
					Quercus rubra, Red oak	Rana sp., Frog		
					Quercus spp., Oak family	Aplondinotus grunniens, Drum		
					Fagaceae spp., Beech, chestnut/oak family	Moxostoma sp., Redhorse		
					Juglans spp., Walnut	Catostomidae, Sucker family		
					Platanus occidentalis, Sycamore	Micropterus sp., Bass		
					Vitis spp., Grape	Ictalarus sp., Bullhead		

TABLE I-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 15 (continued)			
					Pinus sp., Pine	Mephitus mephitus, Skunk		
					Castanea dentata, American chestnut	Martes pennanti, Fisher		
					Carya spp., Hickory	Tamias striatus, Eastern chipmunk		
						Micropterus sp., Bass		
						Canis familiaris, Dog		
						Pseudemys/Graptemys Turtle group		
						Ictalurus sp., Channel and/or Blue catfish		
					Feature 18			
90	B	1						
300	-	16	5c	1				
			8a	4				

TABLE I-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 21			
6	-	1	5a	5		UFBF		
138	M	1	b	4		ULMF		
300	-	6	c	2		Catostomidae,		
			8a	1		Sucker family		
					Feature 22			
6	-	1	5a	10		UBBF	3	1
25	A	1	b	29		UFBF		
138	F	1	c	95		ULBF		
300	-	24	d	7		Terrapene		
			8a	1		cf. carolina,		
			b	4				
						Odocoileus virginianus,		
						White-tailed deer		
						Elaphe obsoleta,		
						Black snake		
						Catostomidae,		
						Sucker family		
						Meleagris		
						gallopavo,		
						Wild turkey		
					Feature 24			
2a	B	1	1a	21		UBBF	2	3
b	F	1	b	57		UFBF	3	1
c	M	1	4b	1		ULMF	4	2

TABLE I-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 24 (continued)			
d	A	1	5a	61		Castor	11	8
d	B	1	b	124		canadensis,	14	2
d	F	4	c	152		Beaver		
d	M	1	d	65				
6	-	62						
10	A	1	8a	28		Terrapene		
24	A	1	b	118		cf. carolina,		
	M	1	c	3		Box turtle		
25	B	4	e	12				
	M	1	g	1		Odocoileus		
26	F	1	9b	1		virginianus,		
	M	1				White-tailed		
45	F	1				deer		
	M	2						
46	A	2				Rana sp.,		
	F	1				Frog		
48	A	1				Sternotherus		
49	A	1				odoratus,		
50	F	1				Musk turtle		
54	A	1						
	M	1				Procyon lotor,		
58	A	2				Raccoon		
90	M	1				Trionyx sp.,		
110	A	1				Soft shell		
138	A	2				turtle		
	F	1						

TABLE I-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 24 (continued)			
151	Q	1				Sciurus niger, Squirrel		
155	P	2						
157	X	1						
300	-	647				Catostomidae, Sucker family		
						Meleagris gallopavo, Wild turkey		
						Turtle sp.		
						Marmota monax, Woodchuck		
					Feature 25			
6	-	3	4a	1		UBBF	7	1
25	A	1	5a	12		ULMF		
111	F	1	b	9				
300	-	47	c	14				
			d	8				
			e	1				
			8a	1				
			b	1				
					Feature 26			
6	-	11						
7	F	1	5a	18		ULMF	1	1
14	A	1	b	37		UFBF	6	2
22	A	1	c	45		UBBF	7	3
24	M	1	d	18			11	3

TABLE I-1 (continued)

Lithics			Ceramics			Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T n
					Feature 26 (continued)		
25	M	1	e	7		Odocoileus virginianus, White-tailed deer	
26	F	1	f	1			
29	Y	2	8b	2			
31	Y	1	c	1			
32	F	2					
42	M	1				Ondontra zibethica, Muskrat	
45	A	1					
	F	1					
47	A	1					
49	A	2				Procyon lotor, Raccoon	
50	-	1					
138	A	1					
	B	2				Didelphis marsupialis, Opposum	
300	-	226					
						Trionyx sp., Softshell turtle	
						Terrapene cf. carolina, Box turtle	
						Pseudemys/Graptemys, Turtle group	
						Meleagris gallopavo, Wild turkey	
						Turtle spp.	

TABLE I-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 26 (continued)			
						Moxostoma sp., Redhorse		
						Catostomidae, Sucker family		
						Marmota monax, Woodchuck		
						Amia calva, Bowfin		
						Ictalurus sp., Bullhead		
						Ictalurus sp., Channel and/or Blue catfish		
						Pylodictus olivaris, Flathead catfish		
					Feature 29			
						Canis familiaris, Dog		
					Feature 30			
2c	F	1	4a	1		ULMF	1	1
6	-	31	b	1		UBBF	2	1
10	F	1	5a	66		UFBF	5	1

TABLE I-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 30 (continued)			
16	F	2	b	99			7	1
24	A	1	c	88		Ictalurus sp.,	11	12
	M	2	d	69		Bullhead/	13	2
25	A	3	e	10		Channel	14	1
	B	1	8a	10		catfish/		
28	Y	2	b	10		Blue catfish		
31	A	1	d	1				
36a	F	1				Lynx rufus,		
37	F	1				Bobcat		
45	A	1						
49	A	1				Sciurus sp.,		
50	M	1				Fox squirrel		
51	F	2						
58	F	1				Catostomidae,		
	M	1				Sucker family		
81	D	1						
114	A	1				Small rodent		
122	A	1						
138	A	1				Odocoileus		
	M	2				virginianus,		
151	O	1				White-tailed		
300	-	443				deer		
						Terrapene cf.		
						Box turtle		
						Turtle sp.		
						Pseudemys/Graptemys		
						Turtle group		

