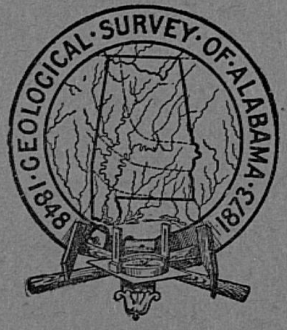
GEOLOGICAL SURVEY OF ALABAMA
WALTER B. JONES, STATE GEOLOGIST

MUSEUM PAPER 25
ALABAMA MUSEUM OF NATURAL HISTORY

THE PERRY SITE Lu°25

Units 3 and 4
Lauderdale Co., Alabama

By
Wm. S. WEBB
and
DAVID L. DeJARNETTE



Prepared with the assistance of the Work Projects Administration
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UNIVERSITY, ALABAMA
1948

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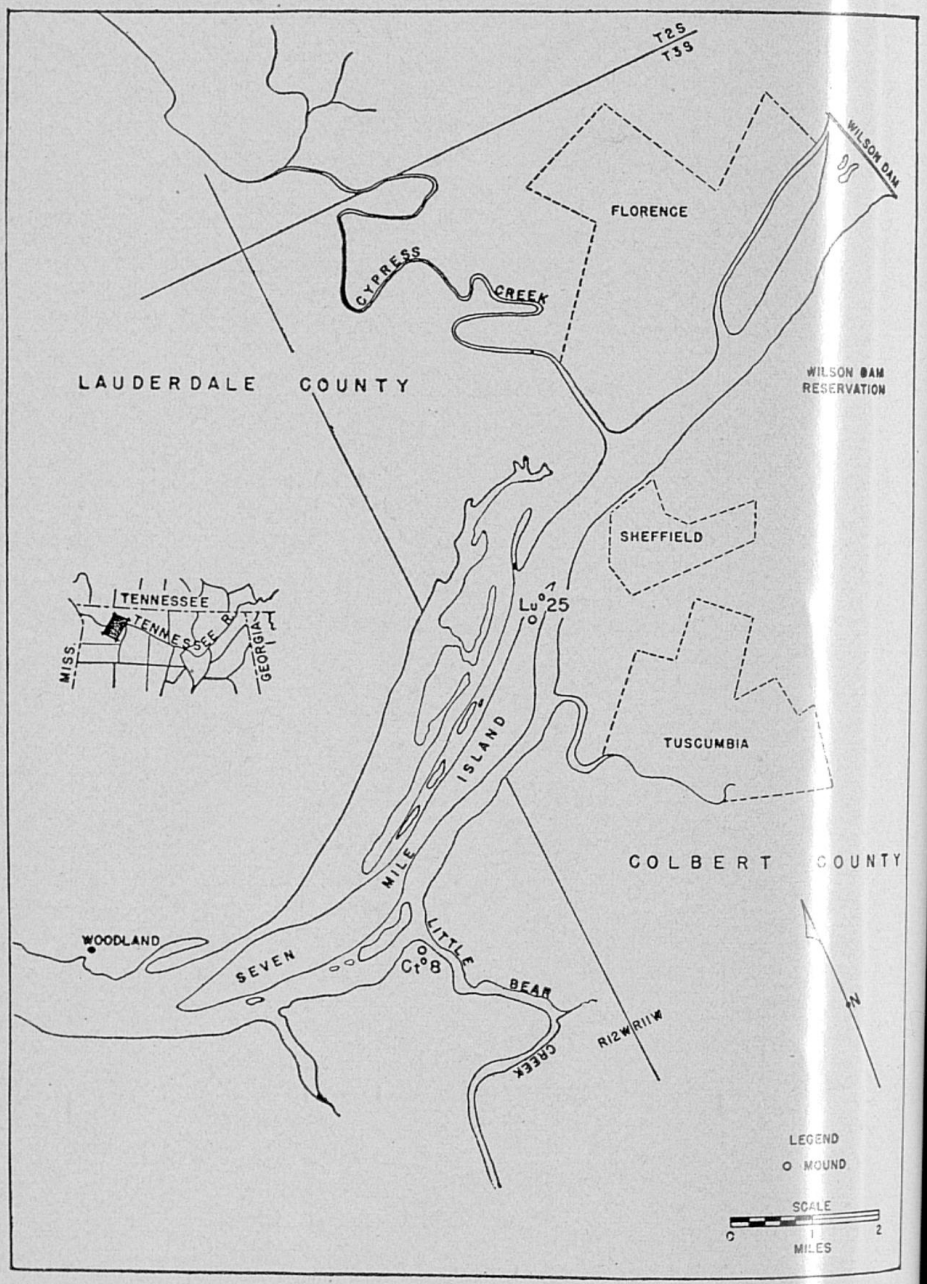

Frontispiece: Map of the region showing Seven Mile Island and the mouth of Little Bear Creek on the Tennessee River.

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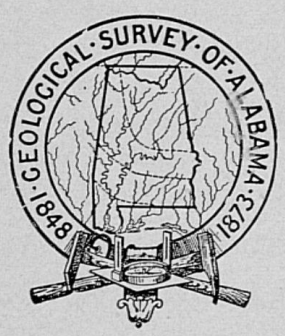

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LETTER OF TRANSMITTAL

University, Alabama

May 24, 1948

Honorable James E. Folsom

Governor of Alabama

Montgomery, Alabama

Sir:

I have the honor to transmit herewith the manuscript of a report on "The Perry Site, Lu°25, Units 3 and 4, Lauderdale County, Alabama", by Wm. S. Webb and David L. DeJarnette. It is requested that this be printed as Museum Paper 25 of the Alabama Museum of Natural History.

Respectfully,

WALTER B. JONES,

State Geologist

INTRODUCTION

Previous Excavations

The Pickwick Landing Dam on the Tennessee River in Hardin County, Tennessee, was authorized by Congress November 19, 1934. The dam was completed and the gates were closed February 8, 1938. At that time the reservoir lying largely in the State of Alabama began to fill, and the rising water began to submerge scores of archaeological sites in Pickwick Basin.

An Archaeological Survey of the basin was early undertaken and excavation of important selected sites was begun May 4, 1936.

The Perry Site, Lu°25 on the northern end of Seven Mile Island in the Tennessee River near Sheffield, Alabama, (see frontispiece map of the region) was chosen as one of the sites worthy of careful excavation.

The excavation of Unit 1 of this site, see Base Chart Figure 1, under the direction of Mr. James R. Foster, Junior Archaeologist T.V.A., was begun April 25, 1938, and finished August 30, 1938. The excavations of Unit 2, under the direction of Mr. Harold V. Andersen, Archaeological Supervisor W.P.A., was begun immediately and continued to November 15, 1938. The results of these excavations formed the basis for the report* on this site in "An Archeological Survey of Pickwick Basin Bulletin 19, Bureau of American Ethnology."

The report of this excavation showed a total of 83 special features listed and a total of 350 burials recorded. The site proved to be a very important shell mound, and excavation in Unit 2 revealed an extensive late intrusion of the Moundville or Koger's Island Complex. Because of the importance of the site and also because of the fair state of preservation of its skeletal material, it was deemed advisable to continue the excavations here after closing other field work in Pickwick Basin in order to permit a more extensive study of this site and in order to increase the skeletal series from this site and thus enhance the validity of statistical measurements of skeletal material.

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*Webb and DeJarnette, 1942.

However, due to the labor conditions, excavation was not resumed at this site until June 29, 1939. At that time Mr. Andersen began the excavation of Unit 3, consisting of Blocks 8 to 12, inclusive, see Base Chart, Figure 1. After the resignation of Mr. Andersen in the late summer, Mr. Wayne W. Kraxberger, Archaeological Supervisor W.P.A., took charge of the site, completing Unit 3 November 12, 1939, and immediately beginning the excavation of Unit 4, consisting of Blocks 13 to 16, inclusive, see Base Chart, Figure 1.

ACKNOWLEDGMENTS

To Messrs. Andersen and Kraxberger the authors express their appreciation of the excellent field techniques employed, and the carefully kept records which have provided the basis for this study.

To Dr. Lawrence L. Durisch, Chief Social and Economic Research Division, Tennessee Valley Authority, and to Dr. Walter B. Jones, Director of the Alabama Museum of Natural History, the authors express their deep appreciation of many personal kindnesses, and are pleased to acknowledge much aid and assistance from the organizations represented by these gentlemen in the cooperative endeavor of the Archaeological Survey of Pickwick Basin.

To Mr. Harold F. Dahms, Miss Marion Dunlevy, and Mr. James R. Foster, all of the Central Archaeological Laboratory, the authors express their gratitude for the services rendered by these scientists in aiding in the compilation of the data from this site. The authors are indebted to Miss Dunlevy for the report on the pottery from this site, published here, and to Mr. Foster for the data on the flint classifications.

Lu° 25
PERRY SITE
SEVEN MILE ISLAND

THE PERRY SITE

Lu°25, Units 3 and 4

This site is a shell mound located in the SE¼ of the SE¼ Section 30, T 3S, R11W, Lauderdale County, Alabama, northwest of the city of Sheffield. See frontispiece map of the region. The mound is a conspicuous elevation near the north shore of Seven Mile Island in the Tennessee River. When the river is at its normal elevation of 414 feet above mean sea level, the mound can be excavated entirely to its base. A general view of this site is shown in Figure 2-b.

As shown on Base Chart, Figure 1, Unit 1 consisted of the zero trench and Blocks 1, 2, 3 with the trenches about them. Unit 2 consisted of the 115-foot trench and Blocks 4, 5, 6 and Block 7 to the B Zone.

In this report Unit 3 is made of the base of Block 7, and Blocks 8, 9, 10, 11 and 12. These are shown in Figures 2-a and c. Figure 3-a shows the excavation of Blocks 10, 11 and 12 nearing completion. Mr. Harold V. Andersen was in charge of this portion of the excavation.

Unit 4 was made up of Blocks 13, 14, 15 and 16. Mr. Wayne W. Kraxberger was in charge of this excavation. Figure 3-b shows the first three blocks staked off and Figure 4-a shows how they were isolated before horizontal slicing. Figure 4-b presents Block 16 near the completion of excavation.

The advantages of the block method of excavation of shell mounds were explained in the Pickwick Basin report, Bureau American Ethnology Bulletin 129. Briefly, it has been found that when shell mounds are excavated by the trench system, material falling out of the profiles is "found" at lower depths than its normal situation. Lines of natural zones are difficult to determine and intruded pits are harder to detect in the trench system. Material falling from above and intruded into deeper levels through rodent holes, post holes and small minor disturbances which can not be recognized in the trench system can usually be detected in the isolated block system. By isolating the block with 5-foot trenches and by the horizontal slicing of 5-foot square

Figure 2

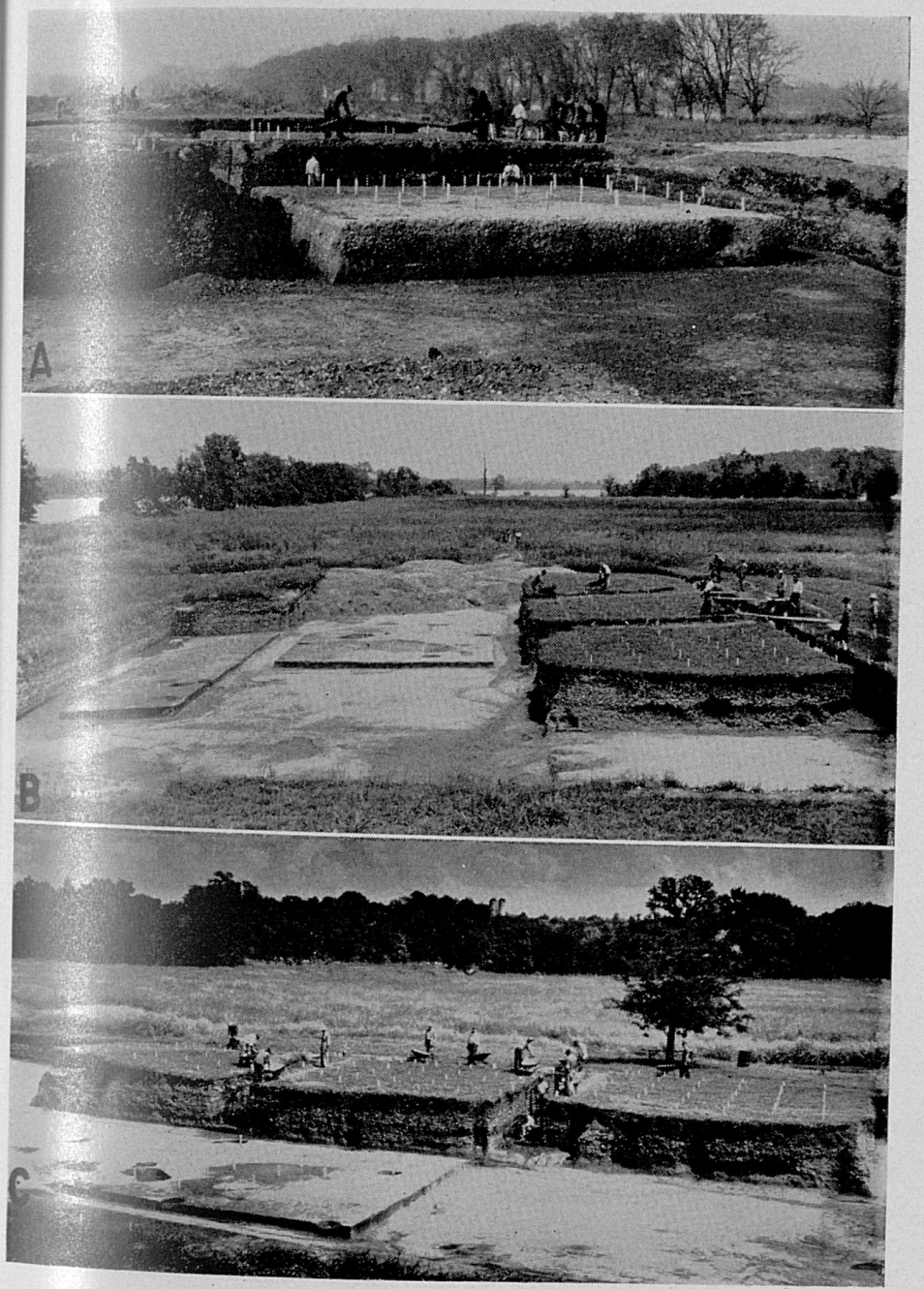

Figure 2. (a) Isolating Block No. 8. Remaining portion of Block No. 7 is in foreground.

(b) General view of Site Lu°25 looking northeast toward the head of Seven Mile Island.

(c) Block Nos. 10, 11, and 12 staked and isolated. Base of Block No. 8 in foreground.

Figure 3. (a) Excavation of Block Nos. 10, 11, and 12.

(b) Block Nos. 11 and 12 nearing completion. Block Nos. 13, 14, and 15 staked for excavation.

levels, it is possible to obtain more correct depth distribution data. The block method of excavation has yielded evidence of stratigraphy where the trench method has failed to demonstrate it. A record of the material coming from the isolating trenches is carefully kept and the material is studied in the same way as that from the block, but in the determination of lower boundaries of cultural zones it has been found that the data from the block is more reliable.

Natural Zones

In Units 3 and 4 natural zones were apparent as layers of nearly pure shell which were separated by more compact layers containing silt. Some of the lower zones seem to suggest redeposit of shell by flood action. As in most shell mounds the zones are not continuous over the whole site, but represent local accumulations of shell or midden as the result of occupancy of a local area. As occupancy shifted from one portion of the site to another, the zones were made to vary in thickness, and at some points to disappear entirely. In general, it may be said that very little cultural significance can be attached to some of these zones, especially in these new units. For this reason, although the zones were noted for each block, and they varied in thickness from block to block in both units, all material was recorded by foot levels and has been studied on that basis.

