

THE ARCHEOLOG

PUBLICATION OF THE SUSSEX SOCIETY OF ARCHEOLOGY AND HISTORY

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THE ARCHEOLOG
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Delaware Humanities Forum

2600 Pennsylvania Avenue, Wilmington, Delaware 19806 • Rona G. Finkelstein, Director 738-8491

This issue of The Archeolog is dedicated to the following people who according to our records were members in 1948:

Benjamin S. Albertson, Jr.	Mrs. J. A. Moore
Alton Brittingham	Horace S. Okie
Ethel Lynn Burns	H. Geiger Omwake, Sr.
Adele Chambers	Mrs. H. G. Omwake, Sr.
Mrs. Virginia F. Cullen	H. Geiger Omwake, Jr.
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Mrs. K. D. Givan	Harold W. T. Purnell
Mrs. J. Rohe Green	Charles C. Robertson
David B. Green	Warren Schneller
Anthony Higgins	William Sloan
Miss Helen Hutchinson	H. D. Smith
Henry Hutchinson	Mrs. S. M. Sloan
William S. Ingram, Sr.	Edward A. Steelman
Mrs. Wm. S. Ingram, Sr.	Raymond E. Steelman
William S. Ingram, Jr.	W. Vernon Steen, Jr.
Ralph Karl	Mrs. Vernon Steen, Jr.
Irving Kehs	Howard Sammons
Philip H. Kugelmann	Mrs. Gladys Toms
Harold V. Lang	Gerald A. Timmons
Mrs. H. V. Lang	William R. Tyson
William Lynch	Roger E. Vandegrift
Mrs. Wm. Lynch	Marjorie F. Virden
Jack R. Lawton	Andrew W. Vann Sant
Franklin C. Maull	Molly C. Vaughn
Victoria W. Maull	Mrs. Molly C. Vaughn
William N. McCauley	Stephen C. Vaughn
Mrs. Robert Maedler	William B. Vaughn
Catharine C. Maull	J. Franklin Yeager
Ernest E. Megee	Frederick H. Butcher
James A. Moore	

History of our Association

In this, our first news letter, we feel it necessary to review the young life of such a growing "baby" as the Sussex Archaeological Association is proving to be. Born on the evening of January 7, 1948, with an initial membership of 15, it has developed to the present membership of 42. The first meeting was held at the Sequoia Tea Room, Lewes, Del., following an invitation sent out by Mr. Geiger Omwake, Supt. of the Lewes Special School District. The list of those answering this call was as follows:

Kenneth D. Givan
Mrs. Kenneth D. Givan
Anthony Higgins
Mrs. Robert Maedler
Miss Catharine C. Maull
James A. Moore
Mrs. James A. Moore
H. Geiger Omwake
Mrs. H. Geiger Omwake
H. Geiger Omwake, Jr.
Harold W. T. Purnell
Charles C. Robertson
Raymond E. Steelman
W. Vernon Steen, Jr.
Roger E. Vandegrift

At this meeting the following officers were elected: President, K. D. Givan; Vice-Pres., James Moore; Sec. & Treasurer, Catharine Maull. A By-Laws Committee consisting of Mr. Omwake and Mr. Purnell was appointed. The present name of our Association was selected after an interesting discussion of various names. After the meeting was adjourned, an exhibit of restored pots, potsherds, and other interesting materials taken from the Townsend Site was

shown.

At the next meeting, January 28, 1948, at the Sequoia, the Constitution and by-laws were submitted by the Committee and adopted. The dues were set at \$2.00 per year. Following this meeting, a bead, pendant, and bone tools excavated on the Townsend Site were shown.

On February 28, the Association held its third meeting at the Sequoia. At that time the Executive Committee was elected: Harold W. T. Purnell, Roger Vandegrift, and H. Geiger Omwake. The Secretary was requested to obtain copies of the "Soil Survey of Sussex County" and "An Economic Study of Land Utilization in Sussex County." A committee consisting of H. Purnell, G. Omwake, and K. Givan was appointed to contact Mr. Julian E. Townsend of Georgetown, Del., owner of the land on which the Townsend site is located, to see if he would omit the Site from tillage this year to permit the Association to carry on extensive excavation operations during the Spring, Summer, and Fall. Following the business meeting all present gathered around a long table and Mr. Harold Purnell displayed and passed around for inspection choice pieces from his fine collection of Sussex County Indian material. He also brought along some fine examples of Indian apparel with elaborate bead work. An informative as well as enjoyable evening was spent, thanks to Mr. Purnell.

On Sunday, March 14th, at 1 P.M., a sizeable group of members of the Association and visitors visited the Townsend Site, most of them taking part in the dig.

Any anniversary is exciting, and with the excitement there is a measure of gratification and a sense of achievement. That is the way the Sussex Society of Archeology and History feels as it celebrates thirty years of formal organization and publication.

For many years amateur archeologists in Sussex County worked to excavate, register and record results of various sites. Well known among these were Orville Peets, Henry Hutchinson, H. Geiger Omwake, C.L.W. Stein, Leon deValinger, the Sloans, the Purnells, the Vaughns, Kenneth Givan, Catherine Maull, Horace Okie, the Steens, the Steelmans and others - a list that reads like "Who's Who" in Sussex County.

These early Delaware men and women were assisted by experts from the Smithsonian and some of their findings were duly recorded and published by that institution.

However, the diversity of the materials, the huge amount of material being unearthed, the difficulty of differentiating between the many sites being "dug" at the same time, and the propensity of individual members to collect and add to their own collections unusual or more perfect specimens brought the realization that more was needed in the way of cooperation. And so, the Sussex Archeological Association was born.

In December of 1947, the following letter went out from H. Geiger Omwake:

... we have been engaged in excavations of a site near Lewes.

The quantity of material and its nature, differing in many respects from the Slaughter Creek finds ... together with indications that many more promising sites exist in this area have led some of us to think it might be advisable and beneficial if all of the people who are interested could get together.... It is desirable that the information we have obtained should be generally known ... to form some sort of Sussex County group to promote and coordinate the work.

In January, that meeting came about and the formation of the Sussex Archeological Association began a long history of exciting and important excavations and recordings.

The Archeolog was conceived as a newsletter to keep the Association informed of progress in the various areas, but that soon gave way to the present format. H. Geiger Omwake, the first editor, was a thorough workman and in one letter gave this report:

Three refuse pits now in progress will be completed, and the material included in the studies being made. Three or four more which are known to exist will be recorded on the master map as unexcavated at the time. It is felt that the omission of these three or four will not alter the conclusions to be drawn from the 87 pits excavated.

¹ News Letter of the Sussex Archeological Association, Vol. I, No. I, April 1948, pp. 1-2. Quoted verbatim from what was to become The Archeolog

And again in another letter:

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The shell report is complete, the stone implement study has been written. Mrs. Blaker (Smithsonian Institution) has completed her pottery study except for the final tabulations, the skeletal study in underway, the bone implement report is half finished, the general report on the location of the site, founding of the Association, plan of the cooperative dig has been finished, the account of special features is half complete. There remain to be done the pipe study, the pigment report, the historical background of the site and the description of the pits.

Such minute attention to the details with the treatment of each area of knowledge as separately important is what gives the early Archeologists authenticity and value.

There came a time in the history of the Association when it was difficult to differentiate where "archeology stops and history begins" as Mrs. Madeline Dunn, a past president of the organization, put it and the name was changed to its present "Sussex Society of Archeology and History" and the work was broadened to include many facets of life in Sussex County. Also, as time passed, it became increasingly evident that the scope of work that the Society was engaged in was not the only change. Delaware established a Division of Archeology with an Acting Director, taking much of the impetus from the individual discoveries. Henry Hutchinson, the long time Editor of the Archeolog, passed away, followed by two issues with your present President as Editor, and now several further issues with the present Editor, William Pedersen. In view of these changes, and the shifting values which they represent, what is the future of the Sussex Society?

Several avenues of interest and action have opened up for our organization. We are still deeply interested in the primary purpose initially responsible for the founding - this issue contains a very vital report of a "dig" from one of our charter members, Perry Flegel. More in this line can still be expected, although perhaps in lessening amounts.

Many Archeologists have dealt with old and valued structures in our county. Of these, there have been two containing information on "Old Christ Church". Still one of our best issues deals with the "Parson Thorne Mansion". "Bethel", that beautiful little town of many historic homes and buildings, is the topic of another. There are many colonial structures, historically important, which might serve as subjects for future articles which might well be the means of saving important lore of the county.

Genealogy is a subject which never loses its appeal for those interested. It has been touched on by only a very few articles in past issues and would definitely create a new readership for our publication.

For those who are interested in a more active future, there are two very interesting avenues of activity which are being considered at the present time. One of these, which is being

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sponsored by the State Division is an archeological survey of Sussex County, which if undertaken would mean many hours of open air research and measurement. This project could bring to light many unknown and unrecorded aspects of Sussex County history.

A second project waiting only for good weather and enough interested people to start it, is the overland canoe route and pathway from one side of the county to the other - this project is being headed up by Ken Douty, Howard Ennis and Robert Robinson, and could well be a worthwhile subject for a future Archeolog. Certainly such a pathway could be a featured tourist attraction when completed.

It is felt by your President that there are many areas of activity open to a county wide organization such as ours in the line of assisting individual town historical societies, of which there are eleven in our county and many many more in our three state area. Personnel to speak, to help organize projects, to publish a mini-Archeolog of local happenings and discoveries, to assist with museum needs, and to be an encouraging, helpful center for any countywide discussion need should give us more hours of activity than we can well take care of.

And so, in conclusion, it is our feeling that the Sussex Society of Archeology and History has a continuing and important service to perform in Sussex County and that The Archeolog, after thirty years, is a more vital instrument for the dissemination of knowledge than it has ever been.

Here's to our next thirty years!

Elizabeth S. Higgins
President 1975-1979

Postscript: My apologies to any early and very active members who may not have been included in my listing. I can already think of Dr. David Marine and Dr. Chesleigh Bonine and am sure there are others. Is my excuse of not being a member at that time acceptable? E.S.H.

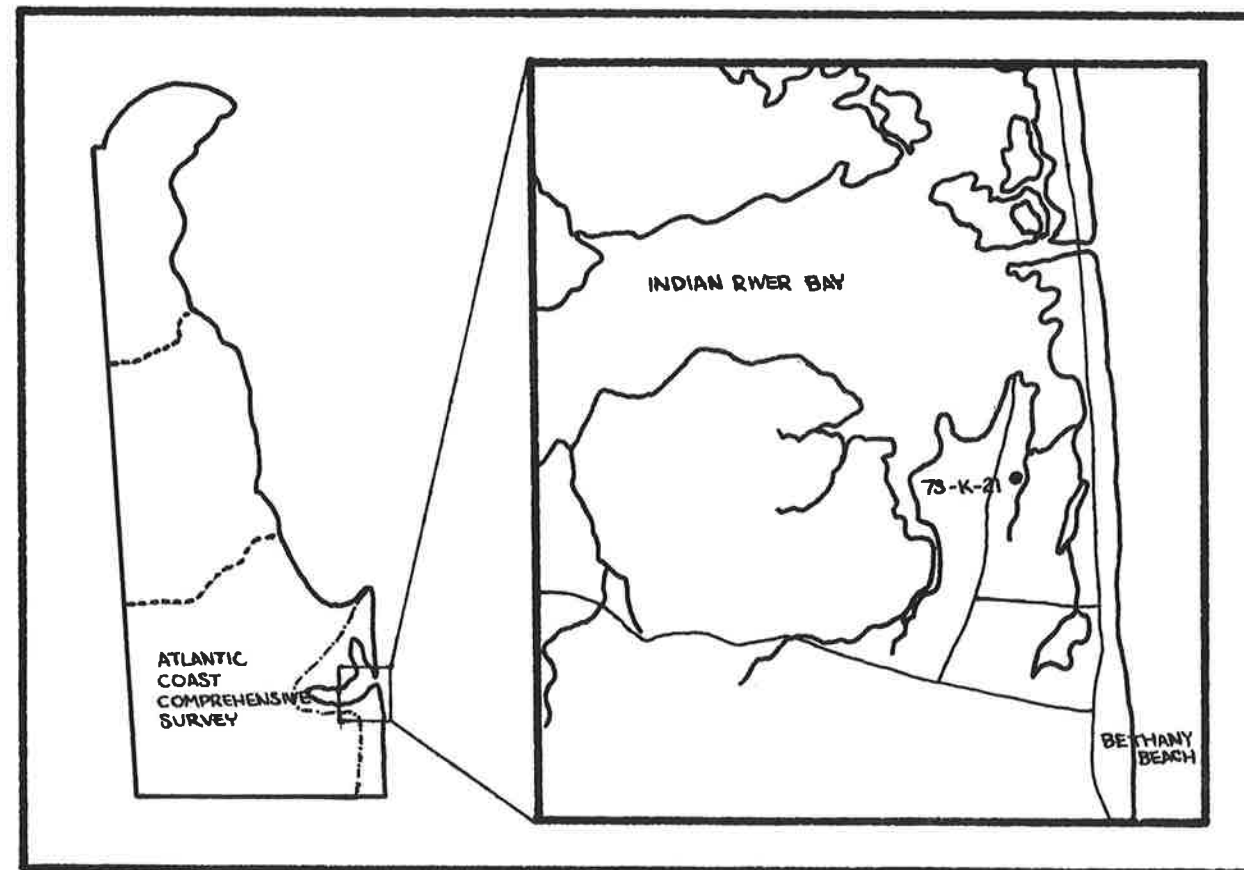
THE WILGUS SITE

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Richard E. Artusy, Jr.
Division of Historical and Cultural Affairs

The Wilgus Site (7S-K-21) was surveyed and tested as a result of the Atlantic Coast Comprehensive Survey (ACCS). The goal of the ACCS is to locate cultural resources in a zone surrounding the several bays along Delaware's Atlantic Coast where a considerable amount of private recreational development is occurring. This cultural resource information is then used locally as a planning tool.

I would like to express my thanks to Mr. Gerald Wilgus of Wilgus Associates, Inc. for allowing this excavation on his property. This excavation provided data not only for this paper, but also for the preparation of a nomination to the National Register of Historic Places. The Wilgus Site was placed on the National Register of Historic Places Inventory on March 30, 1978.



LOCATION AND GEOGRAPHY

The Wilgus Site is situated on Cedar Neck, along the west bank of Slough's Gut, a small tributary emptying into the south side of Indian River Bay. The site is only slightly elevated being less

than five feet above sea level. The associated soil type is Klej. Klej is an extremely porous, sandy soil with a relatively high water table, often within two feet of the surface. Agriculturally, it is a very poor soil, as evidenced by the spotty growth of wild grasses. The present day flora in the immediate area consists of oak, pine, red maple, cedar, sweet gum, holly, dogwood and poplar, similar to what was present throughout the Woodland period. The Woodland period fauna is similar to that of today, the only major additions being turkey, bear and bobcat (Thomas, et. al. 1975).

During the Pleistocene, probably the Mid-Wisconsinian, baymouth barrier ridges formed unconformably on lagoon marsh deposits in what is now the Bethany and Ocean View area. The most western of these barrier ridges gives form to Cedar Neck (Kraft 1971). Since the site is located on a relic barrier ridge composed almost totally of sand, it is understandable that the soils in this area are so poor agriculturally. The Wilgus Site is located on a small ridge, 60 meters in width, which adjoins and is perpendicular to the barrier ridge forming Cedar Neck. The axis of the small ridge is west to east with the eastern extreme of the ridge falling into the tidal marsh associated with Slough's Gut. The site, slightly over an acre in size, is located at the eastern end of the ridge. To the north of the site is a low swampy woods and to the south is a low swamp area which prior to agricultural clearing and cultivation contained a potable spring. The site extends 100 meters westward from the tidal marsh along the ridge.

FIELD METHODOLOGY

Even though the soils are agriculturally poor, the site has been plowed, mixing artifacts in the upper 20-25 centimeters of the soil horizon. To better understand the nature of the site and to locate its boundaries, a systematic controlled surface collection of the site was undertaken, using ten meter square units. While the controlled surface collection was taking place, a general scatter of shell was noted and mapped. Following the controlled surface collection, the entire site was probed at one meter intervals in an attempt to locate shell features, middens and sub-surface pits. Two middens and three shell pits were located and mapped. A single shell pit was tested along with 14m² of the 275m² of shell midden. It is possible that non-shell sub-surface features are also present, but due to time limitations testing was not conducted to locate such features.

