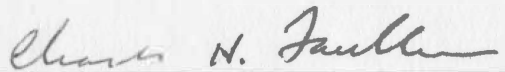


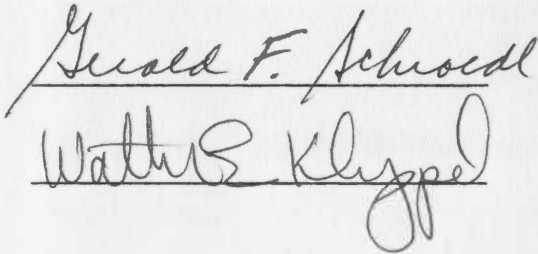
To the Graduate Council:

I am submitting herewith a thesis written by Mark J. Wagner entitled "The Aaron Shelton Site (40CF69): A Multicomponent Site in the Lower Normandy Reservoir." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Anthropology.

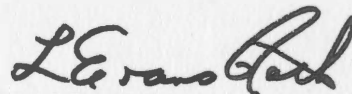


Charles H. Faulkner
Major Professor

We have read this thesis and
recommend its acceptance:



Accepted for the Council:



Vice Chancellor
Graduate Studies and Research

THE AARON SHELTON SITE (40CF69): A MULTICOMPONENT SITE
IN THE LOWER NORMANDY RESERVOIR

A Thesis
Presented for the
Master of Arts
Degree
The University of Tennessee, Knoxville

Mark J. Wagner

June 1980

ACKNOWLEDGMENTS

I sincerely wish to thank a number of people for their advice and encouragement in the completion of this thesis. First, thanks are due my committee members, Dr. Charles Faulkner, Dr. Walter Klippel, and Dr. Gerald Schroedl. I particularly wish to thank my committee chairman, Dr. Charles Faulkner, for his greatly appreciated assistance and encouragement in the completion of this thesis.

I also wish to thank Dr. Major C. R. McCollough for his personal observations concerning the Aaron Shelton site. Thanks also go to several people from the Department of Anthropology of The University of Tennessee at Knoxville, including Gary Crites for his analysis of the botanical material; Mr. Neil Robison for his analysis of the faunal material; Ms. Terry Faulkner for the drafting of the figures in this thesis; and last, but certainly not least, thanks to my wife Mary McCorvie for the analysis of the osteological remains.

I also wish to thank my parents, Mr. and Mrs. George A. Wagner, and my mother-in-law, Mrs. Ruth McCorvie, for the support they've given to both Mary and myself in the completion of our graduate work. A special thanks goes to my sister, Maridell, for typing the draft of this thesis.

ABSTRACT

The Aaron Shelton site (40CF69) was a multicomponent site in the upper Duck Valley which was excavated by The University of Tennessee in early summer of 1975. A total of fifty-five features and sixty postholes was excavated at the site with four cultural components, Late Archaic through Late Woodland, being defined. An analysis and description of all prehistoric cultural activity at the Aaron Shelton site are presented with an emphasis on the McFarland phase occupation. The McFarland phase settlement patterns at 40CF69 indicate that during the early Middle Woodland period the Aaron Shelton site was occupied by minimal, probably nuclear, family groups exploiting resources in the lower reservoir zone in a seasonal schedule of hunting and gathering rounds. It is proposed that Aaron Shelton and other small McFarland phase sites in the lower reservoir zone represent seasonal camps in a "mobile dispersed" settlement system and that this type of settlement system was in operation in the upper Duck Valley during the late Early Woodland Long Branch and early Middle Woodland McFarland phases.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Statement of Problem	3
Summary	6
II. PHYSIOGRAPHY	8
Geology and Lithic Resources	10
Soils	13
Climate	13
Floral and Faunal Resources	14
III. SITE BACKGROUND	20
Description	20
Survey	20
1975 Test Excavations	25
IV. 1975 EXCAVATION OF THE AARON SHELTON SITE	30
Feature Morphology	30
Type I: basins	30
Type II: pits	34
Type III: earth ovens	34
Type IV: burial receptacles	35
Type V: miscellaneous	36
Discussion of Features	36
Excavation Strategy	36
Excavation Area 1	42
Excavation Area 2	54
Excavation Area 3	60
Excavation Area 4	62
V. LITHICS	72
Lithic Raw Materials	72
Local raw materials	73
Near exotic raw materials	80
Lithic Artifacts	82
Primary lithic material	82
Unifacial implements	88
Bifacial implements	90
Projectile points/knives	93
Ground stone implements	113

CHAPTER	PAGE
Miscellaneous lithic artifacts	114
Summary of lithics	114
VI. CERAMICS	124
Limestone-Tempered Ware	124
Chert-Tempered Ware	128
Summary	129
VII. FAUNAL AND BOTANICAL REMAINS	133
Faunal Remains	133
Botanical Remains	134
VIII. BURIALS	139
Burial 1 (Feature 1)	139
Burial 2 (Feature 41)	140
Burial 3 (Feature 56/Posthole 55)	143
Burial 4 (Feature 34)	143
Summary of Burial Patterns	144
Ledbetter phase	144
McFarland phase	146
IX. SITE 40CF69A	149
Methodology and Conduct of Investigation	149
Features and Postholes	150
Feature Summary	154
Lithics	155
Local raw materials	162
Near exotic raw materials	162
Primary lithic material	163
Unifacial implements	164
Bifacial implements	165
Ground stone implements	167
Summary of lithics	168
Botanical Materials	170
Conclusions	171
X. SUMMARY	172
Early Site Utilization	173
Ledbetter Phase	174
Wade Phase	180
McFarland Phase	182
Mason Phase	197

CHAPTER	PAGE
REFERENCES CITED	199
APPENDIX	207
VITA	228

LIST OF TABLES

TABLE	PAGE
1. Lithic Assemblage, Aaron Shelton Collection	22
2. Morphological Feature Classification for Normandy Reservoir Features	31
3. Feature Data—40CF69	37
4. Posthole Data, 40CF69 and 40CF69A	49
5. Lithic Raw Materials—40CF69	74
6. Total Lithic Assemblage—40CF69	83
7. Total Lithic Indices—40CF69	115
8. Lithic Indices, Ledbetter Phase Features	116
9. Lithic Indices, Wade Phase Features	117
10. Lithic Indices, McFarland Phase Features	118
11. Distribution of Primary Lithic Artifacts (Raw Material Types A, B, and C) by Cultural Phase	122
12. Distribution of Lithic Raw Materials by Cultural Phase . . .	123
13. Distribution of Ceramics in Features and Postholes— 40CF69	125
14. Distribution of Faunal Remains in Features—40CF69	135
15. Wood Charcoal in Features at 40CF69	136
16. Plant Remains in Grams From Features, (40CF69)	138
17. Lithic Raw Materials—40CF69A	156
18. Lithic Assemblage—40CF69A Features	157
19. Total Lithic Assemblage—40CF69A Features	161
20. Total Lithic Indices—40CF69A	169

LIST OF FIGURES

FIGURE	PAGE
1. Location of Aaron Shelton Site within the Normandy Reservoir Zone	2
2. 1975 Excavation Area 40CF69 and 40CF69A	21
3. Plan of 40CF69 Excavation Units	26

LIST OF PLATES

PLATE		PAGE
I.	Aaron Shelton Site (40CF69) Feature 2—Projectile Points/Knives, Bifacial Implements	208
II.	Aaron Shelton Site (40CF69) Feature 33—Bifacial Implements, Projectile Points/Knives	210
III.	Aaron Shelton Site (40CF69)—Projectile Points/Knives . . .	212
IV.	Aaron Shelton Site (40CF69) Feature 19—Projectile Points/Knives	214
V.	Aaron Shelton Site (40CF69) Feature 37—Ceramics	216
VI.	Aaron Shelton Site (40CF69)—Ceramics	218
VII.	Aaron Shelton Site (40CF69A) Feature 10—Lithic Artifacts	220
VIII.	View of Aaron Shelton Site (40CF69)	222
IX.	View of Aaron Shelton Sites 40CF69 and 40CF69A	224
X.	Excavation Area 4 Feature Clusters (40CF69)	226

CHAPTER I

INTRODUCTION

The Aaron Shelton site is a small multicomponent site in the lower Normandy Reservoir which was partially excavated by The University of Tennessee in the summer of 1975 (Figure 1). Initial surface collections on the site indicated the presence of an Early Archaic occupation at 40CF69 with *Big Sandy*, *Decatur*, and *Kirk Corner Notched* projectile points/knives being included in the collection. Based on these surface collections it was suggested that 40CF69 represented an Early Archaic and Late/Terminal Archaic hunting-butcherer station (Faulkner and McCollough 1973:346-347). Limited test excavations were carried out in the early spring of 1975 which confirmed the existence of a Late Archaic horizon but failed to find any evidence of an Early Archaic horizon at 40CF69 with the exception of surface material. Actual field excavations at the Aaron Shelton site commenced in early June of 1975 and lasted for a period of approximately one month. Features assignable to the Terminal Archaic Wade phase, Late Archaic Ledbetter phase, Middle Woodland McFarland phase, and Late Woodland Mason phase were found as a result of the fieldwork. An adjacent section of the terrace north of the main excavation area which also contained prehistoric material was designated 40CF69A and was excavated concurrently with 40CF69. 40CF69A was located approximately 300 feet north of the major excavation area.

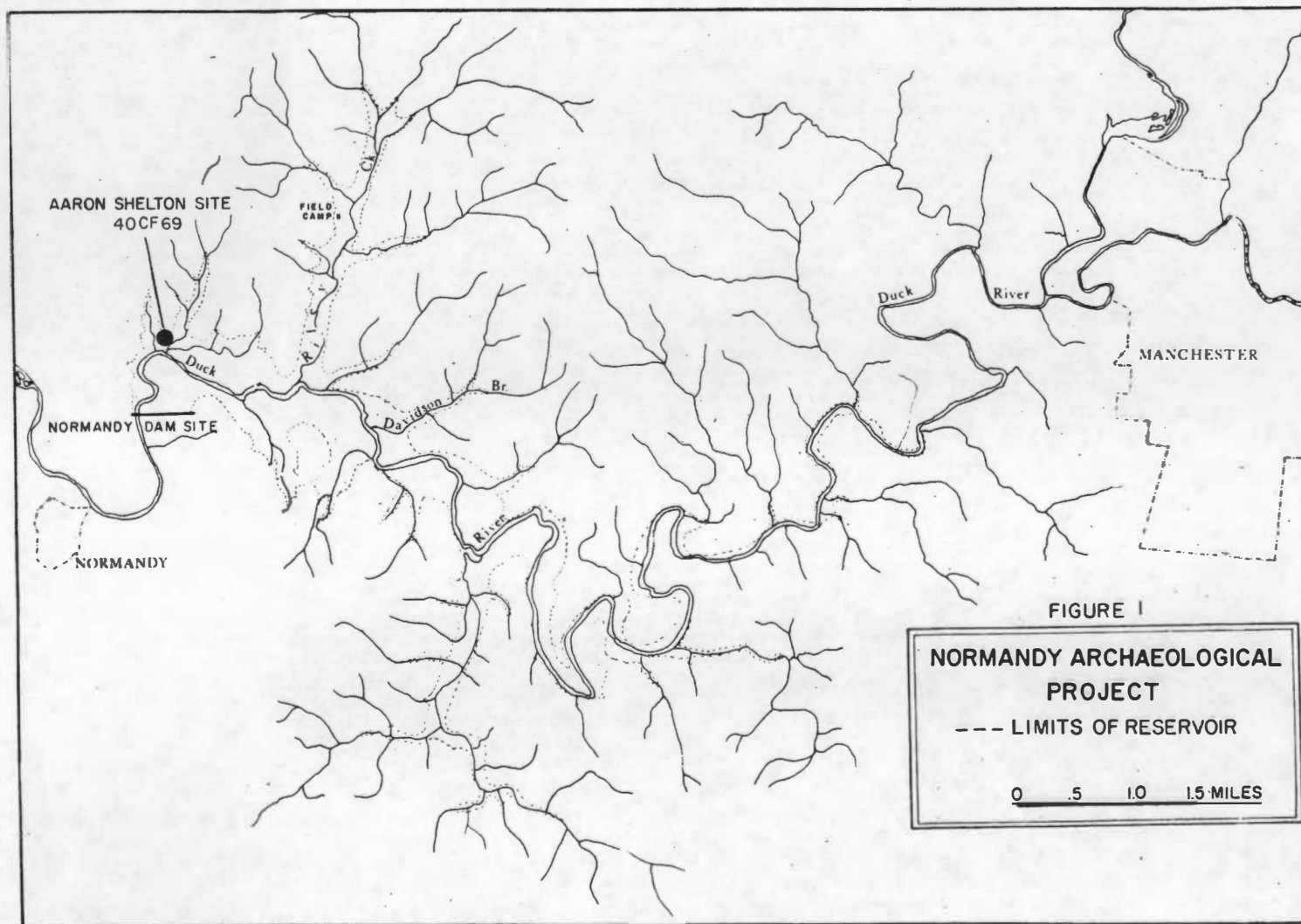


Figure 1. Location of Aaron Shelton Site within the Normandy Reservoir Zone.

Statement of Problem

Although the 1975 excavations recovered material from four different occupations, the primary objective of this thesis will be a delineation of the McFarland phase occupation at 40CF69 and the relationship of this occupation to the McFarland phase settlement patterns in the Normandy Reservoir as a whole. This emphasis on the McFarland phase occupation at 40CF69 is engendered by the fact that a large amount of data concerning Middle Woodland settlement patterns in the Normandy Reservoir zone already exists and this will make it possible to utilize the McFarland phase data from 40CF69 in a comparative study of McFarland settlement patterns. Secondly, the McFarland phase occupation found at 40CF69 and at other small McFarland sites in the lower reservoir zone appears to differ significantly from that of the upper reservoir zone sites in terms of intensity of occupation and intrasite community patterning; an analysis of these differences could provide significant information on Middle Woodland settlement patterns in the Normandy Reservoir area.

Alternative hypotheses concerning the integration of these lower reservoir zone McFarland sites into the total McFarland phase settlement pattern for the Normandy Reservoir zone will be examined in this thesis. One hypothesis to be tested is that the McFarland sites in the lower reservoir zone represent an early McFarland phase settlement pattern analogous to that first described by Faulkner (1973). This model would see 40CF69 and the other small McFarland sites as representing seasonal base camps occupied by nuclear or extended family groups in order to exploit the resources of the most productive biogeographic zones in the

surrounding area. This model also suggests that some of the larger sites with more permanent features may represent central camps which served as a focus for regular but discontinuous cultural activity and provided social intensification for groups ranging in size from small extended families to a macro band. However, the absence in the lower reservoir zone of sites showing intensive McFarland phase activity (with the exceptions of the Parks and Eoff I sites) suggests that a dispersed settlement pattern similar to the "mobile dispersed" type proposed by Prescott for the Late Archaic period in the upper Duck Valley (1973:366) may be in existence during the early Middle Woodland period. The mobile dispersed settlement model has as its principal sites seasonal base camps which are established and utilized by extended family groups moving within a restricted territory to exploit areas of maximum resources. It is hypothesized in this thesis that the Aaron Shelton site represents a seasonal base camp in a mobile dispersed type of settlement pattern in the lower reservoir zone. It is also hypothesized that the mobile dispersed type of settlement model represents an early McFarland phase type from which develops the middle to late McFarland phase settlement pattern of the upper reservoir zone in which more intensively occupied sites with permanent structures are found. Faulkner (n.d.) proposes that the McFarland settlement pattern for the upper reservoir zone conforms to that of his previously described "dispersed" type (Faulkner 1973:35-45) or the dispersed type with permanent single family base camps of Butler (1977:7-8). Both Faulkner's and Butler's models include a central camp which is seasonally established for purposes of social

intensification through ritual exchange, burial of the high-status dead, and other socially significant activities, with a dispersal by the constituent family groups into smaller camps for the remainder of the year. As envisioned here, the settlement models of Butler (1977) and Faulkner (1973) would apply only to the middle and late McFarland phase occupation of the upper reservoir zone while the early McFarland phase settlement pattern proposed in this thesis for the lower reservoir zone would consist of seasonally dispersed camps, inhabited by nuclear or extended family groups, which are shifted seasonally in order to fully exploit the resources of the surrounding environment. The presence of *Long Branch Fabric Marked* ceramics in the majority of the McFarland phase features at 40CF69 suggests that the McFarland occupation at 40CF69 is earlier than that of more intensively occupied sites such as 40CF118 where *Long Branch Fabric Marked* is a minority type comprising only 0.5 percent of the total ceramic assemblage (DuVall 1977:201). Two radiocarbon samples were processed from McFarland phase features at 40CF69 which contained *Long Branch Fabric Marked* ceramics. The radiocarbon sample from Feature 33 returned an unacceptable date of B.P. 2750 $\pm$ 190 years (800 B.C.); this date is much too early for a McFarland phase feature in the upper Duck Valley. The radiocarbon sample from Feature 37, however, returned a date of B.P. 2165 $\pm$ 110 years which is an acceptable early McFarland phase date and supports the hypothesis that the McFarland occupation at 40CF69 occurs very early during the early Middle Woodland period.

Another hypothesis to be tested is whether these lower reservoir sites represent various types of short-term camps at which specialized

activities were carried out during the entire McFarland phase. This is suggested by the proximity of 40CF69 to lower reservoir quarry sites such as the Sterling Shelton Pond source (Penny and McCollough 1976:171) and the very high incidence of primary lithic material (specifically lithic types 3, 4, and 6) found in features at 40CF69. This suggests that the McFarland phase occupation at 40CF69 could have been short-term and oriented toward the exploitation of adjacent lithic resources. It should be noted that this second hypothesis is not necessarily exclusive of the first hypothesis; that is, it is possible that the McFarland occupation could prove to be both early and oriented toward the exploitation of gray banded chert resources.

Summary

There are two major research goals of this thesis. The first is an analysis and description of all prehistoric activity at the Aaron Shelton site (40CF69). The second research goal will be an analysis of McFarland community patterns at 40CF69 and the implication that this may have for McFarland phase settlement patterns in the Normandy Reservoir. Two hypotheses will be tested in relation to these smaller lower reservoir ① settlements with the first being that they represent an earlier type of McFarland phase settlement pattern for the Normandy Reservoir zone while the more intensively occupied upper reservoir zone sites represent a later type of McFarland settlement pattern. The second hypothesis to be ② tested is that the smaller lower reservoir zone sites may represent

short-term specialized activity camps which were contemporary with the larger McFarland sites in the upper reservoir zone.

CHAPTER II

PHYSIOGRAPHY

The upper Duck Valley lies in the transitional zone between the Nashville Basin and the Eastern Highland Rim sections of the Interior Low Plateaus physiographic provinces (Fenneman 1938:415). The valley floors of the Duck River and its tributary streams are part of the Nashville Basin physiographic section while the surrounding ridges are part of the Highland Rim section. The surface of the Nashville Basin is rolling to hilly with an average elevation of 600 feet above sea level. Considerable relief is found along the eastern margin where monadnocks and ridges stand as outliers of the Highland Rim; also in this area are found a series of deep v-shaped valleys which are the result of stream dissection. The Cumberland Plateau forms the eastern boundary of the Highland Rim in the form of a pronounced escarpment whose limestone and sandstone cliffs rise 800 to 1,000 feet above the surface of the adjacent Eastern Highland Rim. The Highland Rim itself is a hilly to deeply dissected low plateau with an average elevation of 1,050 feet. The largest section of the Highland Rim within Coffee County is the Barrens, a moderately flat to rolling area located between the dissected escarpment of the Highland Rim and the Cumberland Plateau.

The source of the Duck River is formed by several tributary streams which drain the eastern section of the Barrens. The Little Duck River is the major tributary of the headwaters and it joins the Duck River

just south of the town of Manchester between river miles 268 and 269. Three large creeks flow into the Duck River in the 19 miles between this confluence and the Normandy Dam axis; Crumpton and Carrol Creeks drain the uplands to the south of the Duck Valley while Riley Creek flows in from the north. The Duck River and its tributaries are moderate to fast moving streams flowing through relatively narrow valleys. Below the confluence of Carrol Creek there is a leveling of the stream gradient as the Duck River flows into the Nashville Basin; this has led to the formation of large flood plains and alluvial terraces in the lower reservoir zone. The upper reservoir zone above Carrol Creek is characterized by steep-walled valleys with narrow floodplains and alluvial terraces.

Four major biogeographic zones are found within the Normandy Reservoir area. These are: the flood plain, older alluvial terraces, valley slopes and bluffs, and uplands (Faulkner and McCollough 1973:3).

The flood plain or T-0 is a low terrace of Huntington silt loam underlain by phosphatic or cherty limestones. Although the floodplain soil is quite rich and would have been attractive to aboriginal food-producers the use and/or occupation of this zone would have been limited by the probability of a major flooding of the Duck River between November and May (Faulkner and McCollough 1973:4).

The older alluvial terraces appear to have been important areas for human occupation throughout the prehistory of the upper Duck Valley. The first terrace (T-1) is flat to gently sloping in relief with a height of at least 10 feet above the current level of the floodplain.

The T-1 is generally not affected to any great extent by the seasonal flooding of the Duck River. The second terrace (T-2) was formed as a result of the washing down of sediments from the contiguous slopes and uplands. These terraces are less extensive than the T-1 and are generally sloping in nature.

The valley slopes and bluffs zone appears to have been the least important area in the Normandy Reservoir zone in terms of human occupation. The steep slopes and bluffs of this zone along with a lack of habitable caves and rock-shelters would have severely restricted human occupation of this area. Utilization of this area by aboriginal groups was probably largely restricted to the exploitation of the lithic raw materials which can be found in this zone.

The upland zone of the upper Duck Valley lies within two distinct topographical areas of the Highland Rim physiographic section. The uplands above the lower reservoir zone are deeply dissected with long, narrow ridgetops separated by narrow, steep valleys. In the upper reservoir zone, the uplands consist of the "flat" Highland Rim which has a rolling to level topography. These uplands are poorly watered making it doubtful that any intensive human occupation occurred in this area.

Geology and Lithic Resources

The vast quantity of various types of lithic materials available in the upper Duck Valley is a direct result of the areas status as an ecotone or edge area (Penny and McCollough 1976:141). Sandstone, quartz, chalcedony, and limestone are present in the Pennsylvanian and

Mississippian exposures of the Cumberland Plateau scarp. Stream dissection has acted to expose high quality nodular chert of the upper Mississippian St. Louis Formation in the eastern section of the flat Highland Rim while fossiliferous chert of the Warsaw Formation has been exposed in the west. Massive beds of tabular Ft. Payne chert and Chattanooga black shale have also been exposed by the cutting action of the upper Duck River. In the lower reservoir zone, the valley bottom is an outlier of the Nashville Basin physiographic section in which large exposures of Middle Ordovician limestone containing nodular chert are found. The three local lithic materials that were exploited to the greatest extent by aboriginal groups are Ft. Payne chert, gray-banded chert, and Chattanooga black shale.

In the upper reservoir zone, Ft. Payne chert could have been secured by prying blocks of chert from the thick bluff outcrop, by gathering it from the talus debris immediately above the narrow alluvial terraces, or from gravel bars in the river (Penny and McCollough 1976: 152). Ft. Payne chert exhibits a wide color variation with the color ranging from a light blue to tan (Faulkner and McCollough 1973:53; Penny and McCollough 1976:151). Pink chert (lithic type C) is now known to be a result of either an accidental or intentional heating of Ft. Payne chert.

No extensive fresh exposures of Ft. Payne chert are found in the lower reservoir zone with in-situ exposures limited to the summits and upper slopes of heavily eroded hills. The most tractable form of

Ft. Payne chert occurs in the gravel bars of the Duck River and its tributaries. Aboriginal groups utilizing Ft. Payne chert in the lower reservoir zone had access to blocks of smaller absolute size than those of the upper reservoir zone and also relied on chert gathered from gravel bars in the river to a greater extent (Penny and McCollough 1976:53).

Gray banded chert is a cryptocrystalline material which occurs in the upper Duck Valley largely in the form of subspherical nodules. Limited outcrops of this chert type also occur in Ordovician deposits at the base of the Duck River in the lower reservoir zone. Specific source areas and quarry sites for gray banded chert in the lower reservoir zone were documented by Penny and McCollough (1976:141-194).

Chattanooga black shale is a thinly laminated to slabby material that was utilized by prehistoric groups in the Normandy Reservoir area in the fashioning of digging implements, gorgets, and insect effigies of possible ritual significance (Penny and McCollough 1976:149-150). It occurs in massive deposits of up to 30 feet in thickness beneath the Ft. Payne chert formations. Exposed outcrops of black shale in the lower reservoir zone occur at middle elevations on hills flanking the Duck River and also in the valley walls of tributary streams within one mile of the main river channel. Large shale slabs can also be collected from the beds of the tributary streams. In the upper reservoir zone, numerous fresh exposures of black shale occur at low elevations in the river bluffs adjacent to the habitable terraces (Penny and McCollough 1976:149).

Soils

Two soil association groups are present within the Normandy Reservoir zone. These are the Armour-Huntington-Linside and the Bodine-Dellrose soil association groups (Love et al. 1959).

The flood plain and terrace zones of the upper Duck Valley are included in the Armour-Huntington-Linside association. The floodplain consists primarily of the Huntington series as well as gravelly alluvial deposits. The soil type of the first terrace is largely the well-drained Armour Silt Loam series while that of the second terrace is chiefly the Etowah Silt Loam series.

The second soil association group is the Bodine-Dellrose association which includes the upland slopes of the western portion of the Eastern Highland Rim as well as outliers of the Highland Rim within the Nashville Basin (Love et al. 1959; Duvall 1978:9). In the upper reservoir zone, two different soil series are present with the "flat" Highland Rim soils being part of the Montview series while the Dickson series soil type is characteristic of the Barrens.

Climate

The climate of the upper Duck Valley is in accord with the Koppen CFA classification of a humid, mesothermal, subtropical climate (Koeppel and DeLong 1958:248; Faulkner and McCollough 1973:7). The climate is described as mild with only a 34 degree variance between the average winter and summer temperature.

The summers are hot with an average temperature of 76.2 degrees. The hottest months are July and August with the temperature usually not exceeding 95° fahrenheit more than 15 to 20 days a year (Love et al. 1958:88; Faulkner and McCollough 1973:7-8). Summer rains are most often heavy thunderstorms of only a short duration.

Winter temperatures are generally mild with an average temperature of 42.2° fahrenheit. Temperatures fall below 0° fahrenheit on an average of only once a year. Winter is the time of heaviest precipitation which may fall in the form of drizzle, sleet, or snow, with an average winter rainfall of 16.47 inches. Snowfalls are light with the accumulation seldom exceeding three or four inches (Faulkner and McCollough 1973:8).

Fall and spring weather is mild with unusually warm weather occurring during this time. The average frost-free growing season is 190 days although killing frosts have been known to occur as early as September 27 and as late as May 10. Rainfall is heavy in the spring with an average of 14.73 inches (Faulkner and McCollough 1973:8).

Floral and Faunal Resources

The upper Duck Valley lies within the Carolinian biotic province which is characterized by a diversified deciduous forest with pines being of less importance (Dice 1943:16-17). Braun (1950) suggested that the transitional zone between the Western and Mixed Mesophytic Forest regions is coincidental with the Highland Rim/Nashville Basin transitional zone. If correct, this interpretation would mean that the

upper Duck Valley is located in a transitional area between two major forest regions. Faulkner and McCollough (1973:9) have suggested that such an ecotonal situation in the upper Duck Valley would have made the area extremely attractive to aboriginal hunters and gatherers.

The floodplain biogeographic zone would have provided many potential food resources for human exploitation. Trees on the floodplain which could have provided potential food resources in the form of either seeds and nuts or edible sap and cambium include the silver maple (*Acer saccharinum*), box elder (*Acer Negundo*), black walnut (*Juglans nigra*), black locust (*Robinia Pseudo-Acacia*), southern red oak (*Quercus falcata*), and burr oak (*Quercus macrocarpa*) (Faulkner and McCollough 1973:14-16).

Herbaceous seed-bearing plants and tubers may have played an important role in aboriginal floodplain subsistence activities depending on their availability. Faulkner and McCollough (1973:15) suggested that the availability of certain of the herbaceous seed-bearing plants in the upper Duck Valley may have been restricted due to the absence of large floodplains conducive to their growth. Plants available for use as "greens" in the spring would have included the yellow dock (*Rumex sp.*), goose grass (*Galium aparine*), and the common cattail (*Typha sp.*). In the late summer and fall the seeds of such plants as the goose grass, knotweed, lambsquarter (*Chenopodium sp.*), and giant ragweed (*Ambrosia trifida*) could have been collected. Backwater or swampy areas could have been exploited for the tubers of such plants as the American lotus (*Nelumbo lutea*), cattail (*Typhus sp.*), bulrush (*Scirpus sp.*), and possibly skunk cabbage (*Spathymeia foetida*).

Faulkner and McCollough (1973:34-36, 45) listed the fauna which would have been available in the upper Duck River Valley during the prehistoric period. Neil Robison (1977:8-17) revised this list primarily by the addition of more species.

Faulkner and McCollough (1973:45) suggested that all of the mammalian species present in the upper Duck Valley would have been available to some degree in the floodplain zone. Mammals which prefer an aquatic environment such as the floodplain would have provided include the raccoon (*Procyon lotor*), beaver (*Castor canadensis*), mink (*Mustela vison*), and the muskrat (*Ondatra zibethica*). In addition to these species Faulkner and McCollough (1973:40) suggested that 14 other species were being regularly exploited by prehistoric hunters for food and hides. These species include the white-tailed deer (*Odocoileus virginianus*), bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*), red fox (*Vulpes fulva*), spotted skunk (*Spilogale putorius*), longtail weasel (*Mustela funata*), shorttail weasel (*Mustela erminea*), woodchuck (*Marmota monax*), eastern gray squirrel (*Sciurus carolinensis*), eastern fox squirrel (*Sciurus niger*), southern flying squirrel (*Glaucomys volans*), eastern cottontail (*Silvilagus floridanus*), and the opossum (*Didelphis marsupialis*). In addition to these species, Faulkner and McCollough (1973:40-41) list five species of extirpated large mammals which may have been utilized by the prehistoric hunter of the upper Duck Valley area. These five species are the black bear (*Ursus americanus*), gray wolf (*Canis lupus*), elk (*Cervus canadensis*), mountain lion (*Felis concolor*), and the fisher (*Martes pennati*).

Fauna which would have been largely restricted to the floodplain zone include shellfish, fish, amphibians, and reptiles. Faulkner and McCollough (1973:36) listed 107 species of fish as being reported for the Duck River. Robison (1977:11) revised this list to 122 species with 9 more species of fish listed as probable inhabitants of the Duck River. Of this list, 47 species of rough and game fish are suggested as the species most likely to have been utilized by the aboriginal inhabitants of the area. Rough fish congregate in large numbers during the spring spawning runs and could have been netted and seined at this time.

Due to the mildness of the climate, molluscan fauna probably represented a year-round floodplain food resource. Robison (1977:8-9) lists 51 species of mussels as occurring in the Duck River with one species, *Corbicula manilensis*, being a recently introduced species. Robison (1977:10) notes that this listing is for the Duck River system as a whole and that the upper Duck River does not support as many mussel species as the entire river system. Furthermore, historic collections of mussels from the upper Duck River indicate the molluscan fauna of the upper Duck are small or headwater forms that do not grow to a large size (Robison 1977:11).

Twelve varieties of turtles and 22 species of snakes are present in the Duck River Valley with another five snake species listed as possibly present. Thirty-four species of amphibians including frogs, toads, newts, and salamanders are also known to occur within the area (Robison 1977:15).

Two hundred and thirteen species of birds are found in the Duck River Valley area as either permanent summer or winter residents or as

migrants (TVA 1972:L-13—L-17). Faulkner and McCollough (1973:37-40) believe that only a few of the larger species were being regularly exploited by the aboriginal inhabitants of the area. The passenger pigeon (*Ectopistes migratorius*) and the ruffed grouse (*Bonasa umbellus*) are two now extirpated species which also would have represented a potential food resource to the aboriginal inhabitants of the upper Duck Valley area (Faulkner and McCollough 1973:37-40; Robison 1977:16-17).

The older alluvial terrace zone and the valley slopes and bluffs zone probably represented marginal food resource areas in relation to the other biogeographic zones of the upper Duck Valley (Faulkner and McCollough 1973:47). Although potential food resources such as nut crops and mammalian fauna were available in these areas, both the floodplain and upland zones would have had a higher carrying capacity for the aboriginal hunter. Maximum exploitation of the alluvial terrace zone probably occurred in the fall when nut crops such as acorns, walnuts, and hickory nuts could be collected.

The upland resource zone was probably at the peak of its productivity in the summer and fall. Utilization of this area during the spring may have been restricted to the hunting of prairie birds near the Barrens (Faulkner and McCollough 1973:48; Prescott 1978:39). Herbaceous and woody plants could be found throughout the uplands of the entire Normandy Reservoir area in the late summer or early fall. Arboreal seed crops were also plentiful throughout the uplands zone in the fall and probably attracted large quantities of game to this area (Prescott 1978:40). Turkeys in particular would have been attracted by the large

amount of acorn and chestnut "mast" available in the uplands zone in the fall and winter (Faulkner and McCollough 1973:49).

CHAPTER III

SITE BACKGROUND

Description

The Aaron Shelton site (40CF69) was located on top of a fifty foot bluff overlooking the confluence of Boyd Branch and the Duck River (Figure 2). The maximum areal extent of the site was approximately 400 feet by 600 feet with an elevation of 850 to 870 *AMSL*. Descriptions of the physical environment in the area of 40CF69 can be found in Chapter II.

