

THE MEEKS SITE EXCAVATION
MONTGOMERY COUNTY
TENNESSEE

By
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PREFACE

This report on the excavation and subsequent analysis and interpretation of the Meeks Site (40Mt40) is the result of a three-week salvage project conducted by the Division of Archaeology during the summer of 1976.

Any archaeological research project invariably involves the efforts and assistance of a great number of individuals and institutions and the Meeks Site project was no exception.

Although no specific funds were made available to the Division of Archaeology for the project the work was carried out by use of workers employed with the State C. E. T. A. program as well as individual volunteers. The author wishes, therefore, to express his appreciation to the Jersey Miniere Zinc Company and the Daniels Inter-national Construction Company for making available a pan scraper for removal of the overburden from the site; and to the Environmental Management Planning and Engineering Company who provided one of their staff, Steve Maloney, to serve in the project excavations as Field Assistant. The Environmental Management Planning and Engineering Company also provided contour maps of the site which aided in its overall interpretation.

A number of individual members of the Cheatham County Chapter of the Tennessee Archaeological Society were also very helpful in assisting with the excavating and recording of features. These individuals included Mr. David McMahan, Mrs. Charles McMahan, Linda and Wanda McMahan, Mr. Clyde Seabolt, and John Hart. The author also wishes to thank Robert Dalton, Jr., Michael Dalton, and James Puckett as well as C. E. T. A. workers Steven Strunk, Ruse Tucker, Jr., and Johnny Fergerson for their aid in the excavations.

Special appreciation is extended to Mr. Emanuel Breitburg of the Division of Archaeology for his analysis of the faunal collection from the Site; to Mrs. Mary Eubanks Dunn for her identification and analysis of the ethnobotanical specimens; to Victor Hood of the Division of Archaeology for editing the report; and to Mrs. Mary Lee Derryberry, Secretary for the Division of Archaeology for typing of the manuscript.

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THE MEEKS SITE (40Mt40)

EXCAVATIONS

Joseph L. Benthall

INTRODUCTION

During the period from July 12th through August 2nd, 1976 the Division of Archaeology conducted salvage excavations at the multi-component Meeks Site (40Mt40) endangered by the proposed construction of the Jersey Miniere Company's electrolytic zinc smelter southeast of Clarksville, Tennessee. The existence of the site was established as a result of the survey conducted by Dr. Brian Butler, who at that time served on the Division of Archaeology's staff. Excavation of several test squares on the site indicated the existence of sub-surface features, which thereby established the potential for recovery of valuable archaeological data. Since previous archaeological investigations of a scientific nature had never been conducted within this portion of the Cumberland Valley, it was felt that excavation of the Meeks Site would provide the opportunity to gain a better understanding of the prehistory of the area. The Cumberland Valley, as presently known, was inhabited from Paleo-Indian times and was also intensively occupied during the Archaic, Woodland, and Mississippian cultural periods. Although the Meeks Site was multi-component, its most intensive occupation occurred during the Late Archaic period as evidenced by the nature of the features and their associated artifacts. Other components represented at the Site include those belonging to the Early and Middle Archaic as well as Middle Woodland and Mississippian periods. Historic period occupation within the vicinity of the Meeks Site was also noted by the occurrence of a single pit feature containing early Nineteenth Century artifacts.

THE SITE AND SURROUNDINGS

The Meeks Site, designated as 40Mt40, is located in Montgomery County, Tennessee on the south side of the Cumberland River approximately six miles southeast of the City of Clarksville, Tennessee. The legal description of the Site's location is 36 degrees, 30 minutes, 52 seconds north latitude and 87 degrees, 24 minutes, 31 seconds west longitude (U. S. Geological Survey Map, New Providence Quadrangle (Figure 1)).

The site is situated along a narrow upland ridge approximately one mile south of the river, overlooking both its floodplain and terraces (Plates 1-2). Distribution of artifacts and features indicated that the main occupation had been confined to the crest of the ridge, encompassing an area of approximately 100 meters in length and 30 meters in width (Figure 2). Previous testing on the site disclosed the existence of a dark brown clay loam,

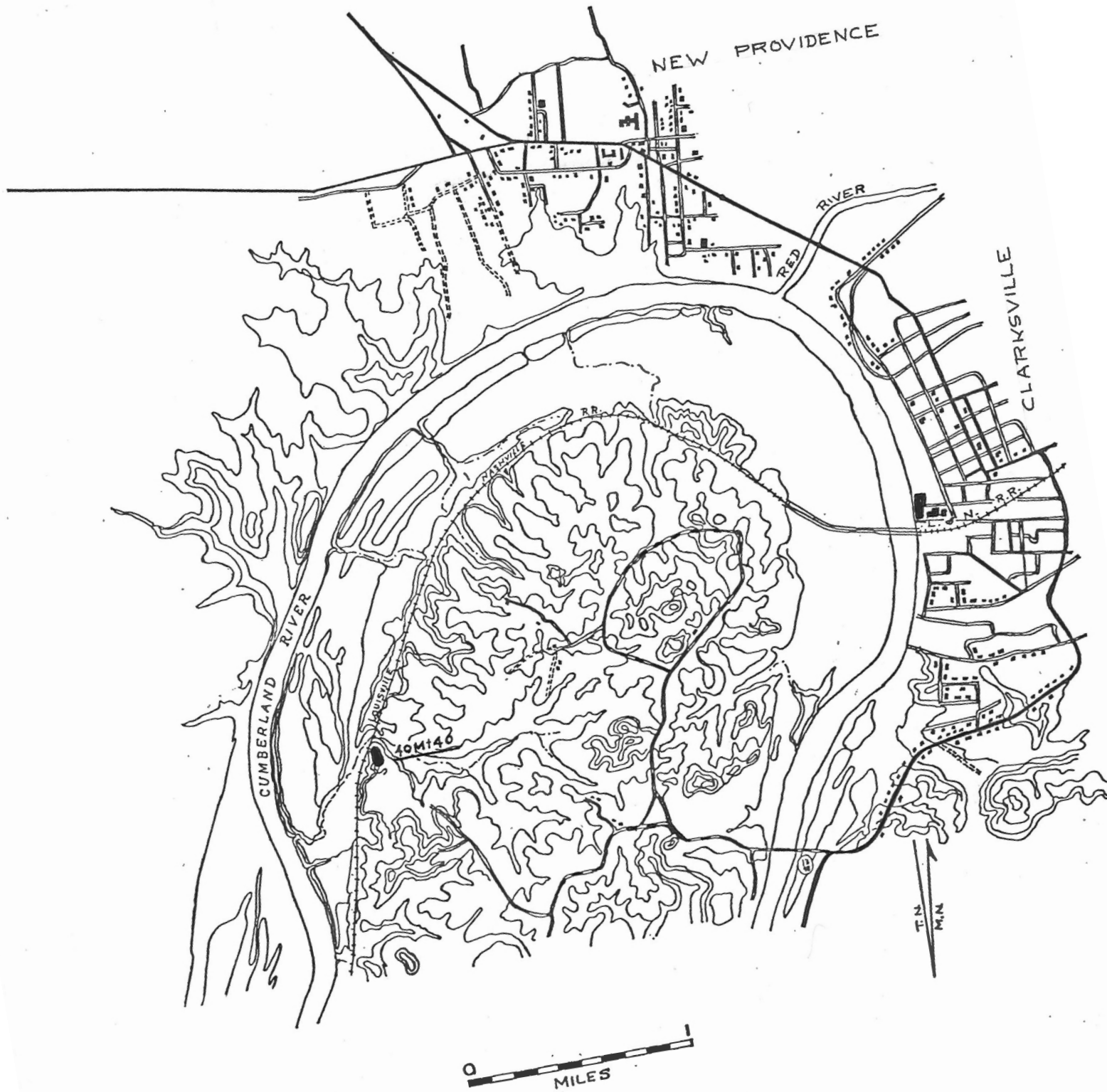


Figure 1. Meeks Site and Vicinity

12 to 16 centimeters in depth, containing charcoal, fire-cracked rocks, and other lithic debris. The lower two to three centimeters of this midden was still intact at the time of the 1976 excavation.

The site is situated along one of a series of upland ridges which are perpendicular to the river and oriented in a northwest southeast direction with elevations ranging from fifty to one hundred feet above the present level of the river. The depressions between these ridges provide the drainage for large adjacent areas, but have been subjected to flooding by the river in previous years.

The nearest water source is a spring-fed pond which is presently located approximately 150 meters southwest of the site. Although the pond is of recent origin, the spring had undoubtedly existed during aboriginal times and must have served as the principal source of water for the prehistoric Meeks Site inhabitants. The spring had also served as a watering place for various animal species during early times, thus the congregating of animals around the spring would have enhanced the hunting potentialities for the nearby site occupants.

The Cumberland River is the largest body of water nearest the Site and served as a source of water for several varieties of fish and mollusks important to aboriginal subsistence. The river did not only serve as a rich source of food but as a major means of transportation, consequently, it had probably served as a major migratory route for aboriginal peoples during early times.

PHYSIOGRAPHY AND GEOLOGY

Geologically, Montgomery County is located within the Western Highland Rim physiographic region of Tennessee (Miller, 1974). The Western Highland Rim sub-section consists of the dissected upland plateau between the Central Basin (Nashville Basin) section on the east, the Coastal Plain province on the west, the Southern Highland Rim sub-section to the south and the Pennyroyal sub-section on the north. The upland is developed primarily on the St. Louis and Warsaw Limestones, but some of the ridges and numerous valleys cut into the Fort Payne Formation (cherty limestone) while some of the valleys have downcut into strata of the Silurian and Ordovician Ages. The few upland areas are capped with small and cherty gravel of the Tuscaloosa Formation. Features of Karst topography appear often in this sub-section, but sinkhole caverns and springs are present mostly along the valleys (Barr, 1961-Matthews, 1971).

Generally the Western Highland Rim sub-section is one of ridges and valleys characterized by long steep slopes. The highest upland elevation of around 1,000 feet above mean sea level occurs near the headwaters of the Buffalo River while the uplands in the Montgomery County area are approximately 850 feet above sea level along the lower Cumberland and Tennessee Rivers, 400 to 500 feet A. M. S. L. along the Duck and Buffalo Rivers, and about 450 feet A. S. L. along the Harpeth River (Quarterman and Powell, 1978, p. 37).

The major streams within the Western Highland Rim sub-section consists of the Cumberland, Harpeth, and Duck Rivers which dissect the area from the Nashville Basin. These three rivers, as well as several large streams are deeply

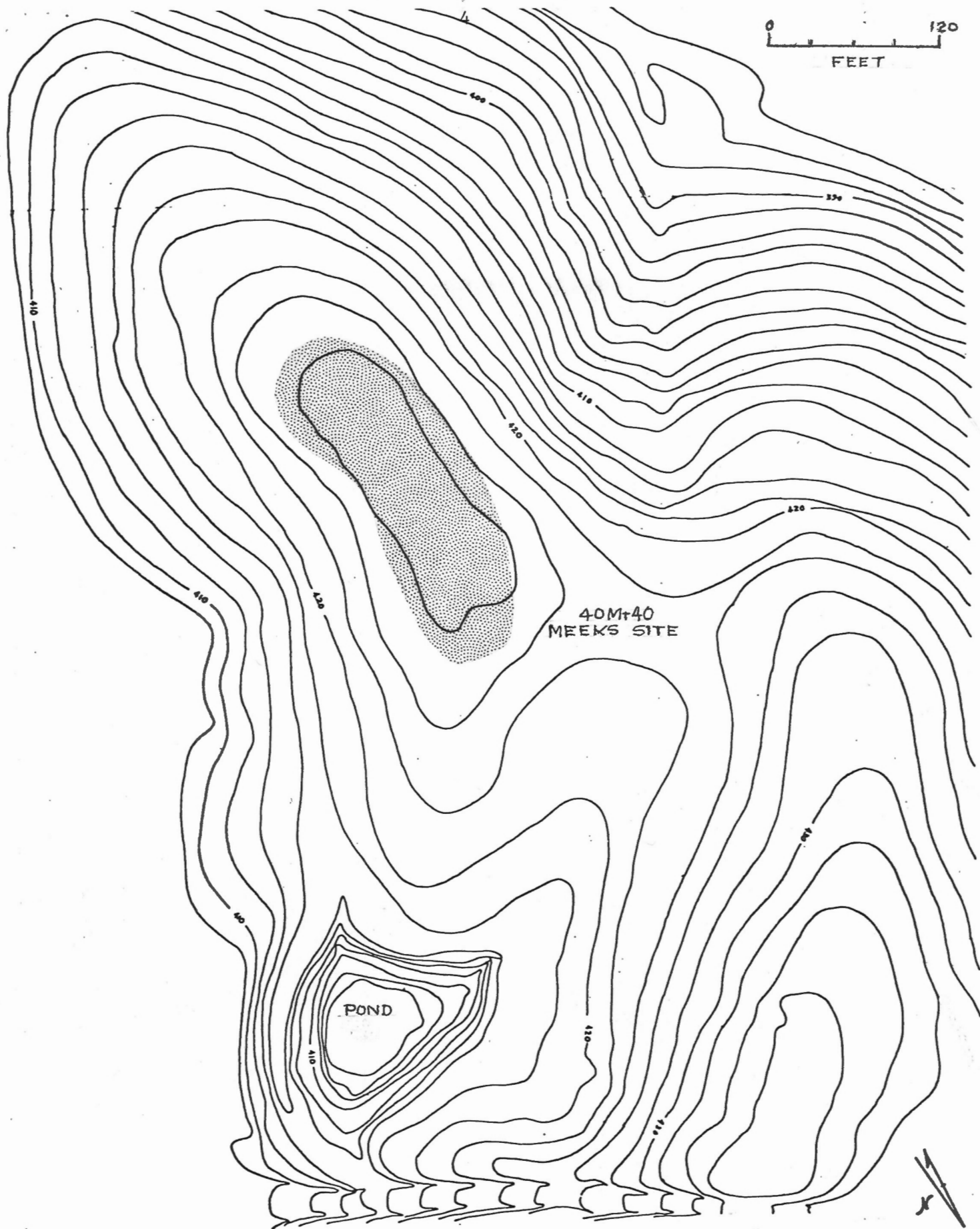


Figure 2. Topographic view of the Meeks Site.



Plate 1. Overall view of the site looking west toward the Cumberland River.



Plate 2. View of the site looking north. The auto is parked on the principal habitation area.

entrenched, meandering with narrow alluvial floodplains in their lower reaches.

The soil of the Meeks Site consists of the Pembroke silt loam, which is a member of the Baxter-Mountview Association. Lampley (1975) describes the Pembroke silt loam as a deep, well-drained rolling soil on broad uplands. These soils were formed in Loess that is approximately two feet thick and in the underlying old alluvium or residuum of limestone that is many feet thick. Slopes range from two to twelve percent.

In a representative profile the surface layer is dark brown silt loam approximately eight inches thick. The upper 20 inches of the subsoil is reddish brown and dark reddish brown, friable or firm silty clay loam. Below this and extending to a depth of 65 inches or more, it is dark-red firm clay.

The permeability is moderate and available water capacity high. In unlimed areas, these soils are strongly acid or very strongly acid throughout.

The Baxter-Mountview Association consists of broadly rounded hills, the tops of which have gently rolling plateau-like areas. A well-defined network of crooked drainageways form the numerous hollows which are almost V-shaped along lateral drainageways, but range to nearly level valleys approximately one-half mile wide along permanent streams (Lampley, et al. 1975).

The common soil pattern in the Association is that of cherty soils on hilltops; chert-free soils on hilltops; and dark-brown, fertile soils on the narrow bottomlands. Since most of the broad hilltops have a two to three foot cover of loess, the soils are loamy to a depth of two feet or more and are relatively chert-free in these areas.

CLIMATE

Montgomery County is generally favored with relatively mild winters and warm summers. Weather sometimes differs in various portions of the County, but altitude differences are not large enough to cause significant differences in the climate.

The climate of the area is primarily influenced by two types of air masses; the first of these overruns the Gulf of Mexico and brings warm moist air over Tennessee; the other consists of cool, dry continental air from north and west of the State. Frequent changes between these two types of air masses over the area, provide changes in the weather (Lampley, et al. 1975).

The average annual precipitation is approximately 48 inches. Daily variations in rainfall over the County are frequent particularly during thunderstorms in the summer. The greatest degree of precipitation occurs during the winter and the least amount in early fall. This sometimes causes a water surplus during the winter that results in excessive runoff and a moisture deficiency in summer resulting in drouth.

The average annual temperature in the central portion of the County is

60 F. Temperatures are more than 90°F on approximately 71 days each year and drop below 32°F on 79 days. During an average winter the ground freezes to a depth of approximately five inches. The average dates of the late freeze in spring and the first during the fall are around April 4 and October 29, respectively, which provide for an average growing season of 207 days (Lampley *et al.* 1975).

FLORA AND FAUNA

In consideration of the floral resources Quarterman and Powell (1978) have concluded that the upland hardwood and post oak - blackjack oak forests comprise the two major categories to be found within the southern portion of the western Highland Rim sub-section. The upland hardwoods include oaks, hickories, and yellow pines. It has been suggested that the upland type in the Montgomery County area in the northern portion of the sub-section is separated into four sub-types, thus the white oak - northern red oak - hickory may also include sugar maple, beech, tulip poplar, and Southern red oak. On moist, north-facing slopes, occurs a beech-maple dominated type whose common associates include white oak, red oak, shagbark hickory, and tulip poplar.

The drier sites generally host a greater predominance of a post oak-black oak type. Also included on drier sites are red oak, chestnut oak, and scarlet oak (Quarterman and Powell, 1978, p. 12).

Bottomland species include swamp white oak, bitternut hickory, and big shellbark hickory as well as occasional sweetgum and black gum.

Streambanks (floodplains) are dominated by silver maple, black willow, cottonwood, and sycamore (Quarterman and Powell, 1978, p. 13).

Mixed mesophytic forest relics occur in the ravines of the more dissected portions of the sub-section (Braun, 1950).

There are also many smaller varieties of plants, shrubs, etc. to be found in the area, consequently the botanical specimens recovered from the Meeks Site excavations suggest the utilization of many of these plants as a food source as well as other uses. The predominance of hickory nut shells with some acorn and walnut included, gives evidence of the importance of the oak-hickory forests to the aboriginal inhabitants. Many other varieties of edible roots, seeds, and berries had surely been available to the Meeks Site inhabitants. The plant resources must have also served a large variety of uses other than for food. Such uses would have included construction, basketry, fiber products, medicines, dyes, and tools.

The following table (Table 1) lists several varieties of plant species which occur in areas near or adjacent to the Meeks Site. The list is based upon surveys of the Tennessee Valley and the Plateau by Ronald Harper (1942, 1943, 1944), and studies of the woody flora of the Land Between the Lakes in Kentucky and Tennessee by E. W. Chester, Louis J. Schibig, and Richard J. Jensen (Nature Conservancy program) (Summers, personal communication, 1978). Ethno-historical accounts of many of the Southeastern Indians (Hudson, 1976) indicate uses of several of the plant species by the Indians.