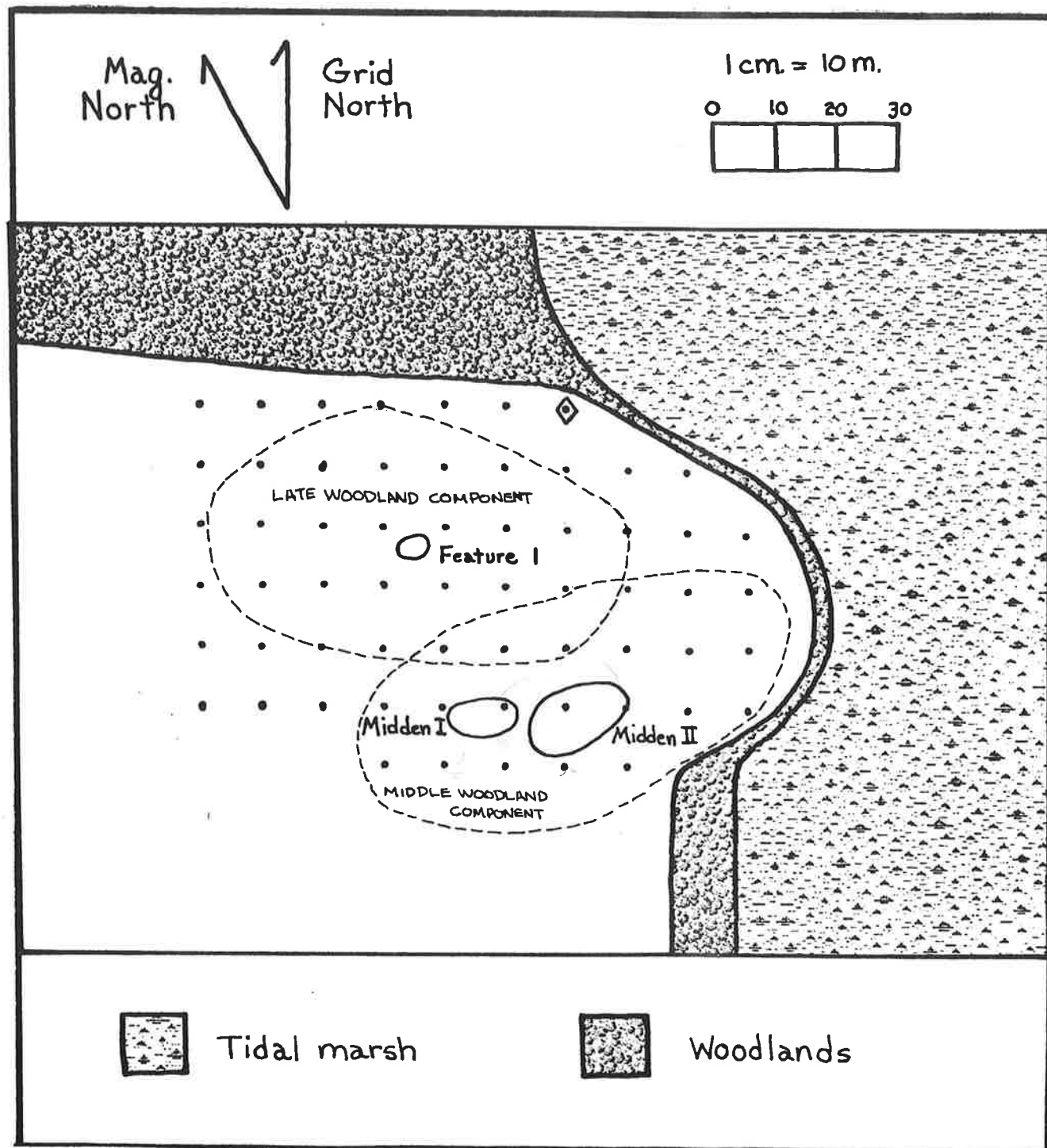
SURFACE COLLECTION

The general surface collection from the Wilgus Site is a mixed assemblage of artifacts from a variety of cultural manifestations. Four prehistoric ceramic wares are included: Townsend Ware (900 A.D.-1600 A.D.), Mockley Ware (100 A.D. - 400 A.D.), Coulbourn Ware (375 B.C.) and Wolfe Neck Ware (500 B.C.) (Artusy, 1976). The latter three wares often occur at the same site and appear to represent an in situ ceramic tradition in southern Delaware. Only subtle changes in tempering medium occur from one ware to the next. Wolfe Neck Ware is quartz tempered, Coulbourn is clay tempered, and shell (usually striated mussel, *Modiolus dimissus*) is the tempering agent in

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Mockley Ware (Griffith and Artusy 1977). The lithic artifacts are limited to Late Woodland triangular points, two scrapers, several utilized flakes and a general scatter of flakes and cores.

As a result of the controlled surface collection, the Late Woodland component and the Middle Woodland components can be separated spatially though some overlap does occur. The Late Woodland assemblage is concentrated along the center of the ridge in the western two-thirds of the site, while the Middle Woodland components are located in the southeastern third of the site from the ridge into the low swampy area of the recently filled spring.



LATE WOODLAND COMPONENT

Test excavation of a shell feature located by systematic probing further substantiated the areal separation of the Late Woodland and Middle Woodland components. The large sub-surface feature located in the center of the Late Woodland artifact surface scatter is a Late Woodland, Slaughter Creek Phase, Type 3 feature, possibly a pit house (Griffith and Artusy 1975), which has an intrusion dating to the first half of the eighteenth century. The pit is 360 cm x 240 cm at the surface and 155 cm in depth with nearly vertical walls. The lowest 30 cm were not excavated due to the high water table. The artifacts from the historic intrusion include a bowl fragment of Staffordshire combed slipware, a fragment of a redware storage jar stamped "R. Standley", and a pipe bowl resembling the Broseley style of 1720-1740.

The prehistoric ceramics from the feature are Rappahannock Fabric Impressed and Rappahannock Incised which date to the early Late Woodland, 900 A.D. to 1300 A.D. Lithics from the feature are few, consisting of only flakes and an earlier Middle Woodland point. A considerable amount of faunal material was recovered from the historic intrusion, but only non-diagnostic fragments of bone were recovered from the remainder of the feature. Since the shell located in this feature was deposited with the historic material, and is not part of the Late Woodland depositional sequence, it is possible that other non-shell, sub-surface features exist at the Wilgus Site.

MIDDLE WOODLAND COMPONENT

The testing of the midden area, with randomly selected one meter square units and 1x2 meter units, again reflects the pattern derived from the controlled surface collection that the Middle Woodland assemblage was located in the southeastern portion of the site. No Late Woodland artifacts were found within the undisturbed midden below the plow zone. The test excavation and additional probing subdivided the midden area into two distinct areas. Midden I, approximately 55m², is separated from midden II, approximately 216m², by a sterile one meter strip (see Sketch Map). An average profile in either midden would consist of shell and artifacts 10-15 cm in thickness, sandwiched between 25 cm of plowed top soil and the undisturbed subsoil. In some areas sterile slope wash (5-10 cm) separates the midden from the plow zone.

In Midden I, two 1m² units were excavated or 4% of the midden. Nine sherds whose lengths are greater than 2 cm on a side were recovered. A density ratio of sherds to surface area of midden is 4.5 sherds per square meter. The sherds are Wolfe Neck Ware though several sherds contain both crushed quartz and sand as tempering agents. A shell sample was sent to the University of Georgia radio-carbon labs for testing. The resulting date for midden II is 290 B.C. (UGa - 1763, 2240 ± 60 B.P.). Other dates in Delaware for Wolfe Neck Ware are 500 B.C. and 505 B.C.

Twelve square meters were excavated in midden II, 5% of the midden. Two-hundred and five sherds, greater than 2 cm on a side, were recovered from the midden II excavation. The sherd density ratio is 17.0. The majority of the sherds in midden II are Mockley Ware, a few sherds are Coulbourn Ware and the remainder of the sherds

exhibit a mixing of shell and clay tempers. A sample from this midden was also sent to the University of Georgia radiocarbon labs for testing. The radiocarbon date for midden II is 240 A.D. (UGa - 1762, 1710 \pm 70 B.P.). Other dates in Delaware for Mockley Ware are 200 A.D., 300 A.D. and 330 A.D.

CONCLUSION

Assemblages at the Wilgus Site, associated with the Late Woodland and Middle Woodland periods, are relatively discrete with little overlap. Each loci contains sub-surface features (below plow zone) and surface scatters of artifacts which may provide information on intra-site variability. The Late Woodland feature suggests a somewhat permanent settlement but provides little information on subsistence activities. The Middle Woodland middens provide a relatively large body of datable ceramic information.

Recent research in Delaware has focused on constructing a long needed chronological sequence of local ceramic wares (Artusy 1976). The Late Woodland and late Middle Woodland wares of the ceramic sequence are fairly well understood but the Early Woodland wares need additional datable information. The early Middle Woodland wares are of special interest since it appears that a local in situ ceramic tradition is occurring (Griffith and Artusy 1977).

The Middle Woodland (700 B.C. to 1000 A.D.) is a period of ceramic stabilization and regionalization. Wolfe Neck Ware is similar both physically and temporally to a large number of types found throughout the Middle Atlantic in both piedmont and coastal ecosystems. In most of the Middle Atlantic these crushed stone tempered, net or cord types occur from 700 B.C. to possibly 100 A.D. However, in Delaware, Coulbourn Ware interrupts this continuum at about 400 B.C. and probably lasts until 100 B.C. A similar phenomenon occurs on the Potomac River with Popes Creek, a sand tempered rather than crushed stone ware. Both Popes Creek and Coulbourn develop in localized areas after a crushed quartz or grit tempered tradition. There are also similarities in certain descriptive attributes such as a scraped interior surface treatment. Based on an evaluation of radiocarbon dates and ware distributions, it appears that Coulbourn and Popes Creek are at least partially contemporaneous and represent islands of ceramic development in a broader background of Wolfe Neck and Wolfe Neck-like wares in the Mid-Atlantic. In other words, by approximately 400 B.C. three different, though related wares are co-occurring on the Mid-Atlantic Coastal Plain; Popes Creek on the Potomac and immediately adjacent areas, Coulbourn on the Delaware Bay and Atlantic Coast drainages in southern Delaware and the Wolfe Neck types in the intervening areas. This is admittedly a preliminary picture based on incomplete space/time distribution studies, but one that the authors feel merits further consideration. (Griffith and Artusy 1977)

The radiocarbon date of 290 B.C. for Wolfe Neck Ware does not fit the

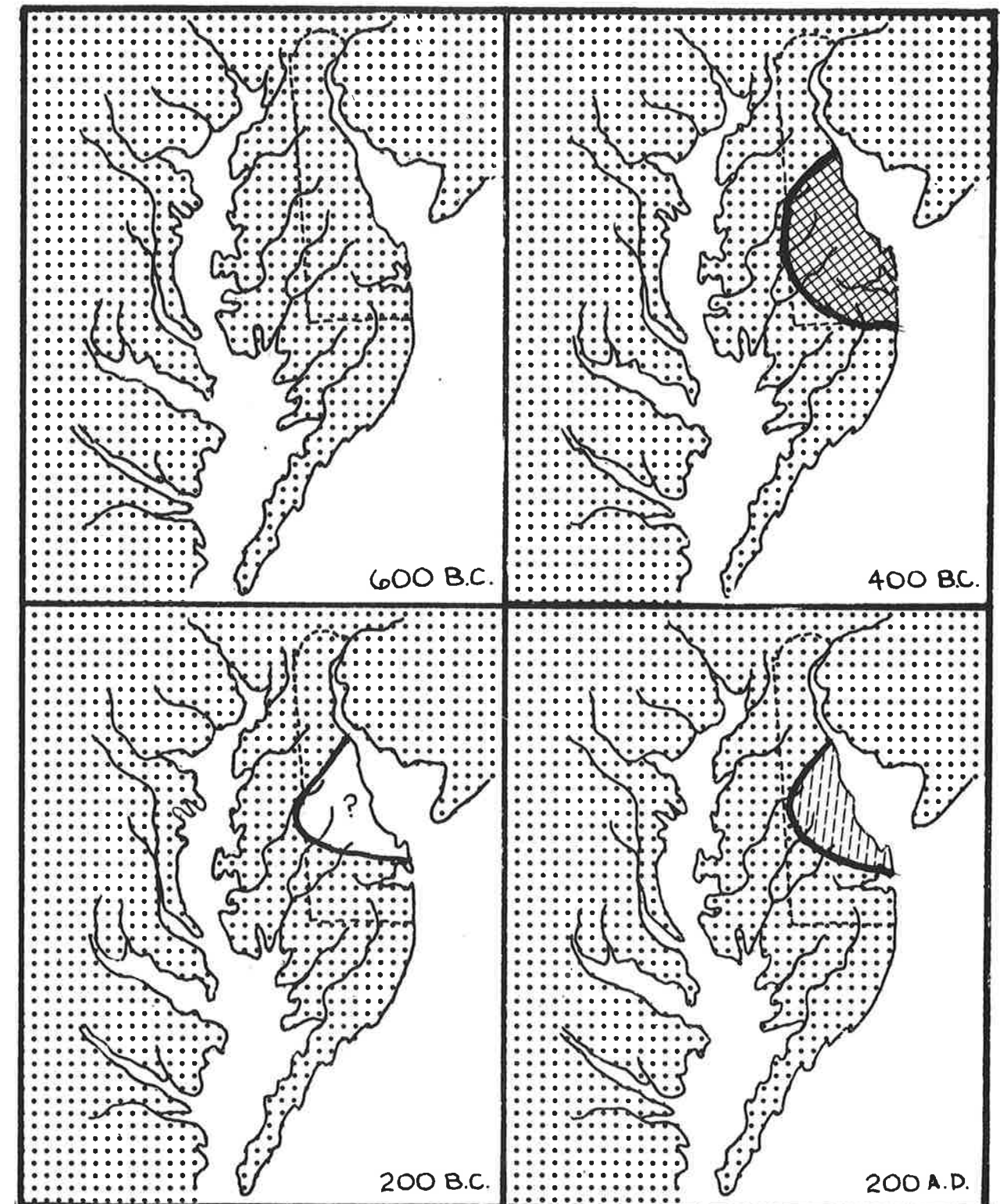





FIGURE 3

-  WOLFE NECK-LIKE WARES
-  COULBOURN WARE
-  MOCKLEY WARE

above construct. However, as stated above this is "a preliminary picture" which needs refinement. If this date of 290 B.C. can be assumed as correct, then a reanalysis of the "picture" is necessary.

On the western shore of Maryland, Wolfe Neck-like wares are dated from 700 B.C. to 80 A.D. (Wright 1973). While on the eastern shore of Maryland Wolfe Neck Ware is dated at the Nassawango Site from 785 B.C. to 240 B.C. (Bastian 1975). Coulbourn Ware is not found in either of these areas. Therefore, it seems likely that Wolfe Neck-like Wares persisted in these areas until Mockley Ware was first made, 400 A.D.

However, in the southern two-thirds of Delaware Coulbourn Ware, dated at 375 B.C., occurs at nearly an equal number of sites as does Wolfe Neck Ware, dated at 500 B.C., 505 B.C., and 290 B.C. There seems to be only two explanations which allow for a date of 290 B.C. for Wolfe Neck Ware. The first is that Coulbourn Ware was a short lived ceramic ware. When it was no longer manufactured the void was filled by Wolfe Neck Ware which was still being produced in the surrounding areas. The second explanation is that the area over which Coulbourn Ware was distributed began to shrink in size around 300 B.C. It is possible that a variant ceramic technology (Coulbourn Ware) could have persisted as an isolate. This is not to say that the culture persisted as an isolate, but that a ceramic trait, tempering with clay, persisted until shell tempering was excepted by the cultures residing on the Coastal plains of the Middle Atlantic Region. It is interesting to note that the earliest dates for Mockley Ware (200 A.D.), a shell tempered ware, occur within the same area where Coulbourn Ware was made. (Figure 3)

In summary, the Wilgus Site contains an important body of information and deserves the protection provided by its inclusion on the inventory of the National Register of Historic Places.

BIBLIOGRAPHY

- Artusy, R.E., Jr.
1976 An Overview of the Proposed Ceramic Sequence in Southern Delaware. Maryland Archeology, Volume 12, No. 2 The Archeological Society of Maryland, Inc.
- Bastian, Tyler
1975 New Radio Carbon Dates for a Maryland Adena Site. Newsletter, New Series, Volume 1, No. 2 Archeological Society of Maryland, Inc.
- Griffith, D.R. and R.E. Artusy, Jr.
1977 Middle Woodland Ceramics from Wolfe Neck, Sussex County, Delaware. The Archeologist, Vol. XXVIII, No. 1. Sussex Society of Archeology and History.
- Griffith, D.R. and R.E. Artusy, Jr.
1975 A Brief Report on Semi-Subterranean Dwellings of Delaware. The Archeologist, Vol. XXVII, No. 1. Sussex Society for Archeology and History.
- Kraft, John C.
1971 A Guide to the Geology of Delaware's Coastal Environments. College of Marine Studies at the University of Delaware, Newark, Delaware.
- Wright, Henry T.
1973 An Archeological Sequence in the Middle Chesapeake Region, Maryland. Archeological Studies No. 1. Maryland Geological Survey.

Sussex Society of Archeology and History

Guide For Contributors to The Archeolog

In submitting papers or articles for The Archeolog, it is requested they be prepared using the following guidelines.

1. Articles are solicited from members and the general public on an equal basis.
2. We welcome material from other similar archeological and historical organizations and related governmental agencies as long as the content deals with our fields of interest.
3. Contributors are requested to adhere to the following format:
 - (1) Type material with clear black ink on 8½ X 11 inch white paper exactly as it is to appear in final form.
 - (2) Use one side of paper only and single space.
 - (3) Do not number pages in type but number them lightly with soft pencil. Pages will be renumbered when published.
 - (4) Allow one inch (1) margins on all sides of the paper.
 - (5) Mount drawings in black ink on same 8½ X 11 inch white paper with figure numbers and titles in black ink also.
 - (6) Photographs must be black and white, gloss finish and with identifying numbers and titles corresponding to those used in the text.
 - (7) Contributors should footnote their manuscript listing source material at the end of the manuscript. Follow any good writing guide or English book.
4. Each contributor is given four (4) free copies of the issue in which his article appears in addition to his membership copy. If he wishes additional copies, he may obtain them at the actual cost of the issue provided he orders them before the printing order is placed. Delivery costs will be added to this cost.
5. The retail price is printed on each issue in advance and is set to include mailing and handling costs and to provide a few extra copies for members and other interested persons who may wish to purchase them at the published cost.

For additional information please get in touch with Mr. William L. Pedersen, RD 3, Box 190, Laurel, Delaware 19956 or any officer of the Society listed in The Archeolog.

THE MARSHYHOPE CREEK

ITS INDIAN PLACES, POTTERY, POINTS AND PIPES

PERRY S. FLEGEL

For years the writer as well as countless individuals have collected thousands of stone artifacts along both shores of the Marshyhope Creek throughout its entire length. To locate and classify all of the material found would be an arduous task and an expensive one beyond the financial possibilities of this magazine.

No collection of pottery or pottery shards, from this area, is known other than that of the writer. His collection in excess of 10,000 pieces constitute the basis for this study. The late Henry Hutchinson's artifact collection contained a partially restored vessel and some shards from the area. Except for mention of a few restored vessels and some odd pottery shards, in past issues of this magazine, nothing else has been written about the pottery.

The heavier stone artifacts of the area are not included in this report. Only a sample of the projectile points, a few odd tools, an Indian clay pipe and a few pipe fragments are included.

The sites mentioned in this report are not pin-pointed. This information is available either from the Maryland or Delaware state Departments of Archaeology, and may be released to individuals whose interest in the area, from an archaeological standpoint would warrant it. This is being done to discourage unwanted surface hunting and vandalism.

Many of the sites are "off limits" to the general public. Red Bank and the Saw Mill site are now owned by the Delmarva Boy Scouts and trespassing is not allowed. Other sites are under grass in housing developments, while others are more or less protected by their owners.

The writer wishes to express his appreciation and thanks for the work contributed towards the presentation of this report, by certain students from the Cambridge-South Dorchester High School; especially Holly Hughes, Sandy Travers, and John Jull. Also to their advisor, Morley Jull, who headed their photography classes. Without their kindness and zeal working many hours outside their regular school classes, developing and taking pictures, and the accompanying plates, this report would not have been so easily completed.