Survey

The Aaron Shelton site was initially surveyed in 1971 by a Normandy Archaeological Project Survey crew. Initial surface collections were made in a freshly cultivated garden behind the Shelton farmhouse. In addition, the landowner made available for study his personal collection (Table 1) which indicated at least a minimal occupation at the 40CF69 site during the transitional Paleo-Early Archaic period. Projectile points/knives in the landowner's collection included examples of the *Beaver Lake*, *Big Sandy*, *Decatur*, and *Kirk Corner Notched* types (Faulkner and McCollough 1973:346). A total of 67 lithic artifacts including 55 bifacial implements was collected by the Normandy Project survey crew. Thirteen projectile points/knives, largely culturally nondiagnostic types, were also represented in the survey collection. A

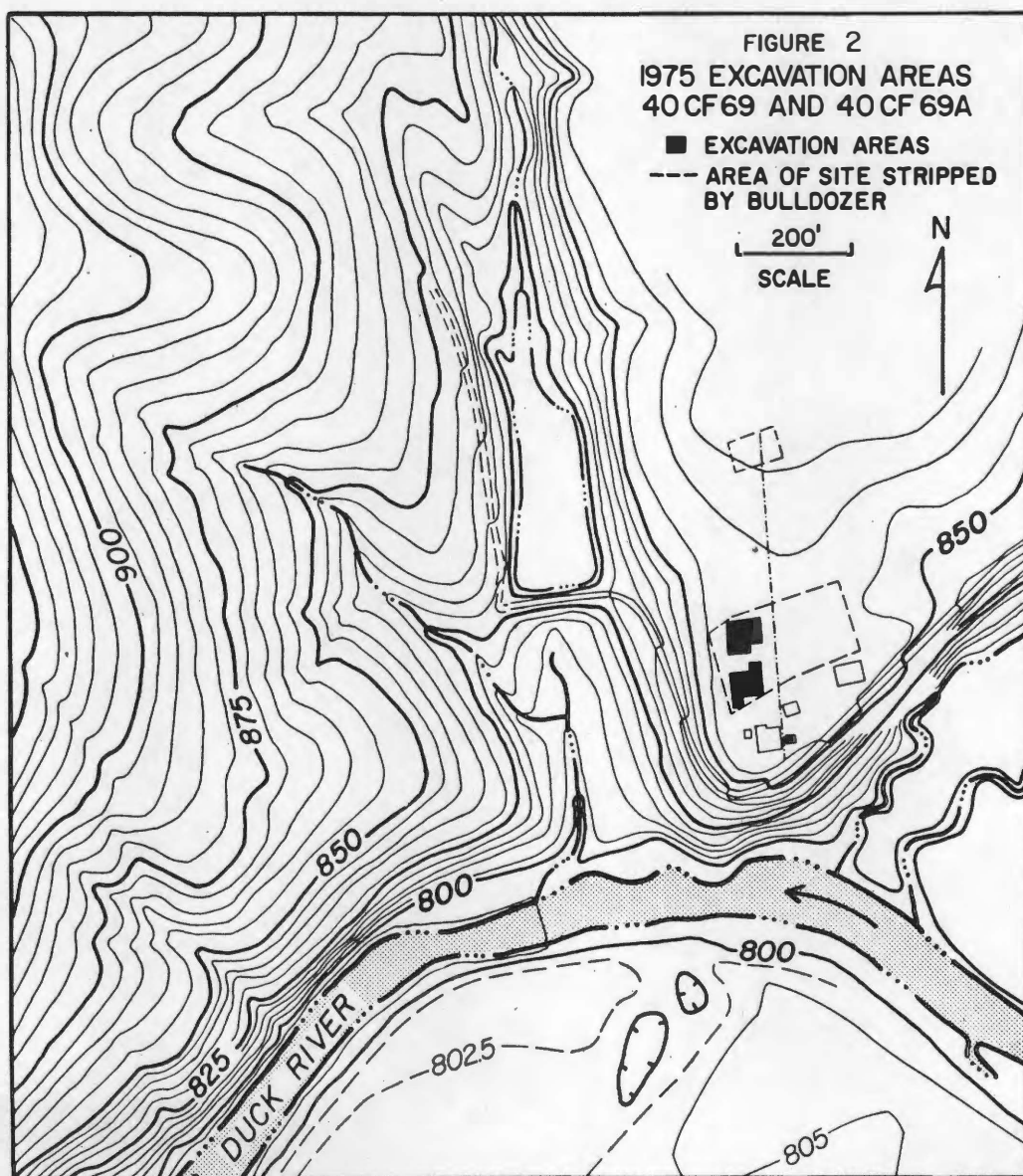


Figure 2. 1975 Excavation Area 40CF69 and 40CF69A.

TABLE 1

Lithic Assemblage, Aaron Shelton Collection

Tool Type	Raw Material						TOTAL	%
	A	B	C	D	I	M		
1					1		1	0.2
2d	1		1				2	0.4
3	5	5	2	1	5		18	3.5
6	4	2	7				13	2.5
7	1		1				2	0.4
12							1	0.2
13			1				1	0.2
14	1						1	0.2
15	1		1				2	0.4
19			2				2	0.4
24	3		4		2		10	1.9
25	13	1	7	1			26	5.0
26	24	1	10				36	7.0
27	15	1	2				22	4.2
29	3						3	0.6
30							1	0.2
31		1			1		3	0.6
32	2		1				3	0.6
34	1						1	0.2
36	1						1	0.2
37							1	0.2
38			1				1	0.2
52	1						1	0.2
53	6		3				9	1.7
54	1		1				2	0.4
55	3	1	3				7	1.3
56			1				1	0.2
57	1		2				3	0.6
59	2		2				4	0.8
60	3				2		5	1.0
61	3	1	4		2		10	1.9
62	6	2			1		9	1.7
63					1		1	0.2
65	1		1				2	0.4
66	1						1	0.2
67	2						2	0.4
68							1	0.2
72	1		1				2	0.4
74	1						2	0.4
76							2	0.4
78	4		1				11	2.1
80	1						1	0.2
81	3						3	0.6

TABLE 1 (continued)

Tool Type	Raw Material						TOTAL	%
	A	B	C	D	I	M		
82	3		6				3	2.3
84			3				2	1.0
89	2						1	0.6
90	1							0.2
91	3		3					1.2
92	11		5				1	3.3
95	1						1	0.4
96	1							0.2
97	8	1	3				4	3.1
98	9		5				3	3.3
99	2		1					0.6
100	2		1					0.6
101	2						1	0.6
102	8		3					2.1
103	3						1	0.8
104	2						2	0.8
105	2							0.4
107			1					0.2
108	1							0.2
109	3		1				1	1.0
111	3		5				1	1.7
112	3							0.6
113	16		6				3	4.8
114	15		10		1			5.0
115			1					0.2
116	2						1	0.6
119	5		1					1.2
120	1							0.2
121	1		1					0.4
122	3							0.6
123	5		3				6	2.7
124	3						2	1.0
125	2							0.4
129	1							0.2
120	1							0.2
132	3						1	0.8
133	3							0.6
134	2		5				4	2.1
135			1					0.2
136	1					1	1	0.6
138	16		7				15	7.3
139			1			3	1	1.0
140	1		1					0.4
Total	267	16	133	2	16	4	78	516 = n
%	51.7	3.1	25.8	0.4	3.1	0.8	15.1	

Type 134 (cf. *Big Sandy*) side-notched projectile point/knife substantiated the Paleo-Early Archaic component that had been indicated by the landowner's collection. The presence of Late Archaic and Early Woodland components at 40CF69 was indicated by projectile points/knives of the Ledbetter cluster (Type 103) and the Rounded Base cluster (Type 92). Activity indices based on the recovered lithic material were rather uniformly low; it was suggested, however, that the Aaron Shelton site could represent an Early Archaic and Terminal-Late Archaic hunting-butcher station (Faulkner and McCollough 1973:347).

Prescott (1978) further analyzed the lithic material from 40CF69 in his study of surface lithic collections from the Normandy Reservoir area. In addition to the 1971 survey collection material Prescott utilized lithic material collected by survey crews during the winter of 1974 and the summer of 1975. This new material indicated the presence of Middle Archaic, Early Woodland, and Middle Woodland components at 40CF69. Early Archaic projectile point/knife types were represented by 26 Kirk cluster and 7 *Big Sandy* lithic artifacts. The continued utilization of 40CF69 by Middle Archaic period groups was indicated by the presence of 42 White Springs/Sykes cluster projectile points/knives in the survey collection. The 1971 survey recorded no evidence of a Middle Woodland period occupation at 40CF69 although lithic artifacts diagnostic of this period were included in the landowner's collection. However, the 1974-1975 survey recorded 22 McFarland cluster projectile points/knives, substantiating the presence of a McFarland phase component at 40CF69. Activity indices based on the combined surface collections

failed to indicate the presence of extensive sedentary occupations at 40CF69, supporting Faulkner and McCollough's (1973:346-347) suggestion that 40CF69 represented a hunting-butcherer station.

1975 Test Excavations

Testing operations at 40CF69 were carried out intermittently in March and April of 1975 with a total of seven days being spent in actual fieldwork. A centerline 1,180 feet in length was established with the 0-0 stake being located at the junction of the site access road and the Shelton farmhouse driveway. The first stake on the centerline was placed 80 feet north of the 0-0 stake with each succeeding stake being placed at intervals of 100 feet apart. The centerline ran in a north-south direction for 1,180 feet and terminated at a fenceline running in an east-west direction.

Seven intuitively placed 5' by 5' test units were excavated over the seven days of the testing operations (Figure 3). Six aboriginal features including an extremely fragmentary burial were found as a result of the testing process. Only one feature (Feature 2) contained culturally diagnostic material in the form of projectile points/knives indicative of a Late Archaic period association for this feature. There was no evidence of an intact midden deposit at 40CF69.

Test Unit 1, 100-105 L65-70, represented the western limit of testing. Upon removal of the plowzone a small circular stain was noted in the southwestern corner of the unit. Upon excavation this was defined as a burial basin approximately two feet in diameter with a

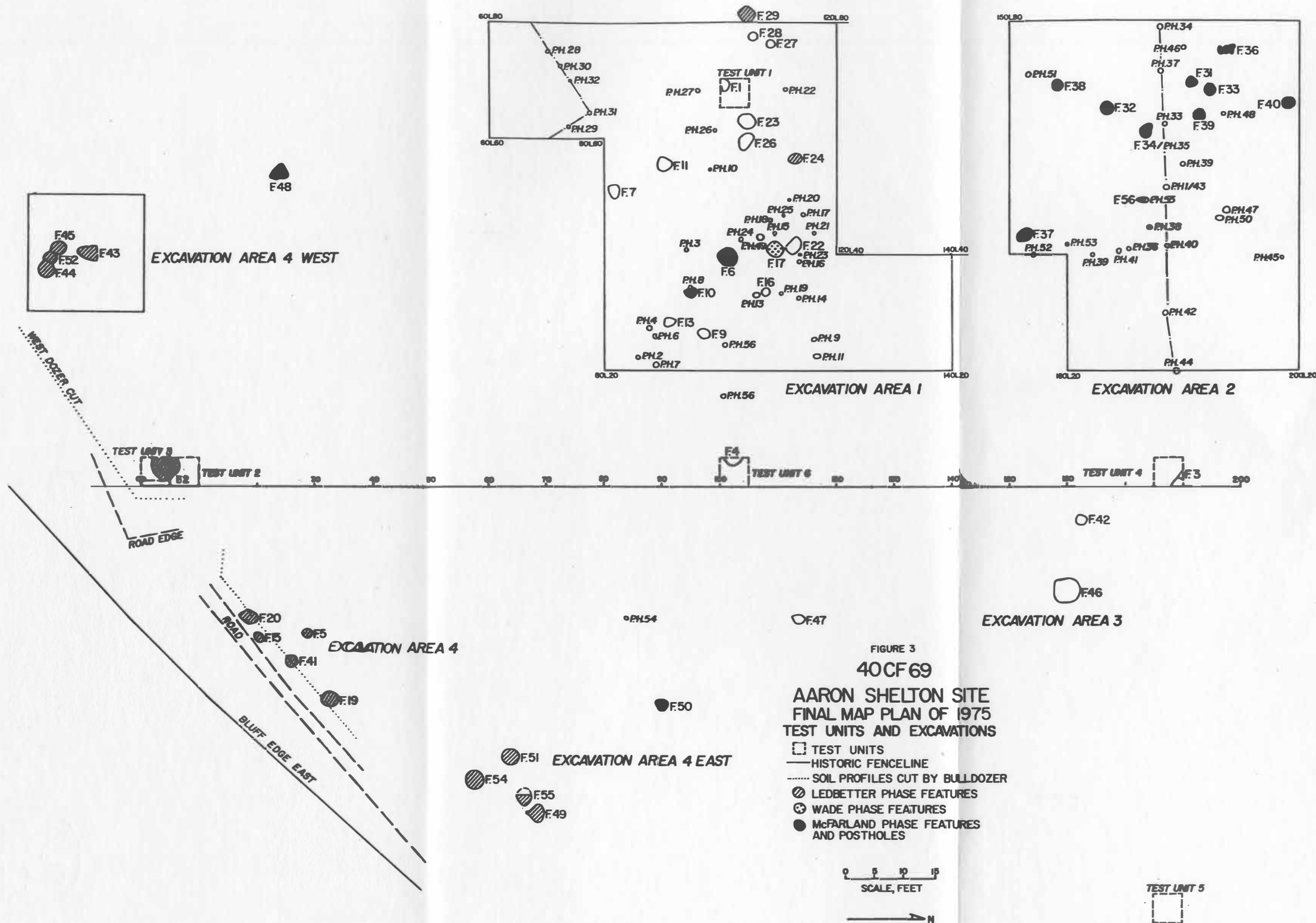


Figure 3. Plan of 40CF69 Excavation Units.

maximum interior depth of 0.85 feet. The burial (Burial 1/Feature 1) was in a state of extremely poor preservation but appeared to have been a flexed burial. No culturally diagnostic material was found in the basin containing the burial and Burial 1 is further described in Chapter VIII. Test Unit 1 penetrated sterile clay at the base of Level 1 (approximately 1.0 feet).

Test units 2 (5-10 L 0-5) and 3 (0-5 L 1-5) contained a large basin-shaped feature which had been intruded in its center by a second feature in the form of a large deep pit. The separate identity of these two features was not immediately recognized and all cultural material from both features was combined under a single feature number (Feature 2). The basin was approximately 4.5 feet in diameter with an interior depth of at least 1.20 feet. The pit had a basal diameter of 2.40 feet with a maximum interior depth of at least 2.90 feet. The combined lithic assemblage from the two features included a large amount of primary lithic debitage ($n = 319$), two worked pieces of Chattanooga black shale, two Type 25 (thick biface) artifacts, a Type 26 asymmetrical knife, and a Type 36 drill fragment (Plate I; Appendix). A total of four projectile points/knives were recovered from Feature 2. Two of these are Late Archaic Pickwick cluster artifacts; a Type 105 (medium-large, narrow-straight stemmed, slight barb, wide blade) and a Type 106 (medium-large, straight-stemmed, wide asymmetrical-recurvate, thick blade). The other two projectile point/knives from Feature 2 are Type 91 (medium rounded stemmed, narrow blade) and Type 109 (large, crude, straight stemmed artifacts) (Plate I). The Type 91 projectile

point/knife type is thought to be related to the Pickwick cluster (Type 102-106) artifacts (Faulkner and McCollough 1973:125) while the Type 91 projectile point is included in the Late Archaic-Early Woodland Rounded Base cluster. The occurrence of these diagnostic projectile point/knife types suggests a Late Archaic period association for one, if not both, of the two features. Feature 2 was first recorded at a depth of approximately 1.0 foot below the ground surface; sterile subsoil was not reached in either Unit 2 or 3 until a depth of approximately 1.5 feet below the ground surface.

Feature 3 was an irregular basin located in Test Unit 4, 175-180 L 0-5. Only the southwestern portion of this feature that fell within the test unit was excavated. The feature fill was mottled and only slightly darker in color than the surrounding subsoil matrix. No material of any kind was found within the feature which had a maximum depth of approximately 0.7 feet. The absence of artifacts and the mottled appearance of the feature fill strongly suggest that Feature 3 represents a natural disturbance. Test Unit 4 reached sterile clay at a depth of approximately 0.50 to 0.60 feet below the present ground surface. The cultural material from this level largely consisted of primary lithic debitage; however, two projectile points/knives, a Type 55 (medium-large triangular, straight elongate blade) McFarland cluster artifact and a Type 65 (weak shouldered, expanded base) artifact, were found in this level. The Type 65 projectile point/knife is similar to the *Bakers Creek* type of northern Alabama and is believed to be associated with the late Middle Woodland period in the upper Duck Valley (Faulkner and McCollough 1973:100).

Feature 4 was a shallow basin/hearth contained in Test Unit 5, 100-105 L 0-5. The feature fill was extremely dark (almost black) in color and contained charred hickory nut remains. Burnt limestone and small pieces of fired clay were scattered throughout the fill, suggesting that this feature functioned as a hearth. Lithic material from this feature consisted entirely of primary lithic debris. The cultural affiliation of Feature 4 is unknown. The western half of Test Unit 5 reached sterile subsoil at a depth of approximately 1.15 feet below the present ground surface.

Test Units 6 (175-80 L 50-55) and 7 (175-180 R 70-75) contained no evidence of subsurface disturbances nor any lithic material outside of primary lithic debris. Both of these test units reached sterile clay at a depth of approximately 1.0 foot below the present ground surface.

The test excavations were disappointing in that no features attributable to an Early Archaic occupation were found at 40CF69. Only one feature (F2) contained diagnostic material in the form of projectile points/knives assignable to the Late Archaic Ledbetter phase. However, it was still believed that an Early Archaic horizon was present at 40CF69 and the primary objective of the 1975 summer excavations was to determine if a substantial Early Archaic period occupation was indeed present at 40CF69.

CHAPTER IV

1975 EXCAVATION OF THE AARON SHELTON SITE

Feature Morphology

A total of 55 features was excavated at the Aaron Shelton site during the spring and summer of 1975. These features were separated into five morphological types in accordance with the classificatory system utilized at the Wiser-Stephens I site (Davis and Keel 1975:14-28; Davis 1976:34-39). These five types are basins, pits, earth ovens, burial receptacles, and miscellaneous features. Features were assigned to one of these morphological types based on the plan, profile, and depth of the individual features. Features less than 1.0 foot in depth are designated as shallow while features greater than 1.0 foot in depth are designated as deep.

DuVall (1977:34-39) further refined the classificatory system of Davis and Keel (1975) by establishing subcategories of all five morphological types. These subcategories (Table 2) were used in the morphological classification of 40CF69 features with one addition; a new subcategory (Type IVe: burial receptacle/amorphous pit) has been added here.

Type I: Basins

Basins are those features in which there is a lack of distinction between the feature walls and bottom (Davis 1976:38). Basins were the

TABLE 2
MORPHOLOGICAL FEATURE CLASSIFICATION FOR
NORMANDY RESERVOIR FEATURES

Primary Category	Morphological Category
I. Basins	(a) Shallow oval (b) Shallow circular (c) Deep oval (d) Deep elliptical (e) Amorphous
II. Pits	(a) Shallow oval (b) Shallow circular (c) Deep oval (d) Deep oval/circular straight sides, flat bottom (e) Deep circular, sloping sides (f) Bell-shaped (g) Amorphous
III. Earth Oven	(a) Shallow circular
IV. Burial Receptacles	(a) Shallow circular basins (b) Deep oval pit (c) Shallow circular pit (d) Amorphous basin (e) Amorphous pit
V. Miscellaneous	(a) Tree fall (b) Tree stump and/or root mold (c) Small basal feature remnants

Based on Duvall (1977).

predominant feature type at 40CF69 comprising 69.7 percent ($n = 29$) of all features.

a. Shallow Oval Basins

Twelve features were classified as shallow oval basins. Diameters ranged from a minimum of 1.62×1.75 feet to a maximum of 3.07×2.91 feet with a mean diameter of 2.77×2.64 feet. Depth of these basins ranged from 0.19-0.97 foot with a mean of 0.66 foot. Six are assignable to the McFarland phase and two to an undetermined Woodland phase. Two other basins (Features 43 and 51) located along the terrace edge are suggested to be associated with the Late Archaic period occupation at 40CF69. Although neither basin contained diagnostic material both were located in the immediate vicinity of other terrace edge features which did contain Late Archaic artifacts. The remaining shallow oval basins ($n = 2$) contained no diagnostic material.

b. Shallow Circular Basins

Nine features were defined as shallow circular basins. Diameters ranged from a minimum of 1.17×1.15 feet to a maximum of 3.43×3.44 feet with a mean diameter of 1.98×1.78 feet. Depth ranged from 0.25-0.90 foot with a mean depth of 0.42 foot. Two of the basins were associated with the Ledbetter occupation while one was a McFarland phase installation. The cultural affiliation of the remaining six shallow circular basins is unknown.

c. Deep Oval Basins

Two basins were designated as deep oval basins. These had dimensions ranging in depth from 1.12-1.60 feet with a mean depth of 1.31 feet. Diameters ranged from 2.42×1.17 feet to 2.75×2.22 feet with a mean average diameter of 2.59×1.17 feet. The cultural association is unknown although the proximity of one of these basins (Feature 40) to several McFarland phase features suggests that it also is a McFarland phase installation.

e. Amorphous Basins

Six basins were designated as amorphous basins. Four basins (Features 2, 3, 4 and 52) were placed in this subcategory because they were only partially excavated and their actual configuration is indeterminate. If completely excavated they would have been subsumed in one of the other basin subcategories. The remaining two basins (Features 24 and 49) were irregular in plan view and could not be classified as either oval or circular basins. These features ranged in diameter from 2.24×1.98 feet to 3.00×2.75 feet with a mean diameter of 2.62×2.32 feet. Depth ranged from 0.26-1.41 foot with a mean depth of 0.84 foot. Feature 24 contained a diagnostic Ledbetter cluster projectile point/knife. The cultural association of Feature 49 is uncertain but its location along the terrace edge suggests a Late Archaic affiliation.

Type II: Pits

Pits are characterized by the presence of a definite wall and a distinct bottom (Davis 1976:35). Pits comprised 16.36 percent ($n = 9$) of all features at 40CF69.

c. Deep Oval Pits

Six features were classified as deep oval pits with diameters ranging from a minimum of 1.82×2.14 feet to a maximum of 2.55×2.69 feet with a mean diameter of 2.55×2.69 feet. Depths ranged from 1.41-3.49 feet with a mean depth of 2.24 feet. One deep oval pit was assignable to the Wade phase, two to the Ledbetter phase, one to an undetermined Woodland phase, and two contained no diagnostic material.

e. Deep Circular Pits

Three features were classified as deep circular pits. Diameters ranged from a minimum of 2.53×2.05 feet to a maximum of 3.70×3.31 feet with a mean diameter of 2.94×2.89 feet. Depth ranged from 1.15-2.25 feet with a mean of 1.79 feet. One deep circular pit (Feature 45) contained projectile points/knives indicative of a Late Archaic placement and a second deep circular pit (Feature 44) is associated with it. The remaining pit contained no culturally diagnostic material.

Type III: Earth Ovens

One feature was classified as an earth oven and had a diameter of 2.82×3.10 feet and was 0.47 foot deep. The earth oven (Feature 6) was

a shallow circular basin in shape. Ceramics from the earth oven indicated a McFarland phase affiliation.

Type IV: Burial Receptacles

Burial receptacles are basins or pits which have been utilized as receptacles for flesh interments or cremations (DuVall 1977:42). Burial receptacles comprised 5.5 percent of all features at 40CF69.

a. Shallow Circular Basins

A flexed inflesh inhumation (Burial 1) was contained in a shallow circular basin in Excavation Area 1. Measurements for this basin are 1.78×2.05 feet with a depth of 0.85 foot. The cultural association of this feature is unknown.

d. Amorphous Basins

An amorphous basin (Feature 41; Burial 2) located along the terrace edge showed evidence of in situ firing and contained the remains of one or two individuals. This basin measured 2.48×2.37 feet in diameter and was 1.21 feet deep. Projectile points/knives indicative of a Late Archaic Ledbetter phase placement were recovered from this basin.

e. Amorphous Pit

One amorphous pit in Excavation Area 2 contained a flexed inflesh inhumation. Measurements were 2.48×2.37 feet in diameter by 1.21 feet deep. Ceramics in the burial fill indicated a McFarland phase affiliation for this pit (Feature 34).

Type V: Miscellaneous

b. Tree Stump and/or Root Mold

A total of eight features was determined to be tree stumps. This type comprised 14.5 percent (n = 8) of all features excavated at 40CF69.

Discussion of Features

A total of 55 features was excavated at the Aaron Shelton site (Table 3). Determination of the cultural affiliation of these features was based primarily upon the presence of culturally diagnostic projectile points/knives or ceramics in the fill. In addition, if a group of features formed a distinct cluster this was interpreted as an indication that all features in the cluster shared a contemporaneous origin. Also, a cultural affiliation indicated by diagnostic material from one feature in a cluster was assumed to apply equally to all features in the cluster. At least three separate clusters attributable to the Late Archaic occupation at 40CF69 were located along the terrace edge.

Excavation Strategy

The Aaron Shelton site was divided into four separate areas immediately after the removal of the plowzone by the self loading pan (Figure 3, page 26). Each of these areas (Excavation Areas 1-4) represents a section of the site where evidence of heavy prehistoric activity in the form of features and cultural debris was observed following the stripping operations. Excavation procedures in these areas varied slightly. Excavation Areas 1 and 2 were gridded off into

TABLE 3
Feature Data—40CF69

Feature	Location	Unit	Dimensions (feet)	Depth (feet)	Feature Morphology	Cultural Affiliation
1	Area 1	100L60	1.78 × 2.05	0.85	Burial receptacle	Unknown
2	Area 4	0L0	4.50 Diameter	3.10	Basin/pit	Ledbetter
3	-----	160L60	-----	0.65	Basin	Unknown
4	-----	100L0	3.00 Diameter	0.36	Basin	Unknown
5	Area 4	20R20	1.62 × 1.75	0.30	Shallow oval basin	Ledbetter*
6	Area 1	100L20	2.82 × 3.10	0.47	Earth oven	McFarland
7	Area 1	80L40	2.12 × 2.47	2.12	Deep oval pit	Unknown
8	Area 1	80L40	2.20 × 1.08	0.51	Tree stump	-----
9	Area 1	80L20	2.30 × 1.72	0.49	Shallow oval basin	Unknown
10	Area 1	80L40	2.15 × 1.78	0.19	Shallow oval basin	McFarland
11	Area 1	80L40	2.19 × 1.91	0.60	Shallow oval basin	Woodland
12	Area 1	80L40	1.62 × 0.75	1.06	Tree stump	-----
13	Area 1	80L20	1.35 × 1.33	0.28	Shallow circular basin	Unknown

TABLE 3 (continued)

Feature	Location	Unit	Dimensions (feet)	Depth (feet)	Feature Morphology	Cultural Affiliation
14	Area 4	Profile trench	1.70 × 1.55	0.27	Shallow circular basin	Unknown
15	Area 4	Profile trench	2.25 × 1.10	0.42	Shallow circular basin	Ledbetter*
16	Area 1	100L40	1.17 × 1.05	0.90	Shallow circular basin	Unknown
17	Area 1	100L40	2.70 × 2.84	3.49	Deep oval pit	Wade
18	Area 4	Profile trench	4.50 × 4.20	1.21	Deep basin	Ledbetter*
19	Area 4	Profile trench	2.70 × 2.84	3.49	Deep circular pit	Ledbetter
20	Area 4	Profile trench	3.07 × 2.94	0.86	Shallow oval basin	Ledbetter*
21	-----	-----	-----	----	-----	-----
22	Area 1	100L40	2.42 × 1.17	1.12	Deep oval basin	Unknown
23	Area 1	100L60	2.42 × 2.40	0.46	Shallow circular basin	Unknown
24	Area 1	100L40	2.24 × 1.98	0.26	Shallow amorphous basin	Ledbetter
25	Area 1	100L40	3.80 × 2.75	1.51	Tree fall	-----
26	Area 1	100L40	3.20 × 2.36	0.60	Shallow oval basin	Woodland

TABLE 3 (continued)

Feature	Location	Unit	Dimensions (feet)	Depth (feet)	Feature Morphology	Cultural Affiliation
27	Area 1	80L60	1.46 × 1.33	0.50	Shallow circular basin	Ledbetter*
28	Area 1	80L60	1.90 × 1.75	0.71	Shallow oval basin	Ledbetter*
29	Area 1	80L80	3.00 × 2.75	1.41	Deep oval pit	Ledbetter
30	Area 1	80L60	1.90 × 0.95	----	Root mold	-----
31	Area 2	100L60	1.82 × 2.00	2.14	Deep oval pit	Woodland/ McFarland
32	Area 2	160L60	2.33 × 2.10	0.43	Shallow circular basin	McFarland
33	Area 2	180L60	1.88 × 2.28	0.36	Shallow oval basin	McFarland
34	Area 2	160L60	2.48 × 2.37	1.21	Burial receptacle	McFarland
35	Area 4	80R50	2.35 × 1.45	0.62	Root mold	-----
36	Area 2	180L60	2.93 × 1.90	0.36	Amorphous	McFarland
37	Area 2	140L40	2.90 × 2.60	0.60	Shallow oval basin	McFarland
38	Area 2	140L60	2.07 × 2.13	0.46	Shallow oval basin	McFarland*
39	Area 2	180L60	2.53 × 2.05	1.97	Deep circular pit	McFarland*
40	Area 2	180L60	2.75 × 2.22	1.60	Deep oval basin	McFarland*

TABLE 3 (continued)

Feature	Location	Unit	Dimensions (feet)	Depth (feet)	Feature Morphology	Cultural Affiliation
41	Area 4	Profile trench	2.20 × 2.30	0.50	Crematory basin	Ledbetter
42	Area 3	160R20	1.69 × 1.66	0.25	Shallow circular basin	Unknown
43	Area 4	0L30	2.82 × 2.82	0.97	Shallow oval basin	Ledbetter*
44	Area 4	0L30	3.20 × 3.31	2.25	Deep circular pit	Late Archaic/ Ledbetter*
45	Area 4	0L30	3.09 × 3.31	1.15	Deep oval pit	Late Archaic/ Ledbetter
46	Area 3	160R20	4.00 × 4.20	1.17	Tree stump	-----
47	Area 3	120R20	1.90 × 1.80	0.24	Shallow oval basin	Unknown
48	Area 4	20L40	2.70 × 3.15	0.41	Shallow oval basin	McFarland
49	Area 4	60R60	2.42 × 3.25	1.49	Deep amorphous basin	Ledbetter*
50	Area 4	80R40	2.00 × 2.10	0.70	Shallow oval basin	McFarland
51	Area 4	60R40	2.62 × 2.81	0.88	Shallow oval basin	Ledbetter*
52	Area 4	0L30	2.33 diameter	1.56	Deep basin	Ledbetter*

TABLE 3 (continued)

Feature	Location	Unit	Dimensions (feet)	Depth (feet)	Feature Morphology	Cultural Affiliation
53	Area 4	40R40	3.43 × 3.44	0.33	Shallow circular basin	Ledbetter*
54	Area 4	40R60	3.57 × 3.53	0.62	Tree stump	-----
55	Area 4	60R40	2.80 × 3.60	1.67	Deep oval pit	Ledbetter*
56	Area 2	160L40	1.85 × 0.80	0.25	Amorphous burial receptacle	McFarland

*Phase affiliation for these features was determined by (1) the proximity of the feature to a feature containing culturally diagnostic material or (2) the feature's inclusion in a culturally specific habitation locus at 40CF69.

20 × 20 foot units each of which was then completely shovel skimmed and troweled to discern features. In Excavation Area 3 only those features evident after the mechanical removal of the plowzone were investigated and in Excavation Area 4 earth-moving equipment was used to cut trenches to determine if a buried horizon existed at the edge of the terrace.

In the section that follows features from each excavation area are described in turn. A description of features based on their numerical order was determined to be too confusing as at one point excavations were being carried out concurrently in several of the excavation areas.

Excavation Area 1

Excavation Area 1 was a 40 × 60 foot area demarcated by stakes 120L80 (N.W.), 120L20 (N.E.), 60L60 (S.W.), stake 80L20 (S.E.). A 20 × 20 foot extension was excavated on the southwest edge of this unit and another 20 × 20 foot unit extension was excavated on the northeast edge. All of Excavation Area 1 was completely troweled and all features and postholes recorded before excavations were begun.

Features

A total of 21 features was excavated in Area 1. All feature fill was removed by troweling and waterscreened with soil samples from selected features being saved for field flotation.

Four of the features (F8, F12, F25 and F30) were defined in the field as natural disturbances (tree stumps or root casts) and consequently are not discussed in this section nor shown on the site map (Figure 3, page 26). Measurements for these features are listed in Table 2, page 31.

Feature 6 was a shallow circular earth oven (Type IIIa) located in the southwest corner of unit 100L20. There was evidence of in situ burning at the base of this feature in the form of burnt limestone (9.3 lbs.) and pieces of fired clay. The feature fill was very dark and contained charcoal, calcined bone, and charred hickory nuts. The cultural material from this feature consisted of primary lithic debris and twelve limestone-tempered sherds including two fabric-marked sherds and a single check stamped sherd (Plate V). A McFarland phase affiliation for this feature is indicated.

Feature 7 was a stratified pit (Type IIc) 2.12 feet deep with a basal layer of dark brown fill overlain by a rich reddish-brown (5YR3/4) soil layer. This feature was located in unit 80L60. A small amount of faunal material was found near the base of the feature. No culturally diagnostic material was contained in the fill. The absence of in situ burning in this feature suggests that it was a storage pit which had been secondarily utilized as a trash receptacle. The top layer of reddish-brown fill probably represents washed in terrace soil. The cultural association of this feature is unknown but it is morphologically similar to Features 19 and 44, both of which contained diagnostic Late Archaic projectile points/knives.

Feature 9 was a shallow oval basin (Type Ia) in unit 80L20. The fill was dark brown with a small amount of charcoal scattered throughout. Artifactual material consisted entirely of primary lithic debitage. There was evidence of burning along the base of the feature suggesting that it may have functioned as a hearth. Cultural association is unknown.

Feature 10 was a shallow oval basin (Type Ia) located in unit 80L40. The fill was dark reddish brown and contained a small amount (4.0 grams) of burnt limestone. Four limestone tempered sherds were recovered from this feature including one fabric marked sherd. Also present was a single chert tempered sherd but this appears to have its source in a Mason phase post (P.H.8) which intruded the western edge of the feature. No diagnostic lithic material was present. The small amount of limestone tempered ceramics in this feature indicates a McFarland phase affiliation for this basin. Feature 10 is possibly associated with the McFarland phase earth oven (Feature 6) which lies approximately 6 feet to the northwest.

Feature 11 was a shallow oval basin (Type Ia) located in unit 80L40. The fill was dark brown and contained a small amount of charcoal. Cultural material from this feature consisted of primary lithic debris, a scraping tool (Type 8), and a Type 78 (small-medium, short straight stemmed) projectile point/knife. The Type 78 projectile point/knife is thought to be a Woodland artifact of uncertain phase affiliation (Faulkner and McCollough, eds. 1977:31).

Feature 13 was a shallow circular basin (Type Ib) located in Unit 80L20. The fill was a mottled brown orange and contained a single piece of charcoal. Artifactual material consisted entirely of nondiagnostic primary lithic debitage. The cultural affiliation of this feature is unknown.

Feature 16 was the remnant of a shallow circular basin in unit 100L40 (Type Ib). The carbon flecked fill contained no artifactual material and the cultural association of this feature is unknown.