The only significant features which seem definitely related to zones are the post-mold patterns which occur on the top of Zone B. Here these post molds seem to show that some kind of structures built of poles were selected at this level. Zone A is about 3 feet thick and it seems to suggest a continuous occupancy which deposited shell and midden debris without interruption. The top of Zone B was a more compact layer of clay and silt in which post molds remaining. This level shows possibly three house structures in Blocks 8 and 9 in Unit 3. Figure 5-b shows the occupational level in Block 8. These structures are poorly defined—but they all seem to have as a common trait a central fired clay area. Such structures as seem to be indicated here could hardly have been permanent, and seem to have been little more than a temporary frame work upon which some roof material was placed. There were many scattered post molds found on the top of Zone B in Blocks 13, 14 and 15, and figure 5-a shows

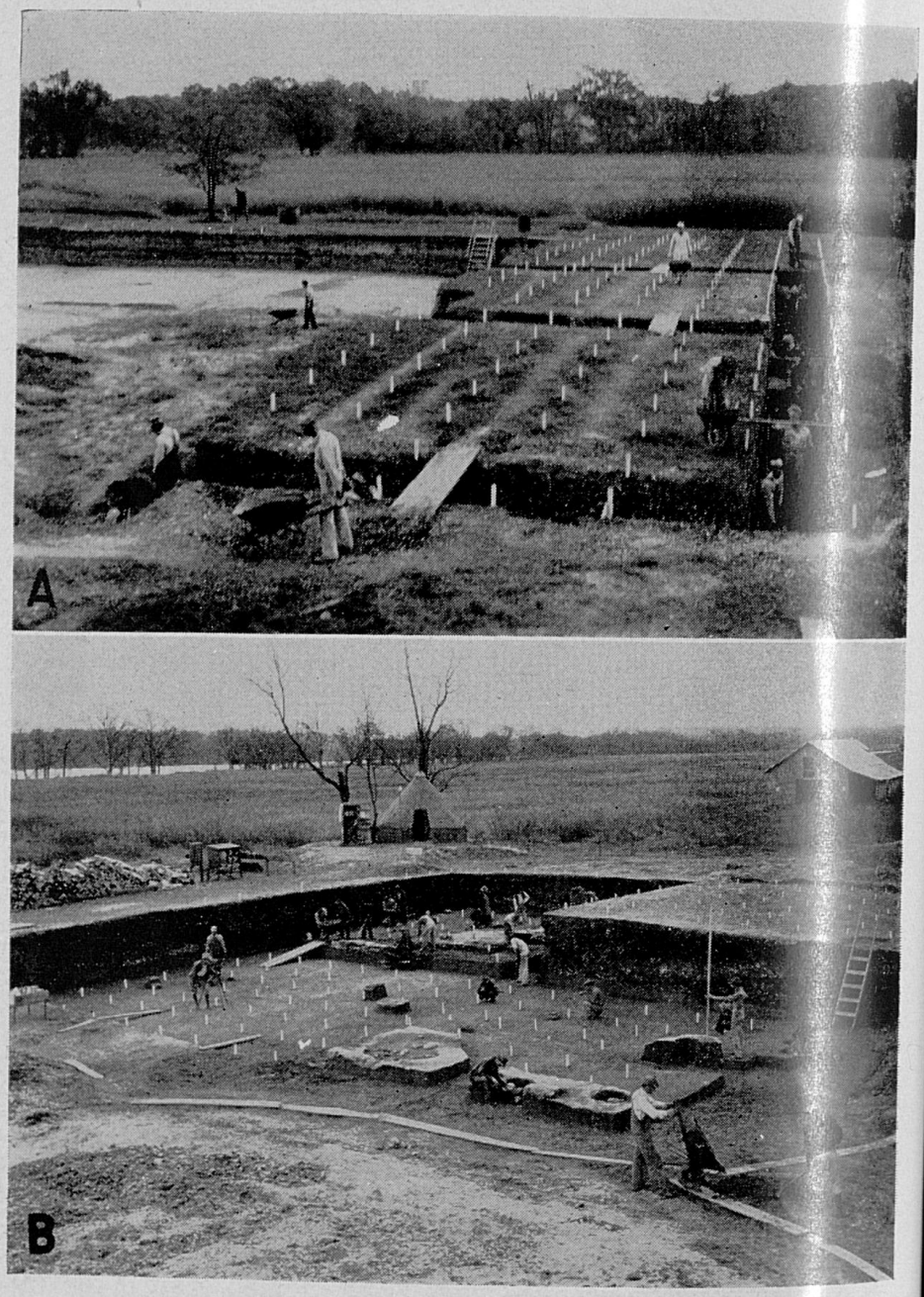

Figure 4. (a) Isolating Block Nos. 13, 14, and 15.
(b) Block No. 16 nearing completion.

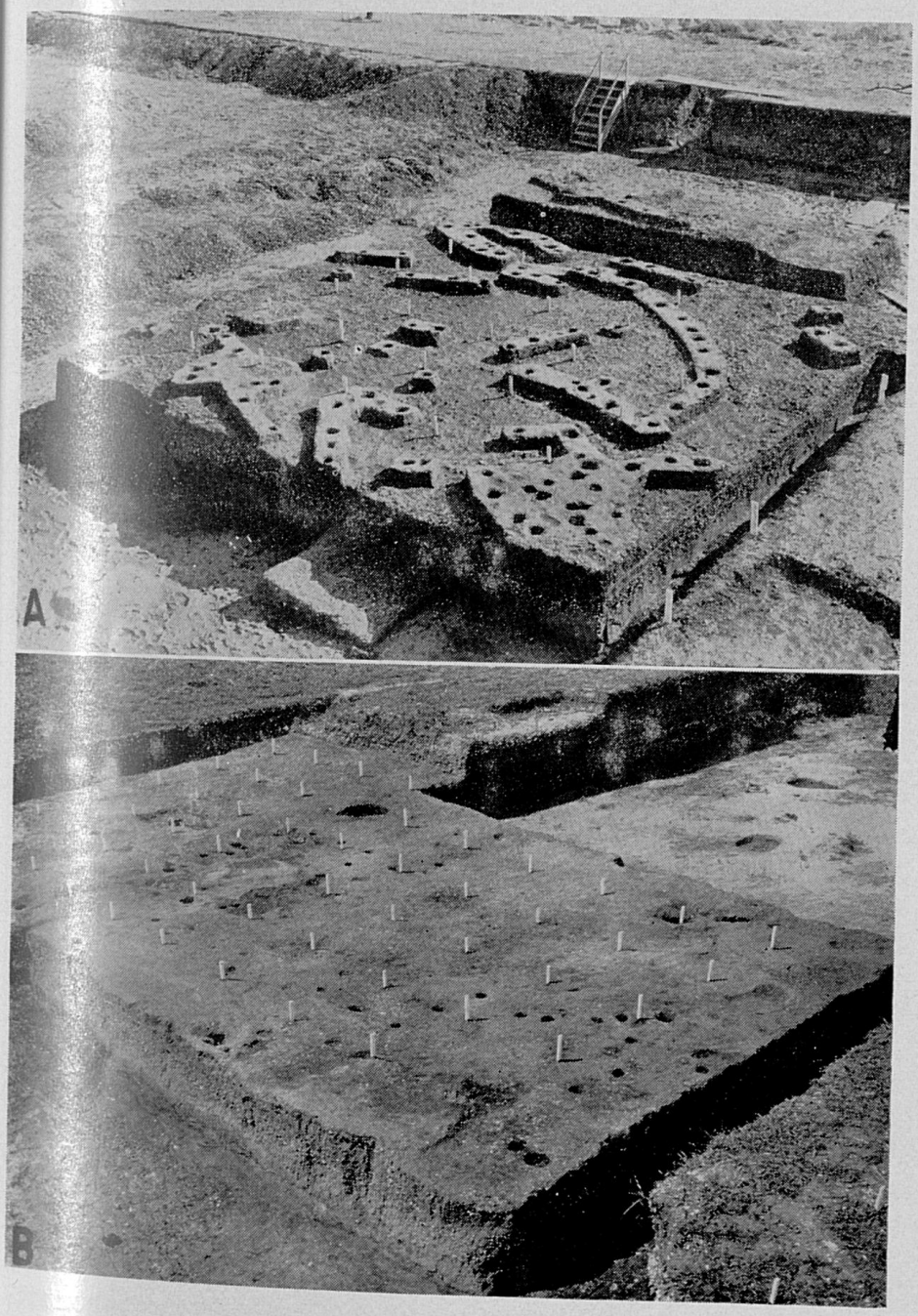

Figure 5. (a) Scattered post-molds on the surface of Zone B of Block No. 14.

(b) Post-molds on a definite occupational level, Block No. 8.

the occupational level of Zone B in Block 14. These molds are so scattered as to give no exact idea of the form of the structure. Even with evidence of an occupational level on top of Zone B the natural zones seem to carry no cultural significance—as occupancy shifted back and forth over the surface of the midden as it was being built. Natural zones are therefore proven to be of only slight significance culturally, and for this reason artifact designations are by foot levels instead of zones. In most of the excavation in both Units 3 and 4, the record was taken in half-foot levels. This seems to yield the best results in studies of stratigraphy.

Features

In Units 1 and 2 previously reported there were 83 special features. In Units 3 and 4 there were 112 features given special designation as follows:

	Unit 3	Unit 4
Fire pits	6	10
Midden pits	1	7
Fired clay hearth areas	6	24
Charred shell areas or clam bakes		15
Rock piles, limestone and river pebbles	2	11
Flint workshop area	2	13
Cache of hammerstone		3
Fire pits outlined with or containing rock		9
Deposit of gastropod shells		1
Cache of large flint blanks and cores		2
Totals	17	95
GRAND TOTAL	112	

While it is probably not desirable to describe each one of these features separately, it is possible to present the general characteristics of each group of features since the individual features in each group are often quite similar.

Fire pits occurred from the top of the mound throughout the midden and a few were found in the river-deposited silt below Zone E. They were usually well formed concave pits—about 3 feet in diameter and about 1.5 feet deep. They were dug into the shell or silt layers and the walls showed the effect of fire in

the pit. They were filled with ashes, charcoal, and nearly all had in them pieces of rock broken by fire action. About half of them had burned animal bones, mostly deer, scattered in the ashes. One such pit had the partially cremated remains of a dog skeleton. These fire pits seem to have been places for cooking where animal bones were thrown back into the fire. Probably they were also used to heat stones and river pebbles for use in "hot rock cooking" by boiling the water in containers into which the stones were dropped. This seems to account for the considerable amount of fire broken stones in the ash fill of these pits, and may explain the occurrence of much fire-cracked stone scattered throughout the shell midden. One of the fire pits is shown in figure 6-a after being cleaned out.

Midden pits were pits from 3 to 5 feet in diameter and about 3 feet deep which contained the usual midden debris, with a considerable amount of broken animal bone, deer antler, turtle carapaces and scattered shell. Generally there was no evidence of fire and the use to which pits could have been put is not clear. Several of these pits were found in the river-deposited silt under the mound. One such pit contained a few scattered human bones in the debris. These pits were not used as burial pits.

Fired clay hearth areas were quite numerous throughout the midden. They seem to occur with about the same frequency at all levels. They were areas nearly circular, about 5 feet in diameter or larger. A few of these were elliptical in shape and were 4 by 8 feet in dimension. Clay seems to have been laid down in a layer two or three inches thick covering the shell, and a fire made on the clay hearth. Some of these hearths show considerable fire action on the clay which is made quite red by the heat and is often as hard as brick. Usually there is some ash on these hearths—but not a heavy deposit. There is but little if any evidence of cooking about these fires and they may have been used solely for warmth. It is possible that these hearths were the center in most cases of transient shelters—crudely made—which were perhaps little more than "wind breaks". Later occupancy has scattered shell over these hearths but there is no concentration of midden other than shell about them. One hearth had some scattered burned human bones above it which suggested to the excavating supervisor that it may have been a cremation. However, this is regarded as a chance association as the numerous other hearths showed no connection with cremation. In most

cases there was no evidence of postmolds about these hearths although such evidence was carefully sought.

Charred shell areas or clam bakes occurred at all levels in the midden. They were in general shallow basins dug into the shell layers. Fire, made in these shallow basins about 4 feet in diameter and about one foot deep, charred the surrounding shell so that it easily disintegrated. The fire usually left a layer of ashes and charcoal several inches thick. It appears that a quantity of mussels were poured on such fires while there still were numerous hot coals in the fire. These mussels were thus cooked ready for eating. Some nearest the fire were burned and never eaten. The paired bivalves often remained in position above the ash layer but show the effect of fire.

Throughout the midden were found, occasionally, piles of rock made of from 5 to 20 large stones, some of which were flat limestone slabs, and others river boulders. These rocks were usually piled close together to floor a small area. Their purpose is not clear. A few of the stones show battering as if they had been used as anvils. With some of these stone piles were smaller stones evidently used sa hammers. One of these stones showed evidence of grinding as if it were a crude mortar. These stone piles may mark the kitchen site where food was prepared as by the cracking of mussel shells, or the crushing or grinding of roots, nuts, or seeds.

Another use of stone occurred occasionally in the midden. Stones were used to outline or floor a small fire basin. They were much like the fire basins previously described but differed in that the stones were used to line the basin. A few broken stones occur in the ashes in the pit.

Like most other shell mounds there was a period in their history when the working of flint was very important at the site. This seems at this site to have occurred when the top of Zone E was being laid down. This is at a depth of about 5 feet from the mound surface. These flint workshops all occur at about this level. Some are only small patches of flint spawls and others are much more extensive. One of these workshop areas was 11 by 16 feet. The broken flint covered this area to a depth of 4 inches. There were taken out of this workshop 117 chipped flint tools, 66 flint cores, and an estimated 105,000 spawls. Another shop

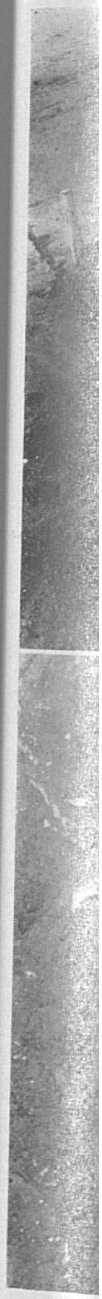

Figure 6.

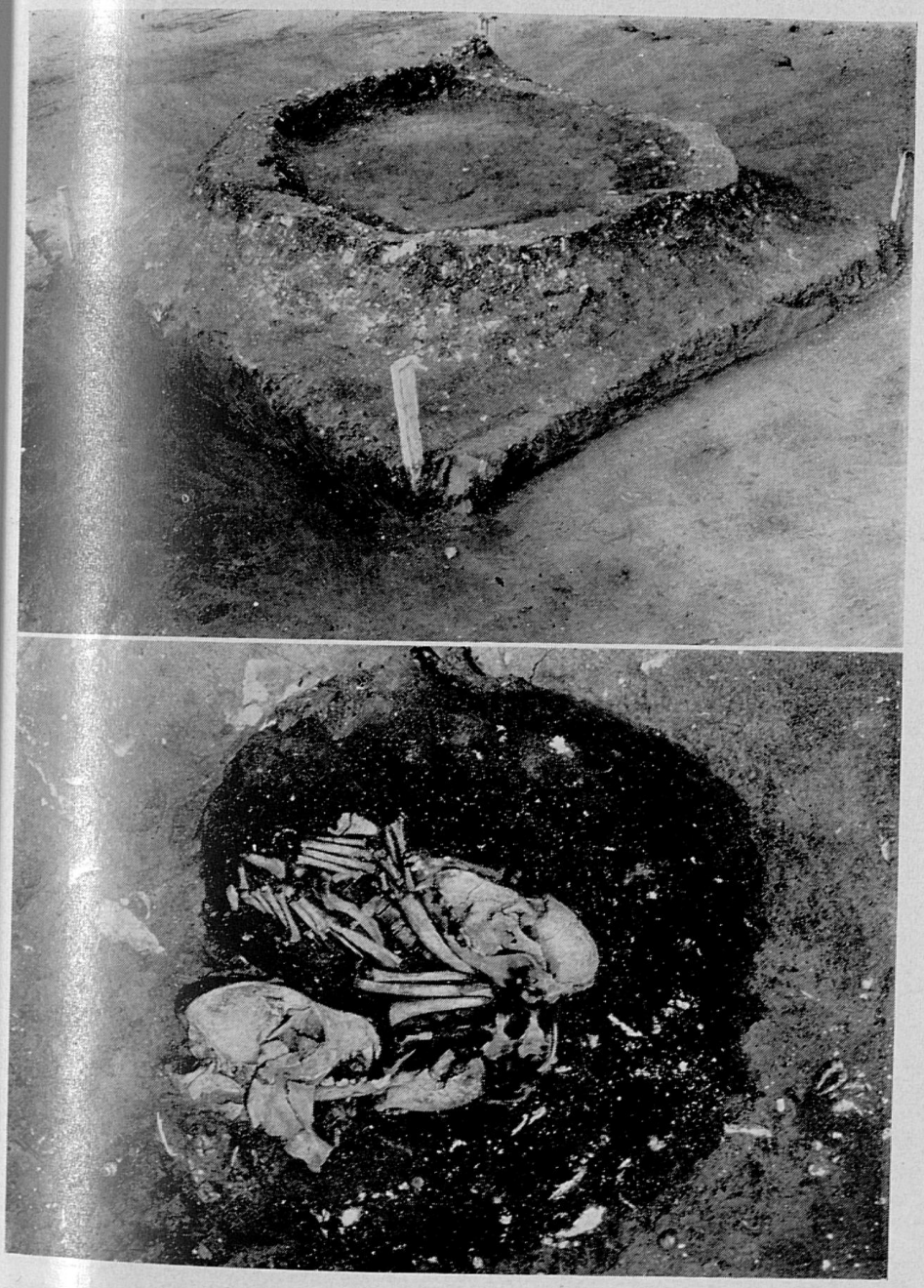

Figure 6. (a) Feature 113, a fire pit, in Block No. 11, Unit 3 near the bottom of the midden.