TABLE I-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 30 (continued)			
						Trionyx sp., Softshell turtle		
						Procyon lotor, Raccoon		
						Castor canadensis, Beaver		
					Feature 31			
6	-	6	5a	1		ULMF		
138	A	1	b	1				
155	P	2	c	2		Odocoileus		
300	-	38	d	1		virginianus,		
			8a	1				
			b	2		White-tailed deer		
					Feature 32			
6	-	10	5a	7		ULMF		
24	A	1	b	14		UBBF		
25	A	1	c	8		UFBF		
300	-	84	d	9				
			e	1		Rana sp.,		
			8h	1		Frog		
						Terrapene cf. carolina, Box turtle		
						Meleagris gallopavo, Wild turkey		

TABLE I-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 32 (continued)			
						Odocoileus virginianus, White-tailed deer		
					Feature 33			
300	-	10				ULMF UFBF	11	7
					Feature 36			
			5a	3		ULMF		
			b	3		Ondatra zibethica, Muskrat		
			c	7				
			d	4				
					Feature 38			
46	A	2	5b	2		ULMF		
	F	1	c	5		UBBF		
300	-	8	d	1				
			8e	1		Odocoileus virginianus, White-tailed deer		
					Feature 40			
6	-	1	5a	1		Odocoileus virginianus, White-tailed deer	14	1
300	-	4	b	2				

APPENDIX II

TABLE II-1

LATE WOODLAND FEATURE CONTENTS—40CF5

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 17 (Burial 1 and Burial 2)			
3	A	6	8a	15		cf Appendix III		
	B	17	b	1				
	C	5	c	3				
	E	1	5a	1				
4	A	55	6a	1				
	B	12	b	2				
	C	14						
5	A	14						
	B	3						
	C	7						
6	A	4						
67	A	1						
92	A	1						
Ground calcareous crinoid stem (possible ear ornament)								
					Feature 19 (Burial 3)			
3	A	21	8a	11	Carya spp.,	cf Appendix III		
	B	19	b	3	Hickory nut shell			
	C	9	c	2				
	F	2			Juglandaceae,			
	I	1			Walnut family			
4	A	42						
	B	24						

TABLE II-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 19 (Burial 3) (continued)			
	C	39						
5	A	62						
	B	11						
	C	29						
6	A	6						
19	A	1						
32	C	1						
111	B	1						
					Feature 20			
3	A	50	8a	11	Charred	cf Appendix III		
	B	35	5a	1	nut shell			
	C	12						
	F	5						
4	A	107						
	B	24						
	C	57						
	F	3						
	I	2						
	L	1						
5	A	26						
	B	3						
	C	15						
	F	2						
6	A	12						
	B	3						
8	F	1						

TABLE II-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 22 (Burial 4)			
3	A	3			Charred	cf Appendix III		
	B	1			nut shell			
	C	3						
4	A	11						
	B	2						
	C	4						
5	A	2						
	C	8						
	F	2						
6	A	1						
					Feature 23			
2d	A	2	8a	5				
3	A	34	b	1				
	B	18	c	2				
	C	11			*Carya* spp.,			
	F	7			Hickory nut shell			
	I	2						
4	A	149			Juglandaceae,			
	B	27			Walnut family			
	C	41						
	F	7						
5	A	2						
	B	4						
	C	5						
	E	1						
	F	1						
6	A	4						

TABLE II-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 23 (continued)			
10	A	1						
	D	1						
138	A	1						
					Feature 24			
3	A	64	8a	13		cf Appendix III		
	B	33	b	1				
	C	18	f	1	Carya spp.,			
	D	1	5a	5	Hickory nut shell			
	F	8	b	5				
4	A	233			Juglandaceae,			
	B	61			Walnut family			
	C	70						
	F	3						
5	A	13						
	B	2						
	C	2						
	F	3						
6	A	7						
	C	5						
26	A	1						
61	C	1						
65	A	1						
111	C	1						
138	A	2						
	F	1						

TABLE II-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 25 (Burial 6)			
3	A	12	8a	2	Fruits, Nuts, and	cf Appendix III		
	B	10						
	C	2						
	F	1			Carya spp.,			
4	A	39			Hickory nut shell			
	B	17						
	C	20						
	F	1			Juglandaceae,			
	M	1			Walnut family			
5	A	8						
	C	7			Woods			
6	B	1						
					Carya spp.,			
					Hickory			
					Quercus spp.,			
					Oak			
					Gymnocladus dioicus,			
					Kentucky coffeetree			
					Feature 26			
3	A	25	8a	5	Charred	cf Appendix III		
	B	15			nutshell			
	C	8						
	F	3						
	I	1						
4	A	90						
	B	22						

TABLE II-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 26 (continued)			
	C	53						
	F	2						
5	A	1						
6	A	1						
	C	2						
8	B	1						
14	F	1						
32	A	1						
36a	A	1						
53	F	1						
138	F	1						
					Feature 27 (Burial 8a, 8b, 8c)			
2d	A	1	8a	3	Charred	cf Appendix III		
3	A	50			nut shell			
	B	51						
	C	15						
	D	3						
	F	2						
4	A	182						
	B	70						
	C	50						
	D	6						
	F	9						
5	A	7						
	C	15						
6	B	1						
	C	1						
48	A	1						
101	A	1						

TABLE II-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 28 (Burial 5 and Burial 7)			
3	A	55						
	B	46	8a	4		cf Appendix III		
	C	11	b	2				
	D	6	c	2				
	K	4	e	1	*Carya* spp.,			
4	A	133	5a	2	Hickory nut shell			
	B	109	3b	2				
	C	50			Juglandaceae,			
	D	4			Walnut family			
	F	1						
	M	1			*Juglans* spp.,			
5	A	22			Walnut shell			
	B	2						
	C	11			*Quercus* spp.,			
	D	2			Acorn shell			
6	A	2						
	B	1						
	C	3						
27	A	1						
52	A	1						
53	M	1						
54	C	1						
67	A	1						
					Feature 29			
3	A	20	8a	3	Charred	cf Appendix III		
	B	11	6c	1	nut shell			
	C	9						
	F	3						