Feature 17 was located approximately one foot south of Feature 22 in unit 100L40. This flat bottomed pit (Type IIc) appears to have been a storage facility which was later utilized as a trash receptacle. The basal fill was a 0.3-0.4 layer of dark reddish brown (5YR3/4) soil which was overlain by a dark red (10YR2.5/2) humus layer approximately 0.5-0.6 foot in thickness. These two soil layers were in turn overlain by a culturally sterile layer of red (2.5YR4/6) soil which appears to represent soil which washed in during a period when the feature was standing open. The feature was then utilized once again as a trash receptacle with the top layer of feature fill consisting of a 2.5-2.6 foot layer of dark humus (10YR2.5/2) with high artifact content. Two projectile points/knives (Types 80 and 96) were found in this top layer. The Type 80 projectile point/knife is a diagnostic Terminal Archaic Wade cluster artifact (Faulkner and McCollough 1973:109). Scraping implements (Types 8 and 10; n = 7) found in the fill indicate that hideworking activities were performed in the area of Feature 17. Botanical material from this feature consisted of charred walnut and hickory nut fragments. Unburnt faunal material was also present including some fragments identified as white-tailed deer (*Odocoileus virginianus*). The absence of any in situ burning together with the stratified feature

fill indicates that this Wade phase storage facility was secondarily utilized as a trash receptacle.

Feature 22 was a large deep oval basin (Type Ic) located immediately north of Feature 17 and possibly associated with it. The fill was dark reddish brown and contained a small amount of unidentifiable faunal material. Artifacts included primary lithic material, two Type 10 unifacial flake scrapers, and a Type 96 projectile point/knife. Type 96 artifacts were originally classified as Late Archaic-Early Woodland implements (Faulkner and McCollough 1973:117-118). However, Faulkner and McCollough (1977:126) later suggested that these may be Woodland artifacts. A more precise cultural association for Feature 22 than the Late Archaic-Early Woodland period is hampered by the presence of a Terminal Archaic Wade phase pit (Feature 17) and a McFarland phase earth oven in the immediate vicinity. The function of this feature is unknown.

Feature 23 was a shallow circular basin (Type Ib) located in unit 100L60 and situated approximately eight feet southeast of Feature 24 and immediately west of Feature 26. The fill was dark reddish brown with small flecks of charcoal scattered throughout. Lithic material consisted of primary lithic debitage and a Terminal Archaic Wade cluster projectile point/knife (Type 78). A small plain limestone tempered sherd was found in the fill. The combination of a Wade cluster projectile point/knife and a limestone tempered sherd render a cultural placement for this feature impossible. The sherd is small enough to have been intruded into Feature 23 through a roothole but this cannot be substantiated. The function of this basin is unknown.

Feature 24 was an amorphous deep basin (Type 1e) with slightly concave walls. The fill was dark reddish brown and contained a small amount of charcoal and burnt limestone; there was no indication of in situ burning. The feature was located in unit 100L40. Bifacial lithic implements from this feature included a Type 25 asymmetrical knife, a Type 31 chisel, and a Late Archaic Ledbetter cluster projectile point/knife (Type 103). The function of this shallow basin is unknown.

Feature 26 was a shallow oval basin (Type 1a) located immediately east of Feature 23 in unit 100L40. The fill was dark reddish brown and contained a large amount of burnt limestone. Cultural material from this feature consisted of a small amount of primary lithic material and a Type 78 projectile point/knife. Type 78 (small-medium short straight stemmed) artifacts are thought to be Woodland implements but the phase affiliation is uncertain (Faulkner and McCollough, eds. 1977:31).

Feature 27 was a circular basin (Type 1b) located in Unit 80L60 which contained no diagnostic material. The fill was dark reddish brown and contained a small amount of charcoal and primary lithic debitage. This feature was northeast of Features 28 and 29 and possibly associated with them. The cultural association of this feature is unknown.

Feature 28 was approximately three feet southwest of Feature 27 in unit 80L60. The feature was a shallow oval basin (Type 1a). The fill was a moderate brown/orange and contained a minute amount ($n = 3$) of primary lithic debitage. This feature was interpreted as a possible natural disturbance in the field.

Feature 29 was a deep oval flat bottomed pit (Type IIc) in units 80L80 and 100L80. The fill was a dark reddish brown loam/clay mixture

which contained pockets of burnt clay, limestone, and chert in addition to a considerable amount of charcoal. There was some evidence of in situ firing in the form of burnt faunal material and burnt pieces of clay near the base of this feature. One culturally diagnostic artifact, a Type 106 projectile point/knife was recovered. This is a Late Archaic Ledbetter cluster artifact (Faulkner and McCollough 1973:122) which may have been used primarily as a knife. The relationship of Feature 29 to the two other features in the immediate vicinity (F27 and F28) is unclear; while the three features may represent a Ledbetter phase activity area, the evidence is far from certain. The contents and depth of Feature 29 suggest that this feature is a storage pit which was later utilized as a hearth.

Postholes

A total of 30 postholes (Nos. 2-32) in four distinct concentrations was excavated in Excavation Area 1. Data concerning these postholes is included in Table 4; actual locations of various postholes are shown on Figure 3, page 26.

One group of posts (Nos. 28-32) in unit 60L60 represent a historic fence line probably associated with the Shelton family garden. Material recovered from these postholes included glass, brick fragments, and pieces of cedar posts.

One concentration of postholes representing a possible alignment occurred in unit 100L40. Eight postholes (Nos. 15, 16, 17, 18, 21, 23) are located to the north and west of Features 17 and 22; Feature 17 is a Terminal Archaic Wade phase feature and Feature 22 is possibly

TABLE 4

Posthole Data, 40CF69 and 40CF69A

No.	Location	Diameter	Depth	Content	Interpretation
1	180I40	1.00' x .85'	.75'	Limestone chinking	historic posthole
2	80L20	.85' x .60'	.50'	---	posthole
3	80L40	.49' x .46'	.09'	Chattanooga black shale	posthole
4	80L20	.64' x .48'	.59'	Lithic type 4(1); 14.0 grams dried cedar wood; limestone chinking.	historic posthole
5	80L20	.70' x .72'	.51'	Lithic type 4(1)	posthole
6	80L20	.60' x .65'	.73'	Lithic type 3(1); ceramic type 2c (1)	posthole, probably Mason phase
7	80L20	.96' x .91'	.51'	Lithic type 3(1), 4(6); 77.3 grams burned clay	posthole
8	80L20	.65' x .72'	.95'	Lithic types 3(5), 4(1), 5(2), 6(1); ceramic types 1c(4), 2c(45); charred wood and nut fragments; 2 geodes	posthole, Mason phase
9	100L20	.57' x .52'	.16'	---	posthole
10	80I40	.63' x .51'	.21'	Lithic type 3(1)	posthole
11	100L20	.78 x 1.11'	.43'	Lithic type 3(2)	posthole
12	100L20	.95' .92'	.48'	Lithic type 3(14), 4(8), 5(7)	posthole
13	100L20	.95' .80'	.98'	Lithic types 3(16), 4(17) 5(5), 6(3)	posthole

TABLE 4 (continued)

No.	Location	Diameter	Depth	Content	Interpretation
14	100L20	.44' x .53'	.52'	Lithic type 4(1); C-14 sample	posthole
15	100L40	.50' x .46'	.18'	Charred nut fragments	remnant of posthole
16	100L20	.5' x .58'	.48'	---	posthole, root intruded
17	100L40	.53' x .62'	.48'	---	posthole
18	100L40	.31' x .32'	.16'	Charcoal on surface	posthole
19	100L20	.50' x .49'	.28'	---	posthole
20	100L40	.35' x .39'	.22'	---	posthole
21	100L40	.45' x .50'	.30'	---	posthole
22	100L40	.35' x .37'	.45'	Charred wood and nut	posthole
23	100L40	.35' x .27'	.15'	---	posthole
24	120L40	.45' x .50'	.15'	Lithic types 3(1), 5(2)	posthole
25	120L40	.40' x .46'	.16'	---	posthole
26	80L60	.40' x .48'	.15'	---	posthole
27	80L60	.57' x .65"	.59'	---	posthole, root intruded
28	60L60	.60' x .55'	.13'	---	historic posthole
29	60L60	.60' x .60'	.14'	Lithic types 3(1), 4(2), 5(1); 2 pieces of glass	historic posthole
30	60L60	.68' x .63'	.36'	Charred wood	historic posthole
31	60L60	.90' x .67'	.35'	Lithic type 6(1)	historic posthole, root intruded

TABLE 4 (continued)

No.	Location	Diameter	Depth	Content	Interpretation
32	60L60	---	.50'	---	root
33	160L60	.80' x .85'	.62'	12 chert cobbles, 1 ls. slab, 1 quartz geode.	historic posthole
34	160L80	.90' x .99'	.85'	Lithic types 3(7), 4(6) 5(1)	historic posthole
36	160L60	.72' x .67'	.55'	Lithic types 4(1), 6(1); historic glass, 1 nail, and historic ceramics	historic posthole
37	160L60	.95' x 1.02'	.95'	Lithic types 3(5), 4(3), 5(1), 6(1); ls. chinking	historic posthole
38	160L40	.55' x .60'	.17'	Lithic types 3(3), 4(6), 5(1); ceramic type 2b(2)	historic posthole possible gravemarker
39	160L40	.81' x .79'	.58'	2 pieces of limestone (454.0 grams)	historic posthole
40	160L40	.58' x .60'	.82'	Wood splinters	historic posthole
41	160L40	.51' x .64'	.57'	Glass fragment	historic posthole
42	160L20	.55' x .52'	.41'	Lithic types 3(1), 4(1), 5(2)	posthole
44	160L20	.70' x .78'	.78'	---	historic posthole
45	180L20	.61' x .52'	.41'	Lithic types 3(3), 4(1), 6(1)	posthole
46	180L40	.81' x .61'	1.01'	---	posthole
47	180L40	1.15' x 1.09'	1.46'	Lithic types 3(2), 4(1)	root
48	180L60	.44' x .40'	.36'	Lithic types 3(2), 4(1)	posthole

TABLE 4 (continued)

No.	Location	Diameter	Depth	Content	Interpretation
49	100L40	1.00' x 1.10'	.36'	Lithic types 3(2), 4(3); ceramic type 2b(3); 20 pieces of daub	posthole, probable McFarland phase
50	180L40	1.24' x .58'	.52'	---	posthole, root intruded
51	140L60	.88' x .93'	.45'	---	posthole
52	140L40	.80' x .75'	.50'	Lithic types 3(4), 4(12), 6(1)	posthole
53	160R20	.60' x .60'	1.14'	Lithic types 3(6), 4(4); ceramic type 2b (2)	posthole, McFarland phase
54	80R20	.56' x .52'	.54'	Lithic types 3(4), 4(4), 5(3); brick fragment	historic posthole
55	160L40	.40' x .63'	.30'	cremation	posthole
56	120L0	.71' x .82'	.77'	Lithic types 3(2), 4(3)	posthole
60	-----	----	-----	Lithic type 6(1)	posthole
1a	530L120	.60 x .70'	.75'	14.0 grams burned limestone	posthole

associated with it. Six of these posts (Nos. 16, 17, 18, 21, and 23) form a rough arc enclosing the north and west sides of these two features. Post diameters range from a low of 0.31×0.32 foot to a maximum of 9.50×0.58 foot. No culturally diagnostic material was recovered from any of the posts. This grouping of posts may represent a windbreak or cabana shelter such as that associated with the Late Archaic occupation on the Banks I site (Faulkner and McCollough 1974:199-211). The posts could also be associated with functional activities connected with these two features.

A third group of posts occurred in unit 80L20 in the area of Features 9, 10, and 13. There was no evidence of an alignment of posts in this area. Two of the postholes (Nos. 6 and 8) contained Late Woodland Mason phase chert tempered ceramics with Posthole 8 containing a large section of an *Elk River* ware vessel. The relationship of these two postholes to the features in the area is unclear. Posthole 8 is intrusive into Feature 10 which is a McFarland phase installation.

A second possible alignment of posts was recorded in unit 100L20. Five posts (Nos. 9, 11, 13, 14, 19) form a rough arc which is open to the southeast. P.H. 11 and P.H. 13 are the two largest posts with diameters of 0.78×1.11 feet and 0.95×0.80 feet respectively. P.H. 11 is 0.43 feet deep and P.H. 13 is 0.98 feet deep. None of the postholes contain diagnostic material and it is doubtful whether this arc represents an intentional structure. The occurrence of Wade, Ledbetter, McFarland, and Mason phase posts and features in Excavation Area 1 makes the contemporaneity of these postholes somewhat doubtful.

Excavation Area 1 Summary

Features assignable to the Wade (n = 1), Ledbetter (n = 2), and McFarland phases (n = 2) were located in Excavation Area 1. In addition, two features (F11 and F26) contained Woodland period projectile points/ knives of indetermined phase affiliation (Type 78) while Feature 22 contained a Late Archaic/Early Woodland projectile point (Type 96). Two postholes (Nos. 6 and 8) containing Late Woodland Mason phase chert-tempered ceramics were also located in this area. Eight features contained no culturally diagnostic material and the multicomponent nature of Area 1 makes it impossible to ascertain their cultural affiliation.

An analysis of all of the prehistoric occupations in Excavation Area 1 is included in Chapter X.

Excavation Area 2

Excavation Area 2 was a 40 × 60 foot area demarcated by stake 200L80 (N.W.), 200L20 (N.E.), 160L80 (S.W.), 106L20 (S.E.). A 10 foot extension south by 40 foot extension east-west was made on the south edge of the unit (Figure 2, page 21).

Features

A total of ten features was excavated in this area. Excavation procedure in this area was identical to that used in Excavation Area 1. One feature (F35) was determined to be a root mold and is not described in this section. Measurements for Feature 35 are given in Table 3, page 37.

Feature 31 was a large stratified pit (Type IIc) in Unit 160L60.

Three distinct soil layers could be discerned in the fill. The top stratum was 0.65 foot deep and reddish brown (5YR4/4) in color. The second layer was 0.75 foot thick and was dark reddish brown (5YR3/4) in color. The bottom layer was 0.80 foot thick and was yellowish red in color (5YR4/6). A small amount of burnt faunal material, burnt limestone, and wood charcoal was contained in this basal layer but there was no indication of in situ firing. Primary lithic material was scattered throughout the feature with a Type 71 (undifferentiated side notched) projectile point/knife being found at the bottom of the feature. The cultural association of this artifact type is uncertain but a Woodland affiliation has been suggested (Faulkner and McCollough 1973: 105).

Feature 32 was a shallow circular basin in unit 160L60 (Type Ib).

The fill varied from a dark brown (5YR4/4) to a dark reddish brown (5YR3/4) with a minimal amount of charcoal scattered throughout. Artifactual material consisted of a small amount of culturally undiagnostic primary lithic material.

Feature 33 was a shallow oval basin (Type Ia) in unit 180L60.

The fill was yellowish red (5YR4/4) in color and contained a small amount of burnt clay and limestone with no evidence of in situ burning. This was a definite McFarland phase feature with the entire base of a limestone tempered conoidal base vessel resting on the bottom of the feature. *Long Branch Fabric Marked* rim and body sherds, apparently representing the upper portion of this same vessel, were found above

and to the left of the base. A concentration of calcined bone was found directly above the vessel base and may have represented its contents; this material was unidentifiable as to species. Botanical material consisted of hickory nuts and wood charcoal. Lithic artifacts from this feature included an asymmetrical knife (Type 26) and two projectile points/knives (Types 53 and 56). The Type 56 projectile point/knife (Plate II) is an excellent example of the *Village Copena* type which is a diagnostic McFarland phase artifact (Faulkner and McCollough 1973:97). Type 53 *McFarland Triangular* projectile points/knives are characteristic Middle Woodland artifacts in the upper Duck and Elk River valleys (Faulkner and McCollough 1973:94). Two other McFarland features (F34 and F36) are located in the near vicinity of Feature 33. A radiocarbon sample from this feature consisting of wood charcoal and charred nut fragments returned an unacceptable date B.P. 2750 $\pm$ 190 years (800 B.C.). This date is considered to be much too early for a McFarland phase feature.

Feature 34 was an oval pit (Type IV) in unit 160L60 containing a flexed adult human burial (Burial 4). This feature had been initially defined as a posthole (P.H. 35) and some artifacts from this feature were catalogued under this designation. Artifactual material consisted of primary lithic debitage and four limestone tempered sherds, two of which are *Long Branch Fabric Marked* sherds. Burial 4 is further described in Chapter VIII.

Feature 36 was an amorphous feature (Type Vc) of irregular shape in unit 180L60. This feature was recorded in the field as a natural

disturbance due to its irregular shape and shallow depth. Two layers of *Long Branch Fabric Marked* ceramics were found in the reddish brown feature fill; analysis of these sherds ($n = 54$) indicated that all were from a single McFarland phase vessel. Lithic material consisted entirely of primary lithic debitage. The presence of a McFarland phase vessel in Feature 36 suggests an artificial rather than a natural origin for this feature.

Feature 37 was a shallow oval basin (Type Ia) in unit 140L40. The feature fill was dark brown in color and contained a large amount of charcoal and hickory nut remains. No faunal material was present nor was there any indication of in situ burning. This feature contained a number ($n = 19$) of limestone-tempered ceramics including the entire side of a *Long Branch Fabric Marked* vessel (Plate III). Lithic material consisted of a large quantity ($n = 436$) of primary lithic debitage and a *McFarland Triangular* (Type 53) projectile point/knife. A radiocarbon sample composed of charcoal and charred nut fragments yielded a date for this feature of B.P. 2165 ± 110 years (215 B.C.). This feature is rather isolated from the other McFarland phase features in Excavation Area 2; only P.H. 53 which is located approximately six feet north of Feature 37 and also containing limestone-tempered ceramics appears to be associated with it. The function of this basin shaped McFarland feature is uncertain but the lack of in situ burning suggests that the fill with its high charcoal content has been redeposited from elsewhere.

Feature 38 was a poorly defined circular basin (Type Ib) located in unit 140L60. The fill was black and contained a number ($n = 13$) of

pieces of fired untempered clay. Artifactual material consisted entirely of primary lithic debitage. The cultural affiliation of this feature is unknown.

Feature 39 was a deep circular pit (Type IIe) located approximately five feet northeast of Feature 31 and three feet southeast of Feature 31 in unit 180L60. The fill was reddish brown in color with no indication of in situ burning. Cultural material consisted of nondiagnostic primary lithic material and one Type 24 bifacial implement. This feature appears to be a well-cleaned out storage facility of unknown cultural affiliation.

Feature 40 was a deep oval basin (Type Ic) located approximately 12 feet north of Feature 33 in unit 180L60. The fill was a dark reddish brown (5 YR3/4) in color except at the base of the feature where it was yellowish red (5YR4/6) in color. Artifactual material consisted entirely of nondiagnostic primary lithic material. The morphology of this feature suggests a probable function as a storage facility. Cultural association is unknown.

Feature 56 was a shallow amorphous feature (Type Vc) in unit 160L40. It was impossible to define the edges or base of this feature. No material of any kind was found in this feature. P.H. 55 intruded the northern edge of this feature and contained a redeposited adult cremation (Burial 3) of unknown cultural association. Feature 56 was classified as a possible natural disturbance in the field.

Postholes

A total of 19 postholes (Nos. 33-34; 35-48; 50-52; 55) was found in Excavation Area 2. Over half of these (n = 10) are historic posts and

a very definite historic fenceline (P.H.'s 33, 34, 37, 40-44) transverses Excavation Area 2 in an east-west direction. Historic postholes were easily recognizable with most containing historic material such as glass, nails, and brick fragments. Three other historic posts (P.H.'s 36, 39, 41) form a roughly north-south alignment along the western edge of unit 160L40 and are probably associated with a second fence row. P.H. 38 was a square disturbance in unit 160L60 that was identified in the field as the base of a historic grave marker with the surrounding historic posts forming a fence around the grave. This post measured 0.55 foot north-south by 0.60 foot east-west by 0.10 foot deep. The field interpretation of this post as a grave marker is probably incorrect as the supposedly associated posts (P.H.'s 36, 40, 41, 43) are in reality fenceline posts; there also was no indication of a grave.

Only one post (P.H. 38) containing culturally diagnostic prehistoric material was found. Posthole 38 contained limestone-tempered ceramics and is possibly associated with a McFarland phase basin (Feature 37) located six feet southeast of P.H. 38 in unit 140L40. One posthole (No. 55) contained a redeposited adult cremation (Burial 3) of unknown cultural affiliation.

Excavation Area 2 Summary

In contrast to Excavation Area 1, diagnostic cultural material recovered from this area (with the exception of historic material) consisted entirely of McFarland phase and Woodland artifacts. Four features (F33, F34, F36 and F37) in this area contained diagnostic McFarland phase ceramics or projectile points/knives. All four were

shallow oval basins and one (Feature 34) contained a flexed inflesh inhumation (Burial 4). The remaining features in this area (F31, F32, F38, F39, F40, and F56) contained no diagnostic material but their proximity to the McFarland phase features in Area 2 suggests that they are McFarland phase installations. Four of these features are shallow basins while the remaining two features (F31 and F40) are deep pits. An analysis of the McFarland phase occupation in Excavation Area 2 is presented in Chapter X.

Excavation Area 3

This area was located to the east of the baseline and contained a total of three features, one of which (F46) was a tree stump. Measurements for Feature 46 are contained in Table 3, page 37. Excavation Area 3 had no definite boundaries, but encompassed that section of the site located east of centerline stakes 0-100 and 0-180. None of the features contained culturally diagnostic material. A single posthole (No. 53) was found in this area.

It is probable that a larger number of features had originally been located in this area of the site and that the majority of these features were destroyed during the historic occupation of the site (personal communication from Dr. Major C. R. McCollough). The erection of farm buildings in this area as well as agricultural activities were the major types of historic disturbance.

Features

Feature 42 was a shallow circular basin (Type Ib) in unit 160R20. The fill was a homogenous dark reddish brown (5YR3/4) with a very small amount of charcoal flecking scattered throughout. Artifactual material consisted of a small amount of nondiagnostic lithic debitage. The cultural association of this feature is unknown.

Feature 47 was a very shallow oval basin (Type Ia) in unit 120R20 which measured 1.90 feet north-south by 1.80 feet east-west by 0.24 foot deep. The fill was only slightly darker than the surrounding subsoil matrix and contained only a small amount of primary lithic material. Cultural affiliation is unknown.

Postholes

Posthole 53 was located in unit 120R40 and was a straight sided, flat bottomed posthole. Two small limestone-tempered sherds were recovered, and one of these was identified as *Long Branch Fabric Marked*. A McFarland phase association is indicated for Posthole 53. This posthole was not associated with any other postholes or features.

Excavation Area 3 Summary

Historic disturbances in this area resulted in the almost total destruction of prehistoric occupational evidence. Interpretation of aboriginal activities in this area of the 40CF69 site is virtually impossible. Evidence of at least minimal utilization of this section of the site during the McFarland phase was present in the form of a posthole.

Excavation Area 4

Excavation Area 4 was located along the terrace edge approximately 30 to 55 feet northeast of the 0-0 grid stake. The Shelton farmhouse driveway ran through this area and when the roadbank at the end of the driveway was profiled a feature (F5) was discovered with a point of origin approximately 1.2 feet below the present ground surface. Although the feature contained no culturally diagnostic material its depth below the ground surface suggested that a buried Early Archaic horizon might exist along the edge of the terrace. A gravel access road ran parallel to the terrace edge and a bulldozer was used to profile a section of the roadbank both east and west of the baseline. A cluster of five features (F14, F15, F18, F20, and F41) was discovered in the east bank profile with the point of origin for these features varying between 2 to 4.5 feet below the present ground surface. Only a single feature (F19) was found in the west bank profile with its point of origin being the base of the plowzone. The hypothesis that these features were part of an Early Archaic occupation at 40CF69 was invalidated by the recovery of Late Archaic Ledbetter phase projectile points/knives from Features 19 and 41. As two Late Archaic Ledbetter phase features in Excavation Area 1 (F17 and F20) had originated at the base of the plowzone, it was apparent that a layer of overburden up to several feet thick had been deposited in a narrow strip on the terrace edge east of the baseline. This humus layer does not appear to have been deposited by some natural process such as alluvial flooding as the only section of terrace on which it is present is the terrace edge. One suggestion is that since

this layer of thick overburden occurs only in the area of the house driveway and parallel to the access road it may have been deposited as a result of historic road building activities (personal communication with Dr. M. C. R. McCollough).

Two additional clusters of prehistoric features were found near the edge of the terrace when the 40CF69 site was stripped; neither of these areas was covered by a heavy layer of overburden as was Excavation Area 4. These areas were designated Excavation Area 4 East and Excavation Area 4 West with the direction indicating to which side of the baseline the area was located. Both of these areas appear to be associated with the Late Archaic occupation at 40CF69.

Excavation Area 4 West lay to the southwest of the 0-0 grid stake and was located by stakes -20L30 (S.W.), -20L30 (S.E.), -0L30 (N.E.), and 0L50 (N.W.). There were four features in a cluster in this area, one of which (F45) contained a Late Archaic projectile point/knife.

Excavation Area 4 East contained four features, none of which contained culturally diagnostic material. This area had no defined boundaries but included sections of units 40R40 and 60L40.

Excavation procedure in this area was the same as that previously described for Excavation Area 1. A total of 16 features was found in the three excavation areas.

Six features (F5, F14, F15, F18, F20, and F41) were located in Excavation Area 4. Feature 5 was a shallow oval basin (Type Ia) located in the bank profile at the end of the driveway. This feature was located 38.30 feet northeast of the 0-0 grid stake at a depth of

1.2 feet below the present ground surface. Measurements were 1.75 feet east-west by 1.62 feet north-south to the bank profile; approximately 20 percent of the south edge of this feature was missing. Depth was 0.30 foot. Cultural material consisted of a small amount of primary lithic debitage. This feature is located immediately north of Ledbetter phase Feature 41 and is possibly associated with the Late Archaic occupation at 40CF69.

Feature 14 was a shallow circular basin (Type Ib). The feature fill was light brown and had a clayish texture. Only a small amount of primary lithic debitage was recovered. Point of origin for this feature was approximately 4.5 feet below the present ground surface.

Feature 15 was a shallow circular basin (Type Ib). This feature originated at approximately three feet below the surface and was located 75.30 feet northeast (azimuth 52.50°) of the 0-0 grid stake. The fill was light brown and lightly flecked with charcoal. Artifactual material consisted of a minimal amount ($n = 8$) of primary lithic debitage. This feature was located approximately four feet southwest of the Ledbetter phase burial (Feature 41) and immediately northeast of Feature 20.

Feature 18 was a deep circular basin (Type Ie) located east of Features 14 and 15. This feature was located 96.84 feet northeast (azimuth 52.0°) of the 0-0 grid stake and originated at a depth of three feet below the ground surface. The fill was reddish brown in color and contained a small amount of burnt sandstone and siltstone together with some wood charcoal. There was no evidence of in situ

burning. Artifactual material consisted primarily of lithic debris but also included a Type 27 (preform: knife) biface and a Type 96 projectile point/knife. Faulkner and McCollough (1973:118) consider the Type 96 (medium short straight stemmed, unfinished base) artifacts to be associated with the Late Archaic-Early Woodland period. Based on its location at the terrace edge and the presence of the Type 96 projectile point this feature is probably associated with the Late Archaic period occupation at 40CF69.

Feature 20 was a shallow oval basin (Type Ia) located 55.55 feet northeast (azimuth 52.50°) of the 0-0 grid stake. This feature originated at approximately 0.25 foot below the present ground surface. The fill was a medium dark brown in color with a small concentration of charcoal being found in the northwest part of the feature. There was no evidence of in situ burning. Cultural material consisted of primary lithic debitage and a Type 96 (medium short straight stemmed, unfinished base) projectile point/knife which is associated with the Late Archaic-Early Woodland period (Faulkner and McCollough 1973:118). This feature (like Feature 18) is probably associated with the Late Archaic period occupation at 40CF69.

Feature 41 was a shallow circular crematory basin (Type IVa) located 39.81 feet northeast (azimuth 52.0°) of the 0-0 grid stake. The walls of this feature showed evidence of heavy burning and numerous pieces of fired untempered clay were present in the fill. The feature fill was dark reddish brown and contained a large amount of wood charcoal. The remains of at least one adult individual, probably male,

were contained in the basin. Artifactual material from this feature included two projectile points/knives (Types 99 and 103); the Type 103 projectile point is a diagnostic Ledbetter cluster artifact (Faulkner and McCollough 1974:39). A radiocarbon sample composed of wood charcoal returned a date of B.P. 3755 ± 75 years (1805 B.C.) for this feature making this the oldest skeletal material yet found in the Normandy Reservoir area. The skeletal material (Burial 2) is described in Chapter VIII.

Excavation Area 4 West contained five features, one of which (F19) was found in the roadbank profile. The remaining four features (F43, F44, F45, and F52) were located directly north of the west road bank cut at the base of the plowzone.

Feature 19 was a deep stratified pit (Type IIe) located in the west bank profile in unit -20L20. Unlike the buried features in the east bank profile the point of origin for Feature 19 was at the base of the plowzone. The top layer of fill was 0.50 foot thick and contained faunal material surrounded by burnt limestone and charcoal with evidence of in situ burning on the walls of the feature. No culturally diagnostic material was recovered from this section of the feature. Directly beneath this layer was a clay lens 0.4-0.6 foot thick which was initially interpreted as the base of the feature; further scraping of the profile by the bulldozer revealed that this was a false bottom and that the feature continued for three more feet. The fill of this lower section was brown to dark brown (7.5YR4/4) in color and contained a large amount of charcoal; the walls and base of the feature were heavily fired.

Artifacts recovered from the lower section of Feature 19 included a projectile point tip reworked into a perforator (Type 140/138), a biface (Type 26) and three projectile points/knives (Types 92, 106, and 119). The Type 106 projectile point is a Late Archaic Ledbetter cluster artifact while the Type 92 artifact is included in the Terminal Archaic/Early Woodland Rounded Base cluster (Faulkner and McCollough 1974:39). The Type 119 projectile point is an Early Archaic artifact (Faulkner and McCollough 1973:131); its inclusion in the feature fill is probably fortuitous. Feature 19 appears to have been a Late Archaic storage facility which was cleaned out, used as a hearth or cooking pit, and then filled with refuse. At some point the lower section of the feature was sealed off, either accidentally or intentionally, and the feature was again utilized as a hearth.

A cluster of four features (F43, F44, F45, and F52) was located immediately northwest of the west bank profile in unit 0L30. Feature 43 was a large oval basin (Type Ia) located three feet north of Feature 44 and three feet northeast of Feature 45. The feature had an east-west dimension of 2.82 feet with the north-south dimension being a minimum of 2.82 feet at which point the feature intersected the north edge of the unit. The fill was yellowish red (5YR4/6) in color and very leached along the edges of the feature making it difficult to determine the exact shape of the basin. No diagnostic cultural material was recovered. This feature appears to be associated with Feature 45 which is a Late Archaic pit.

Features 44, 45, and 52 were a group of three overlapping features immediately south of Feature 43. Feature 44 was a deep pit (Type IIe)

which was intruded on its northwest edge by Feature 52. The fill was dark reddish brown (5YR3/4) in color and contained a minute amount of burnt limestone and calcined bone. An abundance of lithic material was recovered including a large amount of primary lithic debitage (n = 821), a Type 30 end scraper, and a Type 94 (large rounded stemmed, tapered shoulder) projectile point/knife; this projectile point type is believed to be a Late Archaic-Early Woodland artifact (Faulkner and McCollough 1973:117). A Chattanooga black shale hoe was found in the center of the feature. Feature morphology and location suggest that this feature is most likely a Late Archaic storage pit.

Feature 45 was a deep oval pit (Type IIId). This feature was intruded on its southwest edge by Feature 52. The fill was a dark reddish brown (5YR3/4) in color with small pockets of wood charcoal and black organic material scattered throughout but there was no evidence of burning on the sides and bottom of the feature. Cultural material from this feature consisted of a large pitted stone, primary lithic material, and a Type 110 projectile point/knife which is believed to be a Late Archaic artifact (Faulkner and McCollough, eds. 1977:35). The shape of this pit and its location on the terrace edge also suggest a Late Archaic association.

Feature 52 was a deep basin (Type Ie) which was intruded by both Feature 44 and 45. Approximately 50 percent of the fill was removed during the excavation of Feature 44 before Feature 52 was recognized as a separate feature. No diagnostic material was recovered from the remaining fill. This feature appears to be associated with both

Feature 44 and Feature 45 and is probably a Late Archaic period installation.

A total of five features was found in Excavation Area 4 East with four of these features (F49, F51, F53, and F55) forming a cluster immediately north of the east road bank cut.

Feature 49 was an amorphous deep basin (Type Ie). Charcoal, calcined bone, and burnt limestone were contained in the fill. No culturally diagnostic material was recovered from this feature.

Feature 50 was a shallow oval basin (Type Ia) located 20 feet northwest of the feature cluster at the edge of the east roadbank cut. The fill was dark reddish brown in color and there was a large root intrusion through the center of the feature. Two small limestone-tempered sherds, one of which was a *Long Branch Fabric Marked* sherd, were found in the fill along with a minute amount of primary lithic material. The two sherds would appear to indicate a McFarland phase affiliation for Feature 50 but it is also possible that these sherds intruded the feature through root intrusion.

Feature 51 was a shallow oval basin (Type Ia) located four feet northwest of Feature 53 and four feet southwest of Feature 49 in unit 60R60. The fill was a dark reddish brown (5YR3/4) and contained no diagnostic artifacts. The cultural affiliation of this feature is unknown.

Feature 53 was a shallow circular basin (Type Ib) located in unit 40R60 approximately four feet southeast of Feature 54 and nine feet southwest of Feature 49. Only the western half of this feature was

excavated due to a lack of time. The fill was a dark reddish brown in color (5YR3/3) with charcoal flecks scattered throughout. No culturally diagnostic material was recovered.

Feature 54 was a tree stump (Type Vb) in unit 40R60 and is not shown on Figure 3, page 26.

Feature 55 was a deep oval flat bottomed pit (Type IIc) located in unit 60R60 at a distance of 0.50 foot northwest of Feature 49. The base of the feature showed evidence of possible burning and nut fragments and charcoal were found in the yellowish red (5YR4/6) fill. Only the eastern half of this feature was excavated with artifactual material consisting of primary lithic debitage (n = 85) and two unidentifiable fragments of projectile points/knives (Type 138). This feature was identified in the field as a Late Archaic storage pit but this interpretation cannot be substantiated.

Excavation Area 4 Summary

Three separate clusters of features attributable to the Late Archaic period were located along the 40CF69 terrace edge in Excavation Area 4 (Figure 2, page 21). Culturally diagnostic artifacts recovered from the feature cluster in Area 4 West (F44, F45, F46, and F52) indicate a Late Archaic period placement for this cluster. Two of the features in the central Area 4 cluster (F5, F14, F18, F20, and F41) contained Ledbetter phase projectile points/knives. A radiocarbon sample from the Ledbetter phase cremation in this cluster (Feature 41) returned a date of B.P. 3755 $\pm$ 75 years (1805 B.C.). The third cluster in Area 4 East (F49, F51, F53, and F55) contained no culturally diagnostic material

but the general morphology of the features in this cluster and their location along the terrace edge suggests a Late Archaic association. Finally, diagnostic Ledbetter cluster projectile points/knives were recovered from Feature 2 which was excavated during the testing operations.

