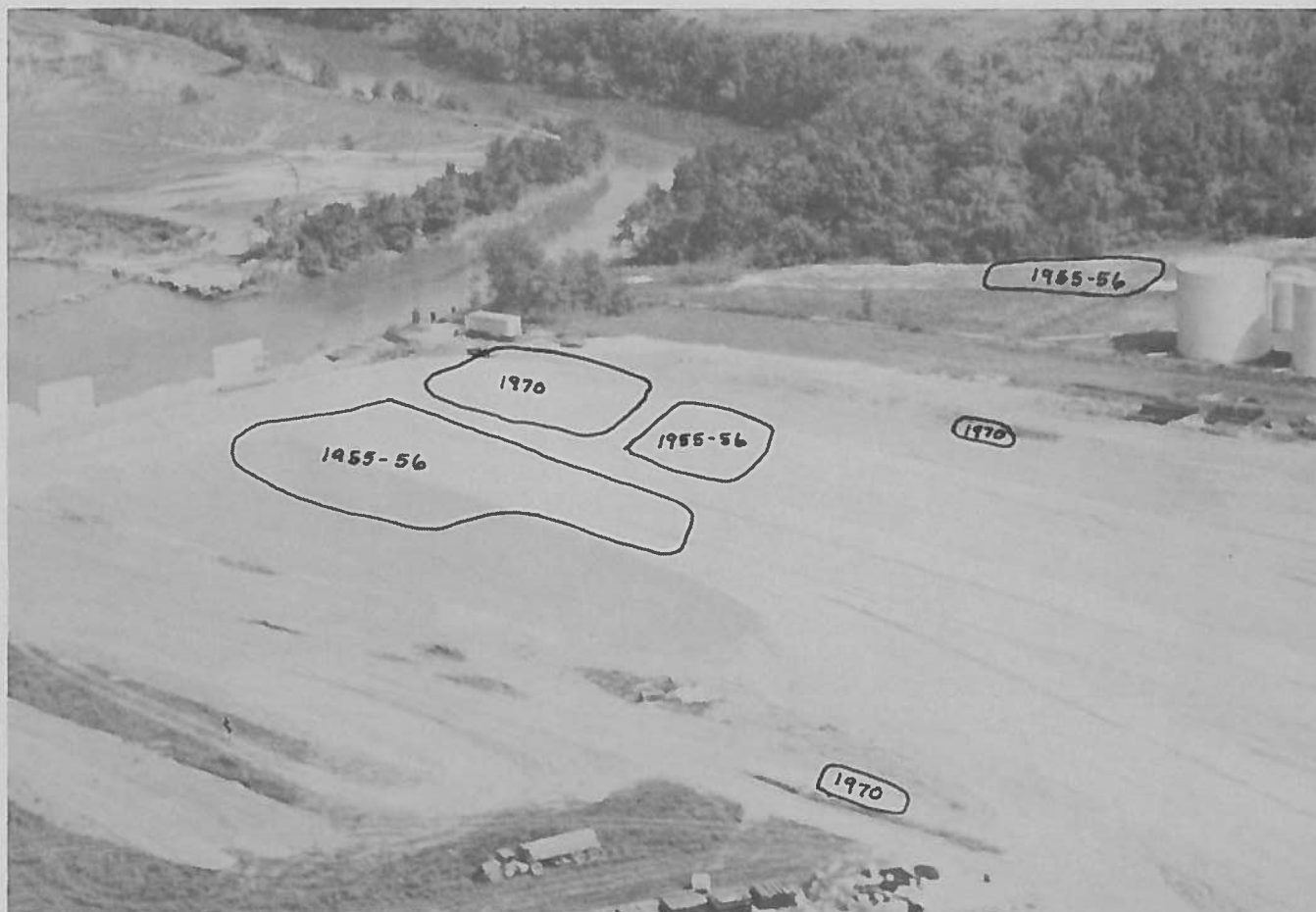


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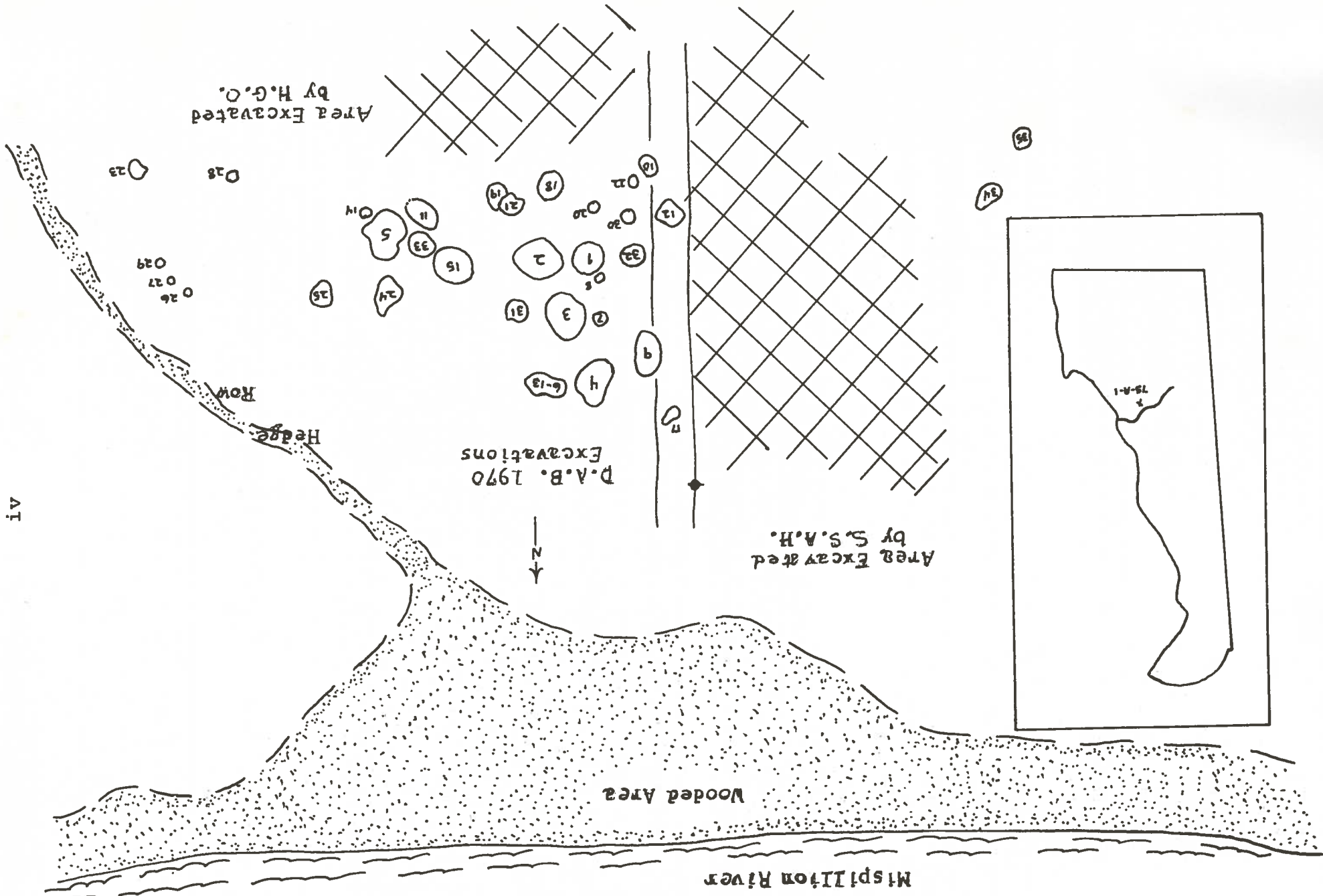
Table of Contents

	<u>Page</u>
Aerial Map of Mispillion Site.....	Front Cover
Mispillion Site, 1970 Excavations..... (Ronald A. Thomas and Nancy H. Warren)	1
Helen Hutchinson (1880-1970).....	24
Officers and Notices.....	25

Mispillion Site

Table of Contents

	Page
Map of Site	iv
Introduction	1
Artifactual Data	3
Ceramics	3
Townsend Series	4
Albemarle Series	5
Miscellaneous Sherds	5
Pottery Bead	5
Ceramic Pipes	6
Miniature Vessels	6
Stone Tools	6
Bone Tools	7
Faunal Evidence	8
Floral Remains	8
Intrusive Historical Artifacts	9
Features	9
Cultural Interpretations	15
Summary	19
Bibliography	20
Tables	21
Plates	24



Sketch map of the Mispillion Site, 1970 excavations.