TABLE II-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 29 (continued)			
4	A	58						
	B	15						
	C	21						
	F	5						
138	C	1						
					Feature 32			
3	A	79	5a	17		cf Appendix III		
	B	39	c	1				
	C	23			*Carya* spp.,			
	D	1			Hickory nut shell			
	F	4						
	I	1			Juglandaceae,			
4	A	345			Walnut family			
	B	63						
	C	123						
	I	1						
	M	5						
5	A	6						
	C	8						
6	A	11						
	B	3						
	C	10						
16	A	1						
25	A	1						
26	A	1						
36a	C	1						
48	C	1						
101	A	1						
138	A	2						

TABLE II-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 33			
2d	A	1	5a	2		cf Appendix III		
3	A	71	b	2				
	B	29	c	1				
	C	64			Carya spp.,			
	D	1			Hickory nut shell, husk			
	F	2						
	M	1			Juglandaceae,			
4	A	154			Walnut family			
	B	64						
	C	211			Juglans spp.,			
5	A	9			Walnut shell			
	C	11						
6	B	1						
	C	4						
14	A	1						
46	C	1						
48	C	1						
58	C	1						
138	A	1						
	C	1						
					Feature 36			
2a	A	1						
2d	C	1	8a	42	Carya spp.,	cf Appendix III		
3	A	209	b	7	Hickory nut shell			
	B	168	c	2				
	C	108	d	1	Juglandaceae,			
	D	3	7a	1	Walnut family			
	E	2	b	1				

TABLE II-1 (continued)

Lithics			Ceramics		Botanical Species	Faunal Species	Modified Bone	
T	R.M.	n	T	n			T	n
					Feature 36 (continued)			
	F	20	5a	46				
	I	1	b	7				
	J	1	d	4				
4	A	361	c	9				
	B	147						
	C	304						
	E	1						
	F	15						
	I	13						
	J	1						
5	A	15						
	B	6						
	C	21						
	F	1						
6	A	9						
	B	4						
	C	15						
	F	2						
14	C	1						
16	C	1						
17	B	1						
25	A	2						
27	A	1						
36b	A	1						
43	A	1						
54	A	1						
56	A	1						
58	C	1						
100	A	1						

TABLE II-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 36 (continued)			
111	C	1						
112	A	1						
138	A	4						
	B	1						
	C	4						
140/ 52	A	1						
					Feature 38			
3	A	36	8a	4	Charcoal	cf Appendix III		
	B	34	b	1				
	C	20	5a	16				
	F	3	b	2				
4	A	71	d	1				
	B	24						
	C	34						
	F	2						
5	A	38						
	B	3						
	C	29						
6	A	2						
	B	3						
	C	5						
25	A	1						
36a	C	1						
111	A	3						

TABLE II-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 39 (Burial 9a, 9b, and 10)			
3	A	18	8a	3	Fruits, Nuts, and Seeds	cf Appendix III		
	B	12	b	1				
	C	9	c	2	Carya spp.,			
	F	3	5a	2	Hickory nut shell			
5	A	69	b	1				
	B	20	3a	1	Juglandaceae,			
	C	23			Walnut family			
	F	5						
5	F	2			Cucurbitaceae, gourd/			
26	F	1			squash family			
92	A	1						
138	A	1			Woods			
	B	1						
139/ 116	B	1			Quercus rubra, Red oak group			
					Juglans spp., Walnut			
					Carya spp., Hickory			
					Pinus sp., Pine			
					Diospyros virginiana, Persimmon			
					Kalmia spp., Laurel			

TABLE II-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 39 (Burial 9a, 9b, and 10) (continued)			
					Acer spp. Maple			
					Fabaceae, Honey locust/ Kentucky coffeetree			
					Feature 40			
3	A	47	8a	8	Fruits, Nuts, and Seeds	cf Appendix III		
	B	25	b	1			3	7
	C	12	h	1	Carya spp.,			
	F	13	7c	1	Hickory nut shell			
4	A	27	5a	18				
	B	28	c	17	Juglans cinerea,			
	C	66			Butternut shell			
	D	2						
	F	18			Quercus spp.,			
	I	1			Acorn shell			
5	A	9						
	F	1			Curcurbita pepo,			
6	A	9			Squash			
	B	1						
10	B	1			Lagenaria			
14	B	1			siceraria,			
138	A	2			Gourd			
155	P	1						
					Galium spp.,			
					Cleavers			

TABLE II-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 40 (continued)			
					Passiflora incarnata, Maypops			
					Woods			
					Carya spp., Hickory			
					Juglans spp., Walnut			
					Quercus spp., Oak			
					Gleditsia triacanthos, Honey locust			
					Prunus serotina, Black cherry			
					Arundinaria spp., Cane			
					Feature 44 (Burial 11)			
3	A	32	8a	8	Fruits, Nuts, and Seeds	cf Appendix III		
	B	16						
	C	14			Carya spp., Hickory nut shell			
	F	3						

TABLE II-1 (continued)

Lithics			Ceramics		Botanical Species	Faunal Species	Modified Bone	
T	R.M.	n	T	n			T	n
					Feature 44 (Burial 11) (continued)			
4	A	55			Juglandaceae,			
	B	18			Walnut family			
	C	44						
	F	4			Quercus spp.,			
5	A	9			Acorn shell			
	B	1						
	C	10			Woods			
6	A	3						
	C	2			Quercus alba,			
	F	1			White oak			
32	A	2						
138	F	1			Quercus rubra,			
					Red oak			
					Juglans spp.,			
					Walnut			
					Pinus spp.,			
					Pine			
					Carya spp.,			
					Hickory			
					Fabaceae,			
					Honey locust/Kentucky			
					coffeetree family			
					Acer spp.,			
					Maple			

TABLE II-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 44 (Burial 11) (continued)			
					Maclura pomifera Osage-orange			
					Fagus spp., Beech			
					Cornus florida, Dogwood			
					Feature 51			
2a	A	1	8a	3	Charcoal			
3	A	46	5a	2				
	B	12						
	C	21						
	F	1						
4	A	89						
	B	24						
	C	38						
	F	1						
5	A	21						
	B	5						
	C	6						
	F	1						
6	A	2						
	C	2						
14	C	1						
17	A	1						
24	A	1						
	B	1						