(b) Two dog burials. Note how the limbs of the skeletons have been folded. In a human burial they would be classed as "fully flexed".

site area measured about 15 by 15 feet. There were found 299 flint artifacts, some 50 cores and there were an estimated 485,000 broken chips, covering the area to a depth of about 9 inches in the center. After the appearance of flint shops in the shell mound, flint artifacts are very abundant at all later levels, but the shop site working of flint on the shell mound ceased, since no shops are found at levels above their first occurrence. This may mean that later it became convenient to work the flint elsewhere, and save the trouble of its transportation to the mound site for working.

Dog Burials

There were 19 dog burials reported from these later excavations. Of these 5 were in Zone A, 4 were from Zone B and 10 were in Zone E. In general the dog skeletons were often found disturbed by later aboriginal digging in the midden, and sometimes the bones were found scattered, although it is believed most of these disturbed dog skeletons represent bodies that were carefully placed at the time of burial. There were four dog burials reported as in the sleeping position, i.e. body was "curled up" in grave with bones in anatomical order. Two of these were in association with human graves. One was near the head of Burial No. 688 and one was placed directly on the chest of Burial No. 552. Two dog burials were found partially cremated. This appears to be unintentional, and resulted from later fire basins being built very close to dog burials though in one case one dog seems to have been buried close to a fire basin, which continued to be used. Figure 6-b shows two dog skeletons buried very close together, but seemingly at different times. The general impression from all of these skeletons is a dog of rather small size.

Burials

There were previously reported from Units 1 and 2, 350 burials. Burial Nos. 351 to 564 inclusive, a total of 214 were taken from Unit 3 and Burial Nos. 565 to 708, a total of 144, were found in Unit 4.

A summary of the forms of burials is given in the following table.

	Unit 3 Bu. 351-564	Unit 4 Bu. 565-708
Fully flexed	71	31
Partially flexed	53	38
Extended	13	6
Sitting	8	27
Infants	40	17
Disturbed	19	15
Reburial of bones	4	3
Partial cremation	2	5
Dismembered burials	2	0
Total cremation	1	0
Burial skulls only	1	2
Total	214	144
Total for Units 3 and 4	358	
Grand total for Units 1 to 4 inclusive	708	

As previously reported from data taken from Units 1 and 2, the occupancy of this site falls into two major subdivisions. The first of these, the so-called "shell mound" occupants, in their early stages a non-pottery people, began this site by laying down a shell midden on water-laid silt on the river bank. They buried their dead closely flexed in small pits, usually without artifacts, though shell and bone beads and pins are occasionally found. This method of burial seems to give rise to several burial forms, which may all be the result of a practice of rolling the body into a small bundle when prepared for burial.

The body seems to have been tied with ropes and perhaps covered with skins, or textiles, and thus converted into an ellipsodial bundle. The grave was only just large enough to receive this "bundle". If the body were placed on its side, or back, or face down, in a circular pit this would produce the typical "round grave" burials of the Shell Mound Complex, well illustrated in figures 7-a and b. If the bundle were merely laid on the midden and covered over with shells, no pit being dug, a typical "fully flexed" burial would result—as is often found in shell mounds, and well illustrated in figure 8-a. If, however, the grave dug to receive the "body in the bundle" were a very small circular pit,

Figure 7. (a) Pit of Burial No. 580 intruded into silt below Zone E.
(b) Burial No. 580 exposed in pit.

Figure 8. (a) Burial Nos. 440 to 446 inclusive and No. 448. Many are typical fully flexed burials.

(b) Burial Nos. 561 and 562 typical sitting burials, elevated knees. Burial No. 562 at somewhat lower level has collapsed or slumped, and head has fallen.

the bundle which was "egg shaped" might have been placed "on end" in the pit. This would have produced the so-called "sitting burials" so common to shell mounds, as illustrated in figure 8-b. All of these forms of burials occur at all levels in shell middens, and seem to have all been in use throughout the building of the middens. Physical anthropological studies seem to show no distinction in skeletal remains from these several burial types, but on the contrary seem to establish that these different burial types were used by the same people. Artifacts other than shell beads occur only very rarely in any of these burial types.

The second, and later occupancy of this site was designated a "Koger's Island" or Moundville Complex, because evidence of it was found in great abundance on Koger's Island, and has many of the archaeological characteristics observable at Moundville. This Koger's Island Complex, added but little to the height of the shell midden, but made considerable use of the site if one may judge from the number of their burials intruded into the midden. Their form of burial was usually extended, or very slightly flexed. Graves are usually not deep and the intrusion of the pits from the surface obvious. This pottery-making people usually placed one or more shell-tempered pottery vessels with their dead, as illustrated in figures 9-a, b, c and 10-al b. In the burials of the Koger's Island Complex multiple burials seem to be so common that one is led to suspect that something more than accidental death of several persons at the same time would be necessary to account for the frequent recurrent multiple burials as illustrated in figures 11 and 12-a. By multiple burials is meant the burial of several bodies at the same time. It often happens that Koger's Island burials were intruded into graves of the Shell Mound Complex as shown in figure 12-b, or such burials may include a reburial of bones as shown in figure 9-c.

These are not properly to be regarded as multiple burials even though the deposit of the bundle of bones, as in figure 9-c, was probably made when the partially flexed body was buried, yet a considerable time may have elapsed between the deaths of these individuals. The Koger's Island type of burial, beside pottery, often contains other artifacts as illustrated in figure 13-a. Not infrequently projectile points of flint are found imbedded in bone, or within the chest cavity of Koger's Island type burials as shown in figure 10-b, suggesting that these points were not burial offerings—but rather the cause of violent deaths.

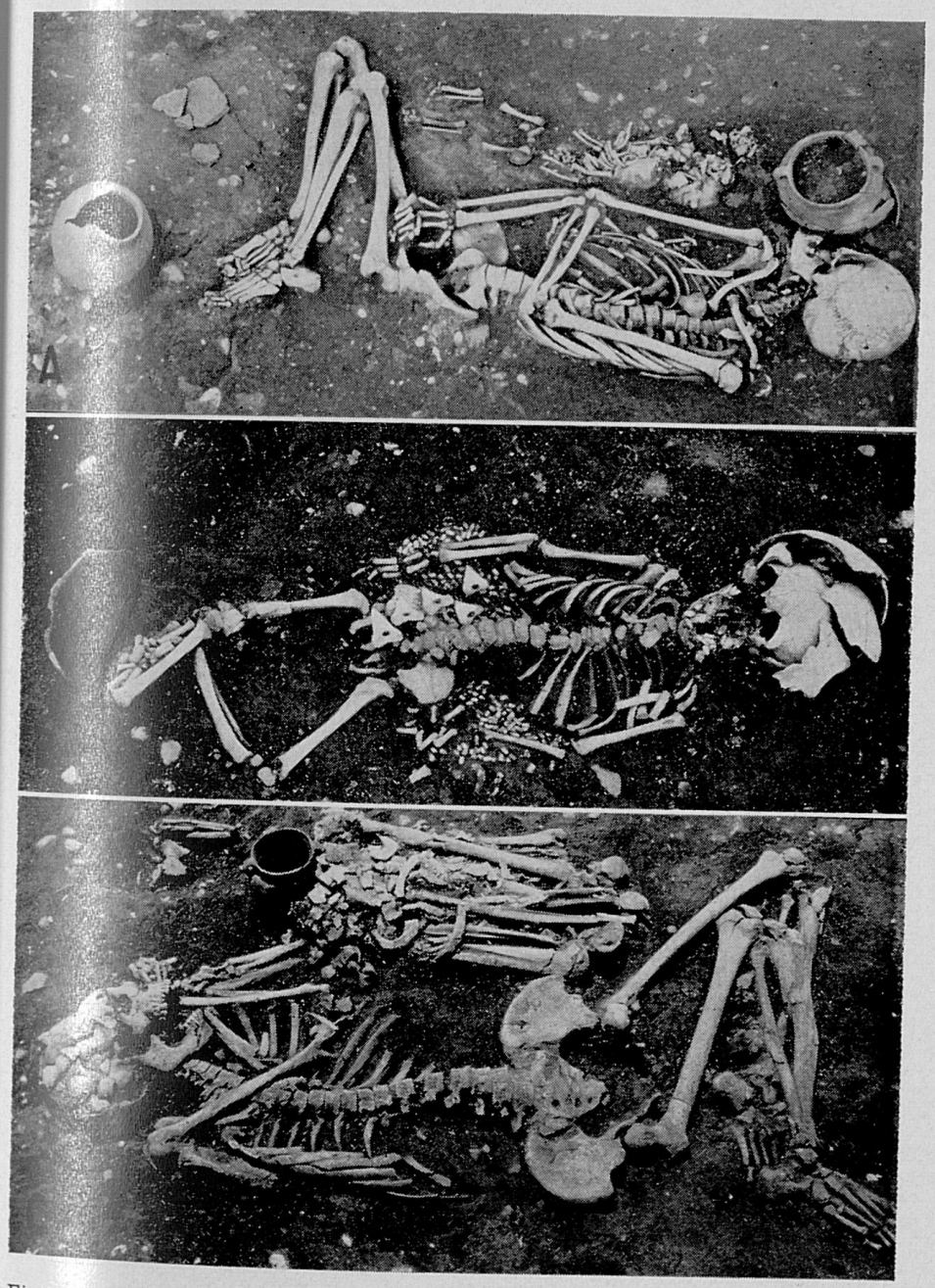

Figure 9. (a) Burial Nos. 401 and 402 adult and child, each with pottery vessel.

(b) Burial No. 435, a child with shark teeth beads and copper ear ornaments.

(c) Partially flexed Burial No. 438. A bundle burial of bones No. 439 and a disturbed Burial No. 440 of a child upper left. All of the Koger's Island Complex.

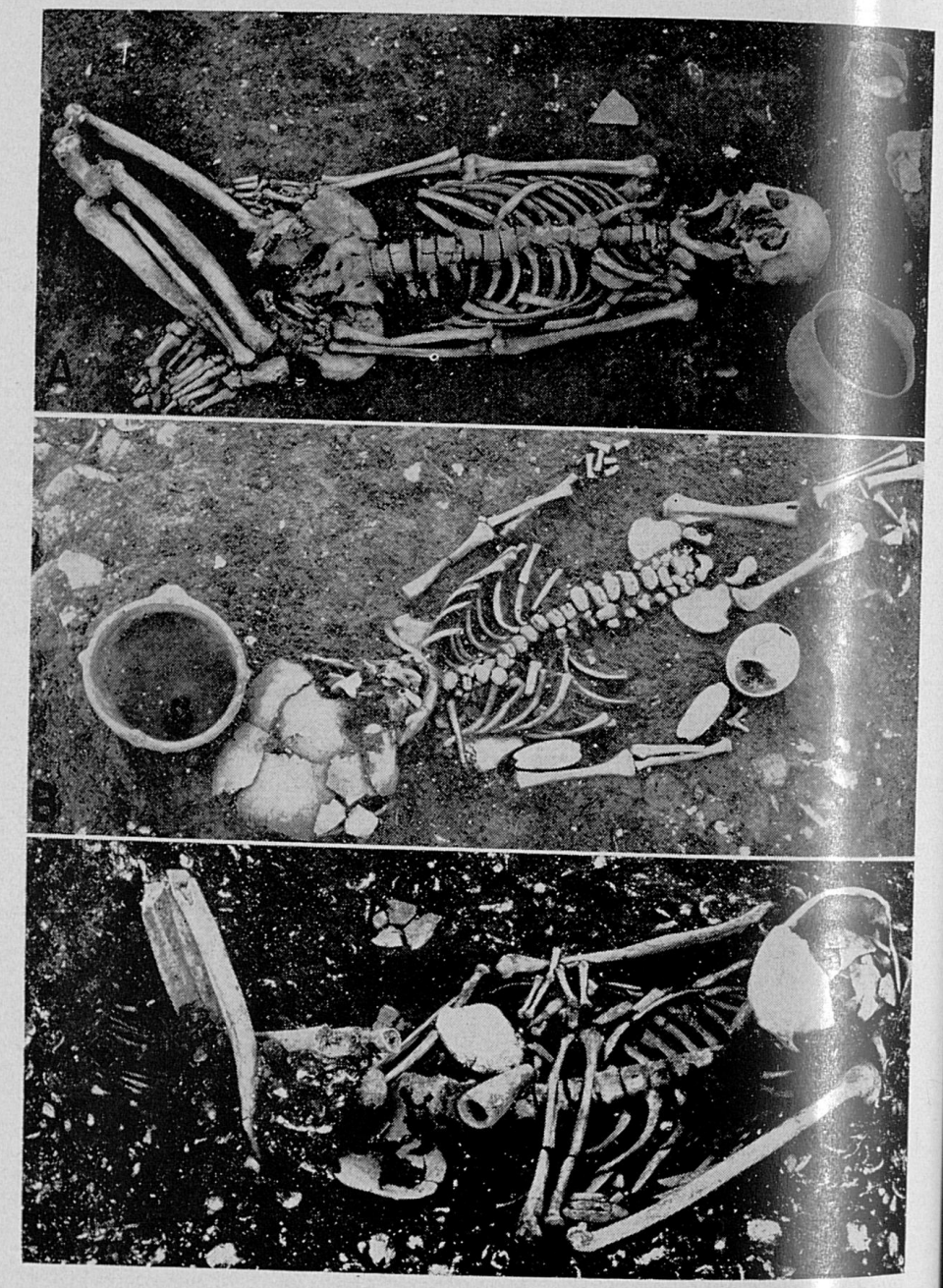

Figure 10. (a) Burial No. 505 with pottery.

(b) Burial No. 506 with shell beads and pottery.

(c) Burial No. 458 at depth of 4.7 feet, far below the pottery zone, hence, a typical shell mound burial. Note tubular stone pipe.

It is impracticable to describe in detail each individual burial of the 358 burials reported from this last excavation of this site. As pointed out, one of the objects of this excavation was to procure additional skeletal material in order that the statistical observations of physical anthropology might rest upon a larger series of measurements. This objective has been accomplished and it is an important one, even though the additional excavations have only added weight to the former archaeological conclusion as to occupancy, and have brought to light no important new facts relative to this site.

Of these 358 burials it is possible, from archaeological data alone, to identify 100 of them as of the Koger's Island type. These had an average depth of grave intrusion of 1.54 feet below the surface—the deepest one being 3.6 feet deep and only one other being as deep as 3 feet. There were 202 burials designated as "Shell Mound" type from archaeological data only. These had an average depth of 3.78 feet, the deepest being 7.5 feet and the one nearest the surface was 1.5 feet deep. Only sevn of these burials were less than 2 feet deep.