TABLE I

Potential Floral Resources of the Meeks Site Area

<u>Scientific Name</u>	<u>Common Name</u>
<i>Acer negundo</i>	Box Elder
<i>Acer rubrum</i>	Red Maple
<i>Acer saccharinum</i>	Silver Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Aesculus glabra</i>	Buckeye
<i>Allium canadense</i>	Wild onion
<i>Amelanchier canadensis</i>	Service Berry
<i>Arctium minus</i>	Burdock
<i>Aster pilosus</i>	Aster
<i>Boerhaavia cylindrica</i>	False Nettle
<i>Bursa pastoris</i>	Shepherd's Purse
<i>Carpinus caroliniana</i>	Ironwood
<i>Carya alba</i>	White Hickory
<i>Carya glabra</i>	Pig-nut Hickory
<i>Carya ovata</i>	Shagbark Hickory
<i>Castanea dentata</i>	American Chestnut
<i>Celtis Mississippensis</i>	Hackberry
<i>Coccoloba caroliniana</i>	Coral Beads
<i>Cornus florida</i>	Flowering Dogwood
<i>Dioscorea villosa</i>	Wild Yam
<i>Diospyros virginiana</i>	Persimmon
<i>Fagus grandifolia</i>	American Beech
<i>Festuca Sp.</i>	Fescue
<i>Fraxinus Sp.</i>	Ash
<i>Gleditsia tracanthos</i>	Honey Locust
<i>Hedeoma pulegioides</i>	Pennyroyal
<i>Ilex decidua</i>	Deciduous Holly
<i>Ilex decidua</i>	American Holly
<i>Juglans nigra</i>	Black Walnut
<i>Juniperus virginiana</i>	Cedar
<i>Liquidambar styraciflua</i>	Sweet Gum
<i>Liriodendron tulipifera</i>	Yellow Poplar
<i>Malus angustifolia</i>	Crab Apple
<i>Morus rubra</i>	Red Mulberry
<i>Nyssa sylvatica</i>	Black Gum
<i>Oenothera biennis</i>	Evening Primrose

TABLE I (Cont.)

<u>Scientific Name</u>	<u>Common Name</u>
<i>Oxydendrum arboreum</i>	Sourwood
<i>Parthenocissus quinque folia</i>	Virginia Creeper
<i>Phytolacca americana</i>	Pokeberry
<i>Pinus echinata</i>	Short-leaf Pine
<i>Pinus virginiana</i>	Spruce Pine
<i>Polygonum Sp.</i>	Smartweed
<i>Prunus americana</i>	Wild Plum
<i>Prunus augustifolia</i>	Chickasaw Plum
<i>Prunus serotina</i>	Wild Cherry
<i>Quercus alba</i>	White Oak
<i>Quercus rubra</i>	Red Oak
<i>Quercus coccinea</i>	Scarlet Oak
<i>Quercus falcata</i>	Southern Red Oak
<i>Quercus lyrata</i>	Overcup Oak
<i>Quercus Sp. marilandica</i>	Black-Jack Oak
<i>Quercusmontana</i>	Chestnut Oak
<i>Muhlenbergii Sp.</i>	Chinquapin Oak
<i>Quercus pellos</i>	Willow Oak
<i>Quercus prinus</i>	Rock Chestnut Oak
<i>Quercus shumardii</i>	Shumard's Oak
<i>Quercus velutina</i>	Black Oak
<i>Rhus copallina</i>	Dwarf Sumac
<i>Rhus glabra</i>	Smooth Sumac
<i>Rhus radicans</i>	Poison Ivy
<i>Robinia pseudoacacia</i>	Black Locust
<i>Rubus argutus</i>	Tall Blackberry
<i>Salix nigra</i>	Willow
<i>Sambucus canadensis</i>	American Elder
<i>Sassafras albidum</i>	Sassafras
<i>Smilax bona-nox</i>	Bullbrier
<i>Smilax glauca</i>	Sawbrier
<i>Smilax rotundifolia</i>	Greenbrier
<i>Tilia Sp.</i>	Basswood
<i>Typha latifolia</i>	Cat-tail
<i>Ulmus fulva</i>	Slippery Elm
<i>Vaccinium arboreum</i>	Highbush Blueberry
<i>Viburnum</i>	Black Haw
<i>Vitis cordifolia</i>	Frost Grapes

The forest and riverine environments in the vicinity of the Meeks Site supported a variety of animal life utilized by the Indians.

Faunal populations within the area would have included most of the species indigenous to the upland forests of the Southeastern United States. The most commonly known mammalian species would include whitetail deer, elk, black bear, wild boar, bobcat, cougar, beaver, otter, muskrat, weasel, mink, skunk, raccoons, o'possum, cottontail rabbit, squirrel, groundhog, wolf, and gray fox. There were also many varieties of small rodents such as chipmunk, mice and rats.

There were also many varieties of birds of which the most commonly known species considered by the Indians for food sources include wild turkey, Canada goose, passenger pigeon, bobwhite, and several varieties of duck. Other common species not necessarily considered as a potential food source include owls, crows, woodpeckers, vultures, as well as many smaller varieties.

Amphibians and reptiles also were to be found in great numbers, but it is unlikely that reptiles had been utilized as a food source. The occurrence of the shells and bones of turtles at the Meeks as well as other archaeological sites lends support to the fact that turtles had served as supplement to the aboriginal diet.

Large numbers and varieties of fish and mollusks were also available to the Indians. Such fish and mollusks were to be found in the Cumberland River and its smaller stream tributaries.

It is probable that the wildlife populations have not changed significantly for the past several thousand years. Consequently the species which had been prevalent during aboriginal times are essentially the same as those found in the region today, with the exception of elk, porcupine, and black bear. It is not presently known how long ago the porcupine disappeared from the region, but the elk and black bear have been killed or driven out within the past one hundred years.

METHOD OF EXCAVATION

Following the completion of the survey within the areas of proposed construction, it was recommended that the site be fully excavated since it contained sub-surface features and was located in one of the construction areas for proposed grading. It was decided that fifteen work days would be needed to complete archaeological investigations, this being based upon weather conditions, amount of overburden to be removed, and the extent of area to be investigated.

Since the principal portion of the midden had been disturbed by previous decades of plowing, it was decided that all overburden could best be removed by means of a pan-scraper, shaving the surface in 1-inch increments.

Prior to the removal of the overburden, a datum was established to facilitate accurate recording of all features. Removal of the overburden

from the site was begun on July 12th and conducted in two phases. The first included stripping of the entire eastern half of the site, and the second phase, stripping of the remaining portion. Once the overburden was removed, exposing the top of the underlying subsoil, features, appearing as dark soil stains, were easily identified. All features were then mapped, drawn to scale, photographed, and excavated. Flotation samples were also collected from those pits and other features which appeared most promising.

ARCHAEOLOGICAL FEATURES

A total of seventy-five features, as well as numerous post molds, were exposed, excavated, and recorded (Figures 2 - 7; and Plates 1 - 10). Of this total four of the features date from the Mississippian Period, four from the Woodland Period, and sixty-five from the Late Archaic Period. The remaining two features cannot be classified as man-made and consequently not be described in this report. These two features are designated as Features 13 and 33. Although many post molds were recorded, none formed any sort of a structural pattern. However, it is of interest that many of the post molds were closely adjacent to pits, suggesting that posts had been used as hanging racks or other similar purposes.

There was a noticeable absence of burials at the Meeks Site except for a single poorly-preserved dog burial and the badly disturbed remnant of a human burial. The only remaining portion of the burial consisted of a poorly preserved fragmented tibia and femur (Figure 3). The scarcity of burials may possibly be attributed to the poor bone preservation or by the fact that few individuals had been buried at the site. The cremated remains of an individual were also found scattered throughout Feature 65.

In reference to all the recorded features it should be noted that these had been disturbed by cultivation in earlier years and that the upper level of the pits (represented in the plow zone) was removed when the site was stripped of its overburden. Consequently, the descriptions and illustrations include only the lower remnant of each pit. It is uncertain, however, whether the Late Archaic Component had represented a single occupation or a series of brief occupations occurring over a period of several years.

Brief descriptions of features with their contents are as follows:

Feature 1. A basin-shaped pit 77 cm. long, 68 cm. wide and 12 cm. deep, with sloping interior walls and a rounded bottom. Associated artifacts include the following:

Flakes	69
Burned Limestone fragments	7
Pottery sherds (limestone tempered)	10
Adena Stemmed projectile points	1
Big Sandy side-notched scrapers	1
Burned clay or daub	1
Bakers Creek projectile points	1

Feature 2. A small pit 50 cm long, 48 cm wide and 7 cm deep having sloping interior walls and a rounded bottom. The pit contained the following items:

Burned cane fragments	21
Flakes	1
Wood charcoal fragments	6
Bone fragments (mammal)	14

Feature 3. A small pit 60 cm long, 56 cm wide and 18 cm deep with sloping interior walls and a rounded bottom. The pit contained dark brown sandy fill. There were no associated cultural debris.

Feature 4. This is a small slightly oval pit 47 cm long, 43 cm wide and 4 cm deep with sloping walls and a flat bottom. The pit contained many fragments of burned limestone.

Feature 5. A small circular pit 57 cm in diameter and 9.5 cm deep. The pit, having sloping walls and a rounded bottom, contained the following artifacts:

Flakes	8
Burned limestone fragments	3
Wood charcoal fragments	10
Bone fragments (mammal)	7

Feature 6. An oval shaped pit 70 cm long, 63 cm wide, and 12 cm deep with burned, sloping interior walls and a rounded bottom. The pit was filled with ashes, fragments of baked earth, fragments of wood charcoal, and the following artifacts:

Hand wrought nail	1
Flakes	5
Utilized flakes	1
Projectile point midsections	1
Blue shell edged plate fragments	1

Feature 7. A circular pit 64 cm in diameter, .6 cm deep with sloping interior walls and a flat bottom. This pit was closely adjacent to Feature 6 and was probably related. Feature 7 contained chert flakes and a small number of fragmentary bones.

Feature 8. This is a small oval pit 68 cm long, 58 cm wide, 10 cm deep with sloping walls and a flat bottom. The pit contained the following artifacts:

Flakes	9
Bone fragments (mammal)	3
Sandstone bowl fragments	1
Aquatic snail shells	1

Feature 9. An oval pit 66 cm long, 58 cm wide and 16 cm deep with sloping walls and an irregular shaped bottom. This pit contained charred wood fragments and the following artifacts:

Flakes	13
Utilized flakes	1
Cores	1
Bone fragments (mammal)	13
Human skull fragments	3
Bone fragments (bird)	1
Charred hickory nut shells	8

Feature 10. (plates 3-4, Fig. 6). A circular pit 1.14 meters in diameter and 18 cm deep with sloping walls and a rounded bottom. Three post molds closely adjacent to this pit probably served to accommodate posts which had been used as hanging racks for food or other items. In addition to the great volume of ashes and charred wood fragments, the pit contained the following artifacts:

Burned daub fragments	23
Limestone fragments	20
Chert fragments	7
Flakes	36
Modified flake drills	1
Biface fragments	1
Utilized flakes	1
Cores	1
Bone fragments (mammal)	2

Feature 11. A small circular pit 66 cm in diameter, 11 cm deep with sloping walls and an irregular shaped bottom. The pit contained charred wood fragments and the following artifacts:

Flakes	2
Biface fragments	1
Bone fragments (mammal)	3
Iron belt buckle (intrusive)	1

Feature 12. An oval pit 79 cm long, 48 cm wide, and 22 cm deep with sloping walls and a rounded bottom. The pit contained the following artifacts:

Flakes	26
Cores	2
Chert fragments	2
Bone fragments (mammal)	4

Feature 13. Tree stump disturbance, which appears to have been intrusive into a refuse pit. Artifacts recovered within and adjacent to the disturbance include the following:



Plate 3. Feature 10 Pit prior to its excavation. Light colored spots within the pit outline are ashes.

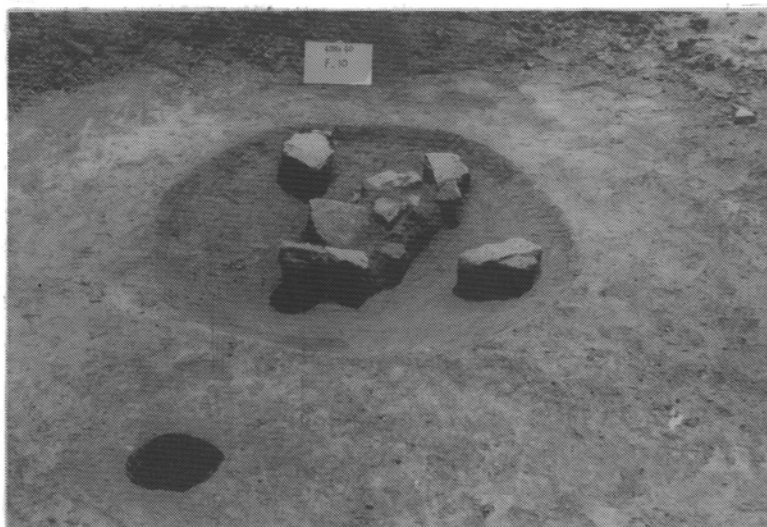


Plate 4. Feature 10 and adjacent post mold after excavation.

Flakes	2
Utilized flakes	1
Projectile point midsections	1
Burned daub fragments	3
Walnut shell fragments	2
Wood charcoal fragments	20

Feature 14. An oval pit 80 cm. long, 63 cm. wide, and 13 cm. deep with sloping interior walls and a rounded bottom. Artifacts associated with the pit include the following:

Flakes	11
Utilized flakes	1
Burned daub fragments	1

Feature 15. A large circular pit 83 cm. in diameter and 15 cm. deep with vertical interior walls and an irregular shaped bottom. The pit contained the following artifacts:

Flakes	15
Biface fragments	1
Charred hickory nut shells	6

Feature 16. An oval pit 60 cm. long, 48 cm. wide and 11 cm. deep with vertical sides and a flat bottom. The pit contained the following artifacts:

Flakes	5
Bone fragments (mammal)	4
Limestone fragments	10

Feature 17. A circular pit 1.10 meters in diameter and 36 cm. deep with sloping interior walls and rounded bottom which were burned or baked as a result of intense heat. This feature was closely adjacent to Features 14, 15, and 16 and was possibly related. Artifacts associated with Feature 17 include the following artifacts:

Limestone digging implements	2
Pitted nutstone	1
Atlatl weight	1
Bell shaped pestles	1
Flakes	28
Bifaces	1
Utilized flakes	2
Utilized cores	2
Bifacial scrapers	1
Quartzite cobble fragments	1
Ground cobbles	1
Bone fragments (mammal)	36
Bone fragments (bird)	5
Mussel shells	7
Bone awls (turkey tibia)	1
Projectile points (antler)	1

Feature 18. A small basin shaped pit 25 cm in diameter, 8 cm deep with sloping walls and a rounded bottom. The pit contained no associated artifacts.

Feature 19. A small shallow oval pit 62 cm long, 50 cm wide, and 8 cm deep with sloping interior walls and round bottom. Associated artifacts include 6 fragmentary animal bones.

Feature 20. A large oval pit 1.10 meters long, 94 cm wide, and 38 cm deep with sloping interior walls and irregular shaped bottom. This feature was intrusive into Feature 21 and contained the following artifacts:

Flakes	15
Cores	3
Utilized flakes	1
Biface fragments	1
Fire cracked stones	3
Nut stones	1
Projectile point fragments (Adena)	1
Bone fragments (mammal)	3
Turtle shell fragments	2
Mussel shells	1

Feature 21. An oval pit 1.15 meters long, 90 cm wide, and 26 cm deep with sloping walls and round bottom. Artifacts associated with this feature include the following:

Ground cobbles	1
Flakes	2
Utilized flakes	2
Fire cracked rocks	1

Feature 22. A large pit 1.03 meters long, 90 cm wide, and 27 cm deep with sloping interior walls and a rounded bottom. This pit was intrusive into Features 20 and 21 indicating a later date of construction. Associated artifacts include charred wood fragments and the following artifacts:

Flakes	16
Utilized flakes	1
Cores	2
Hammerstones (Quartzite)	1
Burned daub fragments	1
Limestone fragments	1
Bone fragments (mammal)	1
Hickory nut shells	3

Feature 23. The remnant of a small oval pit 61 cm long, 51 cm wide, and 3 cm deep. Interior shape of this pit is unknown since most of it had been destroyed during the removal of the overburden from the site. Two chert flakes were the only associated artifacts.

Feature 24. A small poorly defined oval pit 57 cm long, 47 cm wide with sloping walls and round bottom. Artifact associations include 2 burned daub fragments and 6 chert flakes.

Feature 25. A small oval shaped pit 71 cm long, 63 cm wide, and 6.5 cm deep with sloping interior walls and a flat bottom. The pit contained wood charcoal fragments, a single mussel shell, and fragments of burned limestone.

Feature 26. (Plate 5) A large circular pit 95 cm in diameter and 13 cm deep with vertical walls and a rounded bottom. This feature contained a large quantity of ashes, traces of wood charcoal, and the following artifacts:

Digging implements (limestone)	4
Flakes	8
Cores	2
Bone fragments (mammal)	25
Turtle shell fragments	2
Bone fragments (bird)	7
Burned limestone fragments	50

Feature 27. An oval shaped pit 80 cm long, 70 cm wide, and 8 cm deep with vertical walls and a flat bottom. Associated artifacts include the following:

Flakes	8
Utilized flakes	2
Core fragments	2

Feature 28. A small oval pit 60 cm long, 56 cm wide, and 13 cm deep with sloping interior walls and an irregular shaped floor. Associated artifacts include the following:

Flakes	47
Burned daub fragments	4
Cores	1
Flake scrapers	1
Projectile point (distal ends)	1
Bifaces	1
Charred wood fragments	6

Feature 29. A circular pit 64 cm in diameter and 10 cm deep with sloping walls and a rounded bottom. The pit contained the following artifacts:

Flakes	1
Utilized flakes	1

Feature 30. An oval pit 73 cm long, 67 cm wide, and 13 cm deep with sloping interior walls and a rounded bottom. The pit contained charred wood fragments, fire cracked limestone fragments, and the following additional artifacts:

Flakes	6
Core fragments	1
Biface fragments	1
Quartzite pebbles	1

Feature 31. A bell-shaped Mississippian Period pit 99 cm in diameter and 26 cm deep with a rounded bottom which, along with the walls, had been baked hard as a result of intense heat. Associated artifacts include the following:

Projectile point bases (Adena)	1
Projectile points (Baker's Creek)	1
Projectile points (Big Sandy)	1
Projectile points (distal end)	1
Flakes	27
Chert fragments	12
Cores and fragments	3
Ground cobbles	1
Utilized flakes	4
Sherds (Shell temp. Plain)	28
Sherds (Shell temp. cord marked)	2
Sherds (Shell temp. fabric marked)	1
Mussel shells	4
Bone fragments (mammal)	4
Corn cob fragments	2
Hickory nut shell fragments	8
Seeds	1
Unfired pottery fragments	1

Feature 32. A small oval pit 69 cm long, 65 cm wide, and 13 cm deep with rounded bottom and sloping interior walls. The pit contained dark brown fill and the following artifacts belonging to the Mississippian cultural period:

Sherds (Shell temp. plain)	3
Flakes	9
Utilized flakes	1
Mussel shells	5

Feature 33. A tree root disturbance having 7 chert flakes, and 1 core associated.