TABLE II-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 51 (continued)			
25	A	1						
111	A	1						
138	A	1						
					Feature 52			
3	A	1	8a	4	Charcoal	cf Appendix III		
	C	1						
4	A	9						
	B	1						
	C	1						
	F	2						
5	A	2						
	B	1						
45	C	1						
46	C	1						
					Feature 53			
3	A	3	8a	1	Fruits, Nuts, and Seeds	cf Appendix III		
	B	2	5c	8				
	C	6						
4	A	23			Carya spp., Hickory nut shell			
	B	3						
	C	17						
					Juglandaceae, Walnut shell			
					Quercus spp., Acorn shell			

TABLE II-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 53 (continued)			
					Corylus sp., Hazelnut shell			
					Cucurbita pepo, Squash			
					Gleditsia triacanthos L., Honey locust			
					Woods			
					Quercus rubra, Red oak			
					Gymnocladus dioicus, Kentucky coffeetree			
					Arundinaria spp., Cane			
					Feature 58			
3	A	5	5b	1	Charred nut shell			
	B	1						
	C	2						
4	A	10						
	B	6						
	C	2						

TABLE II-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 62			
3	A	1	5a	1				
	B	1						
	A	5						
4	B	2						
	C	1						
					Feature 82			
3	A	21	8a	10	Carya spp.,	cf Appendix III		
	B	9	f	1	Hickory nut shell			
	C	10	5b	1				
	D	1			Juglandaceae,			
	F	2			Walnut family			
4	A	33						
	B	9			Juglans spp.,			
	C	14			Walnut			
	F	1						
5	A	7			Quercus spp.,			
	B	5			Acorn shell			
	C	13						
18	N	1			Woods			
58	A	1						
103	A	1			Arundinaria spp.,			
138	B	1			Cane			
					Feature 99			
2d	A	1	8a	7	Charred	cf Appendix III		
3	A	3	b	1	nut shell			
	B	5	5a	1				
	C	7						

TABLE II-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 99 (continued)			
4	A	11						
	B	2						
	C	7						
6	A	1						
58	A	1						
					Feature 106			
4	C	1	8f	13	Fruits, Nuts, and Seeds			
			5b	4				
					Carya spp., Hickory nut shell, husk			
					Juglandaceae, Walnut family			
					Quercus spp., Acorn shell			
					Cucurbitaceae, Squash family			
					Woods			
					Quercus alba, White oak			
					Quercus rubra, Red oak			
					Juglans spp., Walnut			

TABLE II-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 106 (continued)			
					Castanea dentata, Chestnut			
					Carya spp., Hickory			
					Sassafras albidum, Sassafras			
					Feature 112 (Burial 12)			
3	A	169	8a	9	Charred			
	B	82	5a	39	nut shell			
	C	164	b	11				
	F	26	e	1				
	I	1	3a	1				
	L	1						
4	A	468						
	B	119						
	C	485						
	D	1						
	E	1						
	F	20						
	I	3						
	K	1						
5	A	23						
	B	5						
	C	52						
	F	1						

TABLE II-1 (continued)

Lithics			Ceramics			Modified Bone	
T	R.M.	n	T	n	Botanical Species / Faunal Species	T	n
					Feature 112 (Burial 12) (continued)		
6	A	5					
	B	1					
	C	8					
	F	2					
8	A	1					
	C	2					
14	A	2					
24	A	1					
31	A	1					
45	A	1					
	C	2					
	F	1					
46	C	1					
48	A	5					
	B	1					
50	C	1					
51	A	1					
52	C	2					
58	C	4					
59	A	1					
61	A	1					
111	A	1					
113	C	1					
138	A	6					
					Feature 135		
3	A	18	8a	1	Charred		
	B	10	5a	1	nut shell		
	C	2					

TABLE II-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 135 (continued)			
4	A	25						
	B	14						
	C	6						
	D	2						
	F	1						
5	A	2						
6	A	4						
111	A	1						
153	Q	1						
					Feature 136			
3	A	13	8a	20	Charred	cf Appendix III	11	1
	B	11	b	3	nut shell			
	C	3	c	3				
	F	2	5a	4				
4	A	7	b	4				
	B	3	c	7				
	C	8						
5	A	12						
	B	1						
	C	7						
	F	1						
6	A	1						
	C	1						

TABLE II-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 150			
3	A	35	8a	16	Fruits, Nuts, and Seeds	cf Appendix III		
	B	18	g	2				
	C	14	5a	1	Carya spp.,			
	F	1			Hickory nut shell			
4	A	76						
	B	11			Juglandaceae,			
	C	29			Walnut family			
	F	1						
5	A	1			Juglans spp.,			
	B	1			Walnut shell			
	C	1						
	F	1			Quercus spp.,			
25	C	1			Acorn shell			
					Woods			
					Quercus alba,			
					White oak			
					Quercus rubra,			
					Red oak			
					Juglans spp.,			
					Walnut			
					Castanea dentata,			
					Chestnut			
					Carya spp.,			
					Hickory			

TABLE II-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 150 (continued)			
					Fraxinus spp., Ash			
					Acer spp., Maple			
					Fabaceae, Honey locust/Kentucky coffeetree family			
					Prunus serotina, Black cherry			

APPENDIX III

TABLE III-1

FAUNAL SPECIES RECOVERED FROM LATE WOODLAND FEATURES AT 40CF5
(Compiled from Robison, 1982)