The remaining 56 burials could not certainly be assigned to either complex—either because they were infants, or had been disturbed, or were incomplete, or had no significant artifacts. The presence of seven burials out of a total belonging to the "Shell Mound Complex" which were less than 2 feet deep would seem to argue that they were buried near the later part of the dposit of the midden, and that Koger's Island folk, although they intruded 100 burials into the midden, yet contributed very little to its increase in depth. It may well be that the Koger's Island folk used very little shell fish, and brought upon their village site very little to make permanent increase in its elevation. It is also possible—even probable that this latter people did not actually live on this shell midden, but had their village elsewhere in the general vicinity, and came upon the shell mound only to bury their dead. This would explain the general lack of artifacts of this later people in the midden, and the obvious difference between the midden content and the burial associations of these graves intruded into the midden. It was the very considerable digging in the midden by the Koger's Island people which caused so many burials to be disturbed and scattered. It is quite possible that many of the disturbed burials were of the Shell Mound Complex. The pottery zone was shown to be superficial. It was

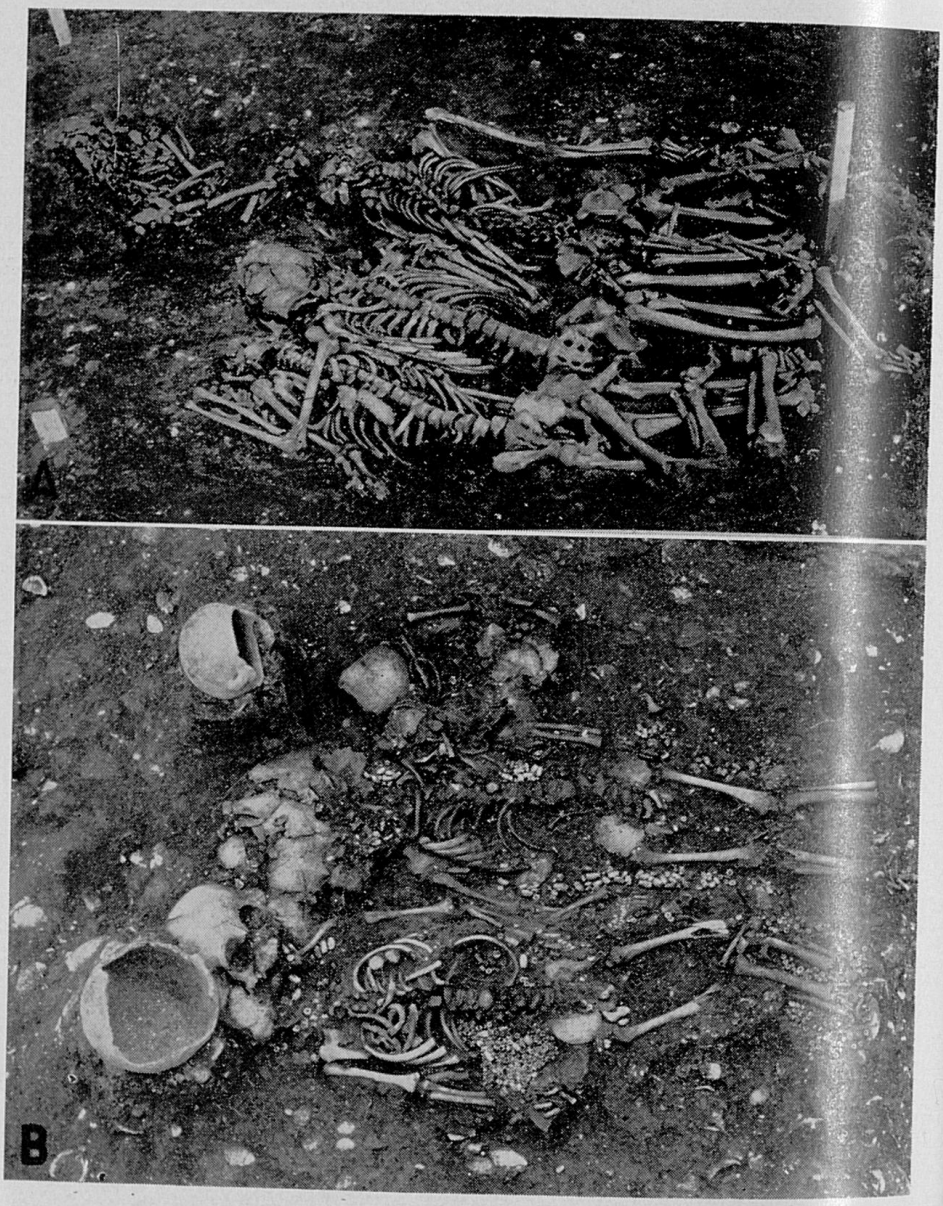

Figure 11. (a) Burial Nos. 496 to 500, inclusive.

(b) Burial Nos. 384, 385 and 386.

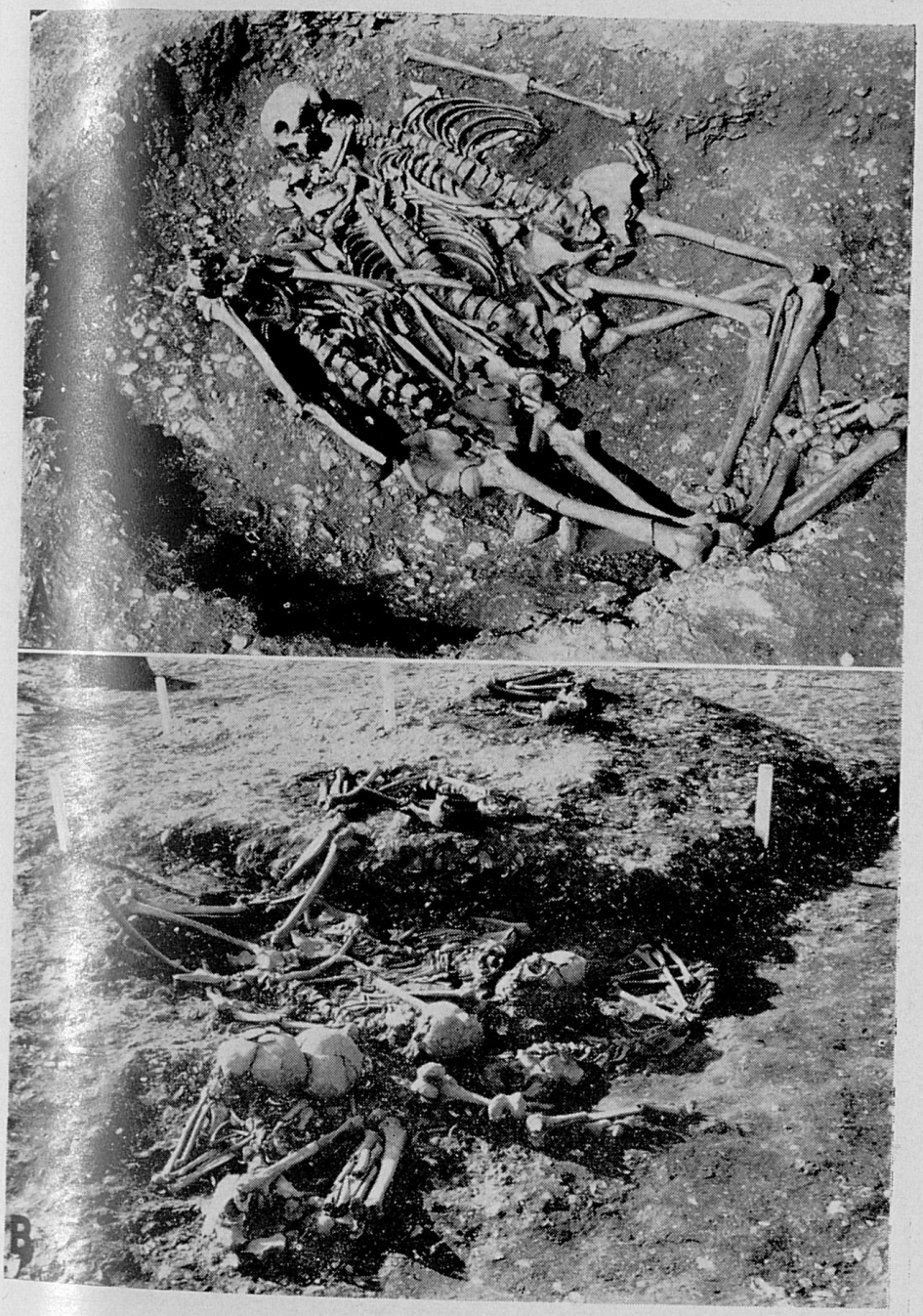

Figure 12. (a) Burial Nos. 537, 538 and 539.

(b) Burial Nos. 607 and 615 to 620 inclusive. Here Koger's Island burials have been intruded into burials of the Shell Mound people.

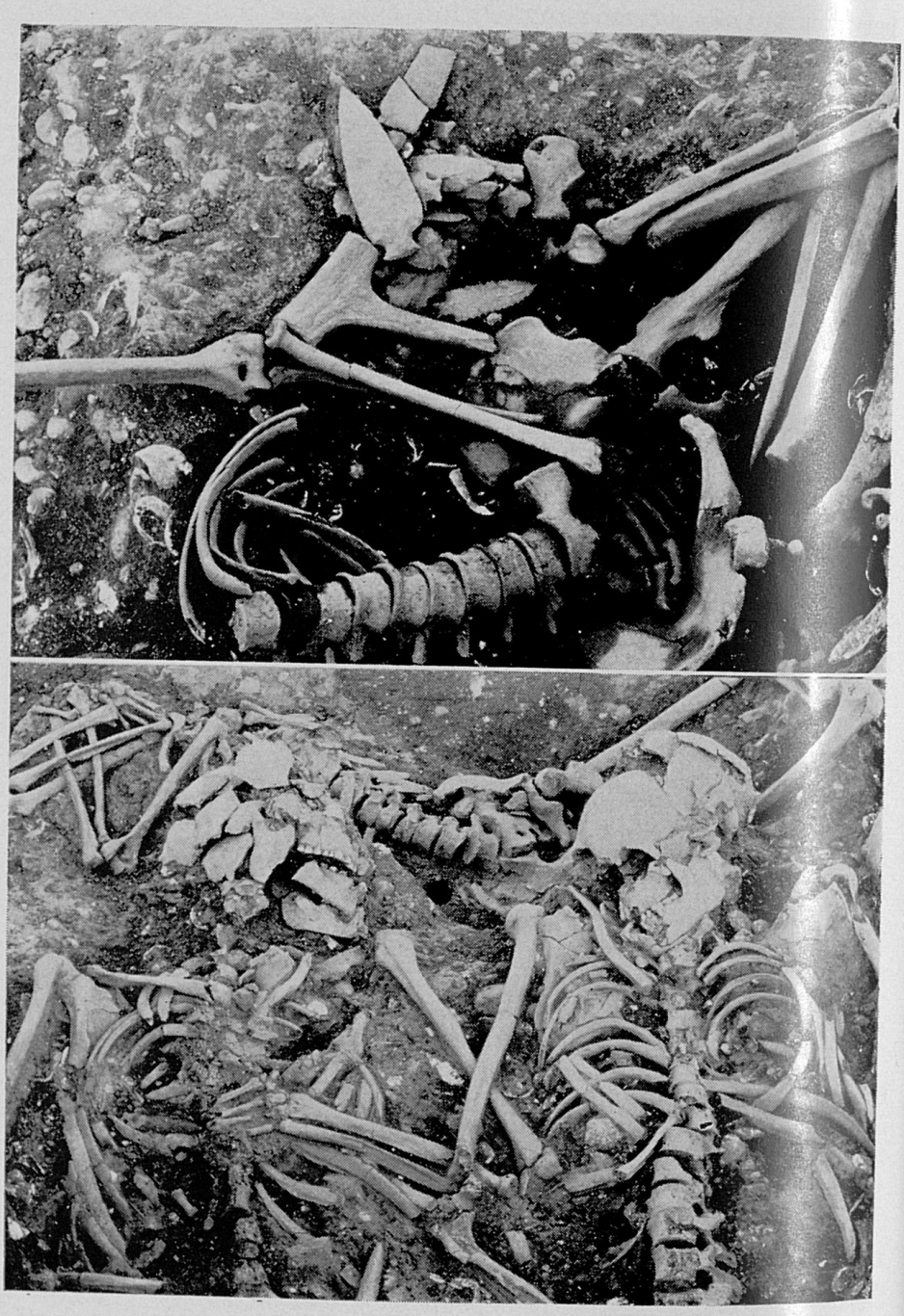

Figure 13. (a) Burial No. 623 with cache of artifacts.

(b) Burial Nos. 616 and 617. Note projectile points in chest cavities of both burials.

not possible to observe in the Shell Mound Complex any difference between burials originating within this zone and those in the pre-pottery levels of the midden.

There follows a list of the most important burials with artifacts in definite association. The cultural designation for each burial with artifacts is also noted. It is possible where single flint points or potsherds of different kinds are reported, these may be only chance inclusions in the grave fill, since such material occurs frequently in the midden generally.

LIST OF BURIALS WITH ASSOCIATED ARTIFACTS AND CULTURAL PLACEMENT*

Burial No.	Type	Depth	Artifacts	Illustration Figure No.	Cultural Placement
360	P.F.	4.5	13 large disc shell beads, 6 cylindrical stone beads, (Limestone, slate, and hematite)		SM
361	F.F.	4.5	Flint point lodged in skull		SM
364	Dist.	1.2	One half pottery jar, Type 5d Mounville Incised, shell tempered		KI
365	P.F.	1.0	Shell-tempered pottery bowl, Type 5a Plain, bone projectile point (chance inclusion)		KI
368	Dist.	1.2	Pottery bowl, Type 5a Plain, shell tempered, one fibre, one sand, and 2 shell-tempered sherds, in grave pit		KI
371	Inf.	1.5	Pottery jar, Type 5a Plain, shell tempered. One sand-tempered, six limestone-tempered, one clay grit-tempered and 15 shell-tempered sherds in grave pit. One flint point Type 3		KI
372	P.F.	1.8	Pottery bowl, Type 5a. One fourth pottery jar Type 5a and crushed water bottle, Type 2aa	20-a	KI
375	F.F.	2.0	End of flint point, imbedded in proximal epiphysis of left tibia		KI

* Abbreviations used:
P.F.—Partly Flexed
F.F.—Fully Flexed
Dist.—Disturbed
Inf.—Infant
EX—Extended
Sit.—Sitting
Re. Bu.—ReBurial
SM—Shell Mound Complex
K.—Koger's Island Complex

LIST OF BURIALS WITH ASSOCIATED ARTIFACTS AND CULTURAL PLACEMENT—Continued

No.	Burial Type	Depth	Artifacts	Illustration Figure No.	Cultural Placement
377	P.F.	1.3	Quarter of pottery jar Type 5e, flint point Type 17		KI
378	Dist.	2.8	Cylindrical bone awl beveled head, flint points, three Type 23, one Type 6, one Type 17		SM
379	Ex.	3.6	Portion pottery jar Type 5a. Sherd clay-grit tempered, check stamp		KI
381	Ex.	2.8	32 conch shell columella beads, cylindrical large pottery jar Type 5d	15-a	KI
383	P.F.	1.7	Two worked mussel shells		KI
384 and 385	Ex.	1.7	Four strings shell beads disc and cylindrical, total 745 beads, pottery jar Type 5a Pottery jar Type 5a, conch shell pendant, split bone awl, bone pin elliptical section, pebble hammerstone battered on ends, 279 shell disc and cylindrical beads. Sandstone pallette flat, hematite stains on surface, 3 flat sand stone fragments worked, tarsometatarsus turkey awl, deer ulna awl, bone projectile point, broken, conch cylinder, bone bead, bear canine, antler tine flaker, two greenstone celts, Type F. Flint point Type 32, 42 sheet copper fragments cut in rectangular geometric shapes, with number of perforations and rivets part of a copper gorget.	11-b 14-a 11-b	KI KI
386	Inf.	1.7	265 shell small disc and cylindrical beads		?
387	Dist.	1.2	Rim section pottery jar, Type 5a, crinoid stem		KI
392	P.F.	1.5	Pottery jars crushed Type 5a, one restored		KI
401	P.F.	1.5	Pottery jar and water bottle Type 5a	9-c	KI
405	Dist.	1.5	75 bone beads, tubular sections		?
407	P.F.	2.1	Antler tine flaker, cut antler fragment, 3 broken flint points		SM

LIST OF BURIALS WITH ASSOCIATED ARTIFACTS AND CULTURAL PLACEMENT—Continued

Burial No.	Type	Depth	Artifacts	Illustration Figure No.	Cultural Placement
413	P.F.	1.9	Pottery jar Type 5a, 30 shell beads conch columella beads sypherical 7 to 9mm diameter		KI
414	F.F.	2.5	Conch shell dipper		SM
415	F.F.	3.0	3 bone awls cylindrical or hair pins, one with expanded head		SM
422	Inf.	1.5	Flint Type 14, crinoid stem head		SM
425	P.F.	2.8	Pottery jar Type 5a, 2 flint points Type 3, limestone celt fragment		KI
432	P.F.	2.6	Water bottle Type 5a, 4 shell beads, cylindrical, quarter of pottery jar, Type 5a		KI
435	Ex.	2.2	37 shell beads small disc and cylindrical, ear spools 2 convex copper discs on wood 22mm diameter, 347 cylindrical shell beads, 5 shark tooth pendants, pottery jar Type 5a	9-b	KI
436	P.F.	2.9	Antler projectile point socketed, bone spatula, antler atlatl hook, slotted and perforated for hafting, bone pin polished 202mm long. Shale gorget flat, centrally expanded, shouldered trianguloid ends, 2 perforations, broken and secondarily used as grooved abraider. Beaver incisor, bone awl elliptical sections, small bird skeleton, bone projectile point, 2 flint points Type 17.	15-a 14-b	SM
438	P.F.	2.9	4 irregular pearl beads and 2 shells with elliptical sections	9-c	KI
439	Re. Bu.	2.9	Pottery jar Type 5a	9-c	KI
443	F.F.	2.7	Limestone celt flaked pecked flat, flint point Type 8		SM
451	Inf.	2.8	Cylindrical bone pin polished, expanded head		SM