Feature 34. This is a small circular pit 75 cm in diameter and 8 cm deep with sloping interior walls and a rounded bottom. The pit contained traces of wood charcoal and the following artifacts:

Flakes	22
Utilized flakes	1
Projectile point (distal ends)	1
Biface fragments	1

Feature 35. An oval pit 93 cm. long, 80 cm. wide and 14 cm. deep with sloping interior walls and round bottom. The pit had been used for deposit of refuse and contained the following artifacts:

Flakes	17
Utilized flakes	2

Feature 36. A large, slightly oval pit 1.5 meters long, 1.20 meters wide and 40 cm. deep with sloping walls and a flat bottom. Associated artifacts include the following:

Flakes	34
Fire-cracked stones	3
Projectile point base (Sykes, Class 7)	1
Sherds (Sand temp. plain)	1

Feature 37. This is a small oval pit 76 cm. long, 54 cm. wide, and 9 cm. deep with sloping walls and rounded bottom. Associated artifacts include the following:

Flakes	5
Projectile point (distal ends)	1
Drill fragments	1
Bone fragments (mammal)	6
Acorn meats	10

Feature 38. A large circular pit 93 cm. in diameter and 18 cm. deep with sloping walls and a rounded bottom. The pit contained the following items:

Cores	4
Flakes	28
Projectile point (distal ends)	1
Bone fragments (mammal)	1

Feature 39. A small pit 33 cm. in diameter and 8 cm. deep with sloping interior walls and a flat bottom. Associated artifacts include two chert flakes.

Feature 40. (Plate 6) A small circular pit 61 cm. in diameter and 14 cm. deep with sloping interior walls and a rounded bottom. Associated artifacts include the following:

Projectile points (Turkey tail)	1
Flakes	2
Atlatl weight	1
Bone fragments (mammal)	3
Fire cracked stones	4

Feature 41. This is a circular pit 58 cm. in diameter and 8 cm. deep with sloping interior walls and a rounded bottom. The pit contained no artifacts or other refuse.

Feature 42. A small oval pit 58 cm. long, 54 cm. wide, and 4 cm. deep with sloping interior walls and a rounded bottom. The pit contained no identifiable



Plate 5. Feature 26 Pit with associated limestone digging implements.



Plate 6. Feature 40 Pit with associated Turkey Tail projectile point and Atlatl weight.

refuse or artifacts.

Feature 43. An oval pit 60 cm long, 46 cm wide, and 19 cm deep with sloping interior walls and a rounded bottom. The pit contained a few small fragments of charred wood, a single chert flake, and two fragments of burned daub.

Feature 44. A large Woodland or Mississippian pit 87 cm long, 80 cm wide, and 18 cm deep with sloping interior walls and a rounded bottom. Refuse and identifiable artifacts include the following:

Celts(fragmentary)	1
Flakes	5
Utilized flakes	1
Burned daub fragments	2
Bone fragments (mammal)	6
Charred wood fragments	35

Feature 45. (Figure 3) A large circular pit 76 cm in diameter and 25 cm deep with sloping interior walls and a rounded bottom. The partial remains of a human burial (8 long bone fragments representative of a tibia and femur) indicate that the pit had first been used for burial purposes. The poorly preserved remains of a dog were also found in the pit but had been placed there at a later date than the human remains. The evidence suggests that the final use of the pit had been for deposition of refuse. Artifacts recovered from the pit include the following:

Drills (straight shank)	1
Drills (incomplete)	1
Utilized flakes	1
Chert fragments	5
Flakes	35
Bone fragments (mammal)	157
Bones (fish)	1
Bones (bird)	1
Bone fragments (human)	8
Bone fragments (dog)	10

Feature 46. An oval pit 1.15 meters long, 89 cm wide, and 31 cm deep with sloping interior walls and a rounded bottom. The pit contained the following artifacts and refuse:

Flakes	45
Biface fragments	1
Preform fragments	1
Burned clay fragments	7
Drills (stemmed)	1
Cores	1
Bell-shaped pestles	2
Bone fragments (various mammals)	45
Turtle shell fragments	3
Bone fragments (fish)	2
Mussel shells	3

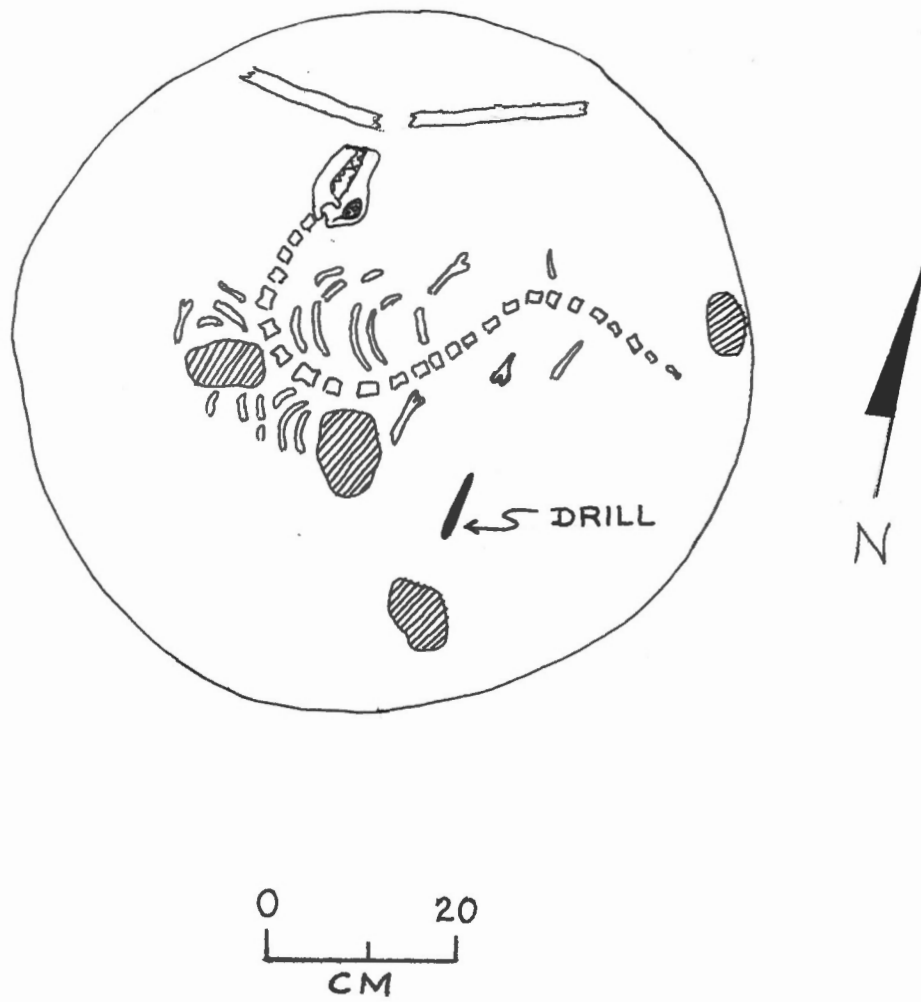


Figure 3. Feature 45 dog burial.

Feature 47. A small oval pit 65 cm long, 53 cm wide, and 7 cm deep with sloping interior walls and a flat bottom. Associated artifacts include the following:

Charred wood fragments	56
Flakes	4
Bone fragments (mammal)	21
Limestone fragments	7

Feature 48. A large oval pit 1.10 meters long, 90 cm wide and 20 cm deep with sloping interior walls and an irregular bottom or floor. The pit contained wood charcoal fragments as well as the following artifacts:

Flakes	14
Cores	2
Chert fragments	1
Preform fragments	1
Projectile points (Eva)	1
Worked antler fragments	1
Bone fragments (Mammal)	1

Feature 49. A small circular pit 65 cm in diameter and 6 cm deep with vertical walls and a flat bottom. The pit contained the following artifacts:

Flakes	2
Burned daub fragments	8
Limestone fragments	1

Feature 50. (Plate 7) A small pit 95 cm long, 56 cm wide, and 18 cm deep with sloping interior walls and a rounded bottom or floor. The pit contained a black organic fill containing charcoal traces and the following artifacts:

Projectile points (Adena)	1
Atlatl weights	1
Chert fragments (fire cracked)	4
Flakes	15
Bone fragments (mammal)	2
Burned daub fragments	2

Feature 51. A small circular pit 66 cm in diameter and 10 cm deep with sloping interior walls and a rounded bottom. The pit contained no associated artifacts.

Feature 52. This feature had possibly been the remains of a pit which had been badly disturbed by tree roots.

Feature 53. A recent disturbance resulting from tree root intrusions.

Feature 54. A small circular fire pit or earth oven 54 cm in diameter and 8 cm deep with vertical walls and a flat bottom which had been burned. Associated artifacts include 4 chert flakes.

Feature 55. A small oval pit 45 cm long, 40 cm wide, and 6 cm deep with sloping interior walls and a flat bottom or floor. Associated artifacts include the following:

Biface fragments	1
Burned daub fragments	1

Feature 56. An oval pit 62 cm long, 45 cm wide and 6 cm deep with sloping interior walls and a rounded bottom. The pit contained the following artifacts:

Limestone fragments	2
Biface fragments	1
Projectile point fragments	1

Feature 57. A small oval pit 56 cm long, 50 cm wide, and 6 cm deep with sloping interior walls and a rounded bottom. The pit contained the following artifacts:

Flakes	7
--------	---

Feature 58. A circular pit 45 cm in diameter and 4 cm deep with sloping interior walls and a flat bottom. This pit was closely adjacent to Features 56 and 57 and had possibly been related. A large post mold was also adjacent to the above three pits. Feature 58 contained a limestone digging implement.

Feature 59. A small circular pit 45 cm in diameter and 8 cm deep with sloping interior walls and a rounded bottom. The pit contained a few small fragments of wood charcoal and the following additional artifacts:

Chert hammerstones	1
Flakes	4
Chert fragments	1
Bone fragments (mammal)	1

Feature 60. A large oval pit 71 cm long, 63 cm wide, and 12 cm deep with vertical walls and an irregular floor. Associated artifacts include the following:

Flakes	3
Pearlware (Blue Shell Edge) plate fragments	3
Pearlware bowl fragments	2
Bone fragments (mammal)	1

Feature 61. A circular pit 67 cm in diameter and 10 cm deep with sloping interior walls and an irregular bottom. The pit contained twenty fragments of burned limestone and the following other items:

Drills	1
Projectile points (Adena)	1
Flakes	10
Bone fragments (mammal)	2

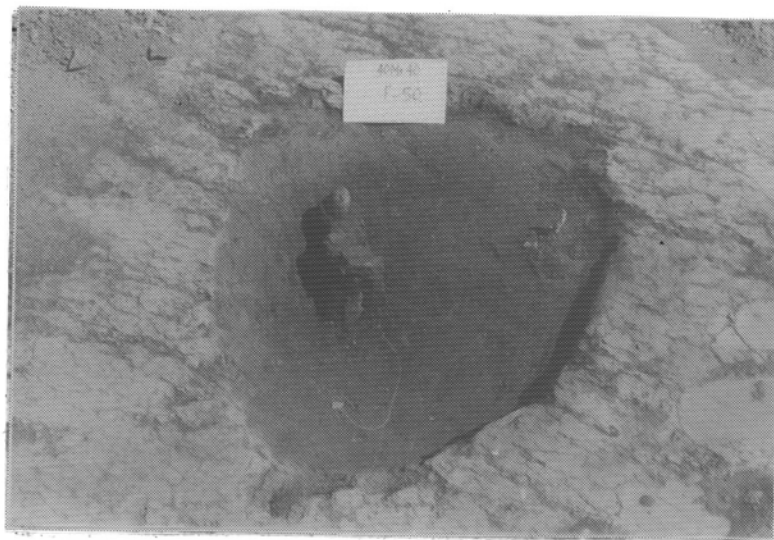


Plate 7. Feature 50 refuse pit with associated Adena projectile point and atlatl weight.

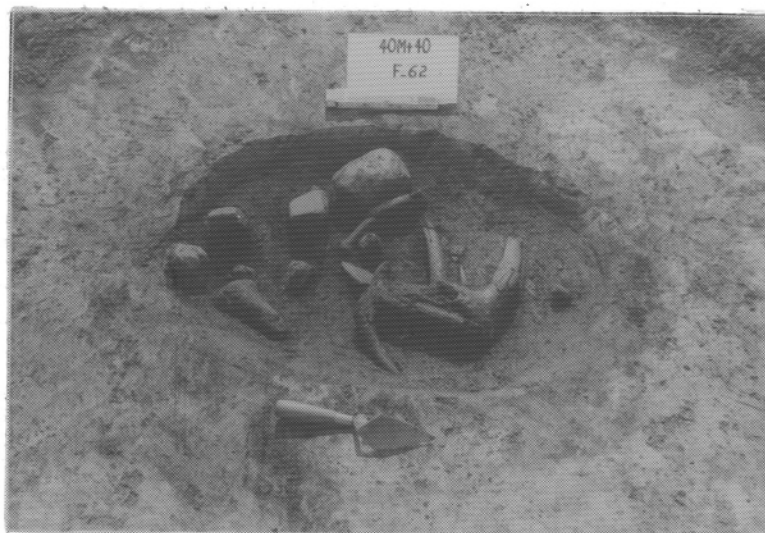


Plate 8. Feature 62 Refuse Pit. Note bell-shaped pestle and deer antler tines.

Feature 62 (Plate 8). An oval pit 78 cm. long, 56 cm. wide, and 12 cm. deep with sloping interior walls and a rounded bottom. The pit contained a few fire cracked stones, traces of wood charcoal and the following additional artifacts:

Antler tine flakes	1
Flakes	14
Bell shaped pestles	1
Deer antler fragments	85
Bone fragments (mammal)	8
Bone fragments (turkey)	9

Feature 63. An oval pit 80 cm. long, 68 cm. wide, and 6 cm. deep with vertical walls and a round bottom. The pit contained brown fill mixed with traces of wood charcoal and the following artifacts:

Limestone fragments	6
Flakes	3
Cores	1
Animal bone fragments (burned)	14

Feature 64: A small circular pit 58 cm. in diameter and 13 cm. deep with sloping interior walls and a round bottom. The pit contained the following artifacts:

Limestone fragments	2
Flakes	6
Utilized flakes	1

Feature 65. An oval pit 64 cm. long, 50 cm. wide, and 10 cm. deep with sloping interior walls and a flat bottom. This pit dating from the Woodland Period contained the remains of a cremation as well as traces of wood charcoal and the following artifacts:

Flakes	11
Burned daub fragments	7
Slate fragments	3
Human bone fragments (burned)	28
Sherds (sand tempered)	2

Feature 66. An oval pit (function unknown) 58 cm. long, 48 cm. wide, and 14 cm. deep with sloping interior walls and a round bottom. The pit contained traces of wood charcoal and two fragments of burned daub.

Feature 67. A small pit 73 cm. long, 65 cm. wide, and 11 cm. deep with sloping interior walls and a round bottom. The pit contained the following artifacts:

Flakes	8
Core fragments	2
Limestone fragments	3
Burned daub fragments	1

Feature 68. An oval pit 82 cm. wide and 18 cm. deep with sloping interior walls and a round bottom. The pit contained black organic fill containing small traces of charcoal and the following artifacts:

Flakes	12
Bone fragments (mammal)	2

It should be noted that this feature was adjacent to Feature 70 and may have been related.

Feature 69 (Plate 9, Figure 7). An oval pit 106 cm long, 100 cm wide, and 17 cm. deep with sloping interior walls and a round bottom. The pit contained the following artifacts:

Projectile points (Adena)	1
Flakes	8
Core fragments	1
Chert fragments	2
Limestone fragments	1
Bone fragments (mammal)	9

Feature 70. A small circular pit 48 cm in diameter and 13 cm deep with sloping interior walls and a round bottom. The pit was filled with dark gray soil and contained a single limestone fragment and three chert flakes.

Feature 71. (Plate 10, Figure 7) An oval pit 90 cm long, 70 cm wide, and 13 cm deep with sloping interior walls and a flat bottom. The pit contained black organic fill and the following artifacts:

Projectile points (Adena)	2
Anvil stones (chert)	1
Fire cracked stones	2
Flakes	5
Cannel coal fragments	13
Bone fragments (mammal)	3
Chert fragments	2
Ground cobbles	1

Feature 72. An oval pit 85 cm long, 74 cm wide and 19 cm deep with sloping interior walls and a round bottom. The pit contained dark brown fill and the following artifacts:

Bifaces	1
Flakes	38
Chert fragments	1
Utilized flakes	1
Burned daub fragments	1
Preform fragments	1

Feature 73. A small oval Woodland pit 66 cm long, 58 cm wide and 12 cm deep with sloping interior walls and a round bottom. The pit contained dark brown fill intermixed with traces of wood charcoal as well as the following artifacts:

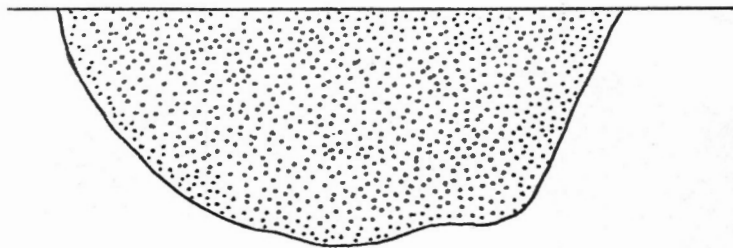
Flakes	12
Sherds (limestone tempered)	1
Limestone fragments	2
Cannel coal fragments	1



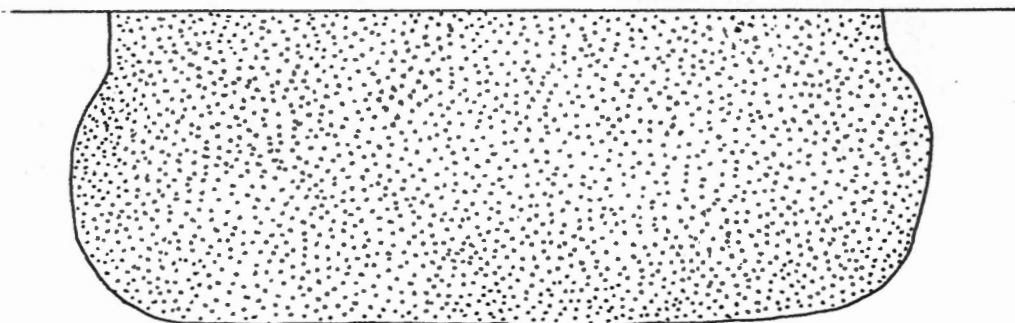
Plate 9. Feature 69 Pit with associated Adena projectile point.