Species	Common Name
Blarina brevicauda	Short-tailed shrew
Myotis sp.	Myotis bat
Procyon lotor	Raccoon
Canis familiaris	Domestic dog
Sciurus sp.	Gray/Fox squirrel
Reithrodontomys humulis	Eastern harvest mouse
Peromyscus spp.	White-footed mouse
Microtus pinetorum	Pine vole
Cricetidae	Small rodent
Sylvilagus floridanus	Cottontail
Odocoileus virginianus	White-tailed deer
Indeterminate mammal bone fragments	
Passerine sp.	
Indeterminate bird bone fragments	
Chrysemys/Graptemys spp.	Turtle
Terrapene carolina	Box turtle
Turtle spp.	
Viperidae	Snake
Colubridae	Snake
Snake spp.	
Rana catesbiana	Bullfrog
Rana sp.	Frog
Scaphiopus holbrooki	Eastern Spadefoot toad
Bufo sp.	Road
Toad/Frog spp.	
Cryptobranchus alleganiensis	Hellbender
Indeterminate fish bone fragments	
Olivella cf. *jaspidea*	Marine gastropod
Pupillidae	Terrestrial gastropod
Discus patulus	Terrestrial gastropod
Anguispira alternata	Terrestrial gastropod
Stenotrema fraternum	Terrestrial gastropod
Mesodon inflectus	Terrestrial gastropod
Triodopsis albolabris	Terrestrial gastropod
Goniobasis laqueata/edgariana	Freshwater gastropod
Pleurocera canaliculatum	Freshwater gastropod
Indeterminate gastropods	
Indeterminate terrestrial gastropods	

APPENDIX IV

TABLE IV-1

LATE WOODLAND FEATURE CONTENTS—40CF32

Lithics			Ceramics		
T	R.M.	n	T	n	Botanical Species
			Feature 1 (Area A)		
2d	A	1	5a	1	Fruits, Nuts, and Seeds
3	A	4	b	1	
4	A	6			Carya sp., Hickory nut shell
	B	1			
6	A	1			
	B	1			Woods
					Wood charcoal
			Feature 13 (Area A)		
4	A	2			
			Feature 16 (Area A)		
3	A	1	5c	1	
			Feature 18 (Area A)		
			5b	1	Fruits, Nuts, and Seeds
					Carya sp., Hickory nut shell
					Zea mays, Corn
					Woods
					Arundinaria gigantea, Cane
					Carya sp., Hickory
			Feature 22 (Area A)		
3	A	1	8c	1	
	B	2			
4	A	1			
5	A	1			
	C	1			
6	A	3			

TABLE IV-1 (continued)

Lithics			Ceramics		
T	R.M.	n	T	n	Botanical Species
			Feature 23 (Area A)		
6	A	1	8c	1	
	F	1	5c	1	

APPENDIX V

TABLE V-1

LATE WOODLAND FEATURE CONTENTS—40CF37

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
				Feature 2 (Burial 1)		
4	-	1	5b	3		Homo sapiens
55	-	14	a	1		sapiens,
			c	2		Human
			d	1		
			8b	1		
				Feature 19		
3	A	33	8a	1	Carya sp.,	
	B	4	5a	2	Hickory nut	
	C	24	b	10	shell	
4	A	23	c	2		
	B	13			Juglans cinerea,	
	C	37			Butternut	
5	A	26			shell	
	B	7				
	C	27				
	F	2				
6	A	4				
	B	1				
	C	5				
	F	3				
19	C	1				
28	C	1				
138	A	2				
	C	1				
				Feature 55 (Burial 9)		
2a	C	1	8b	2	Fruits, Nuts, and	Homo sapiens
3	A	71	a	1	Seeds	sapiens,
	B	25	5b	25		Human
	C	113	a	30	Carya spp.,	UFBF
	F	4	c	24	Hickory nut	UMBF
	I	4	d	5	shell	
4	A	157				Moxostoma sp.,
	B	82			Juglans nigra,	Redhorse
	C	215			Black walnut	
	G	1			shell	
5	A	4	8b	2		
	B	1	a	1	Juglandaceae,	
	C	10	5b	25	Walnut family	
8	C	1	a	30		
10	A	1	c	24		

TABLE V-1 (continued)

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
			Feature 55 (Burial 9) (continued)			
25	A	1	d	5		
51	C	1			Quercus sp., Acorn shell	
116	A	1				
138	B	1				
	C	2			Vitis spp., Grape	
					Woods	
					Carya spp., Hickory	
					Quercus spp., Oak	
					Quercus alba, White oak	
					Quercus rubra, Red oak group	
					Plantanus occidentalis, Sycamore	

APPENDIX VI

TABLE VI-1

LATE WOODLAND FEATURE CONTENTS—40CF81

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 2			
			5d	2	Fruits, Nuts, and Seeds	Aquatic gastropods		
			7a	5				
			d	11	Carya spp., Hickory nut shell			
					Woods			
					Quercus spp., Oak			
					Quercus rubra, Red oak			
					Carya spp., Hickory			
					Unidentified wood fragments			
					Feature 3			
1	A	1	5a	233	Carya spp.,	Campeloma sp.,	3	1
2a	A	1	b	117	Hickory nut	Aquatic		
	M	1	d	26	shell	gastropod		
2d	A	13	c	87				
	B	2	7a	14	Juglans nigra,	Pleurocera sp.,		
	F	1	b	23	Black walnut	Aquatic		
	N	1	d	3		gastropod		

TABLE VI-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 3 (continued)			
3	A	728	c	1	*Vitis* spp.,			
	B	451	8a	21	Grape	*Lithansia* sp.,		
	C	10	b	4		Aquatic		
	F	9	9c	1		gastropod		
	M	1						
	S	1				*Goniobasis* sp.,		
4	A	967				Aquatic		
	B	237				gastropod		
	C	42						
	F	7				*Anculosa* sp.,		
	K	5				Aquatic		
	M	4				gastropod		
5	A	176				UFBF		
	B	29				UMBF		
	C	21				UBBF		
	F	4						
	M	1				Unidentified		
	N	1				aquatic gastropod		
6	A	74						
	B	13				Turtle shell		
	C	5				fragments		
	M	1						
7	A	20				*Terrapene* cf.		
	B	3				*carolina*,		
8	A	1				Box turtle		
	F	1						
10	A	3				*Trionyx* sp.,		
	B	1				Softshell turtle		
14	A	1						