LIST OF BURIALS WITH ASSOCIATED ARTIFACTS AND CULTURAL PLACEMENT—Continued

Burial No.	Type	Depth	Artifacts	Illustration Figure No.	Cultural Placement
455	F.F.	4.8	2 antler drifts cylindrical 23 x 60mm, 2 antler tine flakers, cut antler sections, deer ulna, unworked, 2 antler drifts truncated conical 38mm. Shale abrader flat grooved, split bone awl, deer ulna awl, deer ulna spatula, deer phalanx, split longitudinally, ground fishhook blank		SM
458	P.F.	4.7	Ground terrapin plastron fragment, terrapin carapace cup, red limestone tubular pipe 104 x 45mm, numerous unworked animal bones.	14-b 10-c	SM
460	F.F.	5.2	Antler bead, cylindrical 44mm		SM
479	Inf.	2.0	14 shell beads, disc and cylindrical		?
489	P.F.	6.0	13 shell beads large disc-one large cylindrical and one limestone disc bead.		SM
493	Dist.	2.0	Pottery water bottle Type 5p engraved. Fragment pottery jar Type 5n noded	17-b	KI
497	P.F.	.8	Flint point Type 1 (multiple burial of five)	11-a	KI
505	P.F.	3.0	Pottery jar Type 5, crushed jar Type 5, mussel shell spoon, short handle	10-a 15-a	KI
506	Ex.	2.4	Pottery bowl Type 5j black filmed, 2 cylindrical shell beads, pendant shell (Nerita)	10-b 15-a	KI
514	P.F.	4.0	Bone projectile point, flint point Type 22		SM
515	F.F.	4.0	Portion of sandstone vessel, 55 fragments		SM
519	P.F.	3.4	Flint points Type 1, Type 6, Type 17, three Type 23, three broken points, two fiber, two limestone, and two shell-tempered potsherds, six in all, in grave pit.		?
526	F.F.	4.0	Tarsometatarsus awl turkey, partial cremation.		SM

LIST OF BURIALS WITH ASSOCIATED ARTIFACTS AND CULTURAL PLACEMENT—Continued

Burial No.	Type	Depth	Artifacts	Illustration Figure No.	Cultural Placement
527	F.F.	4.0	Bone awl from deer scapula		SM
529	F.F.	5.4	Bone awl cylindrical		SM
530	Sit.	5.5	Bone awl cylindrical, flint point Type 28		SM
535	P.F.	1.7	Pottery jar Type 5a, crushed jar Type 5a		KI
536	F.F.	1.7	83 plain shell-tempered sherds from at least four different vessels		KI
538	Ex.	1.5	Sherds Type 5a and flint point Type 23		KI
543	F.F.	2.0	Split bone awl		?
545	P.F.	3.0	Antler drift conical		SM
546	P.F.	3.0	3 flint scrapers Type 23, limestone axe, pecked ground, full grooved	15-b	SM
548	F.F.	4.5	Flint scraper Type 23		SM
549	P.F.	4.0	Antler drift, cylindrical		SM
550	Ex.	4.1	Forked bone implement, small mammal long bone section. Bone projectile point.		?
551	P.F.	4.0	Split bone awl		?
557	P.F.	1.5	3 antler tines, 2 antler flakers. Broken flint point imbedded in 11th thorasic vertebra		KI
558	F.F.	1.4	4 chert hoes flaked crude, one side notched, 3 antler flaking tools, 2 flint points Type 23, terrapin shell	15-b	SM
560	Sit.	4.1	59 large disc shell beads, 9 large cylindrical shell beads, and one cylindrical steatite bead, cylindrical bone awl.		SM
561	Sit.	4.0	Flint point Type 3	8-b	SM
562	Sit.	4.6	Flint point Type 17	8-b	SM
563	Sit.	4.3	68 large disc and 5 large cylindrical shell beads		SM
574	F.F.	3.4	Flint points Type 3 and Type 23		SM

LIST OF BURIALS WITH ASSOCIATED ARTIFACTS AND CULTURAL PLACEMENT—Continued

Burial No.	Burial Type	Burial Depth	Artifacts	Illustration Figure No.	Cultural Placement
575	P.F.	5.9	Flint point Type 6		SM
578	F.F.	4.9	Flint points Type 3 and Type 4		SM
580	F.F.	6.0	301 shell disc beads, small, and one limestone bead excurvate, cylindrical	7-a, b	SM
583	Inf.	.7	Pottery jar Type 5a		KI
587	F.F.	1.5	Flint drill Type 31		SM
588	F.F.	1.7	Flint point Type 5		SM
601	P.F.	2.0	Flint points Type 3, Type 7		SM
603	P.F.	1.4	Pottery jar Type 5a, portions of bowl Type 5j black filmed		KI
607	P.F.	2.2	Shell gorget incised world quarters cross, 18 shell beads small disc and cylindrical	15-a 12-b	KI
608	P.F.	2.0	3 large sherds of vessel Type 5a, 13 sherds Type 5a, six pebble hammerstones, crushed pottery bowl Type 5a		KI
611	F.F.	3.3	Shell gorget two perforations, from top of conch shell. 88 dentalium shell beads, one disc shell bead, one cylindrical conch columella bead, oblique perforation at ends.		SM
613	Sit.	2.0	5 bone beads, tubular section of long bone		SM
614	Sit.	2.0	Flint point Type 17		SM
615	P.F.	2.4	Pottery jar Type 5a		KI
616 to 620	P.F.	3.0	Limestone grooved axe, bone spatula, antler drift elliptical section, many worked, bone and antler fragments and flint points, Type 3, Type 8, Type 18, Type 28, four Type 23, and six Type 17	12-b 12-b 13-b	SM SM
623	P.F.	2.0	3 terrapin plastron fragments, unworked, 2 antler tine flakers, flint points Type 3, Type 32, Type 44, two Type 30, three Type 17, Type 13.	15-b 13-a	KI

LIST OF BURIALS WITH ASSOCIATED ARTIFACTS AND CULTURAL PLACEMENT—Continued

Burial No.	Type	Depth	Artifacts	Illustration Figure No.	Cultural Placement
624	P.F.	2.3	Shell gorget, 2 perforations, from top of conch, two stone beads.	16-a	
625	P.F.	4.8	Flint points Type 3		SM
626	P.F.	4.3	Flint points Type 1, Type 23, Type 44		SM
630	P.F.	.8	Flint point Type 17		KI
636	F.F.	2.3	Turtle carapace covering face		SM
642	Sit.	3.7	11 large cylindrical beads conch columella, one red limestone cylindrical, 29 unworked antler fragments, flint point Type 3	16-a	SM
647	P.F.	3.4	Large pebble pestle, bell shaped, flint point		SM
649	P.F.	2.0	Effigy bowl Type 5m, crushed bowl Type 5a		KI
651	P.F.	2.0	Cannon bone awl, split		SM
673	F.F.	1.2	Red slate gorget flat, tapering, truncated ends, 2 biconical perforations, notches along edge, antler drift elliptical section	16-a	KI
674	F.F.	1.3	Cannon bone awl, split, 4 cut bear mandibles, 2 with cross hatched incised decorations, pottery sherd, Pickwick simple stamped, fiber tempered.	16-a	KI
679	P.F.	2.2	Pottery jar Type 5a, bone projectile point		KI
680	P.F.	3.6	4 bone fish hooks from section of long bones. Limestone discoidal, ground 19mm thick, 39mm diameter.	15-a	SM
681	P.F.	2.3	3 sherds Type 5a		KI
682	F.F.	3.6	29 shell disc beads 2 to 5mm thick, 7 to 9mm diameter.		SM
686	Sit.	4.2	Cylindrical beads, 20 shell, one red jasper 12mm diameter, 28mm long. Cylindrical bone awl, bone pin incised.		SM

LIST OF BURIALS WITH ASSOCIATED ARTIFACTS AND CULTURAL PLACEMENT—Continued

Burial No.	Type	Depth	Artifacts	Illustration Figure No.	Cultural Placement
690	Sit.	4.3	17 shell disc beads, cylindrical bone awl		SM
691	Sit.	3.8	34 disc and one cylindrical bone awl		SM
692	Sit.	2.8	20 disc and cylindrical shell beads, 9 disc and cylindrical stone beads.		SM
693	Sit.	4.4	Conch shell dipper, section of conch columella ground, 279 disc shell beads, 2 cylindrical limestone beads.		SM
700	Sit.	5.0	11 shell beads cylindrical conch columella 9mm diameter, 45mm long.		SM
706	Sit.	7.1	Three bone fishhooks		SM
708	Sit.	6.1	Flint point Type 17		SM

Artifacts from burial associations are shown in figure 14 to 16 inclusive. In figure 14-a is presented some of the artifacts from Burial Nos. 384 to 385. This was a multiple burial of the Koger Island Complex and it was not possible to separate the artifacts belonging to each skeleton.

In figure 14-b the red limestone tubular pipe and the terrapin carapace cup were found with Burial No. 458. There is also presented a bone pin, bone projectile point, socketed antler projectile point, two flint points Type 17, bone spatula, beaver incisor, shale gorget, and antler atlatl hook all from Burial No. 436. This hook is interesting in that it is slotted and perforated for attachment to the shaft. These burials are of the Shell Mound people.

The burial associations of artifacts presented in figure 15-a and indicated by figures are as follows:

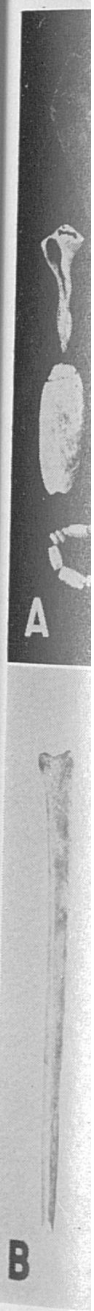

Figure 14.

Figure 14. (a) Artifacts associated with Burial Nos. 384 and 385, Koger's Island.

(b) Tubular pipe and terrapin carapace with Burial No. 458. Remaining artifacts with Burial No. 436.

1, 2	Shell pendant and oliva shell	Burial No. 506
3	Mussel shell spoon	Burial No. 505
4	Shell gorget	Burial No. 607
5, 8	Copper ear spools, shark teeth pendants	Burial No. 435
6, 7	Fish hooks and limestone discoidal	Burial No. 680
9	Shell beads	Burial No. 381

The side notched chert hoe shown in figure 15-b was taken from burial pit of Burial No. 558. The flint scraper and the elongated grooved limestone axe or pick shown in figure 15-b, (2 and 3) were with Burial No. 546.

The antler tine flaker and five flint points were with Burial No. 623.

The burial associations of the artifacts presented in figure 16-a and indicated by figures are as follows:

1	Cannon bone awl	Burial No. 674
2	Cut bear mandible, engraved	Burial No. 674
3	Cut bear mandible	Burial No. 674
4, 5	Limestone and shell beads	Burial No. 642
6, 7	Shell gorget and limestone beads	Burial No. 624
8, 9	Antler drift, red slate gorget	Burial No. 673
10	Shell and stone beads	Burial No. 692

Figure 15.

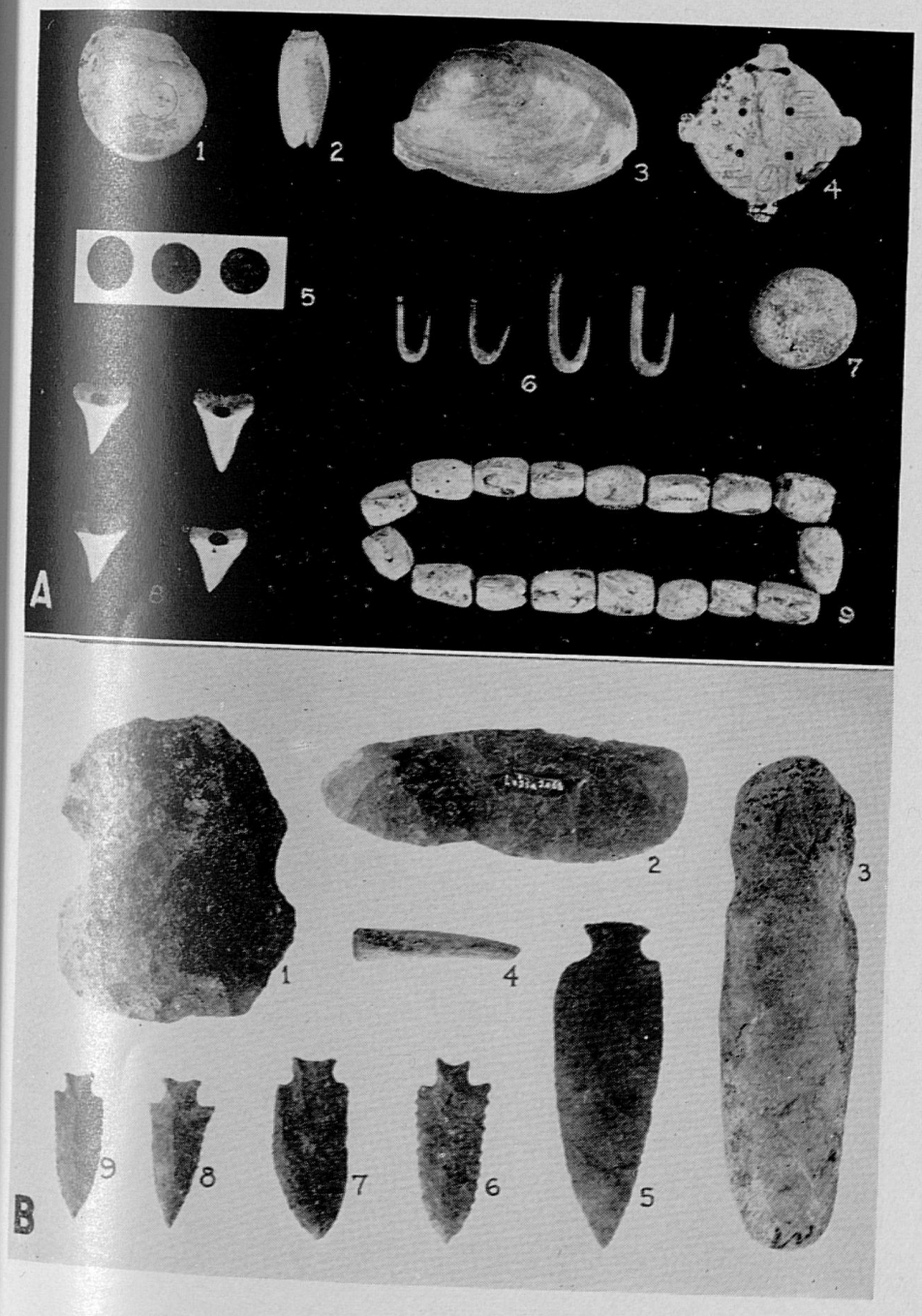

Figure 15. (a) Artifacts in association with Burial Nos. 381, 435, 505, 506, 607 and 680.

(a) Artifacts in association with Burial Nos. 546, 558 and 623.

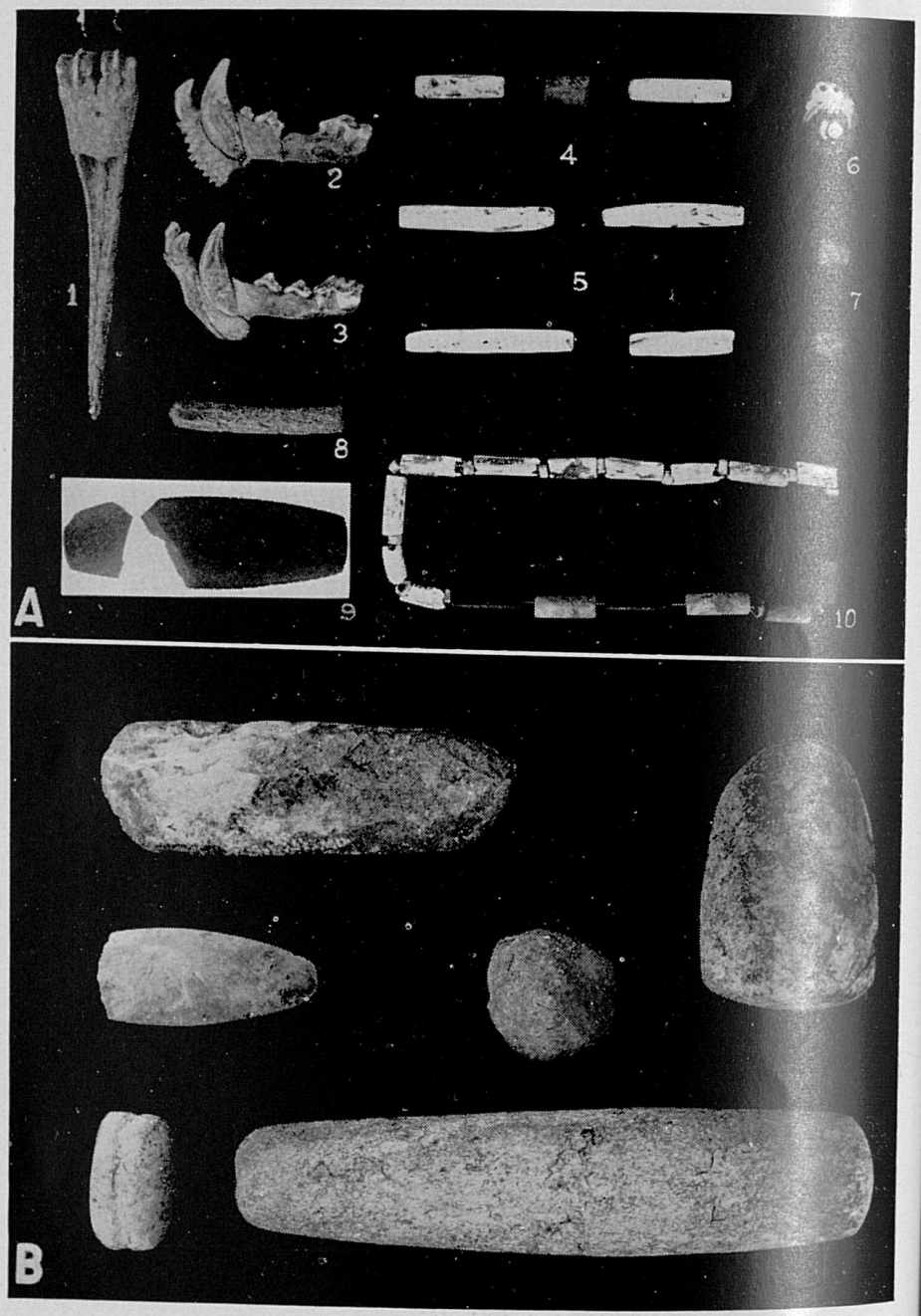

Figure 16. (a) Artifacts in association with Burial Nos. 624, 642, 673, 674 and 692.