1970 SALVAGE EXCAVATIONS AT THE MISPELLION SITE

Ronald A. Thomas and Nancy H. Warren
Delaware Archaeological Board

Introduction

In March of 1970 the Delaware Archaeological Board became aware of the impending destruction of the Mispillion Site (7S-A-1) due to the construction of a new highway to bypass the city of Milford. Contact was immediately made with the Delaware State Highway Department in order to assure the initiation of proper salvage excavations. The complete cooperation of this agency was obtained and work began that same month.

The Mispillion Site is located on the south bank of the Mispillion River approximately eight miles upstream from the Delaware Bay and one mile east of the city of Milford. It is situated on a series of knolls running east from Hering Branch for about one half mile. The soil of the area is well drained and quite sandy. The meandering river cuts through a number of broad salt marsh areas on its way towards the bay. The Mispillion Site is located along the Atlantic Flyway and is situated amidst a variety of food resources.

The Site has been known as a source of archaeological material for at least fifty years. It was first excavated in 1954 by three members of the Sussex Society of Archeology and History, a local organization long involved in Delaware Archaeology. The society conducted extensive excavations at the site in 1954 and 1955 at which time the entire site was sampled and thousands of artifacts were recovered. A total of five reports were issued on the work done (Hutchinson & Omwake, 1955; Hutchinson et al, 1957; Flegel, 1959; Lopez, 1961; and Omwake, 1962).

The exact route of the highway was ascertained with the assistance of the Right-of-way section of the State Highway Department. It was learned that the area excavated extensively by the S.S.A.H. would be bisected and two areas only slightly touched would also be destroyed. Salvage work was scheduled for the easternmost edge of the highway right-of-way.

The area to be excavated was previously occupied by a trailer park and consequently a great deal of disturbance had occurred. The removal of the trailer pads, miscellaneous sheds, and the lawn and shrubbery was accomplished with the help of highway department earth moving machinery. A road grader was first utilized but was abandoned when it was learned that it caused a great deal of dis-

Artifactual Data

turbance to the subsoil. A track-mounted Grapple was then made available with much better results. Members of the staff of the Delaware Archaeological Board, assisted by members of local archaeological societies, followed with flat shovels to examine all indications of aboriginal features. (Plate V, 1)

After the removal of the top soil and the dressing down of the subsoil over thirty-five aboriginal and modern disturbances were noted. Subsequent construction operations resulted in the discovery of two additional features. The area to be excavated was mapped and a grid control system of two meter square units was laid out. A datum point was established as near as possible to a marker utilized during the S.S.A.H. excavations. All disturbances were examined and those that appeared to be aboriginal features were photographed and carefully drawn on record sheets. The excavation of the features involved the use of trowel, brushes, dental picks, and a variety of other implements. Soil samples were retained as were all objects of human manufacture. Excavation around features was done by flat shoveling in an attempt to recover information concerning post mold patterns.

Surface collections were made in a somewhat controlled manner. An attempt was made to systematically collect specimens by portioning the site into wide belts or zones paralleling the river. Greater amounts were found in the second through fifth belts rather than in the zone closest to the river bank. Later excavations revealed the presence of numerous features within the area covered by these zones.

During most of the excavations conducted by the Delaware Archaeological Board in the past five years, a great deal of assistance has been received from amateur archaeological society members and other interested persons. Such was the case with the Mispillion Site salvage excavations. The number of persons involved has not been determined and many who assisted will go unrecognized. There are some, however, who by the dedication to the task of recovering scientific information should be identified. Excepting the staff of the D.A.B., perhaps the most assistance was received by Mr. and Mrs. Lott Ludlow, Mrs. Janet Parker, and Mr. Roscoe Mitchell. Also of great help were John Harris, Tom Hughes, Mr. and Mrs. Herbert Hughes, Richard Gardner, Steve Frazer, and many others who came to spend one or more weekends or weekdays in the attempt to salvage the data from the Mispillion Site.

The artifacts found during the excavation of the Mispillion Site ranged in type from ceramics to objects of bone. They include objects of domestic activities as well as objects of the hunt and possibly religious items. Perishable items were not noted except for the impressions of textiles on ceramic vessels.

The following descriptions are based on only the objects excavated and do not include surface-collected material. This report should be considered preliminary in that a detailed examination of the technology and stylistic expression of the artifacts has not been attempted. A final report will be issued following close laboratory analysis of all the material found during the 1970 excavations as well as much of that recovered during earlier excavations.

Since none of the artifact categories discussed in this report are available in large numbers, the classifications will follow those established by other investigators in nearby areas. Whenever noticeable differences occur, they will be noted. All identifications are based upon comparisons with written descriptions and no type samples were examined. Faunal identifications were based on a combination of written sources and reference collections.

Ceramics

The majority of the finished artifacts excavated at the Mispillion Site were pottery sherds. The total from all features was 5236. Every feature but one contained at least one sherd. The largest number was found in Feature 15, which produced 644. The number of vessels represented by the rim sherds has not been determined and only one restoration has been attempted. The sherds range from large, thick, rounded basal portions to highly decorated rim sherds. A large number of small weathered sherds proved difficult to classify but the remainder have been placed in categories.

The classification system used for the pottery from this site is virtually the same as that established by previous investigators of similar sites in the area (Lopez, 1961; Blaker, 1963). An exception is the use of the classification of the Albemarle Series as defined by Evans (1955). The great majority of sherds have been grouped in one or the other of the types of the Townsend Ceramic Series (Blaker, 1963).

Townsend Series

The Townsend Series, constituting 95% of the sherds from the Mispillion Site, is the largest of the ceramic categories recognized. The sherds of this series are shell tempered and as in many other sites the shell tempering has often been leached out leaving small holes throughout the paste. Coiling is evident from the many coil-juncture breaks and from several accidentally fired coils. The color of the paste ranges from reddish buff to a dark grey. The thickness and texture of the paste also varies considerably at times.

The vast majority of the Townsend sherds are identified as Rappahannock Fabric Impressed. They are recognized by their outer surfaces which are roughened or impressed by a paddle wrapped with a variety of textiles or fabrics. In many cases the impressions of the fabric have all but been obliterated by either intentional smoothing or by the weathering process. The rims are usually direct and straight but a number of inflaring rims have also been recorded. A total of 4570 body sherds and 135 rim sherds of this type has been found. (Plate III, 1-2)

Seventy-six rim sherds have been excavated which by the type and placement of their incised designs can be designated as Rappahannock Incised. Also present are 182 shell tempered, incised body sherds which appear to be Rappahannock Incised, but because their position on the vessel is not known, they can not be definitely labeled as such. The design elements and combinations noted are similar to those noted at the Townsend Site (Blaker, 1963). The incised designs begin at, or close to, the lip of the vessels. The rims are in most cases straight, but at times they are outflaring. (Plate II, 8-9) Horizontal encircling lines are common, as are groupings of vertical, horizontal and oblique incisions. Punctates and short strokes are not uncommon, appearing in various combinations with the incised lines. Nested blocks, inverted triangles, chevrons, and semi-castellations are among the other designs noted. (Plate II; Plate IV, 9)

There are only seven sherds which can be labeled Townsend Corded Horizontal. Two of these are rim sherds and five are body sherds which appear to be identifiable with this category. (Plate III, 3)

Evidence is lacking for the other two types generally associated with the Townsend Series. There are no sherds which can be definitely labeled as Townsend Incised or Townsend Herringbone. It is possible that they are present, but if so, they are of such a fragmentary nature that it is impossible to identify them. It should be noted that these two types were rare, if at all present, in the earlier Mispillion excavations.