Two small basins (Feature 48 and Feature 50) were also located in Excavation Area 4 but were situated away from the Late Archaic feature clusters at the terrace edge. Both were isolated features containing a minute amount of limestone-tempered ceramics indicative of a McFarland phase association.

CHAPTER V

LITHICS

Lithic Raw Materials

A fundamental goal of the Normandy Research Project has been the study of how lithic raw materials were utilized by the aboriginal peoples of the upper Duck Valley. Major emphasis has been placed on the origin, spatial distribution, and utilization of these lithic raw materials through time. A comprehensive lithic raw material typology was established by Faulkner and McCollough (1973:56-62) based on materials collected during a 1972 pedestrian surface survey of the Normandy Reservoir area. All lithic raw materials were divided into two spatially defined categories: local and exotic. Local resources were defined as those raw material types available in the immediate vicinity of the Normandy Reservoir zone; exotic raw materials were those raw materials whose source was located outside of the Normandy Reservoir zone. Penny and McCollough (1976:146) further refined these categories by classifying certain of the raw material types as "near exotic" types. This third category included those raw material types available in the near vicinity of the upper Duck Valley.

A second intensive survey of the Normandy Reservoir area was carried out during the winter of 1974. The purpose of this survey was to provide the researchers with information that would enable them to deal "in detail with the identification of significant raw material classes, and

their geologic context, forms, quantities, quality, and spatial distribution in natural occurrences" (Penny and McCollough 1976:140-194). Source areas for gray banded chert (Faulkner and McCollough Type C) were also located as part of this study.

Excavations at the Aaron Shelton site revealed that 15 of the raw material types listed by Faulkner and McCollough (1973) were present at this site. All lithic raw material types found at 40CF69 (Table 5) are described below. Gray banded chert is discussed to a greater extent than any of the other raw material types as one of the hypotheses being examined in this thesis is that aboriginal occupations at 40CF69 and other small lower reservoir sites may have been oriented toward the exploitation of this lithic resource. All descriptions of raw material types in the following section are from Faulkner and McCollough (1973) except where otherwise noted.

Local Raw Materials

Type A: Blue-Gray and Tan Chert

Blue gray and tan chert is a coarse-grained chert derived from the Lower Mississippian Ft. Payne Formation. Individual outcrops of this chert of up to 80 feet in thickness are found in some sections of the Normandy Reservoir area with individual tabular layers averaging 10-12 inches in thickness. In the lower reservoir zone, in situ exposures of this chert type are confined to the summits and upper slopes of heavily eroded hills with the exposures at higher elevations being severely broken down while exposures at lower elevations are of very small

TABLE 5
Lithic Raw Materials—40CF69

Type	Description
A	Blue-Gray and Tan Chert
B	Pink Chert
C	Gray Banded Chert
D	Fossiliferous Chert
F	Blue-Green Nodular Chert
G	Dover Chert
H	Novaculite
I	Vein Quartz
K	Chalcedony
L	Horse Mountain Agate
M	Other Cryptocrystalline Chert
	Gray Flattened Nodular (Slab) Chert
N	Other Cryptocrystalline Chert
	(Unidentifiable Miscellaneous)
O	Limestone
P	Chattanooga Black Shale
R	Fine-Grained Sandstone

individual thickness and lateral extent. The most tractable local form of the material in the lower reservoir zone is found in the gravel bars of the Duck River and its tributary streams (Penny and McCollough 1976: 153). Blue-gray and tan chert was the second most frequent raw material at 40CF69 comprising 37.2 percent ($n = 3,009$) of the total raw material count.

Type B: Pink Chert

Pink chert comprised 11.8 percent ($n = 954$) of the total raw material count. This type was originally blue-gray and tan Ft. Payne chert which has been thermally altered either intentionally as part of the chert-knapping process or unintentionally in fires. Hood and McCollough (1976:197-205) demonstrated in a controlled laboratory experiment that the tan variety of Ft. Payne chert undergoes a dramatic color shift to pink when heated at a temperature of 250°C. The blue-gray variety of Ft. Payne chert was only slightly altered after being heated to 400°C, becoming slightly lustrous with a slight reddening of the cortex. Natural outcrops of pink chert have been reported as occurring in the Normandy Reservoir zone. These have been interpreted, however, as possibly being the result of the burning over of cultivated areas or of forest fires (Penny and McCollough 1977:152).

Type C: Gray Banded Chert

This was the predominant lithic type at 40CF69 constituting 48.8 percent ($n = 3,943$) of the total raw material count. This is a fine-grained lustrous chert which derives from Ordovician deposits at

the interface of the Catheys and Bigby Cannon limestone formations.

Gray banded chert occurs in the form of nodules which vary in diameter from four to twelve inches. The matrix is dark gray in color interspersed with black wavy bands. Availability of this raw material type is largely restricted to the lower reservoir zone with no outcrops of this chert type occurring farther upstream than river mile 251.6. Sixteen natural outcrops of gray banded chert representing either demonstrated or possible procurement sources for this type were documented in the lower reservoir zone by the Normandy lithic resource survey (Penny and McCollough 1976:141). Three chert outcrops in close proximity to the Aaron Shelton site were suggested as the probable source of the gray banded lithic material found at 40CF69. These three outcrops are the Rhoton Cave-Shelton Source (Source Area 10), the Boyd Branch Source (Source Area 11), and the Sterling Shelton Pond Source (Source Area 12).

Penny and McCollough's (1976:171) description of the Sterling Shelton Pond Source is reprinted below as this was the gray banded chert source in closest proximity to 40CF69:

Sterling Shelton Pond Source (Source Area 12). This source is on a high terrace above the right (west) bank of Boyd Branch, where tributary stream erosion at the head of a farm pond furnishes a poor exposure of gray banded chert; it was documented by Mr. Michael Binion in February 1975, after reservoir clearing. The location is at 35°28'44" N. Lat., 86°14'25" W. Long. (elevation 860 feet AMSL). The soil type is Rockland, moderately steep, and the geologic provenience is high in the Bigby-Cannon limestone, 30-40 feet below the base of the Catheys Formation. A large number of badly fractured gray banded nodules and a few brown nodular fragments were recovered here on deflation surfaces. Brown nodular chert was observed in situ, but there was no good exposure of the gray banded seam. No workshop debris was present, and Source Area 12 is not believed to have been a

major procurement area. It is the recorded outcrop in closest proximity to high-terrace sites 40CF69 (Aaron Shelton), 40CF76 (Boyd Branch I), and 40CF77 (Boyd Branch II), with high proportions of gray banded chert of 52, 54, and 60 percent in surface collections (Faulkner and McCollough 1973:Tables 5-7), but *Source Areas 10 and 11 and other undocumented exposures may also have supplied these habitation sites*. Again, the factor of prehistoric stripping of the exposures must be considered. Proximity to gray banded chert outcrops may have been a factor in site selection on these higher terraces, and among other things, site 40CF77 (located only 400 feet south-east of Source Area 12) may have been a center from which the high-quality chert supply at this location was exhausted. (Penny and McCollough 1976:171)

As noted above, a high proportion (52 percent) of the lithic material collected during the initial surface survey of the 40CF69 sites had been manufactured from gray banded chert (Faulkner and McCollough 1973: Table 5). A second collection of surface lithic material analyzed by Prescott (1978:146-148) consisted of 36.6 percent gray banded chert. Although not extremely high, the percentage of gray banded chert in the second sample is still higher than that from upper reservoir habitation sites where there are 75 to 80 percent use levels of Ft. Payne material (Penny and McCollough 1976:153). The high incidence of gray banded chert in these surface samples led to the formulation of the hypothesis that aboriginal occupations at 40CF69 may have been oriented in part toward the exploitation of gray banded lithic raw materials. The validity of this hypothesis based on the lithic materials recovered at 40CF69 is discussed at the end of this chapter.

Type D: Fossiliferous Chert

This type comprised 0.1 percent ($n = 11$) of the total raw material count at 40CF69. This chert is multicolored and coarse-grained with a

mottled appearance due to the inclusion of fragments of crinoid stems. The two apparent origins of this chert type are the Mississippian Warsaw Limestone Formation and the Ft. Payne Formation (Penny and McCollough 1976:176-177). This type occurs in very low frequencies in collections from the Normandy Reservoir area in comparison to other local chert types but does appear to have been utilized during the Late Archaic period for the production of large straight-stemmed projectile point/knives such as Type 99 (Faulkner and McCollough 1973:119).

Type M: Gray Flattened Nodular Slab Chert

This type occurs in the form of large flattened ovoid nodules which measure from a few inches to two to three feet in length. Most specimens of this type are less than two inches thick and have a dense, thick cortex; the result is that the chert nucleus of the nodule is generally no greater than an inch in thickness. The chert matrix is fine-grained and opaque with a generally homogenous dark gray coloration. This is a poor quality chert both in its texture and because of the presence of incipient fracture planes which restrict the usefulness of this raw material in the manufacture of artifacts. This material occurs together with gray-banded chert in the Ordovician formations in the lower reservoir zone. This type constituted 0.08 percent ($n = 7$) of the total raw material count at 40CF69.

Type N: Other Cryptocrystalline Chert:
Unidentifiable

This category is comprised of those specimens which do not correspond to any of the established raw material types for the Normandy

Reservoir area. These may either be variants of already identified types or examples of as yet unidentified raw material types. This type comprised 0.1 percent ($n = 10$) of the total raw material count at 40CF69.

Type O: Limestone

Ordovician limestone is the most abundant lithic raw material in the Normandy Reservoir area. Utilization of this material, however, was largely restricted to the manufacture of large digging implements and pestles, or use as a pottery tempering agent. Large amounts of limestone also occur in Middle Woodland and Late Woodland earth ovens (DuVall 1977: 142). A single crinoid bead contained in the pit fill of Burial 4, represented the only artifact fashioned from limestone at 40CF69. Modified limestone represented 0.01 percent ($n = 1$) of the total raw material count at 40CF69.

Type P: Chattanooga Black Shale

Chattanooga black shale is a local material which occurs in deposits varying from 15 to 30 feet in thickness beneath the Lower Mississippian Ft. Payne formation. In the lower reservoir zone, badly weathered exposures of shale occur at middle elevations on the hills of the Duck River Valley, in full vertically cut outcrops in the valley walls, and in the beds of tributary streams within one mile of the main river channel. Aboriginal inhabitants of the lower reservoir zone would have been able to gather large shale slabs suitable for the manufacture of implements from tributary stream gravels (Penny and McCollough 1976:149). Chattanooga black shale was used by the prehistoric inhabitants of the

upper Duck Valley in the manufacturing of gorgets, digging implements, and objects of possible ritual significance. One example of modified shale was recovered from a feature context at 40CF69. This raw material type comprised only 0.01 percent ($n = 1$) of the total raw material count at 40CF69.

Type R: Fine-Grained Sandstone

Only two sandstone artifacts were found at 40CF69. Slabs of fine-grained sandstone occur locally in the upper Duck Valley as part of the Warsaw formation of the Highland Rim. Fine to medium-grained sandstone slabs are also found at the base of the Chattanooga black shale (Faulkner and McCollough 1973:55).

Near Exotic Raw Materials

Type F: Blue-Green Nodular Chert

Penny and McCollough (1976:139) recorded two possible source areas for this raw material type in the Hillsboro Locality. This chert type is derived from the St. Louis Limestone Formation with availability limited to the eastern edge of the flat Eastern Highland Rim and the adjacent western escarpment of the Cumberland Plateau. Blue-green nodular chert is fine-grained and glassy and occurs in four to eight inch spherical nodules with a thick calcareous cortex. This chert type was the most prevalent of any near-exotic or exotic chert type at 40CF69, comprising 1.5 percent ($n = 121$) of the total raw material count.

Type I: Vein Quartz

Vein quartz constituted 0.2 percent ($n = 16$) of the total raw material count at 40CF69. This is a dense white opaque quartz which occurs in rounded masses approximately four to six inches in diameter. Its origins are the Pennsylvanian deposits of the western escarpment of the Cumberland Plateau in the Hillsboro Locality. However, all of the examples of this raw material type which have been found in the Normandy Reservoir zone are waterworn, indicating that this quartz type was gathered from the stream beds of the escarpment coves rather than from the primary sources on the scarp itself (Penny and McCollough 1976:183).

Type K: Chalcedony

This raw material type is described as a quartz with a waxy luster which intergrades with vein quartz. Both vein quartz and chalcedony share the same origin in the Pennsylvanian deposits of the western escarpment of the Cumberland Plateau in the Hillsboro Locality. Only three examples of this raw material type representing 0.04 percent of the total raw material count were found at 40CF69.

Type L: Horse Mountain Agate

This is a multicolored chalcedony which appears to originate in the Mississippian formations of the Eastern Highland Rim. The presence of red-tinted agate in Normandy Reservoir collections points to the Wartrace Locality as the source for this raw material type as opposed to the Hillsboro Locality where red agate is seldom found or the Normandy Reservoir area where the coloration is uniformly white (Penny

and McCollough 1976:183). Horse Mountain agate comprised 0.04 percent ($n = 3$) of the total raw material count at 40CF69.

Lithic Artifacts

Excavations at 40CF69 produced a total of 8,081 lithic artifacts. This material was initially analyzed in the field by Normandy Archaeological Project crew members under the direction of various supervisory personnel including Dr. Major C. R. McCollough. The bifacial implements and projectile points/knives were later reexamined in the laboratory under the direction of Dr. Charles Faulkner. All lithic material from the Aaron Shelton site was analyzed using the typology developed for the Normandy Archaeological Project (Faulkner and McCollough 1973:63-327) which is an imposed typology based largely upon the intuitive clustering of morphological attributes.

Surface material from the 49CF69 site was analyzed only in regard to bifacial implements and projectile points/knives (Types 24-140). A breakdown of all lithic artifacts by raw material types is found in Table 6. Projectile points/knives from a feature context are described in detail and specific metric measurements for these artifacts are presented.

Primary Lithic Material

Primary lithics comprised 97.9 percent ($n = 7,912$) of the total lithic assemblage. Gray banded chert was the predominant raw material type constituting 49.0 percent ($n = 3,889$) of the primary lithic

TABLE 6

Total Lithic Assemblage-40CF69

Tool Type	A	B	C	D	F	I	K	L	M	N	O	P	R	Total	%
1							1							1	0.01
2a	3													3	0.04
2d	3	1	2											6	0.07
3	1,133	426	1,159	1	95	9	2	3	2					2,830	35.29
4	1,300	390	1,862	3	13	5								3,573	44.21
5	392	104	632	2	9	1			5					1,145	14.16
6	88	27	234		4	1								354	4.42
8	1		5											6	0.07
10	3		2											5	0.06
14			1											1	0.01
24	3			1										4	0.05
25	18	2	10											30	0.37
26	3		1											4	0.05
27	14	1	4											19	0.23
30			1											1	0.01
31	1													1	0.01
36a	1		1											2	0.02
52	2													2	0.02
53	2	2	1											5	0.06
55			1											1	0.01
56			2											2	0.02
57			1											1	0.01
61			1											1	0.01
62	2		2											4	0.05
66			1	1										2	0.02
69			1											1	0.01
71	1		1											2	0.02

TABLE 6 (continued)

Tool Type	Raw Material													Total	%
	A	B	C	D	F	I	K	L	M	N	O	P	R		
76	1		1											2	0.02
78	1													1	0.01
80			2											2	0.02
82	1													1	0.01
84	1													1	0.01
88	2		1											3	0.04
90	1													1	0.01
91	2													2	0.02
92	2													2	0.02
93	1													1	0.01
94	1													1	0.01
96	2		1											3	0.04
99	2													2	0.02
100	2													2	0.02
101			1											1	0.01
102	1													1	0.01
103	3			1										4	0.05
105			1											1	0.01
106	3			1										4	0.05
107										1				1	0.01
108	1													1	0.01
109	1													1	0.01
110										2				2	0.02
111	1		1	1										3	0.04
112			1											1	0.01
113										1				1	0.01
114										1				1	0.01
115			1											1	0.01
118			1											1	0.01
119			1											1	0.01
125			1											1	0.01

TABLE 6 (continued)

Tool Type	Raw Material													Total	%
	A	B	C	D	F	I	K	L	M	N	O	P	R		
131										1				1	0.01
134	1		1											2	0.02
138	9	1	4							4				18	0.22
153													2	2	
155												1		1	
Crinoid stem bead											1			1	0.01
Total	3,009	954	3,943	11	121	16	3	3	7	10	1	1	2	8,081 = n	
%	37.23	11.81	48.79	0.13	1.49	0.19	0.04	0.04	0.09	0.12	0.01	0.01	0.02		

assemblage compared to 36.8 percent (n = 2,919) for blue-gray and tan chert and 12.0 percent (n = 798) for pink chert.

Type 1: Hammerstone (n = 1)

These are spherical, subspherical, or polyhedral chunks which exhibit wear attributable to battering. A single example of this lithic type was found in Feature 34.

Raw Material: Chalcedony—1

Type 2a: Crude Subconical Core (n = 3)

A crude subconical core can stand on its striking platform with the angle between the striking platform and the flake removal surface being greater than 45°. One example of this type was recovered from a Late Archaic feature.

Raw Material: Blue-gray and tan chert—3

Type 2d: Amorphous Core (n = 6)

This type is comprised of blocks of raw material which show little modification or shaping and also exhibit scars or removal of one or a few flakes. Four examples of this type were associated with the Late/Terminal Archaic occupation at 40CF69.

Raw Material: Blue-gray and tan chert—3;

Pink chert—1; Gray banded chert—2

Type 3: Core Trimming Flakes (n = 2,830)

This category consists of unaltered flakes including core rejuvenation and decortication flakes. This was the second most

frequently occurring lithic type at 40CF69 comprising 31.9 percent of the total lithic assemblage.

Raw Material: Blue-gray and tan chert—1,133; Pink chert—426; Gray banded chert—1,159; Fossiliferous chert—1; Blue-green nodular chert—95; Vein Quartz—9; Chalcedony—3; Horse Mountain Agate—3; Unidentifiable gray chert—2

Type 4: Flat Flake (n = 3,573)

This was the most frequently occurring lithic artifact type at 40CF69 constituting 40.2 percent of the total lithic assemblage. McFarland phase features yielded 278 flat flakes, Wade phase features 319, and Ledbetter phase features (including all features along the terrace edge) 1,518.

This type is defined as a flake which has been detached by direct percussion from a core or blank from which all cortical material has been previously removed.

Raw Material: Blue-gray and tan chert—1,300; Pink chert—390; Gray banded chert—1,862; Fossiliferous chert—3; Vein Quartz—9; Chalcedony—5

Type 5: Bifacial Thinning Flakes (n = 1,145)

Bifacial thinning flakes were the third most frequently occurring lithic type at 40CF69 making up 12.9 percent of the total lithic

assemblage. This type is defined as a flake, usually expanding and thin with minimum thickness at the distal end, which retains platform evidence of removal from a bifacial blank. Scars of previous bifacial removals are present on the dorsal surface of the blank. McFarland phase features produced 115 flakes of this type, Wade phase features 104, and Ledbetter phase features (including all features at the terrace edge) 581.

Raw Material: Blue-gray and tan chert—392; Pink chert—104; Gray banded chert—632; Fossiliferous chert—2; Vein Quartz—9; Chalcedony—1; Unidentifiable gray chert—5

Type 6: Utilized Flake (n = 354)

This type is defined as a flake showing utilization in the form of very irregular or localized retouch and small irregular edge removals not constituting retouch and/or edge wear. Utilized flakes represented 4.0 percent of the total lithic assemblage from 40CF69.

Raw Material: Blue-gray and tan chert—88; Pink chert—27; Gray banded chert—234; Blue-green nodular chert—4; Vein Quartz—1

Unifacial Implements

Unifacial lithic implements were minimally represented at 40CF69, comprising only 0.14 percent (n = 12) of the total lithic assemblage. Only three of the 16 unifacial implement types established for the

Normandy Project (Faulkner and McCollough 1973:83-85) were included in the total lithic collection from 40CF69. These three tool types are Type 8 (end scraper), Type 10 (unifacial scraper), and Type 14 (notched flake).

Type 8: End Scraper (n = 6)

End scrapers are defined as those flakes which show a continuous line of relatively steep retouch located at the distal or, infrequently, proximal end of the piece. Four of the five examples of this type were recovered from the Wade phase pit (Feature 17) while the fifth was found in a Ledbetter phase feature.

Raw Material: Blue-gray and tan chert—1;

Gray banded chert—5

Type 10: Side Scraper on Flake (n = 5)

This type is identified as a flake with one or more convex, straight, or long, shallow concave working edges formed by a continuous line of relatively steep retouch along the lateral margins of the flake. Side scrapers were the second most frequently occurring unifacial tool type with a total of five specimens, two of which were recovered from the Wade phase pit (Feature 17).

Raw Material: Blue-gray and tan chert—3;

Gray banded chert—2

Type 14: Notched Flake (n = 1)

Only one example of this unifacial implement type was recovered from a feature context at 40CF69. This type is defined as a flake

having one or more intentional multiple-blow notches which are deep relative to their width at the edge of the piece.

Raw Material: Gray banded chert—1

Bifacial Implements

A total of 57 bifacial implements (Types 24-42) was recovered from both a surface and feature context at 40CF69 with Types 25 (n = 30) and 27 (n = 18) being the most frequently occurring bifacial tool types. Bifacial implements (exclusive of projectile points/knives, Types 43-139) comprised only 0.6 percent of the total lithic assemblage. Bifacial implements were associated with the Ledbetter, Wade, and McFarland phase occupations at 40CF69. No bifacial implements were associated with the Mason phase occupation.

Type 24: Amorphous Biface: Miscellaneous Thick (n = 4)

This category includes bifaces in the early stages of thinning and amorphous pieces which when unbroken may have been identifiable in other categories of bifacial implements. One specimen of this type was recovered from a possible McFarland phase pit (Feature 39) in Excavation Area 2 while the other three specimens were found on the surface.

Raw Material: Blue-gray and tan chert—3;

Fossiliferous chert—1

Type 25: Thick Biface (n = 30)

This type is comprised of symmetrical thick bifaces which were broken and discarded in the advanced process of thinning. Faulkner

found that this bifacial implement type was primarily associated with the Woodland occupation at the Eoff I site (40CF32) (Faulkner and McCollough, eds. 1977:111). He further noted that the absence of this bifacial implement type at the Hicks I site where there is a large Archaic component also suggests that Type 25 artifacts are primarily Woodland artifacts. DuVall (1978:155-156) found that Type 25 bifacial implements occurred in McFarland, Mason, and Wade phase features at 40CF118. Eight examples of this tool type were recovered from a feature context at 40CF69. Two occurred in McFarland phase features while the remaining six pieces were associated with the Late Archaic Ledbetter phase occupation along the edge of the terrace.

Raw Material: Blue-gray and tan chert—18;

Pink chert—2; Gray banded chert—10

Type 26: Knife, Including Asymmetrical
Knife (n = 4)

Three examples of this bifacial implement type were recovered from feature context at 40CF69. One of these implements was associated with the McFarland phase occupation (Feature 33) while a second was recovered from a Ledbetter phase basin (Feature 24). This type is defined as a thinned lanceolate biface which exhibits symmetry and/or a finished cutting edge on a single blade margin. Distal fragments of asymmetrical stemmed knives are also included in this category.

Raw Material: Blue-gray and tan chert—3;

Gray banded chert—1

Type 27: Preform: Knife (n = 19)

Nineteen examples of this artifact type were recovered at 40CF69. These implements are defined as fully thinned lanceolate bifaces with retouched blade edges. Whole bifaces included in this category could have easily been converted into projectile points/knives by either stemming or notching. One example of this tool type was recovered from a Wade phase feature while six were recovered from Late Archaic features including features located at the terrace edge. No specimens of this stype were recovered from McFarland phase features.

Raw Material: Blue gray and tan chert—14;

Pink chert—1; Gray banded chert—4

Type 30: End Scraper (n = 1)

One specimen of this type was recovered from Feature 44 which is associated with the Late Archaic occupation along the terrace edge. This type consists of bifaces which exhibit a convex scraping edge formed by a continuous line of relatively steep retouch departing one face of the implement. On lanceolate or stemmed/notched bifaces the working edges are located at the proximal or distal end of the piece; on amorphous bifaces the working edges are at one or both ends of the artifact.

Raw Material: Gray banded chert—1

Type 31: Chisel (n = 1)

This type is a thick elongate biface with a utilized straight to convex working edge at one end of the long axis which has been formed

by bifacial removals. The single specimen of this type was recovered from a Ledbetter phase basin (Feature 24).

Raw Material: Blue-green nodular chert—1

Type 36a: Drill (n = 2)

This type consists of bifaces which have a long thick tapering blade which is diamond-quadrilateral in cross-section. A broken specimen (Plate I) measuring 21 mm in length, 9 mm wide at the proximal end, and 7.5 mm wide was recovered from a Ledbetter phase pit (Feature 2).

Raw Material: Blue-gray and tan chert—1

Gray banded chert—1

Projectile Points/Knives

Faulkner and McCollough (1973:87-88) established 97 separate lithic categories for use in the classification of projectile points/knives from the Normandy Reservoir area. A total of 87 projectile points/knives assignable to 40 of these types was recovered from 40CF69. In the type descriptions below, primary emphasis is placed on those projectile points/knives recovered from a feature context and references for additional information are supplied.

Type 52: Large Triangular, Thick Excurvate
Blade (n = 2)

Faulkner and McCollough (1973:94) define this type as a variant of Type 51 and suggest that it is a Woodland period artifact. Both examples from 40CF69 were recovered from a surface context.

Raw Material: Blue-gray and tan chert—2

Type 53: Medium-Large Triangular, Thick
Straight-Excurvate Blade (n = 5)

These are *McFarland Triagnular* projectile points/knives and are analogous to the *Copena Triangular* projectile point of northern Alabama (Faulkner and McCollough 1973:94-95). These are diagnostic artifacts for the Middle Woodland period in the upper Duck and Elk River Valleys. Two specimens of this type were recovered from McFarland phase features at 40CF69. The specimen from Feature 33 (Plate II) is 54.5 mm long, 7 mm thick, and 17 mm wide at the base. This artifact is isosceles triangular in shape with a slightly incurvate base. The base of this artifact is lightly ground. The specimen from Feature 37 (not shown) is a smaller, much cruder, example of this type. It measures 43 mm in length, 8 mm thick, and is 16 mm wide at the base. The artifact is isosceles triangular in shape with one blade edge being incurvate. There is no basal grinding on this piece and the base is incurvate while the base is slightly excurvate with no evidence of grinding.

Raw Material: Blue-gray and tan chert—2;

Pink chert—2; Gray banded chert—1

Type 55: Medium-Large Triangular,
Straight Elongate Blade (n = 1)

One example of this type was recovered from a surface context at 40CF69. These are McFarland cluster artifacts and are probably variants of Types 53 and 56 with a knife function suggested for the larger specimens of this type.

Raw Material: Gray banded chert—1

Type 56: Medium-Large Triangular,
Recurvate Elongate Blade (n = 2)

These are McFarland cluster projectile points/knives with a limited distribution on Middle Woodland sites in the upper Duck and Elk River Valleys. This type is similar to the *Copena Triangular* variant with incurvate hafting areas. The specimens of this type from the upper Duck Valley have been named *Village Copena* (Faulkner and McCollough 1973:97). One specimen of this type was recovered from a McFarland phase feature at 40CF69. This artifact (Plate II) is isosceles triangular in shape and measures 51 mm long, 8 mm thick, and 16.5 mm wide at the base. The blade edges are slightly recurvate at the hafting area. The base of the piece is slightly incurvate and has been lightly ground; the hafting area also forms a slightly expanded-pointed auriculated base.

Raw Material: Gray banded chert—2

Type 57: Medium-Large Triangular, Thick
Straight Elongate Blade (n = 1)

These are McFarland cluster projectile points/knives and are possible crude examples or preforms of Type 55. It has also been suggested that this type is possibly a variant of the transitional Paleo-Early Archaic *Quad* projectile point. Excavations at the Eoff I site, however, indicated that this type is a companion type to artifacts in the McFarland cluster (Faulkner and McCollough, eds. 1977:119). One specimen of this type was found on the surface at 40CF69.

Raw Material: Gray banded chert—1

Type 61: Narrow Thick Lanceolate
Expanded Stemmed (n = 1)

This type is similar to the *Bakers Creek* type of the Tennessee Valley of Northern Alabama (DeJarnette, Kurjack, and Cambron 1962). A specimen of this type was found associated with a McFarland cluster projectile point (Type 53) in a feature at the Eoff I site (Faulkner and McCollough, eds. 1977:119).

Raw Material: Gray banded chert—1

Type 62: Narrow Thick Lanceolate
Side Notched (n = 4)

This type is included in the Lanceolate Expanded Stemmed cluster and is similar to Type 61. Although Lanceolate Expanded Stemmed cluster artifacts were associated with the Owl Hollow phase occupation at the Banks I site they were also found to be associated with McFarland cluster projectile points/knives at the Eoff I site (Faulkner and McCollough, eds. 1977:122). It is possible that the Lanceolate Expanded Stemmed cluster artifacts may be transitional between the stemless triangular McFarland phase points and the stemmed or lanceolate spike forms of the Owl Hollow phase. All four specimens were found on the surface at 40CF69.

Raw Material: Blue-gray and tan chert—1

Type 66: Medium-Large Wide Shallow
Side Notched (n = 2)

A Lanceolate Stemmed cluster artifact. This type is similar to the Type 62 projectile point/knife but has more pronounced notches.

A Middle Woodland association for this artifact is suggested. Two specimens of this type were recovered from the surface at 40CF69.

Raw Material: Gray banded chert—1;

Fossiliferous chert—1

Type 69: Small Shallow Side Notched (n = 1)

These are thick, relatively crude artifacts, possibly related to Type 62. A Woodland association for this type is suggested. The single specimen from 40CF69 was a surface find.

Raw Material: Blue-gray and tan chert—1

Type 71: Undifferentiated Side Notched (n = 2)

This artifact type has a short blade with very wide, shallow side notches. The cultural association for this artifact is uncertain although a Woodland affiliation has been suggested. A Type 71 artifact was recovered from Feature 31 which appears to be associated with the McFarland phase occupation in Excavation Area 2.

Raw Material: Blue-gray and tan chert—1;

Gray banded chert—1

Type 76: Small-Medium Expanded Stemmed (n = 2)

Faulkner and McCollough (1973:107) have suggested that these artifacts are variants of Type 62 with a more pronounced shoulder and that they are Woodland artifacts. One specimen of this type was recovered from Feature 26 in Excavation Area 1; the cultural context is uncertain. This artifact (Plate III) measures 36.5 mm long, 24 mm wide at the shoulders, and 8.8 mm thick. The blade edges are slightly

excurvate and the basal edge is slightly concave. The specimen is biconvex in cross-section.

Raw Material: Gray banded chert—2

Type 78: Small-Medium Short Straight
Stemmed (n = 1)

Faulkner and McCollough (1973:108) suggested that this type was a Woodland artifact possibly related to the stemmed types in the Lanceolate Spike cluster. DuVall (1977:170) noted that Type 78 artifacts found at the Ewell III site (40CF118) resembled Wade cluster projectile points/knives and were found in both a McFarland and a Mason phase context at that site which indicates that this artifact type may have been manufactured for a period of 1,500 years. The specimen from 40CF69 was found in Feature 11 in Excavation Area 1 and measures 33 mm long, 21.2 mm wide at the shoulder, and 7 mm thick. The basal edge is slightly excurvate as are the blade edges.

Raw Material: Blue-gray and tan chert—1

Type 80: Small-Medium Narrow Expanded Stemmed,
Slight Barb, Narrow Blade (n = 2)

These are Terminal Archaic Wade cluster artifacts (Faulkner and McCollough 1973:149); both examples of this type from 40CF69 were recovered from a feature context. One specimen (Plate III) was recovered from Feature 17 in Excavation Area 1 in association with a Type 96 projectile point/knife. This artifact measures 46.8 mm long, 15 mm wide at the shoulders, and 9.2 mm thick. The basal and blade edges are straight and the artifact is flattened in cross-section.

The second artifact (not shown) was recovered from Feature 23 in Excavation Area 1 in association with a limestone-tempered sherd which is possibly intrusive into the feature. This specimen has an elongate blade with straight blade edges. The basal edge is straight and unground. This artifact measures 62 mm long, 22.2 mm wide at the shoulders and 7 mm thick. It is flattened in cross-section.

Raw Material: Gray banded chert—2

Type 82: Medium Expanded Stemmed, Straight
Base, Excurvate Blade (n = 1)

This type has been placed in the Terminal Archaic Wade cluster (Faulkner and McCollough 1973:110). It is similar to the *McIntire* projectile point type which is associated with Late Archaic shell mounds along the Tennessee River in Alabama. The single example found at 40CF69 is from the surface.

Raw Material: Blue-gray and tan chert—1

Type 84: Medium Undifferentiated Expanded
Stemmed, Narrow Blade (n = 1)

Artifacts of this type were found in two Middle Woodland features at the Eoff I site (40CF32) which suggests this type is probably related to the expanded stemmed points in the Lanceolate Expanded Stemmed cluster (Faulkner and McCollough, eds. 1977:126). The one example from 40CF69 was found on the surface.

Raw Material: Blue-gray and tan chert—1

Type 88: Medium Contracting Stemmed,
Narrow Blade, Weak Shouldered (n = 3)

This artifact type is similar to the Illinois Valley Middle Woodland type *Dickson* or *Dickson Contracting Stem* (Perino 1968:18-19) and the Terminal Archaic *Gary* type (Suhm, Kreiger, and Jelks 1954). Examples of this type have been recovered from a Late Archaic context at the Wiser Stephens site (40CF81) and from a McFarland phase context at the Ewell III site (40CF118) in the Normandy Reservoir (DuVall 1977:173). A long period of production beginning in the Late Archaic period and continuing into the Middle Woodland period is indicated for this type. One example of this type was recovered from Feature 46 in Excavation Area 4 West. This specimen is fractured at approximately the midpoint of the blade; the break at midblade shows no evidence of use or retouch. The blade edges are straight and the base is unfinished. The width at the shoulders is 32 mm and the maximum thickness of the artifact is 10.8 mm.

Raw Material: Blue-gray and tan chert—2;

Gray banded chert—1

Type 90: Medium Short Rounded Stemmed,
Strong Shouldered (n = 1)

This is a Rounded Base cluster artifact and is similar to the small variety of the *Gary* type (Suhm, Krieger and Jelks 1954). This is probably a Late Archaic-Early Woodland artifact in the upper Duck Valley. The single example from 40CF69 was found on the surface.