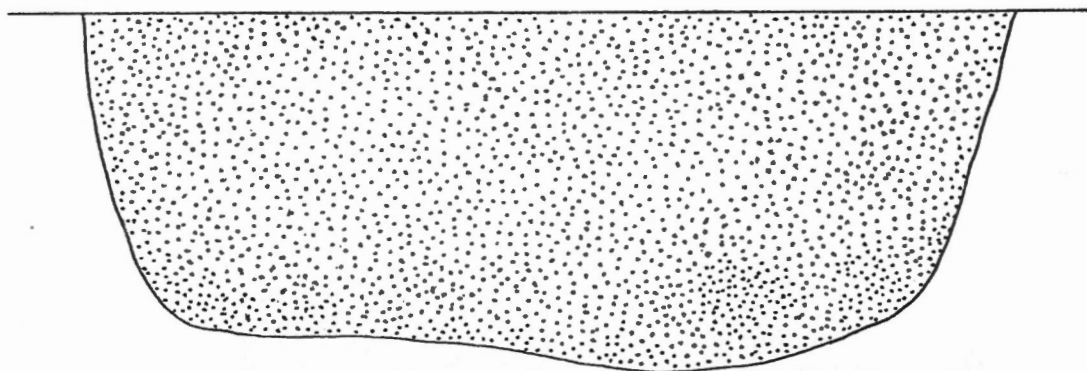
Plate 10. Feature 71 Pit with associated stones, animal bones, and Adena projectile points.



F 28



F 31



F 36

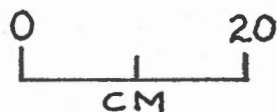
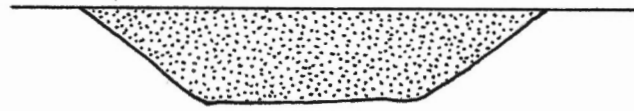
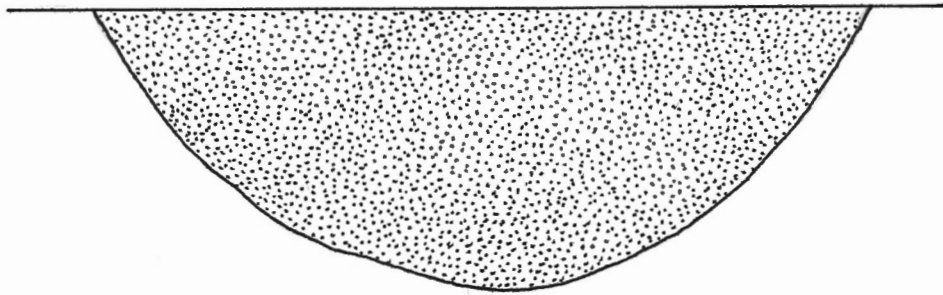


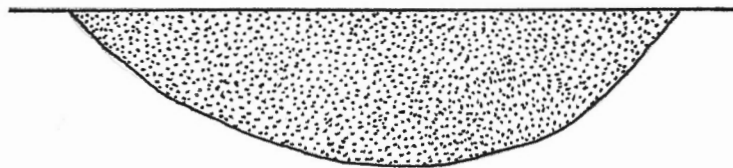
Figure 4. Pit Profiles. F-31 is Mississippian.



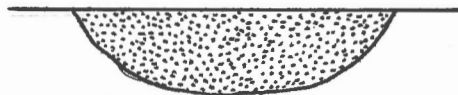
F 43



F 45



F 50



F 59

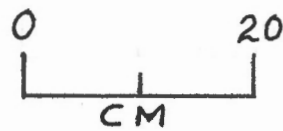


Figure 5. Pit Profiles.

Feature 74. A small basin-shaped pit 45 cm. in diameter and 8 cm. deep with sloping interior walls and a round bottom. The pit contained dark gray fill as well as thirteen chert flakes.

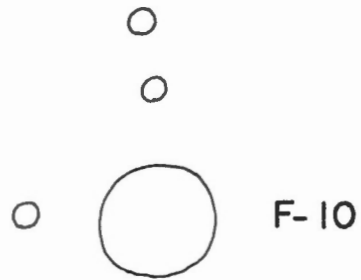
Feature 75. A large circular pit 98 cm. in diameter and 18 cm. deep with interior sloping walls and a round bottom. The pit contained a few fragments of badly decomposed animal bone and two burned daub fragments.

Upon completion of the mapping of all features and post molds, it was observed that post molds were adjacent to many of the pits. There are several post mold-pit arrangements which suggests that these features were probably interrelated. The arrangements consist of a single pit with a single adjacent post mold (Figure 6), clusters of three or four pits with a single adjacent post mold (Figure 7), or a single pit with two or more adjacent post molds (Figure 6). In such instances where posts had been closely adjacent to a pit or several pits, it is conceivable that such posts had perhaps functioned as hanging racks, supports for wind screens, or some other activity related to the functions of the pits. There are several instances in which posts had been set close to pit hearths suggesting their use in activities related to food processing such as drying of meat or vegetal materials. Other pits contained food processing tools, such as pestles and nut stones which suggest that these features had been used in food processing activities. Several pits also contained cores, flakes, projectile points, and other tools broken and discarded during the process of manufacture, suggesting that flint knapping (tool manufacture and weapons repair) had been included in the activities occurring adjacent or near those features containing the above artifacts.

The following table (Table 2) lists the activity areas, as suggested by pit-post mold clustering.

32
TABLE 2

<u>Activity Area</u>	<u>Feature</u>	<u>Type</u>	<u>Post Molds</u>	<u>Suggested Activities</u>
1	5	Refuse Pit	1	Food processing
	6	Pit hearth		Food preparation
	7	Refuse		
2	9	Pit hearth	2	Food preparation
				Food processing
				Flint knapping
3	10	Pit hearth	3	Food preparation
				Food processing
4	16	Pit hearth	1	Food preparation
				Food processing
5	19	Pit hearth	3	Food preparation
				Food processing
6	32	Pit hearth	1	Food preparation
				Food processing
7	34	Pit	1	Food processing
				Flint knapping
8	35	Pit hearth	1	Food preparation
				Food processing
				Flint knapping
9	41	Unknown	-	Undetermined
10	45	Refuse pit	1	Food processing
	46	Pit hearth		Food preparation
11	54	Pit hearth	3	Food preparation
				Food processing
12	59	Pit hearth	1	Food preparation
				Food processing
				Flint knapping
13	63	Pit hearth	1	Food preparation
				Food processing
14	66	Refuse pit	1	Food processing
	67	Refuse pit		Flint knapping
	75	Pit hearth		Food preparation
15	68	Refuse pit	1	Food processing
	69	Refuse pit		Flint knapping
	70	Refuse pit		
	71	Pit hearth		Food preparation

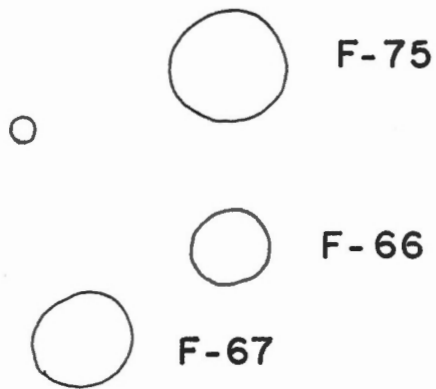


TYPE 1 ARRANGEMENT

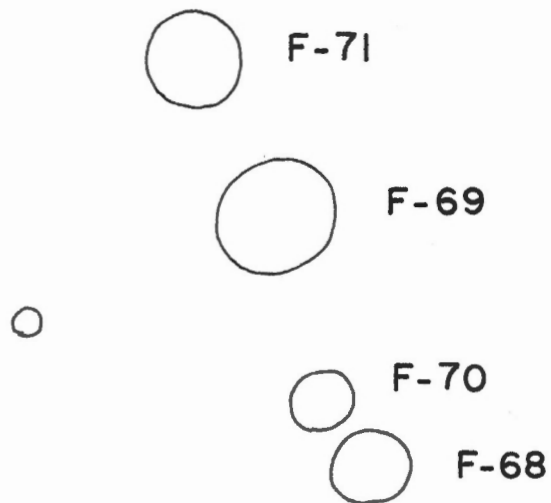


TYPE 2 ARRANGEMENT

Figure 6. Pit-Post Mold Arrangements



TYPE 3 ARRANGEMENT



TYPE 4 ARRANGEMENT

Figure 7. Pit-Post Mold Arrangements

ARTIFACT ASSEMBLAGE

A total of 2,593 artifacts were recovered from the site, including material from all features, general excavations, and the surface. The collection includes many objects which can be classified within the general categories of metal, chipped stone, ceramics, ground and pecked stone, and lithic debris. The artifact count does not indicate in every instance complete specimens as many artifacts recovered were fragmentary, but nonetheless informative statistically. Since the inventory for each feature is included in the description of that particular feature, repeated descriptions of individual artifacts from each feature will not be done. However, a general description of artifacts from the site is in order.

Examination of all the lithic artifacts from the site suggests that these had been manufactured from a variety of materials which had been obtained locally and in adjacent areas to the site. The most common chert used for manufacture of tools from the Meeks Site had been in the blue-gray and tan varieties derived from the Fort Payne Formation. Lithic waste from the site strongly suggests that the chert had occurred both as large pebble nodules and weathered blocks which are common in the Nashville Basin and adjacent areas of the Lower Highland Rim along the Cumberland River and its smaller stream tributaries. Fragments of water-worn cortex from pebble nodules as well as chert blocks are common in the chipping debris from the site.

Some implements from the site were also manufactured from Dover chert which occurs principally in Stewart County, Tennessee where a number of quarry sites have been located near the town of Dover.

Other stones used for tools such as sandstone, limestone, and quartzite were also derived locally. Quartzite and sandstone cobbles can be found in most local stream beds.

Projectile Points

A total of 82 projectile points, including fragments, were recovered from the site, both from the surface, as well as from excavated features. Of the total number of specimens recovered only 32 examples can be recognized as belonging to a given type, consequently, the following types and classes are as follows: Midsections 14; distal ends 25; Class 1 (Adena) 17; Class 2 (Bakers Creek) 2; Class 3 (Big Sandy) 2; Class 4 (Eva) 2; Class 5 (Kirk Corner Notched) 5; Class 6 (Expanded stem) 1; Class 7 (Sykes) 2; Class 8 (Turkey Tail) 4; and Classes 9-12, which do not fit into any known type category, 5 examples. All of the above types are described as follows:

Class 1. Adena (Cambron and Hulse, 1964) (Bell, 1958) (Figure 8, A-G). Sample size: 9 complete and 8 fragmentary. Form: Triangular blades with excurvate or straight edges. Stemmed: Medium to long stems with rounded

bases. One example has a pointed base. Cross section: Flattened. Material: Gray, tan, and reddish tan chert.

Size: Length: 34-95 mm, stem length 11-26 mm, mean 18.5 mm; stem width: 11-23.5 mm, mean 17.2 mm.

Comments: 12 examples were recovered from the plow zone, 1 from Feature 1, 1 from Feature 50, 1 from Feature 69, and 2 from Feature 71. The Adena point is generally considered a diagnostic artifact of the Adena culture which existed during the Early Woodland Period in the Ohio Valley. The Adena type also occurs frequently at Late Archaic sites in the Cumberland Valley and has been dated at the Robinson Shell Mound at approximately 1000 B. C. (Morse and Polhemus, 1964:26).

Class 2. Bakers Creek (Cambron, 1960b) (Figure 10-B-C). Sample size: 2; Form: Triangular blade with excurvate and straight edges. Shoulders are weak and horizontal. Stemmed: Stems are expanded with straight bases. Cross section: Varies from flattened to biconvex. Material: Gray chert.

Size: Length: 52.5 - 62 mm; mean 57.2 mm; Width: 25-28 mm; mean 26.5 mm; Thickness: 5-8 mm, mean 6.5 mm; Stem length: 12-15 mm, mean 13.5 mm; Stem width: 17-21.5 mm, mean 19.2 mm.

Comments: One of these points was recovered from the surface and the other from Feature 31, a Mississippian Period pit. Bakers Creek projectile points are generally found on Middle Woodland sites over a wide area of the Southeastern United States, and were also recovered from the Yearwood Site in Lincoln County which produced radiocarbon dates of A. D. 150 $\pm$ 75, and A. D. 50 $\pm$ 95. (Butler, 1977:10)

Class 3. Big Sandy Side Notched (Lewis and Kneberg, 1959) (Cambron and Hulse, 1960a) (Figure 10-D). Sample size: 2 fragmentary. Form: Triangular blade with excurvate edges. Shoulders are slightly tapered to horizontal. Side notched with grinding sometimes found in the notches and base. The base on one example is straight and on the second example slightly concave. Cross section: biconvex. Material: Light tan to red chert.

Size: Length ____; Width: 24-28 mm, mean 26 mm; Thickness: 7.5 mm (both examples); Stem length: 10-12 mm, mean 11 mm; Stem width: 19-21 mm, mean 20 mm.

Comments: One example was recovered from Feature 31 and the other from the plow zone. Three additional Big Sandy types re-worked into scrapers were also recovered, all having ground bases and notches. Big Sandy points having ground bases are most often associated with Early Archaic components.

Class 4. Eva 1 (Kneberg, 1956) (Lewis and Lewis, 1961) (Figure 10-F). Sample size: 2 fragmentary. Form: Triangular blades with excurvate blade edges. Basal notched; and straight bases with some grinding in the notches. Cross section: Flattened. Material: Dark to light gray chert.

Size: Length: _____, mean _____: Width: 32-35 mm, mean 33.5 mm; Thickness: 5-6 mm, mean 5.5 mm; Stem length: 2-8 mm, mean 5 mm; Stem width: 11-15 mm, mean 13 mm.

Comments: These points were recovered from Feature 48 and the other from the surface of the site and are associated with the Middle Archaic Eva component. Lewis and Lewis's excavation of the Eva site produced a C-14 date of 5200 $\pm$ 500 B.C. which was derived from carbon samples recovered from Stratum IV of the site (Lewis and Lewis, 1961, p. 173).

Class 5. Kirk Corner Notched (Coe 1964: 69-70; Broyles 1971:65). (Figure 10, G-H). Sample size: 5, 2 complete and 3 fragmentary. Form: Lanceolate to triangular blades with excurvate blade edges. None have serrations on blade edges. All examples are corner notched, with straight bases with some grinding on bases and in notches. Cross section: Flattened; material: Dark to light gray chert.

Size: Length: 45-50 mm, mean 47.5 mm; Width: 23-25 mm, mean 24 mm; Thickness: 4-7 mm, mean 5.5 mm; Stem length: 0.8 - 10 mm, mean 9 mm; Stem width: 18-20 mm, mean 19 mm.

Comments: These projectile points were recovered from the plow zone of the site and are associated with the Early Archaic Period.

Class 6. Large Expanded Stem (Figure 10-A). Sample size: 1 complete Form: Triangular blade with excurvate edges. Shoulders are weak and horizontal, while the stem is expanded with a straight base. Cross section: bi-convex. Material: Gray and brown mottled chert.

Size: Length: 63.4 mm; Width: 35 mm; Thickness: 9.3 mm; Stem length: 13.8 mm; Stem width: 27 mm.

Comments: The single example was recovered from the plow zone of the site.

Class 7. Sykes (Lewis and Lewis, 1961). Sample size: 2 fragmentary Form: Triangular blades with excurvate edges. Shoulders are narrow and horizontal while stems are straight with straight bases. Cross section: biconvex. Material: Gray chert.

Size: Length _____ Width: 26-27 mm, mean 26.5 mm; thickness: 5-7 mm, mean 6 mm; Stem length: 5.5 - 10 mm, mean 7.7 mm.

Comments: One of the Sykes projectile point fragments was recovered from Feature 36 and the other from the surface. Sykes projectile points are reported from the Eva site (Lewis and Lewis, 1961) as occurring primarily with the Big Sandy component and to a lesser extent with the earlier Three-Mile component. Sykes points were also found in association with the Benton Stemmed types at the Champion Site in Northwest Alabama (Oakley and Futato, 1975). The Benton Stemmed projectile point type is considered a diagnostic trait of the Middle Archaic phase in the Tennessee and Cumberland River valleys.

Class 8. Turkey Tail (Scully, 1951; Cambron and Hulse, 1960). (Figure 9, A-C). Sample size: 2 complete and 2 fragmentary. Form: Triangular to Lanceolate blades with straight to excurvate edges. Shoulders are weak but horizontal. Stems are long and contracting with slight restrictions or shallow notches in their upper portions, immediately below the shoulders. Bases of the stems are not thinned and sometimes show remaining portions of the cortex of the stone. Cross section: flattened; Material: Gray chert (Fort Payne).

Size: Length: 82-135 mm, mean 108.5 mm; Width: 28.2 - 33 mm, mean 30.6 mm; Thickness: 4-6 mm, mean 5 mm; Stem length: 18-30mm, mean 24 mm; Stem width: 22-23 mm, mean 22.5 mm.

Comments: This type is often found on sites together with Adena Stemmed projectile points. The Meeks site produced 1 Turkey Tail from Feature 40 and the 3 remaining from the plow zone. It is of interest that many examples of the Turkey Tail types seen by the author in private collections show wear along the blade edges indicating their use as knives.

Class 9. Sample size: 1 fragmentary. Form: Narrow Lanceolate blade with excurvate edges. Poorly defined side notched: Medium stem with slightly excurvate base. Cross Section: Biconvex. Material: Mottled blue, white and pink chert.

Size: Length _____; Width: 20 mm. Thickness: 7 mm Stem length: 10 mm Stem width: 13mm.

Comments: This projectile point type resembles Type #67 reported by Faulkner and McCollough from The Normandy Reservoir (Faulkner and McCollough, 1973, pp. 103). This type is possibly associated with the Middle Woodland Period. The example from the Meeks Site was recovered from the surface.

Class 10. (Figure 10-E). Sample size: 1 fragmentary. Form: Triangular blade with excurvate edges. Medium stem with straight base. Cross Section: biconvex. Material: Brown chert. Shoulder is slightly barbed.

Size: Length _____. Width: 30 mm Thickness: 7.2 mm Stem length: 12 mm Stem width: 17 mm.

Comments: This example was recovered from the surface of the site and resembles class 77 described by Futato from the Bellefonte Site in Alabama (Futato, 1977 pp. 94 and 142).

Class 11. (Figure 9, D-E). Sample size: 2 fragmentary. Form: Narrow Lanceolate blade with excurvate blade. Shoulders are narrow and horizontal. Stems are straight and wide with straight bases. Cross section: biconvex. Material: Dark to light gray chert.

Size: Length: _____, Width: 24-25 mm, Mean 24.5 mm; Thickness: 7-8mm, mean 7.5 mm; Stem length: 16-17 mm, mean: 16.5 mm, Stem width: 16-17 mm, mean 16.5 mm.

Comments: Both examples from the site were recovered from the surface.