Albemarle Series

A smaller group of 144 sherds, or 3% of all the sherds found at the Mispillion Site, have a distinctively different appearance. They are typically orange-red to grey in color, are thicker in cross section, and have a crushed quartz temper. The exterior surface treatment includes fabric impression, cord marking, and net impression. Based on similarities in paste, temper and surface treatment, they appear to be closely related to, if not identical with, the Albemarle Series of the western fringe of the Chesapeake Bay (Evans, 1955).

Present are 81 sherds of the Albemarle Fabric Impressed type, 54 Albemarle Cord Marked sherds and 9 Albemarle Net Impressed sherds. The impressions on the outer surface of the sherds vary from distinct, easily identifiable markings to highly roughened markings which are sometimes difficult to identify. The Albemarle Series also includes plain surface and scraped surface types but these have not been noted at the Mispillion Site. (Plate III)

Miscellaneous Sherds

This category, consisting of sherds which cannot be identified with any defined ceramic type, is comprised of shell tempered sherds which do not belong in the Townsend Series, sand tempered varieties, and sherds which appear to have no temper. (Plate III)

The shell tempered sherds include 3 with cord impressions and 9 with net impressions. The 74 sand tempered sherds are cord marked, net impressed, plain, or incised. Thirty-six small reddish sherds appear to be untempered. Further study of this pottery and comparisons with sherds from other local sites may lead to their identification with defined types.

Pottery Bead

A shell tempered bead was found in Feature 5. It can be described as a somewhat flattened sphere with a smooth surface which has been indiscriminately incised. A portion of the surface has been fire blackened. The diameter of the bead through its main perforation is 1.5 mm. In addition, there are three partial perforations in other areas. Pottery beads are quite rare in this area. A much larger one was found at the Townsend Site and a marble-sized clay sphere, which may have been an undrilled bead, was excavated from the earlier Mispillion excavations (Flegel, 1959). (Plate IV, 7)

Ceramic Pipes

Nine fragments of Indian clay smoking pipes were found at the Mispillion Site. One was a crude stem portion with particles of reddish brown clay visible in the paste. The remaining eight sherds are bowl fragments of a more refined nature. The clay is more dense and varies in color from buff to black with little temper visible. The two black examples are highly polished with carefully executed designs incised in the surface. One shows alternating cross-hatched and plain triangular zones above incised lines. The other is unusual in that it appears to be incised with a human effigy face consisting of three rectangular blocks for the eyes and mouth enclosed within a trapezoidal area surrounded by fine cross-hatching. A buff colored specimen has been decorated by a fine dentate design. (Plate IV, 4,5,6,8)

Miniature Vessels

Townsend Series miniature vessels are represented here by 23 sherds. Most of these have a smoothed and undecorated finish, but at least 3 have delicately incised designs similar in nature to those of Rappahannock Incised vessels. The paste is similar in color and texture to that of the rest of the Townsend Series but the vessel wall is much thinner. Miniatures are known from the Townsend and Ritter sites but are not documented from any other sites in this area. (Plate IV, 1-3)

Stone Tools

The majority of the lithic artifacts found at the Mispillion Site were manufactured from the local pebble jaspers and quartz found along the beaches and in the river cuts of the Delmarva Peninsula. Very few pieces of non-local materials such as rhyolite and argillite were found and these appear to have been manufactured by a people carrying a different technology than those using the local jaspers. Large numbers of discard flakes were found throughout the site indicating the manufacturing of stone tools on the spot. Although the tools were percussion-made, no hammerstones were found in the pits. A single pressure flaking tool represents the flint knapping tool kit at the site. Surface collections may include the common hammerstone, however.

Two basic categories of bifacially-flaked projectile points and knives were recorded. Twenty-five finely made triangular points, most likely used as arrow points, were recovered. Edges were evenly flaked and varied from convex to concave. Basal edges were deeply concave to straight. The points were most often equilateral but some isosceles triangular specimens occurred. (Plate I, 10-12)

A more numerous category includes those crudely flaked triangular tools often referred to in the literature as rejects or blanks. The tools are made of pebble jasper and portions of the cortex often remain. They are quite thick in cross section with

irregular edges. Many of the tools exhibit use-flaking, indicating that they were used as knives and/or scrapers. (Plate I, 8-9)

Found in lesser numbers are a variety of stemmed and notched tools of non-local quarried material. These are rarely of pebble jasper. Included are types that appear to be of earlier cultural horizons recognized in the eastern United States. Unidentifiable as to type are 9 tips of projectile points or knives.

Over 500 crudely flaked tools and partially used cores of pebble jaspers and quartz were found at the Mispillion Site. These include pebbles with one or more flakes removed by percussion flaking; jasper cores with the entire cortex removed but with no deliberate shaping attempted; and tools which appear to be flaked solely for the purpose of forming a working edge. In this category are a relatively high percentage of milky and semi-crystal quartz specimens.

By far the most numerous of the lithic tool categories are the discard and utilized flakes. A total of 16,221 flakes were found during the salvage work. Of this total over 99% were jasper. Less than 35% of the larger flakes exhibit any evidence of use and very few of these were purposely retouched to form a working edge. Those that were used show scars on only one face suggesting their use as scraping tools.

A unifacial scraping tool and an elongated, chisel-edged flake with steep retouching (Plate I, 13) complete the stone tool inventory from the Mispillion Site excavations.

Bone Tools

Despite the abundance of faunal remains found at the site, bone and antler artifacts are not frequently found. Only 7 examples of worked bone were found in the excavated features and all but one of those was in a fragmentary condition.

Only 3 bone awls were recovered. One of these was a splinter awl of deer long bone which had been highly polished. (Plate I, 3) The working end had been rounded and the tip was sharply pointed. In Feature 23 were 2 deer ulna awls. Both had been polished but are in fragmentary condition. The tip and basal end of each artifact has been damaged. (Plate I, 1-2)

Bone needles are represented by two fragmentary sections manufactured from split long bone. (Plate I, 4-5) A portion of the drilled hole is visible on one example. Both specimens have been highly polished.

Only one object manufactured from deer antler was recovered. This was the tip end of an antler tine which exhibited use as a flaker. (Plate I, 7) Although only 1.6 mm. remained, battering marks are numerous suggesting a great deal of use.

Faunal Evidence

Over 8000 fragments of animal bone were recovered at the Mispillion Site excavations. The vast majority of these were quite small and could not be identified as to the species of animal from which they were derived. Approximately half of these, however, have been separated into categories which include large mammal, small mammal, bird, fish, turtle and domestic.

Those animals which could be definitely identified included deer, dog, rat, woodchuck, squirrel, racoon, fox and possibly the skunk. Sea life included oyster, clam, whelk, the sturgeon and crab. Among the birds, the domestic or wild turkey seemed to be most numerous. Also found was evidence of the tern. Domestic animals included the cow, the pig, and most probably, the horse. The only complete skeletons found were those of the dog.

The largest number of remains are those of oyster. Thousands of oyster shells, together with clam and whelk shells, were found in the midden fill of the Mispillion Site features. No attempt was made to ascertain an accurate count but samples from each feature were retained.

Examination of the bone for butchering evidence or animal pathologies has not been attempted. The lack of identification for the majority of the bone prevents any attempt to arrive at an approximation of dressed meat quantity. A casual examination of the deer bone reveals that both young and mature animals are present, indicating the lack of selective hunting methods. With the lack of antler parts, it was not possible to determine any evidence of seasonal or year-around occupation. Fish bone from both shallow and deep waters were present, suggesting the possibility of canoe travel.

The faunal evidence from the Mispillion Site indicates that any and all sources of food were utilized by the aboriginal people. Not only were highly skilled hunting and fishing techniques probable but the simplest of gathering methods were also applied.

Floral Remains

Evidence of the flora utilized by the Mispillion people was found only in the form of charred wood and nut shells. The hickory nut has been identified but it does not occur in great numbers. The nature of the charred wood has not been investigated. Soil samples were retained to allow for future pollen analysis but, due to the uncertainty as to the origin of the feature fill, such an analysis may prove useless.

Intrusive Historical Artifacts

In more than a few of the features excavated during the 1970 salvage excavations, artifacts of historic origin were recovered. In no case, however, was an artifact identified that could have been contemporaneous with the aboriginal artifacts. The majority of these intrusive objects appear to date from the mid-nineteenth century.