Raw Material: Blue-gray and tan chert—1

Type 91: Medium Rounded Stemmed,
Narrow Blade (n = 2)

This is a Rounded Base cluster artifact resembling the *Moorhis* type (Suhm, Krieger, and Jelks 1954:454). *Moorhis* points were recovered from a Late Archaic Early Woodland context at the Westmoreland-Barber site in the Nickajack Reservoir (Faulkner and Graham 1966:70). A Late Archaic-Middle Woodland association is suggested for this type in the Normandy Reservoir area. One example of this type (Plate I) was found in Feature 2 near the edge of the terrace.

Raw Material: Blue-gray and tan chert—2

Type 92: Medium Contracting-Rounded Long
Stemmed, Narrow Blade (n = 2)

These are Rounded Base cluster artifacts similar to Type 91 except that the stem is longer and, infrequently, lightly ground. This type is associated with the Late Archaic-Early Woodland period in the Normandy Reservoir. At the Hicks I site artifacts of this type were found in Level 2 which indicates they were being manufactured during the Late Archaic period (Faulkner and McCollough, eds. 1977:32). One specimen of this type was recovered from a Late Archaic Ledbetter phase feature (F19) at 40CF69. The extreme distal edge of this artifact is fractured. Battering on the edges of the broken distal end indicate that the specimen may have been used as a wedge. Also, there is evidence of wear along this broken edge suggesting the artifact may have been utilized as a knife. The specimen measures 32.8 mm wide at the shoulders and is 7 mm thick. It is plano-convex in cross-section. The blade

edges are straight and show evidence of utilization as a knife. The base of the piece is slightly concave.

Raw Material: Blue-gray and tan chert—2

Type 93: Medium Contracting-Rounded Stemmed,
Wide Blade (n = 1)

This type is similar to Type 92 but has a wider blade. This type is also similar to the *Elora* projectile point/knife of the Tennessee Valley of northern Alabama (Cambron and Hulse 1960) with the exception that the base of the *Elora* is generally unfinished. The single specimen from 40CF69 was found on the surface. A Late Archaic-Early Woodland association is suggested.

Raw Material: Blue-gray and tan chert—1

Type 94: Large Rounded Stemmed,
Tapered Shoulder (n = 1)

This type is included in the Rounded Base cluster (Types 89-95) and is considered to be a Late Archaic-Early Woodland artifact. One specimen was recovered from Feature 44 in Excavation Area 4 West. This specimen is quite crude and appears to have been manufactured solely by direct percussion. The blade edges of the artifact are straight and the base is unfinished. There is evidence of heat-treating in the form of a very slight pink coloration at both the proximal and distal ends of the piece. The artifact is 60.8 mm long, 34 mm wide at the shoulders, and 7 mm thick. The piece is biconvex in cross-section.

Raw Material: Blue-gray and tan chert—1

Type 96: Medium Short Straight Stemmed,
Unfinished Base (n = 3)

These artifacts are characterized by an unfinished basal edge which was blunted by having an unfinished striking platform base, an unfinished cortex base, or a lateral stem burination. Although the cultural affiliation of this type is uncertain, a Late Archaic-Early Woodland association has been suggested (Faulkner and McCollough 1973:117-118). Faulkner found these artifacts to be primarily associated with the Woodland occupation at the Eoff I site (Faulkner and McCollough, eds. 1977:126). Three specimens of this type were recovered from a feature context at 40CF69. One example (Plate III) was recovered from Feature 18 in Excavation Area 4. This artifact has an unfinished straight basal edge and the proximal end of the piece is fractured. One blade edge is crudely serrated suggesting a cutting function for this particular artifact. This piece measures 44 mm long, 28.8 mm wide at the shoulders, and 9.8 mm wide. The artifact is biconvex in cross-section.

A Type 96 artifact was recovered from Feature 17 in association with a Type 80 Terminal Archaic Wade phase projectile point/knife. The blade is wide (23.2 mm) relative to the length (34.8 mm) of the artifact. The blade edges are straight and the shoulders are well-developed. Thickness is 7.8 mm and the specimen is flattened in cross-section.

Feature 20 in Excavation Area 1 contained a Type 96 projectile point/knife which is fractured at approximately the midsection of the blade. This specimen is 23 mm wide at the shoulder by 9.2 mm thick and is biconvex in cross-section.

The Type 96 artifacts from 40CF69 appear to be associated primarily with the Late-Terminal Archaic occupation at this site.

Raw Material: Blue-gray and tan chert—2;

Gray banded chert—1

Type 99: Medium-Large Straight Stemmed,
Weak Shouldered (n = 2)

These large, crude artifacts have been found in a definite Late Archaic context at the Hicks I site (Faulkner and McCollough, eds 1977:33). Most of the larger specimens of this type are similar to the *Appalachian* stemmed (Kneberg 1957). One artifact of this type (Plate III) was associated with the Late Archaic-Ledbetter phase crematory basin (Feature 41). The presence of numerous hairline cracks throughout this piece attests to its presence in the crematory basin at the time the cremation took place. This artifact is somewhat crude, has an elongated blade with relatively straight shoulders, and the base is unfinished. This specimen is 68.8 mm long, 29.8 mm wide at the shoulder, and 6.5 mm wide. Feature 41 had an adjusted radiocarbon date of B.P. 3755 $\pm$ 75 years (1805 B.C.) which indicates a Late Archaic Ledbetter phase association for this artifact.

Raw Material: Blue-gray and tan chert—2

Type 100: Medium-Short Straight Stemmed,
Narrow Blade (n = 2)

This type is similar to Type 101 but possesses a shorter and more squared stem and a more finely retouched blade. Some of the artifacts of this type are similar to the *Flint Creek* type (Cambron 1958). These

artifacts are believed to be associated with the Terminal Archaic-Early Woodland period and a specimen of this type was recovered from a firm Late Archaic context at the Hicks site (Faulkner and McCollough, eds. 1977:33). Both specimens from 40CF69 were recovered from the surface.

Raw Material: Blue-gray and tan chert—2

Type 101: Medium Straight Stemmed, Narrow Blade, Strong Shouldered (n = 1)

This type is similar to the *Carrollton* type from the Poverty Point site (Ford and Webb 1956:56-57) and to the slightly larger *Kays* type of the Tennessee Valley (Kneberg 1956). A Late Archaic association for this type in the Normandy Reservoir area was indicated by the recovery of three examples from the Level 2 midden at the Hicks site (Faulkner and McCollough, eds. 1977:33). The specimen from 40CF69 is from the surface.

Raw Material: Gray banded chert—1

Type 102: Medium-Large Straight Stemmed, Narrow-Wide Recurvate Blade, Strong Shouldered (n = 1)

One artifact of this type (Plate IV) was recovered from Feature 19 in Excavation Area 4. Artifacts of this type are characterized by a wide elongate blade with asymmetrical recurvate blade edges and prominent straight or tapered shoulders (Faulkner and McCollough, eds. 1977:33). This type is almost identical to the *Pickwick* type of the Tennessee Valley (DeJarnette, Kurjack, and Cambron 1962). The specimen from 40CF69 is fractured at the extreme distal end. Edge wear along both blade edges and the broken distal end of this piece support the interpretation of these large artifacts as stemmed knives. This

example is 34 mm wide at the shoulders and 7.8 mm thick. The basal edge is unground and slightly convex.

Raw Material: Blue-gray and tan chert—1

Type 103: Medium-Large Straight Stemmed,
Narrow-Wide Asymmetrical Blade (n = 4)

This type is a Late Archaic Ledbetter cluster projectile point/knife. One example of this type was recovered from the Late Archaic Ledbetter phase crematory basin (Feature 41) in Excavation Area 4 which has an adjusted radiocarbon date of B.P. 3755 $\pm$ 75 years (1805 B.C.). This specimen (Plate III) is fractured at the distal end and one of the shoulders is also broken off. This artifact, like the Type 99 projectile point/knife associated with it in Feature 41, has many hairline cracks throughout which indicate that it was present in the crematory basin at the time the cremation took place. The basal edge of this piece is lightly ground and slightly convex. The artifact is 6.2 mm thick and is biconvex in cross-section.

A second example of this type was found in Feature 24 in Excavation Area 1. The distal end of this specimen is broken off and a large fire spall is present on one side of the piece. The basal and blade edges are straight. This artifact is rather crude and measures 40.8 mm wide at the shoulders by 10.0 mm thick. The piece is flattened in cross-section.

Raw Material: Blue-gray and tan chert—3;

Fossiliferous chert—1

Type 105: Medium-Large Narrow Straight Stemmed,
Slight Barb, Wide Blade (n = 1)

This type was recovered from a Terminal Archaic Wade phase context at the Banks III site (40CF108) and from a Late Archaic period context at the Hicks I (40CF62) site (Faulkner and McCollough, eds. 1977:34). The specimen from 40CF69 was recovered from Feature 2 which is associated with the Late Archaic occupation along the edge of the terrace. The artifact (Plate I) is strong shouldered with an ovate blade. A very slight barb is present on one blade edge. The base of the piece is finished, unground, and slightly convex. This specimen is well-made and measures 49.8 mm long, 31.2 mm wide at the shoulders, and 8.5 mm thick. The artifact is flattened in cross-section.

Raw Material: Gray banded chert—1

Type 106: Medium-Large Straight-Stemmed, Wide
Asymmetrical Recurvate Thick Blade (n = 4)

These are Ledbetter cluster artifacts which appear to be crude or unfinished variants of Types 102 and 103. Two examples were found in a feature context at 40CF69. The specimen from Feature 17 (Plate IV) is slightly fractured near the distal end and also at the shoulder on one side. The asymmetrical shape of the blade appears to be the result of resharpening. The artifact is 58.5 mm long by 7 mm thick. The base is unfinished.

The one Type 106 projectile point from Feature 29 is fractured at approximately the midpoint of the blade. This artifact is quite crude with asymmetrical blade edges and an unfinished cortex base. The

width of the artifact at the shoulders is 39.8 mm. The piece is flattened in cross-section with a maximum thickness of 9.8 mm.

Raw Material: Blue-gray and tan chert—3;

Fossiliferous chert—1

Type 107: Asymmetrical Stemmed Knife (n = 1)

This type is characterized by an asymmetrical blade which suggests a cutting function for this artifact. A Late Archaic affiliation is suggested. One specimen was recovered from the surface at 40CF69.

Raw Material: Unidentified dark gray chert—1

Type 108: Large Short, Wide Rounded Stemmed, Broad Blade (n = 1)

This type is similar to the *Maples* type of the Tennessee drainage of northern Alabama (DeJarnette, Kurjack, and Cambron 1962) and also the *Morrow Mountain* type (Coe 1959). A Late Archaic association has been suggested for this type. The single example from 40CF69 was found on the surface.

Raw Material: Blue-gray and tan chert—1

Type 109: Large Crude Straight Stemmed (n = 1)

These are probably large, crude knives related to Types 102 and 106. One specimen of this type (Plate I) was recovered from Feature 2. The distal end of the piece is blunt and slightly glossy suggesting that this artifact may have been used as a wedge. The blade edges are very asymmetrical due to resharpening. This artifact measured 58 mm

long with a maximum thickness of 10.2 mm. The specimen is biconvex in cross-section.

Raw Material: Blue-gray and tan chert—2

Type 110: Medium-Large Straight-Expanded
Stemmed, Crude Base, Thick Blade (n = 2)

These are undifferentiated stemmed artifacts with thick blades and crude stems which are probably Late Archaic-Early Woodland knives.

Both examples were found on the surface.

Raw Material: Unidentifiable gray chert—2

Type 111: Unidentifiable Broken Stemmed
and Notched (n = 3)

These are broken artifacts which can only be identified as having been stemmed and notched. Both Archaic and Woodland artifacts are included in this type.

Raw Material: Blue-gray and tan chert—1;

Gray banded chert—1; Blue-green

nodular chert—1

Type 112: Medium-Large Corner Removed,
Wide Blade (n = 1)

These artifacts are possibly related to the White Springs-Sykes cluster (Types 113-114) or the earlier corner-notched types 120-126. An Early Archaic to Middle Archaic affiliation is suggested for this type.

Raw Material: Gray banded chert—1

Type 113: Medium-Large Corner Removed,
Wide Stemmed (n = 1)

This type is similar to the *White Springs* type of northern Alabama which has been found in association with *Morrow Mountain* projectile points at the Stanfield-Worley Bluff Shelter (DeJarnette, Kurjack and Cambron 1962). A Middle Archaic date is suggested. The example from 40CF69 was found on the surface.

Raw Material: Unidentifiable gray chert—1

Type 114: Small-Medium Corner Removed (n = 1)

This type is a White Springs-Sykes cluster artifact. The majority of the specimens of this type resemble the *Sykes* projectile point from the Eva site which was found in the Eva, Three Mile, and Big Sandy phases (Lewis and Lewis 1961:40-43). A variant of this type was found in association with the *Morrow Mountain* type projectile point at the Westmoreland-Barber site in the Nickajack Reservoir, Tennessee (Faulkner and Graham 1966:71-72). Faulkner and McCollough, eds. (1977:189) have suggested this type could be related to the Middle Archaic *Stanly* projectile point. A Middle to Late Archaic date is suggested for this type.

Raw Material: Unidentifiable gray chert—1

Type 115: Medium-Large, Basally Notched,
Wide Blade (n = 1)

This type is similar to the *Eva* type of the Tennessee Valley (Kneberg 1956). A Late Archaic association is indicated. The one specimen from 40CF69 was recovered from a surface context.

Raw Material: Gray banded chert—1

Type 118: Medium Short Expanded Stemmed,
Strong Shouldered, Wide Blade (n = 1)

This type is similar to the New York *Perkiomen* type (Ritchie 1961) and an Archaic period placement is suggested. A single example of this type was found on the surface at 40CF69.

Raw Material: Gray banded chert—1

Type 119: Medium Short Incurvate-Base Stemmed,
Wide Blade, Short Barb (n = 1)

This type is similar to the *Kirk* projectile point/knife. A specimen of this type was recovered from Feature 19 in association with two Late Archaic projectile points/knives (Types 102 and 106) and also a Type 92 artifact. This artifact (Plate IV) is fractured near the distal end of the piece. Both blade edges are heavily serrated and the basal edge of the artifact is incurvate and unground. This specimen is 16.5 mm wide at the shoulders and has a maximum thickness of 8 mm. Feature 19 appears to be associated with the Late Archaic occupation along the terrace edge at 40CF69. The presence of this Type 119 artifact in the feature fill does not appear to represent a primary association.

Raw Material: Gray banded chert—1

Type 125: Medium Corner Notched,
Straight Base (n = 1)

These artifacts are included in the *Kirk* cluster but lack basal grinding. An Early Archaic association is likely.

Raw Material: Gray banded chert—1

Type 131: Medium Short Expanded Stemmed,
Bifurcated Base, Wide Blade (n = 1)

This type is included in the Early Archaic Bifurcated Base cluster of the upper Duck Valley. This type is similar to the Type 130 projectile point/knife except it has a wider blade. The example from 40CF69 was found on the surface.

Raw Material: Unidentifiable gray chert—1

Type 134: Small-Medium Side Notched (n = 2)

This type is similar to the *Big Sandy I* and *Big Sandy II* types associated with transitional Paleo-Early Archaic *Dalton* points at the Stanfield-Worley Bluff shelter (DeJarnette, Kurjack, and Cambron 1962). An Early Archaic date is suggested for this type in the upper Duck Valley.

Raw Material: Blue-gray and tan chert—1;

Gray banded chert—1

Type 138: Unidentifiable Broken Distal
Ends (n = 18)

These are broken distal ends of projectile points/knives which cannot be identified as to type.

Raw Material: Blue gray and tan chert—9; Pink

chert—1; Gray banded chert—4;

Unidentifiable gray chert—4

Ground Stone Implements

A total of four ground stone implements representing three types in the Normandy Lithic Typology was associated with the McFarland or Mason phase occupations at the site.

Type 153: Worked Siltstone-Fine Grained
Sandstone (n = 2)

Two pieces of fine grained sandstone exhibiting shallow scratches were recovered from a Wade phase feature (Feature 17). The first of these pieces has a maximum width of 50 mm, a maximum length of 54 mm, and is 8 mm thick. There are two very shallow parallel scratches on one side of this stone. The second artifact is a very fragmentary piece of sandstone with a very shallow scratch on one side. In neither case are the scratches deep enough or of a uniform enough nature to suggest the stones were used as abraders.

Type 155: Worked Black Shale and
Type 225: Bifacial Hoe-Like
Implement (n = 1)

This type consists of flat thin slabs of Chattanooga black shale which exhibit modification of the edges; this modification can take the form of grinding or chipping. Feature 44 in Excavation Area 4 West produced a large, crude, rectangular hoe with a rounded poll. A very distinct thinned excurvate blade is present along the distal end of the piece and one side of the artifact is crudely chipped so as to form a second blade edge. The other edge of the artifact is unaltered. The maximum length is 276 mm with a maximum thickness of 39 mm. Its

inclusion in Feature 44 suggests a Late Archaic placement for this particular artifact.

Miscellaneous Lithic Artifacts

No Type Number: Crinoid Stem Bead (n = 1)

This artifact was found in the pit fill of Burial 3 (Feature 34) which is associated with the McFarland phase occupation at 40CF69. It is a single section of a fossil crinoid which has been drilled through the center. Whether this artifact represents an intentional grave accompaniment or merely part of the grave fill is unknown.

Raw Material: Limestone

Summary of Lithics

A total of 8,081 lithic artifacts was recovered at 40CF69 with 97.0 percent (n = 7,839) of this material being recovered from a feature context. Lithic indices for the Aaron Shelton site are presented in Table 7 with separate lithic indices for the Wade, Ledbetter, and McFarland components being presented in Tables 8, 9, and 10, respectively. As stated in the preceding chapter, all features located along the terrace edge in Excavation 4 were classified as Ledbetter phase features and the lithic material from these features was used in the computation of the Ledbetter phase lithic indices. Similarly, all features in Excavation Area 2 including those not containing culturally diagnostic material were assigned to the McFarland phase occupation and the lithic material from these features was used in the determination of the 40CF69

TABLE 7
Total Lithic Indices—40CF69

<u>Stage of Manufacture (N = 8,081)</u>						
$\frac{PL}{7,912}$	$\frac{FI}{169}$	$\frac{UI}{12}$	$\frac{BI}{57}$	$\frac{PPK}{92}$	$\frac{GS}{3}$	(n =)
97.90	2.10	0.15	0.7	1.15	0.04	
<u>Raw Material</u>						
$\frac{H}{137}$	$\frac{W}{7}$	$\frac{E}{0}$	$\frac{L}{7,937}$			(n =)
1.69	0.09	0.14	0.71			
<u>Activities</u>						
$\frac{HI}{87}$	$\frac{BII}{21}$	$\frac{WWI}{3}$	$\frac{HWI}{12}$			(n =)
1.07	0.26	0.04	0.15			
$\frac{BWI}{0}$	$\frac{PPI}{23}$	$\frac{SBFB}{0}$	$\frac{PFW}{7,912}$			(n =)
0.0	0.28	0.0	97.90			
<u>Function</u>						
$\frac{PI}{2}$	$\frac{CI}{361}$	$\frac{SI}{7}$	$\frac{PERI}{2}$			(n =)
0.02	4.46	0.09	0.02			
$\frac{DI}{2}$	$\frac{SSI}{0}$	$\frac{HPI}{1}$	$\frac{GSI}{2}$			(n =)
0.02	0.0	0.01	0.02			
<u>Projectile Point/Knife Cluster Indices (N = 74)</u>						
$\frac{HC}{0}$	$\frac{LSC}{0}$	$\frac{LESC}{5}$	$\frac{McFC}{8}$	$\frac{WC}{3}$		(n =)
0.0	0.0	6.75	10.81	4.05		
$\frac{RBC}{7}$	$\frac{LC}{8}$	$\frac{WSSC}{2}$	$\frac{EMMC}{1}$	$\frac{BBC}{1}$	$\frac{KC}{1}$	(n =)
9.45	10.81	2.70	1.35	1.35	1.35	

TABLE 8
Lithic Indices, Ledbetter Phase Features

<u>Stage of Manufacture (N = 3,879)</u>					
$\frac{PL}{3,810}$ 98.22	$\frac{FI}{69}$ 1.77	$\frac{UI}{5}$ 0.12	$\frac{BI}{51}$ 1.31	$\frac{PPK}{41}$ 1.05	$\frac{GS}{1}$ 0.03
(n =)					
<u>Raw Material</u>					
$\frac{H}{53}$ 1.37	$\frac{W}{1}$ 0.03	$\frac{E}{0}$ 0.0	$\frac{L}{3,825}$ 98.60	(n =)	
<u>Activities</u>					
$\frac{HI}{31}$ 0.79	$\frac{BII}{11}$ 0.28	$\frac{WWI}{1}$ 0.03	$\frac{HWI}{1}$ 0.03	(n =)	
$\frac{BWI}{00}$ 0.0	$\frac{PPI}{11}$ 0.28	$\frac{SBFB}{0}$ 0.0	$\frac{PFW}{3,810}$ 98.22	(n =)	
<u>Function</u>					
$\frac{PI}{41}$	$\frac{CI}{98}$	$\frac{SI}{6}$	$\frac{PERI}{1}$	(n =)	
$\frac{DI}{1}$ 0.03	$\frac{SSI}{0}$ 0.0	$\frac{HPI}{0}$ 0.0	$\frac{GSI}{1}$ 0.03	(n =)	

TABLE 9
Lithic Indices, Wade Phase Features

<u>Stage of Manufacture</u> (N = 1,039)						
$\frac{PL}{1,022}$	$\frac{FI}{17}$	$\frac{UI}{6}$	$\frac{BI}{10}$	$\frac{PPK}{9}$	$\frac{GS}{2}$	(n =)
98.36	1.64	0.6	1.0	0.9	0.2	
<u>Raw Materials</u>						
$\frac{H}{11}$	$\frac{W}{0}$	$\frac{E}{0}$	$\frac{L}{1,028}$			(n =)
1.06	0.0	0.0	98.4			
<u>Function</u>						
$\frac{PI}{9}$	$\frac{CI}{18}$	$\frac{SI}{4}$	$\frac{PERI}{0}$			(n =)
0.9	1.73	0.4	0.0			
$\frac{DI}{0}$	$\frac{SSI}{0}$	$\frac{HPI}{0}$	$\frac{GSI}{2}$			(n =)
0.0	0.0	0.0	0.2			
<u>Activities</u>						
$\frac{HI}{6}$	$\frac{BII}{1}$	$\frac{WWI}{0}$	$\frac{HWI}{6}$			(n =)
0.6	0.1	0.0	0.6			
$\frac{BWI}{0}$	$\frac{PPI}{4}$	$\frac{SBFB}{0}$	$\frac{PFW}{1,022}$			(n =)
0.0	0.4	0.0	98.36			

TABLE 10
Lithic Indices, McFarland Phase Features

<u>Stage of Manufacture (N = 980)</u>						
$\frac{PL}{973}$	$\frac{FI}{8}$	$\frac{UI}{0}$	$\frac{BI}{12}$	$\frac{PPK}{9}$	$\frac{GS}{1}$	(n =)
99.28	0.81	0.0	1.22	0.91	0.10	
<u>Raw Material</u>						
$\frac{H}{0}$	$\frac{W}{4}$	$\frac{E}{0}$	$\frac{L}{976}$			(n =)
<u>Activities</u>						
$\frac{HI}{8}$	$\frac{BII}{4}$	$\frac{WWI}{0}$	$\frac{HWI}{0}$			(n =)
0.81	0.40	0.0	0.0			
$\frac{BWI}{0}$	$\frac{PPI}{1}$	$\frac{SBFB}{0}$	$\frac{PFW}{973}$			(n =)
0.0	0.10	0.0	99.28			
<u>Function</u>						
$\frac{PI}{9}$	$\frac{CI}{12}$	$\frac{SI}{0}$	$\frac{PERI}{0}$			(n =)
0.91	1.22	0.0	0.0			
$\frac{DI}{0}$	$\frac{SSI}{0}$	$\frac{HPI}{0}$	$\frac{GSI}{1}$			(n =)
0.0	0.0	0.0	0.1			

McFarland lithic indices. The Wade phase lithic indices at 40CF69 are based on the lithic material recovered from Feature 17 and Feature 22 in Excavation Area 1.

One of the hypotheses under investigation in this thesis is that aboriginal occupations at the smaller lower reservoir sites such as 40CF69 may have been oriented largely toward the exploitation of adjacent gray banded chert resources which were not available in the upper reservoir zone. For such a hypothesis to be valid, then, it would have to be proven in part that gray banded chert comprised a significantly higher proportion of the total raw material count at 40CF69 than it does at the upper reservoir sites where gray banded chert comprises only a small percentage of the total lithic assemblage (Penny and McCollough 1976:157).

Analysis of the 40CF69 lithic material revealed that gray banded chert did indeed comprise a much higher percentage of the total lithic raw material count at this site than it does at the upper reservoir sites. A total of 7,839 lithic specimens was recovered from feature context at 40CF69 with 58.5 percent ($n = 3,606$) of this total consisting of gray banded chert while blue gray and tan chert ($n = 2,021$) and pink chert ($n = 864$) comprised a combined 49.55 percent of the total.

Analysis of the 40CF69 Wade, Ledbetter, and McFarland components also showed high use values existed for gray banded chert in all three phases. Gray banded chert comprised 47.76 percent ($n = 1,848$) of all lithic material from Ledbetter phase features while blue-gray and tan chert ($n = 1,531$) and pink chert ($n = 431$) comprised a combined

50.60 percent of the total. The lithic material from the Wade phase features (F17 and F22) also showed a very high use value for gray banded chert which comprised 59.82 percent ($n = 624$) of all lithic material from the features as opposed to a combined 37.39 percent ($n = 313$) for blue-gray and tan chert and pink chert. Use levels for gray banded chert during the McFarland phase were significantly lower than those for the Ledbetter and Wade phases. Gray banded chert comprised 33.77 percent ($n = 331$) of all lithic raw material as opposed to a 65.71 percent use level for blue-gray and tan chert ($n = 528$) and pink chert ($n = 116$). This decrease in the frequency of use of gray banded chert during the McFarland phase has been previously noted on upper reservoir zone sites and is attributed to the overall depletion of gray banded chert resources in the Normandy reservoir area by the Middle Woodland period (Penny and McCollough 1976:174).

The primary lithic index values are extremely high for all three phases which suggests that lithic core reduction was an important prehistoric activity at 40CF69. Analysis of the lithic raw materials from which lithic types 3 (core trimming flake), 4 (flat flake), and 5 (bifacial thinning flake) were manufactured indicates that gray banded and blue-gray and tan chert were being processed in a similar manner by the aboriginal inhabitants of 40CF69. If gray banded lithic material was being shaped into cores at 40CF69 for transportation elsewhere it might be expected that lithic type 5 (bifacial thinning flake) would comprise a smaller proportion of the total gray banded lithic assemblage than it does of the blue gray and tan lithic assemblage, the reasoning

being that bifacial thinning represents an advanced process of thinning which is not necessary if the immediate goal is simply to reduce the size of the lithic raw material for transport. Instead, the proportion of bifacial thinning flakes relative to the rest of the primary lithic assemblage is roughly the same for both blue-gray and tan and gray banded chert in all three phases (Table 11 and Table 12). This is a possible indication that utilization of gray banded lithic material at 40CF69 was oriented toward the immediate use of this raw material type and not toward the production of cores for transportation elsewhere in the reservoir zone.

Faulkner and McCollough's (1973:347) interpretation of the Aaron Shelton site as a hunting-butcher camp is supported by the 40CF69 lithic index values (Table 7, page 115). With the exception of primary lithics (PL), relatively high index values are recorded only for cutting (CI) and hunting activities (HI) in all three phases. The uniformly low butchering indices (BI) for all three phases suggests the possibility that this activity was carried out at ancillary transient camps.

TABLE 11

Distribution of Primary Lithic Artifacts (Raw Material Types A, B, and C) by Cultural Phase

Tool Type	<u>Ledbetter</u>						<u>Wade</u>						<u>McFarland</u>						TOTAL	%		
	<u>Raw Material Type</u>			<u>Raw Material Type</u>			<u>Raw Material Type</u>			<u>Raw Material Type</u>			<u>Raw Material Type</u>									
	A No.	%	B No.	%	C No.	%	A No.	%	B No.	%	C No.	%	A No.	%	B No.	%	C No.	%				
1																						
2a																						
2d	1	.1					1	.1													2	.03
3	476	31.7	180	41.9	579	31.8	50	30.5	23	44.3	159	32.8	177	32.8	50	43.1	114	34.5			1,808	44.8
4	658	43.8	149	34.6	833	45.7	85	45.7	26	50.0	208	45.5	256	49.0	49	42.2	154	46.5			2,418	33.3
5	322	21.5	93	21.6	370	20.3	22	13.4	3	5.7	79	17.3	83	15.9	16	13.8	48	14.5			1,036	19.0
6	44	2.9	8	1.9	42	2.3	7	4.3			11	2.4	6	1.1	1	0.9	15	4.5			134	2.4
7																						
Total	1,501		430		1,824		165		52		457		522		116		331				n = 5,398	
%	27.8		7.9		31.8		3.1		.9		8.2		9.5		2.2		6.1					

TABLE 12

Distribution of Lithic Raw Materials by Cultural Phase

Raw Material Type	<u>Ledbetter</u>		<u>Wade</u>		<u>McFarland</u>		<u>Mason</u>	
	No.	%	No.	%	No.	%	No.	%
A	1531	39.57	172	24.64	528	53.87	2	100.0
B	431	11.13	52	7.44	116	11.8		
C	1848	47.76	462	66.18	331	33.77		
D	5	0.12	1	0.14	1	0.01		
F	38	0.98	8	1.14	4	0.04		
I	14	0.36						
L	1	0.02						
P	1	0.02	1	0.14				
R			2	0.28				
Total	3869	100.0	698	100.0	980	100.0	2	100.0

CHAPTER VI

CERAMICS

Limestone-Tempered Ware

Four types of limestone-tempered ware were recovered from a feature context at 40CF69 (Table 13). These types were residual plain (Type 2a), plain (Type 2b), check stamped (Type 2d), and fabric marked (Type 2i). No ceramic material whatsoever was recovered at 40CF69A.

2a. Limestone-Tempered Residual Plain (n = 179)

Temper: Fine to medium crushed limestone

Surface Treatment: Indeterminate

Vessel Form: Indeterminate

Remarks: These are small sherds on which it was impossible to define the surface treatment due to the leached and eroded condition of these fragments. The majority of these sherds (n = 114) are from a single McFarland phase feature (F36).

2b. Limestone Tempered Plain (n = 33)

Temper: Fine to medium crushed limestone

Surface Treatment: Smoothed

Vessel Form: Uncertain, but most likely these are fragments of conoidal vessels.

Remarks: This type is definitely associated with the McFarland phase occupation at 40CF69 with the majority of these sherds (n = 25) coming from two McFarland phase features (F33 and F37). These sherds were probably originally from the lower

TABLE 13

Distribution of Ceramics in Features and Postholes—40CF69

Ceramic Type	Limestone tempered, Residual Plain	Limestone tempered, Plain	Limestone tempered, Check Stamped	Limestone tempered, Fabric Marked	Chert tempered, Residual Plain	Chert tempered, Plain	Chert tempered, Cordmarked	Total	%
Feature 6	9		1	2				12	3.8
Feature 10	4	1		1				6	1.9
Feature 23		1						1	0.3
Feature 25	1							1	0.3
Feature 30				1				1	0.3
Feature 33	22	3		6				31	9.9
Feature 34	3							3	1.0
Feature 36	144	19		33				166	53.2
Feature 37	25	5		13				43	13.8
Feature 48		1						1	0.3
Feature 50	1			1				2	0.6
Posthole 6					12			12	3.8
Posthole 8					5	13	8	26	8.3
Posthole 38				2				2	0.6
Posthole 49		3						3	1.0
Posthole 53				2				2	0.6
Total	179	33	1	61	17	13	8	312 = n	
%	57.4	10.6	0.3	19.5	5.4	4.2	2.6		

smoothed-over sections of fabric marked vessels. Faulkner found that at the Eoff I site this type continued to be manufactured into the Late Woodland Mason phase (Faulkner and McCollough, eds. 1977:177). However, no ceramics of this type were recovered from the two Mason phase postholes at 40CF69.

2d. Limestone-Tempered Check Stamped (n = 1)

Temper: Fine to medium crushed limestone

Surface Treatment: Check stamped

Vessel Form: Unknown, but a subconoidal jar with rounded or podal base is probable.

Remarks: A single sherd (Plate V) of this type was recovered from the earth oven Feature 6. This sherd was identified as a *Wright Check Stamped* which is an early Middle Woodland ceramic type and the majority stamped type on McFarland phase sites in the upper Elk (Bacon and Merryman 1973:6-8) and Duck River valleys (Faulkner and McCollough 1974:330).

2i. Limestone-Tempered Fabric Marked (n = 61)

Temper: Fine to medium crushed limestone

Surface Treatment: Impressed with a textile wrapped paddle

Vessel Form: Subconoidal jars with a conoidal or rounded base.

Remarks: This is the second most frequently occurring ceramic type at 40CF69, comprising 21.0 percent of the total

ceramic assemblage. Approximately one-quarter of a large fabric marked jar (Plate VI) was recovered from Feature 37. This vessel has a flattened excurve rim with a slight constriction at the neck of the vessel. This vessel section was completely fabric marked with no indication of smoothing. Two additional small rim sherds from different vessels were also found in Feature 37; both are fabric marked, flattened rim sections with one of the rims being slightly excurve. Nearly one-half ($n = 33$) of the fabric marked sherds found at 40CF69 came from a single feature (F36). This feature had been defined in the field as a natural disturbance due to the very irregular shape of the feature; the ceramic material from this feature, however, shows a strong uniformity in surface treatment and thickness such as to indicate that all of the sherds are from the same *Long Branch Fabric Marked* jar. One of the sherds is a large fabric marked, flattened, excurve rim section with a slight constriction at the neck of the vessel. A number of fabric marked body sherds ($n = 16$) from this feature show an identical surface treatment to that of the rim fragment and are probably part of the same vessel. The surface treatment of five other sherds from Feature 36 is smoothed over fabric marked which suggests that they are pieces from the lower section of the vessel.

Long Branch Fabric Marked ceramics were also recovered from Feature 33. The entire base of a smoothed over fabric

marked vessel was found resting on the bottom of the feature. Although rim and body sherds from this vessel are described on the field form and in the excavation notes, they are not listed on the Feature 33 analysis sheet nor are they present in the 40CF69 artifact assemblage at The University of Tennessee, Knoxville.

Chert-Tempered Ware

Three types of chert-tempered ware were recovered from features and postholes at 40CF69. These types were residual plain (Type 6a), plain (Type 6b), and cordmarked (Type 6e). A large section of an Elk River ware vessel was present in Posthole 8. All of the chert-tempered ceramic material from 40CF69 was identified as Late Woodland Elk River ware which was locally manufactured during the Mason phase in the upper Duck River Valley.