Additional credit is also due to Mr. Dan Griffith, Cultural Preservation Specialist, for the State of Delaware, for his timely assistance in the identification of much of the pottery and projectile points.

Introduction

Because of the lack of interest in Indian Pottery, and its shards by local people, little or no work has been done in this part of the Delmarva Peninsula with this material. Several reasons may account for this: (1) Local pottery is usually found along the shores of creeks and streams which severely limits the number of people to whom it may be exposed; (2) pottery shards do not attract the attention of surface hunters of artifacts, or other people, in the same manner as do projectile points and larger stone artifacts; (3) most people finding pottery shards are unaware of what they have picked up; (4) until recently there has been no archaeological museum or private collection available locally in the area where such material might be on display to the public.

The contents of this report was made from a collection of points, shards and other material that has been gathered over a period of more than 30 years. Much of what was found in the early days (before the Townsend and other series were named) has now been classified which has resulted in a much more fuller meaning to the story of the people who lived here before the historical period.

Some of the material, the Tub Island Pot and other pieces, cannot be classified in any of the categories or series that have been named to date. They have been mentioned as being "similar to" or "like" some that have already been classified. These could be distinct types and could be given a proper name at a later date.

All of the material taken from the shore-line of this Creek, by this writer, now rests in the Antiquity Room of the Dorchester Heritage Museum at Horn Point, below Cambridge, Maryland. Also included are countless pieces of unmentioned pottery, projectile points, and larger artifacts. This material is available for study to qualified persons interested in continuing with the work.

Where hardness of a shard is mentioned, Moh's scale was used in determining this characteristic.

THE MARSHYHOPE CREEK AREA

The area covered by this report does not include all of the land that was inhabited by pre-colonial people. It embraces only that section which extends from a point about $4\frac{1}{2}$ miles below the town of Federalsburg to a place known as Walnut Landing $16\frac{1}{2}$ miles from the bridge at Federalsburg. The confluence of the Creek and the Nanticoke river is an additional $\frac{3}{4}$ mile below the "Landing". (See Plates I and II.)

There are a number of sites above the town of Federalsburg but as of this writing none have been other than surface hunted for projectile points and other larger stone artifacts.

The Creek lies wholly within a Chesapeake drainage area within the western part of the mid-Delmarva Peninsula. Its beginning lies in the southwestern part of Kent county, Delaware and about 22 miles above Federalsburg, Maryland. Its entire length is 37 to 38 miles.

In the past the Creek was navigable up to Federalsburg. In fact, in the early days, "bog iron" was mined near the town, and shipped from there down the Marshyhope Creek and on to Baltimore. Bridges at Harrison Ferry and Brookview now prevent the passage of anything more than small pleasure boats.

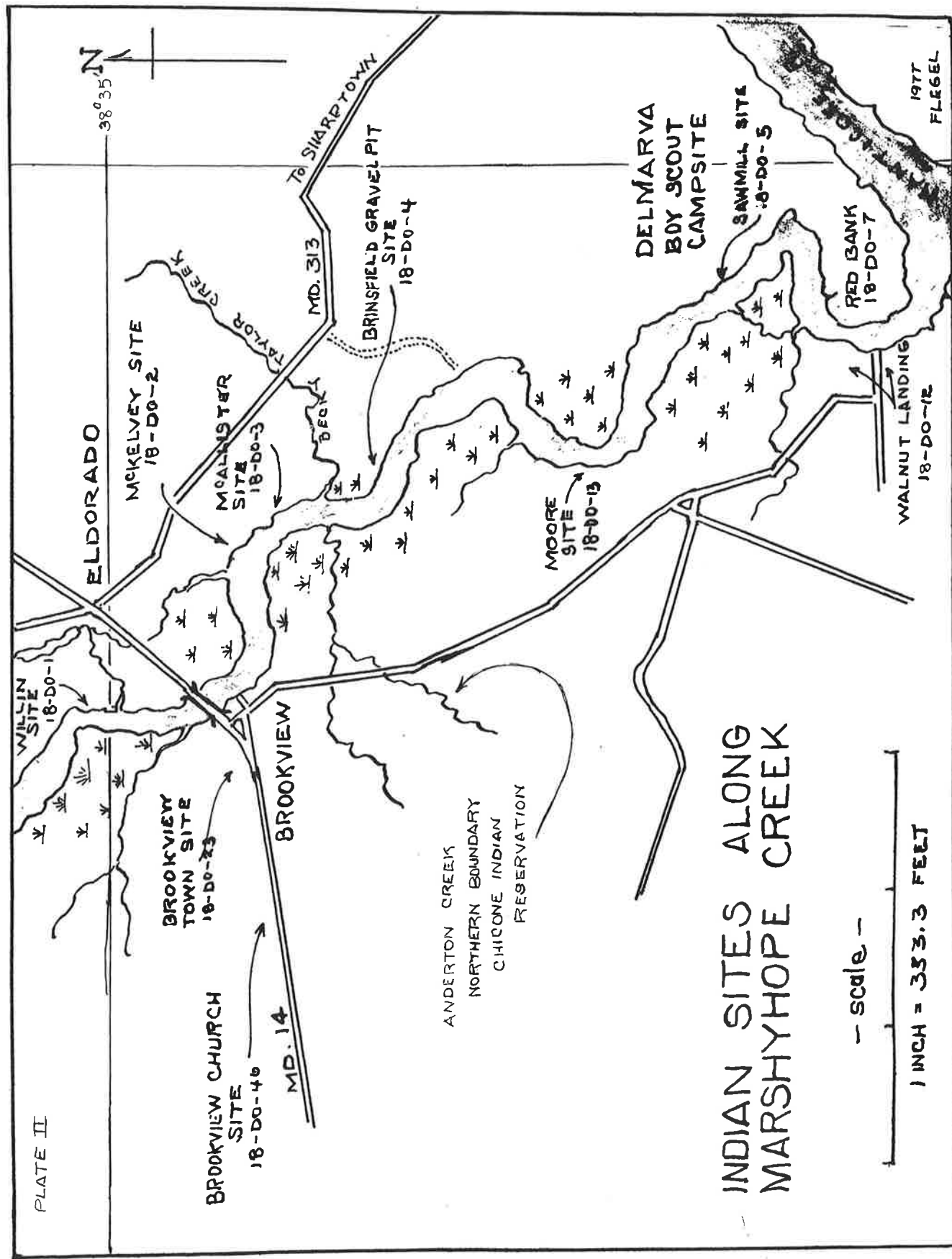
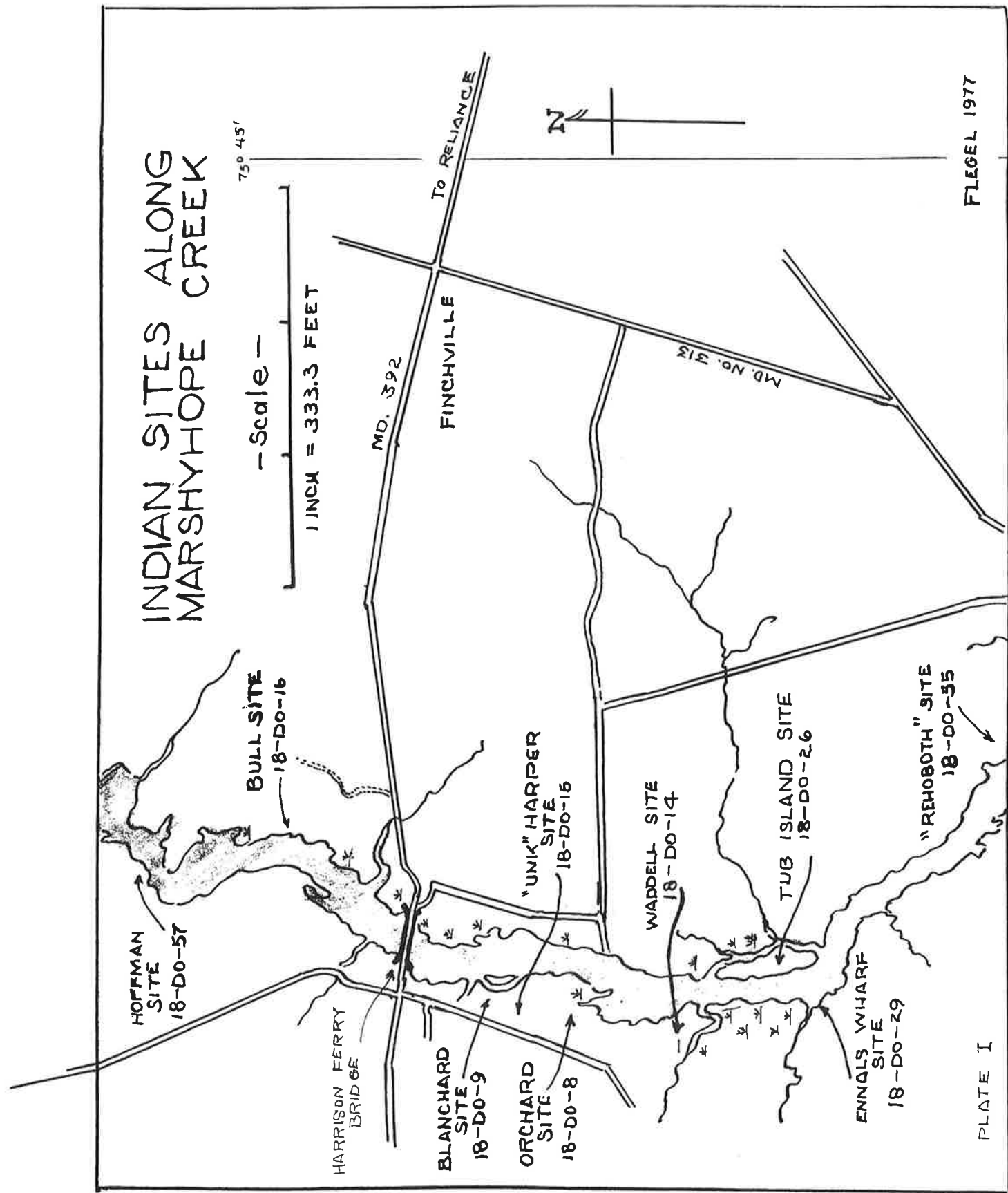
In the early days the waterway was known as the "Northwest Fork" of the Nanticoke river. The name had reference to a branch of the Nanticoke which forked off from it in a northwesternly direction. At what time the name was changed to Marshyhope, and for what reason is not known.

Maryland Archives, XX, 360-361 refer to a fort on the Marshyhope Creek. This reference indicates that a Nanticoke village there was called a "fort", presumably because it was palisaded. This area has never been identified.

There is very little mention or reference to the Indians along the Marshyhope. History seems to have skipped over the area. No Indian landmarks along the Creek have been noted by historians.

The Chicone Creek Indian Reservation (set aside for the Nanticokes in April 12, 1703), and containing $5166\frac{1}{4}$ acres reaches in some places to the shores of the Marshyhope. (Plate II.) It is the most westernly mention of the Nanticokes in this area. The Chicone Creek is located about $4\frac{1}{2}$ miles down the Nanticoke river from the mouth of the Marshyhope Creek.

Like all of the other streams in the area the Marshyhope Creek contains countless marshy areas along its entire length, and probably should not be called a "marshy" creek anymore than the other tributaries that flow into the Chesapeake Bay.



Most of the eastern shore-line of the Creek is free of marsh there being only a few miles of it. This situation exists all the way to Federalsburg with marsh diminishing sharply as one approaches this town.

The Creek runs southwesterly in its upper regions to a place called Ennal's Wharf where it turns southeasterly until it empties into the Nanticoke. In the lower section is a major double bend in the waterway. This reversal upon itself is in the area that is known as Red Bank. (Plate II.)

The Creek is what geologists call a drowned river and this condition extended, at one time, as far as Smithville, in Caroline county, Maryland. The dam at Federalsburg now stops the tidal flow.

About 14 of the more than 50 runs, creeks, and branches that empty into the Marshyhope have been named in local and governmental soil and other maps. The more prominent branches that flow into the Creek average about 4 miles in length and the watershed has been estimated at somewhat over 200 square miles.

At least 16 sites have been located in the area from Federalsburg to the mouth of the Creek. Most of them indicate temporary living sites, or camping areas. It appears that not more than 4 or 5 sites held permanent settlements. The Willin site was the largest and most prominent and probably established for the longest period. This site has been established as an historical site by the state of Maryland.

Red Bank and the McAllister sites were probably the earliest ones inhabited with Red Bank probably occupied first because of it being closest to the confluence of the Marshyhope and the Nanticoke rivers.

All of the sites contained various types of pottery shards, including those tempered with grit, shell and sand. All sites had chip of various stones from projectile point making which may have indicated at least a temporary camping period. At least one or more of the heavier artifacts have been found at each site and last but not least, to indicate substantial camping periods are oyster shell deposits and or indications of refuse pits.

The soils along the west bank of the Creek throughout its entire length, in Dorchester county, are made up of Sassafras Sand. The east bank from Eldorado to a point almost opposite Wright's Wharf Branch has a concentration of Sassafras loamy sand. For another mile above this is Norfolk sand and then more of the Sassafras sand. Tidal marsh invades most of the entire Dorchester county shoreline. The new terminology which has been devised for soil classification will be used in the text.

THE SITES

WALNUT LANDING: 18-DO-12

This is the first high ground on the west side of the Marshyhope Creek from its confluence with the Nanticoke river.

The landing was an important steamship stop in the early days. Old maps show a wharf jutting out into the stream at this point.¹ It is thought that the name of the place was so called due to the number of black walnut trees that once stood there. Early records and maps indicate that a J. B. Taylor had a store at the landing and his home also stood nearby.²

The soil at the landing has been classified as (GaB) Galestown loamy sand with 2 to 5 per cent slope. A narrow strip of (LaB) Lakeland loamy sand with a clayed sub-stratum lies just inland. Surrounding all of this is another area of (GaB).

The area has been surface hunted for many years and numerous fine pieces have been found. Pottery shards are scattered over the area and are mostly Townsend plain and cord wrapped stick impressed. Oyster shell is also prominent. Some places have concentrations of shell indicative of refuse pits. There have been no pits dug in the area.

Pieces of petrified wood have been found at the landing at low tide. Such pieces of wood are occasionally found all along the Creek as far up stream as the Bull site.

RED BANK: 18-DO-7

This site is on the east side of the Creek. It is on the lower part of the reverse "S" and lies just below the last sharp bend of the waterway. As one faces the Creek at this point it flows to the west.

No map is available that shows Red Bank or gives it a name. All maps refer to this place as tidal marsh or swamp land. This is not true as there are many acres of high land there, and in some places the shore line banks rise more than twenty feet above the mean tide level.

Erosion of the bank at the lower part of the reverse "S" curve in the Creek exposes a reddish soil that can be seen from a great,

¹The 1877 Atlases & Other Early Maps of the Eastern Shore of Maryland, Bicentennial Edition, Published by the Wicomico Bicentennial Commission, Poplar Hill Mansion, 117 Elizabeth Street, Salisbury, Maryland. p. 66, (Fork District No. 1.)

²Ibid.

distance, hence its name. A small rill cuts through the bank at its down-stream end dividing it into two sections. This smaller part of the Bank has been known locally as "Turkey Ridge". On this ridge was found a red clay, incised, complete, square-stemmed Indian pipe. (Plate XIII,4.)

Two small pits were excavated here in the early 50's. Shell, shards, flakes, projectile points, etc. were found but not too plentiful. Surface was fair but difficult due to a deep carpet of pine needles covering much of the area. Pottery representing all local cultures from 900 B. C. were found. Some of the early types are shown in Plate V. The greatest number of pottery shards were from early types such as Marcey Creek, Dame's Quarter, and Seldon Island. One might conclude that this was the first place along the Creek that was inhabited.

From year to year, as the bank eroded, more and more shards and artifacts would be exposed. It is not known how much material was lost in this way or how extensive the site was at the time of its occupancy.

A small area of GaC (Galestown sandy loam with a 10 to 15 per cent slope) is listed in a USDA soil map of the area as being where the creek turns east. It is incorrectly placed and should be farther down stream, and should extend past the first rill below it.³

Galestown sand has been classified as a "Distinctly brown" very sandy subsoil. Anyone who has ever seen Red Bank would never call this soil anything but a rich red sandy colored soil.

As previously mentioned the lands are included in the Delmarva Boy Scout camp site. The site was purchased from the Lamar Corporation of Salisbury, Maryland, who cut timber from it for years.

THE SAW MILL SITE: 18-DO-5

This site is also on the east bank of the Creek at what might be called the first bend of the reverse "S". It is in full view of Red Bank.

The land is very low and often flooded with high tides. Winter rains leave the land wet and soggy. An area of this type is often referred to as "cripples". Several attempts have been made to excavate one known Indian midden here but even our dry spring seasons have a water table which is only 12 inches from the surface.

Since the eastern seaboard is slowly sinking, this feature plus the rise of the Creek's water level due to sediment filling and choking its passageway, may have something to do with the flooding of the

³USDA Soil Survey Dorchester County, Maryland, August 1963 Sheet 24.

site. The pit must have been well above high tide level at one time since the shell deposit extends almost three feet below the surface of the ground.

The pit was discovered by the presence of numerous oyster shells scattered over the surface of the ground. A few shards have been taken from the area which seem to indicate an Indian occupation around the Mid to Late Woodland era.

At one time some 50 years ago there was a saw mill at this site and nearby the pit. Large piles of sawdust were prominent and the remains of a log receiving rack could be seen.

This site is well within the boundary of the Nanticoke Scout Reservation and as has been mentioned is "off limits" to most people.

THE MOORE SITE: 18-DO-13

The Moore site is the next site up the Creek and is located on the west bank and on high land about 15 to 18 feet above the water.

Recent maps show the area as swamp land. Some swampy areas are nearby but in most places the high land reaches right to the edge of the Creek.⁴

Early maps refer to this soil as Sassafras sandy loam and tend to describe it in a manner that clearly represents it.⁵ Later maps refer to it as that of the Klej Series. (this soil is described as loamy sand).

Some interesting material has been recovered from the 7 pits that were excavated. An almost complete oval shaped vessel was restored from pit #2.⁶ (See Plate III,b.) Most of the material here represents a mid to late Woodland culture.

A number of additional pits are here that could be excavated. When the first pits were opened 25 years ago, a small planting Christmas trees was on the southern end of the site, and several pits were located there. These have remained untouched and could now be worked out since the trees have been sold.