Among the artifacts of historic derivation were glass, ceramics, metal objects, animal bone, wood and even plastic. The glass was predominantly pane glass but some drinking glass fragments and jar basal fragments were present. The ceramics varied widely from thick, brown glazed ware to finely painted delftwares. Metal objects included two tined forks, buckles, a juice harp, large numbers of machine cut nails and metal plates. Animal bone included cut soup bone as well as cow, horse and pig teeth.

The introduction of this historic material into the aboriginal pit fill must have occurred quite recently and does not indicate contact with the prehistoric peoples of the Mispillion Site. What artifacts of prehistoric origin, if any, that may have been introduced along with the historic material, is not known.

Features

Features are defined, for purposes of this report, as any evidence of disturbance or alteration of the natural soil conditions by aboriginal or modern man. Only those of probable aboriginal origin are considered in this report. The features found during the 1970 salvage excavations included excavated pits, graves and shallow, midden-filled depressions. No evidence of post molds, surface fire-hearths or living floors were uncovered.

Feature 1

This shell and refuse-filled pit was circular in shape with dimensions of 222x218x116 cm. Straight, steeply sloping side walls extended to a flat sandy bottom. The pit fill consisted of dark brown soil mixed with oyster shell. In one area was a concentration of charcoal. The shell was concentrated around the circumference and at the bottom of the pit. A large quantity of lithic materials, bone and potsherds were discarded in this pit. Three crude and five fine triangular points, along with examples of shell, quartz and sand tempered pottery and one pipe bowl fragment were found. A few historic artifacts were also recovered from this feature.

Feature 2

This pit was oval in outline with dimensions of 345x330x98 cm. One side wall was straight and steeply sloping, while the other was incurvate. The bottom was flat with one area being basin-shaped. The fill consisted of mottled black and brown organic soil

with concentrations of shell. These concentrations were primarily of oyster with some clam and whelk. The artifacts found in this pit included stemmed, fine and crude triangular points; shell, quartz and sand tempered pottery sherds; miniature and pipe fragments; a portion of a bone needle; and a small sample of historic goods.

Feature 3 (Plate V, 2)

Feature 3 had a roughly oval outline. The pit dimensions were 332x260x110 cm. The side walls sloped down to a rounded bottom, and the fill consisted of layers of brown, black and mottled yellow soil with thin concentrated lenses of oyster shell and one concentration of charcoal. There was some evidence of rodent disturbance. Among the artifacts present were both crude and fine triangular points. The largest number of potsherds from any one pit were found here. These include three with mending holes and the broken remains of a shell tempered, net impressed vessel. One bone awl, a portion of a bone needle and a tubular bone bead were discovered; as well as two historic artifacts.

Feature 4

This feature had an irregular oval outline with dimensions of 316x280x112 cm. The relatively flat bottom rested on hard packed reddish sand, which was broken through in pockets to soft yellow sand. One side wall was sharply convex, while the other curved in gently. The fill contained numerous lenses of black, brown and yellow streaked soil and yellow sand. Among the artifacts, ten bifacial points were found, along with a unifacial chisel-edge tool. There were no historic goods in this pit.

Feature 5

This refuse pit was roughly oval in shape with dimensions of 375x330 cm. The fill consisted of black and brown organic soil. Among the artifacts were crude and fine triangular points. The pottery was exclusively of the Townsend series variety and included a fragment of a miniature vessel and an incised bead. Nut shells were present as well as a small number of more modern artifacts.

Feature 6/13

The shape of this pit was oval with a basin-shaped cross section. The side walls were steeply sloping and the bottom gently rounded. The fill was composed of organic soil with very little shell included. It's measurements were 280x170x70 cm. Bone and lithic remains were present, including stemmed, triangular and broken points. In addition to Townsend series sherds, a few quartz tempered and sand tempered examples were found. There was no historic material in this feature.

Feature 7

The measurements of this oval pit were 110x80 cm. The fill was dark organic soil with a large amount of oyster shell, along with a few clam and whelk shell, present. The highlight of this feature was the discovery of two articulated dog burials. Artifacts were limited to relatively small numbers of lithic, bone and ceramic materials. No historic material was present.

Feature 8

Feature 8 consisted of a small midden-filled depression containing very limited amounts of lithic material, no bone and only two shell tempered sherds.

Feature 9

This feature was a midden depression which had been disturbed by plowing. It was oval in shape and measured 400x230 cm. It contained one crude triangular point and other lithic material, bone, pottery fragments and a number of more contemporary artifacts.

Feature 10

This refuse pit had an irregular oval outline which measured 220x170 cm. Excavated from it were stemmed and crude triangular points, shell and quartz tempered pottery sherds, a small amount of bone material and a few historic items.

Feature 11

This was an oval pit measuring 280x140. It had been highly disturbed by machinery and was not fully excavated. The material that was recovered included stemmed and crude triangular points and some Townsend series sherds. The surface of black organic soil contained later Delawarean material.

Feature 12

This feature had an irregular circular outline with measurements of 180x182x40 cm. The bottom was sloping with a deeper basin in the east end. One side wall was steeply sloping and straight, while the other was less steep. The mottled soil include organic fill and yellow sand with many oyster and a few whelk shell. There were indications of considerable disturbances. The artifacts were limited to a few stone samples, limited bone material, and a few shell and sand tempered sherds. The only historic artifact was a portion of a white pipe stem.

Feature 14

Feature 14 was a small, circular, basin shaped pit measuring 28x22 cm. It contained a quantity of rusted metal, glass and ceramics of modern origin. These were discarded as not being pertinent to this investigation.

Feature 15

This feature exhibited an oval outline with measurements of 320x260x100 cm. The side walls were steep and straight and the bottom flat. The fill consisted of layers of dark and light soil with some sand. (Plate VI, 1-2) Very little shell was present. The pit had been carefully shaped and produced an abundance of artifacts. Over six-hundred pottery sherds were excavated from this one pit, the majority being of the Townsend series. Lithic material, bone and historic artifacts were all present.

Feature 16

This feature was apparently only an irregular, midden-filled depression in the sub-soil which had been recently disturbed.

Feature 17

This feature measured 60x38 cm. It was irregular in outline and quite shallow. It contained a canine burial which was laying on the yellow sub-soil. Very few artifacts were excavated from this pit.

Feature 18

This pit had a circular outline with curved, steeply sloping side walls and an irregular, flat bottom. It's measurements were 176x160x94 cm. The fill consisted of very black soil and shell. A human burial (#1) was encountered laying over a considerable amount of refuse fill. This skeleton was that of an adult and was fully flexed. A large amount of debris was excavated, including triangular points, many pottery sherds of all types and two isolated historic artifacts.

Feature 19

This circular shaped pit had a bowl shaped profile and measured 110x90x50 cm. The fill consisted of a mottled sandy loam. Artifacts were limited; consisting of small amounts of stone, bone and pottery sherds.

Feature 20

This was a small feature with a circular outline and a dish-shaped profile. It's measurements were 79x68x12 cm. and the fill was a mottled soil. Artifacts were rare and historic material was nonexistent.

Feature 21

This feature had an irregular oval outline with straight, steeply sloping side walls and an even, flat bottom. It measured 154x120x70 cm. The fill was made up of lenses of dark brown loam, mottled loam, and tan sand. Among the artifacts were Townsend and Albemarle series sherds and one historic sherd.

Feature 22

This was a small circular pit with steep, excurvate side walls and a rounded bottom which had measurements of 50x50x25 cm. Only a few artifacts were recovered including lithic material, charcoal and sherds. No historic artifacts were present.

Feature 23

This shell pit had an irregular circular outline and measurements of 176x152x106 cm. The side walls were excurvate and steeply sloping, while the bottom was flat and irregular. The fill consisted of layers of soil and a large amount of shell. Oyster comprised about ninety percent of the total, but some clam and over eighty-five whelk shells were present. The artifact inventory from this pit includes triangular points, two deer ulna awls, one antler tine flaker and a few items of more recent manufacture.