6a. Chert-Tempered, Residual Plain (n = 17)

Temper: Medium to large pieces of crushed chert

Surface Treatment: Indeterminate

Vessel Form: Indeterminate

Remarks: These are small sherds on which it was impossible to determine the surface treatment. Residual ceramics were recovered from the two Mason phase postholes in association with *Elk River Cordmarked* ceramics.

6b. Chert-Tempered, Plain (n = 13)

Temper: Medium to large pieces of crushed chert

Surface Treatment: Smoothed plain

Remarks: The chert tempered plain ceramics are all from Posthole 8 and can be joined together to form part of the body section of a vessel of indeterminate shape. Faint traces of smoothed over cord marking are visible on this body section; thickness varies from 6 to 8 centimeters. One remnant of a flattened plain rim sherd was also found in Posthole 8. The similarity of this rim fragment to the cordmarked rim sherds from the same posthole in regard to thickness and rim form suggests that all are from the same vessel.

6e. Chert-Tempered Cordmarked (n = 8)

Temper: Medium to large pieces of crushed chert

Surface Treatment: The vessel surface is impressed with a cord wrapped wooden paddle

Vessel Form: Indeterminate

Remarks: Seven of the eight cordmarked sherds are rim sherds with five of these coming from Posthole 8. All of the rim sherds have a flattened rim and are heavily cordmarked with an average thickness of 5 to 6 centimeters. A single cordmarked body sherd was recovered from Posthole 8. All of the cordmarked ceramics from 40CF69 have been identified as *Elk River Cordmarked* which is the predominant pottery type during the Late Woodland Mason phase (Faulkner and McCollough, eds. 1977:99).

Summary

Limestone-tempered ceramics comprised 87.8 percent (n = 274) of the total ceramic assemblage at 40CF69 with fabric-marking (n = 61) being

the predominant surface treatment. In addition, 33 plain limestone-tempered sherds and one check stamped sherd were represented in the collection. DuVall (1977:205) has previously noted that smoothing of the vessel surface was a common practice during the McFarland phase with the smoothing resulting in the obliteration of the original surface treatment (fabric-marking, check stamping) of the vessel. This form of surface treatment was also evident at 40CF69 with the majority of the fabric marked sherds showing some evidence of smoothing. Limestone-tempered vessel shape at 40CF69 was largely indeterminate due to the small size of the sherds but a large section of a Long Branch Fabric Marked jar with a slightly excurvate rim, constricted neck, and expanding shoulders, was recovered from Feature 37 (Plate VII) and the conical base of a fabric marked vessel was recovered from Feature 33.

The predominance of fabric marked sherds in the ceramic assemblage together with the exclusive use of limestone as a tempering agent is indicative of either a late Early Woodland Long Branch or early Middle Woodland McFarland phase occupation at 40CF69. Long Branch Fabric Marked ceramics appear in the Tennessee Valley during the Early Woodland period (Haag 1939:10; Sears and Griffin 1950; Heimlich 1952:17) and is the predominant ceramic type on sites from this period with *Wright Check Stamped* and *Mulberry Creek Plain* comprising smaller percentages of the limestone-tempered ceramic assemblage. Radiocarbon dates from features containing Long Branch Fabric Marked ceramics in Tennessee include dates of 340 B.C. $\pm$ 105 years from the Westmoreland-Barber site in the Nickajack Reservoir (Faulkner and Graham 1966:113-114), 205 B.C. $\pm$ 80 years

from the Banks I site in the Normandy Reservoir (Faulkner and McCollough 1973:192), 90 B.C. $\pm$ 95 years from the Banks V site (McCollough 1978:47), A.D. 55 $\pm$ 95 years from the 40FR47 site (Bacon and Merryman 1973), and 215 B.C. from the Aaron Shelton site. In Alabama, a feature containing a conoidal based fabric marked vessel at the Dam Axis site in Franklin County, Alabama, was dated at 1850 $\pm$ 125 B.P. or A.D. 100 (Oakley and Futato 1975; Futato 1977:42) while Layer D at Russel Cave which contained 48 percent Long Branch Fabric Marked ceramics was dated at 155 B.C. $\pm$ 200 years (Futato 1977:42). Faulkner and McCollough (n.d.:402) list a high percentage of fabric marked ceramics as one of the diagnostic characteristics of the Long Branch phase (400-150 B.C.) in the Normandy Reservoir area. During the Middle Woodland McFarland phase the percentage of fabric marked ceramics in the limestone-tempered ceramic assemblage declines and check stamping becomes the predominant surface treatment. The high percentage of fabric marked ceramics at 40CF69 (64.2 percent, exclusive of residual sherds) as opposed to check stamped (1.0 percent) indicates that the major Woodland period occupation at 40CF69 occurs during either the late Early Woodland Long Branch phase or the very early Middle Woodland McFarland phase. The association of triangular McFarland cluster projectile points/knives and fabric marked ceramics in two of the features at 40CF69, however, indicates that the major Woodland period occupation occurred early in the McFarland phase.

Chert-tempered ceramics of the *Elk River* series were recovered from two postholes and one feature in Excavation Area 1 with this

ceramic type comprising only 12.12 percent ($n = 38$) of the total ceramic assemblage at 40CF69. The predominant surface treatment, excluding residual sherds ($n = 17$), were plain ($n = 13$) and cordmarked ($n = 8$). Evidence of smoothing was found on all of the cordmarked sherds suggesting that this was a common surface treatment during the Late Woodland Mason phase occupation of the site. Vessel shape was indeterminate due to the limited number and small size of the chert-tempered sherds.

CHAPTER VII

FAUNAL AND BOTANICAL REMAINS

Faunal Remains

Only a small amount of faunal material was recovered at 40CF69. There were three methods used in the recovery of faunal remains from features: (1) recovery during the hand/trowel excavation of the feature; (2) water-screening of all or a portion of the feature fill through window screen and 0.25 inch hardware cloth; (3) field flotation of all or a portion of the feature fill.

The relative absence of faunal material at 40CF69 is the result of several factors. A TVA clearing crew rather prematurely burnt to the ground the Aaron Shelton barn in which the flotation material was being stored. Any small-sized faunal material which could have indicated to what extent smaller species of animals were being utilized at 40CF69 has, therefore, been destroyed. The only flotation material to escape destruction was that from the Ledbetter phase burial (Burial 2/Feature 41). Poor preservation of faunal material due to the highly acidic nature of the terrace soil is also a factor. Fairly well preserved faunal material was recovered from some Ledbetter and Wade phase features, however, while other Ledbetter and Terminal/Late Archaic phase features contained no faunal material. The same situation exists at 40CF69 in regard to McFarland phase features. This suggests that at least in some instances the absence of faunal remains in features may not be the result of poor

preservation but rather the result of the differential nature and function of some of these features.

A total of twelve features contained faunal material, most of it unidentifiable (Table 14). Faunal material was present in Wade, Ledbetter, and McFarland phase features. Identifiable remains of the white-tailed deer (*Odocoileus virginianus*) occurred in both Ledbetter and Wade phase features.

A slight indication of seasonality was the recovery of several snake vertebrae (Family Colubridae) from Feature 19 which is a Terminal Archaic Wade phase feature. Snakes of this family are known to become active as early as March and to begin hibernation as late as October (Barbour 1971:247). The intentional or accidental inclusion of a snake in the feature fill simply suggests that Feature 19 was open and being utilized during the warmer part of the year.

Botanical Remains

As stated previously, all of the 40CF69 flotation material except that from Feature 41 was destroyed by fire. This severely limits the inferences that can be drawn about the aboriginal occupations at 40CF69 with regard to seasonality, subsistence activities carried out at the site, and the function of various features. The only botanical material available from 40CF69 (with the exception of Feature 41) is that which was gathered by trowel sorting during the excavation of the various features.

Six genera of trees (Table 15) were identified from wood charcoal samples from a feature context with another genera, *Juglans nigra*, the

TABLE 14

Distribution of Faunal Remains in Features—40CF69

	Snake sp.	Snake sp. (Family Colubridae)	White-tailed Deer (<i>Odocoileus virginianus</i>)	Unidentifiable Large Mammal Bone	Unidentifiable Small Mammal Bone	TOTAL
Feature 6				2	15	17
Feature 7			1	1	10	12
Feature 10				4		4
Feature 17			2	11	15	28
Feature 19	2	1	14	27	22	66
Feature 29				8	26	34
Feature 33				11	13	24
Feature 37					2	2
Feature 45				5	9	14
Feature 49				9	46	55
TOTAL	2	1	17	78	158	256 = n

TABLE 15

Wood Charcoal in Features at 40CF69

Genera and Species	Features									
	F6	F7	F17	F19	F20	F27	F30	F31	F37	F41
<u>Acer</u> sp. (Maple)								X		X
<u>Carya</u> sp. (Hickory)		X			X				X	X
<u>Fraxinus</u> sp. (Ash)		X	X				X		X	
<u>Quercus</u> sp. (Oak)										X
<u>Quercus</u> sp. (White Oak Group)										X
<u>Quercus</u> sp. (Red Oak Group)				X						X
<u>Liriodendron tulipifera</u> . (Yellow Poplar)	X					X				

black walnut, represented by charred nut remains (Table 16). All of these are species which exist in the area today, suggesting that a mixed mesophytic forest similar to that of the present was the predominant forest type during the prehistoric occupation of the site.

Despite the destruction of the flotation material, enough information was contained in the remaining botanical samples to determine the seasonality occupation at 40CF69 in some instances. The utilization of at least two nut crops, hickory (*Carya* sp.) and the black walnut was indicated by charred nut remains (Table 16). The presence of hickory nuts in three of the five recognized McFarland phase features suggests that the McFarland phase occupation at 40CF69 occurred in the early fall as hickory nuts ripen and can be collected during the months of September and October (Petrides 1972). Recovery of walnut and hickory nuts from the single recognized Wade phase feature (F17) is also indicative of a fall occupation at 40CF69 during the Terminal Archaic period. Walnuts mature and can be collected during September and October (Petrides 1972). Charred hickory nut remains were also found in a Ledbetter phase feature (F2) during the test excavations; this material is not present in the 40CF69 collection. Assuming the field interpretation of this material was correct, it can be stated that at least part of the Late Archaic Ledbetter phase occupation took place in the fall. A further indication of this was the recovery of hickory nut remains from Feature 20, one of the buried features at the edge of the terrace. Although this feature contained no diagnostic material, these buried features along the bluff edge are believed to be associated with the Late Archaic occupation at 40CF69.

TABLE 16

Plant Remains in Grams From Features, (40CF69)

Feature No.	Hickory Nutshell	Walnut	Wood Charcoal	Total Wt.
6	.31		.03	.34
7			.03	.03
11			.04	.04
12			.21	.21
13	.04			.04
17	1.83	.08	.14	2.05
19			.06	.06
20	.13		.02	.15
27			.35	.35
29			.08	.08
30			.19	.19
31		.31		.31
32			3.75	3.75
37	13.79		2.78	16.57
41			7.06	7.06
45			.06	.06
49			1.35	1.35
TOTAL	16.10	.39	16.15	32.64

CHAPTER VIII

BURIALS

Four burials were recovered during the test and summer excavations at 40CF69 with the condition of this skeletal material being uniformly poor. Two of the burials were cremations while the remaining two were inflesh inhumations. The cultural association of these burials could be determined in only two instances with Burial 2 (Feature 41) being assigned to the Ledbetter phase occupation while Burial 4 (Feature 34) was assigned to the McFarland phase occupation. A radiocarbon date of B.P. 3755 ± 75 years (805 B.C.) was obtained on Burial 2 making this the oldest human skeletal material yet recovered in the Normandy Reservoir area. Of the remaining two burials, Burial 3 (Feature 56/Posthole 55) is suspected to be a McFarland phase inhumation due to its location in Excavation Area 2 but this cannot be substantiated. All skeletal material from 40CF69 was analyzed by Ms. Mary McCorvie of the Department of Anthropology of The University of Tennessee, Knoxville.

Burial 1 (Feature 1)

Burial 1 was a primary inhumation located in a shallow oval basin in Excavation Area 1. The individual had been placed in a flexed position laying on its left side and was in an extremely poor state of preservation. Identifiable postcranial material included both tibias and a section of the midshaft of a femur. Black (1978b:227) has developed a technique for determining the sex of an individual based

on the femoral shaft circumference. Using a population of 114 skeletons from the Libben Site in Ontario County, Ohio, Black determined that the midpoint between the male and female means for femoral shaft circumference was 81.00 mm. Individuals with a femoral circumference less than 81.0 mm were classified as females while those with a femoral circumference greater than 81.0 mm were classified as males. This method of sexing was shown to have an accuracy rating of 85 percent (Black 1978b: 227; DiBernardo and Taylor 1979:635). The femoral shaft circumference for Burial 1 was 82.0 mm which suggests that it should be classified as a male. However, this classification should be regarded with some caution as it has not yet been demonstrated that Black's sexing process is valid for any skeletal material other than the population used in his original study. No culturally diagnostic material was found with Burial 1 and its cultural association is unknown.

Burial 2 (Feature 41)

Burial 2 was the remains of a cremated individual located in a Ledbetter phase crematory basin at the edge of the terrace in Excavation Area 4. The most accurate age indicators for this burial are the fused but visible distal ulna and the partially fused distal radius. According to McKern and Stewart (1957:44) this suggests an age of from 19 to 20 years old for the individual. Most of the bones of the body were represented in the well-calcined remains recovered from the crematory basin but were difficult to identify due to transverse splitting of the bones followed by tabular curling of the fragments

around their long axis. This curling and splitting of the bone occurs after the cremation of green bone or bone with the flesh still attached (Baby 1954:5; Binford 1972:374; Buikstra and Goldstein 1973). Whereas a dry bone cremation is characterized by longitudinal fractures, an absence of warping, and superficial angular cracking, green bone cremations are characterized by deep transverse fractures which are frequently curved, much warped, with occasional presence of endostium (Binford 1972:374). The condition of the skeletal material from Burial 2 fits the criteria for a green bone cremation.

Long bone wall thickness and cranial vault thickness do express bimodal distribution due to sexual dimorphism (Gejvall 1963:474-475). Unfortunately, the warpage and fracturing that accompany a green bone cremation can seriously affect the identification of the skeletal material used for these measurements. The shrinkage of the skeletal material when heated can also seriously affect the validity of thickness measurements. Bearing these factors in mind, a wall thickness of 5.00 mm was recorded for the femur of Burial 2 while the humerus was 3.5 mm thick. Using Gejvall's (1963:474) criteria these measurements identify Burial 2 as a female. Sex determinations arrived at by this method are very tenuous and should be approached with caution. Gejvall also maintains that cranial wall vault thickness is sexually dimorphic and the cranial fragments from Burial 2 with a maximum thickness of 3.5 mm fall within the female mode as determined by Gejvall (1963:474-475). The extreme thinness of the cranial material from Burial 2 could also possibly be the result of some type of pathological condition. The

sex and age of human skeletal material can also be determined using the dentition (Baillit and Hunt 1964; Gran, Lewis and Kerewsky 1967; Gran, Lewis, Swindler, and Kerewsky 1967; Ditch and Rose 1972; Black 1978; Garn, Cole, and van Alstine 1979). Unfortunately, the incineration of Burial 2 fragmented the dentition along root and cusp lines making measurements impossible.

Some observations concerning the articulation and orientation of Burial 2 are possible. First, the burial appears to have been articulated at the time of cremation. The color and texture of both femur heads, one humerus head, and both mandibular condyles indicates that these bone sections remained unburnt while the shafts of the femora and humerii were completely calcined which suggests that these joints were still being protected by musculature at the time of cremation. Second, all of the cranial fragments of Burial 2 are well calcined except for fragments of the right temporal and right maxilla. This suggests that the right side of the cranium was positioned away from the fire during incineration (Buikstra and Goldstein 1974:21). The absence of left temporal fragments suggests that the left side of Burial 2 was much closer to the fire and also indicates that the individual may have been laying on its left side at the time of cremation. Further supporting evidence for this was the recovery of the right side of the sacral promontory and right superior and inferior articular surface of the first cervical vertebrae.

Heavy firing along the walls of the basin and the recovery of large quantities of charcoal indicate that Burial 2 was cremated

in place. The recovery of two diagnostic Ledbetter cluster points (Types 99 and 103) from the basin indicated that this was a Late Archaic cremation. This was further corroborated by the radiocarbon date of B.P. 3755 ± 75 years (1805 B.C.) obtained on charcoal from Feature 41.

Burial 3 (Feature 56/Posthole 55)

Burial 3 was a very small concentration of well-calcined skeletal material which had been redeposited in Posthole 55. The remains recovered gave little indication of sex or age but Burial 3 appeared to be a mature individual of indeterminate sex. No diagnostic material was recovered in association with this individual but as Excavation Area 2 appears to have been utilized solely during the McFarland phase this is most likely a McFarland phase cremation. Redeposited cremations are associated with the McFarland phase occupations at the Banks III site (Faulkner and McCollough 1974:300-313), and the Ewell III site (DuVall 1977:115). The redeposition of human skeletal material in a posthole has not been reported on any other site in the Normandy Reservoir zone.

Burial 4 (Feature 34)

This burial was placed in a flexed position on its right side in an oval pit in Excavation Area 2. The remains were oriented north-south with the head to the north. The burial was in an extremely fragmentary state and was initially identified in the field as a "bear burial." The skeletal material was returned to The University of Tennessee, Knoxville,

where Dr. Paul W. Parmalee identified it as human but a portion of the material was later misplaced and was not available for study. The remaining skeletal material consisted of the midshaft of the left clavicle, one pisiform fragment, one rib fragment, two fragments from the midshaft of a fibula, one left proximal fibula articular surface, one tarsal navicula, and several indeterminate phalange fragments. The complete fusion and obliteration of the line of fusion of the distal fibula indicates that the individual is an adult; no further determination of the age of Burial 4 can be made given the condition of the skeletal material. The determination of the sex of this individual is also difficult but the gracility of the skeletal material suggests that Burial 4 is probably a female. This assessment is based on the gracility of the fibula and clavicular fragments and should be regarded as tentative. The recovery of limestone-tempered ceramics in the burial fill suggest that Burial 4 is associated with the McFarland phase occupation of 40CF69.

Summary of Burial Patterns

Ledbetter Phase

Very little is known concerning Late Archaic burial patterns in the Normandy Reservoir with the crematory basin (Feature 41/Burial 2) at 40CF69 being the earliest evidence of mortuary activity yet found in the reservoir area. One other possible example of the cremation of human remains during the Archaic period in the Normandy Reservoir was a cluster of three redeposited cremations at the Banks III site which

was tentatively assigned to the Terminal Archaic occupation at that site (Faulkner and McCollough 1974:312-313).

The cremation of human remains comprises a distinctly minor form of burial treatment during the Late Archaic period in Tennessee. At the Eva site during the Late Archaic (Eva III) occupation the burial pattern consisted almost entirely of fully articulated primary inhumations with only three scattered cremations being found in the plowzone. The lack of burnt soil in association with the cremations indicated that the actual cremation had taken place elsewhere and, similar to the Ledbetter cremation at 40CF69, all of the burials were determined to have been adult inflesh individuals at the time of cremation. The cremation of human remains was a Late Archaic development at the Eva site with no cremations being associated with the Middle Archaic occupation at that site (Magennis 1977:70). A similar mortuary pattern was recorded for the Late Archaic occupation at the Cherry site in the western Tennessee Valley where almost all of the Late Archaic interments consisted of fully articulated primary inhumations with a single cremation being found in the plowzone. This cremation was determined to have been an adult individual who had been cremated elsewhere and redeposited at the site (Magennis 1977:78).

Two facts relevant to the Late Archaic Ledbetter phase mortuary patterns in the Normandy Reservoir area are suggested by the burial data from the Eva and Cherry sites, these being (1) that the cremation of adult inflesh individuals is associated with Late Archaic mortuary patterns elsewhere in Tennessee, and (2) that the cremation of human

remains comprises only a minor part of the total mortuary pattern at other Late Archaic sites in Tennessee with the predominant burial type consisting of fully articulated primary interments. This suggests that the cremation at 40CF69 might not be representative of Ledbetter phase mortuary patterns in the Normandy Reservoir but may instead, as elsewhere in Tennessee, comprise only a minor aspect of the total mortuary pattern. Also, the fact that the cremations from 40CF69 and the Eva and Cherry sites were all of adult inflesh individuals suggests that during the Late Archaic period in Tennessee the use of cremation as a burial treatment may have been reserved for a small segment of the adult population.

McFarland Phase

The presence of a flexed burial in an oval pit (Feature 34/Burial 4) at 40CF69 is suggestive of late Early Woodland-early Middle Woodland mortuary patterns found elsewhere in Tennessee and northern Alabama. Flexed burials were associated with late Early Woodland occupations at the Westmoreland-Barber and Lay sites in Tennessee (Faulkner and Graham 1966:33-40; 77), the Colbert phase in northeastern Alabama (Futato 1977), and the Early Woodland period in the Coosa River Valley of Alabama (DeJarnette, Kurjack, and Keel 1973:186). In the Normandy Reservoir, flexed burials are associated with both the late Early Woodland Long Branch phase (Faulkner and McCollough, eds. n.d.:402) and the early Middle Woodland McFarland phase with a flexed burial being found in a McFarland phase context at the 40FR47 site (Bacon and Merryman 1973:34)

while several flexed burials at the Banks I site were tentatively assigned to the Middle Woodland occupation at that site (Faulkner and McCollough 1974:300-313). Flexed burials were also associated with the Long Branch phase at the Jernigan II site (Faulkner and McCollough, eds. n.d.). The flexed burial at 40CF69 (Burial 4) is believed to be associated with the McFarland phase occupation at the site based on the recovery of three limestone-tempered residual sherds in the burial pit fill.

The single cremation (Burial 3/Feature 56/Posthole 55) at 40CF69 was found redeposited in what was interpreted in the field as a posthole but it appears more plausible, given the general shallow depth of all features in Excavation Area 2, that this posthole was in reality the basal remnant of a shallow plowed out feature. Cremation becomes the preferred type of burial treatment later in the McFarland phase (DuVall 1977:214; Faulkner and McCollough n.d.:403) with cremations of subadults being associated with McFarland phase occupations at the Ewell III and Parks sites (DuVall 1977:214). The early radiocarbon date of B.P. 2165 $\pm$ 110 years (215 B.C.) from Feature 37, however, together with the high percentage of fabric marked sherds in the ceramic assemblage at 40CF69 suggest that the cremation (Burial 4) is associated with an early McFarland phase occupation. As at other Woodland period sites in the Normandy Reservoir area there was no evidence of a crematory facility associated with the Woodland occupation at 40CF69. This absence of crematory facilities on Woodland period sites in the reservoir area has led to the hypothesis that during the McFarland phase the primary method

of cremation was surface fires, all evidence of which have now been destroyed by plowing and erosion (DuVall 1977:116; Tracy Brown, personal communication). While this may be the case at 40CF69, it is equally possible that the heavy alteration of sections of the site area which occurred during the historic occupation of the site could have resulted in the destruction of any crematory facility associated with the McFarland occupation of the site. No culturally diagnostic artifacts were found in association with the cremation (Burial 3) but its inclusion in what is judged to be a "pure" McFarland habitation locus (Excavation Area 2) indicates that it is associated with the early McFarland phase occupation at 40CF69.

CHAPTER IX

SITE 40CF69A

Methodology and Conduct of Investigation

40CF69A was a separate site located on a small rise at a distance of between 300 to 500 feet north of the main excavation area (Figure 2, page 21). Earth-moving equipment was used to remove the plowzone in this area down to sterile subsoil. All 40CF69A features were completely excavated prior to the start of excavations at the main site (40CF69).

Earth-moving operations at 40CF69A began on June 13, 1975, with the removal of the plowzone by the self-loading pan. Three parallel cuts were made in an east-west direction along the total extent of the rise. Heavy plow scars were present in the clay hardpan of all three trenches; there was no evidence of an intact midden at 40CF69A. Only two prehistoric features were initially observed and recorded but the possible presence of an Early Archaic component at 40CF69A was indicated by the recovery of several Type 134 (cf. *Big Sandy*) projectile points/knives during the stripping operations. Two final east-west cuts were made by the pan on June 16 with eight additional features being recorded for a total of ten features and one posthole.

Excavation of the 40CF69A features began on June 17, 1975. The 40CF69 centerline was extended north to 40CF69A and nine stakes were placed at various grid points to allow the triangulation of features and postholes. The feature excavation procedure at 40CF69A was the same as that used at 40CF69.

Features and Postholes

There was little evidence of any intentional clustering of features such as would have indicated possible activity areas with only two features (F7 and F8) being in close proximity to one another. Descriptions of feature morphology in this section are based on the classification developed by Davis (1976:35-39) and previously described in this thesis.

Feature 1 was a poorly defined deep oval basin (Type Ic) located 6.10 feet north of Stake 460L100. A maximum depth of 1.78 feet was recorded for this feature but several inches of the upper section of the feature had been removed by the pan. Feature 1 measured 3.50 feet north-south by 3.45 feet east-west. The fill was light brown throughout with the exception of a thin layer of reddish-orange soil at the base of the feature. Artifactual material from this feature consisted of primary lithic debitage and the unidentifiable distal end of a projectile point/knife (Type 138). This feature was identified in the field as an Archaic storage pit based on its physical morphology but this cannot be substantiated by the associated artifacts.

Feature 2 was the basin-shaped remnant of an earth oven (Type IIIa) located 14.57 feet northwest of stake 550L120. Dimensions were 2.50 feet north-south by 2.52 feet east-west by 0.38 foot deep. The fill was dark brown to black in color with evidence of in situ firing at the base of the feature. A total of 3.405 grams of burned limestone was contained in the fill along with a small quantity of primary lithic material. The cultural affiliation of this feature is uncertain although it was interpreted as a Woodland earth oven in the field.

Feature 3 was a shallow oval basin (Type Ia) located 15.25 feet west of stake 520L120. Measurements were 2.65 feet north-south by 2.95 feet east-west with a maximum interior depth of 0.92 foot. The fill was light to dark brown and contained a small amount of burned clay together with 1.5 grams of charred nut and wood remains. Lithic artifacts from this feature included flat flakes and primary decortication material (n = 249), two distal ends of unidentifiable projectile points/knives (Type 138), and the proximal end of an asymmetrical biface (Type 25). The cultural association of this feature is unknown.

Feature 4 was a flat-bottomed feature which appeared to be the base of a shallow circular pit (Type IIb). This feature was only 0.15 foot deep and measured 1.99 feet east-west by 1.83 feet north-south. The fill was light to medium brown throughout. The recovery of a projectile point/knife which had been reworked into an end scraper (Type 139/101) indicated a Late Archaic association for this feature as Type 101 projectile points/knives (medium straight stemmed, narrow blade, strong shouldered) were recovered from a Late Archaic context at the Eoff I site (Faulkner and McCollough, eds. 1977:33). The function of this truncated feature is unknown although it may represent the base of a storage pit.

Feature 5 was similar in shape to both Features 1 and 3. Located 8.10 feet southeast of stake 500L100, this feature measured 2.52 feet north south by 2.37 feet east-west by 1.00 foot deep. The fill was a homogenous dark brown throughout. Cultural material consisted of primary lithic material and the distal end of an unidentifiable

projectile point/knife. The cultural affiliation of this feature is unknown.

Feature 6 was a stratified basin (Type Ia), 0.65 foot in depth in which a 0.3-0.4 foot layer of dark brown to black fill with high charcoal content was overlain by a reddish-brown soil layer with a clay-like consistency. Although the basal layer of charcoal suggests a possible hearth function for this feature there was no evidence of in situ firing. The top of the feature measured 2.75 feet east-west by 2.45 feet north-south and it was located 5.35 feet northwest of stake 570L120. Artifactual material consisted of primary lithic debitage, a perforator (Type 17), side scraper (Type 32), and a projectile point/knife fragment (Type 138). Although the hideworking activity index value is rather low (2.86), the presence of the perforator and side scraper suggest that some hideworking activities were carried out in the area of Feature 6. The cultural affiliation of Feature 6 is unknown.

Feature 7 was a shallow circular basin (Type Ib) located 21.30 feet east-west of stake 550L120. This feature was quite shallow (0.22 foot deep) and measured 1.80 feet north-south by 1.85 feet east-west. The fill was light brown with some leaching along the base of the feature. Cultural material from this feature consisted entirely of primary lithic debitage. Cultural association is unknown.

Feature 8 was a shallow circular basin (Type Ib) located one foot west of Feature 7; these are the only two features at 40CF69A located in close proximity to each other. There was slight evidence of in situ firing at the base of this feature together with a small quantity of

charcoal in the feature fill. Artifactual material consisted entirely of a small amount of primary lithic debitage. The in situ firing at the base of this feature indicates a probable hearth function for Feature 8. The cultural association of this feature is unknown.

Feature 9 was a shallow circular pit (Type IIb) that was heavily damaged by the earth-moving equipment. The fill was medium to dark brown with charcoal flecking throughout. Feature 9 was located 14.59 feet west of stake 500L100 and measured 1.00 foot north-south by 1.05 foot east-west by 0.40 foot deep. No artifacts were recovered in the fill.

Feature 10 was a shallow oval basin (Type Ia) which measured 2.15 feet north-south by 2.45 east-west by 0.46 foot deep. The feature fill was a medium to dark brown with charcoal and calcined bone flecks scattered throughout. A number of chert blocks showing evidence of firing were found in the fill together with burnt limestone fragments. Artifactual material consisted of primary lithic debitage, a siltstone celt/abrader and a trapezoidal pendant made from Chattanooga black shale (Plate VII). Two-hole shale gorgets have been recovered from McFarland phase context on sites 40CF118, 40CF35, and 40CF5 (Penny and McCollough 1976:149). A similar affiliation is suggested for this pendant. The high incidence of primary lithic material from this feature (n = 74) together with the presence of fired chert blocks indicates that primary flint working activities were carried out in the area of Feature 19. This is probably a Woodland period feature.

Posthole 1, located 13.25 feet west of stake 500L120, was the only posthole recorded at 40CF69A. Dimensions were 0.60 foot north-south by 0.70 foot east-west.

Feature Summary

Historic farming activities at 40CF69A heavily damaged the features at this site with only the lower sections of those features which penetrated the clay hardpan surviving. Damage to features also occurred during the stripping operations with the result being that the mean average feature depth at 40CF69A is quite shallow (0.63 foot).

Three distinct morphological feature types could be distinguished at 40CF69A: basins, pits, and earth ovens.

Seven of the 40CF69A features were basins which ranged in depth from 0.22 foot to 1.78 feet. The mean average depth for basins was 0.77 foot with only one feature having a depth greater than 1.00 foot. Diameters ranged from 1.80 × 1.85 feet to 3.50 × 3.45 feet with an average diameter of 2.61 × 2.53 feet. Due to the shallowness of these features and their lack of material content, function could be determined in only a few instances. One basin (Feature 8) was classified as a hearth on the basis of in situ burning; Feature 19 is also classified as a hearth despite the absence of in situ burning due to the presence of burned chert blocks, charcoal, and calcined bone in the feature fill. The presence of the burned chert blocks and primary lithic material also suggests that primary flint working activities were carried out in the immediate vicinity of this basin. A Woodland association was proposed for this basin based on the presence of a

trapezoidal shale pendant in the feature fill. No other basins contained culturally diagnostic material.

Two shallow circular pits (Type IIb) were also found at 40CF69A. Average depth for these features was 0.27 foot. Feature 4 contained a projectile point/knife (Type 101) indicative of a Late Archaic affiliation. The shallowness of these two pits and their lack of material content precludes any interpretation of their function; however, these two features possibly represent the bases of Late Archaic storage pits similar to those found at 40CF69.

A single earth oven (Feature 2) was found at 40CF69A. No diagnostic material was found in this feature. Measurements for this particular feature have already been given in the section on 40CF69A features.

Lithics

A total of 608 lithic artifacts was recovered from both surface and feature context at 40CF69A (Tables 17, 18 and 19). These artifacts were manufactured from eight of the 22 specific raw material types described in Volume I of the Normandy Archaeological Project (Faulkner and McCollough 1973:52-61). Seven of the eight raw material types from 40CF69A have been previously described in this thesis in the chapter on 40CF69 lithics and only that raw material type from 40CF69A not previously described (Type Q: Siltstone) will be discussed in this section.

TABLE 17
Lithic Raw Materials—40CF69A

Type	Description
A	Blue-Gray and Tan Chert
B	Pink Chert
C	Gray Banded Chert
D	Fossiliferous Chert
F	Blue-Green Nodular Chert
I	Vein Quartz
P	Chattanooga Black Shale
Q	Siltstone

TABLE 18

Lithic Assemblage—40CF69A Features

Tool Type	Raw Material								Total	%	
	A	B	C	D	F	I	L	P			R
<u>Feature 1</u>											
3	11	4	14		1		1			31	37.8
4	16	5	18		3					42	51.2
5	2		2		2					6	7.3
6	1		1							2	2.5
138			1							1	1.2
Total	30	9	36		6					82 = n	
%	36.6	11.0	43.9		7.3						
<u>Feature 2</u>											
3			2							2	40.0
4	1		2							3	60.0
Total	1		4							5 = n	
%	20.0		80.0								
<u>Feature 3</u>											
3	17	2	35		32					86	38.8
4	58	4	27							89	40.0
5	27		15							42	18.9
6	2									2	0.9

TABLE 18 (continued)

Tool Type	A	B	C	Raw Material		I	L	P	R	Total	%
25				D	F					1	0.5
138			2							2	0.9
Total	104	6	79	1	32					222 = n	
%	46.8	2.7	35.6	0.5	14.4						
<u>Feature 4</u>											
3			2		1					3	30.0
4	3	2	1							6	60.0
139/101			1							1	10.0
Total	3	2	4		1					10 = n	
%	30.0	20.0	40.0		10.0						
<u>Feature 5</u>											
3	16	4	13		4	4				41	42.3
4	9	3	25							37	38.1
5	8	1	7							16	16.5
6			2							2	2.0
138					1					1	1.0
Total	33	8	47		5	4				97 = n	
%	34.0	8.2	48.5		5.2	4.1					

TABLE 18 (continued)

Tool Type	Raw Material								Total	%	
	A	B	C	D	F	I	L	P			R
<u>Feature 6</u>											
3	6	3	10		4					23	28.4
4	17	9	17		1					44	54.3
5	3	1	4							8	9.9
6			2							2	2.5
17			1							1	1.2
25			1							1	1.2
32	1									1	1.2
138			1							1	1.2
Total	27	13	36		5					81 = n	
%	33.3	16.0	44.4		6.2						
<u>Feature 7</u>											
4	2	1	2							5	100.0
Total	2	1	2							5 = n	
%	40.0	20.0	40.0								
<u>Feature 8</u>											
3	2	1	2		1					6	21.6
4	5	2	3							10	52.6
5	1		2							3	15.8
Total	8	3	7		1					19 = n	
%	42.1	15.8	36.8		5.3						

TABLE 18 (continued)

Tool Type	Raw Material						Total	%
	A	B	C	D	F	I		
3	6	7	17				30	39.5
4	27		8			1	36	47.4
5	5		2				7	9.2
138	1						1	1.3
153							1	1.3
155							1	1.3
Total	39	7	27			1	76 = n	
%	51.3	9.2	35.5			1.3	1.3	1.3

TABLE 19
Total Lithic Assemblage—40CF69A Features

Tool Type	A	B	C	D	F	I	L	P	R	Total	%
3	58	21	95		43	4	1			222	37.2
4	138	26	103		4	1				272	45.6
5	46	2	32		2					82	13.4
6	3		5							8	1.3
17			1							1	0.2
25			1	1						2	0.4
32	1									1	0.2
138	1		4		1					6	1.0
139/101			1							1	0.2
153									1	1	0.2
155								1		1	0.2
Total	247	49	242	1	50	5	1	1	1	597 = n	
%	41.3	8.2	40.4	0.2	8.4	0.8	0.2	0.2	0.2		

Local Raw Materials

Type A: Blue Gray and Tan Chert (n = 258);
Type B: Pink Chert (n = 41); Type C: Gray
Banded Chert (n = 254); Type D: Fossilif-
erous Chert (n = 1); Type P: Chattanooga
Black Shale (n = 1); and Type Q: Silt-
stone (n = 1)

A greenish-gray shale or mudstone (Maury shale) occurs at the base of the Ft. Payne formation and a massive gray, laminated calcareous mudstone or siltstone is also found at the base of the Leipers and Catheys formation (Faulkner and McCollough 1973:55). Mudstone-siltstone raw materials could have been secured from Ordovician and Mississippian deposits through the entire length of the reservoir zone (Penny and McCollough 1976:148).