It may be of interest to note that about 2.3 miles above the Moore site and on the same side of the Marshyhope is Anderton's Creek (Now known as Spear's Creek). This creek marks the

⁴USDA Bureau of Soils, Base Map from U. S. Geological Survey Sheets, Maryland Dorchester County Sheet, 1922.

⁵USDA Soil Survey Dorchester County, Maryland, August 1963 Sheet 17.

⁶The Archaeologist, Vol. V., Nos. 1. and 2.

northern boundary of the Chicone Indian Reservation that was set aside, by the state of Maryland, for the Nanticoke Indians in 1903. The land was set forth by William Barrow's surveyor of Dorchester County on April of that year. It was at a time when the Marshyhope Creek was known as the "North West Prong" of the Nanticoke river.⁷

THE BRINSFIELD SITE: 18-DO-4

This is also known as the Brinsfield Gravel Pit site. It is on the east bank of the Creek somewhat below the Becky Taylor Branch. This branch is well known locally because of the herring runs that take place in it each spring.

In the early 30's Mr. Floyd Brinsfield, the owner of the property, sold gravel from this place to the Maryland State Highway Administration for road fill. During the removal of the gravel workers came upon an Indian ossuary. In those days little attention was given to archaeological finds locally, workmen did not know or realize what they had uncovered, so it went practically unnoticed. The find was never officially reported and the only record of its existence is what has been handed down orally.

The site proper is adjacent to the gravel pit on its north side (up stream). This area has a dark sandy loam, is now several feet above the high tide level, and has been a prolific producer of scrappers, large and flat blades, broad spear points and very fine projectile points. Most of them were made from a slate-like material. There were other chips as well as points of argillite, and muscovite (rhyolite). It appears that the area harbored an active workshop of sorts. Pottery shards were also present, mostly shell tempered Townsend ware.

At the northern end, away from the Creek, stands a small cemetery, which today is well kept and grassed over. It includes about an acre within which are 28 to 30 graves with head and foot stones. One headstone has the word "TONWAS", with the dates 1802 - 1822. For years this grave has been designated as that of a faithful Indian worker of the property owner at that time. The land has been known as the "Briley Tract".

Some bricks form a foundation, or more probably a chimney are scattered near the cemetery. They may have been from a house or church adjoining the graveyard.

No pits have been located here although much oyster shell is to be found over the area. Gravel is no longer taken from here. A locked gate and heavy chain has been placed across the entrance to the site and it is posted with "No Trespassing" signs.

The area has been under cultivation for many years and still is to this day.

⁷C. A. Weslager, The Nanticoke Indians (Harrisburg, Pennsylvania, The Historical Museum Commission), p. vii.

THE McALLISTER SITE: 18-DO-3

This site occupies the next arable land up the Creek from the Brinsfield site.

Today the land rises only a few feet above the Creek's high tide level but slopes perceptively upward as one travels inland. At the shore line the soil is classified as Galestown sand and is replaced by a sand loam as one travels away from the water.

Pilings from a very old wharf were visible when the site was first discovered. This was its southern end nearby where a cache of 24 large, flat, muscovite granite (rhyolite) blades flecked with rhodonite were found buried.⁸

A small un-named stream or rill borders the site on its northern edge and for many years a badly rotted remains of an Indian log canoe was to be seen. Much of it was submerged in mud and silt that filled the mouth of the rill.

No one recalls the house, on a knoll, at the northern end of the site that was destroyed by fire. Broken pieces of brick, from its chimney, some glazed brick, melted pieces of glass, glazed ware, square-cut nails and colonial pipes were scattered over a large area due to plowing for cultivating.

No pits have been found but concentrations of oyster shell are to be seen in a number of places. Many projectile points, axes, celts, jasper, quartzite and other stone chips, plus pottery shards were plentiful. A small paint cup (?) of Indian origin was found here and restored. (Plate III, c.)

THE McKELVEY SITE: 18-DO-2

This site is on the same side of the Creek as the McAllister site and at the mouth of what is known as Bachelor Creek. It is to be found on the northern bank. There is a bend in the waterway at this point which flows almost directly from the west. Current maps show this area as swamp land.⁹ This is not true and the original classification namely Sassafras sand is more to being a correct description. The land is well drained at the site, with an excellent view both up and down the Creek.¹⁰

No archeological work has been done here but surface finds have

⁸The Archeolog, Vol. VI, No. 2, Sept. 1954 (Plate II)

⁹USDA Soil Survey Dor. Co., Maryland, August 1963. Sheet 16.

¹⁰USDA Soil Survey of Dorchester County, Maryland. Accompanying Map. Government Printing Office, Washington, D. C. 1926.

been plentiful. Shell concentrations were prominent and probing has revealed the location of several middens. Celts, axes, scrapers, flakes and pottery shards have been found. It appears that this site was something more than just a temporary camping place.

THE BROOKVIEW BRIDGE SITE: 18-DO-23

It is located on the west side of the Marshyhope Creek and on the north side of Route 14 where this roadway meets the Creek.

No work has ever been done here but a lot of the surface has been surface hunted in past years much to the objection of a previous owner.

The soil here is classified as Galestown loamy sand of varying slopes ranging from 2 to 15 per cent. For many years the land has been planted to small truck crops and the owner refused to permit any excavating.

Oyster shell is abundant and specific concentrations of them indicate the presence of shell pits. Some shell was placed on the land by early colonial and later farmers to raise the lime content and hydrogen ion concentration.

Heavy working of the soil has ground the pottery shards into very small pieces but the material that has been found indicates a sustained pre-historic inhabitation.

THE WILLIN SITE: 18-DO-1

The largest and most prolific site on the Creek. It has now been set aside by the state of Maryland as one of its historical landmarks. Archaeological investigations here have been very extensive and surface hunting was a popular pastime there for many years.

It is located on the east side of the Creek and at the shore line is about five feet above the high tide level. The land slopes strongly upward from the bank of the Creek and at the same time slopes to the south.

The soil in the area is a conglomeration of three different series and four types. These range from a loamy sand, sandy loams, and pure sand.¹¹

Just how far this site extends northward has not been determined. Beyond the concentration of pits, and where the surface material drops off sharply, the land rises steeply into a very sandy area which reaches an elevation of 25 feet.

¹¹ USDA Soil Survey Dorchester County Maryland, August, 1963 Sheet 16.

Many very nice artifacts have been found here. Numerous articles in magazines, newspapers and the Archeolog have been published about the area and finds from there. The site has produced the largest shards of any of the sites along the Creek and restoration of a number of pottery vessels from available shards is possible. The largest restored vessel from the Marshyhope came from here. (Plate III, a.)

A tentative closing report on the Willin site was made in 1967. We are most grateful for the extensive amount of work needed to present this report, to the late H. H. Hutchinson, et. al.¹² His work has added greatly to our knowledge of the Indian of the area. Most of the material from here has been classified as Townsend Series pottery, and middle to late Woodland stone tools, and projectile points.

REHOBOTH: 18-DO-55

At the intersection of Maryland Route 14 and Maryland Route 313, in Eldorado, Maryland, there is a State Highway Roads Commission Historical Marker. It reads as follows:

" REHOBOTH "

Patented by Captain John Lee of Virginia, 1675 for 2350 acres. It descended through the Lee family until 1787. Thomas Sim Lee 1745 - 1819 (second governor of Maryland) was descended from the Lees of Rehoboth.

Down the road in the direction which the sign points, is the entrance to "Rehoboth". The original home still stands and is in excellent repair.

As one leaves the Willin site northward the sandy land rises steeply and traces of artifacts disappear. A hundred yards or so onward, in the high land, traces of Indian occupation again appear. Hundreds of points, many celts and axes, chips, pottery, and other artifacts have been collected. The site has also produced gorgets, clay pipe fragments, and a 3-barbed 4 inch long bone harpoon.

Since this site was never mentioned in connection with the Willin report, and due to its apparent separation from the Willin site, it is now considered a separate entity in spite of its closeness.

No excavations have been made at the site. It has been known for a long time and shell is plentiful on the surface of the arable land.

¹² "Final Report on the Willin Site.", The Archeolog, Vol XIX, No. 2. 1967.

THE ENNALL'S WHARF SITE: 18-DO-29

This site also goes by the name "Coventry Site" being named after the present owner of the land. It is on the west side of the Marshyhope and at the mouth of a branch by the same name. It was an important steamer wharf in by-gone days. The wharf has disappeared and has been replaced by a small dock for pleasure craft.

A Galestown loamy sand surrounds the area and supports a 10 to 15 per cent slope.

No archaeological work has been done in the area. Shell is prominent and projectile points, stone chips from point making are numerous and the pottery is of an early type.

Coulbourne net impressed rim shards, which are a rare type of pottery in the area are found here, also Mockley cord and Wolf-Neck Criss-Cross. Some Townsend material is also present. Not enough of any type of pottery vessel was found for reconstruction.

WADDELL SITE: 18-DO-14

Wright's branch empties into the Marshyhope Creek less than one-half mile up stream from Ennall's Branch. It passes through a considerable amount of swamp before reaching the Creek. Both sides of the Marshyhope, at this point, are bounded by swamp.

There is no road leading to this site. It must be reached by walking over plowed and cultivated fields. A small wharf was here many years ago.

The soil is Galestown sand of varying slopes which range up to 15 per cent. Along the north side of the branch the land is high and a steep bank up to ten feet exists. This high land extends inland along the branch for more than one-half mile.

Several oyster shell concentrations are still visible along the creek shore but no pits have been found. Surface hunting has been productive of points, gorgets, celts and chips from projectile manufactures. Pottery shards are also common.

In 1953 some land along the high north bank was bulldozed away in order to increase the farm acreage. On a walkover of this area, pieces of a grit tempered pottery vessel were found.¹³ A large section of the rim and some side wall parts of a 14 inch diameter vessel, now referred to as Wolf Neck cord marked,

¹³The Archaeolog, Vol VI, No. 3, 1954, pp. 13 - 16.

were collected.¹⁴ (Plate III, e.)

Recent studies has placed this pottery in an Era between 500 and 300 B. C. Whereas this vessel has little resemblance to the Tub Island vessel, found close by on the other side of the Creek, both seem to have come from the same time period.¹⁵ (See following site description).

THE TUB ISLAND SITE: 18-DO-26

On a long diagonal up stream from the Waddell site, and on the eastern shore of the Creek lies Tub Island. This island cannot be found on any local, state, or U.S. map. One reason for its lack of identification may be due to its location, and another may be the surrounding terrain. From the waterway it does not look like an island, in spite of the fact that some of its lands are 15 to 20 feet above the mean tide level. Cripples surround all land approaches making it difficult to approach it from the eastern side. It is thickly covered with underbrush which tends to screen out the land mass under it. The poor sandy soil, upon which this growth depends, gives rise to stunted pine trees, which blend perfectly with the surrounding flora growing in the adjacent swamp land.

The island is about one-half mile long and 200 to 300 feet wide. No one can remember it ever being occupied although some bricks which might have come from a chimney can be found. There is no indication that it has ever been cultivated. It is inaccessible by road, but timber has been cut from it.

At low tide the shore line of the island reveals pottery shards and projectile points. An Indian refuse pit was found near the southern end of the island. It was sparsely filled with some oyster shell, deer bones, and the greater part of an Indian pottery vessel. (Plate IV, a.) Also in this pit was one light-brown colored jasper projectile point, serrated like the LeCroy and Kirk styles of 9000 B. C., yet shaped much like the Selby Bay type of the early Woodland. (Plate XII, i.)

No other pits have been found on the island. What may be under the thick layer of pine needles that cover the ground is speculative.

¹⁴"The Waddell Site Grit Tempered Pottery". Vol. VI, No. 3, 1954, pp. 13 - 16.

¹⁵"The Tub Island Pot". Vol VII, No. 1, 1955, pp. 12 - 13.

THE ORCHARD SITE: 18-DO-8

This site received its name from a small peach orchard which once occupied the land about 30 years ago. It was located on the Palmer Gravel Pit Road about a mile below where it meets Maryland Route 392 at Harrison Ferry Bridge. It is on the left side of the Creek and quite near the shore line.

This site is now on the southern end of a block of land which realtors have developed and called Marshyhope Village. At this time there are 25 to 30 mobile and permanent homes at or on the site.

Older maps show this soil to be sassafras sand. More recent maps refer to it as Galestown sand, and it has a slope of from 2 to 5 per cent. No pits were found in the area, nor have they been looked for in the past 20 years. Some oyster shell was scattered over the area with a few flakes from projectile making, but very little pottery and fewer points. It is thought that the area was a temporary camp site.

THE "UNK" HARPER SITE: 18-DO-15

Today, this site is located on the northern end of the above mentioned Marshyhope Village. The village now covers both this and the Orchard site. The soil is still Galestown sand and about 8 to 10 feet above the Creek on well drained land. It was very sub-marginal farm land and lent itself more to sand bars than it did crop production.

Grassy plots and homes have covered all traces of this site, which 25 years ago yielded shards, flakes, points and celts. No pits were ever located, and the 25 or more septic tanks that were placed in the ground, in connection with the houses did not come in contact with any shell pits. Oyster shell was commonly seen in parts of the site before it was developed.

THE BLANCHARD SITE: 18-DO-9

This site is located on the Creek a short distance north of the "Unk" Harper site. A very small un-named branch separates these two sites while swampy land, cripples and trees line each side of this waterway.

One unexcavated pit is known to be here. Other indications of Indian occupation include the finding of projectile points, flakes from point manufacture, the finding of several axes and celts and pottery shards. Occupation here must have been temporary.

THE BULL SITE: 18-DO-16

North along the Creek from the Harrison Ferry bridge, and on the east side past the first marsh and swampy land, is a bit of high ground. In this area along the shore line is what has been called the Bull site. It has been so named after a man who lived there in the 20's.

The soil is still Galestown loamy sand, which is entirely surrounded by swamp and areas of tidal marsh. At low tide the sandy shore line will occasionally expose projectile points, and a shard or two. A considerable amount of petrified wood is also present.

Inland, on higher ground, the area is more productive. Many second and third growth loblolly pine trees have grown quite tall in the area and a heavy carpet of pine needles cover the land. This stand has completely taken over the land and has discouraged the growth of underbrush. The extent of the site has never been determined. Oyster shell is common and several pits have been found by probing. Where the needles were scarce, and the wind had blown them away, leaving a bare spot, shells, stone chips and a few points have been found.

There was a garden nearby where the homestead was located and in plowing several celts and a small ax was found.

THE HOFFMAN SITE: 18-DO-57

This site was named after the farmer who tilled the land at the time of its discovery. It is on the west side of the Creek, about 12 miles from the mouth of the waterway and the last site that has been located before the town of Federalsburg. At one time the place was known as Brown's Ferry, and the landing is at a point on the Creek where its course changes from a north-westerly direction to one that is north easterly. Early records reveal little about this landing and no one in the locality is old enough to remember it.

The soil type is composed of Norfolk sand, Elkton sandy loam and Sassafras loamy sand. These three soil types have been renamed as Sassafras loamy sand, Lakeland loamy sand, and sassafras loam respectively. The soil is loose and well drained, high and dry, lending itself to a good encampment area for Indians. It is a very poor land for farming.

Numerous artifacts have been found in the area to include pottery shards, flakes, and projectile points. It is not heavily endowed with material but enough was there to assume it was occupied at least temporarily. All material found in the form of potshards appears to be of the Townsend series.

PLATE III

- a. Large grain storage vessel. Slightly oval rim, diameter 12" x 14-3/4", rounded lip, straight rim, coil manufactured and crushed shell tempered. Gray color, surface cord-wrapped paddled outside, smooth inside with medium fine texture. Design a series of inverted triangles around the rim with 6 or 7 others inside. Similar to Rappahannock incised. (See, Archeolog, Vol. 15, No. 1. Plate 6A No. 3.) "The Townsend Site Near Lewis, Delaware." Hardness 3.0 From the Willin site.
- b. Cooking vessel (?). Oval rim 8" x 11" with rounded lip and rim flaring outward. Coil manufactured and tempered with finely crushed shell. Dark gray color, finely cord-wrapped stick paddled outside, smooth on inside and of a fine medium texture with no design. Hardness 2.5. From the Moore site. (See The Archeolog, Vol V, No. 1. Cover Nos. 1-2, also pages 1-2.)
- c. Very small paint pot (?), diameter 3", depth 1 1/2". Lip rounded and rim straight. Coil manufactured and lightly paddled. No temper visible and color tan. Surface is smooth both inside and outside, texture fine and with a hardness of 3.0. From the McAllister site.
- d. Rimshard with mending hole. Lip flattish and rim straight. Coil manufactured probably and tempered with a finely crushed quartzite. Reddish color with the outer surface incised with both a twisted cord and pointed tool. Lines running in at least four different directions. Surface slightly grainy and texture coarse. Hardness 3.5. Found at Red Bank.
- e. Partially re-constructed vessel. Diameter 14", lip rather flat with incising on the diagonal. Rim curves inward slightly. Coil manufactured and tempered with crushed and whole stones, some extending entirely through the wall of the vessel. Stone sizes microscopic up to 1/4 inch in diameter. Tan color with a surface somewhat like Wolf Neck cord type. Twisted cord downward and to the left is thick and coarse. Inside slightly sandy to feel and appears finger or hand molded. Medium texture and no design or incising. Hardness 2.0. From the Waddell site.
- f. Rim shard with mending holes. Sides of vessel from which this shard came may have been broken on both sides of the holes. Diameter of vessel 15 inches with rounded lip and straight rim. Coil manufactured, crushed shell tempored stick paddled on the outside and smooth inside. Dark gray color, medium texture, no design or incising. Hardness 2.5. From the Willin site.