Feature 24

Feature 24 had an irregular oval outline and measurements of 238x180x100 cm. One side wall was steep and straight, while the other was slightly sloping. The bottom was irregular with a much deeper basin at the west end. The fill was a dark, stained soil flecked with charcoal. Aside from the Indian artifacts, this pit contained 921 articles of historic manufacture.

Feature 25

The outline of this feature was an irregular oval. It had steep excurvate side walls and a rounded bottom. It's measurements were 168x116x62 cm. The fill consisted of dark soil and oyster shell. In addition, a total of 49 whelk shells were found with occasional mussels and a single clam. Disturbance to the top was great. Bone, lithic material and Townsend series pottery sherds were recovered, as well as a relatively large number of historical items.

Feature 26

This feature was small and had a sub-rectangular outline. It had straight, steep side walls and a curved bottom with a basin at one end. The measurements were 196x134x66 cm. The fill consisted of a dark brown organic soil which contained only five artifacts - one of historic manufacture.

Feature 27

This feature had an irregular oval outline and a dish shaped profile. It measured 38x28x10 cm. This saucer shaped depression was filled with a black greasy soil and may have been a fire pit. There were no artifacts present.

Feature 28

This feature of circular outline measured 40x40x75+ cm. It was filled with black soil and may have been a modern post hole.

Feature 29

This small stained area had an oval outline and a dish shaped profile. It measured 36x24x8 cm.

Feature 30

This circular pit measured 100x90x58 cm. It had incurvate, steeply sloping side walls and a rounded bottom. This was an evenly dug feature with stained soil fill. Only a few artifacts were present.

Feature 31

This shell and refuse-filled pit had an irregular outline with incurvate, steeply sloping sidewalls and a flat even bottom. The measurements were 164x140x61 cm. The fill consisted of a thick layer of black organic soil, interrupted in several places by sand lenses, which was laying on a thin layer of shell. Lithic, bone and pottery were all present, but there was an absence of historic artifacts.

Feature 32

This feature was oval in outline with incurvate, sloping side walls and an uneven flat bottom. It measured 170x130x68 cm. A limited number of artifacts were excavated from this pit. All the pottery samples were of the Townsend series and only one artifact of historical use was present.

Feature 33

The outline of this feature was oval with incurvate, steeply sloping side walls and a flat bottom. The measurements were 240x156x74 cm. Indian, as well as historical artifacts, were found in this pit.

Feature 34

This shell and refuse-filled feature had an irregular oval outline. The side walls were shallow and the bottom was irregularly rounded. It measured 196x110x38 cm. The fill consisted of black organic soil and shell, which was mostly oyster with some charred clam. In addition to a limited number of Indian artifacts, many historic goods were present.

Feature 35

Feature 35 was characterized by an oval outline, incurvate steep side walls and an uneven flat bottom, with measurements of 168x132x64 cm. The fill was a light brown organic soil. A flexed

human burial (#2) was nestled against the north wall laying on 40 cm. of clean fill. Very little in the way of artifacts was excavated from this pit.

Feature 36

This was a large oval feature, which was accidentally filled by the dragline before it could be completely excavated. Among the artifacts recovered were triangular points, shell and quartz tempered pottery sherds and some material of historic manufacture.

Feature 37

This feature had an irregular oval outline and a bowl shaped profile. It measured 105x77x42 cm. This has been interpreted as a grave pit. It contained an indeterminate number of burials which had been destroyed by the bulldozer. Indian artifacts were rare, but included the interesting pipe fragment incised with the human effigy. (Plate IV,4) Historical objects were absent.

Feature 38

This feature had an irregular sub-rectangular outline. It measured 240x190 cm.

Cultural Interpretations

A brief analysis of the data obtained during the 1970 salvage excavations at the Mispillion Site (7S-A-1) leads one to the conclusion that the site was occupied by a people carrying a cultural assemblage generally known as the Townsend "culture". Although this cultural manifestation has never been formally defined, numerous references to it are available in the literature. At the present time, the authors are engaged in an attempt to arrive at a definition for a Townsend Phase. The Townsend "culture" is known at a large number of sites in lower Delaware and Maryland's Eastern Shore. It includes among it's artifact inventory the Townsend Ceramic series, triangular projectile points and certain other stone and bone artifact types in lesser numbers. It is characterized by the presence of shell and organic soil-filled pits as well as by the lack of any occupational structure and settlement pattern data.

A comparison between the artifacts from the Mispillion Site and those of the Townsend "culture" immediately reveals their basic similarity. The great majority of the pottery sherds found at the site are identifiable as Townsend series ceramics. Although a sizable number of sherds of other ceramic types were noted, it is believed that they represent either a different time horizon or possibly intermediate occupation by a different people. The Townsend series types are well represented at the Mispillion Site, with

two exceptions, which may only reflect the more northern location of the site. The presence of Townsend "culture" miniature vessels and pipe styles further cements the association.

The most predominant projectile point and knife type is the triangular biface with crude, uneven edges and a thick cross section. While these have been reported from most Townsend "culture" sites, they are usually referred to as rejects. The more finely flaked triangular point is also present at the Mispillion Site as it is in Townsend sites. Also, as with Townsend "culture" stone tools, the predominant material utilized is pebble jasper.

Other lithic artifacts often associated with the Townsend "culture" and found at the Mispillion Site include modified flake scrapers, utilized pebble cores and unshaped bifacially flaked tools. Stemmed projectile points, while found in both situations, are felt to be intrusive. Bone artifacts corresponding to Townsend "culture" types are deer ulna awls, split bone needles, bird bone beads and antler tine flaking tools.

Perhaps the most diagnostic trait of the yet undefined Townsend "culture" is the midden-filled pit. These regularly shaped pits usually can be expected to contain a large amount of oyster shell, a fairly large number of animal bone fragments and a considerable quantity of black, organic-laden soil. Artifacts found mixed with the midden consist generally of village debris that was apparently accidentally included in the pit fill. Other items occasionally found in pits are human and canine burials.

The interpretation of the exact nature of these sub-surface features has puzzled local archaeologists ever since the first one was excavated. Since they are the only evidence of human activity available, with the exception of the artifacts, a careful analysis of them should reveal something of the way of life of their makers. Such an analysis has been attempted several times in the past with little or no useful results. Most interested persons have been content to refer to them simply as refuse pits.

The vast majority of the pits excavated during the 1970 salvage excavations were carefully prepared by the aboriginals. They appear to cluster about three general types. The smallest of these is a circular pit with sloping side walls and a rounded bottom. The diameter varies around a norm of 90 centimeters and the depth below the bottom of the plow zone averages approximately 70 centimeters. The second variety ranges from an irregular circle to an irregular oval in outline. The dimensions average about twice those of the smaller type. Bottoms also vary from rounded to flat with some irregularly shaped bottoms. The third general type is twice the size of the second with an oval outline and a flat bottom. The side walls are almost vertical and the bottoms seem to be a prepared floor.

The midden-fill in these sub-surface features reveals little, if anything, about the use to which they were originally put. It appears that after the pits had served their function, they were either intentionally filled or they were abandoned to fill through water and wind activity. Midden within the pits probably originated in the village debris surrounding the pits. In no case does the fill appear to represent the activity originally associated with the pit, although some tantalizing evidence does exist.

In more than a few cases, evidence of a fire having been built in a pit has been found. In the larger pits, this evidence is contained within the fill and does not extend to the pit walls. Some of the smaller pits do have fire-reddened or hardened side walls or bottoms. Fire-cracked rock is a common occurrence in the pit fill but does not necessarily represent any fire building activity within the pit itself. No evidence of stored foodstuffs or other items within the pits has been found. The use of some of these features as storage pits, however, does remain probable. Some evidence exists at similar sites to suggest that the bottoms may have been purposively lined with shell to facilitate drainage. No puddling of the side walls has been noticed. Evidence of covers for these possible storage units has not been uncovered. Nevertheless, it is suggested that the smallest variety of pit, as well as some of the second variety, were used for the storage of food remains. It is to be hoped that a storage pit abandoned during use will someday be found.