TABLE VI-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 3 (continued)			
16	B	1				Odocoileus virginianus, White-tailed deer		
17	A	1						
24	A	8						
	B	1						
	M	2						
25	C	1						
28	C	1						
45	M	1						
46	A	1						
49	A	1						
58	A	1						
	B	2						
111	A	2						
	B	1						
	C	1						
138	A	12						
	B	2						
	C	3						
	M	1						
140	A	1						
155	P	1						
156	J	1						
176	Z	2						
					Feature 16			
2d	A	1	5a	15		Odocoileus virginianus, White-tailed deer		
3	A	16	b	7				
	B	8	d	3				
4	A	18	c	10				

TABLE VI-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 16 (continued)			
	B	6	7b	5				
5	A	3				UMBF		
6	A	3						
	C	1						
46	C	1						
					Feature 19			
3	A	2	5a	11				
	B	3	b	5				
4	A	9	d	2				
	B	3	c	3				
	C	2						
5	A	1						
6	A	2						
46	A	1						
					Feature 30			
Data missing			5a	1	Carya spp.,			
			d	6	Hickory nut			
			c	4	shell			
					Feature 31			
3	A	26	5b	8	Carya spp.,	UMBF		
	B	15	d	3	Hickory nut			
4	A	62	c	1	shell			
	B	19	7b	5				
5	A	11						
	B	2						
	C	2						

TABLE VI-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 31 (continued)			
6	A	9						
	C	1						
54	A	1						
					Feature 32			
2d	A	1	5a	21	Carya spp.,	UMBF		
	B	1	b	4	Hickory nut			
3	A	25	d	2	shell			
	B	3	c	4				
4	A	51	8a	1	Juglans nigra,			
	B	11			Black walnut			
5	A	8			shell			
6	A	2						
7	A	1						
138	A	1						
					Feature 33			
2d	A	1	5a	25	Carya spp.,	UMBF		
	B	1	b	12	Hickory nut			
3	A	22	d	5	shell	Odocoileus		
	B	3	c	21		virginianus,		
	C	1	7a	1	Juglans nigra,	White-tailed		
4	A	21	b	1	Black walnut	deer		
	B	6			shell			
	F	1				Turtle sp.		
5	A	3			Gleditsia			
6	A	4			triacanthos,			
					Honey locust			

TABLE VI-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 38			
2d	A	2	5a	3	Carya spp.,	Campeloma sp.,		
3	A	25	b	2	Hickory nut	Aquatic gastropod		
	B	8	d	2	shell			
4	A	79	7a	1		Pleurocera sp.,		
	B	12	b	1	Juglans nigra,	Aquatic gastropod		
	C	4	8b	2	Black walnut			
5	A	10			shell	Anculosa sp.,		
6	A	3				Aquatic gastropod		
	B	1						
25	A	1				Unidentified		
46	A	1				aquatic gastropod		
						UMBF		
					Feature 39			
						Aquatic gastropods		
					Feature 40			
3	A	110	5a	12	Fruits, Nuts, and Seeds	UMBF	3	1
	B	47	b	3			11	2
4	A	176	d	2				
	B	67	c	13	Carya spp.,			
	C	5	7b	8	Hickory nut			
	F	4	8b	1	shell			
5	A	9						
	B	3			Woods			
	C	3						
	F	2			Quercus alba,			
6	A	8			White oak			

TABLE VI-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 40 (continued)			
	B	7						
24	A	1			Carya spp., Hickory			
					Juglans nigra, Black walnut			
					Feature 43			
2d	A	1	5a	7	Carya spp.,	UMBF		
3	A	32	b	2	Hickory nut	UBBF		
	B	9	d	1	shell			
	C	1	c	9		Odocoileus		
	N	1	7a	4		virginianus,		
4	A	28	b	10		White-tailed		
	B	2	c	3		deer		
5	A	3	8a	2				
	C	1						
	F	1						
6	A	5						
10	A	1						
98	A	1						
					Feature 45			
2d	A	1	5a	8	Carya spp.,	UMBF	11	1
	A	57	b	6	Hickory nut			
	B	24	d	5	shell			
	C	1	c	6	Juglans nigra,			
4	A	68	7a	1	Black walnut			
	B	14	b	1	shell			

TABLE VI-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 45 (continued)			
	C	4	8a	1	Quercus spp.,			
	F	1	b	1	Acorn			
5	A	14						
	B	2						
	C	1						
	F	1						
6	A	7						
7	A	1						
45	C	1						
	M	1						
					Feature 48			
2b	A	1	5b	2	Carya spp.,	UMBF		
2d	A	3	c	1	Hickory nut			
	B	1	7b	1	shell	Odocoileus		
	M	1	8a	31		virginianus,		
3	A	149	b	5	Juglans nigra,	White-tailed		
	B	97			Black walnut	deer		
	F	2			shell			
	M	2						
4	A	267			Euphorria			
	B	73			maculata,			
	F	5			Spurge			
	M	5						
5	A	33						
	B	6						
6	A	40						
	B	3						
	I	1						

TABLE VI-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 48 (continued)			
7	A	2						
	B	2						
8	A	1						
	F	1						
10	A	3						
	B	1						
24	A	1						
	B	1						
28	A	1						
36a	N	1						
149	S	1						
155	P	1						
225	P	2						
					Feature 50			
2b	B	5	5a	4	Fruits, Nuts, and Seeds			
	N	1	b	4				
3	A	19	d	1				
	B	19	c	5	Carya spp.,			
	F	1	7b	2	Hickory nut			
4	A	29	d	1	shell			
	B	7						
	C	2			Woods			
5	A	2						
6	A	5			Juniperus			
	B	1			virginiana L.,			
	N	1			Eastern red			
10	A	1			cedar			

TABLE VI-1 (continued)

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 54			
2b	A	1	5a	1	Carya spp.,	UMBF		
2d	A	1	b	1	Hickory nut			
3	A	15	8b	1	shell			
	B	23	g	1				
	C	1						
	F	1						
4	A	61						
	B	21						
	C	1						
	M	1						
5	A	12						
	B	2						
	F	1						
	N	1						
6	A	13						
	B	3						
7	A	1						
111	A	1						
138	A	2						
					Feature 85			
4	A	7			Carya spp.,	Odocoileus		
	B	1			Hickory nut	virginianus,		
	C	1			shell	White-tailed		
5	A	6				deer		
6	M	1						