PLATE III

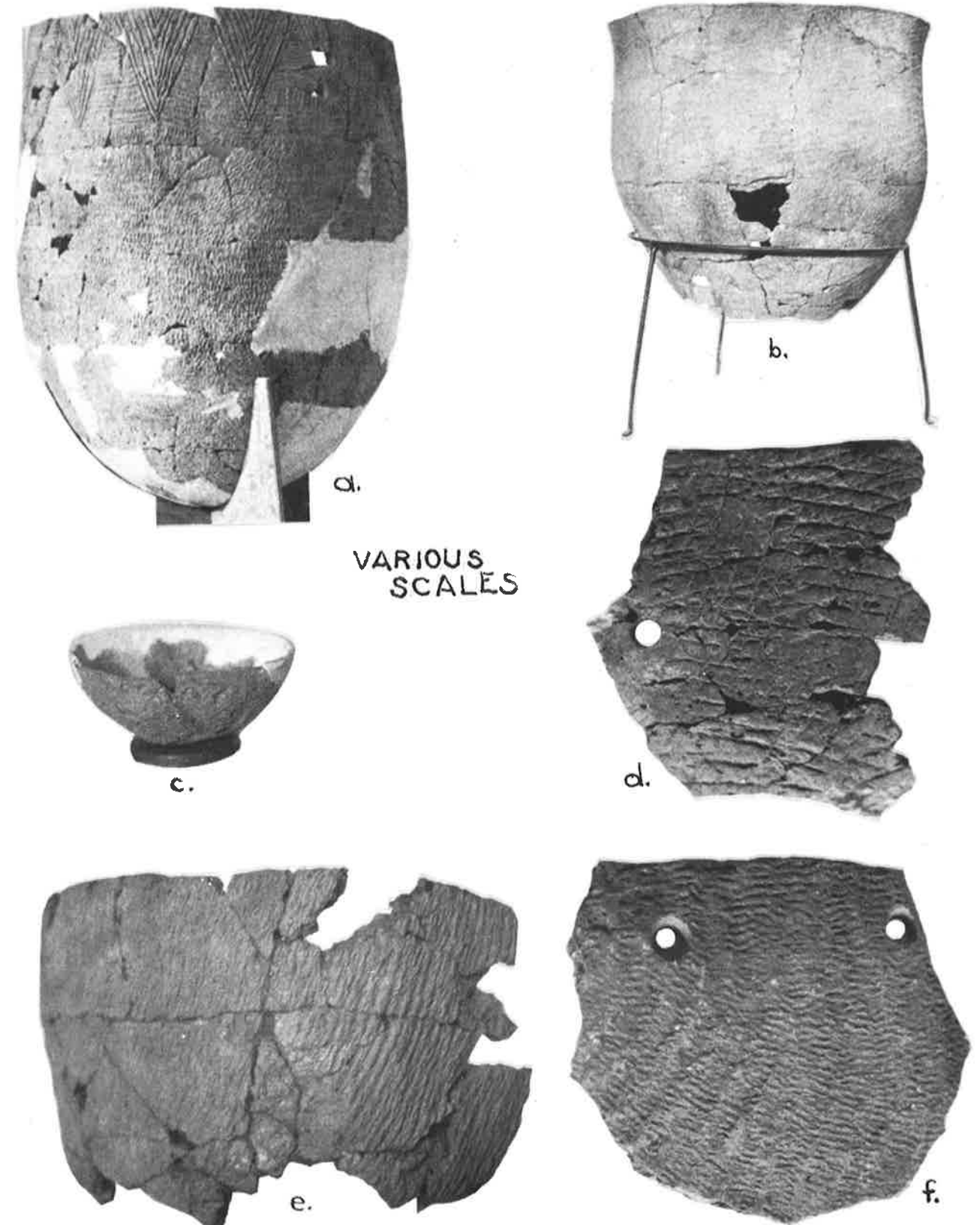


PLATE IV

- a. This may be a new type of pottery. Diameter $10\frac{1}{2}$ ", lip nearly flat, rim straight but the curve is not constant. Vessel may have been oval. Coil manufactured with very small stones as temper. Stone in the clay may have been accidental. Color reddish brown, outer surface fairly smooth over incised diagonally short lines. Inside somewhat coarser. Texture very fine. No design but has short twisted cord marks at intervals downward to the left, plus some diagonal incised lines both vertically and downward to the right. These lines are sparingly placed but intentional. Has a hardness of 2.0. Vessel may have been made elsewhere and transported to this place.
- b. A small vessel enlarged here to show incising and roughness below the markings. Diameter 4 inches, rounded lip, rim flaring outward. Coil manufactured and crushed shell temper. Is of a dark gray color with the outside surface irregular and "bumpy". Not enough of vessel found to reveal design or motif of incising. Incising made with a woody stem or reed. Probably a monocotyledonous plant since the marks of the fibro-vascular bundles of a stem are clearly visible. From the Moore site.
- c. Shard from a flat bottomed pot with a heel. Only flat bottom pot shard found along the Creek. May have been coil manufactured. Tempered with crushed quartzite, and of a dirty-tan color. Fairly smooth surface both inside and outside. Texture rather coarse and well fired in an oxydizing exposure. Has a hardness of 3.0.
- d-e. Two views of a rimshard with a "pie-crust" treatment. Impressions on the depressed areas of the lip made with a twisted-cord wrapped dowel or stick. Diameter 14 inches, lip flat, rim straight, coil manufactured and tempered with crushed shell. Its color is a dark gray and the outside surface is lightly paddled with a cord-wrapped stick. Inside smooth. Texture a medium fine and no design or incising. Hardness 2.0. From the Willin site.
- f. A large piece of unwelded pottery rim shard. This is the largest shard of this kind of pottery that has been found along the Creek and measures 3 x 4 inches. The vessel diameter was 7 or 8 inches, lip rounded and rim straight. Both the surface of the lip and the circumference of the vessel irregular. Coil manufactured with the inside worked smooth and the outside unwelded. Shell tempored and gray in color. Surface smooth to the feel both inside and outside. Medium texture and no indication of incising. Has a hardness of 2.0.

PLATE IV

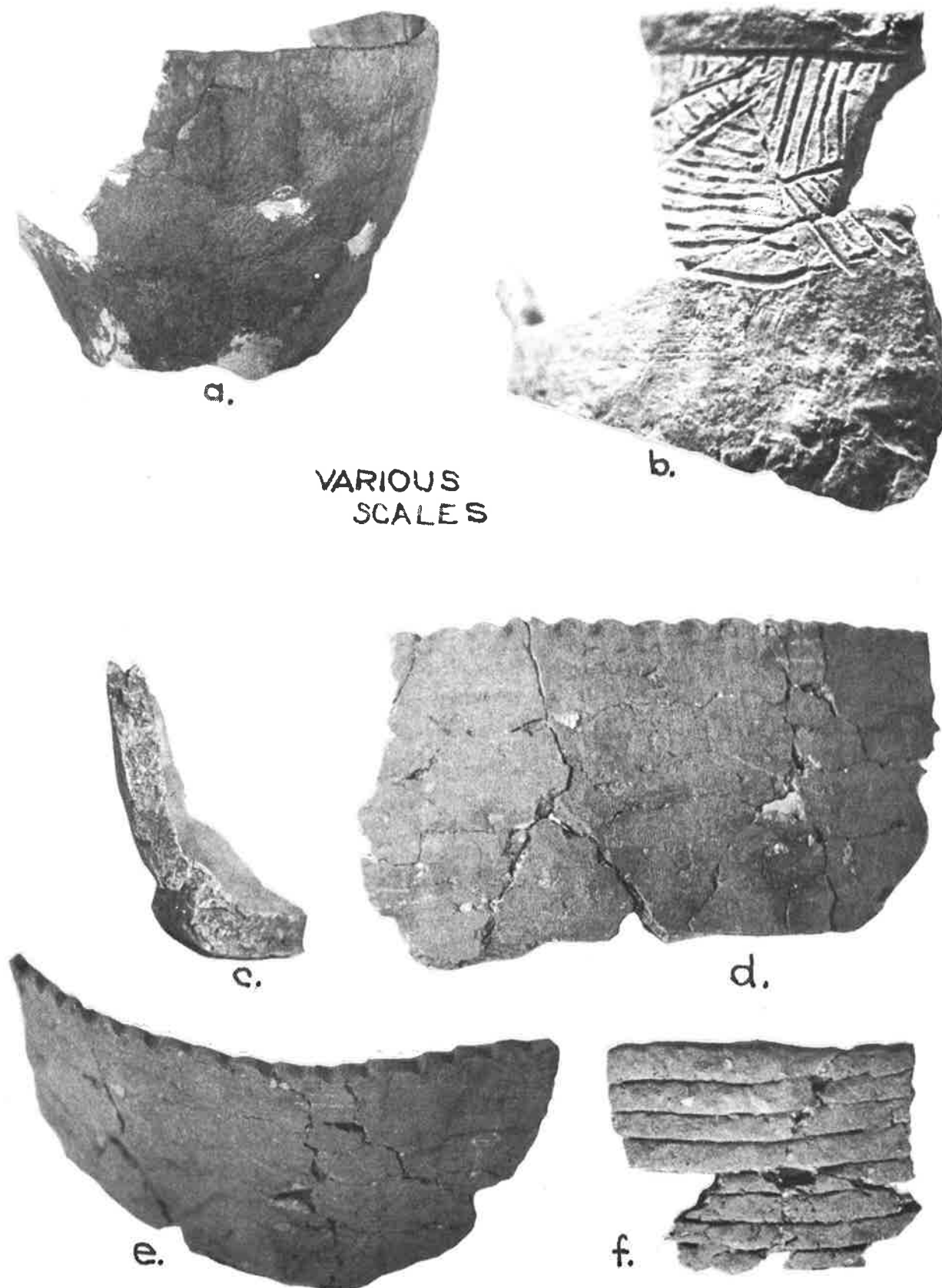


PLATE V

RED BANK POTTERY

(Early Types)

a. Seldom Island Rim and Body Shards:

Nine matching pieces of a vessel, (16-18 inches) in diameter. Lip rounded, rim straight, and appears to have been coil manufactured. Densely tempered with steatite, tan color, surface rough but slippery smooth to the touch both inside and outside. Surface plain. Hardness 2.0.

b. Dame's Quarter Ware:

From a (16-18 inch vessel). Lip flat and slanting outward and roughened. Rim straight. Appears to have been coil manufactured. Tempered with a hornblend (?). Color tannish, surface sandy to the feel both inside and outside. Texture very coarse but closely knit. No design, surface plain and with a hardness of 2.5.

c. Mockley Plain:

Same as the Mockley shards described below except for the plain surface both inside and outside. Hardness of 2.0.

d. Hell Island Ware:

A body shard from a large vessel. Diameter at middle of the shard 16 inches. Coil manufactured and tempered with small quartzite pebbles. Light tan in color, surface quite smooth with a very fine and close texture. Corded lines exceedingly small and in a sort of herring bone pattern. Inside marked with much larger corded impressions running downward and to the left, giving way to hand or palm smoothed surface.

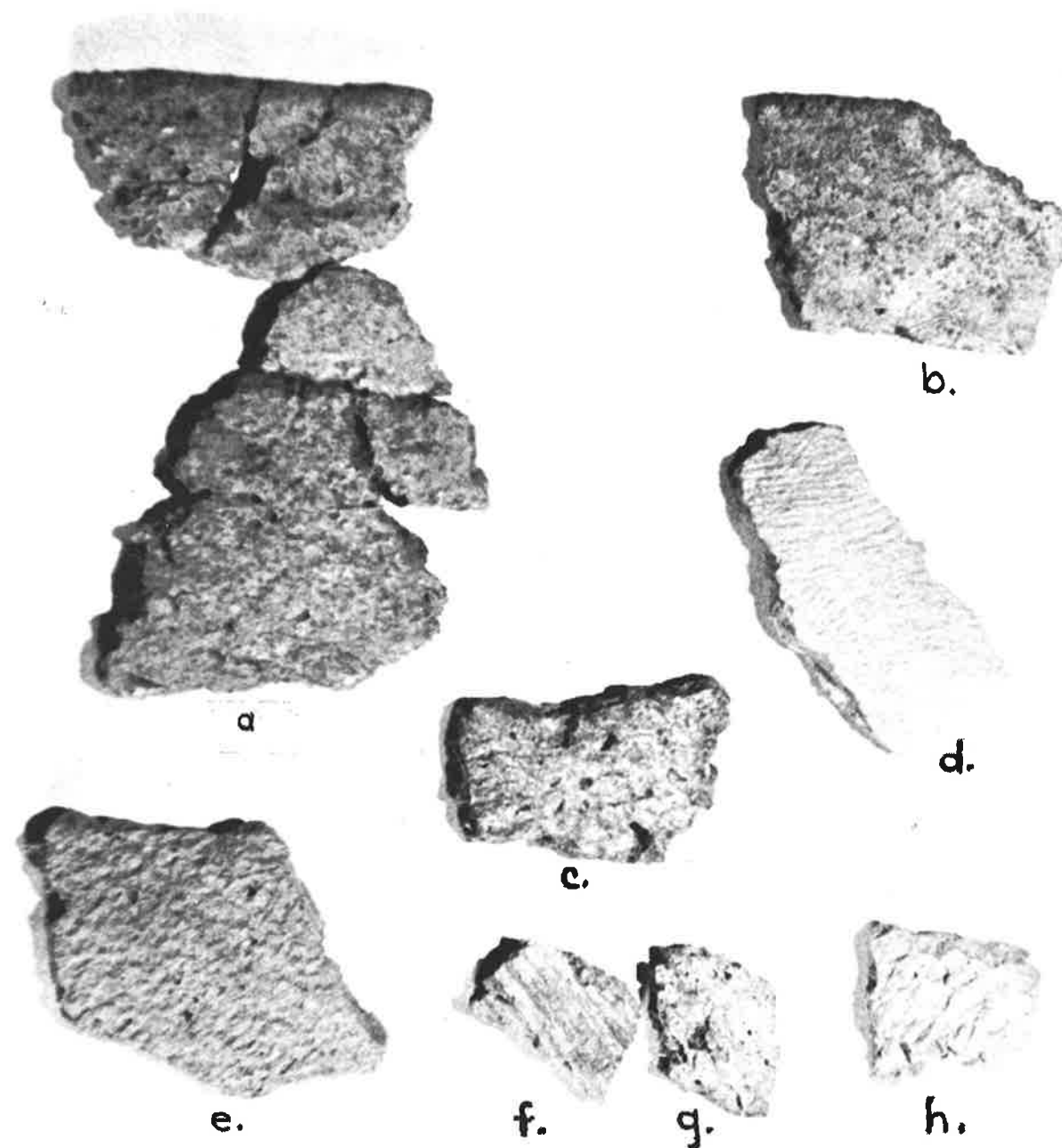
e. Mockley Net Body Shards:

Coil manufactured, hole tempered, and with a net-wrapped paddled outer surface. Inside surface smooth and hand or finger wiped over a surface which has been coarsely scraped. No design or incising. Hardness 2.5.

f-h. Mockley Cord Impressed Samples:

Features are the same as the above types of Mockley shards except for the cord marks. These are also hole tempered resulting from the leaching of crushed lime shell temper. Holes are large indicating a fair amount of crushed shell used.

PLATE V

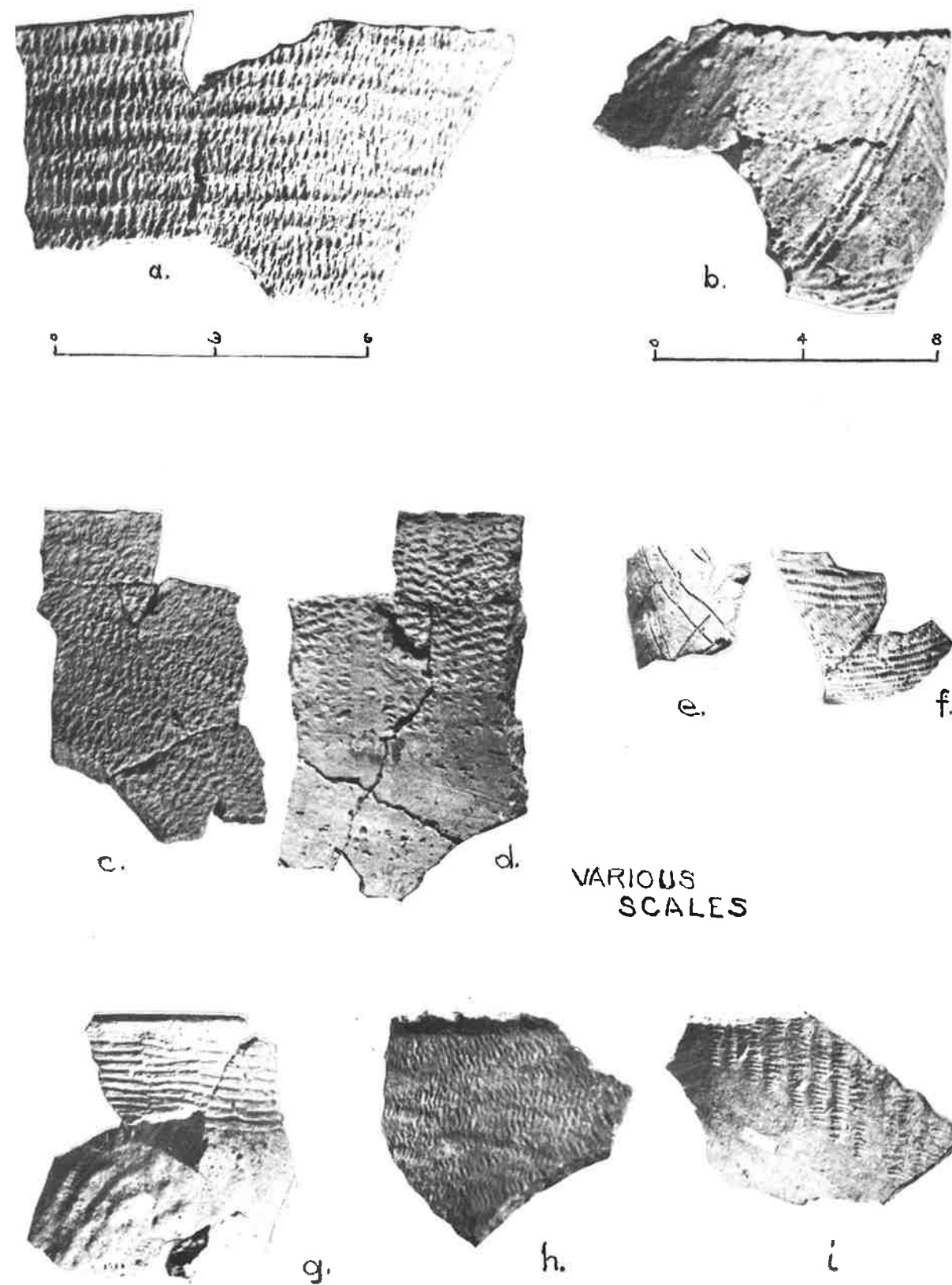


0 1 2 3
SCALE

PLATE VI

- a. Rim shard from large vessel with 18" diameter. Lip is lightly dowel or cord-wrapped stick paddled forming light impressions. Rim curves outward. Coil manufactured using crush shell for temper. Gray color with the surface appearing fabric impressed. This reference to surface treatment is often confusing. Close examination of this shard reveals irregularities that usually develop when a cord wrapped stick or dowel is used. Outside impressions are parallel with rim, inside ones are vertical reaching down about 2½ inches. The texture is medium coarse and the shard has a hardness of 2.0. From the Willin site.
- b. Large pottery rim shard from a vessel with a diameter of 12 inches. Lip has "pie-crust" effect, with impressions made with a cord-wrapped dowel or stick. Rim curves out, coil manufactured and crushed shell tempered. Gray color outside, inside lighter gray with a pinkish cast. Surface slightly grainy, texture medium coarse. Design a series of large triangles extending down from the rim 5 inches, and made with a cord wrapped stick. Impressions making up the sides of the triangles are 7/8 to 1 inch long and made of 13 or 14 coils. Lip treatment with same size cord-wrapped stick. Inside paddled vertically and down from the lip 2¼ inches. Hardness 2.0. From Moore site.
- c-d. Inside and outside views of 5 matching rim and body shards. Lip flat with cord-wrapped dowel impressions. Rim curves outward slightly. Coil manufactured, crushed shell temper. Reddish color, surface smooth, texture fine. (c) paddled parallel to rim outside; (d) perpendicular to rim inside. Hardness 2.5. From the Willin site.
- e. Body shard with 5 inch diameter. Lip round, marked with same tool used on body. Coil manufactured, no temper, rim straight. Tan color, smooth surface, fine texture. Pseudo-cord marks. Hardness 3.0. Found at Red Bank.
- g. Vessel similar to that shown on Plate IV, b. All features practically the same except for the design. The 10 or 11 lines around the rim were made with a round pointed tool, not with a reed as done on the other vessel. Moore site.
- h-i. Rim shards showing paddling on outside (h) and on the inside (i). Both coil manufactured, shell tempered, dark gray color, close texture with no incising. Surface smooth over stick-wrapped cord paddling. Hardness 2.5. Willin site.