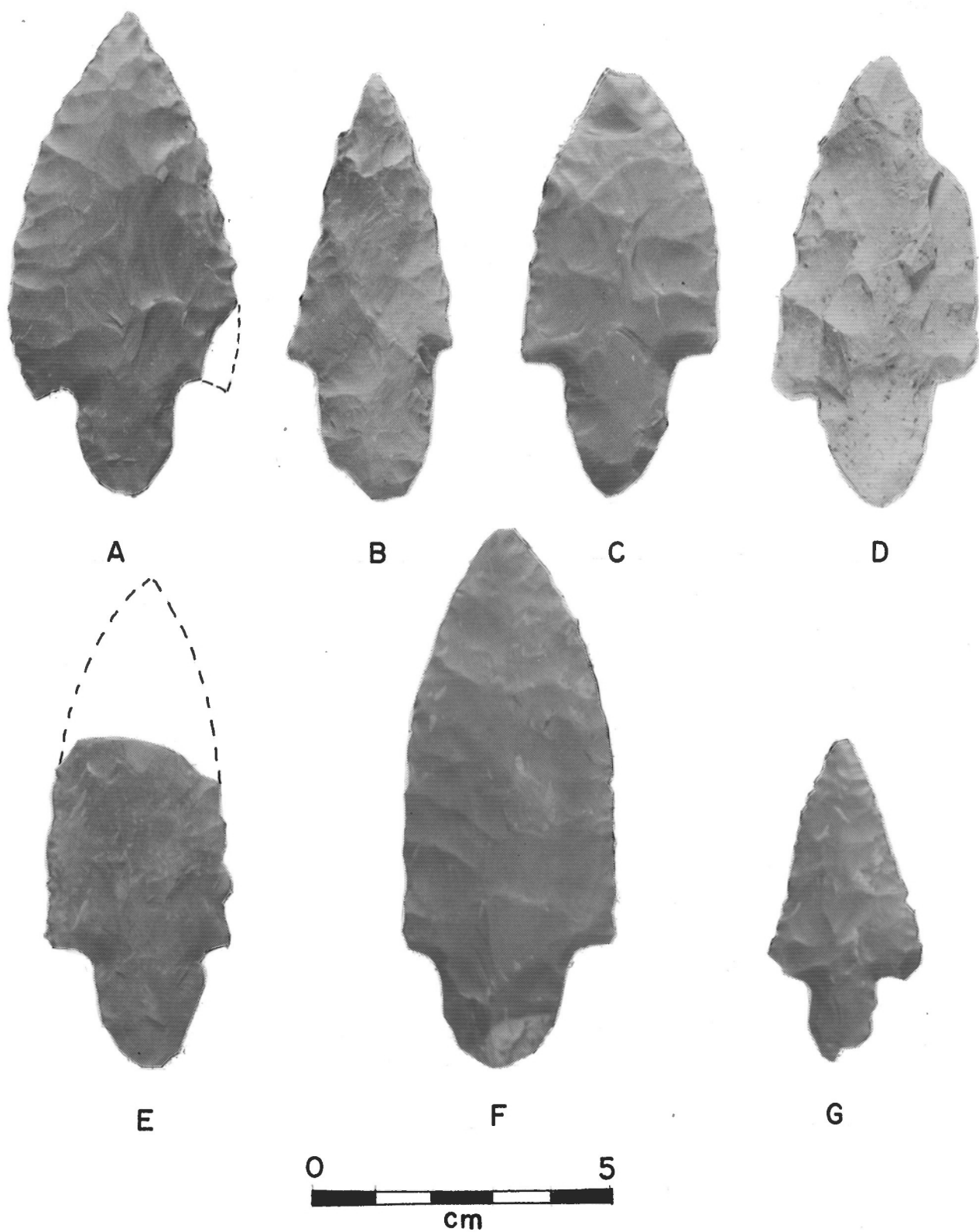


Figure 8. Adena (Class 1) Projectile Points.
(A-B) Feature 71, (C) Feature 50, (D) Feature 69,
(E-G) Surface.

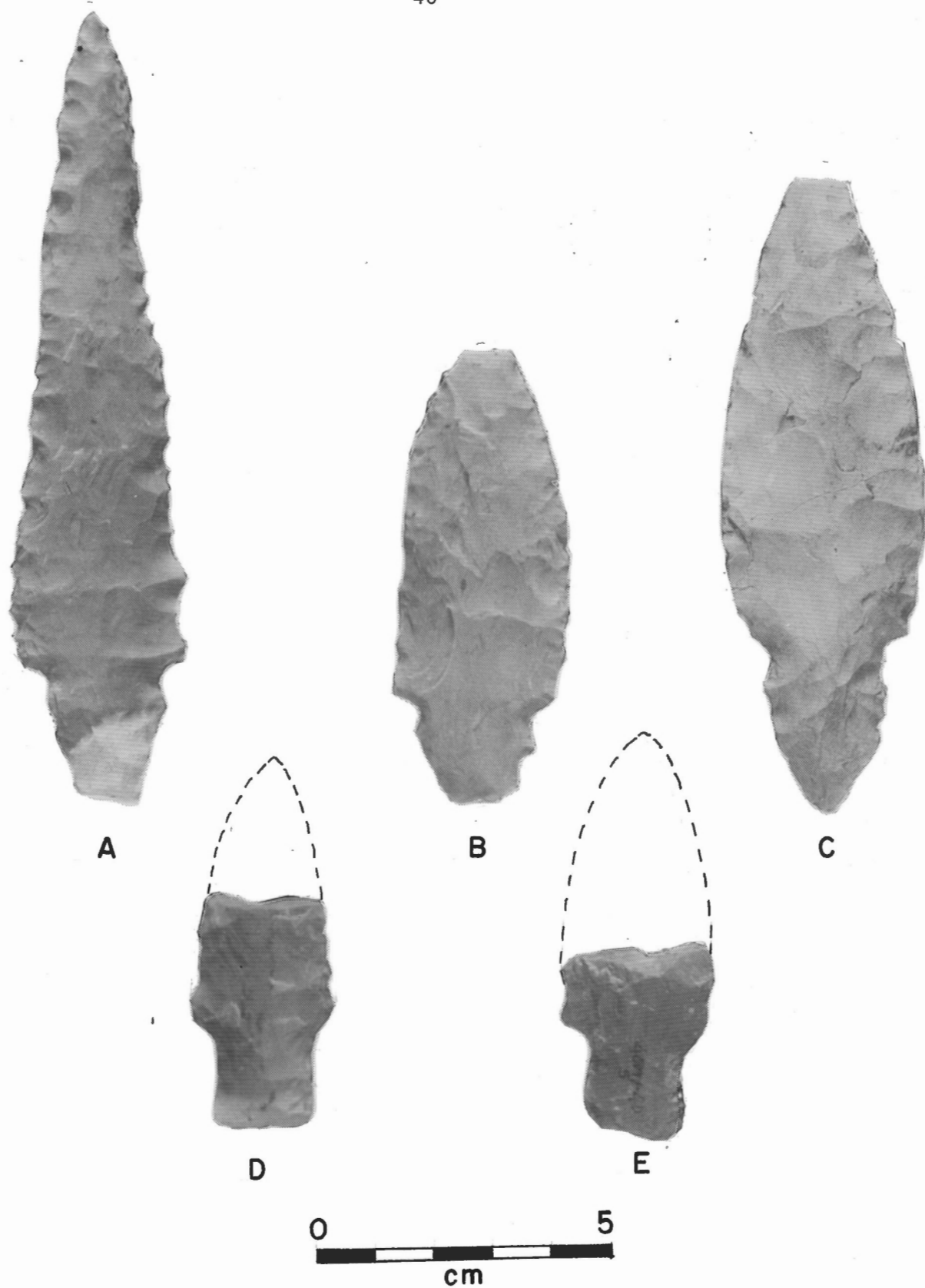


Figure 9. Projectile point types.
(A) Class 8 Turkey Tail
(Feature 40) (B-C) Turkey Tail
(D-E) Class 11

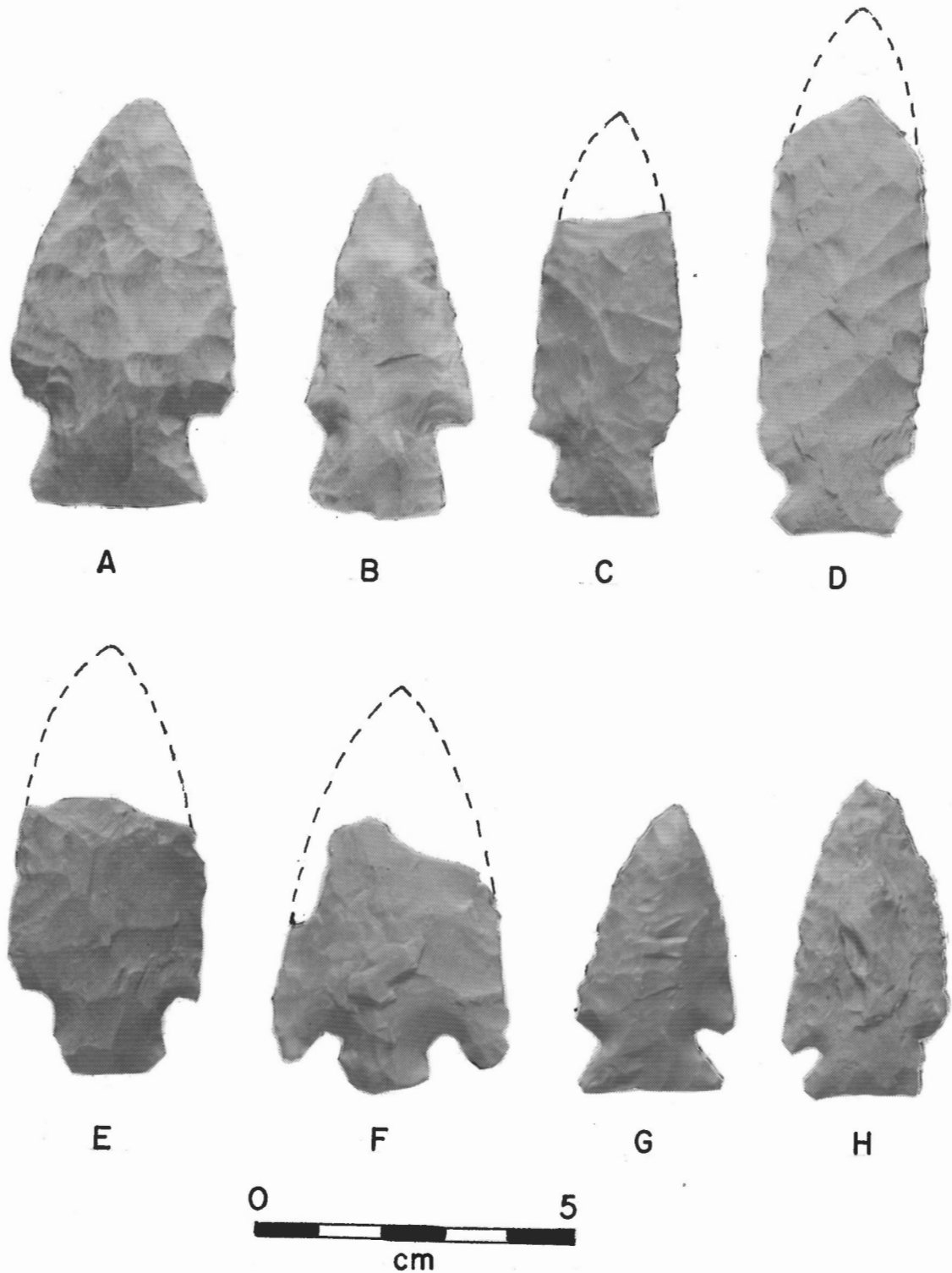


Figure 10. Projectile Point Types.
 (A) Class 6, (B) Class 2 Bakers Creek, (C) Bakers Creek,
 (Feature 1), (D) Class 3 Big Sandy (Feature 31),
 (E) Class 10, (F) Class 4 Eva, (G-H) Class 5
 Kirk Corner Notched.

Class 12. Sample size: 1 fragmentary. Form: Triangular blade with excurvate edges. Shoulders are well pronounced with slight barbs. The stem is straight or square with a straight base. Cross section is biconvex. Material: Gray and pink (mottled) chert.

Size: Length . Width: 26.2 mm. Thickness: 7 mm. Stem length: 8.4 mm. Stem width: 8 mm.

Comments: This example was recovered from the plow zone of the site.

Bifacial Implements

Preform Knives (Figure 11, A-e). These are fully thinned and edge re-touched, bifacially flaked blades and fragments which are categorized in three basic shapes: Type (1) Lanceolate blade with parallel sides and straight bases, Type (2) "Teardrop" shaped blade with excurvate blade edges and rounded bases, and Type (3) Lanceolate with recurvate blade edges and straight, but slightly "eared" bases. This type resembles the Copena blades. Two examples from the Meeks Site have ground bases.

Of the 21 examples recovered from the site, 5 were distal ends, 2 mid-sections, 4 teardrop shaped, 7 Lanceolate having parallel sides and straight bases and 3 Lanceolate with recurvate (Copena-like) blades. Only 5 of the 21 examples were complete. The following table lists the measurements on all complete specimens.

<u>No.</u>	<u>Type</u>	<u>Length</u>	<u>Width</u>	<u>Thickness</u>
2.	Teardrop	45-51 mm	31-35 mm	5-10 mm
2	Lanceolate		25-34 mm	5- 7 mm
1	Lanceolate (recurvate)	60-75 mm	23-27 mm	5-10 mm

Projectile Point Knives (Figure 9, B-C). Two turkey tail types showing wear along both blade edges were recovered from the surface of the site. The examples are 78-108 mm long, 30-35 mm wide, and 5-10 mm thick. These knives have the same form as the turkey tail projectile point.

Chisels (Figure 12 (A-B)). A total of 10 chisels including fragments were recovered from the surface of the site. The examples recovered are thick elongate or trianguloid bifaces with convex working edges at one end of the long axis which was formed by bifacial removals. All except one example are completely bifacially worked. Four of the ten examples show attrition from wear on the working edge and adjacent flake facets, while one example exhibits extreme wear and an "opal sheen" on one face. None of these implements show any modification for hafting. Complete examples are 110-117 mm long, 48-52 mm wide, and 11-30 mm thick.

Stemmed Scrapers (Figure 13, A-C). Three examples were recovered from the surface and are representative of bifaces which have a single convex working edge formed by a continuous line of relatively steep retouch departing one face. The working edges are on the distal end of what appears to have been re-worked square stemmed projectile points. Two of the examples show heavy wear along the working edge. The three examples are 38-67 mm long, 28-33 mm wide, and 5-11 mm thick.

End Scraper. A single example was recovered from a post mold at the site. This example is a thick biface with a straight, steeply flaked, working edge perpendicular to the long axis of the piece. This example showing no modification for hafting is 70 mm long, 48 mm wide, and 20 mm thick.

Drills (Figure 14, A-G). Eleven fragmentary and two complete drills were recovered from the site. Of this total 1 was recovered from Feature 37, 2 from Feature 45, and the remaining 8 from the surface. The drills and fragments from the Meeks Site are comprised of four basic types: (1) simple straight shank, (2) stemmed, (3) "T" shaped or expanded base, and (4) notched. All are bifacially flaked with long rod-like narrow, and thick blades which are diamond-quadrilateral in cross section. One of the stemmed types appears to be a re-worked turkey tail projectile point. The straight shank types have parallel sided blades and rounded or convex bases. The notched type appears to be a re-worked Eva projectile point. Overall length of the drills is 22-63 mm, maximum width at base 10-30 mm, and thickness 5-9 mm.

Denticulate (Figure 15-A). The single example recovered from the surface of the site is a narrow biface having a regular series of adjacent single or multiple-blow notches which produced serrated edges suitable for sawing functions. The example is 50 mm long, 13 mm wide, and 8 mm thick.

Notched Bifaces (Figure 15-B). The six examples recovered from the surface of the site are bifaces having one or two intentional multiple-blow notches along the edge of the pieces. Two of the examples having single shallow notches could be identified as spokeshares, which may have also been used as knives as suggested by the wear along the opposite unnotched blade edge. The notched bifaces from Meeks Site are representative of fragmented implements or rejects which had been notched.

Core Scrapers (Fig. 15-C) Five examples were recovered from the surface of the site and are representative of cores of various forms on which continuous heavy marginal retouch along a portion of the striking platform has been applied.

Side Scraper. The single example recovered from the surface is representative of a fragmented biface having a single straight working edge formed by a continuous line of steep retouch departing one face. The working edge is parallel to the long axis of long 35 mm wide at the base and 9 mm thick.

Thick Bifaces (Figure 16-A-D). A total of 9 complete and 23 fragmentary examples were recovered from the surface of the site. These are thick, large symmetrical or roughly lanceolate, as well as amorphous, bifaces which were broken or discarded in the advanced process of thinning.

Notched Scrapers (Figure 13, D-F). The 3 examples, 1 from Feature 1 and 2 from the surface, are representative of Big Sandy side notched projectile points which had been re-worked and used as scrapers. The working edges are on the

distal end and were formed by a continuous line of relatively steep retouch departing from the face. All of the examples show wear along the working edge. The three examples vary from 30-38 mm in length, 20-22 mm in width at the shoulders, and 4-5 mm in thickness.

Other Bifacial Implements

Digging Implements (Plate 11). These artifacts are slabs of limestone chipped along the edges to an ovoid or rectangular shape. No definite examples of notching for hafting purposes were observed and it is assumed that these implements had been hand-held in their utilization. Of the six examples recovered from the site, two were from Feature 17 and four from Feature 26. Dimensions of these artifacts are as follows:

Length: 250-320 mm Maximum width: 90-120 mm, and Thickness: 20-30 mm.

Perforators. Two examples were recovered from the plow zone of the site and is representative of a small stemmed projectile point with a tiny shark worked on the distal end.

Unifacial Implements

Discoidal Scrapers (Figure 13-G). The single example recovered from the surface of the site is representative of a large thick discoidal flake having a scraping edge formed by continuous steep marginal retouch around most of its circumference. The example is 65 mm in diameter and 9 mm thick.

End Scrapers. Two examples recovered from the surface of the site are thick flakes with one to two convex working edges formed by a continuous line of steep retouch departing one face. One example has the working edge at the distal end and the other example has working edges on both the distal end and one edge. The example with a single working edge is worked on a decortication flake.

Side Scrapers. Six examples were recovered from the surface of the site. Of the six examples, three were worked on decortication flakes and the remaining three on core trimming flakes. All examples have two straight to convex working edges formed by a continuous line of steep retouch on the lateral margins of the flakes.

Flake Knives. The single example from the surface consists of a large core trimming flake having retouch along a section of one lateral edge, on one face only.

Utilized Flakes (Figure 15, D-H). A total of 147 utilized flakes were recovered from the site. Of this total 121 were from the surface and the remaining 26 were from various features (see description of features and associated artifacts). The examples from the site consists of bifacial thinning and core trimming flakes showing utilization in the form of irregular or regular localized retouch along the edges.

Perforators (Figure 15, H). The single example recovered from the surface of the site is representative of a flat flake with a short pointed projection formed by lines of unidirectional marginal retouch on both sides of the projection converging on its tip. One edge of the triangular projection is slightly concave and retouched on one face only suggesting its use also as a spokeshave.