TABLE VI-1 (continued)

Lithics			Ceramics			Modified Bone	
T	R.M.	n	T	n	Botanical Species / Faunal Species	T	n
					Feature 87		
3	A	3	5a	1	*Carya* spp.,		
	B	7	b	4	Hickory nut		
4	A	33	8a	5	shell		
	B	18	b	1			
	C	1					
5	A	17					
	B	11					
6	A	3					
	B	4					

APPENDIX VII

TABLE VII-1

LATE WOODLAND FEATURE CONTENTS—40CF108

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
				Feature 3		
8	B	1	8a	13	Fruits, Nuts, and Seeds	UMBF
17	C	1	b	2		
24	A	1	c	5		Unidentifiable
26	A	1	7b	35	Carya spp.,	bone
27	A	2	1a	1	Hickory nut	(UB)
32	A	1	b	7	shell	
53	C	1				
59	C	1			Woods	
92	D	1				
125	A	1			Unidentified	
138	I	1			wood charcoal	
	C	1				
				Feature 35		
2d	A	1	8a	2	Fruits, Nuts, and Seeds	UMBF
8	-	1	b	5		UB
26	C	1	7a	7		
27	F	1	b	2	Carya spp.,	
	C	1	1a	14	Hickory nut	
59	F	1			shell	
162	-	1				
					Juglans nigra,	
					Black walnut shell	
					Woods	
					Unidentified	
					wood charcoal	

TABLE VII-1 (continued)

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
				Feature 40		
2d	A	2	8a	4	Fruits, Nuts, and Seeds	UB
6	A	1	b	31		
7	A	1	7a	2		
26	F	1	b	5	Carya spp.,	
27	A	3	5a	3	Hickory nut	
	B	2	1a	8	shell	
	C	1	b	7		
	F	1			Juglans nigra,	
32	C	1			Black walnut	
36a	A	1			shell	
46	A	1				
62	C	1			Zea mays,	
80	A	1			corn	
92	B	1				
107	A	1			Woods	
110	B	1				
155	P	1			Unidentified	
					wood charcoal	
				Feature 69		
			5b	5	Wood charcoal	
			8b	2		
				Feature 71		
2d	F	1	8b	5	Fruits, Nuts, and Seeds	
	A	1	7b	16		
31	A	1				
32	A	1			Carya spp.,	
46	C	1			Hickory nut	
					shell	

TABLE VII-1 (continued)

Lithics			Ceramics		Botanical Species	Faunal Species
T	R.M.	n	T	n		
					Feature 71 (continued)	
					Juglans nigra, Black walnut shell	
					Woods	
					Unidentified wood charcoal	

APPENDIX VIII

TABLE VIII-1

LATE WOODLAND FEATURE CONTENTS—40CF111

Lithics T	Lithics R.M.	Lithics n	Ceramics T	Ceramics n	Botanical Species	Faunal Species	Modified Bone T	Modified Bone n
					Feature 32			
3	-	202	8a	26	Fruits, Nuts, and Seeds	Not analyzed		
4	-	1040	b	28				
6	-	39	c	1				
27	-	1	7b	5	Carya spp.,			
62	-	2	5b	14	Hickory nut			
96	-	1	c	2	shell			
			1a	19				
			b	22	Juglans nigra,			
					Black walnut shell			
					Trifolium spp.,			
					Clover			
					Nuphar luteum			
					subsp.			
					macrophyllum,			
					Cow lily			
					Asteraceae,			
					Composite family			
					Woods			
					Acer spp.,			
					Maple			
					Carya spp.,			
					Hickory			

TABLE VIII-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 32 (continued)			
					Juglans nigra, Black walnut			
					Fagus grandifolia Ehrb., American beech			
					Prunus sp., Cherry			
					Quercus spp., Oak			
					Castanea dentata, Chestnut			
					Feature 39			
3	-	66	7b	2				
4	-	112						
5	-	3						
6	-	3						
25	-	1						
104	-	1						
111	-	1						

TABLE VIII-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 43 (Burial 2)			
3	-	239	8b	12	Fruits, Nuts, and Seeds	UFBF	9	3
4	-	353	c	2				
5	-	39	9a	1		Turtle spp.		
6	-	31			Carya spp.,			
8	-	3			Hickory nut	Mussel spp.		
138	-	1			shell			
						Unidentifiable bone		
					Juglans spp.,			
					Walnut nut shell			
					Quercus spp.,			
					Acorn			
					Woods			
					Carpinus caroliniana			
					Walt.,			
					Ironwood			
					Plantanus occidentalis L.,			
					Sycamore			
					Quercus rubra,			
					Red oak group			

TABLE VIII-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 67			
3	-	18	8a	1	Fruits, Nuts, and Seeds	Unidentified		
4	-	42				bone fragments		
5	-	4						
6	-	5			Carya spp.,			
18	-	1			Hickory nut shell			
78	-	1			Juglans spp.,			
					Walnut shell			
					Woods			
					Quercus spp.,			
					Oak			
					Feature 74-17 (Bu 74-1)			
			8a	4	Carya spp.,	Mussel spp.	6	2
					Hickory nut shell			
					Feature 96			
3	-	40	8b	3		Unidentified		
4	-	103	5a	3		bone fragments		
5	-	30	b	3				
6	-	5	c	1				
25	-	1	1b	2				
27	-	1						
					Feature 109			
3	-	111	8b	10		UMBF		
4	-	275	5a	16				
5	-	40	b	15		Unidentified		
6	-	14	c	4		bone fragments		

TABLE VIII-1 (continued)

Lithics T	R.M.	n	Ceramics T	n	Botanical Species	Faunal Species	Modified Bone T	n
					Feature 109 (continued)			
16	-	1	1b	7				
66	-	1	2	1		Sciurus sp., Squirrel		
138	-	3	10	1				
						Crotalidae, Rattlesnakes		
						Columbridae, Most nonpoisonous snakes		
						Bufo sp., Toad		
						Catostomidae, Sucker family		
					Feature 112			
2d	-	1	8a	4		UMBF		
3	-	111	b	3				
4	-	305	7a	2				
5	-	30	5a	3				
6	-	14	b	3				
25	-	1	c	3				
68	-	1	1a	9				
138	-	2	b	29				