The largest features at the Mispillion Site remain to be interpreted. Their large size and careful preparation indicates that they are more than just refuse pits. It is suggested that they are probably too large for storage pits. Evidence from other sites in the eastern United States leads us to expect a storage pit to be smaller in surface dimensions and correspondingly deeper than the dimensions noted for these features. The hard-packed floor that is often noted indicates considerable human activity, and the presence of an in-situ fire hearth in a similar pit at a nearby site suggests the possibility that these features are of the nature of living or sleeping pits. The construction of an enlarged superstructure over the pits and the addition of a ladder would provide space protected from both the harsh winds of winter and the hot sun of summer. In order to "prove" such a contention, however, it would be necessary to excavate a pit complete with household objects in-situ.

The features at the Mispillion Site, whatever their intended use, when abandoned, would fill up with midden. Often the filled pit would be used as a grave for both human and canine bodies. Occasionally, after a pit had almost filled to the surface, it would be reused as a fire pit. Stratification present in some excavated pits indicates that they may have remained open during several rainy and alternating dry seasons. The tops were very often capped with a heavy concentration of oyster shell. Whether

certain pits were filled during the occupation of the site or whether they were all abandoned at the same time is not known. It is often reported that matching pieces of ceramic vessels are found in two widely separated pits. This may indicate contemporaneity of use or simultaneous abandonment.

If it is accepted that the midden found within the pits is associated with the village debris of the aboriginals responsible for the construction of the pit; then certain interpretations concerning the technology, economy and general daily life of the people is possible. The greatest part of the pit fill consists of food remains left by the people. The majority of these remains consist of the oyster shell from numerous meals. Also present is bone from food animals and occasional charred nut hulls. It is to be expected that the organic soil is primarily due to decaying plant remains, much of what was probably edible.

Although on first impression the Mispillion Site people subsisted almost entirely on oyster, a close look at the nature of the midden suggests that their diet was well rounded. The large numbers of animal bone, if put in terms of dressed meat, indicates that hunting provided a great percentage of food for the family meal. Certain features have been excavated, however, that consist almost entirely of shell fill and indicate a much greater dependence upon shell fish. Although no evidence of agriculture has actually been found at the Mispillion Site, it is to be expected that this source of nourishment was well utilized. The incomplete evidence available and the lack of information from an undisturbed surface site, makes any interpretation concerning subsistence rather tenuous.

We are on much safer ground when discussing technology. The total number of artifacts recovered at the Mispillion Site during the many years of excavation are more than sufficient to sustain a detailed study of flint knapping, stone grinding, the bone industry and ceramics. Such a study remains to be done. Since this is a preliminary report, it has not been possible to elaborate upon the technology of the Mispillion Site people. It has been pointed out that their ceramic industry was very similar to that of the Townsend Site itself and the ceramics from that site have been dealt with in considerable detail (Blaker, 1963). The flint knapping industry remains to be examined. It does not appear to be as complex as that of earlier peoples in this area nor as elaborate as other contemporary peoples of the eastern United States. Bone work is simple and shell work is virtually non-existent, at least as far as the 1970 excavations have revealed. Textiles and basketry, while surely present, have not been examined. What evidence of architecture that may exist has already been dealt with in this section.

Summary

The 1970 salvage excavations at the Mispillion Site (7S-A-1) have resulted in the acquisition of considerable data and material which potentially can reveal much about the way of life of the aboriginals of central Delaware. The excavation of over thirty features and the recovery of thousands of artifacts is due to the cooperation received from the State Highway Department and the James Julian Company, both of whom were primarily involved in the construction of the Milford Bypass. The destruction of the Mispillion Site, therefore, was not without it's benefits.

This preliminary report has suggested the presence of a Townsend "culture" component at the Mispillion Site. It noted the presence of non-Townsend influences and suggested that the Mispillion Site is at the northernmost boundary of the Townsend "culture". An approximate date of the major occupation of the site may range between the limits of 1200 and 1700 A.D.

Subsequent to the preparation of this report additional finds were investigated at the Mispillion Site. The analysis of these finds remains to be done and will be included in the final report on the Site.

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CERAMICS & HISTORICAL ARTIFACTS	Townsend		F.C.H.*		Albemarle		Misc. sand		Misc. shell		Misc. untempered		Misc. Ceramics*		Historical	
	total	*.H.	*.H.	*.H.	total	*.H.	tempered	tempered	tempered	tempered	tempered	tempered	tempered	tempered	total	total
Feature 1	492	476	15	1	12	8	2					2-p			10	
Feature 2	481	460	20	1	20	5	1				5	1-p,1-m			9	
Feature 3	845	818	27		17		7				5	1-c			2	
Feature 4	177	150	27		3	16					5					
Feature 5	553	499	54		7	3						1-b,1-m			9	
Features 6&13	73	69	4													
Feature 7	18	16	2													
Feature 8	2	2														
Feature 9	238	223	15		2	4						1-p			25	
Feature 10	65	64	1		1										3	
Feature 11	139	136	3													
Feature 12	15	15													1	
Feature 15	589	559	30		36	9					9	3-p			7	
Feature 17	1		1													
Feature 18	216	209	7		10	5					5	2-m			2	
Feature 19	17	17			3	3	1								1	
Feature 20	3	3														
Feature 21	75	71	2	2	1	3									1	
Feature 22	4	4														
Feature 23	81	76	2	3								19-m			7	
Feature 24	116	115	1		18	16									921	
Feature 25	54	51	3												109	
Feature 26																
Feature 30					1										1	
Feature 31	238	220	18		4						2					
Feature 32	60	59	1									1-p			1	
Feature 33	171	158	13		3										10	
Feature 34	8	8					1					1-c			73	
Feature 35	5	5														
Feature 36	225	216	9								5				13	
Feature 37	9	6	3									1-p				

*Rappahannock Fabric Impressed, Rappahannock Incised, Townsend
Corded Horizontal.
* b - bead, c - coil, m - miniature, p - pipe.

Table 1

LITHIC MATERIALS

LITHIC MATERIALS	lithic total		flakes	cores	fire cracked	pebbles	unifacials	crude triang	fine triangle	stemmed point	broken points
Feature 1	4543	4398	56	76	5			3	5		
Feature 2	2426	2228	41	151	39			3	2	1	
Feature 3	2365	2086	28	197	39			8	6		1
Feature 4	457	355	25	45	21		1	4	2	2	2
Feature 5	1148	980	40	116	8			2	2		
Features 6 & 13	351	272	11	34	30			1		1	2
Feature 7	118	103	2	9	3			1			
Feature 8	15	10	1	1	3						
Feature 9	302	209	47	43	2			1			
Feature 10	120	92	7	17	1			2		1	
Feature 11	297	163	11	96	23			3		1	1
Feature 12	20	16	3								
Feature 15	2975	2680	97	139	52			3	3	1	
Feature 17	1	1									
Feature 18	363	291	18	35	17				2		
Feature 19	43	34	5	2	2						
Feature 20	36	32	1	1	2						
Feature 21	134	107	7	12	7					1	
Feature 22	11	8	1	1	1						
Feature 23	212	161	8	36	3		1	2	1		
Feature 24	482	359	45	71	5			1	1		
Feature 25	215	130	18	55	11				1		
Feature 26	3			3							
Feature 30	15	5	4	6							
Feature 31	499	438	17	34	6				3		1
Feature 32	118	109	4		3			1			1
Feature 33	463	400	23	34	2			1		2	1
Feature 34	57	42	1	13					1		
Feature 35	259	247	8	2	2						
Feature 36	393	261	47	62	21			1	1		
Feature 37	4	4									

BONE MATERIAL

BONE MATERIAL	bone total	small mammal	large mammal	turtle	bird	fish	crab	domestic bone	miscellaneous	bone tools*
Feature 1	540	30	41	27	5				437	l-n
Feature 2	918	70	139	118	86	9			496	
Feature 3	404	40	55	102	27	6			174	l-a, l-n, l-b
Feature 4	88	5	24	7	9	1			42	
Feature 5	1398	66	451	332	80	11			458	
Features 6&13	20	4		3		2			11	
Feature 7	139	36	42	25	3				33	
Feature 8	0									
Feature 9	235	38	71	15	20	3		8	80	
Feature 10	29	16	3	4	2			1	3	
Feature 11	31	5	16		2			2	6	
Feature 12	34	4	3	19					8	
Feature 15	263	13	38	17	37				158	
Feature 17	19	11	1						7	
Feature 18	955	89	54	157	55	75		4	521	
Feature 19	43	3	15			1			24	
Feature 20	0									
Feature 21	95	6	10	5	4	8			62	
Feature 22	0									
Feature 23	1115	70	215	62	167	70			531	
Feature 24	508	25	22		40	45		68	308	
Feature 25	351	15	49	24	28	4	1		230	
Feature 26	1	1								
Feature 30	1			1						
Feature 31	179	18	49	28	9	3			72	
Feature 32	110	3	42	2	3	1			59	
Feature 33	29	10	10					5	4	
Feature 34	245	47	49		2	26		20	101	
Feature 35	0									
Feature 36	267	52	39	31	14	6		1	124	
Feature 37	17	2	4	2	1				8	

* a - awls, h - needles, b - beads, f - antler tine flaker.