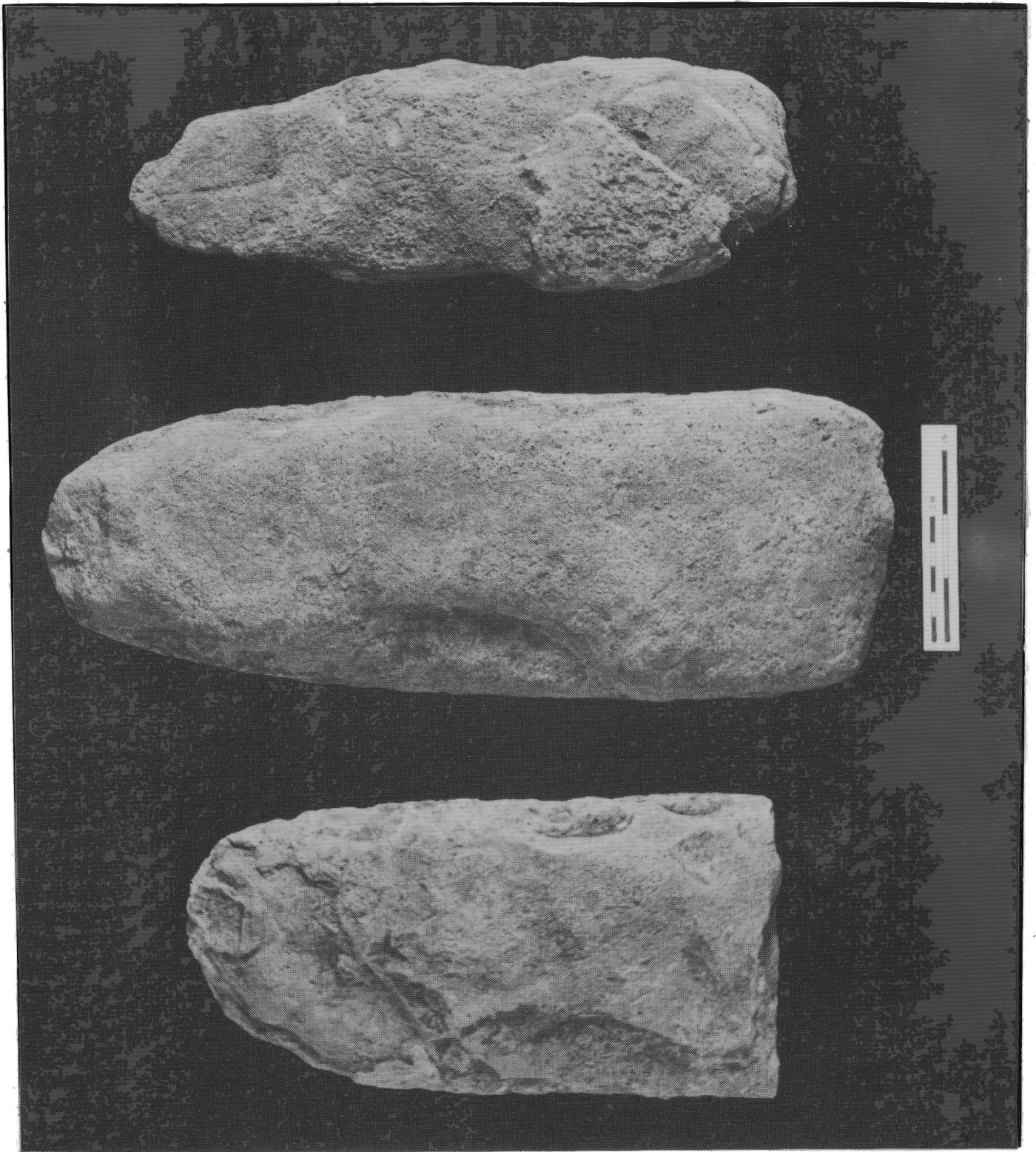


Plate 11. Limestone digging implements
from Feature 26 (approximately $\frac{1}{2}$ size).

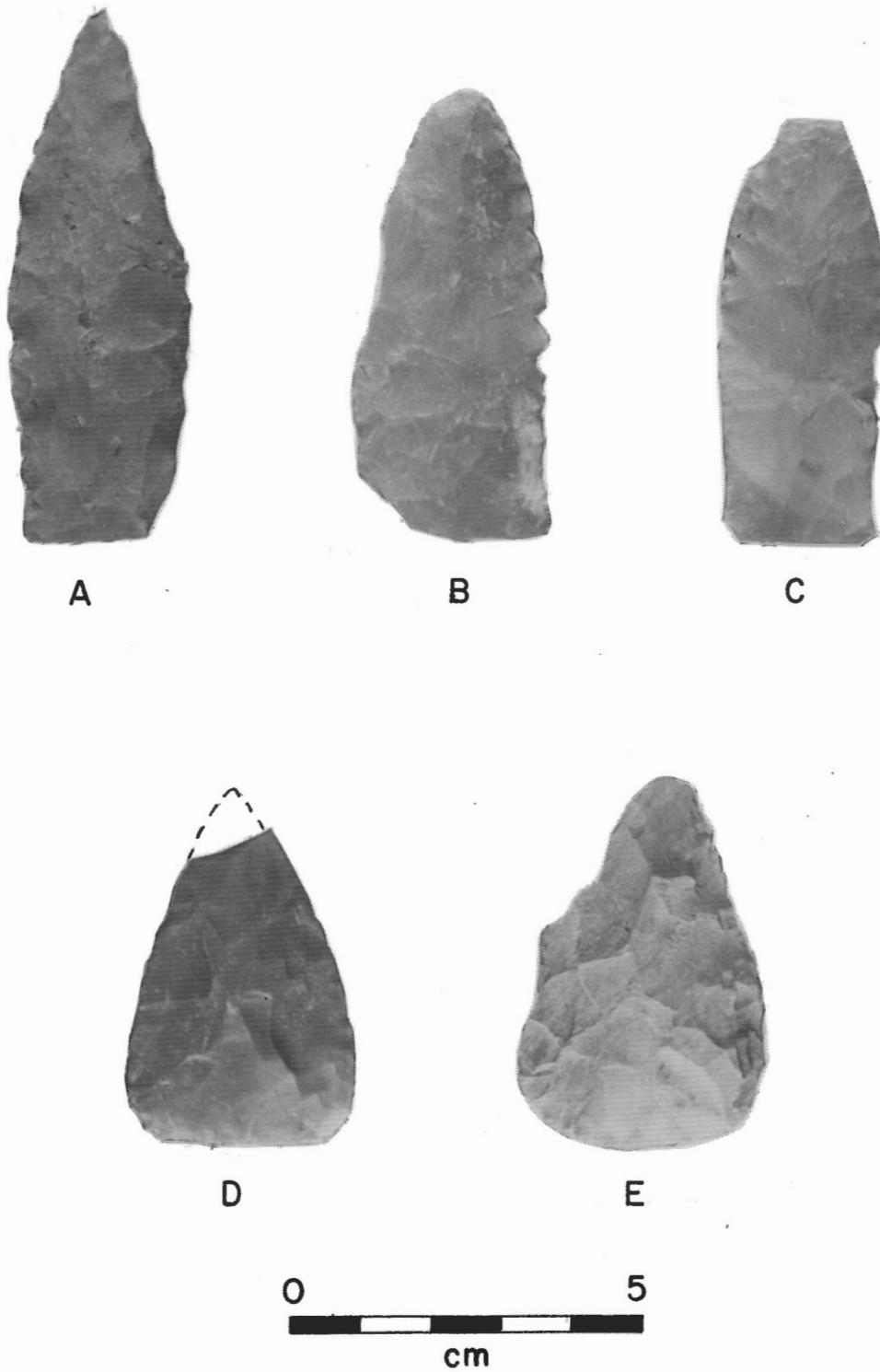


Figure 11. Preform Knives.
(A-C) Type 3 Copena-like
(D-E) Type 1 "Teardrop" shaped.

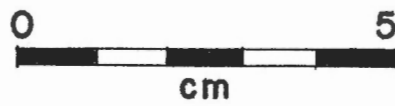
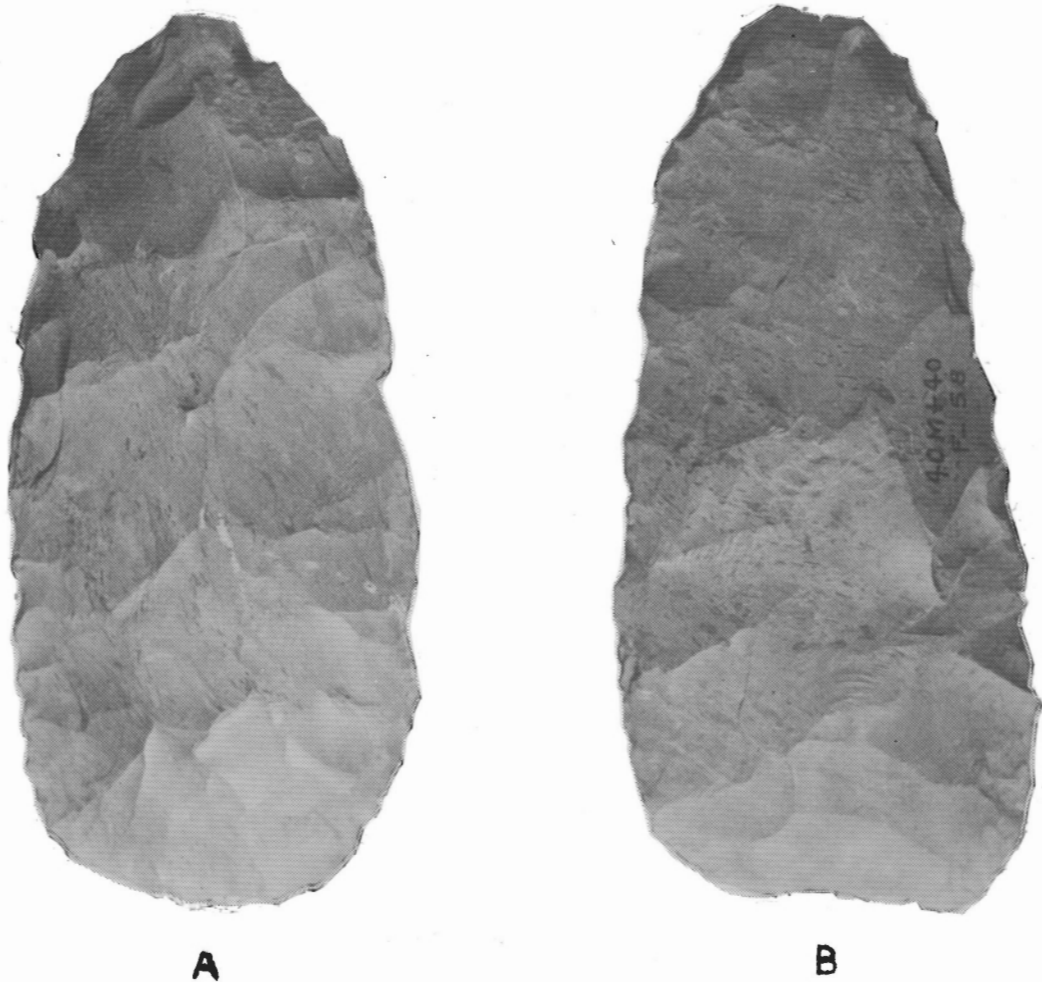


Figure 12. A-B Chisels

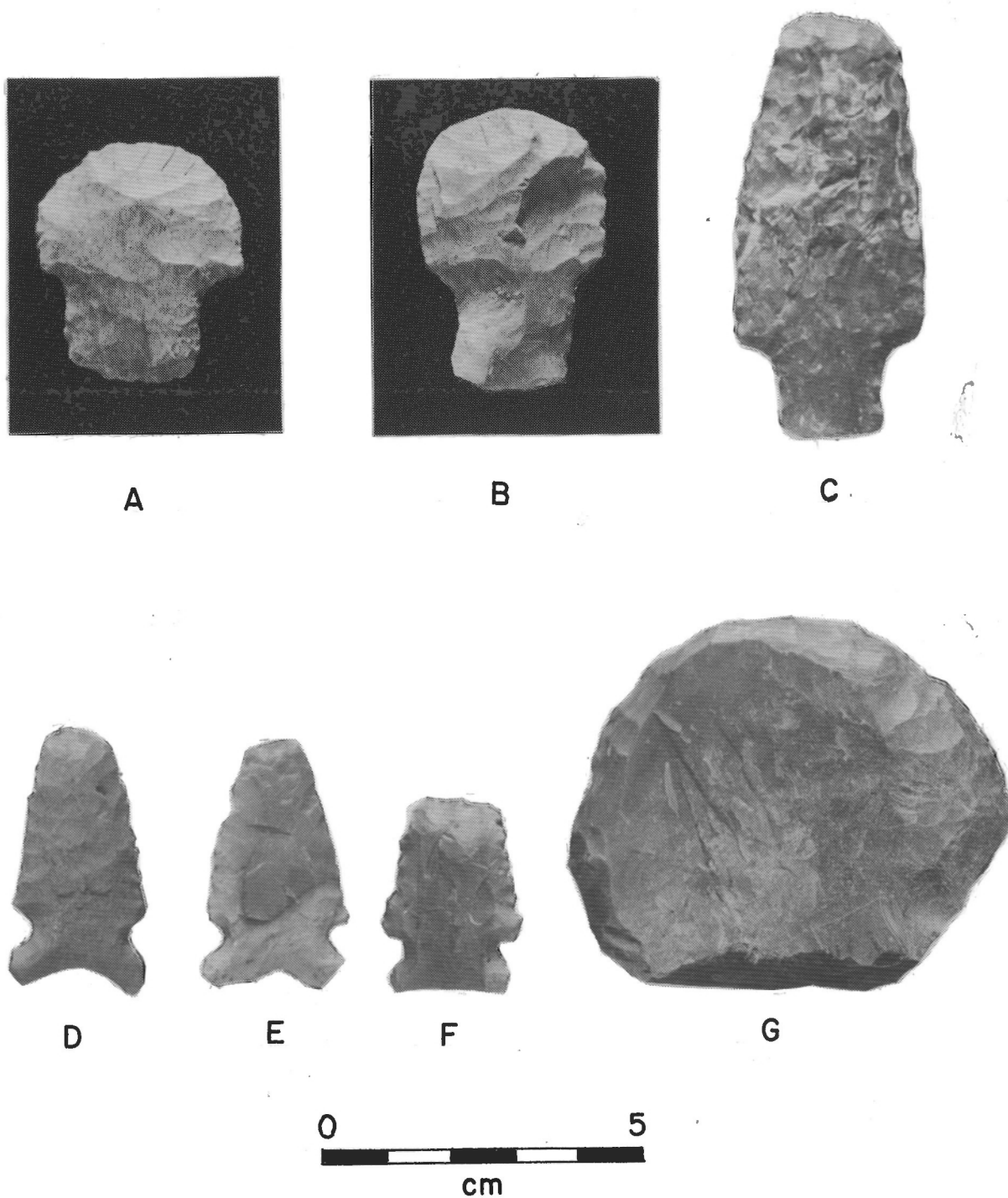


Figure 13. Scrapers.
(A-C) Stemmed; (D-F) Re-worked Big Sandy Types;
"F is from Feature 1. (G) Discoidal Type.

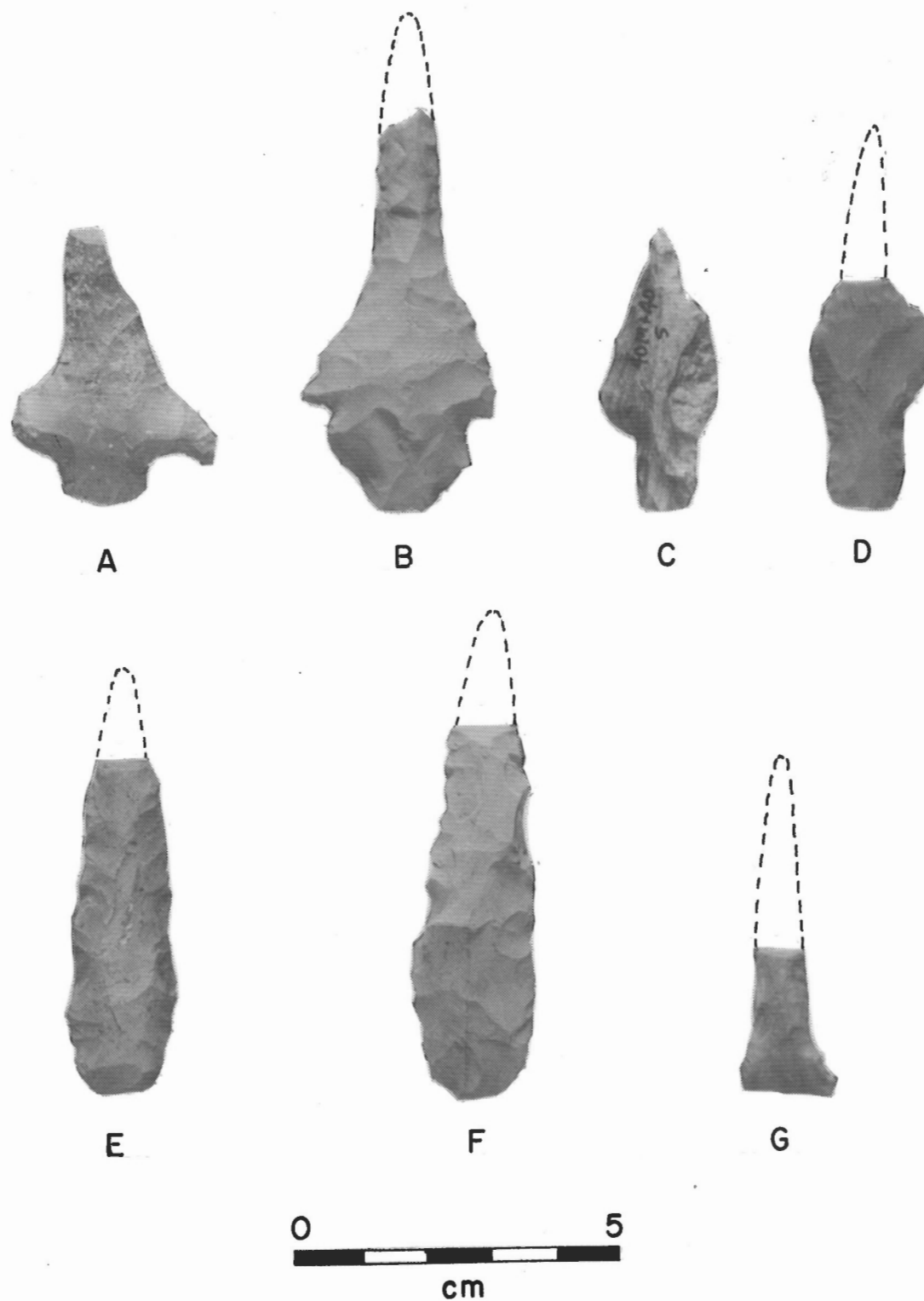


Figure 14. Drills from the Meeks Site:
(A) Stemmed, (Feature 37)
(B-D) Stemmed; (E-F) Straight Shank
(G) Expanded base.