(b) Artifacts without Burial association.

ARTIFACTS WITHOUT BURIAL ASSOCIATION TABULATED BY FOOT LEVELS, DEBRIS MATERIAL EXCLUDED

Artifacts	Foot Levels 1	2	3	4	5	6	7	Total
STONE								
Celts, flake	23	4	4	1	2			34
Hoes, flaked	1	2						3
Axe, ¾ grooved		1						1
Celts, ground	2	3			1			6
Abraders, grooved	3	1	5	1				10
Abrader, chert, faceted					1			1
Hammerstones	3	1	8	6	9	7	7	41
Manos	1				2	2	2	7
Pestles, bell-shaped	1		1	1	2			5
Pestles, limestone, large cylindrical					1			1
Steatite bowl fragments	5	3	2					10
Sandstone bowl fragments	4	11	9	10				34
Pipe, limestone, tubular, fragments	1							1
Weights or sinkers, full grooved					2	2		4
Discoidals	2	1						3
Atlatl weight, limestone, prismatic				1				1
Bannerstone, winged				1	2			3
Bar (atlatl weight?)				1				1
Bar gorgets	9	1	2					12
Beads, tubular, ground		1	1			1		3
Crinoid stem beads (?)	2		3	5	5	1		16
Pendants, perforated	1			1	1			3
Shale, ovoid	1							1
Concretion cup or bowl				1				1
Limonite, ground, striated	1	1					2	4
Hematite				1				1
Worked fragments	1		3	2	7	2	1	16
BONE								
Awls, cylindrical, section	26	36	67	115	97	25	6	372
Awls, elliptical, section	15	27	22	54	73	23	4	218
Awls, split bone	52	84	139	98	96	24	6	499
Awls, splinter, pointed	20	39	34	20	27	6	1	147
Awls, cannon bone	2	1		2	3	5		13

ARTIFACTS WITHOUT BURIAL ASSOCIATION TABULATED BY FOOT LEVELS, DEBRIS MATERIAL EXCLUDED

Artifacts	Foot Levels							Total
	1	2	3	4	5	6	7	
Awls, deer ulna	1	4	5	4	4	2		20
Awls, or pins, birds and small mammals, obliquely cut	1	9	12	7	8	2		39
Awls, or pins, tarso-metatarsus	3	24	32	14	13	2		88
Pins	8	10	25	19	49	19	1	131
Fish spine awls (?)	4	9	29	6	3	1		52
Racoon bacula awls (?)		1		5				6
Bitted "awls"		5	1	3	7	4		20
Needles (?), grooved head		2			1			3
Projectile points	142	107	129	85	158	71	5	697
Bear humerus (lamp or handle) (?)				1				1
Beads, tubular	3	2		3	2			10
Deer, mandible section, ground and incised			1					1
Fish hooks from deer phalanges			1		2	1		4
Deer phalanges, split fish hook blanks			3	2	5	1	2	13
Fish hooks from long bone "Spatulae"	2	3	9	7	3	1		25
Spatulae, splinter	6	2	10	4	6	4		32
Spatulae, deer ulna		1	2	3	4	2		12
Spatulae, "slotted" splinter	1	4	2	2	1	1		11
Spatulae, "slotted" deer ulna			1					1
"Bifurcated" splinters	12	5	21	6	3	2		49
"Bifurcated" deer ulnae	2	3	2	2	1			10
Canine tooth pendants	1			1				2
Racoon bacula pendants	1							1
Beaver incisor scrapers (?)		1		1				2
Bone flakers or punches, cylindrical	1					6		7
Worked fragments	92	74	107	108	129	54	11	575

ARTIFACTS WITHOUT BURIAL ASSOCIATION TABULATED BY FOOT LEVELS, DEBRIS MATERIAL EXCLUDED

Artifacts	Foot Levels 1	2	3	4	5	6	7	Total
Antler								
Antler tine flakers (?)	30	57	60	79	92	28	1	347
Drifts	17	29	48	16	17	5	4	136
Atlatl hooks	2	1	2	1	3	3		12
Projectile points, socketed	3	3	8	8	9	1		32
Chisels (?) beveled bit			2	3	8	2	1	16
Rubbing (?) tools faceted ends	1			2	1			4
Worked or cut sections and fragments	10	13	14	30	48	14	1	130
SHELL								
Beads, cylindrical			2					2
Ear plugs, cylindrical knobbed head			2					2
Worked conch sections	3	7						10
POTTERY								
Discoidals, shell tempered		2						2
Ear plugs, shell tempered	1	1						2
MISCELLANEOUS								
Briquettes, wattle impressed	28	12	6	1	6	1		54
TOTAL								4,023

DESCRIPTION OF ARTIFACTS FROM GENERAL EXCAVATION

Except for minor, individual variations from specimen to specimen, the descriptions given for Ma°48 hold for Lu°25.

STONE ARTIFACTS OTHER THAN FLINT

Celts, flaked—all are limestone except two conglomerate. The flaked celts from Lu°25 showed more evidence of pecking and grinding, both over limited areas of the specimens, than did those of Ma°10. The specimens from Lu°25 were basically and essentially shaped by rough flaking. Nine of the thirty-four celts showed pecking subsequent to flaking over limited areas of the specimens. Four of the thirty-four showed grinding over limited areas (generally near the bit.) Typical celts are shown in figure 16-b.

Hoes, flaked—all are limestone. One showed pecking subsequent to flaking.

Axe, grooved—This specimen was made of limestone and had ¾ groove.

Celts, ground—Four of the six specimens were limestone (two Type E and two fragmnets). The other two specimens were: one greenstone, Type E and one slate, Type F.

Abraders, grooved—All were made of shale.

Hammerstones—These specimens were all pebbles or small water-worn boulders, which showed more or less battering from use as a hammer.

Manos—These specimens were all pebbles or small water-worn boulders, which showed abrasion similar to that found on the grinding surface of bell-shaped pestles. Some of these specimens were also used as hammerstones and possibly, in some instances, as anvils.

Pestles, bell-shaped—These specimens were made from limestone (1), sandstone (2) and quartzite (2). Three of the five specimens were shaped from water-worn pebbles.

Pestle, cylindrical—This specimen was made of limestone and was 283mm long and 62mm in diameter. It is shown in figure 16-b.

Steatite bowl fragments—One of the eleven specimens was a rim fragment showing a "flange" handle and an incised line decoration on the lip, see figure 17-a.

Sandstone bowl fragments—Four of the thirty-nine specimens were rim fragments. One fragment indicated that it was from a flat bottomed vessel. In the list of artifacts showing depth distribution it is interesting to note that both steatite and sandstone bowl fragments occur in the upper level of the middle, first to fourth, and that they do not occur in the lower three foot levels, fifth to seventh, inclusive. It is significant that this great Shell Mound Complex, producing many typical artifacts, laid down here three feet of midden before the introduction of stone vessels of sandstone and steatite. These vessels they had introduced before they began the use of pottery. The only nearly complete sandstone bowl found in this excavation was with Burial No. 515 and was at the 4-foot level.

Weights and sinkers, full groove—All four of these specimens were made of limestone. The groove, in each instance, was longitudinal (i.e., around the greatest diameter of the specimen). A typical sinker is shown in figure 17-a.

Discoidals—Two of the three specimens were made of limestone and one of calcite. The specimens ranged in diameter from 37mm. to 55mm. Two are shown in figure 17. They probably belong to the Koger's Island complex.

Atlatl weight, limestone, prismatic—This specimen was 61 mm. long, had a plano-convex cross-section, and a longitudinal perforation, 14mm. in diameter, see figure 16-b.

Bannerstone, winged—These three specimens, all shown in figure 18, were made of limestone (diameter of perforation 12 mm.) brown limonite (diameter of perforation, 14 mm.), and sandstone (too broken to determine diameter of perforation).

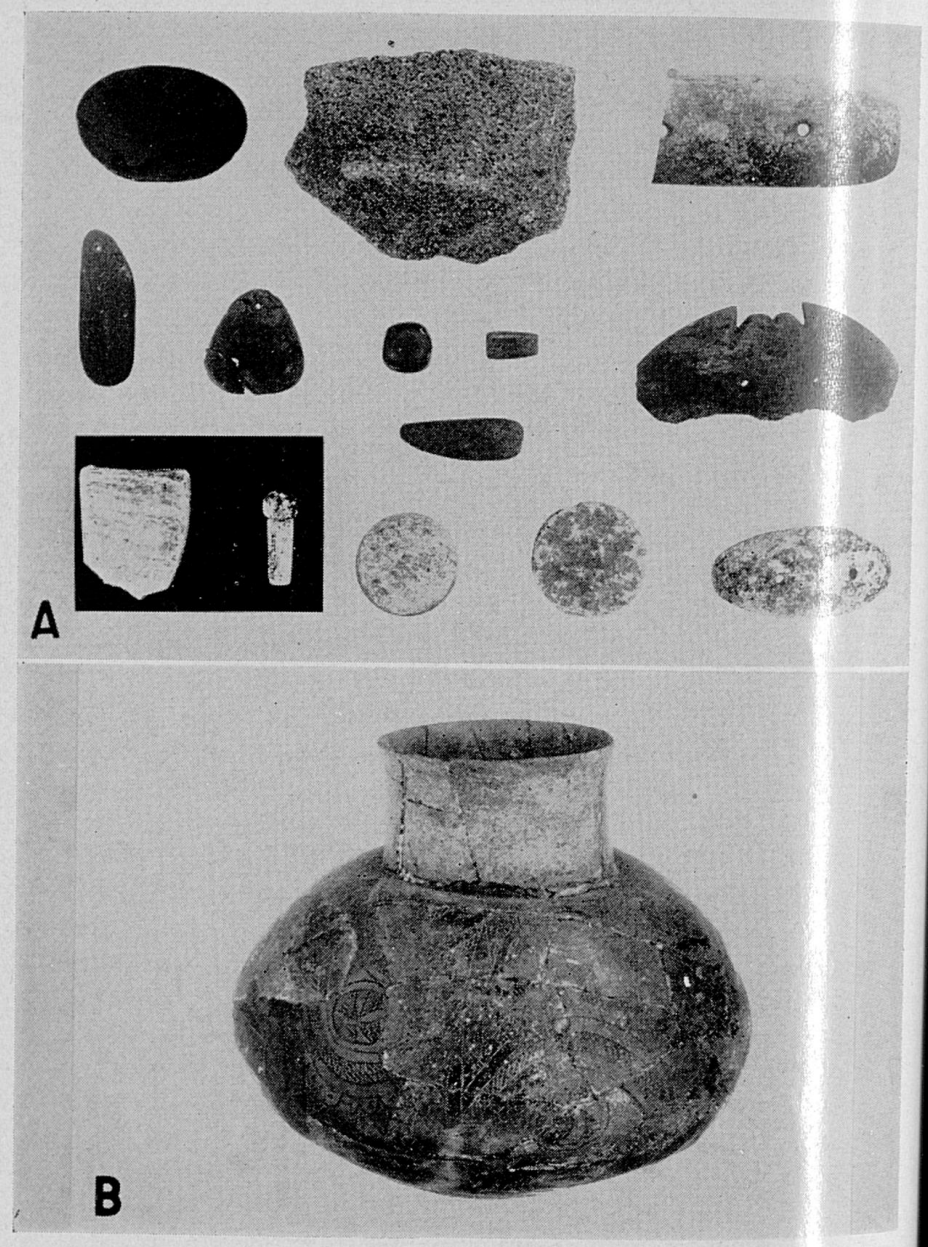

Figure 17. (a) Shale pendants, limestone and schist bar gorgets, steatite vessel fragments with lug, stone beads. Two limestone discoidals, which may belong to the Koger's Island people.

(b) A Type 5p Moundville Filmed Engraved water bottle (a 1991) with Burial No. 493.

Bar—This specimen (see figure 17) was made of greenstone, had a plano-convex cross-section, and had dimensions of 13 x 17 x 46mm.

Bar gorgets—Of the twelve specimens, four were limestone, three calcite, three slate, one shale and one schist, see figure 17. Ten of the specimens showed perforations (the other two were too fragmentary to determine whether perforated or not).

Beads, tubular, ground—These three specimens were made of sandstone, quartzite and serpentine.

Crinoid stem, beads (?)—These hollow crinoid stems may have been entirely a product of nature. Their shape makes them suitable for use as beads. No evidence of working is observable but it is possible that the specimens were used by the Indians as beads.

Pendants, perforated—These three specimens were made of shale, slate and schist. The specimens of shale and schist are shown in figure 17 and have a single perforation each. The other pendant was a fragment.

Shale, ovoid—This specimen had dimensions of 6 x 43 x 63mm. Its function is unknown, but it might represent an unfinished pendant.

Concretion cup or bowl—This specimen was a half of a concretion which was water-worn but showed a little grinding on the edge or lip. It was essentially shaped by natural agencies.

BONE

Awls, cylindrical—The great bulk of these specimens were fragments. Of the whole specimens the ratio was approximately one double-tapered (pointed at both ends) to ten single-tapered (pointed at one end only).

Awls, elliptical—These awls are essentially the same as the cylindrical, but show an elliptical cross-section instead of a circular one.

Awls, cannon bone—Of the thirteen specimens, nine were split and four were made of crude cannon bone splinters.

Awls, or pins, bird and small mammal, obliquely cut—Included in this category are four awls made from ulnae of small mammals, one awl from a turkey (?) tibiotarsus, and one from a canine (?) radius.

Awls or pins, tarsometatarsus—Of the ninety-three specimens in this category, eighty-two were "split" and eleven were "obliquely cut".

Fish spine awls (?)—Three of the fifty-two specimens in this category were definitely worked. The remaining specimens may have been used as awls or may be just unworked fish spines.

Projectile points—Whole specimens ranged from 35mm. to 176mm. in length, with approximately 4/5 of the specimens falling in the range from 45mm. to 100mm. Typical points are shown in figure 18-a.

Canine tooth pendants—One of these specimens was a bear canine and the other a canine canine. Both specimens were grooved, and not perforated as is often the case.

Antler atlatl hooks—See figure 18-a for variations in form of these specimens. The diameters of the sockets on the whole specimens ranged from 11mm. to 14mm. inclusive. One of the specimens associated with a burial was slotted and perforated instead of being socketed. One of the broken specimens (not associated) showed a portion of a perforation on the proximal, broken end, but was too fragmentary to detremine whether it was like the slotted specimen mentioned above. One of the atlatl hooks and one of the socketed antler projectile points showed a full groove running around the exterior of the specimen at the proximal end.