Table 3



PLATE I Figs. 1-2, ulna awls; fig. 3, split deer bone awl; figs. 4-5, fragments of bone needles; fig. 6, bone tube or bead; fig. 7, tip of antler tine flaker; figs. 8-9, crude triangular points; figs. 10-12, fine triangular points; fig. 13, unifacial chisel-edge tool; figs. 14-17, stemmed points.

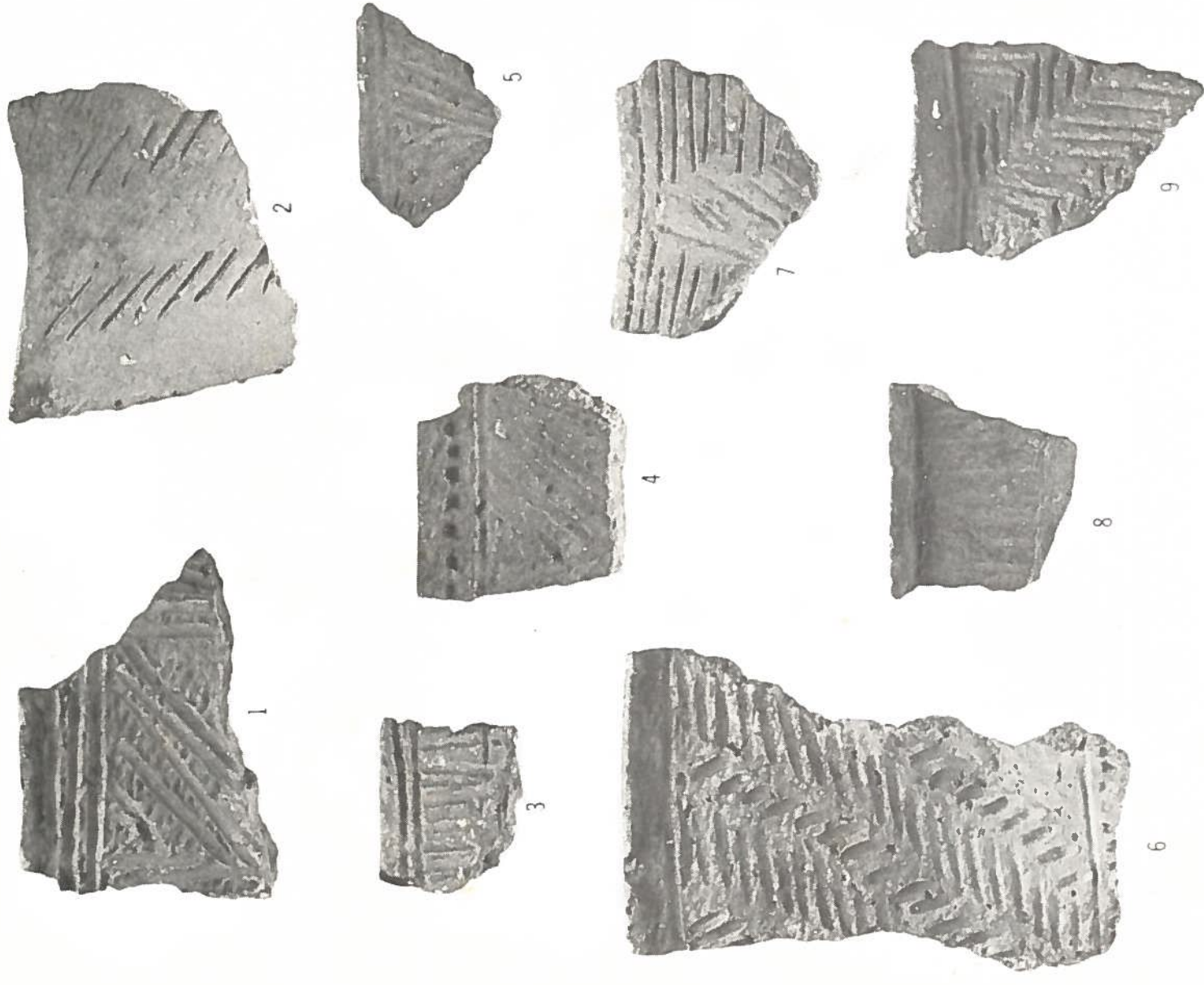


PLATE II. Figs. 1-7, Rappahannock Incised; figs. 8-9, Rappahannock Incised with everted rim.



PLATE III. Fig. 1, Rappahannock Fabric Impressed with mending hole; fig. 2, Rappahannock Fabric Impressed with everted rim and cord decorated lip; fig. 3, Townsend Corded Horizontal; figs. 4-6, Albemarle and sand tempered sherds.