TABLE VIII-1 (continued)

Lithics			Ceramics				Modified Bone	
T	R.M.	n	T	n	Botanical Species	Faunal Species	T	n
					Feature 160			
2d	-	1	8a	17		UMBF		
3	-	110	b	7		UBBF		
4	-	163	5a	2				
5	-	29	b	1				
6	-	2	d	1				
10	-	1	1b	2				

APPENDIX IX

TABLE IX-1

LATE WOODLAND FEATURE CONTENTS—40CF118

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
				Feature 7		
2a	B	1	5b	3		UMBF
2d	A	1	a	1		
3	A	28	8b	2		Unidentified gastropods
	B	13				
	C	1				
	I	1				*Meleagris gallopavo*, Turkey
4	A	21				
	B	3				
5	A	6				*Marmota monax*, Woodchuck
	BB	1				
	C	1				
	FF	1				
6	A	5				
	B	1				
	F	1				
8	A	1				
10	A	1				
14	A	1				
28	A	1				
155	P	1				
				Feature 13		
3	A	4	8a	2	*Woods*	UMBF
	B	3	5c	1		
4	A	12			*Carya* spp., Hickory	
	B	2				
	C	3				

TABLE IX-1 (continued)

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
			Feature 13 (continued)			
5	C	1			Quercus spp.,	
6	A	6			Oak	
				Feature 38		
3	A	32				
	B	12			Plantanus	
4	A	13			occidentalis,	
	B	3			Sycamore	
6	A	16				
	B	6				
	C	3				
	F	1				
				Feature 42		
3	A	2	5b	1	Woods	UBBF
	B	6				
4	A	6			Carya spp.,	
	B	2			Hickory	
					Quercus spp.,	
					Oak	
					Quercus alba,	
					White oak	
					Robinia pseudo-acacia,	
					Black locust	
					Arundinaria spp.,	
					Cane	

TABLE IX-1 (continued)

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
				Feature 43		
1	A	1	8a	4	Unidentified	
3	A	5	5d	2	wood fragments	
	B	12				
4	A	7				
	B	1				
	C	2				
5	A	1				
6	A	5				
	C	1				
25	F	1				
138	B	1				
				Feature 45		
3	A	58	5b	3	Fruits, Nuts, and Seeds	
	B	5	d	5		
4	A	12			*Carya* spp., Hickory nut shell	
	B	2				
6	A	3				
					Woods	
					Quercus spp., Oak	
					Quercus alba, White oak	
					Acer spp., Maple	
					Arundinaria spp., Cane	

TABLE IX-1 (continued)

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
				Feature 60		
2d	A	1	8b	1	Fruits, Nuts, and Seeds	UMBF
3	A	176				UBBF
	B	81				
	C	4			Carya spp.,	
	I	5			Hickory nut shell	
	K	1				
4	A	165			Juglans spp.,	
	B	24			Walnut shell	
	C	2				
	D	2			Juglans cinerea,	
	F	1			Butternut shell	
	I	1				
	K	1			Juglandaceae shell	
5	A	35			Walnut family	
	B	4				
	C	4			Quercus spp.,	
	I	1			Acorn	
6	A	53				
	B	5			Vitis spp.,	
	D	1			Grape	
	F	3				
	K	1			Woods	
24	A	1				
26	A	1			Carya spp.,	
31	J	1			Hickory	
36a	A	1				
78	A	1			Quercus spp.,	
138	C	1			Oak	

TABLE IX-1 (continued)

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
					Feature 60 (continued)	
					Quercus alba, White oak	
					Quercus rubra, Red oak	
					Gleditsia triacanthos, Honey locust	
					Acer spp., Maple	
					Salix nigra, Black willow	
					Liriodendron tulipfera, Tuliptree	
					Feature 61	
3	A	20				
	B	6				
	D	2				
4	A	3				
6	A	8				
	B	3				
	C	1				

TABLE IX-1 (continued)

Lithics			Ceramics			
T	R.M.	n	T	n	Botanical Species	Faunal Species
				Feature 104		
3	A	25	5c	3		
	B	3	d	2		
4	A	8				
	C	2				
5	A	1				
	C	1				
6	A	4				
8	A	1				
31	A	1				
36a	A	1				
50	F	1				
51	F	1				
53	A	1				
88	A	1				
				Feature 107		
4	B	2	8a	1		
			5b	1		
				Feature 108		
3	A	3	8b	2	*Quercus* spp.,	
4	A	12	c	1	Oak	
	B	1	5b	3		
6	A	1	a	1	*Arundinaria* spp.,	
	B	1			Cane	

VITA

Betty J. Duggan was born on October 4, 1952, in Blairsville, Georgia. She attended elementary schools in Alabama and Tennessee and was graduated from Ooltewah High School, Ooltewah, Tennessee, in 1970. In that same year Betty entered Carson-Newman College in Jefferson City, Tennessee, earning the Bachelor of Arts degree (magna cum laude) from that institution in 1974 with major emphasis in Spanish and a minor in History. As an undergraduate, Betty became interested in anthropological studies through participation in classes and foreign exchange programs. Following this pursuit, she entered the Graduate School of Vanderbilt University in Nashville, Tennessee, in 1974 where she took courses in the Latin American Studies Center and the Department of Sociology/ Anthropology. In 1975 she left the university community to pursue training in archaeological field techniques and did not return to academia until 1977 when she entered the Master of Arts program in Anthropology at The University of Tennessee, Knoxville campus. Throughout the duration of these studies, Betty continued to receive practical training in archaeological field and laboratory techniques and supervision through the Universities of Tennessee, Alabama, and West Florida, as well as developing teaching skills as an instructor in The University of Tennessee Evening School.

Betty's other interests include music (piano, voice and guitar), writing (poetry and fiction), crafts (weaving, spinning and natural dyeing) and travel. She has also received recognition for her photographic work.