Near Exotic Raw Materials

Type F: Blue-Green Nodular Chert (n = 47)
and Type I: Vein Quartz (n = 5)

Near-exotic raw materials constituted 8.5 percent (n = 52) of the total raw material count at 40CF69A. All near-exotic lithic material at 40CF69A occurred in the form of primary lithic debitage (lithic types 3 and 4) with 61.5 percent (n = 52) of the material coming from a single feature. The two near-exotic raw materials from 40CF69A (blue-green nodular chert and vein quartz) have a similar origin in the Hillsboro locality near the western escarpment of the Cumberland Plateau.

Primary Lithic Material

All the primary lithic material and manufactured implements from 40CF69A were classified in accordance with the Normandy Archaeological Project comprehensive lithic typology (Faulkner and McCollough 1973: 72-327). Lithic types present at 40CF69 and previously described in this thesis are not further discussed in this section. Specific provenience of all artifacts described in this section can be found in Table 18.

Type 1: Hammerstone (n = 1)

A single example of this artifact types was found during the removal of the plowzone at 40CF69A. These are spherical, subspherical, or polyhedral artifacts that exhibit wear attributable to battering.

Raw Material: Blue-gray and tan chert—1

Type 2a: Crude Subconical Core (n = 2)

This primary lithic type is described on page 86. Both examples of this artifact type were found during the stripping operations.

Raw Material: Blue-gray and tan chert—2

Type 2d: Amorphous Core (n = 2)

This primary lithic type is described on page 86. Both specimens of this type were found during the removal of the plowzone.

Raw Material: Blue-gray and tan chert—2

Type 3: Core Trimming Flake (n = 208)

This primary lithic type is described on page 86.

Raw Material: Blue-gray and tan chert—53; Pink
chert—18; Gray banded chert—90;
Blue-green nodular chert—43;
Vein quartz—4

Type 4: Flat Flake (n = 80)

This primary lithic type is described on page 87.

Raw Material: Blue-gray and tan chert—45; Pink
chert—2; Gray banded chert—32;
Blue-green nodular chert—1

Type 6: Utilized Flake (n = 7)

This primary lithic type is described on page 88.

Raw Material: Blue-gray and tan chert—2;
Gray banded chert—5

Unifacial Implements

Type 10: Side Scraper on Flake (n = 1)

This implement type is described on page 89. The single example of this artifact type was found during the removal of the plowzone.

Raw Material: Blue-gray and tan chert—1

Type 17: Perforator (n = 1)

One specimen of this type was recovered from Feature 6. This category consists of flakes having a short, often asymmetrical pointed

projection formed by lines of unidirectional marginal retouch on both sides of the projection, converging to the point.

Raw Material: Gray banded chert—1

Bifacial Implements

Type 24: Miscellaneous Thick Biface: Amorphous Form (n = 2)

This implement type is described on page 90. Both artifacts of this type were found during the removal of the plowzone.

Raw Material: Blue-gray and tan chert—1

Type 25: Thick Biface: Blank, Roughout (n = 10)

This implement type is described on page 90. Two examples of this artifact type were found in features of indeterminate cultural association. Faulkner found this artifact type associated with the Woodland occupation at the Eoff I site (Faulkner and McCollough, eds. 1977:111).

Raw Material: Blue-gray and tan chert—8;

Gray banded chert—1; Fossiliferous
chert—1

Type 27: Preform: Knife (n = 4)

This implement type is described on page 92. All examples of this artifact type were found during the stripping operations.

Raw Material: Blue-gray and tan chert—4

Type 31: Chisel (n = 2)

These artifacts are thick elongate bifaces with a utilized straight to convex working edge at one end of the long axis, formed by bifacial removals. These implements are rarely completely bifacially worked, but exhibit facial symmetry near the working edge. Attrition from wear on this working edge and adjacent silica flake facets are common, and a few artifacts of this type show extreme wear and "opal sheen" or "silica gloss" on the face of the implement (Faulkner and McCollough 1973:85). Faulkner (Faulkner and McCollough, eds. 1977:114-115) believes these are Woodland tools; their presence at 40CF69A suggests woodworking activities were performed at this site during the Woodland period. Both specimens were found during the stripping operations.

Raw Material: Blue-gray and tan chert—2

Type 32: Side Scraper (n = 3)

This type consists of bifaces having one or more convex, straight, or long shallow concave working edges which are formed by a continuous line of relatively steep retouch departing one face with the lines of these edges being parallel to the long axis of the piece. A major criteria for side scraper attribution is facial asymmetry at the working edge. One example of this type was recovered from Feature 6.

Raw Material: Blue-gray and tan chert—3

Type 138: Unidentifiable Broken Distal Ends (n = 14)

This implement type is described on page 112. Seven examples of this type were recovered from a feature context at 40CF69A.

Raw Material: Blue-gray and tan chert—8;
Gray banded chert—1; Blue-green
nodular chert—1

Type 139/101: End Scraper, Reworked on
Projectile Point/Knife

See Type 30 description (page 92). Type 101 projectile points/knives (medium straight stemmed, narrow blade, strong shouldered) were associated with the Late Archaic occupation at the Hicks I site (40CF62) (Faulkner and McCollough, eds. 1977:33). The single specimen of this type was recovered from Feature 4 and measures 40 mm long, 29 mm wide at the shoulders, and has a maximum thickness of 9.5 mm. This artifact is crudely made and exhibits fine spalling on both faces. The distal end of the piece has been reworked into a blunt blade edge making the artifact a hafted scraper.

Raw Material: Gray banded chert—1

Ground Stone Implements

Type 153: Celt (n = 1)

A siltstone celt with a rounded poll was recovered from Feature 10. This specimen has a maximum length of 99 mm, a maximum width of 60 mm, and a maximum thickness of 27.5 mm. This artifact was heavily used as an abrader. A large, shallow depression (Plate VII) has been ground into the surface of one face. On the reverse face of the artifact (not shown) are a series of shallow grooves running parallel to the long axis of the celt. The grooves are 1-2 mm in depth, 49 mm in length,

and 5 mm wide. The shallowness of these grooves suggests that objects such as bones were being sharpened for awls or needles. A very deep groove (40 mm long, 29 mm wide, 9.5 mm deep) is located just above the poll running horizontal to the long axis of the celt. There are no abrading scars connected with this groove which suggests that some relatively large object, possibly of wood, was being sharpened.

Type 155: Worked Black Shale (n = 1)

A trapezoidal single-hole pendant (Plate VII) made from Chattanooga black shale was recovered from Feature 10. This is probably a Woodland artifact. Two-hole rectangular gorgets made from Chattanooga black shale are associated with McFarland phase occupations at 40CF118, 40CF35, and 40CF5. Trapezoidal pendants are also associated with the late Middle Woodland Newtown phase of the central Ohio Valley and the late Middle Woodland Kipp Island and Hunter's Home phases in New York (Ritchie 1969:250-258). The pendant from 40CF69A is 90 mm in length, 43 mm wide at the bottom, and 5 mm thick. This is possibly a McFarland phase artifact but this cannot be substantiated.

Summary of Lithics

The lithic indices for 40CF69A are presented in Table 20. There is a good probability that these indices are biased as the majority of features at 40CF69A had been affected by plowing and were quite shallow and contained little material. Lithic material recovered from these features is most likely unrepresentative of the original artifact content of these features. Bearing this in mind, the 40CF69A lithic indices

TABLE 20
Total Lithic Indices—40CF69A

<u>Stage of Manufacture</u> (N = 608)					
$\frac{PL}{583}$	$\frac{FI}{25}$	$\frac{UI}{2}$	$\frac{BI}{36}$	$\frac{PPK}{19}$	$\frac{GS}{2}$
					(n =)
<u>Activities</u>					
$\frac{HI}{0}$	$\frac{BII}{4}$	$\frac{WWI}{0}$	$\frac{HWI}{583}$		
0.0	0.65	0.0	95.8		(n =)
<u>Function</u>					
$\frac{PI}{19}$	$\frac{CI}{7}$	$\frac{SI}{5}$	$\frac{PERI}{1}$		
3.31	1.15	0.82	0.16		(n =)
$\frac{DI}{0}$	$\frac{SSI}{0}$	$\frac{HPI}{1}$	$\frac{GSI}{2}$		
0.0	0.0	0.16	0.3		(n =)

indicate that considerable primary flint working of local materials occurred at 40CF69A. Also, relatively high values for cutting, hunting, and piercing indices suggest that butchering activities may have been carried out at this site. Corresponding low or nonexistent values for drilling, woodworking, and sawing/shredding activities could be indicative of the site's status as a transient hunting-butchering station. The blocks of raw chert and primary lithic debitage from Feature 10 indicate that at least some primary flint working activities took place at 40CF69A during the Woodland period.

Botanical Materials

Botanical materials was recovered from only three features. Feature 4, the Late Archaic period feature, contained charred nut and wood remains which were destroyed with the flotation material before they could be further identified. Charred nut remains removed from Feature 10 during the in situ excavation of the feature were identified as hickory nut (*Carya sp.*) while similarly removed material from Feature 6 was identified as burnt hickory wood (*Carya sp.*). The presence of hickory nuts in Feature 10 indicates that at least part of the Woodland occupation at 40CF69A occurred during the fall as hickory nuts ripen and can be collected during the months of September and October (Petrides 1972). The presence of the unidentified nut remains in Feature 4 similarly suggests a fall occupation during the Late Archaic period but this cannot be substantiated due to the destruction of this particular sample.

Conclusions

The excavation data from 40CF69A indicates that only minimal utilization of this area by aboriginal groups occurred over a period of several thousand years. There is no evidence that an intensive occupation of the site took place at any time in prehistory; rather, it appears that 40CF69A was occupied by small groups, possibly nuclear families, for periods of short duration. That the prehistoric occupations at 40CF69A were short-term is suggested by the small number of features, the absence of large storage facilities, and the nonexistence of any type of formal community patterning. The general scarcity of any cultural material except for primary lithics, projectile points/knives, and hideworking implements, suggests that prehistoric occupations at 40CF69A may have been oriented toward the exploitation of readily available local food resources, primarily faunal resources. No faunal material was recovered from the 40CF69A features but this is possibly the result of biased collections from these plow impacted features; poor preservation of faunal material due to the acidity of the terrace soil could also be a factor. A simultaneous occupation of this area and 40CF69 is doubtful; as both sites possess a roughly similar potential for the exploitation of the local environment, no advantage in terms of access to natural resources would be gained by a simultaneous occupation of both areas. In conclusion, then, 40CF69A is interpreted as representing a short-term hunting-butcherer station that was utilized intermittently by small groups from the Archaic through the Woodland periods.

CHAPTER X

SUMMARY

There were two primary objectives of this thesis, these being (1) to analyze and provide a description of all prehistoric occupations at the Aaron Shelton site with an emphasis being placed on the Middle Woodland McFarland phase component, and (2) to interpret the relationship of the McFarland phase settlement pattern at 40CF69 to Middle Woodland settlement and subsistence patterns in the Normandy Reservoir as a whole. In addition, as part of the second objective, two alternative hypotheses concerning McFarland phase settlement patterns in the lower reservoir zone were advanced to be tested with these being (1) that the small, nonintensive McFarland occupations found at some of the lower reservoir sites such as 40CF69 represent an early type of McFarland phase settlement pattern for the entire Normandy Reservoir area, or (2) that these small McFarland phase sites represent short-term, specialized activity camps which were contemporary with the later, more intensive McFarland phase occupation of the upper reservoir zone.

Fifty-five features and sixty postholes were excavated during the 1975 spring and summer field season at 40CF69, with a total of 8,493 artifacts being recovered. In addition, ten features and a single posthole were excavated at 40CF69A which was a separate habitation locus situated approximately 300 to 500 feet north of the main site with a total of 608 lithic artifacts being recovered from this area.

Analysis of the 40CF69 excavation data indicated that the most intensive utilization of the site occurred during the Late Archaic Ledbetter and early Middle Woodland McFarland phases with less intensive Terminal Archaic Wade and Late Woodland Mason phase occupations also being present. A description and interpretation of each of the prehistoric occupations found at the Aaron Shelton site is presented in the following section.

Early Site Utilization

Initial surface collections from 40CF69 suggested that a significant Early Archaic component might exist at the site with 55 bifacial implements including a *Big Sandy* projectile point/knife being collected in a 1971 survey of the site. In addition, the landowner's personal collection of artifacts from the site (Table 1, page 22) included examples of the *Beaver Lake*, *Big Sandy*, *Decatur*, and *Kirk Corner Notched* projectile point/knife types (Faulkner and McCollough 1973:346). Based on this surface material, it was suggested that the Aaron Shelton site represented an Early and Terminal/Late Archaic hunting and butchering station. Later surface collections on the site produced additional Early Archaic artifacts together with 42 Middle Archaic White Springs-Sykes cluster projectile points/knives.

Both the 1975 testing phase and intensive summer excavation phase, however, failed to locate any Early or Middle Archaic features at either 40CF69 or 40CF69A. One Kirk cluster projectile point was collected from a Late Archaic storage pit in association with Ledbetter

cluster projectile points/knives but was apparently redeposited within this feature. The absence of Early and Middle Archaic features at 40CF69 in light of the large amount of surface collected projectile points from this period ($n = 91$) strongly suggests that aboriginal occupations at 40CF69 during the Early to Middle Archaic period were short-term, nonsedentary, and oriented toward the exploitation of faunal resources available in the immediate vicinity of the site. The relatively high number of projectile points/knives is not interpreted as indicating that a sizable aboriginal population was present at the site at any one time during the Early to Middle Archaic periods but rather that the site was being seasonally reoccupied by small, short-term, specialized male activity groups (e.g. male hunting parties).

Ledbetter Phase

The Late Archaic Ledbetter community patterns at 40CF69 indicate that in contrast to the preceding Early and Middle Archaic occupations at the Aaron Shelton site which consisted of short-term, seasonal visits by male hunting parties, 40CF69 was occupied during the Ledbetter phase by nuclear and possibly extended family groups with both males and females being present. The evidence for nuclear families being present at 40CF69 during the Ledbetter phase is based on the occurrence of discrete feature clusters at the site from which both male and female associated lithic artifacts were recovered. Four such feature clusters assignable to the Ledbetter phase occupation at 40CF69 were found with three of these clusters being located along the terrace edge in

Excavation Area 4 while the fourth cluster was located in Excavation Area 1 (Figure 3, page 26). That additional feature clusters were once present at 40CF69 is suggested by the occurrence of isolated Ledbetter phase features (F2 and F19) along the terrace edge in Excavation Area 4. The heavy alteration of the terrace edge at 40CF69 by modern road-building activities makes it entirely possible that these isolated features are remnants of former clusters that have been destroyed. Three of these clusters contain at least one or more of the large, deep, flat-bottomed pits which have been defined as storage facilities or "silos" on other sites in the Normandy Reservoir (Faulkner and McCollough 1974:316-324; Faulkner and McCollough eds. 1977:267-269; Cobb 1978:198). These pits have been interpreted as storage facilities in which arboreal seed crops collected in the uplands in the fall were stored. After the removal of the stored food resources over the winter and early spring seasons the silos were then filled with domestic debris including lithic artifacts indicative of both male and female associated activities. Artifacts believed to be associated with female activities (lithic types 8, 10, 25, 26, 27, 30) were recovered from storage silos and associated features in all four Ledbetter phase feature clusters. Male activities at 40CF69 during the Ledbetter phase consisted primarily of lithic core reduction (lithic types 3, 4, and 5) and hunting and butchering activities. That some woodworking activities were carried out at the site by males is indicated by the recovery of a drill fragment (lithic type 36) and a chisel (lithic type 31) from Ledbetter phase features. A shale digging implement recovered from Feature 44 is

possible a female associated tool that was used to excavate that particular storage silo but other suggested uses for this implement type include woodworking and horticultural activities (Penny and McCollough 1976:150). Faulkner and McCollough (n.d.), in discussing the Late-Terminal Archaic period at the Jernigan II site, note that three conclusions can be drawn concerning these large storage silos. First, the site was occupied during the fall at which time the pits were filled with arboreal seed crops. Second, the site was occupied when the silos were emptied which could have been any time from winter to early spring when the stored foods would have been of premium value for survival. And third, the presence of both male and female associated lithic implements in these features indicate that family units rather than specialized activity groups were present at the site. Although these conclusions were drawn concerning the storage silos at the Jernigan II site, they are equally valid for the Ledbetter phase occupation at 40CF69. The presence of isolated discrete feature clusters at 40CF69 suggests that the Ledbetter phase occupation at this site may have consisted of an extended family group with each of the feature clusters representing the habitation locus of an individual nuclear family. On the other hand, it is also entirely possible that the Ledbetter feature clusters indicate that the site was being seasonally reoccupied by a single nuclear family over an extended period of time with each of the individual feature clusters representing the total extent of the Ledbetter phase occupation at 40CF69 for a particular year.

Other function-specific features within the feature clusters included Type B and Type C hearths as defined by Faulkner and McCollough (1974:189). These hearth types are defined on the basis of feature morphology and fill with a Type B hearth being "a small round pit filled with dark earth and charcoal" while a Type C hearth is defined as a "deeper oval to round basin with dark earth and charcoal flecks" which contains no burnt limestone nor shows any evidence of intensive firing (Faulkner and McCollough 1974:189). A Type B hearth (Feature 18) was located in the Excavation Area 4 cluster as were two Type C hearths (Features 15 and 20). A single Type C hearth was present in both the Excavation Area 4 East cluster (Feature 53) and the Excavation Area 1 cluster. Due to the destruction of the 40CF69 flotation material the only botanical material recovered from any of the hearths consisted of hickory nut fragments removed during the excavation of Feature 20.

There were six shallow basins in the feature clusters (F5, F14, F28, F43, F51, and F52) for which a function could not be determined. Two of these basins (Features 43 and 52) were only partially excavated and a lack of excavation data hinders an assessment of their specific function. The remaining three basins (Features 5, 14 and 51) possibly represent processing basins associated with food preparation activities carried out in the immediate vicinity of the feature clusters.

Only the Excavation Area 4 feature cluster lacked a recognizable storage facility. Two possible explanations for this lack of a storage silo are (1) that the heavy alteration of the terrace edge in this area due to road-building activities resulted in the destruction or

burial of these features or (2) that this particular feature cluster represents a specialized activity area with the hearths and basins of this cluster being functionally associated with the Ledbetter phase crematory facility (Feature 41). The former hypothesis is supported as lithic implements recovered from the Excavation Area 4 cluster hearths and processing basins were indicative of both male and female subsistence activities which suggest that these features are not functionally associated with the crematory basin.

The crematory basin itself is the oldest mortuary facility yet found in the Normandy Reservoir area. Analysis of the skeletal material from the crematory basin indicated that at least one adult individual had been inflesh at the time of cremation. No other cremated skeletal material was found at 40CF69 with the exception of Burial 3 in the McFarland habitation locus (Excavation Area 2) which suggests that the crematory basin may have been used only one time for the cremation of Burial 2. Radiocarbon dates from the crematory basin place the Ledbetter phase occupation of 40CF69 at B.P. 3755 ± 75 years (1805 B.C.).

Faulkner and McCollough (n.d.) suggest that the Late Archaic Ledbetter phase settlement patterns in the Normandy Reservoir area may conform to the "mobile dispersed" settlement system type of Prescott (1978:366) in which a series of seasonal base camps are established by extended family groups as they move seasonally within a restricted territory to exploit areas of maximum food resource potential. This model differs from the dispersed settlement model of Butler (1977:212) in that there are no main base camps at which the population congregates

seasonally for purposes of social intensification. While the Ledbetter phase occupation at 40CF69 might represent an exploitative camp in a mobile dispersed settlement system, the presence of the crematory basin (Feature 41) suggests that the Ledbetter phase occupation at 40CF69 could be more intensive than is indicated by Prescott's model. In relation to the Ledbetter phase settlement patterns in the Normandy Reservoir area as a whole, the Ledbetter phase occupation at 40CF69 is most similar to that found at the Ewell III site where isolated Ledbetter feature clusters suggestive of an occupation by nuclear family groups are also found (Faulkner and McCollough, eds. n.d.).

In summary, the Ledbetter phase occupation at 40CF69 can be defined as a seasonal exploitative camp at which both males and females were present. The lithic indices indicate that lithic core reduction, hunting, and butchering were the most important domestic activities. Analysis of the lithic raw material types recovered from the Ledbetter phase features indicated that while intensive exploitation of gray-banded lithic raw materials did occur, a slightly higher percentage of blue-gray and tan chert was being utilized during the Ledbetter occupation at 40CF69. The presence of several large storage silos suggests that the major occupation at 40CF69 during the Ledbetter phase took place during the fall and winter seasons with arboreal seed crops being exploited as a major food resource. The Ledbetter residence pattern at 40CF69 consisted of isolated feature clusters comprised of hearths, storage silos, and processing basins with each feature cluster suggested to represent the habitation locus of an individual nuclear

family. The major Ledbetter habitation locus at 40CF69 was the terrace edge but a feature cluster (F27, F28, and F29) and an isolated Ledbetter feature (F24) were also found in the multicomponent Excavation Area 1. The fact that the terrace edge feature clusters are distinctly separated from one another rather than concentrated in one area suggests that the Aaron Shelton site may have been occupied by an extended family group during the Ledbetter phase with each component nuclear family occupying a separate habitation locus.

Wade Phase

Evidence of a minimal Wade phase occupation was found at 40CF69 with only two Wade phase features being located in Excavation Area 1. A third feature (F23) containing both a Wade projectile point/knife (lithic type 80) and a fabric-marked sherd is also believed to be primarily associated with the Wade phase occupation at 40CF69.

Feature 17 was a large flat-bottomed storage silo similar to those associated with the Ledbetter phase occupation at 40CF69. The botanical material recovered from this feature (hickory and walnut fragments) suggests that the feature served as a winter storehouse for arboreal seed crops gathered in the fall. Activities suggested by the artifact content of this pit are both male and female oriented with the latter being indicated by the presence of end scraper and side scraper flake tools (lithic types 8 and 10). Male related activities were represented by lithic core reduction material (lithic types 3, 4, and 5) and projectile points/knives (lithic types 80 and 96). A large oval basin

(Feature 22) immediately adjacent to the storage silo contained female activity indicators in the form of two side scraper flake tools (lithic type 10). Male activities were again indicated by lithic core reduction material and a single projectile point/knife (lithic type 96). The function of Feature 22 is uncertain but it possibly represents a processing facility associated with Wade subsistence activities carried out in the vicinity of the storage silo (Feature 17).

A cluster of eight postholes surrounded the two features to the north and west. These posts possibly represent a windbreak or cabana structure similar to that associated with the Late Archaic Ledbetter occupation at the Banks I site (Faulkner and McCollough 1974:201-204) but the irregular spacing and size of the postholes also suggests that the posts might have been connected with functional activities directly associated with the two features. The fact that all of these posts were located to one side of the features, however, strongly suggests that a windbreak structure was indeed present.

Faulkner and McCollough (n.d.) suggest that a mobile dispersed settlement pattern consisting of a series of seasonal base camps was characteristic for the early Wade phase with a shift toward increasing sedentism occurring by late Wade times (approximately 900-800 B.C.). Evidence of an increasingly sedentary settlement pattern is manifested by the construction of permanent structures at some sites, acquisition of greater amounts of rare lithic resources, and the burial of exotic lithic artifacts with the dead.

The Wade phase community pattern at 40CF69 is indicative of a seasonal occupation of the site by a minimal, probably nuclear family

group with both males and females present. The presence of a storage silo suggests that this was a fall-winter occupation oriented toward the exploitation of arboreal food resources. This settlement pattern is virtually identical to that of the preceding Ledbetter phase except in the intensity of the occupation with there being a decrease in the size of the prehistoric occupation at the Aaron Shelton site during the Wade phase. Several of the features ($n = 9$) in Excavation Area 1 lacked culturally diagnostic material and it is possible that the Wade phase occupation at 40CF69 is more intensive than described in this thesis. Based on the available information, however, the Wade phase occupation at 40CF69 is interpreted as representing a seasonal exploitative camp in a mobile dispersed settlement pattern.

McFarland Phase

The major hypothesis under examination in this thesis is that the small, nonintensive McFarland occupations found at 40CF69 and other lower reservoir sites represent an early type of McFarland phase settlement pattern and one that is more similar to the "mobile dispersed" settlement type proposed for the Terminal Archaic period in the Normandy Reservoir area (Faulkner and McCollough, eds. n.d.) than to the more structured, intensive late Middle Woodland McFarland occupations of the upper reservoir zone.

The McFarland phase community patterns at 40CF69 indicate that during the early Middle Woodland period the Aaron Shelton site was occupied by minimal, possibly nuclear, family groups exploiting

resources in the lower reservoir zone in a seasonal schedule of hunting and gathering rounds. A total of fifteen McFarland phase features was defined at 40CF69 with the majority of these features being located in Excavation Area 2, the major occupational locus at 40CF69 during the Middle Woodland period. The McFarland phase features in Excavation Area 2 consisted of hearths (n = 3), burial receptacles (n = 2), storage facilities (n = 2), processing basins (n = 2), and one amorphous feature (F36) for which a function was not clearly definable. Four McFarland phase features were located outside of Excavation Area 2 with these being an earth oven (Feature 6) and hearth (Feature 10) in Excavation Area 1 and two processing basins (Features 48 and 50) in Excavation Area 4.

In contrast to the Late Archaic Ledbetter phase community pattern at 40CF69 which was characterized by the clustering of functional specific features such as hearths, storage facilities, and processing basins, the McFarland phase community pattern at 40CF69 is of a much less structured nature. Only one activity area was definable with this being a loose cluster of eight features (F31-F36; F38-F40) in the western section of Excavation Area 2 with all of these features except Feature 34 (Burial 3) being associated with food storage, processing, or preparation activities.

Two features (F31 and F40) in Excavation Area 2 were defined as storage facilities with artifactual material from these features consisting of lithic core reduction material and projectile points/knives indicative of male associated activities. No botanical material

was secured from either of these features for analysis but it is presumed that they functioned as storage facilities for arboreal seed crops collected in the uplands in the fall. Four McFarland phase features were defined as hearths with three of these being Type C hearths (Features 10, 37, and 38) while the fourth was a Type B hearth (Feature 33). Unidentifiable faunal material was recovered from two of the hearths (Features 33 and 37) while the only botanical material recovered consisted of hickory nut fragments removed during the excavation of Feature 37. The two hearths in Excavation Area 2 (Features 33 and 37) were the only two McFarland phase features at 40CF69 to contain artifacts associated with female activities in the form of a knife (lithic type 26) and large sections of *Long Branch Fabric Marked* vessels. Radiocarbon samples were obtained from these hearths with the sample from Feature 33 returning an unacceptable date of B.P. 2750 ± 190 years (800 B.C.) which is far too early for a McFarland phase feature in the upper Duck Valley. The radiocarbon sample from Feature 37, however, returned a date of B.P. 2165 ± 110 years (215 B.C.) which is an acceptable early McFarland phase date and which supports the hypothesis that the McFarland phase occupation at 40CF69 dates to the very early Middle Woodland period.

A single McFarland phase earth oven (Feature 6) was defined in Excavation Area 1 with a hearth (Feature 10) and a posthole (P.H. 48) in the immediate vicinity being possibly associated with it. The lithic material from these features consisted entirely of lithic core reduction material indicative of male associated activities. No female associated

artifacts were recovered in Excavation Area 1 with the exception of a small amount ($n = 19$) of limestone tempered ceramics.

Two features (F34 and F56) in Excavation Area 2 were defined as McFarland phase burial receptacles. Burial 3 (Feature 56) consisted of the cremated remains of a mature individual which had been redeposited in Excavation Area 2 while Burial 4 (Feature 34) was an adult flexed inflesh inhumation in a shallow oval pit. No deliberately placed artifacts/mortuary offerings were found in association with either burial.

There are no well-defined discrete activity areas at 40CF69 similar to those which characterized the early McFarland phase occupation at 40FR47 at which site it was possible to define separate mortuary, food processing, and residence areas (Bacon and Merryman 1973). In contrast to this structured type of community pattern with function-specific activity areas, the only McFarland activity area which could be defined at 40CF69 was the cluster of eight subsistence related features (hearths, storage pits, and processing basins) in Excavation Area 2. Similar feature clusters have been documented at 40FR47 and the Ewell III site and are thought to represent individual family food processing-storage loci which were maintained at a distance from the dwelling areas during the warm season because of noxious smoke and odors (Bacon and Merryman 1973; Faulkner and McCollough, eds. n.d.). The lack of structural evidence found around these food processing and storage facility areas at such sites as Jernigan II, Eoff I, Nowlin II, and Wiser-Stephens, has been interpreted as indicating that these sites

were occupied during the warm season (summer-early fall) when the need for shelter from the elements would be minimal.

Based on excavation data from the Ewell III and Parks sites, however, it is known that windbreak or cabana shelters were in use during the McFarland phase. Five semicircular windbreak structures were located in the east-west central terrace zone of the Ewell III site while another possible windbreak structure was found at the Parks site. The open nature of these structures together with the lack of hearths in the immediate vicinity has led to the conclusion that these shelters were warm season dwellings (Faulkner and McCollough, eds. n.d.). No McFarland phase structure of any type was documented at 40CF69 with only three definite McFarland postholes being found at the site. Thirty postholes containing culturally nondiagnostic lithic material were defined in Excavation Areas 1 and 2 and although it is probable that some of these postholes are associated with the McFarland occupation at 40CF69 none of them form an alignment such as would indicate that they were part of a structure.

The hypothesis that the McFarland occupation at 40CF69 was a short-term, seasonal encampment is supported by both the McFarland phase lithic indices (Table 10, page 118) and the limited botanical data (Table 16, page 138). The lithic indices indicate that a very limited range of subsistence activities occurred at 40CF69 during the McFarland phase with primary flint working, hunting, and butchering being the major male associated activities at the site. Female associated lithic artifacts are virtually nonexistent with only one lithic artifact

(type 26: knife) indicative of female activities being recovered. The limited range of subsistence activities indicated by the lithic indices for the McFarland phase supports the interpretation of the Aaron Shelton site as a short-term seasonal encampment occupied by minimal family groups. The subsistence data from the McFarland phase features is extremely limited due to the destruction of the flotation material and cannot be accepted as completely representative of the original content of these features. Faunal material unidentifiable as to species was recovered from Features 6, 10, 33, and 37 while the botanical sample consisted of hickory nut fragments from Features 6 and 37 and walnut fragments from Feature 31. Hickory nuts are available from September through December and can be stored for winter use (Shea 1978:609) while walnuts are available from September to November (Shea 1978:609-612). Although the validity of the 40CF69 subsistence data is extremely tenuous, the recovery of walnut and hickory nut fragments from three of the McFarland phase features at the site tentatively suggests a fall-winter occupation.

As regards the lithic material, the hypothesis that the McFarland phase occupation at 40CF69 and the other small lower reservoir sites may have been oriented toward the exploitation of adjacent gray banded lithic resources is largely invalidated by the relatively low percentage (33.7) of this lithic type in McFarland phase features at 40CF69. By contrast, during the Ledbetter phase occupation gray banded chert comprised 47.76 percent of all lithic raw materials at the site and during the Wade phase the percentage rose to 59.82 percent. If the

hypothesis had been correct and the exploitation of gray banded chert resources had been a determining factor in the establishment of certain small, lower reservoir McFarland sites, it is believed that gray banded chert would have comprised a very high percentage of all lithic raw materials recovered at the site. It is possible, however, that initial lithic core reduction activities designed to produce bifacial preforms that would be easy to transport to other sites in the reservoir zone may have taken place primarily at quarry sites such as the Sterling Shelton Pond Source. If such was the case, there would be little evidence at adjacent habitation sites such as 40CF69 to indicate that such activities were taking place.

Projectile points/knives recovered from McFarland phase features at 40CF69 included examples of the *McFarland Triangular* (n = 2) and *Village Copena* (n = 1) artifact types with all of the specimens being found in direct association with *Long Branch Fabric Marked* ceramics. One Type 71 (undifferentiated side notched) projectile point/knife was recovered from Feature 31 in Excavation Area 2. No artifacts of the Rounded Base cluster (lithic types 89-95), which are believed to be late Early Woodland artifacts in the Normandy Reservoir area, were recovered from feature context at the Aaron Shelton site. The direct association of McFarland cluster projectile points (lithic types 53-56) with fabric marked ceramics at 40CF69 again supports the interpretation that the major Woodland period occupation at this site occurred during the very early McFarland phase.

The ceramic assemblage associated with the McFarland phase occupation at 40CF69 consisted almost entirely of *Long Branch Fabric*

Marked and limestone-tempered plain ceramics. Evidence of smoothing was present on a number of the plain sherds, however, which suggests that this type originally had a different surface treatment (presumably fabric marking) which was smoothed over prior to firing. The most characteristic decorated ceramic type of the McFarland phase is limestone-tempered check stamped (Faulkner and McCollough, eds. n.d.) but only one sherd of this type was recovered at 40CF69.