Bone fish hooks of two types were made in two ways as illustrated in figure 18-b. Phalanges of deer were split longitudinally each half constituting a bone blank from which a hook could be cut. This produced a hook in one plane, with a sharp "elbow". Another form made from curved sections of long bone

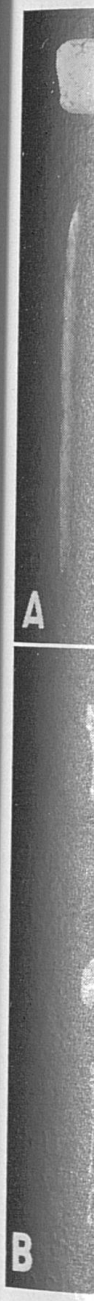

Figure 18

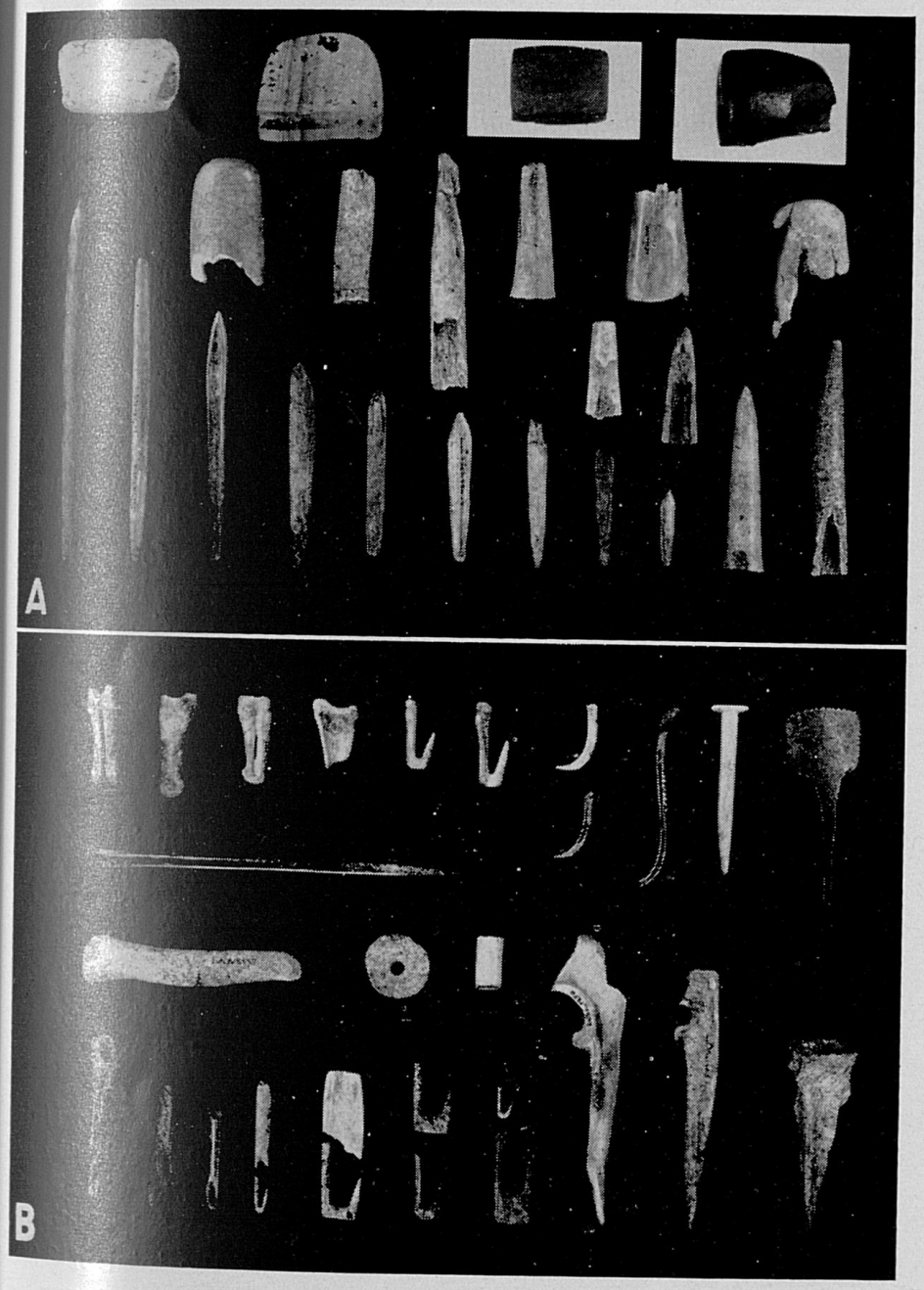

Figure 18. (a) Fragments of atlatl stone weights. Atlatl antler hooks, bone and antler projectile points.

(b) Bone pins (hairpins) bone awls (ulna of deer) and some canine, bone fish hooks from bone spatula and from toe bone of deer.

resulted in a broad hook which retained on its face the natural curvature of the long bone, and which had a broad nearly square base and "open elbow", as shown in figure 18-b.

If one regards split deer phalanges and such fragments as evidence of the manufacture of hooks of the first type, the depth distribution of artifacts shows that none of this type is in the upper two feet of the midden but they extend from the 3-foot level to the bottom of the deposit. This seems to indicate that this type of hook was used early in the history of this site.

If slotted spatulae and bifurcated splinters of long bone and deer ulnae may be regarded as evidence of the manufacture of fish hooks of the second class, it may be concluded from the depth distribution tabulation, that this type of hook was used late in the history of the midden. None of these hooks or bone remnants resulting from their manufacture were found in the lowest levels, while they were found in all other levels from the top downward. They seem to have had a maximum occurrence in the 3-foot level.

FLINT ARTIFACTS

From the general excavation, exclusive of burial associations, there were taken 12,361 flint artifacts, of which 3,365 were from the isolating trenches, and 8,996 from the blocks. Since the depth distribution of artifacts taken from blocks has been proven to have a higher validity than that of artifacts taken from trenches, the depth distribution of the 8,996 flint specimens taken from blocks is shown in the following tabulation.

Since it was desirable to present the flint study from Units 3 and 4 in a manner comparable to Units 1 and 2, previously reported, the classification of flint types used in Pickwick Basin was used for this study. As previously reported, Pickwick Basin flint was broken up into 16 types. Of the total of 8,996 specimen tabulated 8,648 fell within 13 types and there remain only 348 specimen scattered through the other 48 types. It will be noted that the great majority of this material is in the types, 3 and 23, crude knives or blanks, made by percussion fracture. These both show a maximum occurrence at the 5-foot level which was the level of the shop sites. It will be observed that

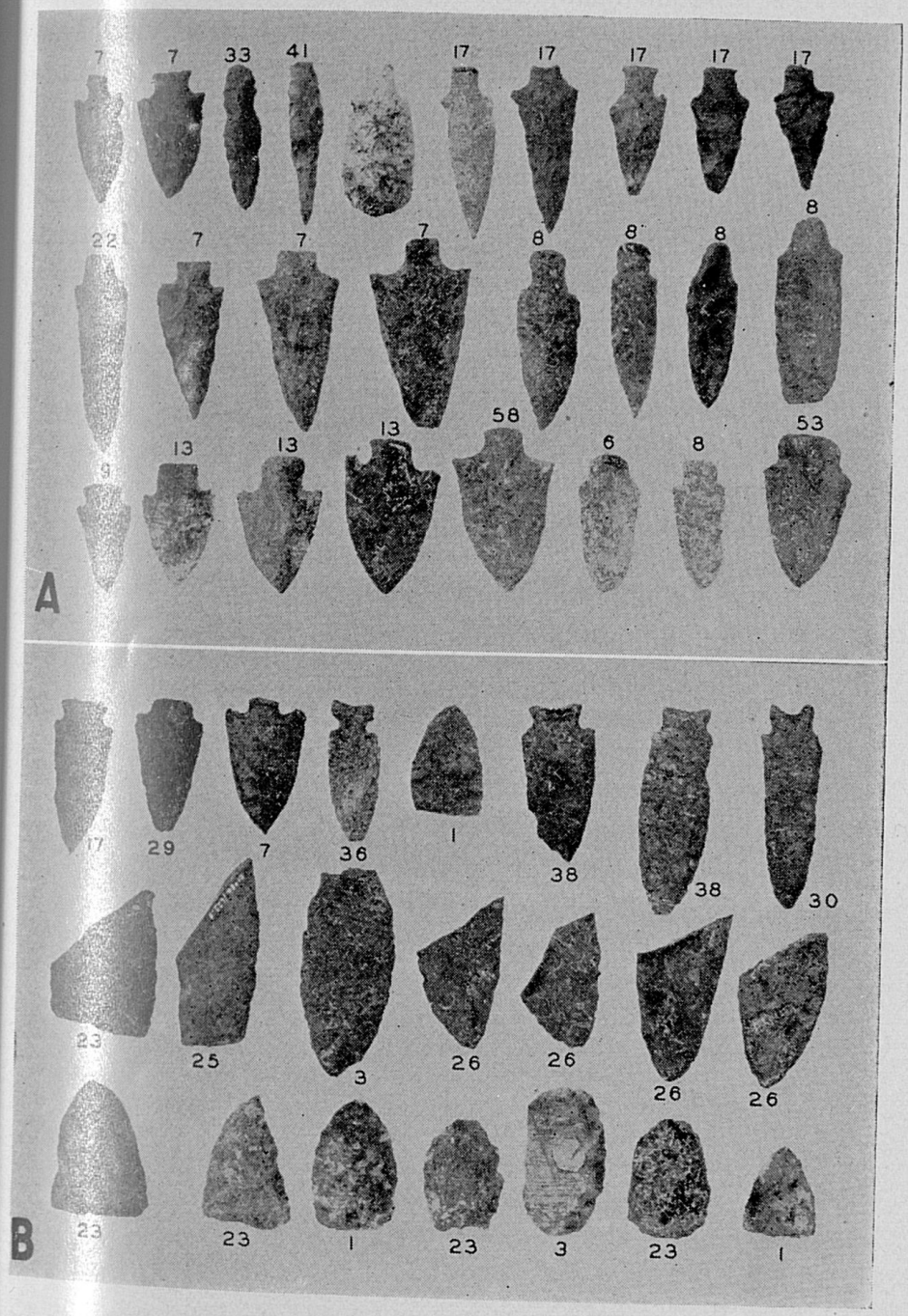

Figure 19. (a) Some of the stemmed flint types which were most numerous. Numbers indicate projectile point type in Pickwick Basin classification.

(b) Two lower rows show the types of crude flint knives.

Type 17 is much more numerous than other stemmed types, and increases from the level of the shop site to later levels, having a maximum occurrence at the 2-foot level. From this tabulation it will be observed that at the beginning of this midden flint was relatively scarce, and that the lower four half-foot levels contained together only half as much flint as the single 5-foot level. The form of all important types are illustrated in figure 19, and designated by type numbers.

TABULATION OF DEPTH DISTRIBUTION OF FLINT TYPES BY HALF-FOOT LEVELS FROM UNITS 3 AND 4

TABULATION OF DEPTH DISTRIBUTION OF FLINT TYPES BY HALF-FOOT LEVELS FROM UNITS 3 AND 4

Type*	Levels .5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	Total
1	5	16	8	5	5	6	3	16	21	42	7	10	3	.....	147
3	35	213	100	140	174	204	322	477	582	671	182	74	42	5	3,221
6	6	67	17	49	46	65	46	33	59	27	14	6	0	1	435
7	0	5	3	5	4	5	5	8	7	3	0	1	1	2	49
8	16	112	28	17	25	21	21	18	17	10	7	6	0	1	299
13	2	16	7	7	7	3	6	8	7	5	3	0	1	0	72
16	1	11	8	17	18	17	7	4	4	1	2	2	0	0	92
17	18	186	107	172	184	132	81	72	69	60	14	6	6	0	1,107
22	0	7	2	8	9	15	7	13	7	8	1	3	1	1	82
23	49	319	165	214	263	290	250	300	250	479	124	53	53	9	2,818
25	0	0	1	1	5	0	4	18	30	43	16	6	2	1	127
26	0	2	0	3	4	2	8	19	40	37	10	3	0	2	130
29	1	12	1	3	1	5	7	8	16	9	0	5	1	0	69
All Others	6	61	11	24	18	25	36	28	59	36	27	12	2	3	348
Totals	139	1,027	458	665	763	790	802	1,022	1,168	1,431	407	187	112	25	8,996

* See Figure 19, this report. See also figure 34 in Webb and DeJarnette, 1942.

POTTERY STUDY

By

Marion L. Dunlevy

Pottery was fairly evenly distributed horizontally throughout the area excavated and in general was confined to the upper levels.

Some areas were excavated by 6"-levels, other by 1'-levels. The quantities of sherds, therefore, in the half foot levels are not comparable to the even foot tabulations. The site summary was tabulated with conversions into one-foot levels.

POTTERY SUMMARY OF UNITS 3 AND 4

LEVEL	TYPE	Number of Sherds	Percentage by Type	Total by Temper	Percentage by Temper
Surface	1b Bluff Creek Punctated	5	41.68		
	1e Pickwick Simple Stamped	1	8.33	6	50.01
	2a O'Neal Plain	1	8.33		
	2b Alexander Incised	1	8.33	2	16.66
	3a Mulberry Creek Plain	1	8.33	1	8.33
	4a McKelvey Plain	1	8.33	1	8.33
	5a Plain Shell	2	16.67	2	16.67
	Total	12	100.00	12	100.00
1'	1a Wheeler Plain	155	6.58		
	1b Bluff Creek Punctated	265	11.25		
	1c Alexander Dentate Stamped	176	7.47		
	1d Bluff Creek Punctated	17	.72		
	1e Pickwick Simple Stamped	60	2.55		
	1f Bluff Creek Punctated	66	2.80	739	31.37
	2a O'Neal Plain	101	4.29		
	2b Alexander Incised	115	4.88		
	2b & f Alexander Incised & Pinched	1	.04		
	2c Smithsonia Zone Stamped	22	.93		
	2f Alexander Pinched	63	2.68		
	2g Kirby Complicated Stamped	2	.09		
	2k	2	.09		
	2l Benson Fabric Marked	1	.04		
	2m	1	.04		
	2q Benson Simple Stamped	2	.09		
	Unclassified Sand Tempered	1	.04	319	13.55
	3a Mulberry Creek Plain	149	6.33		
	3b Long Branch Fabric Marked	430	18.26		
	3c & d Wright Check Stamped	15	.64		
	3e Bluff Creek Simple Stamped	5	.21		
	3f Pickwick Complicated Stamped	3	.13		
	3g Sauty Incised	1	.04		
	3h Flint River Cord Marked	8	.34		
	3n Flint River Brushed	6	.25	617	26.20
	4a McKelvey Plain	51	2.17		
	4b Mulberry Creek Cord Marked	46	1.95		
	4c Benson Punctated	4	.17		
	4d & e Wheeler Check Stamped	89	3,78		
	Unclassified Clay-grit	2	.09	192	8.16

LEVEL	TYPE	Number of Sherds	Percentage by Type	Total by Temper	Percentage by Temper
	5a Plain Shell	480	20.38		
	5b McKee Island Cord Marked	1	.17		
	5d Moundville Incised	2	.09		
	5h Moundville Red Filmed	1	.04		
	5j Moundville Black Filmed	4	.17	488	20.72
	Total for 1′ Level	2,355	100.00	2,355	100.00
2′	1a Wheeler Plain	23	2.96		
	1b Bluff Creek Punctated	55	7.33		
	1c Alexander Dentate Stamped	32	4.26		
	1d Bluff Creek Punctated	5	.66		
	1e Pickwick Simple Stamped	18	2.39	133	17.60
	2a O'Neal Plain	19	2.53		
	2b Alexander Incised	24	3.19		
	2b & f Alexander Incised & Pinched	4	.53		
	2c Smithsonia Zone Stamped	8	1.06		
	2f Alexander Pinched	16	2.13		
	2g Columbus Punctated	1	.14		
	2j Kirby Complicated Stamped	2	.27		
	2l Benson Fabric Marked	1	.14	75	9.99
	3a Mulberry Creek Plain	34	4.52		
	3b Long Branch Fabric Marked	143	19.02		
	3c & d Wright Check Stamped	19	2.53		
	3e Bluff Creek Simple Stamped	2	.27		
	3h Flint River Cord Marked	2	.27		
	3i Cox Punctated	2	.27		
	3n Flint River Brushed	5	.66		
	Unclassified Limestone Temp.	2	.27	209	27.81
	4a McKelvey Plain	22	2.93		
	4b Mulberry Creek Cord Marked	16	2.13		
	4c Benson Punctated	1	.14		
	4 d & e Wheeler Check Stamped	34	4.52		
	4i Cox Fabric Marked	1	.14		
	Unclassified Clay-Grit	2	.27	76	10.13
	5a Plain Shell	250	33.25		
	5e McKee Island Punctated	1	.14		
	5g McKee Island Brushed	1	.14		
	5j Moundville Black Filmed	6	.80		
	5p Moundville Filmed Engraved	1	.14	259	34.47
	Total for 2′ Level	752	100.00	752	100.00

LEVEL	TYPE	Number of Sherds	Percentage by Type	Total by Temper	Percentage by Temper
3'	1a Wheeler Plain	7	3.07		
	1b Bluff Creek Punctated	6	2.63		
	1c Alexander Dentate Stamped	4	1.75		
	1e Pickwick Simple Stamped	4	1.75	21	9.20
	2a O'Neal Plain	4	1.75		
	2b Alexander Incised	4	1.75		
	2c Smithsonia Zone Stamped	1	.44		
	2f Alexander Pinched	1	.44	10	4.38
	3a Mulberry Creek Plain	7	3.07		
	3b Long Branch Fabric Marked	48	21.06		
	3c & d Wright Check Stamped	3	1.32		
	3n Flint River Brushed	1	.44	59	25.89
	4a McKelvey Plain	8	3.51		
	4b Mulberry Creek Cord Marked	5	2.19		
	4d & e Wheeler Check Stamped	10	4.39	23	10.09
	5a Plain Shell	114	50.00		
	5g McKee Island Brushed	1	.44	115	50.44
	Total for 3' Level	228	100.00	228	100.00
4'	1b Bluff Creek Punctated	1	3.57		
	1e Pickwick Simple Stamped	2	7.14	3	10.71
	2a O'Neal Plain	4	14.29		
	2b Alexander Incised	1	3.57		
	2f Alexander Pinched	1	3.57	6	21.43
	3b Long Branch Fabric Marked	4	14.29		
	3c & d Wright Check Stamped	2	7.14		
	3g Sauty Incised	3	10.71		
	3n Flint River Brushed	1	3.57	10	35.71
	4a McKelvey Plain	1	3.57		
	4b Mulberry Creek Cord Marked	1	3.57		
	4h Kirby Incised	1	3.57	3	10.71
	5a Plain Shell	5	17.87		
	5j Moundville Incised	1	3.57	6	21.44
	Total for 4' Level	28	100.00	28	100.00

LEVEL	TYPE	Number of Sherds	Percentage by Type	Total by Temper	Percentage by Temper
5′	1b Bluff Creek Punctated	2	100.00	2	100.00
6′	1b Bluff Creek Punctated	2	20.00		
	1c Alexander Dentate Stamped	1	10.00	3	30.00
	3a Mulberry Creek Plain	3	30.00	3	30.00
	5a Plain Shell	4	40.00	4	40.00
	Total for 6′ Level	10	100.00	10	100.00
7′	2a O'Neal Plain	1	20.00		
	2f Alexander Pinched	3	60.00	4	80.00
	3b Long Branch Fabric Marked	1	20.00	1	20.00
	Total for 7′ Level	5	100.00	5	100.00
	TOTAL FOR UNITS 3 and 4	3,392	100.00	3.392	100.00

Total Unit No. 3	1,901
Total Unit No. 4	1,491
Total for Units No. 3 and No. 4	3,392

		Maximum Depth	Depth of Break in Pottery*
Block No. 8	92	2.5′	2′
Block No. 9	83	2.	2
Block No. 10	518	3.5	1.5
Block No. 11	304	5.5	2.5
Block No. 12	484	6.5	1
Block No. 13	163	2.5	1.5
Block No. 14	347	4	1.5
Block No. 15	267	4	1
Block No. 16	374	3.5	1

*This column represents lowest probable limit of pottery prior to its disturbance by later aboriginal digging.