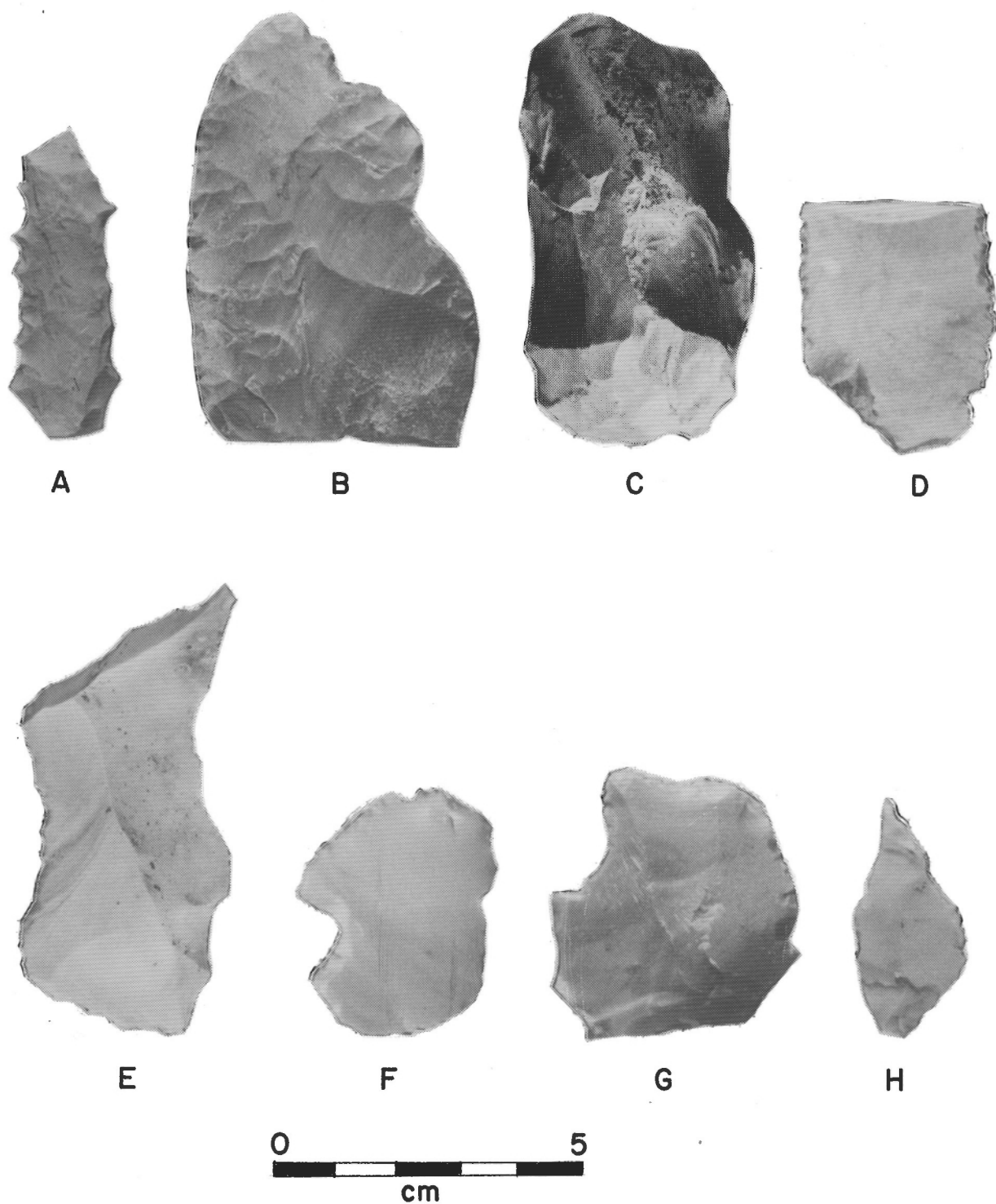


Figure 15. Miscellaneous Tools
(A) Denticulate (B) Notched biface
(C) Core scraper (D-H) Utilized flakes.

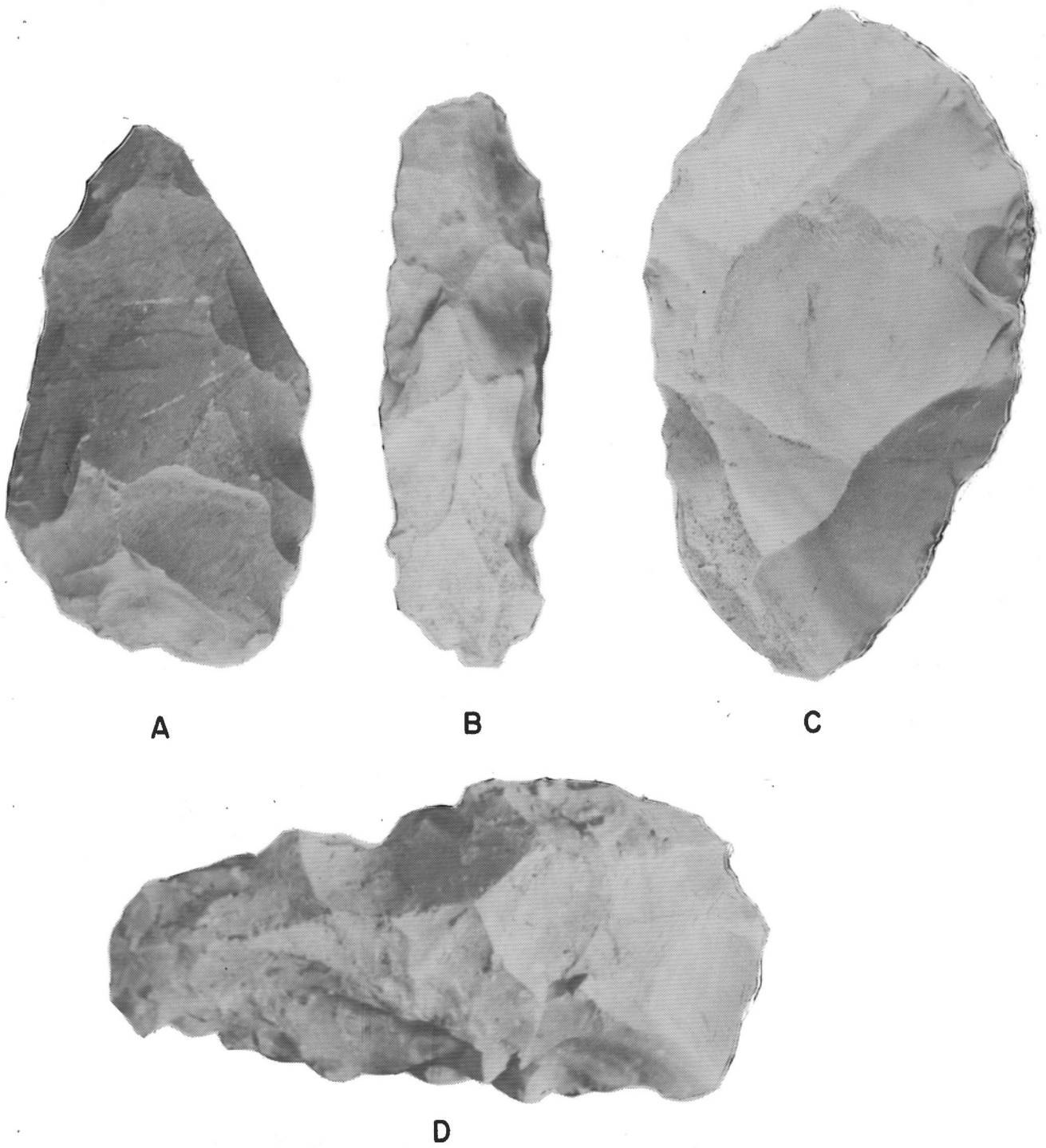


Figure 16.
(A-d) Thick bifaces from the Meeks Site

Spokeshaves. Four examples recovered from the surface are large flat flakes having a deep to shallow semicircular multiple-blow notch. A fifth example was a similar notch worked on a slightly modified block of chert.

Notched Flakes (Figure 15, F-G). Two examples from the surface each have one single-blow deep notch along one edge. Each of the two flakes also show fine retouch along one edge in addition to the notch.

DEBITAGE

The debitage from the Meeks Site has been separated into several categories which include cores, flakes, and worked or un-worked chert nodules and chunks. Of the total quantity of debitage, there were 1,462 unmodified flakes, and 33 chert chunks. Flakes were separated as to whether or not they possessed cortex. There are generally several recognized types of flakes which include the following as identified by Faulkner and McCullough in their Normandy Reservoir studies (Faulkner and McCullough, 1973, pp. 80-81).

1. Core Trimming Flakes are those which are removed from a core and not further altered. These include flakes showing portions of the cortex still remaining as well as core rejuvenation flakes.
2. Flat Flakes are detached by direct percussion from a core or blank from which all cortical material was previously removed.
3. Bifacial Thinning Flakes are usually expanding and thin with minimum thickness at distal ends. These flakes show scars of previous bifacial removals on their dorsal surfaces as well as platform evidence of removal from a bifacial blank.

The chunks from the Site include angular broken pieces of chert, block fracture flakes, angular shatter, and other irregular pieces of chert.

Cores. The 88 cores recovered from the Meeks Site are pieces of chert from which flakes have been detached in a controlled manner. The primary functions of cores are in the production of flakes or as the initial step in the manufacture of core tools. Angular pieces of chert nodules, and rectilinear or tabular chunks of chert were also utilized as cores. Some of these had one or more naturally flat surfaces which had been utilized as a striking platform.

PECKED AND GROUND STONE

The majority of pecked and ground stone artifacts were made from locally available raw materials: These materials include sandstone, quartzite, and chert cobbles, as well as limestone nodules. It is not known from which area greenstone had been derived although central Alabama cannot be ruled out (Faulkner and McCullough, 1973). A greenish-gray slate widely used for celts

in the middle and East Tennessee areas could have been derived anywhere within the Southern Blue Ridge or Piedmont physiographic provinces (Faulkner and McCollough, 1973, p. 60).

Hammerstones (Figure 18, A). A total of seven samples were recovered from the site, two of which were manufactured from sandstone and the remainder from chert. Of this total, one example was recovered from Feature 22, one from Feature 59, and the remaining five from the surface. The examples manufactured from sandstone are representative of unmodified cobbles, one of which shows battering at both ends and the other, a flattened sphere, with battering around its entire circumference. The chert hammerstones are elongated, slightly modified nodules with battering around their entire circumference.

Ground Cobbles (Figure 17, A-B). Five examples were recovered from the site, four from the surface and one from Feature 31. Of the total number recovered two examples are quartzite and the remaining three of chert. All are small unmodified cobbles which show abrasion wear at both ends or along the edge of the long axis. One of the five examples shows wear over most of its surface. It is conceivable that these artifacts had been used for grinding purposes with mullers.

Bell-shaped Pestles. Four examples manufactured from limestone were recovered; one from Feature 17, two from Feature 46, and one from Feature 62.

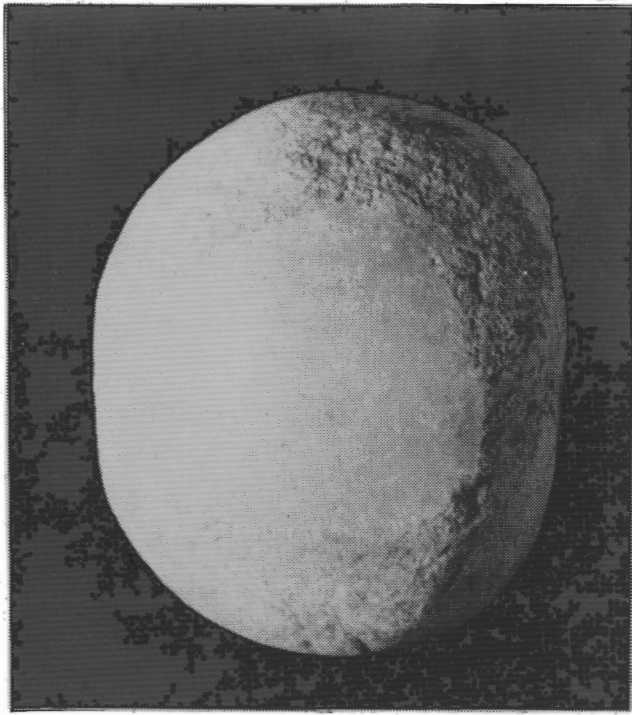
Atlatl Weights (Figure 18, A-B). One complete and four incomplete examples were recovered from the site. Of these, one from F-17, one from Feature 40, one from Feature 50, and two from the surface. The single complete specimen is manufactured from red sandstone and is dome-shaped having lateral and longitudinal grooves which facilitated binding with thongs to the Atlatl shaft. Two of the incomplete weights have no grooves, while the other two have only a single lateral groove. Four of the weights are made of sandstone and the fifth from silt-stone.

Sandstone Bowl Fragment. The single sherd from Feature 8 includes a rim sherd with a lug, and rounded lip. No chisel marks or smoothing can be seen on this sherd which has a wall thickness of 8 mm. The sherd appears to have been burned and has traces of soot on the interior wall.

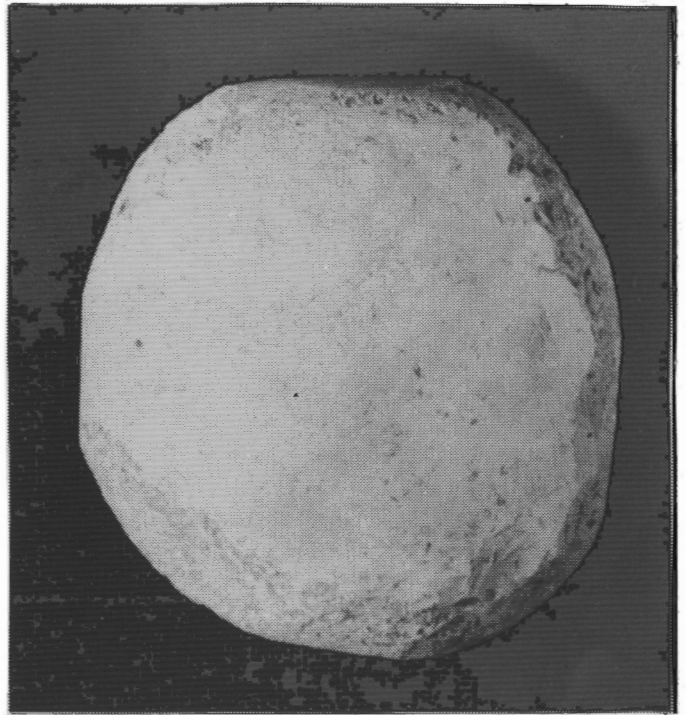
Celts. Fragments of a single celt were recovered from Feature 44. The restored celt has biconvex in cross section and was made of a green schist. The bit end is heavily battered.

Miscellaneous Ground Stone. A single slab of slate having grinding around the edges was recovered from the surface of the site. It is representative of an unfinished gorget.

Pitted Cobble. A single example was recovered from Features 17 and 20, respectively and consist of quartzite cobbles having a small battered pit or depression on one face only. Since none of the edges of the cobbles show battering it is probable that they had served as nut stones.



A



B



C

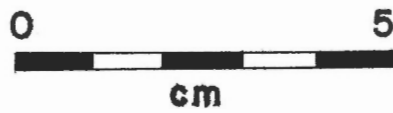


Figure 17. Ground and Pecked Stone Implements
(A-B) Ground cobbles
(C) Hammer stone

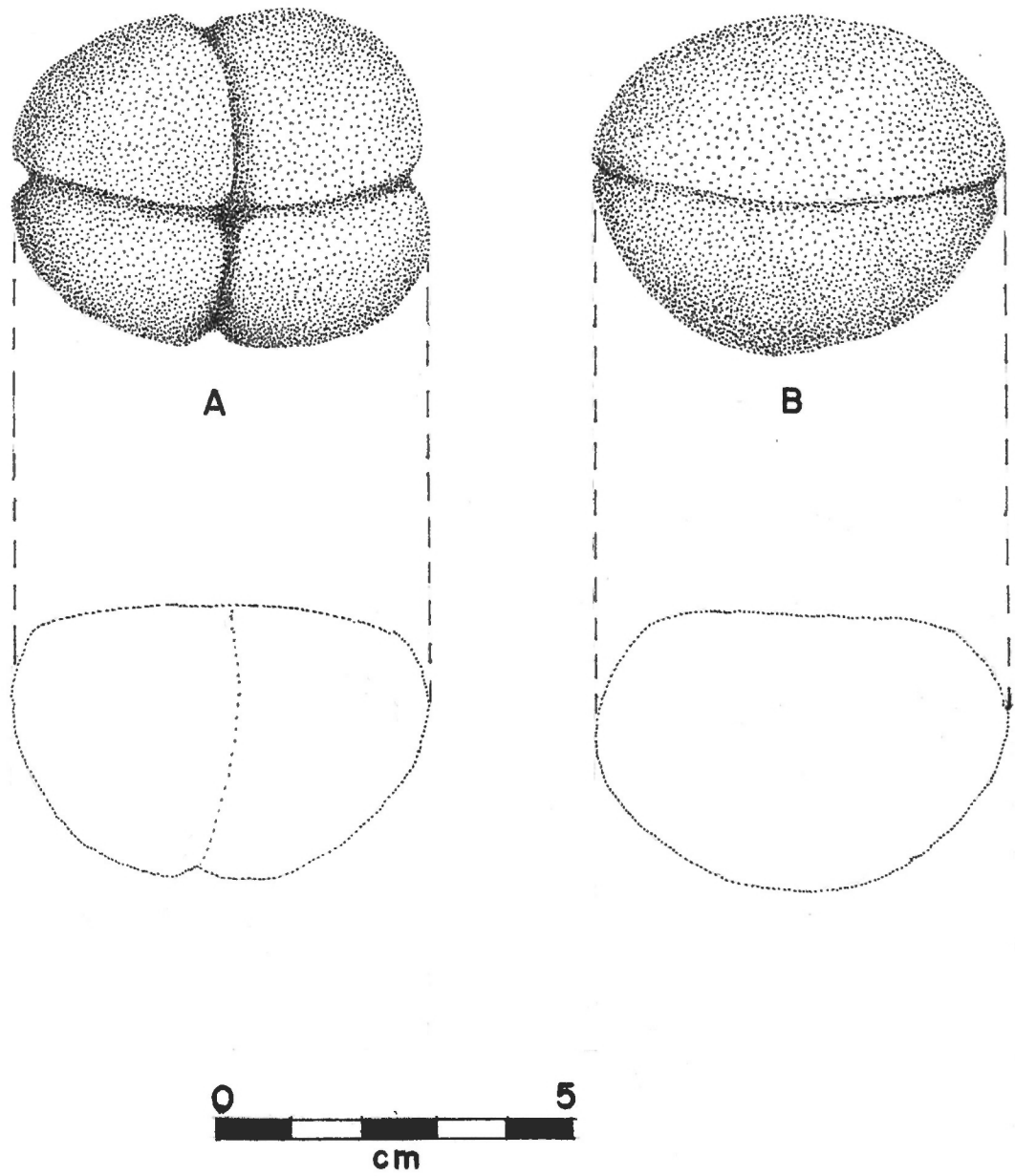


Figure 18. Atlatl Weights. (A) Surface (B) Feature 40.