Based on information from the Jernigan II site Faulkner and McCollough (n.d.) have recently defined an Early Woodland period occupation in the Normandy Reservoir area which has been designated the Long Branch phase (450-100 B.C.) with the two defining characteristics of this phase being (1) a high percentage of limestone-tempered fabric marked ceramics and (2) the utilization of a variety of stemmed projectile points/knives, especially artifacts in the Rounded Base cluster (lithic types 89-95). The community pattern during this phase includes storage pits, earth ovens, and processing basins but there is no distinct patterning of these features which suggests that the site may have been frequented by small groups over an extended period of time. There is also no definite evidence of structures during this time period. The mortuary pattern consists of flexed burials in shallow basins and these occur in clusters which suggests the possibility of separate traditional family plots. Activity indices from Long Branch features are very similar to those of the preceding Ledbetter and Wade phases which suggests that there is a continuity in basic settlement subsistence patterns from the Late/Terminal Archaic through

the Early Woodland period in the Normandy Reservoir area. The most important addition to the material culture during the Early Woodland period is the addition of ceramics while the community pattern changes with the addition of flesh inhumations in oval graves and earth ovens (Faulkner and McCollough, eds. n.d.:403).

The similarities between the Long Branch phase and the early Middle Woodland McFarland phase occupation at 40CF69 are numerous. These include (1) a high percentage of limestone-tempered, fabric marked ceramics; (2) no marked patterning of features; (3) flesh inhumations in shallow oval graves; and (4) a lack of definable structures. In contrast to these similarities, however, there is a distinct difference in projectile point types with no artifacts of the Rounded Base cluster (lithic types 89-95) being recovered from a feature context at 40CF69 while three McFarland cluster (lithic types 52-56) projectile points were found in association with fabric marked ceramics at 40CF69. The association of triangular projectile points/knives and fabric marked ceramics at 40CF69 suggests that the McFarland phase occupation at the Aaron Shelton site occurs quite early in the Middle Woodland period and that this occupation is very similar both in material culture and community patterning to the preceding late Early Woodland Long Branch phase.

As stated at the beginning of this section, the major hypothesis under examination in this thesis is that the McFarland phase community patterns at the Aaron Shelton site are part of an early type of McFarland phase settlement pattern and that it is more similar to the

"mobile dispersed" settlement pattern proposed for the Terminal Archaic period in the Normandy Reservoir area than it is to the more structured, intensive late McFarland occupations of the upper reservoir zone. Previously advanced settlement subsistence models for the upper Duck Valley (Faulkner 1973; Butler 1977; Prescott 1978) were briefly discussed in the introduction to this thesis. These models are discussed in greater detail in the following section particularly with regard to their possible relevancy to the early McFarland occupation at the Aaron Shelton site.

Faulkner (1973:44) proposed two hypothetical settlement subsistence models for the Middle Woodland period in the upper Duck Valley with the first of these being the "nuclear" model in which a permanently occupied site functions as the nucleus of the settlement system. This site is the focus of human activity on a year-round basis although groups of hunters and foragers would leave the site on a seasonal basis and occupy various temporary base camps from which they could exploit the resources of the surrounding biogeographic zones. In terms of this model, the McFarland phase occupations at 40CF69 and the other small lower reservoir sites would represent temporary seasonal base camps.

The "dispersed" settlement system model (Faulkner 1973:45) has as its principal sites dispersed seasonal base camps which are occupied by nuclear or extended family groups. Similar to the nuclear model, this settlement system types has a central base camp but it has a social rather than subsistence related function in that at a certain time of the year the various dispersed family groups would congregate at the

central base camp to conduct mortuary activities and group ritual. Upon the conclusion of these activities the constituent family groups would disperse and return to the various seasonal encampments.

Butler (1977:8-9) formulated a settlement system model based on his excavations at the Yearwood site which combined aspects of both the nuclear and dispersed settlement models. This is a dispersed settlement similar to that of Faulkner (1973) except that the small dispersed encampments are occupied for a major part of the year rather than being seasonal encampments. The nuclear and extended family groups occupying these dispersed camps would congregate once a year at a central camp for purposes of social intensification after which they would again return to the various dispersed camps.

Prescott (1978:366) proposed a fourth settlement system model for the upper Duck Valley which consisted of a series of base camps seasonally established by extended family groups as they moved within a restricted territory to exploit areas of maximum food resource potential. In contrast to the dispersed settlement system models of Faulkner (1973) and Butler (1977), this model proposes no seasonal congregation of nuclear or extended family groups at a central base camp for either redistribution of food resources or purposes of social intensification. Faulkner and McCollough (n.d.) have designated this model the "mobile dispersed" settlement type and they propose that this settlement system type may have been in operation in the Normandy Reservoir area during the Late Archaic Ledbetter phase and the beginning of the Terminal Archaic Wade phase with a change in community patterning

by late Wade times (approximately 900-800 B.C.) suggesting that increasing sedentism is occurring.

In regard to McFarland phase settlement patterns in the Normandy Reservoir area, Faulkner and McCollough have suggested that the McFarland phase occupation in the upper reservoir zone conforms to the dispersed type of Faulkner (1973:44) or the dispersed type with permanent single family base camps of Butler (1977). The Ewell III and Eoff I sites are suggested to be either seasonal or permanent base camps in a dispersed settlement system while the Parks and McFarland sites are suggested to be central base camps for social intensification related activities. This hypothesis is based on data from the Ewell III site which indicated that while that site was intensively occupied during the McFarland phase it was not a permanent year-round occupation and it is also based on the premise that "in the evolution toward settled village life in the upper Duck Valley the McFarland phase would be intermediate between the mobile dispersed settlement patterns of the Archaic phases and the nucleated settlements of the Owl Hollow phase" (Faulkner and McCollough, eds. n.d.).

However, Faulkner and McCollough have also noted that while there is strong evidence of intensive McFarland settlement in the upper reservoir zone, there is some question as to whether this pattern is characteristic of the entire McFarland phase or instead prevailed only during the middle to late periods of this occupation. Possible evidence that a different type of settlement system is in operation in the lower reservoir zone is that only two sites in this area, Parks and Eoff I,

exhibit evidence of intensive occupation while smaller McFarland components are found at the Aaron Shelton, Banks III, Banks V, Jernigan II, and Nowlin II sites. Radiocarbon dates from the lower reservoir zone suggest that the McFarland phase occupation in this area occurs quite early with dates of 15 B.C. $\pm$ 60 years from the Eoff I site, 255 B.C. $\pm$ 125 years from the Parks site, and 215 B.C. $\pm$ 110 years from the Aaron Shelton site. Faulkner and McCollough have suggested that these smaller sites represent seasonal camps in a dispersed settlement pattern or permanent small base camps tied to a larger settlement system.

It is proposed here that these small sites represent seasonal camps in a mobile dispersed settlement system and that this type of settlement system is in operation in the upper Duck River Valley during the late Early Woodland Long Branch and early Middle Woodland McFarland phases. Supporting evidence for this hypothesis is the lack of intensive occupation, absence of discernible intraspatial community patterning, and limited activity indices at lower reservoir sites such as 40CF69 and Jernigan II which suggests that aboriginal occupations at these sites during the late Early Woodland-early Middle Woodland period were short-term, nonintensive, and seasonal. It is further suggested that this early McFarland phase settlement type is similar to that proposed for the Late-Terminal Archaic period in the Normandy Reservoir area (Prescott 1978: Faulkner and McCollough, eds. n.d.) in which seasonal base camps are established by nuclear or extended family groups as they move seasonally within a restricted territory to exploit areas of maximum resource potential. The major difference between this settlement

system model and the dispersed types of Faulkner (1973) and Butler (1977) is that this model postulates that there is no seasonal agglutination of related family units at a central base camp for purposes of social intensification. If this interpretation of transitional late Early Woodland-early Middle Woodland settlement pattern in the upper Duck Valley is correct then it implies that relatively little change occurred in basic settlement-subsistence patterns in this area from the Late Archaic period to the early Middle Woodland period.

As previously noted, evidence of intensive early McFarland phase occupation was found at only two sites in the lower reservoir zone (Parks and Eoff I) with the Eoff I site suggested to be a dispersed seasonal or permanent base camp while the Parks site is thought to be a possible mortuary ceremonial site (Faulkner and McCollough, eds. n.d.). Neither of these sites would appear to be part of a mobile dispersed settlement system in which there are no central base camps or intensively occupied sites. However, despite the early radiocarbon dates for the McFarland occupations at these sites the high percentage of limestone-tempered check stamped sherds in the ceramic assemblage from Parks and Eoff I suggests that these sites are occupied later in the McFarland Phase than the Aaron Shelton site where both the high percentage of limestone-tempered fabric marked ceramics and the community patterning are reminiscent of the Early Woodland Long Branch phase occupation at the Jernigan II site. What the differences between the McFarland occupations at these lower reservoir sites may indicate is that a change in the settlement system type in the Normandy Reservoir area

occurs during the early Middle Woodland period with a settlement system comprised of small, short-term, seasonal encampments (e.g. mobile dispersed) being gradually replaced by a settlement system in which certain sites are intensively occupied for longer periods of time either for purposes of social intensification or because of their advantageous environmental setting. Causal factors for this proposed settlement system shift cannot be determined without a full examination of all settlement-subsistence data from the Normandy Reservoir area but it is suggested here that such a shift could occur as the result of increased food production and population growth within the reservoir area during the late Early Woodland period. A recent analysis of plant remains from the Ewell III site has revealed that squash, gourd, sunflower, and possibly maize were being utilized as cultigens by the prehistoric peoples of the upper Duck Valley during the early Middle Woodland period (Crites 1978; Faulkner and McCollough, eds. n.d.). The increasing use of cultigens as a food resource may have led to a population increase within the reservoir area which could have severely restricted the amount of territory available for exploitation by the nuclear and extended groups inhabiting the area. This restriction could have led to a more intensive occupation of those sites which had the greatest potential for the exploitation of the surrounding biogeographic zone and at which conditions were also conducive to the raising of cultigens. The development of a dispersed settlement system in the Normandy Reservoir area by late McFarland times, then, would be viewed here as being the result of a combination of improved food production techniques

and limited population pressure with both of these factors having their origin in the late Early Woodland Long Branch phase or very early Middle Woodland McFarland phase.

In summation, then, the McFarland phase community patterns at 40CF69 are indicative of a seasonal occupation of the site by a minimal, probably nuclear, family group with both males and females being present. Both the material culture (with the exception of projectile point types) and the community patterns are very similar to those of the preceding Long Branch phase in the Normandy Reservoir area which suggests that there is no change in basic settlement-subsistence patterns from the late Early Woodland to early Middle Woodland period. It is believed that the McFarland phase occupation at 40CF69 is part of a mobile dispersed settlement system type which changes through time as a result of increased food production techniques and limited population pressure into the dispersed settlement type which is operational during middle to late McFarland times.

Mason Phase

Evidence of a minimal Mason phase occupation was found at 40CF69 with a total of 38 chert-tempered *Elk River* sherds being recovered from two postholes (Nos. 6 and 8) and a single feature (No. 10) in Excavation Area 1. The chert-tempered sherd in Feature 10, however, is presumed to have its source in Posthole 8 which intruded the western edge of the feature. Significantly, no projectile points/knives of the Late Woodland Hamilton cluster (types 45-47) are represented in any of the

collections of artifactual material (Table 1, page 22; Table 6, page 83; Prescott 1978:Table 39) from the Aaron Shelton site which suggests that the Mason phase occupation at 40CF69 was very ephemeral. It is possible that some of the features in Excavation Area 1 which contained no culturally diagnostic material are associated with the Mason phase occupation but this cannot be substantiated.

REFERENCES CITED

REFERENCES CITED

- Baby, Raymond S.
 1954 Hopewell Cremation Practices. The Ohio Historical Society, *Papers in Archaeology*, No. 1, Columbus.
- Bacon, Willard S. and H. L. Merryman
 1975 *Salvage Archaeology at 40FR47*. Tennessee Archaeological Society, Miscellaneous Paper No. 11, Knoxville.
- Bacon Willard. S.
 1975 Additional Data on Site 40FR47, Franklin County, Tennessee. *Tennessee Archaeologist*. Vol. 31, No. 2, pp. 98-103.
- Bailit, Howard and Hunt, Edward
 1964 The Sexing of Children's Skeletons from Teeth Alone and its Genetic Implications. *American Journal of Physical Anthropology*. Vol. 22, pp. 171-174.
- Barbour, Roger W.
 1971 *Amphibians and Reptiles of Kentucky*. The University Press of Kentucky, Lexington, Kentucky.
- Bass, William M.
 1971 *Human Osteology: A Laboratory and Field Manual of the Human Skeleton*. Missouri Archaeological Society, Columbia.
- Binford, Lewis R.
 1972 An Analysis of Cremations from Three Michigan Sites. *New Perspectives in Archaeology*. Sally R. Binford, ed., Chicago: Aldine.
- Black, Thomas K.
 1978 Sexual Diamorphism in the Tooth-Crown Diameter of the Deciduous Teeth. *American Journal of Physical Anthropology*. Vol. 48, pp. 77-82.
- 1978 A New Method for Assessing the Sex of Fragmentary Skeletal Remains: Femoral Shaft Circumference. *American Journal of Physical Anthropology*. Vol. 48, pp. 227-232.
- Bowen, William R.
 1975 *Late Archaic Subsistence and Settlement Patterns in the Western Tennessee Valley: A Reevaluation*. M.A. thesis. Department of Anthropology, The University of Tennessee, Knoxville.

- Bowen, William R.
 1977 A Reevaluation of Late Archaic Subsistence and Settlement Patterns in the Western Tennessee Valley. *Tennessee Anthropologist*. Vol. 2, No. 2, pp. 100-120.
- Braun, E. Lucy
 1950 *Deciduous Forests of Eastern North America*. The Blakiston Company, Philadelphia.
- Buikstra, Jane E. and Goldstein, Lynne
 1973 *The Perrins Lodge Crematory*. Illinois State Museum, Report of Investigations, No. 28, Springfield.
- Butler, Brian
 1968 The Brickyard Site. *Archaeological Investigations in the Tims Ford Reservoir*. (Charles H. Faulkner, ed.). Department of Anthropology, The University of Tennessee, Knoxville.
- Butler, Brian M.
 1977 The Yearwood Site: A Specialized Middle Woodland Site on the Elk River. *Tennessee Anthropologist*. Vol. II, No. 1, pp. 1-15.
- Cambron, James W.
 1958 Some Early Projectile Points From the Tennessee Valley, Part II. *Journal of Alabama Archaeology*, Vol. 4, No. 1, pp. 17-19.
- Cambron, James W. and Hulse, David C.
 1960 The Transitional Paleo-Indian Period in North Alabama and South Tennessee. *Journal of Alabama Archaeology*. Vol. 6, No. 1, pp. 7-33.
 1975 *Handbook of Alabama Archaeology Part I: Point Types*. The Archaeological Research Association of Alabama, Inc.
- Chapman, Jefferson
 1973 *The Icehouse Bottom Site: 40MR23*. Department of Anthropology, The University of Tennessee, Report of Investigations 13, Knoxville.
 1975 *The Rose Island Site*. Department of Anthropology, The University of Tennessee, Report of Investigations 14, Knoxville.
 1976 The Archaic Period in the Lower Little Tennessee River Valley: The Radiocarbon Dates. *Tennessee Anthropologist*. Vol. 1, No. 1, pp. 1-12.
- Chapman, Jefferson
 1977 *Archaic Period Research in the Lower Little Tennessee River Valley*. Department of Anthropology, The University of Tennessee, Report of Investigations 18, Knoxville.

Cobb, James E

- 1978 The Middle Woodland Occupations of the Banks V Site, 40CF111. *Fifth Report of the Normandy Reservoir Salvage Project*. Volume 5 of the Normandy Archaeological Project. The Department of Anthropology, The University of Tennessee, Report of Investigations 20. Knoxville.

Coe, Joffre L.

- 1959 *Prehistoric Culture Change and Stability in the Carolina Piedmont Area*. Doctoral Dissertation, The University of Michigan, Ann Arbor.

Crites, Gary

- 1978 *Paleoethnobotany in the upper Duck River Valley, Tennessee*. M.A. thesis, Department of Anthropology, The University of Tennessee, Knoxville.

Davis, R. P. Stephen

- 1976 *The Wiser-Stephens Site - 40CF81*. M.A. thesis. Department of Anthropology, the University of Calgary, Calgary, Alberta, Canada.

Davis, R. P. and Keel, Bennie

- 1975 *Summary Field Report of Excavations at the Wiser-Stephens Site (40CF81), Tennessee*. Reports in Anthropology No. 2, Laboratory of Anthropology, Wright State University, Dayton, Ohio.

DeJarnette, David L., Edward Kurjack, and James W. Cambron

- 1962 Stanfield-Worley Bluff Shelter Excavations. *Journal of Alabama Archaeology*, Nos. 1 and 2, Alabama Archaeological Society, University of Alabama, Alabama.

DeJarnette, David L., Edward Kurjack, and Bennie C. Keel

- 1973 Archaeological Investigations of the Coosa River in Alabama. *Journal of Alabama Archaeology*. Vol. 19, No. 2.

Dice, Lee R.

- 1943 *The Biotic Provinces of North America*. Ann Arbor, University of Michigan Press.

Dibernardo, Robert and James W. Taylor

- 1979 Sex Assessment of the Femur: A Test of a New Method. *American Journal of Physical Anthropology*, Vol. 50, 4:635-637.

Ditch, L. E. and Rose, J. C.

- 1972 A Multivariate Dental Sexing Technique. *American Journal of Physical Anthropology*. Vol. 37, pp. 61-64.

DuVall, Glyn D.

- 1977 *The Ewell III Site (40CF118): An Early Middle Woodland Site in the Normandy Reservoir, Coffee County, Tennessee*. M.A. thesis, Department of Anthropology, The University of Tennessee. Knoxville.

Faulkner, Charles H.

- 1968a *The Old Stone Fort: Exploring an Archaeological Mystery*. The University of Tennessee Press, Knoxville.

- 1973 *Middle Woodland Subsistence-Settlement Systems in the Highland Rim: A Commentary*. Salvage Archaeology at 40FR47 by W. S. Bacon and H. L. Merryman, pp. 35-45. Tennessee Archaeological Society, Miscellaneous Paper, No. 11.

Faulkner, Charles H. (ed.)

- 1968 *Archaeological Investigations in the Tims Ford Reservoir*. Department of Anthropology, The University of Tennessee, Knoxville.

Faulkner, Charles H. and Graham, J. B.

- 1966 *Highway Salvage in the Nickajack Reservoir*. Department of Anthropology, The University of Tennessee, Knoxville.

- 1966a *The Westmoreland-Barber Site (40MI-11), Nickajack Reservoir: Season II*. Department of Anthropology, The University of Tennessee, Knoxville.

Faulkner, Charles H. and Major C. R. McCollough

- 1973 *Introductory Report of the Normandy Reservoir Salvage Project: Environmental Setting, Typology, and Survey*. Volume I of the Normandy Archaeological Project. Report of Investigations No. 11, Department of Anthropology, The University of Tennessee, Knoxville.

- 1974 *Excavations and Testing, Normandy Reservoir Salvage Project: 1972 Season*. Volume 2 of the Normandy Archaeological Project. Report of Investigations No. 12, Department of Anthropology, The University of Tennessee, Knoxville.

Faulkner, Charles H. and Major C. R. McCollough (eds.)

- 1977 *1973 Excavations on the Hicks I (40CF62), Eoff I (40CF32) and Eoff III (40CF107) Sites*. Volume 4 of the Normandy Archaeological Project. Report of Investigations No. 19, Department of Anthropology, The University of Tennessee, Knoxville.

- 1978 *Excavations at the Banks V Site*. Volume 5 of the Normandy Archaeological Project. Report of Investigations No. 20, Department of Anthropology, The University of Tennessee, Knoxville.

- n.d. *Seventh Report of the Normandy Archaeological Project*. Volume 7 of the Normandy Archaeological Project. Department of Anthropology, The University of Tennessee, Knoxville.

Fenneman, Nevin M.

- 1938 *Physiography of the Eastern United States*. McGraw-Hill, New York.

Ford, James A. and Clarence Webb

- 1956 Poverty Point, A Late Archaic Site in Louisiana. *Anthropological Papers of the American Museum of Natural History*, Vol. 46, Pt. 1, New York.

Futato, Eugene

- 1977 Selected Radiocarbon Dates From Alabama. *Journal of Alabama Archaeology*. Vol. 23, No. 1.

Garn, Stanley, Arthur B. Lewis, and Rose S. Kerewsky

- 1967 Sex Difference in Tooth Shape. *Journal of Dental Research*. Vol. 46, pp. 1470.

Garn, Stanley, Arthur B. Lewis, Daris R. Swindler, and Rose S. Kerewsky

- 1967 Genetic Control of Sexual Dimorphism in Tooth Size. *Journal of Dental Research*. Vol. 46, pp. 963-972.

Garn, Stanley, Patricia E. Cole and Wallace L. van Alstine

- 1979 Sex Discriminatory Effectiveness Using Combinations of Root Length and Crown Diameters. *American Journal of Physical Anthropology*. Vol. 50, pp. 115-118.

Gejvall, N.

- 1963 Cremations. *Science in Archaeology*, D. R. Brothwell and E. Higgs (eds.), pp. 379-389. Thames and Hudson, London.

Griffin, John W.

- 1974 *Investigations in Russell Cave*. National Park Service, Department of the Interior, Publications in Archaeology No. 13, Washington.

Haag, William G.

- 1939 Pottery Type Descriptions. *Newsletter of the Southeastern Archaeological Conference*. Vol. 1, No. 1.

Heimlich, Marion D.

- 1952 *Guntersville Basin Pottery*. Museum Paper 32, Geological Survey of Alabama, University, Alabama.

Kneberg, Madeline

- 1956 Some Important Projectile Points Found in the Tennessee Area. *Tennessee Archaeologist*. Vol. 12, No. 1, pp. 17-28.

- 1957 Chipped Stone Artifacts of the Tennessee Valley Area. *Tennessee Archaeologist*. Vol. 13, No. 1, pp. 55-56.

- 1961 *Four Southeastern Limestone-tempered Pottery Complexes*. Newsletter of the Southeastern Archaeological Conference. Vol. 7, No. 1, pp. 3-14.

- Koepe, Clarence E. and George C. DeLong
1958 *Weather and Climate*. McGraw-Hill Book Company, New York.
- Krogman, W. M.
1962 *The Human Skeleton in Forensic Medicine*. Charles C. Thomas Publishing Company, Springfield.
- Lewis, T. M. N., and Madeline Kneberg Lewis
1961 *Eva: An Archaic Site*. The University of Tennessee Press, Knoxville.
- Love, T. R., L. D. Williams, W. H. Profitt, I. B. Epley and John Elder
1959 *Soil Survey of Coffee County, Tennessee*. United States Department of Agriculture.
- Magennis, Ann L.
1977 *Middle and Late Archaic Mortuary Patterning: An Example From the Western Tennessee Valley*. M. A. thesis, Department of Anthropology, The University of Tennessee, Knoxville.
- McCollough, Major C. R. and Charles H. Faulkner
1973 *Excavation of the Higgs and Doughty Sites: I-75 Salvage Archaeology*. Tennessee Archaeological Society, Miscellaneous Paper No. 12.
- 1976 *1973 Testing Program, Lithic Resource Survey, Lithic Annealing Project, and Report on Plant and Faunal Remains From the Banks III Site*. Volume III of the Normandy Archaeological Project. Report of Investigations No. 18, Department of Anthropology, The University of Tennessee, Knoxville.
- McCollough, Major C. R.
1978 *The Investigation of Site 40CF111 (Banks V). Fifth Report of the Normandy Archaeological Project*. Volume 5 of the Normandy Archaeological Project. Report of Investigations No. 20, Department of Anthropology, The University of Tennessee, Knoxville.
- McKern, Thomas W. and T. Dale Stewart
1957 *Skeletal Age Changes in Young American Males*. Quartermaster Research and Development Center, Natick, Massachusetts.
- Oakley, Carey B. and Eugene M. Futato
1975 *Archaeology of the Bear Creek Watershed: Volume I*. Research Series No. 1, Office of Archaeological Research. University, Alabama.
- Perino, Gregory
1968 *Guide to the Identification of Certain American Indian Projectile Points*. Special Bulletin No. 3 of the Oklahoma Anthropological Society.

Petrides, George A.

- 1938 *A Field Guide to Trees and Shrubs*. The Peterson Field Guide Series. Houghton Mifflin Company, Boston.

Prescott, Douglas

- 1978 *An Analysis of Surface Survey Data from the Normandy Reservoir*. M.A. thesis, Department of Anthropology, The University of Tennessee, Knoxville.

Ritchie, William A.

- 1961 *A Typology and Nomenclature for New York Projectile Points*. New York State Museum and Science Service, Bulletin No. 384.
- 1965 *The Archaeology of New York State*. American Museum of Natural History. The Natural History Press, Garden City, New York.

Robison, Neil Douglas

- 1977 *A Zooarchaeological Analysis of the Mississippian Faunal Remains from the Normandy Reservoir*. M.A. thesis, Department of Anthropology, The University of Tennessee, Knoxville.

Sears, William H. and J. B. Griffin

- 1950 *Fabric-marked Pottery of the Eastern United States*. *Pottery of the Eastern United States*. Ceramic Repository, University of Michigan, Ann Arbor.

Shea, Andrea Brewer

- 1978 *An Analysis of the Plant Remains from the Middle Woodland and Mississippian Components on the Banks V Site and a Paleoethnobotanical Study of the Native Flora of the Upper Duck Valley. Fifth Report of the Normandy Reservoir Salvage Project*. Volume 5 of the Normandy Archaeological Project. Report of Investigations No. 20, Department of Anthropology, The University of Tennessee, Knoxville.

Suhm, Dee Ann, Alex D. Krieger and Edward B. Jelks

- 1954 *An Introductory Handbook of Texas Archaeology*. Texas Archaeological Society, Vol. 25.

Tennessee Valley Authority

- 1972 *Final Environmental Statement: Duck River Project*. Tennessee Valley Authority, Office of Health and Environmental Sciences.

Walthall, John A.

- 1972 *The Chronological Position of Copena in the Eastern United States Archaeology*. *Journal of Alabama Archaeology*. Vol. 18, No. 2, pp. 137-151.
- 1973 *A Restudy of the Wright Village (LUv65), A Middle Woodland Habitation Site in Lauderdale County, Alabama*. *Tennessee Archaeologist*, Vol. 29, No. 2, pp. 69-108.

APPENDIX

PLATE I

AARON SHELTON SITE (40CF69) FEATURE 2—

PROJECTILE POINTS/KNIVES, BIFACIAL IMPLEMENTS

Top row (left to right): Type 91; Type 109; Type 105.

Bottom row (left to right): Type 26; Type 25; Type 31.



PLATE I

PLATE II

AARON SHELTON SITE (40CF69) FEATURE 33—
BIFACIAL IMPLEMENTS, PROJECTILE POINTS/KNIVES

Top row (left to right): Type 26; Type 25.

Bottom row (left to right): Type 53; Type 56.

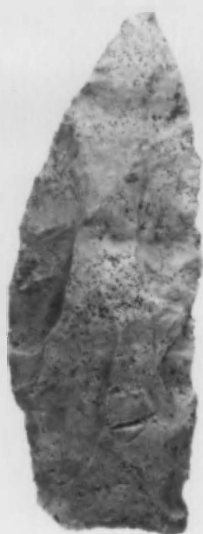


PLATE II

PLATE III

AARON SHELTON SITE (40CF69)—

PROJECTILE POINTS/KNIVES

Top row (left to right): Type 91 (F41); Type 103 (F41).

Bottom row (left to right): Type 96 (F18); Type 80 (F23); Type 76
(F26).

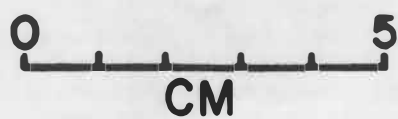
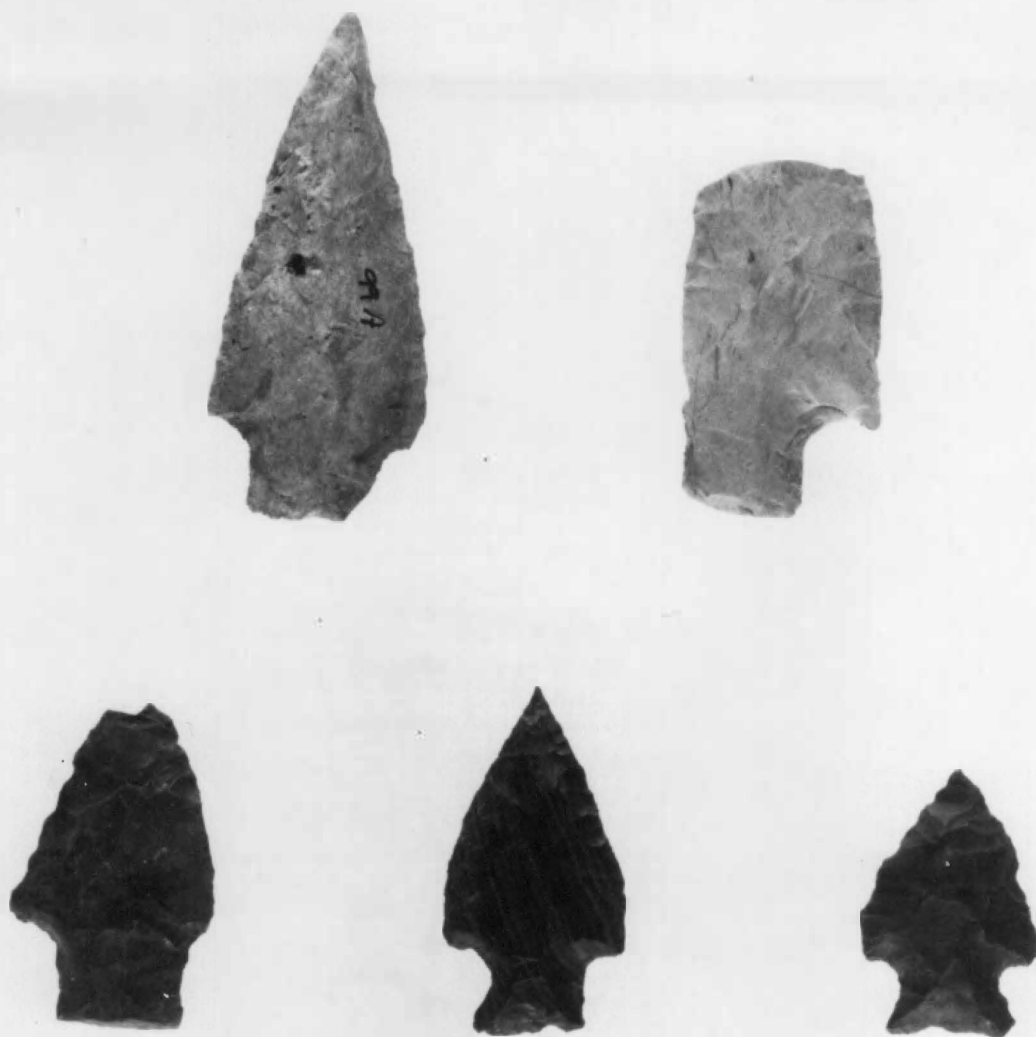


PLATE III

PLATE IV

AARON SHELTON SITE (40CF69) FEATURE 19—

PROJECTILE POINTS/KNIVES

Top row (left to right): Type 106; Type 102.

Bottom row (left to right): Type 92; Type 119.



PLATE IV

PLATE V

AARON SHELTON SITE (40CF69) FEATURE 37—CERAMICS

Center: Long Branch Fabric Marked (Type 2i) Jar Section



PLATE V

PLATE VI

AARON SHELTON SITE (40CF69)—CERAMICS

Top row (left to right): Chert-tempered smoothed over cordmarked rim sherd (Type 6e) from Posthole 8.

Center row: Chert-tempered cordmarked body sherd (Type 6e), Posthole 8.

Bottom row (left to right): Limestone-tempered check stamped body sherd (Type 2c), Feature 6; limestone-tempered fabric marked body sherd (Type 21), Feature 37.

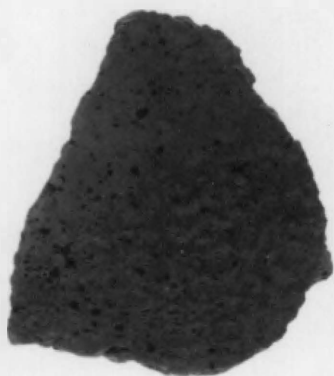
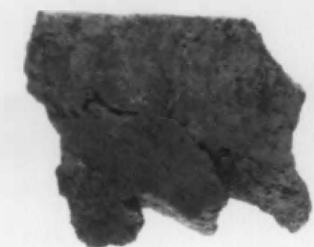


PLATE VI

PLATE VII

AARON SHELTON SITE (40CF69A) FEATURE 10—LITHIC ARTIFACTS

Top row: Type 15 (siltstone celt/abrader).

Bottom row: Type 155 (single-hole trapezoidal pendant).

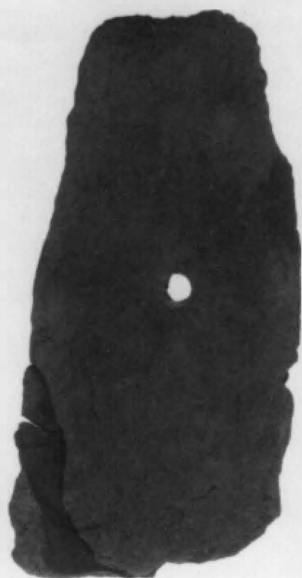


PLATE VIII

VIEW OF AARON SHELTON SITE (40CF69)

Top photograph: View of Aaron Shelton site and farmhouse (center) facing east, with the Duck River to the right.

Bottom photograph: View of Excavation Area 4 West (located left of house) and terrace edge profile trench. Feature 19 is in the bank profile to the left.



PLATE VIII

PLATE IX

VIEW OF AARON SHELTON SITES 40CF69 AND 40CF69A

Top photograph: View of Excavation Area 4 profile trench, facing east. The Ledbetter crematory basin (Feature 41/Burial 2) is being excavated to the left.

Bottom photograph: View of 40CF69 site from the area of the Shelton farmhouse, facing north. Excavation Area 1 (foreground); Excavation Area 2 (center, under tarps); and 40CF69A (bulldozed strips in background).



PLATE IX

PLATE X

EXCAVATION AREA 4 FEATURE CLUSTERS (40CF69)

Top photograph: Ledbetter feature cluster, Excavation Area 4 West.

Bottom Photograph: Ledbetter feature cluster, Excavation Area 4 East.



PLATE X

VITA

Mark Joseph Wagner was born in Covington, Kentucky, on November 19, 1952. He graduated from Northern Kentucky University in 1974 with a B.A. degree in Anthropology and entered the graduate program in Anthropology at The University of Tennessee at Knoxville in 1976. On August 19, 1978, he was married to Mary Rose McCorvie in Sullivan, Illinois. He is currently employed as an archaeologist by the Illinois Department of Conservation, Historic Sites Division, in Springfield, Illinois.