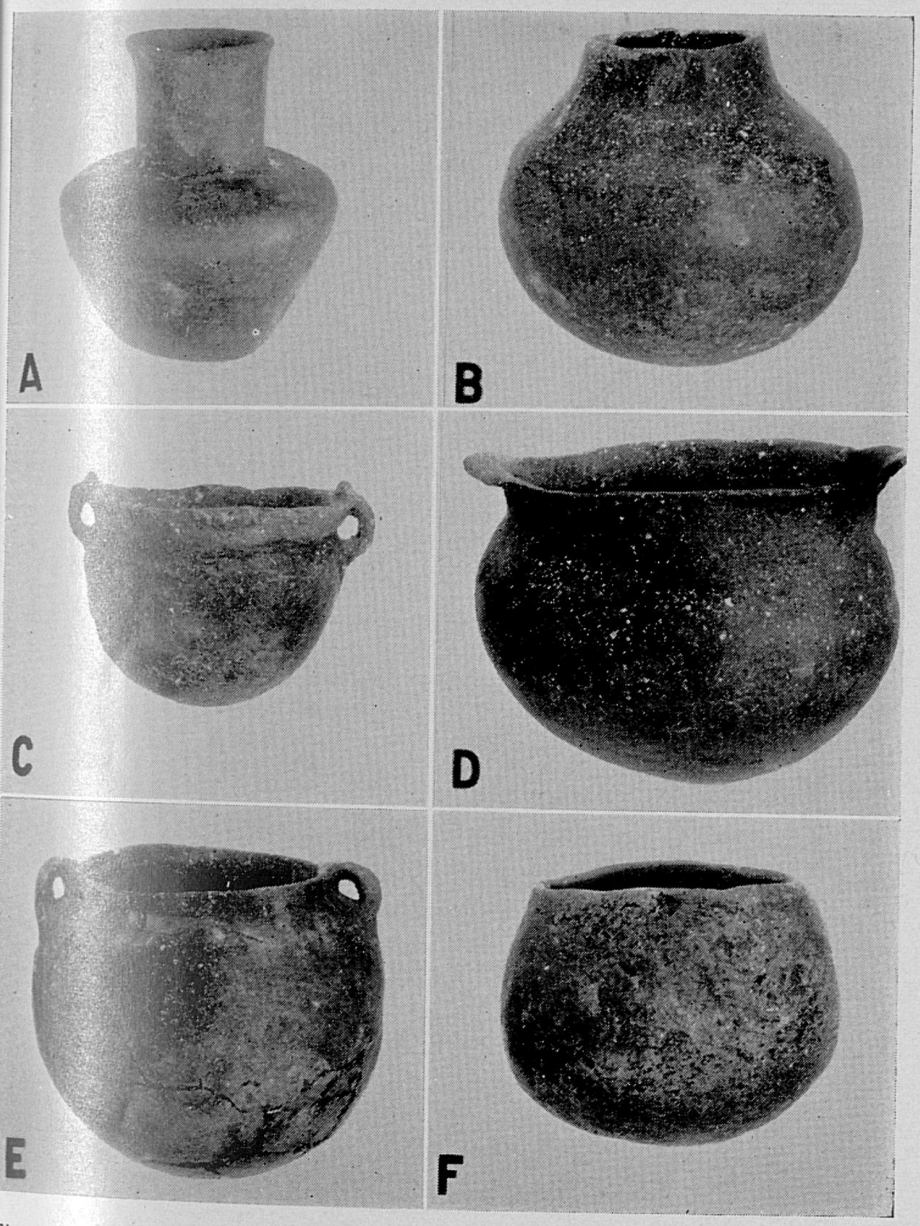

Figure 20. (a) Type 2aa, Henry Island water bottle (a 1811) with Burial No. 372.

(b) Type 5a, Plain Shell Water Bottle (a 1889).

(c) Type 5a, Plain Shell Jar (a 2000).

(d) Type 5a, Plain Shell Jar (a 1908).

(e) Type 5a, Plain Shell Jar (a 1888).

(f) Type 5a, Plain Shell Bowl (a 1804).

POTTERY VESSELS

Type	Vessel Form	Field Specimen Number	Location or Association	Burial Position	Max. Dia. in inches	Height in inches	Orifice in inches	Appendages	Photo Number	Figure Number
5d Moundville Incised	Jar	1802	B.#364	Disturbed	Not Restorable			None	439,709	43
5a Plain Shell	Bowl	1804	B.#365	Partly flexed	5.25	4.5	Approximately 3.75	None	710, 440	
5a Plain Shell	Bowl	1805	B.#368	Partly flexed	5.	3.5	4.25	Paired strap	442, 711	
5a Plain Shell	Jar	1808	B.#371	Disturbed	5.25	4.5	4.25	Paired strap handles	442, 711	
2aa Henry Island Plain	Water Bottle	1811	B.#372	Partly flexed	3.5	4.55	1.75	None	457, 712	36
5a Plain Shell	Jar	1812	B.#372	Partly flexed	Not Restorable			One strap handle	444	
5a Plain Shell	Bowl	1813	B.#372	Partly flexed	3.75	2.25	3.25	Paired flanges	813, 713	
5e McKee Island Punctated	Jar	1830	B.#377	Partly flexed	Not Restorable				449	
5d Moundville Incised	Jar	1850	B.#381	Extended		4.	4.5	Paired strap handles	452, 714	
5a Plain Shell	Jar	1853	B.#384	Extended	Not Restorable			Attachment of 1 strap handle	457	
5a Plain Shell	Jar	1854	B.#385	Partly flexed	3.75	3.	3.	Paired oval strap handles	443, 45	
5a Plain Shell	Jar	1832	B.#387	Disturbed	Not Restorable			1 strap handle		
5a Plain Shell	Jar	1886	B.#392	Partly flexed	Not Restorable			Paired strap	460	
5a Plain Shell	Jar	1887	B.#392	Partly flexed	7.	6.25	4.75	Paired strap handles	460	
5a Plain Shell	Jar	1888	B.#401	Partly flexed	7.	6.25	4.75	Paired strap handles	463, 716	42
5a Plain Shell	Water Bottle	1889	B.#401	Partly flexed	6.25	6.25	3.	None	464, 717	39
5a Plain Shell	Jar	1900	B.#413	Fully flexed	6.25	5.	4.5	Paired strap handles	472, 718	
5a Plain Shell	Jar	1908	B.#425	Partly flexed	4.25	3.	4.	Paired strap handles	481, 719	41
5a Plain Shell	Water Bottle	1911	B.#432	Partly flexed	7.5	8.	3.25	None	483, 720	
5a Plain Shell	Jar	1913	B.#432	Partly flexed	Not Restorable			None		

5a Plain Shell	Water Bottle	1911	B.#432	Partly flexed	7.5	8.	3.25	None	483, 720	
5a Plain Shell	Jar	1913	B.#432	Partly flexed	Not Restorable			None	483	
5a Plain Shell	Jar	1937	B.#439	Partly flexed	5.	4.5	3.5	Paired strap handles	488, 721	
5p Moundville Filmed Engraved	Water Bottle	1991	B.#493	Fully flexed	10.	8.5	4.5	None	526, 722	37
5n Crow Creek Noded	Jar	1992	B.#493	Fully flexed	Not Restorable			1 strap handle	526	
5a Plain Shell	Jar	2000	B.#505	Partly flexed	8.	6.	7.	Paired horizontal lugs	530-31, 723	40
5a Plain Shell	Jar	2003	B.#505	Partly flexed	5.	4.	4.25	Paired strap handles	530, 531, 724	
5j Moundville Black Filmed	Bowl	2004	B.#506	Extended	4.5	2.25	3.75	Modeled animal effigy	532, 725	
5a Plain Shell	Jar	2050	B.#535	Extended	5.25	3.75	4.75 x 4.25	Paired strap handles	544, 726	
5g McKee Island Brushed	Jar	2051	B.#535	Extended	Not Restorable			None	544	
5a Plain Shell	Jar	2281	B.#583	Extended	5.5	4.5	5.	Horizontal nodes	591	
5a Plain Shell	Water Bottle	2282	Dog B.#6		Not Restorable			None	592	
5a Plain Shell	Jar	2355	B.#603	Partly flexed	9.5	7.25	7.25	4 horizontal	600	
5j Moundville Black Filmed	Bowl	2357	B.#603	Partly flexed	7.25	3.5	6.25	None	599, 727	
5a Plain Shell	Bowl	2391	B.#608	Disturbed	7.5	3.25	7.25	None	606, 607	
5a Plain Shell	Jar	2392	B.#615	Partly flexed	5.75	5.	4.25	Paired strap handles	609, 728	
5m Effigy Vessel	Bowl	2740	B.#649	Partly flexed	5.5	2.75	4.5 x 4.	Bird head, tail, wing and 4 supports	629, 630, 631	
5a Plain Shell	Bowl	2741	B.#649	Partly flexed	6.75	3.25	6.	None	629, 630, 631, 729	
5a Plain Shell	Jar	2806-2	B.#679	Partly flexed	4.	3.25	3.25	Paired loop handles		
5a Plain Shell	Water Bottle	2978	B.#717 T -14- 100 R 14		Not Restorable			None		

CONCLUSIONS REGARDING POTTERY

1. Considerable mixing at the site, scattered distribution and concentration of pottery in small areas suggesting pits, which may account for the considerable depth of some material.

2. A good representation of all tempers. The fact that the same relative proportions exist from top to bottom further suggests mixing at the site.

3. Affinities to Moundville illustrated by black filmed vessels and Moundville Incised vessels and sherds.

4. Contemporaneity of a type of sand tempering with shell tempering illustrated by the occurrence of a sand-tempered water-bottle (small), a1811, with a shell-tempered horizon burial.

5. Superficiality of the pottery horizin considering the site as a whole. Pottery occupation level probably only the upper 1 or 1 to 2 feet.

CONCLUSION

This widely spread shell midden on the northern end of Seven Mile Island presents a long record of the prehistory of man on the Tennessee River.

One of its outstanding features is the occurrence of large flint workshops at the depth of five feet. Here is a definite beginning of the Archaic 2 period*. For some reason, as yet not understood, the dwellers on all shell mounds, seemingly all at once, carried upon their midden great quantities of flint, and there, by percussion fracture, made quantities of rough flint blades and knives as represented by types 3, 23, 25, and 26. From that time on flint artifacts were plentiful in the middens, but the workshops occur only at one level and were never again used at later times. Only once on every site there was a time when, seemingly the most important business of the people was chipping flint. When this worshop level was finally covered by shell debris, the shops were never again used, and no new shops are found at higher and later levels.

Prior to the working of flint on the shell midden, flint seems to have been unknown to the shell mound dwellers. At this site the midden is, on the average, about 6.5 feet deep, and burial pits extend into the sand below the midden another 1.5 feet. In the 1.5 feet of midden below the workshop level, there are found scattered crudely chipped flint knives and blades of the exact types made in the workshops. It is believed that these few specimens have found their way into these lower levels as the result of digging and disturbance of the midden by its occupants of Archaic 2 period, and particularly by their habit of moving their occupation level from one point to another on the midden. This particular habitation site was a large area, prominently placed at the head of this important island, and the level area permitted the occupants to shift widely from time to time. This would prevent a large debris accumulation in depth at any one point, due to continuous occupancy at that point. Such discon-

* For a discussion of Archaic 1, 2 and 3 and Pottery 1, 2 and 3, see Webb and DeJarnette, 1948a.

tinuities, the result of shifting occupational levels on the site, results in considerable mixing of artifacts belonging to different periods and makes the determination of stratigraphy very difficult. At this site it seems to have destroyed any cultural significance which natural zones might be expected to have.

It is believed that there was once at this site occupancy in the Archaic 1 period when no worked flint was in use. The base of this great midden shows only a very few flint specimens, but evidence is plain that the lower levels of the shell have been disturbel by flood action. In the early history of this site, before the midden had gained a height of 6.5 feet, flooding would have been easy and doubtless was frequent. The record shows that portions of the lowest level of the shell midden was water lain. In this disturbed midden, occasional flint pieces have been found which, it is believed, belong to the Archaic 2 period(but have reached a lower depth for reasons cited. Occupancy thus began here in Archaic 1 period, on the surface of an island the northern end (head) of which was not much above river level. Floods were frequent and early occupancy shifted from one spot to another until almost the whole end of the island was covered with a layer of shell midden from one to one and a half feet deep. This occupancy in the Archaic 1 period was followed by the establishing of the shop sites and the sudden use of great quantities of crudely chipped flint in the Archaic 2 period.

The Archaic 3 period began with the use of stone bowls, the broken fragments of which appear in the top four feet of the midden. Stone bowls were not as numerous here as at sites further east, Ma°48 and Ma^{v}10,* but their use here has the same artifacts in association. Only one steatite bowl was found in burial association. This was with Burial No. 90 in Unit 1, at a depth of 3 feet. There is some suggestion that sandstone bowls antedated the use of steatite bowls since sandstone bowl fragments are found in the four foot level and upward, while steatite bowl fragments occur in the three foot level and upward. In the Archaic 3 period, the midden was raised to an average depth of 4.5 feet over the whole site.

The pottery zone at this site is about two feet in depth. Due to the very considerable amount of digging into this midden by

* Webb and DeJarnette, 1948a and 1943b.

people of the Pottery 3 period, in order to bury their dead, (the Koger's Island manifestation), the pottery stratigraphy has been greatly confused. There was considerable occupancy in the Pottery 1 period as shown by much fiber tempered pottery, and by sand tempered sherds which usually accompany fiber tempered pottery. However, there is no clear separation of the fiber tempered level from the grit tempered level of occurrence.

In the Pottery 2 period the midden was raised to an average depth of 6.5 feet. The maker of grit tempered pottery here reached a high cultural level if we may judge by the amount of potsherds in the midden and the wide diversity of form and decoration of vessels. These people however, never used pottery as burial accompaniments.

After the midden had reached its full depth of about 6.5 feet over the whole site, people of Pottery 3 period, the Koger's Island manifestation, used this midden as an extensive cemetery. They buried their dead in extended burials, dug into the shell midden. Occasionally they deposited a bundle burial of bones, not in anatomical order. They frequently deposited in the grave, caches of artifacts and used shell tempered pottery in a variety of form and decoration as burial furniture. This occupancy seems long continued and may come down close to the historic period. However, no artifacts or other evidence was found at this site showing historic contact with white traders. Site Lu°25 seems thus to have provided evidence of occupancy continuously from the Archaic 1 through Pottery 3 period.

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