BONE ARTIFACTS

A total of three modified pieces of bone were recovered from the site excavations, two of which were associated with Feature 17, and one with Feature 48. The unusually small quantity of bone from the site had perhaps been attributable to either poor bone preservation or to the fact that there had been a very brief occupation resulting in a small accumulation of such artifacts, and general debris. This fact is further verified by the fact that the majority of the features (pits) belonging to the Late Archaic period contained very little in the way of general refuse.

The recovered bone artifacts are described as follows:

Awls. A single fragmentary example manufactured from a turkey tibia was recovered from Feature 17. The only portion remaining is the distal end which has been worked into a point. Some polish or sheen is evidence of use wear of the object. The fragment is 85 mm long.

Projectile Points. A single fragmentary portion of the distal end of an antler projectile point was recovered from Feature 17 pit. The center of the point had been removed or reamed to form a socket for hafting purpose. The fragment is 51 mm long.

Worked Antler. A single section of antler which had been scored and broken was recovered from Feature 48. The fragment is 55.2 mm long.

CERAMICS

Although the Meeks Site had been predominantly archaic in nature, two of the seventy-five features had belonged to Woodland and three to Mississippian cultural periods. The Mississippian features are in all likelihood related to the principal Mississippian occupation which had occurred on site 40Mt37, approximately 150 yards south of the Meeks Site. It is probable that site 40Mt37 had also contained an extensive Woodland component which might account for the four isolated Woodland features at the Meeks Site. Although the Meeks Site was extensively collected, no Mississippian or Woodland ceramics were found except in the above excavated features.

The sherds from the Site were sorted into groups on the basis of temper and surface treatment. Type names were then applied to the sherd groups when appropriate.

Since a total of only 51 sherds were recovered from the Site, such a small sample cannot be considered as adequate for a meaningful analysis. Furthermore, the collection contains no rim sherds, consequently little can be said concerning vessel forms. Sherd sizes vary from 2 - 5 cm in diameter with the shell and crushed limestone tempering leached from all sherds. Of the total sherds recovered, 34 were tempered with crushed shell, 10 with crushed limestone, and 1 with sand, all of which are briefly described as follows:

Neeleys Ferry Plain (Phillips, Ford & Griffin, 1951). A total of 28 sherds were recovered from Feature 31 and 3 from Feature 32 with sherd thickness varying from 3.5 - 8 mm. All the body sherds appear to have belonged to small or medium size jars. One sherd, however, appears to have been from a plate or shallow, flat bottomed bowl. Sherds are from light tan to buff in color.

McKee Island Cord Marked (Heimlich, 1952). A single sherd from Feature 31 appears to have been decorated with cord impressions. The sherd is dark buff in color and is 8.6 mm thick. Cord marked wares are fairly rare on Mississippian sites in Middle Tennessee.

Flint River Cord Marked (Heimlich, 1952). Ten body sherds were recovered from Feature 1 and two from Feature 73, all decorated by impressions of a coarse cord which had probably been wrapped around a wooden paddle. All sherds were reddish-orange to buff in color, with a few having a gray core. Thickness varies from 6 - 11 mm. Temper is crushed limestone. Flint River cord-marked wares generally occur on Middle Woodland Sites in Tennessee.

Unidentified Plain Surface. A single body sherd having an undecorated surface were recovered each from Features 36 and 65. Both sherds have buff exterior surfaces and black interiors are 7.5 mm in thickness. Both sherds had probably belonged to medium or large jars. Both sherds are tempered with fine to medium sand, giving a slightly gritty texture.

EURO-AMERICAN OBJECTS

In many instances it has been noted that early European settlers had established their homes and other facilities on sites formerly occupied by aboriginal peoples. As usual, topography and availability of good water were the basic criteria used by both peoples as a basis for establishment of their homes and villages.

Excavation at the Meeks Site disclosed a small quantity of Early Nineteenth Century metal and ceramic artifacts which were recovered from Features 6, 11, and 60. The artifacts recovered from these features are identified and described as follows:

Nails. A single hand-made nail recovered from Feature 6, is 60 mm long, has a faceted head, and a flattened, spatulate tip. Such nails were made and used in Tennessee during the last quarter of the eighteenth century and first quarter of the nineteenth century.

Buckle. A single buckle manufactured from iron was recovered from Feature 11, and measures 35 mm in length and 30 mm in width. It is probable that this buckle had been used with a horse harness.

Pearlware. A total of six fragments of this were recovered from the site. Of this total four of the sherds are representative of Blue Shell Edge plates and the remaining two of bowls with blue floral handpainted designs. All of the above sherds are representative of vessels manufactured during the first 25 years of the nineteenth century

In view of the Euro-American objects recovered and the existence of at least one historic period refuse pit, it is probable that there had been an early Nineteenth Century homestead somewhere within the vicinity of the Meeks Site, even though the excavations yielded no evidence of any structures.

		Unidentified Fragments											
		C - 12	C - 11	C - 10	C - 9	C - 8 Turkey Tail	C - 7 Sykes	C - 6 Expanded Stem	C - 5 Kirk Corner N	C - 4 Eva I	C - 3 Big Sandy	C - 2 Bakers Creek	C - 1 Adena
Feature 1	1												
Feature 6		1											
Feature 13		1											
Feature 20	1												
Feature 28		1											
Feature 31	1	1	1										
Feature 34													
Feature 36					1								
Feature 37		1											
Feature 38		1											
Feature 40						1							
Feature 48									1				
Feature 50	1												
Feature 56													1
Feature 61	1												
Feature 69	1												
Feature 71	2												
Surface	9	1	1	1	1	3	1	1	5	1	2	1	33
Totals		17	2	2	2	4	2	1	5	2	2	1	41
C - Class													

original Company

TABLE 4
Tool Type Distribution

Provenience	Pitted Cobbles	Celts	Atlatl Weights	Bell-shaped Pestles	Ground Cobbles	Hammerstones	Notched Flakes	Spokeshaves	Utilized Flakes	Perforators	Digging Implements	Thick Bifaces	Notched Bifaces	Denticulates	Drills	Discoidal Scrapers	Notched Scrapers	Core Scrapers	End Scrapers	Side Scrapers	Stemmed Scrapers	Chisels	Projectile Point Knives	Flake Knives	Preform Knives
Feature 1																									
Feature 6																									
Feature 9																									
Feature 10																									
Feature 13																									
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Feature 48																									
Feature 50																									
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Feature 56																									
Feature 59																									
Feature 61																									
Feature 62																									
Feature 71																									
Feature 72																									
Surface																									
TOTALS	5	1	2	11	3	1	3	5	3	1	13	1	6	42	6	2	146	5	2	7	4	4	5	1	2

Grand Total 281

CONCLUSIONS

The Meeks Site excavations have disclosed evidence that the site had been occupied intermittently over a relatively long period of time. The earliest occupation had occurred during the Early Archaic Period and although no features were found, the recovery of Kirk-Corner notched and Big Sandy 1 projectile points and tools serve as evidence of this early period.

Recovery of the Sykes and Eva projectile point types are indicators of a Middle Archaic occupation which also left no evidence of features relating to habitation activities.

Limited Woodland occupation at the site is evidenced by Features 1, 36, 65, and 73, which contained sand and limestone tempered sherds. Features 2, 31, 32, 44 belong to the Mississippian occupation since they contained shell-tempered sherds as well as charred remains of cultigens. Even though the Meeks Site had been predominantly Archaic in nature, the four isolated Mississippian features are in all likelihood related to the principal Mississippian occupation which had occurred at Site 40 Mt37 located approximately 150 yards to the south. It is also probable that site 40Mt37 had contained extensive woodland components which might account for the four isolated Woodland features at the Meeks Site. Even though the Meeks Site was extensively collected, no Mississippian or Woodland artifacts were found except in the seven excavated features.

The most significant and intensive habitation of the site had occurred during the Late Archaic Period. Sixty-seven of the seventy-five features had belonged to this cultural component whose predominant projectile point and tool types belong to the Adena complex. The Adena projectile point is generally considered a diagnostic artifact of the Adena culture which existed during the Early Woodland Period in many areas of the Northeast - no earlier than 500 B.C. (Webb, Snow, and Griffin, 1974, p. XVI). However, the Adena projectile point is most prevalent on Late Archaic sites in the Tennessee Valley where it occurs frequently in the Ledbetter Phase of the Western Tennessee Valley (Lewis and Kneberg, 1959). The Adena point also occurs frequently at Late Archaic Sites in the Cumberland Valley and has been dated at the Robinson Shell Mound at approximately 1000 B. C. (Morse and Polhemus, 1964: p. 26).

In terms of seasonality, the Meeks Site is probably representative of a base camp which had been occupied during the fall, winter, and early spring. This hypothesis is based upon (1) the sites proximity to the river, (2) the scarcity of shell fish remains at the site, (3) the preponderance of charred nuts, berries, etc. recovered from features, and (4) the individual ages of wild turkeys killed as a food source. It is probable that the Meeks Site inhabitants had moved their camp inland from the river

during the late summer or early fall for the purpose of exploiting the upland hardwood forests for harvesting of nuts and other plant foods which ripen during this time of the year. The scarcity of mussell and other shellfish remains would also support a fall-winter-early spring occupation away from the river, since shellfish collecting would have been more difficult due to the severe conditions of the river during the winter and early spring months.

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APPENDIX A

Faunal Remains, Bone and Shell Artifacts

Emanuel Breitburg

The 1976 excavation of the Meeks Site (40Mt40) produced a small quantity of faunal material for analysis. Of the 338 pieces of bone examined, 18 fragments were recovered from the surface and the remainder from excavated features. In terms of cultural affiliation, 4 bone fragments were recovered from Feature 32, and 6 pieces representative of a large mammal, from Feature 44, both of Mississippian affiliation. The largest portion of the material originated from 20 features associated with the late Archaic occupation of the site. These features produced 304 elements of which 116 fragments were identifiable to the generic or species level.

Surface recovery included a left proximal tibia shaft of a Virginia white-tailed deer (Odocoileus virginianus) and a specimen of a right valve of the kidney shell, (Ptychobranthus faciolare). Two species of aquatic snails were also recovered: Pleurocera Spp. and Io Spp. Indeterminate material consisted of 3 large mammal fragments (one being burned), one mammal fragment, and 9 bivalve sections.

Feature 32, (Mississippian Period) produced 4 bivalve sections that are identified as Pleurobema cordatum Pyramidatum (left and right matching valves), a right valve of the species Cyprogenia irrorata (fan shell), and a matching pair of valves of the species Elliptio dilatatus (Spike).

Late Archaic features yielded sixty-eight elements identified as Virginia white-tailed deer (Odocoileus virginianus). These elements are described below.

Odocoileus virginianus

- A. Antler. 1 polished and modified antler tine tip (Feature 63); 1 polished and burned antler tine section (Feature 46); 1 antler tine flaker (Feature 62); 2 tine sections; burned tine section; 2 fragmented antler sections; 1 beam section; and 2 fragmented beam sections; 1 antler tine section (11 pieces).
- B. Cranial temporal fragments; left and right maxillae sections with the dentitions in situ; left mandibular section with P2 and P3 in situ; right ramus with M1 and M2 in situ; dental fragment; mandibular alveolar fragment; right ramus w/ml. Total fragments (8).
- C. Post-Cranial. 1 atlas vertebra; 2 cervical vertebrae; 1 thoracic vertebra body; 1 thoracic spinous process; 3 lumbar vertebrae; 9 vertebra fragments; 6 rib sections; 1 left scapula; 3 left distal and 2 right distal humeri (the distal epiphysis of one right humerus

unfused but present); 2 humeri shafts; 1 left proximal radius; 1 right distal radius; 2 radii shaft sections; 1 left proximal ulna; 1 left innominate; 1 left femur shaft; 1 right proximal tibia with the epiphysis present and unfused; 2 right tibia shafts; 1 astragalus section; 2 left and 2 right calcanea; Tc+4 section; 1 left proximal metatarsus; 1 burned left proximal metatarsus; 1 right proximal metatarsus; metapodial 2 or 5; 1 metatarsus shaft fragment; 3 metapodial sections; 1st phalanx digit 3 or 4. (34 post-cranial sections) Total recovered 68.

A minimum number of 4 individuals are represented by 3 left distal humeri sections and one right humerus section (distal section) where the epiphysis had not fused.

The remaining identifiable material consists of 48 pieces representative of the following genera and species:

Homo sapiens (human): 3 cranial fragments of the frontal bone; 28 burned pieces of bone and vertebrae fragments (Feature 65). 8 long bone fragments (Feature 45).

Canis familiaris (domestic dog): 1 right distal humerus condyle fragment; 1 distal phalanx fragment. Total 2. (Feature 45).

Castor canadensis (beaver): 1 right humerus shaft.

Meleagris gallopavo (Eastern wild turkey): Feature 62). 1 left coracoid (less than 1 year); 1 right distal coracoid; 1 left and 1 right humeri shaft; 1 ulna shaft; 1 left distal tibio-tarsus; 1 right distal tibiotarsus condyle; 1 right tibiotarsus shaft fragment; 1 polished tarsometatarsus shaft. Total pieces 9.

Terrapene carolina (box turtle): 2 carapace fragments (Feature 20); 2 carapace fragments (Feature 26); 3 carapace fragments (Feature 46).

Chrysemys/Graptemys (painted/cooter turtle group): 1 left and 1 right plastron bridge sections.

Dromus dromas (bivalve): 1 right valve.

The eastern wild turkey is represented by two individuals by a left coracoid which had not fully developed at the time of death and a mature right distal coracoid section. The immature left coracoid from Feature No. 62 would indicate that the individual is less than one year old.

Indeterminate material from these features were sorted into the following categories:

(1)	Large mammal fragments	103
(2)	Burned and polished large mammal fragments	1
(3)	Burned large mammal fragments	23
) 4)	Mammal fragments	5
(5)	Burned mammal fragments	1
(6)	Medium size mammal fragments	1
(7)	Bird fragments	35
(8)	Turtle bones	4
(9)	Reptile bones	1
(10)	Fish (vertebra)	1
(11)	Bivalve sections	13
Total		188

In summary of the faunal remains it should be noted that the sample was too small to permit a conclusive and comprehensive study. The small size of the sample is due primarily to the poor preservation of bone at the site, and possibly because of the fact that the site had not had a long and intensive occupation during any one cultural period.

The site's locality on the upland slopes and great distance from the river would suggest that it had been a seasonal base camp which had been occupied principally during the fall and winter months of the year. Three observations at the site tend to verify the above hypothesis; (1) the scarcity of mussel shells, (2) age of the turkeys at their time of death as evidenced in the faunal remains, and (3) large numbers of charred nuts and other fruits present in the features at the site. Such nuts and fruits are generally harvested during the fall.

APPENDIX B

Botanical Remains from the Meeks Site, Montgomery County, Tennessee

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Vanderbilt University

Small quantities of carbonized plant remains were recovered during excavations at Meeks Site (40Mt40), Montgomery County, Tennessee. Late Archaic materials were recovered from features 9, 10, 15, and 17, and Mississippian materials from features 2 and 31. These were sorted and examined microscopically under low magnification ranging from 7X to 30X. Wood, charcoal, nutshell, carbonized seeds and non-carbonized seeds were identified.

Among the wood charcoal, birch (Betula sp.), oak (Quercus sp.) and corn stem were identified. Food plants identified included hickory nut (Carya sp.), black walnut (Juglans nigra), chenopodium (Chenopodium sp.), wild grape (Vitis sp.), persimmon (Diospyros virginiana), blackgum (Nyssa biflora), blackberry (Rubus sp.), serviceberry (Amelanchior canadensis), greenbrier (Smilax sp.), and corn (Zea mays).

Carbonized seeds of copperleaf (Acalypha sp.) and spurge (Euphorbia maculata), were also identified. Although no documentation for economic use of either of these species by aboriginal cultures of Tennessee was found, it is pointed out that at least four species of Acalypha were used for medicinal purposes by Indians in the Southwest and Mexico (Ford 1975:331), and the Cherokee utilized two species of Euphorbia medicinally (Taylor 1940:35-36).

Non-carbonized seeds identified included crabgrass (Digitaria sp.), bedstraw (Galium sp.), wild millet (Echinochla sp.) and lespedeza (Lespedeza sp.). These are all common weedy species introduced from Eurasia and are evidently intrusive materials. Accidental deposition of wind-borne seeds in archaeological samples during excavation is a frequent occurrence.

The Late Archaic features yielded examples of birch, oak, hickory nut shell, and chenopodium seeds. Table 5 provides a detailed accounting of the plant remains from features 9, 10, 15, and 17.

Specimens isolated from feature 31, a Mississippian refuse pit, included birch, corn stem, hickory nut shell, black walnut, wild grape, persimmon, corn, chenopodium, blackgum, blackberry, serviceberry, greenbrier, copperleaf and spurge. Feature 2 yielded corn stem and grape seed. Table 6 provides a detailed breakdown of the plant remains from feature 2 and 31 by weight and percentages.

The remains of corn included fragmentary kernels and 117 cupules. No cobs were present. One intact kernel was preserved, and it measured 4 mm in width. The cupule measurements ranged from 4 mm to 8 mm in width and from 2 mm to 5 mm in depth. Preservation of the materials was too poor for identification of the type of corn present.

TABLE 5 - Late Archaic Plant Remains: Percentages by Weight.

Feature	Tot wt/ gr	Other*	Wood Charcoal			Nut Shell Hickory	Seeds Chenopod
			Birch	Oak	Unidentified		
9	119.6	69%		2%		29%	
10	89.3	74%		22%		4%	N = 2
15	2.3	43%			22%	35%	N = 2
17	5.4	18%	30%			52%	

*Flakes, bone, shell, sherds, dirt and rootlets.

TABLE 6. - Plant Remains from Features 2 and 31.

	Weight/grams	Sample percentage
<u>Wood Charcoal</u>		
Birch	25.8	19.9
Corn stem	11.2	8.6
<u>Nut shell</u>		
Hickory	20.6	15.8
Black walnut	17.9	13.8
<u>Other*</u>	42.1	32.5
<u>Seeds</u>		
Persimmon	1.0	.8
Corn	7.3	5.7
Combined**	<u>3.7</u>	<u>2.9</u>
Total	129.6	100.0

*Flakes, bone, shell, sherds, dirt and rootlets.

**Blackgum, chenopodium, blackberry, wild grape, serviceberry, greenbrier, spurge, copperleaf.

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