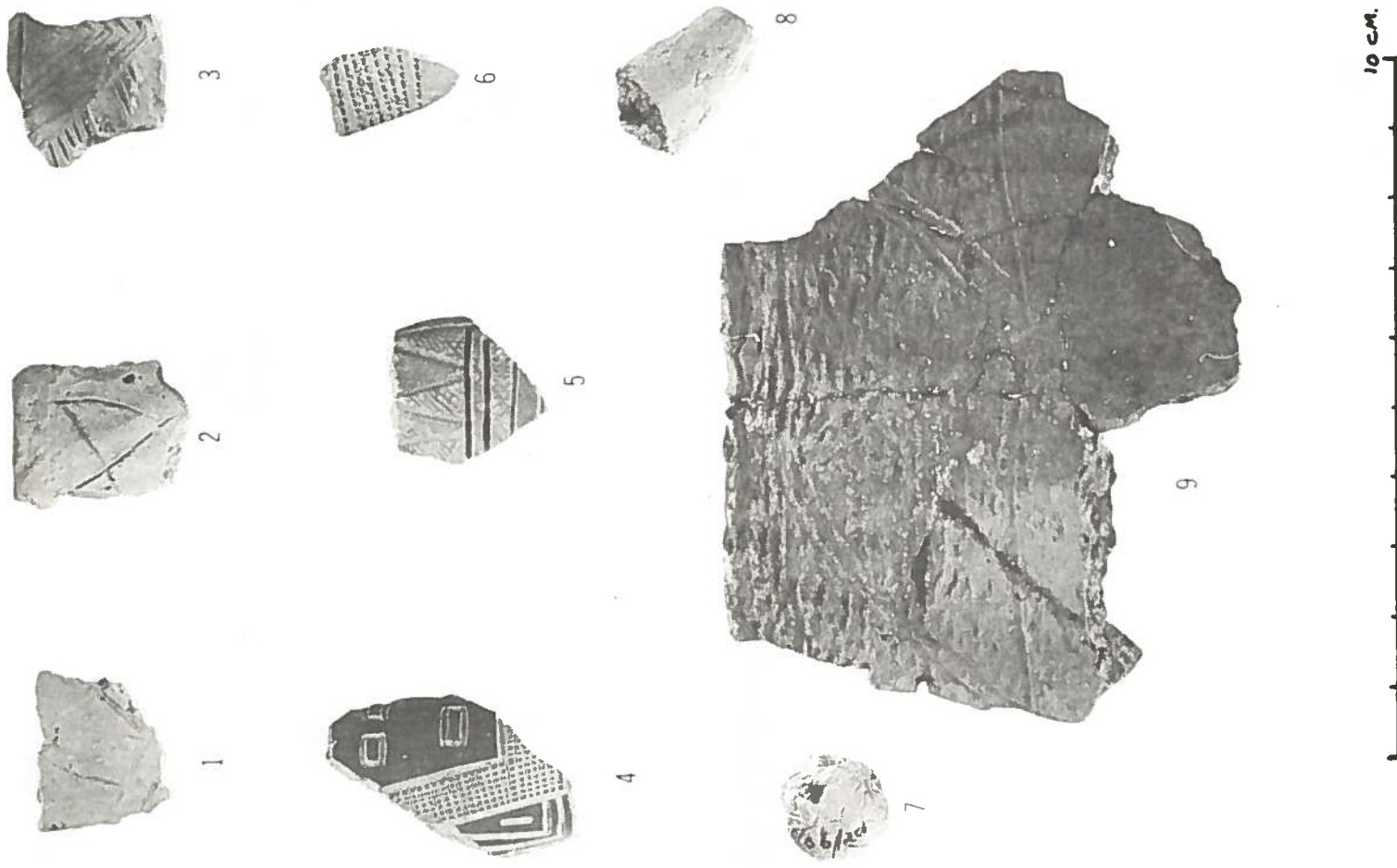


PLATE IV Figs. 1-3, Townsend series miniature sherds; figs. 4-6, pipe bowl fragments; fig. 7, shell-tempered incised bead; fig. 8, pipe stem section; fig. 9, re-tempered rim section of Rappahannock Incised vessel.

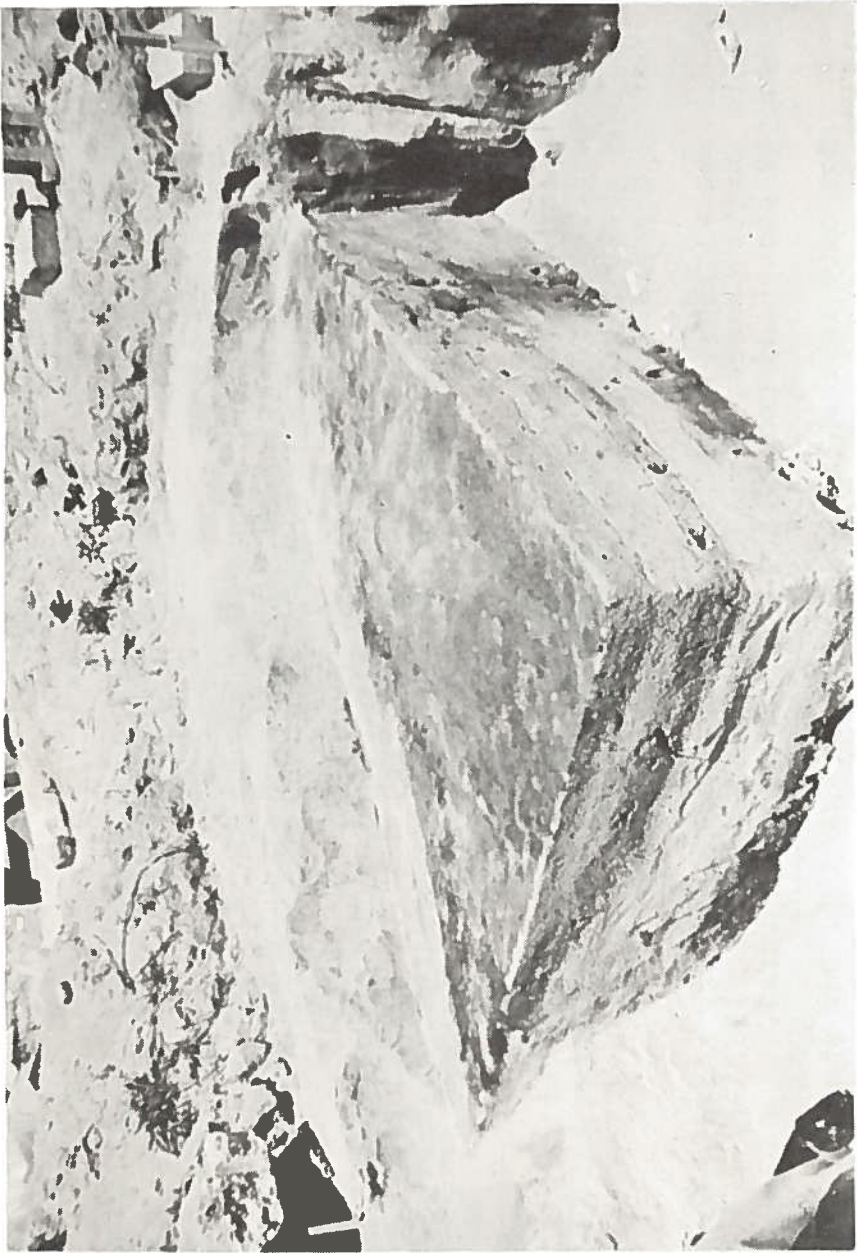


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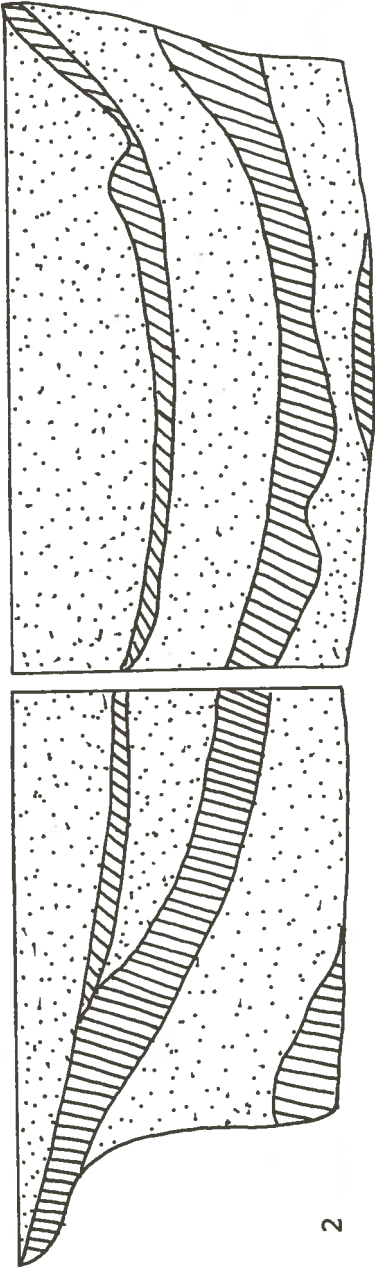


2

PLATE V. Fig. 1, overall view of the 1970 excavations, facing south; fig. 2, Feature 3 during excavations.



1



2

-  Dark organic-laden soil
-  Light brown sandy soil

PLATE VI. Fig. 1, photo of cross-section of Feature 15, fig. 2, sketch of profile of Feature 15.

HELEN HUTCHINSON (1880-1970)

Miss Helen Hutchinson of Bethel, Delaware, died July 3, 1970 and the well attended funeral was held July 6, 1970 in St. Phillip's Church in Laurel. She was 90 years old.

She was a member of the original Sussex Archeological Association from its beginning, and with her brother took an active part in the first project in early 1949--that of the "Townsend Site near Lewes" (The ARCHEOLOG, Vol. XV, No. 1, 1963).

After 1949 she accompanied her brother to nearly all the archeological projects of the Society and took an active part in the various excavations of the Society until a few years before her death.

She was basically interested in the Prehistory and History (Old Christ Church, The ARCHEOLOG, Vol XV, No. 2, 1963) of her adopted state and county (born in Goshen, Virginia).

Not only in the field work was she active, but she was among the most faithful attendants at our meetings--always accompanied by her brother (she did not drive a car) and did all she could to make our various meetings (monthly) attractive and interesting.

We shall miss her interest and efforts. Indeed we have already become less active though this decline is due to many other factors.

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