PLATE VI



Rim Shard Types

There has been no attempt to depict all the types and designs of rim shards that were found at various sites along the Creek. Plates VII and VIII show representative samples. Where other rim shards appear, they have been so identified. The shards shown and described were selected from the more than 1000 to be found in this writer's collection.

Except for matching rim shards from the same vessel, no two were alike, nor was there similarity of pattern which might have revealed a family, clan, or tribe characteristic, by which a vessel or group of vessels may have been identified. From the variability of the designs, within a specific site, there was no indication that any single individual was responsible for pottery manufacturing, or incising of the vessels.

Much of the rim material was plain, with no indication of incising or paddling. This feature was common at all sites.

Most of the incising was done with a smooth, rounded end of a stick or splinter awl. Not too many shards were incised with a reed or woody plant stem. This characteristic is quite common on shards along the rivers farther to the west and closer to the Chesapeake Bay. This region is what is generally referred to as Choptank Indian territory. Woody stem incising is easily identified by the marks left by the fibro-vascular bundles which are so prominently distributed throughout monocotyledenous stems of reeds and grasses.

Moh's scale of hardness was used in determining and testing the surface of the pottery. Some shards were soft enough to be scratched by the fingernail which gave them a reading of 2 or less. Others harder, finer and closer textured revealed a hardness of 5.0.

The vast majority of the vessels were manufactured by the coiling method, as evidenced by fractures made horizontally along the coils, and from the surface of the breaks. Breaks perpendicular to the coils were common but more often than not they terminated in a right-angle to the coil. Many of the shards from smaller vessels showed hand molding from a lump of clay. These pots were not common.

Cord-wrapped round sticks (dowels) and/or cord-wrapped paddling was a dominant feature on a great number of shards. Most of the impressions were downward and to the left, many were parallel with the rim, and fewer were vertical or to the right. A few of the rim shards displayed paddling on both sides of a vessel's surface. That which was done on the inside was always vertical or perpendicular to the rim. These inside impressions seldom went any farther than 2½ inches from the rim.

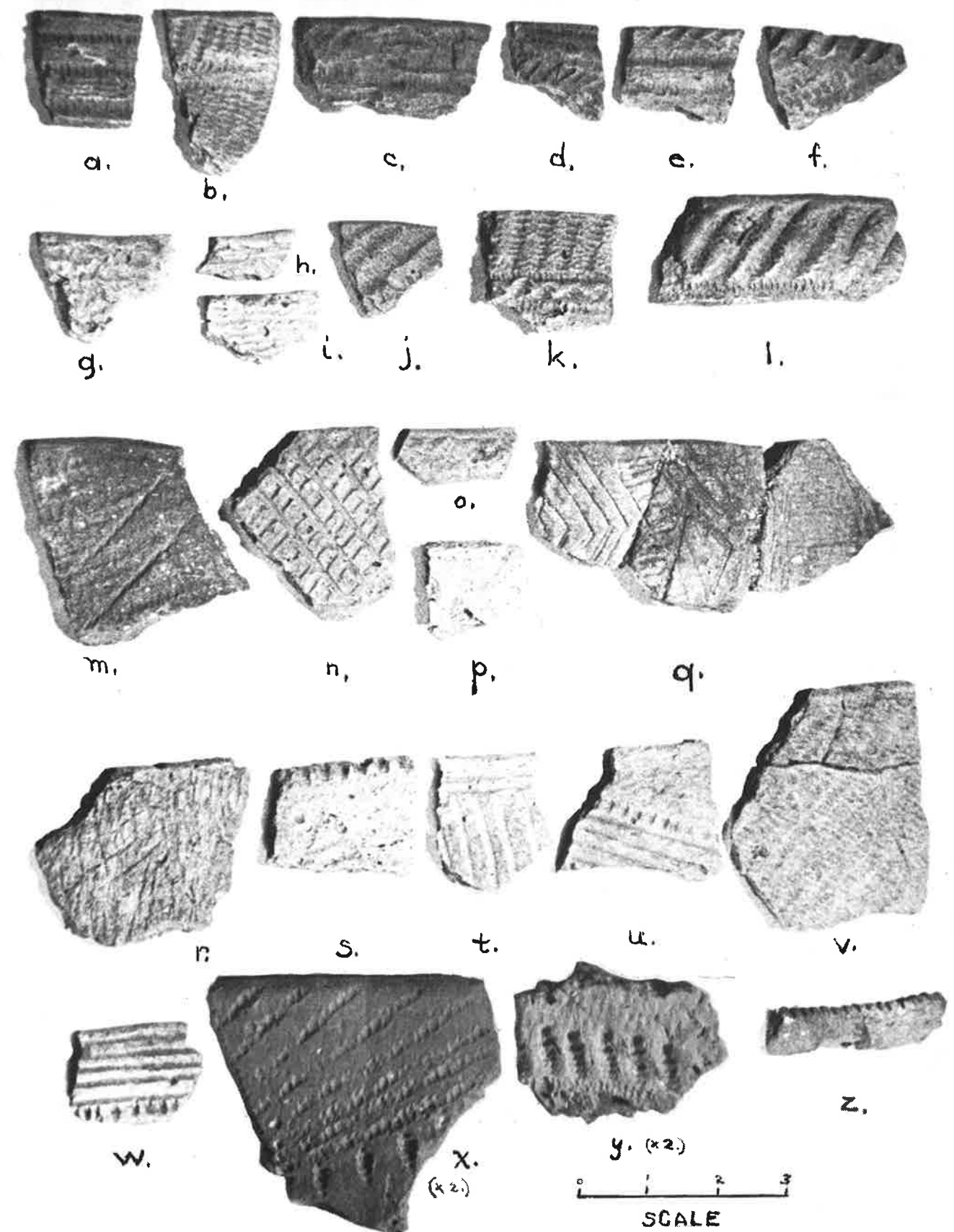
RIM SHARDS PLATE VII

- a-f. Rims are swollen or appliqued. None had temper and all were red in color. The arc of their circumference indicated they were from large vessels averaging 14 to 16 inches in diameter. All were coil manufactured and of a medium fine texture. "b" flared out prominently from the second row of horizontal impressions.
- g-i. These shards had a heavy overlapping of paste on the outside of the rim. All were gray in color, thin walled hole tempered, coil manufactured with a hardness of 2.5.
- j. Deeply paddled impression slanting downward to the left. Lip rounded, rim flaring outward and made after paddling as evidenced by the outward pushed paste.
- k-l. Flat lipped vessels with straight rims, enlarged and bulging to 1 inch below the lip. Body curving inward below the rim and reddish in color. No temper and with a hardness of 2.0. "k" has a delicately molded appearance of a frieze which appears just below the vertical cord-wrapped dowel marks.
- m. Rim from a flat lipped vessel with twisted cord impressions wide apart. Appears fabric impressed (?). Finely ground shell temper, and from a large thick rimmed pot. Coil manufactured and a medium texture. Hardness of 2.0.
- n. Criss-cross lines made with a wide tipped, round pointed tool. Downward lines to left made first. Coil manufactured, reddish color, crushed quartzite temper and a medium coarse texture. Hardness of 2.0.
- o-p. Very much like k, and l, but with rim curving outward.
- q. Combination of herringbone and irregular designs, dark gray color, round lip straight rim, coil manufactured, and crushed shell tempered. Medium texture and a hardness of 3.0.
- r. Twisted cord impressions with occasional cord marks downward and to the left. Crushed quartzite temper with some sand in the clay. Lip is flat and flares outward. Coil manufactured with the inside wiped leaving coarse horizontal and other nearly horizontal lines in groups of from 5 to 7.
- s. Lip uniformly impressed with pseudo-cord marks. Lip flat and rim curving outward. Finely hole-tempered and coil manufactured. Gray in color. Part of the design shown below the rim made with a narrower pseudo-cord tool. Looks like the letter "A".

RIM SHARDS PLATE VII (Cont.)

- t. Red-brown color. Lip round, rim straight, coil manufactured and hole tempered. The two lines below the rim were made with a reed or stem and show fibro-vascular bundle marks. The nearly vertical incised lines made with a wide tool that was flat and had smooth rounded corners.
- u. Rim straight, lip rounded, coil manufactured, and with crushed quartzite used sparingly. It is a red-brown color. Surface inside and outside is smooth and the texture fine. The design, running downward to the right consists of a series of 4 parallel lines made with a reed. Above and under these lines is a row of neatly made punctate impressions. These indentations were applied with a hollow reed and at an angle of about 45 degrees. Hardness is 2.25.
- v. The lip is flat and slanting outward. Rim straight, coil manufactured and small hole tempered. Color is brick red. The surface is very sandy and this material permeates the paste. Outer surface cord-wrapped tool impressed and the inside slightly sandy to the feel. Texture medium coarse and with a hardness of 2.0.
- w. Rim slightly constricted $\frac{1}{4}$ inch from the lip. Lip rounded, straight rim, coil manufactured, and no temper. A red-tan color and a smooth surface. The texture is very fine. The design consists of 5 rows of lines parallel to the rim with a row of punctate jabs perpendicular to the rim and placed below the bottom line. The punctate line was made with a tool which had a protusion at the tip and toward the right side as the incising was made.
- x. Lip slants outward and the rim is straight. Coil manufactured and crushed shell tempered. Color a very dark gray. Surface smooth and texture fine. The design is a series of pseudo-cord lines, slanted like a twisted cord and appear to terminate at a central point off the shard to the left. Below the bottom line is a vertical row of impressions made with an identified tool, a "mystery tool", that as yet has not been recognized. It has been found on a number of shards with slight variations. At times tapering and again ending in a round knob. Occasionally the very short lines within the design have a twisted cord appearance and at other times they are smooth. The shard has a hardness of 3.0. It is shown here twice the size of the other shards. The shard is twice that of others on this page.
- y. Another shard marked with the above mentioned "mystery tool". This shard has also been enlarged to show detail.
- z. Rim shard from a small pot with sharp dentate impressions on the lip. Vessel $5\frac{1}{2}$ inches in diameter, lip round, rim straight, coil manufactured and crushed shell tempered. Color gray outside and reddish inside. Texture medium coarse with a plain surface and a hardness of 3.5.

PLATE VII



RIM SHARDS PLATE VIII

a-c. Willin Site:

All are shell tempered. (c) criss-crossed with a woody stem. Incising over cord-wrapped paddle impressions.

d-f. Red Bank:

(d) is marked with a twisted cord vertically and downward to the left. Round lip, straight rim, coil manufactured and tempered with crushed quartzite. Has a reddish color and a hardness of 3.5.

(e) Very fine cord-wrapped paddled shard. Hole tempered.

(f) Extra small stick used in paddling. Hole tempered.

g-j. Willin Site:

All hole tempered. (g) vessel diameter 10-11 inches. Incising with a sharp pointed tool over a paddled surface.

(h) Round pointed tool incising over paddling. Shell tempered.

(i) Both vertical and diagonal incising.

(j) Flat lip slanting outward. Rim thick from a large pot.

k. McAllister Site:

Smooth rounded incised marks with a herringbone pattern. Hole tempered, lip round, rim straight. Coil manufactured and very smooth on both sides. Texture coarse, hardness 2.0.

l. Willin Site:

Vessel had an 8 inch diameter, round lip and rim flaring outward slightly. Coil manufactured, stick paddled to rim with cord lengths of 7/8 inches. Hardness 3.0.

m. Red Bank:

Lip flat with criss-cross marks like those on body of shard. Rim straight, coil manufactured with all other features like those on body shard (Plate IX,c.)

n-r. Willin Site:

(n-o) From small vessels. Unwelded coils on the outside, smooth on inside. Dark gray color, no temper.

(p) Dentate impressions made with a round pointed stick.

(q) Zig-Zag pattern with punctate holes in various areas.

(r) Very wide vertical lines made with a reed. Upper parallel lines made with a smaller reed than those below. Striations from fibro-vascular bundles of the stem are clearly visible under a glass.

PLATE VIII

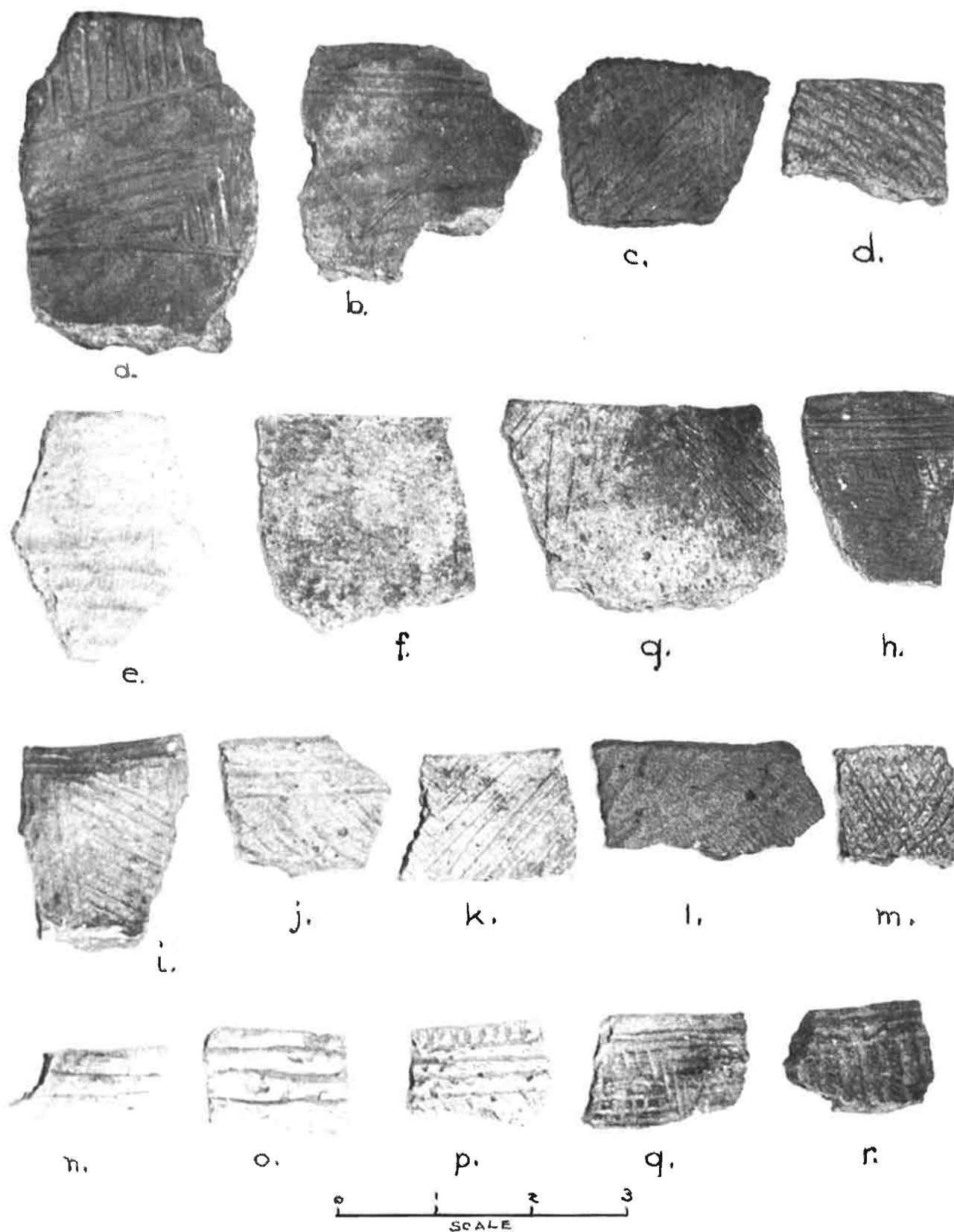


PLATE IX

(Rim and Body Shards)

- a. Body shard, coil manufactured, tempered with finely crushed quartzite. Coarsely wiped horizontally inside. Tan color, surface smooth over a series of criss-cross lines made with a square-edged tool. Texture fine with a hardness of 3.0. From the McAllister site.
- b. Body shard, coil manufactured and quartzite tempered, tan color, smooth inside, with texture fine. Impressed with a fine single strand twisted cord-like material. Some strands terminating abruptly. Hardness 2.2. From the Willin site.
- c. Body shard, coil manufactured, crushed quartzite tempered. Dark tan color, inner surface uneven. Medium coarse texture improperly fired producing a black core. Twisted cord imprints downward and also to the right and the left. Has a hardness of 3.0. From Red Bank.
- d. Rim shard, 14 inch diameter, coil manufactured, clay tempered similar to Coulbourne Ware. Reddish-tan color, with a coarse texture. Inside wiped leaving impressions in groups of 12-15 stria. Fine cord-like marks on outside in 5 directions. Hardness 2.0. From McAllister site.
- e. Body shard, coil manufactured, with large pieces of crushed shell temper. Gray color, smooth surface inside but irregular undulating surfaces as if pushed in place with hands or fingers. Cord wrapped impressions in three directions. Hardness of 2.0. From the Coventry site (Ennall's Wharf)
- f. Body shard, appears coil manufactured, large pieces crushed quartzite temper, reddish color. Smooth feeling on cord impressions on outside. Criss-cross cord marks running two ways. Hardness 2.5. Collected at Red Bank.
- g. Rim shard, 8 inch diameter, lip flat, rim swollen, tempered with quartzite, coil manufactured and tan in color. Outer surface rough with heavy cord marks. Inside smooth but lumpy and hand pressed. Hardness 3.0. From Red Bank.
- h-i. All coiled body shards with crushed quartzite temper. Outer surface with single twisted cord impressions, each with varied size strands. (h-i) a dark gray color. (j) a light tan color. Hardness 3.0. From Red Bank.
- k-m. Body shards. Examples of pseudo-cord impressions, (k) from Willin site, (l) Brinsfield site, (m) Red Bank.

PLATE IX

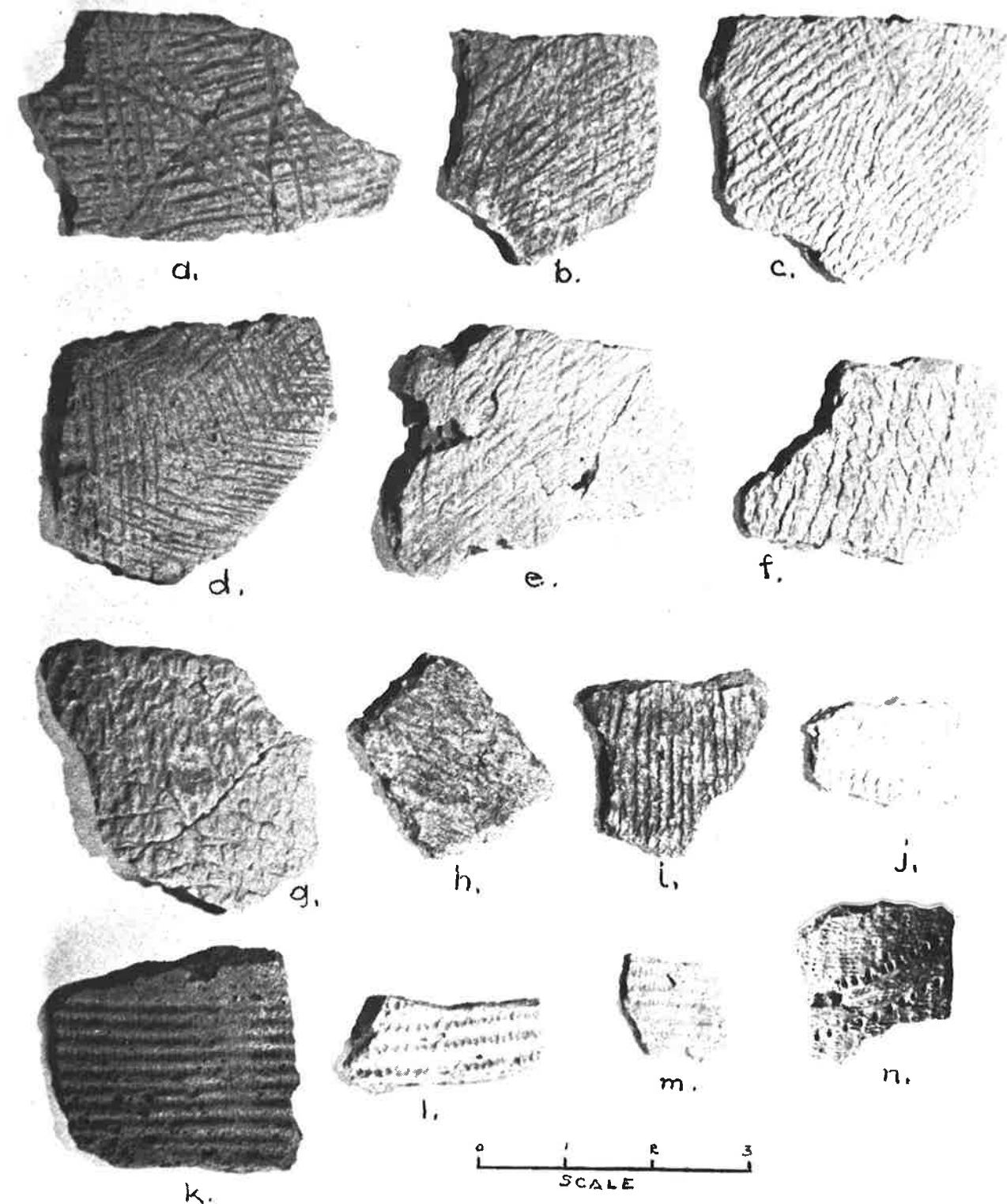


PLATE X

(Rim and Body Shards)

a-d. Willin site body shards:

- a. Cord-wrapped stick paddled shard with deep wide impressions. Dark gray color, shell tempered and has a hardness of 3.0.
- b. Faint paddle impressions. Outside paddling horizontal to the rim and inside perpendicular. Has a reddish color, shell tempered with a hardness of 2.0. Shard from vessel with a constriction near top. Diameter here is 12 inches.
- c. Made from a reddish sandy paste, has gritty surface with grit and crushed shell from scarcely discernable to microscopic in size. Coil manufactured and with a hardness of 2.0.
- d. Light gray color, crushed shell tempered, coil manufactured. Very wide cord impressions having square corners. Has an appearance of a basket weave. Hardness 2.5.

e-f. Moore site body shards:

- e. Coarse dowel-wrapped cord impressions on this shard while (f) has very fine cord-wrapped dowel impressions.

g-h. Willin site:

- g. Appears fabric impressed. Cord impressions very heavy and flecked with finely crushed shell temper. Texture fine. No shell temper visible on outside of shard. Coil manufactured, dark gray color inside, lighter outside. Hardness 2.0.
- h. Stick impressed to give a resemblance to a basket weave.

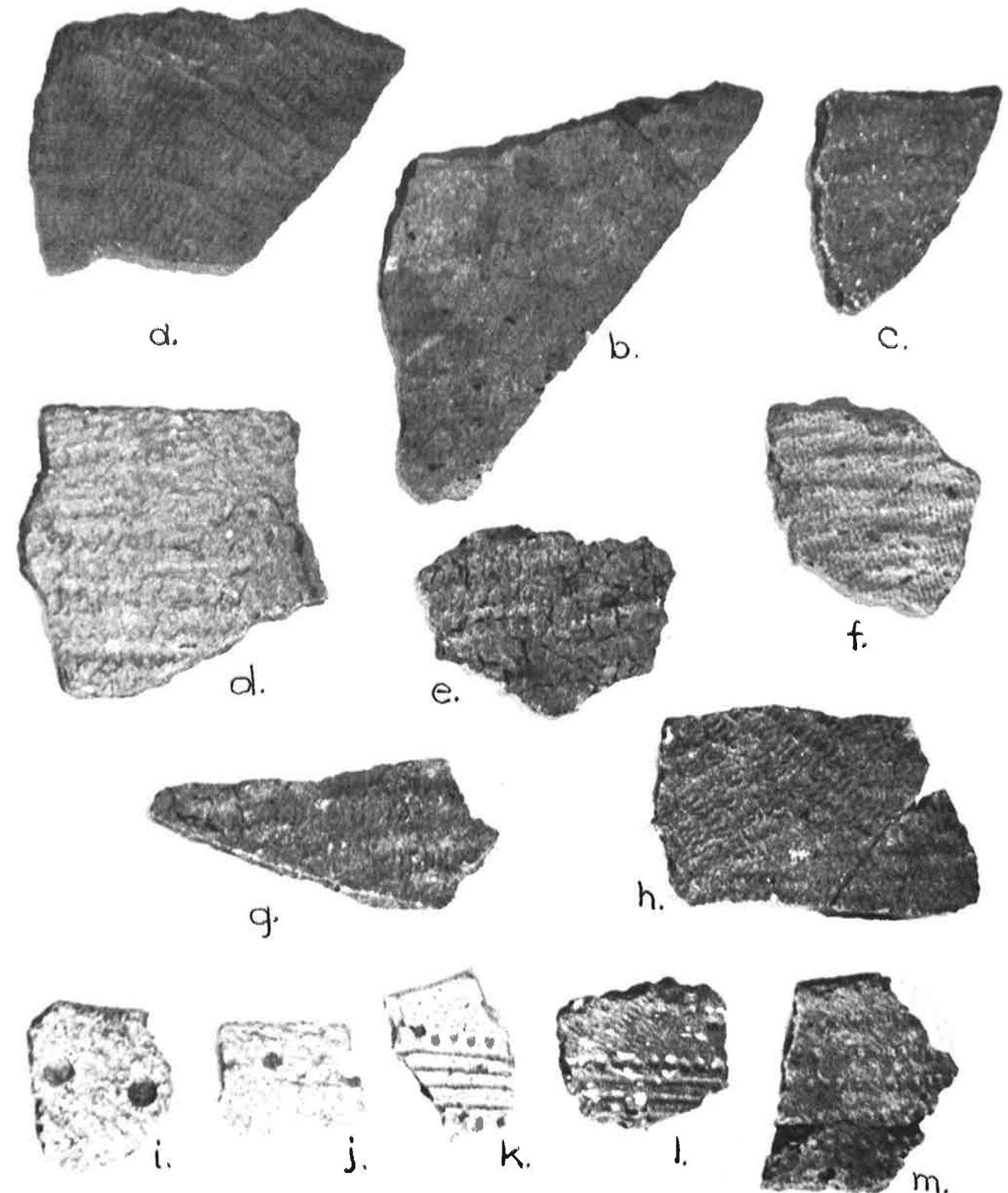
i-j. McAllister site:

- i. Rim shard with punctate impressions which do not pierce the shard but leave raised areas on the inside wall. Steatite (soapstone) tempered and with cord-wrapped impressions in a criss-cross pattern.
- j. Rim shard with mending hole and two partially drilled holes to the left. Crushed quartzite temper. Has a twisted cord impression in a criss-cross pattern.

k-m. Red Bank site:

- k. Rim shard, punctate treatment in design, hole tempered and a plain surface.
- l. Heavily shell tempered throughout paste.
- m. Rim shard, flaring widely, hole tempered.

PLATE X



0 1 2 3 4
SCALE

PROJECTILE POINTS

Plates XI and XII show a number of the various points that have been found along the shores of the Marshyhope Creek. Those that have been found inland $\frac{1}{2}$ mile or more are not included within this report, and examples of only those that were found at the different sites are considered.

It has not been possible to record and identify all of the finds that have been made at the various sites. A few of the dozens of individuals who have collected artifacts during surface hunting are known, and the pieces that they and others have collected are enormous. Several of these collections have been examined, and what has been seen does not contain any varied or different groups from those of this writer. Many nicer examples, yes, but all of them are represented by examples in this report.

The classification of the writer's more than 1000 projectile points indicates a spread of cultures extending from around 10,000 B. C. to the contact period of the late Woodland people with the Europeans.

Projectile points came from stone that was located in widely separated areas. New Jersey Jasper, Pennsylvania muscovite (rhyolite), a dark purplish and other types of sandstone not found locally, slate, a form of argillite, and obsidian from the west (?).

Some reasons why so many different kinds of stones were used locally may have been due to a number of things, (1) Since flakes from all rocks, mentioned above except the obsidian and argillite, have been found at the various sites, it is obvious that projectiles were made, "on the spot", and cache blades from this material may have been introduced through trade; local Indians may have travelled out of the area to gather this material; (2) introduction of the finished or nearly finished points may have been introduced by traders; (3) The points may have been brought in by migratory groups.

Local stone was difficult to find. Occasionally isolated pieces of quartzite can be found, especially after plowing, but this stone is rarely found on the surface. A floor covering of vegetation in pre-historical times made it even more difficult. A type of local sandstone is found but it is too soft to have been of use to the Indians. Certain areas have out-croppings of limonite. This material commonly called "bog iron"; and because it is strictly a secondary substance, formed at the expense of previously existing materials, does not chrysalize, has no cleavage, and early man here, did not know how to make use of it.

The stone in the area, which might have been used if found,

is below the surface of the ground. It is the gravel and consists mostly of various grades of quartzite. Very little of it was taken from the ground in the past but in recent years a number of local farmers have added substantially to their income by turning sections of their farms into gravel pits.

There is no concentration of gravel in or along the banks of the Marshyhope Creek where it cuts its way through the land to meet the Nanticoke. Because of the absence of the right kind of stone material for projectile points locally, it seems most likely this material was introduced here one way or the other.

Projectile material, of one kind or another, may be concentrated and even more so within a single specific area of the site. Other sites may have none of such material at all.

By far, the greatest amount of flakes, arrow points and broad spear points at the Brinsfield site were of variety of slate. Oddly enough they were all found within a certain area of the site. Very few of such points were found elsewhere and none of this material can be found locally.

Argillite and Obsidian points were picked up at Red Bank, but chips and flakes of this material have not been found.

Rhyolite was more prevalent at the McAllister site than elsewhere along the Creek. This particular variety has been identified as coming from an area close to Gettysburg, Pennsylvania, as were the large cache of the same kind of blades found on the same site.

At the Willin site the greatest number of points were of various colors and shades of jasper. There is not enough jasper found locally to have made all the points of that stone that have been found here. Large deposits of this stone are to be found in New Jersey and some way or another it found its way into the lower Marshyhope region.

PLATE XI

(Projectile Points)

- a-b Argillite points from Red Bank. These are the only points of this material that have been found along the Creek to date.
- c-e Sandstone points from the Brinsfield site. These are sandstone of a dark grayish color and having a purplish cast to them.
- f-h Quartzite points. This impure variety of quartz is common at all sites in the area.
- i-l Commonly referred to as "bird points". They are of jasper and have convex bases. All are from the Moore site.
- m-n These bird points have a contracting stem, one tan and the other gray jasper. Found at the Willin site.
- o-p These are the only obsidian points found in the area, nor have any chips or flakes of this material been found. (o) favors the LeCroy pattern, and the other (p) with the narrow stem is much like a point from the Accokeek phase. These two points have a cultural span, from the present, of about 10,000 years and are interesting subjects for local study. Found at Red Bank.
- q-r Both of these appear to be Kirk type points and are from the McAllister site.
- s-u Triangular points with straight bases. These were found at the Willin site.
- v Triangular projectile point with a rounded base. The stone is quartzite. It is from the Willin site.
- w-z Triangular points with concave bases all from the Willin site.
- 1-2 Pentagonal points: (1) from the Willin site and made from jasper; (2) This point is made from slate and is from the McAllister site.
- 3 A drill point with a flaring base which is concaved. The drill is short and made from jasper.
- 4-8 Corner-notched points of jasper with medium and wide bases. From the Willin site.
- 9 Leaf shaped point of jasper. The high thick center area would almost indicate a completed point which is almost a reject. From the Brinsfield site.
- 10-13 Projectile point rejects producing improper fracturing and discarded upon failure to flake out properly. Of jasper stone and from the Willin site.
- 14-15 Thumb-nail scrappers. (15) chipped and bevelled on all sides. These appear to be very old tools made from local pebbles. Both are from the Willin site.

PLATE XI

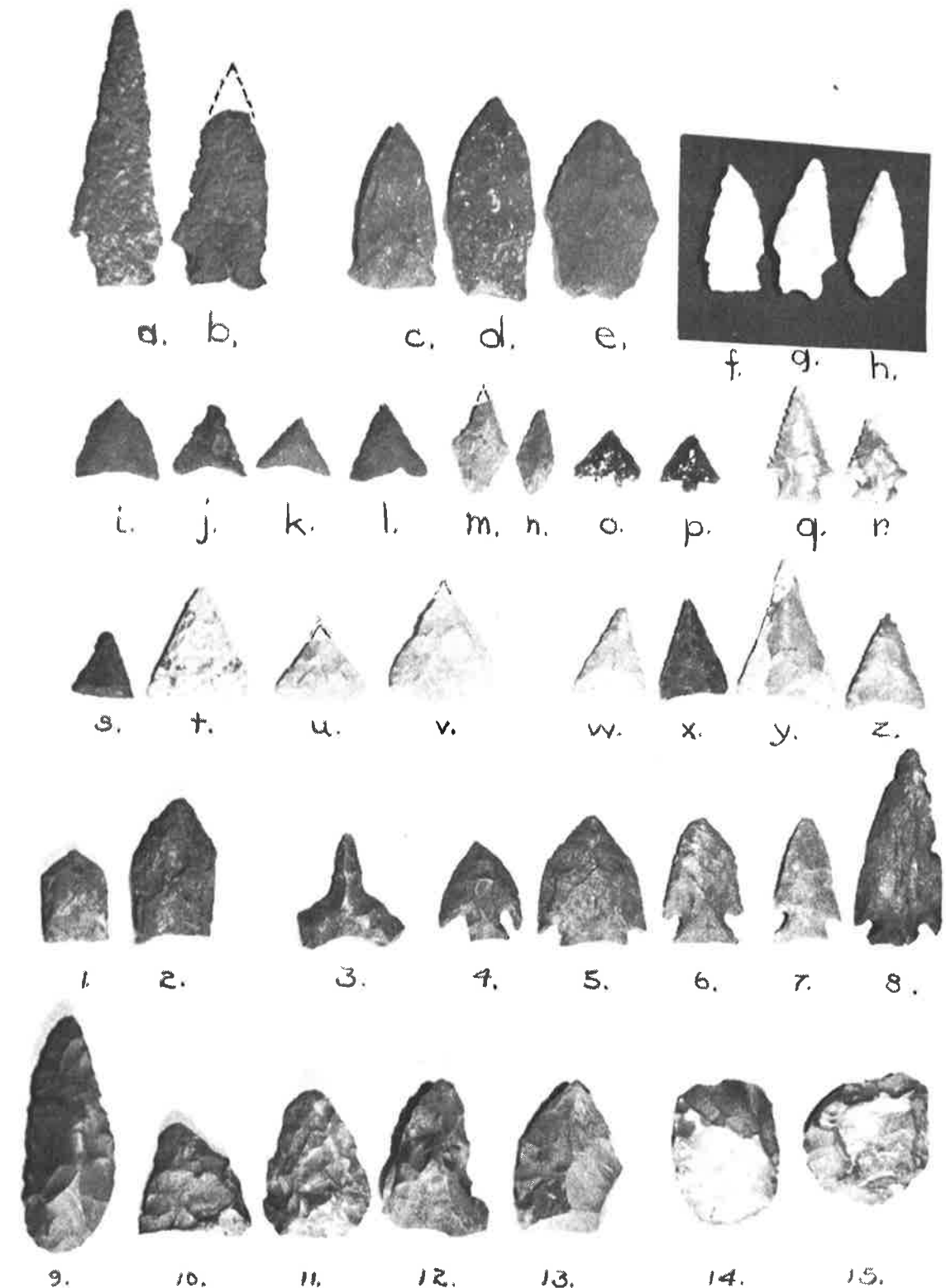


PLATE XIII

(Projectile Points)

- a-c These are sandstone points. All may be spear points. They are of a tan color and crudely made. Their weight and thickness would probably make them more useful as spear points and not arrow points. They resemble the Koen-Crispen type which dates to 6000-4000 B. C. They were found at Red Bank.
- d-f A good example of the Otter-Creek type is shown at (d). It is of tan jasper, and dates from the Middle Archaic Era and was found at the Brinsfield site. (e) appears to be of this type also. It is of red jasper but has a deeper, wider notch, and is very large. It is from the Bull site. (f) is of slate, not deeply notched and may be questioned as being a member of this group.
- g-i These points are not common along the Creek. Very few have been found. Being beveled on two sides, it has been suggested that this type of manufacturing was developed to give the arrow a rotating motion while in flight. (g) is from the Willin site, and of grayish white jasper, with a notched base which is rounded. (h) has a straight base, with a short, blunted round point and of dark gray jasper. It is from the Waddell site. (i) resembles a Selby Bay long type, with rounded base, heavily serrated on both sides and notched on one side. It was found on Tub Island.
- j A sandstone Koen-Crispen point, grayish tan in color and found at the McAllister site.
- k-m Slate points from the Brinsfield site. They are crudely made. (k and m) are like the early Woodland Accokeek phase having a straight base and wide stem. (l) seems to be from an earlier period.
- n-p Wide spear points. (n) is of slate. (o) and (p) are commonly called rhyolite. Geologists have referred to this stone as muscovite. In all probability they are a form of felsite and the dark specks which are scattered throughout the stone appear to be rhodonite.
- q-r These are dark colored pieces which seem to have fractured in a conchoidal way. If these pieces of flint or quartz they are from stone very uncommon along the Creek. The stones are chipped (worked) on all four sides. If they are not gun flints of a sort they may be thumb-nail scrappers. Both are from the McAllister site.

PLATE XII

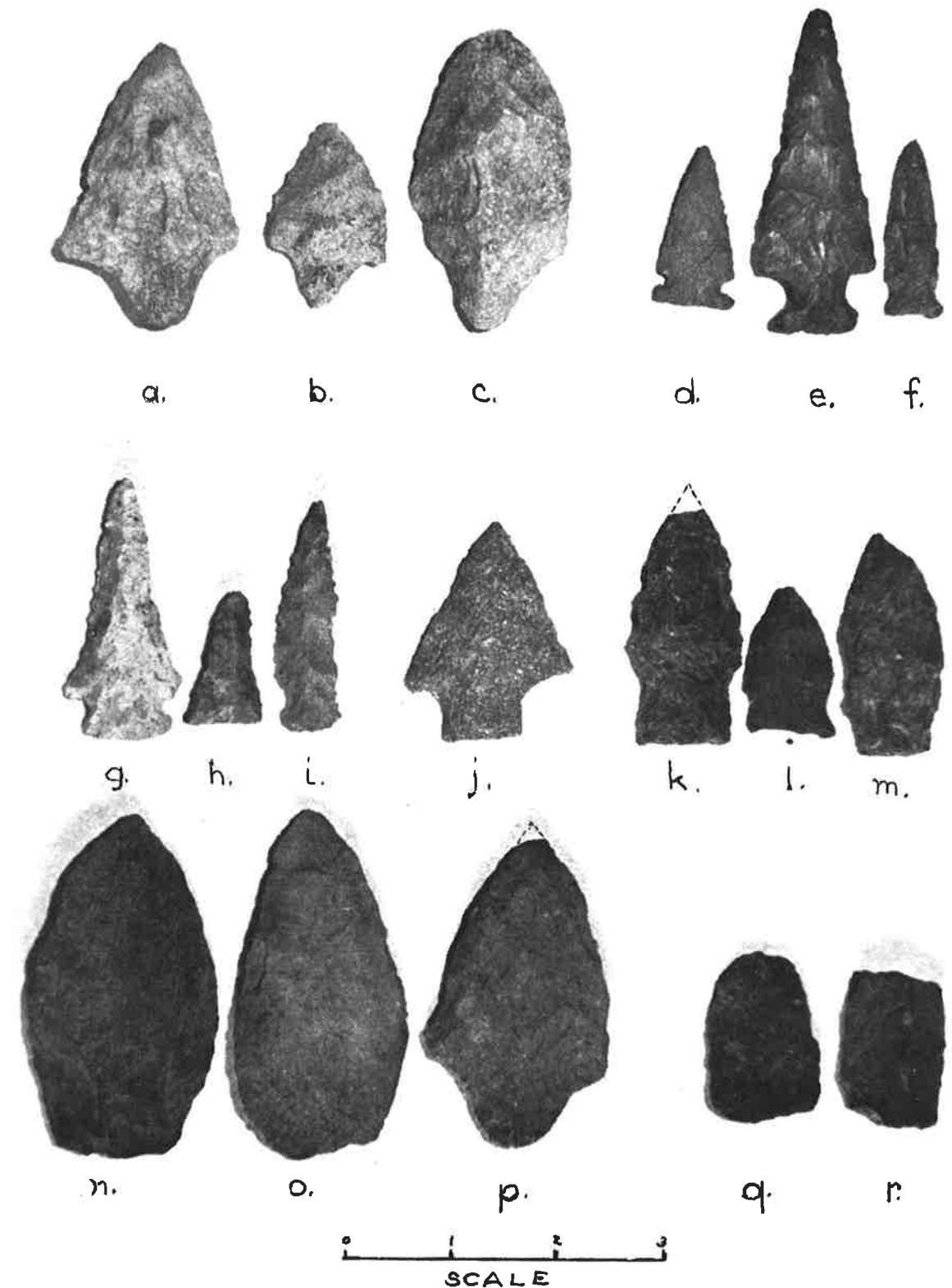


PLATE XIII

(The Bone Tools)

Most of the bone tools found in the various middens along the Creek were made from splinters cracked out of the heavy leg bones of the deer. Occasionally, bones from other parts, the skeleton of this animal were used. These included rib bones, the fibula, and the antler. The heavier bones from smaller animals were also used.

None of the awls, which comprised most of the tools, were very long and the average length was near three inches. They were usually well proportioned in a manner which allowed them to be comfortably held between the thumb and the index finger. A few were nicely pointed, nearly an inch wide and were made from the rib bone of a deer.

Bone awls had many uses and they may be divided into two main classes. Those with sharp or nearly sharp pointed tips and those that were blunt and rounded at the tip.

Some of the uses for those with pointed tips may have been; (1) a prick-punch for making holes in hides and skins prior to fastening them together; (2) as a needle?; (3) for incising pottery; (4) as a toothpick; (5) to remove a thorn or silver from under the skin; (6) as a "marrow-stick" to extract marrow from within a bone. Such a stick is still a popular tool, used even today by the Eskimo.¹⁶

An awl with a blunt rounded end, made from an antler tip, was used in the pressure process of flaking pieces of stone while making projectile points. This is one of the uses but does not account for the polished ends of some of these awls.

The tips of the awls varied considerably. Beside those that were sharply pointed at the tip and those that were blunt and rounded, some were wedged or chisel shaped. One such tool, about three inches long was wedge shaped on one end and pointed on the other.

There were middens in which only one or two awls were found. Other pits contained as many as 25 to 30. At times there were concentrations of them in one area of a pit, but for the most part they were found in random places.

¹⁶B. Miles Gilbert, Mammalian Osteo-Archaeology: North America. Missouri Archaeology Society, Columbia, Missouri, Photograph and Caption, p. 17, C.

PLATE XIII

(The Pipe and Pipe Fragments)

The collection shown here, of a pipe and pipe fragments from the Marshyhope area, constitutes a small and poor representation of this Indian artifact.

Except for the complete pipe, most of the fragments came from the Willin site and interestingly enough from a confined area. It was near the center of the pit region when examined in a north-south direction and completely out of the pit area to the east of the site. All the pieces were found on the surface of the ground which at this place is composed entirely of sand.

Fragments of pipes are small and difficult to see. As a result, they are easily over-looked, and again, since such material is not appealing to the average surface hunter, they are not collected.

All of the pieces were made from red or gray clay except one small piece of bowl fragment made from steatite, three pieces of a gray stone material, and one piece of hollowed out bone which was made into a stem.

Most of the pipe fragments were plain and had no incising. Of the five pieces that had designs, the treatment ranged from fine crude lines faintly scribed to bold sharp impressions in intricate patterns.

No examples of platform pipes were found, nor any pieces of the platform itself, but it is possible that some of the bowl pieces may have come from this type of pipe.

Of the pieces that have been found resemblances of pipe fragments similar to those of the Accokeek plain, a punctate variety of the Potomac Creek, a cord impressed type and some stem ends of tubular varieties.¹⁷

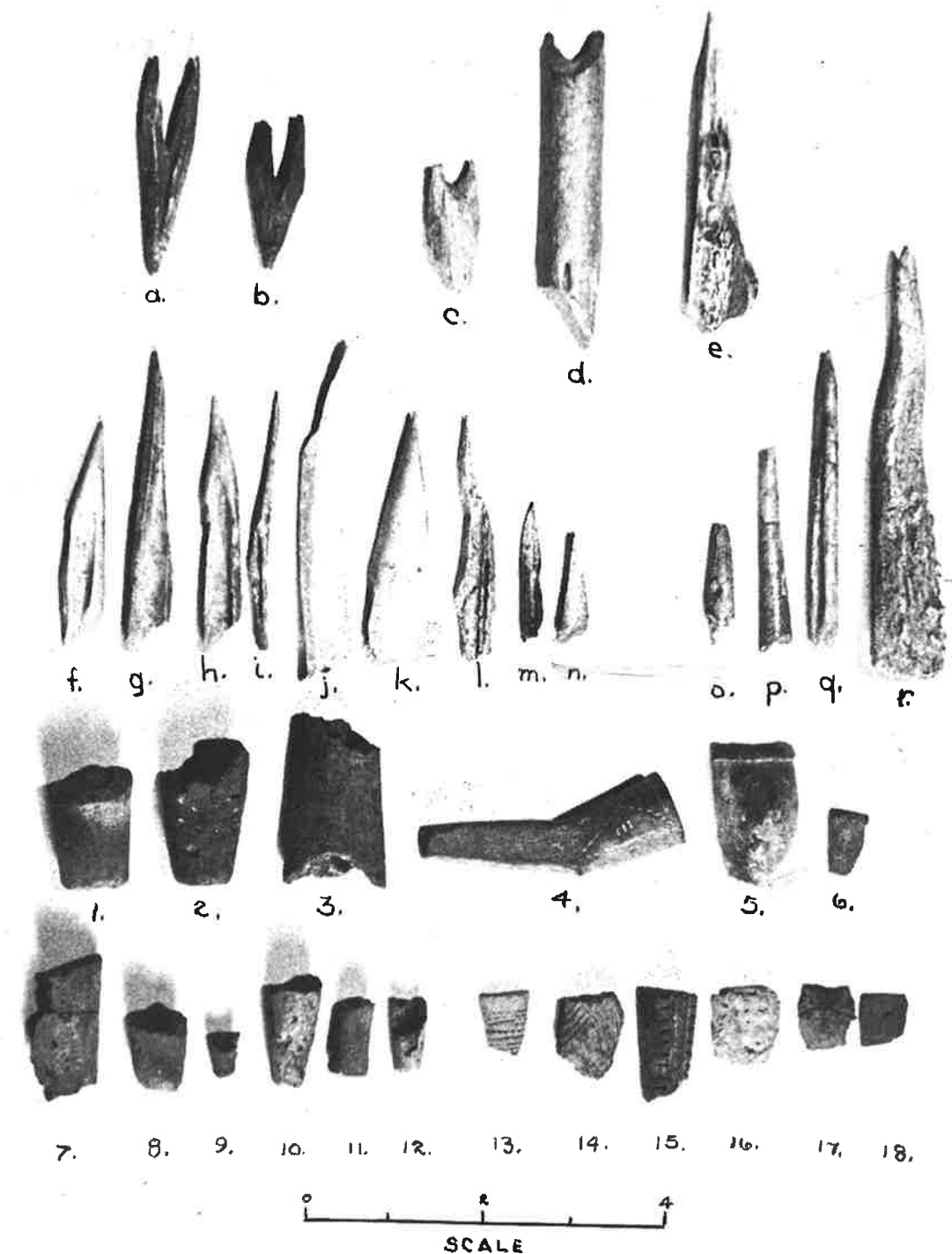
¹⁷Stevenson, Ferguson and Ferguson, The Accokeek Creek Site - A Middle Atlantic Seaboard Culture Sequence, University of Michigan, 1963, Plates XXI, XXII.

PLATE XIII

(Bone Tools and Pipe Fragments)

- a-b Both of these pronged bones are polished at the tip of the tines and show signs of being used. For what purpose they were used is not known nor have the bones been identified. Only a few have been found.
- c-d Gouge-like tool and cut from the long bone of a deer. Its use is unknown and not many have been found.
- e-h Splinter awls from deer bone. All have very sharp points and are highly polished either at the tip or up the bone an inch.
- i Needle pointed bone awl from the fibula of a deer.
- j-m Needle pointed bone awls from animal ribs.
- n Wedge-shaped tip from a bone splinter awl.
- o-r Blunt pointed awls from deer antlers. Tips of these tools are polished.
- 1-2 Large stem ends of Indian clay pipes; (1) gray color; (2) red color.
- 3 Middle section of a large stem clay pipe. There are two holes through the center of the stem. One larger than the other. The pipe of a gray clay.
- 4 Complete and decorated pipe. Similar to the Potomac Plain pipe. Measures $2\frac{1}{2}$ inches long, bowl 1 inch long. Pipe red in color. Found at Red Bank.
- 5-6 Bowl fragments with thickened rim. May be from the contact period. (6) This fragment is of steatite.
- 7 Large fragment of bowl from a clay pipe. No decoration.
- 8-12 Tips of clay pipes (various sizes). Border on Accokeek types.
- 13-14 Punctate decoration on pipe bowl fragments.
- 15 Decorated clay pipe stem fragment.
- 16-18 Plain bowl fragments.

PLATE XIII



RIM SHARD PROFILES

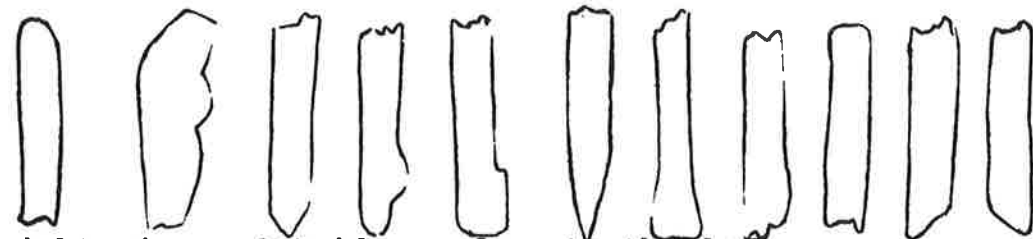
No pottery has been found which indicates the application of any kind of lug on the wall of the vessels. This innovation was probably unknown.

This report includes no grouping of rim shards to indicate the number and various types of rim treatments at separate sites. They have only been described as different ways of treating straight, in-curving and out-curving rims. Lip variations have also been mentioned.

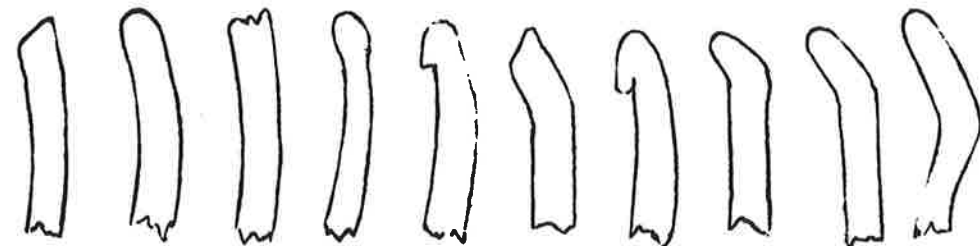
The profiles that are shown have not been drawn to scale with respect to each other.

Lip treatment may be flat, rounded, flat slanting in or out, plain, incised, cord marked, flaring, or tapering inward.

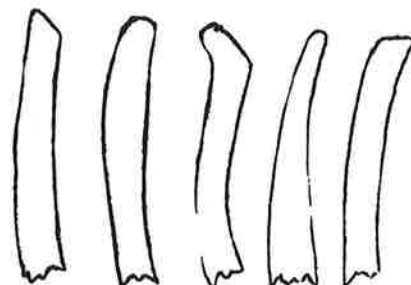
Rim treatment is straight, curving in or out, appliqued, or tapering to the lip. They may also be plain or incised.



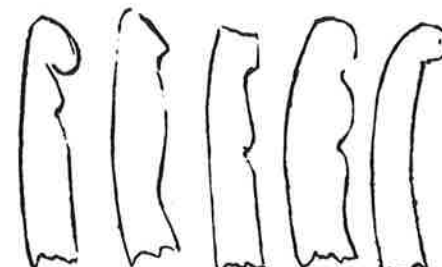
Straight Rims: Outside surface to the left.



Rims Curving Outward: Outside surface to the left.



Rims Curving Inward:



Miscellaneous Types:

MISCELLANEOUS TOOLS

(A) This tool, from the Willin site, was probably an arrow or shaft scraper. It is 3.2 cm. long and 2.0 cm. wide, made from brown jasper. The arc of the circle reveals a diameter of 19 mm. The edges of the curved surface are perpendicular to both faces of the stone and appear to be somewhat worn and rounded from wear. (Fig. 1.) This writer has found only one other such microlith locally and knows of no others. The overall size of the second one was slightly smaller with the arc showing a diameter of 14 mm. It was found at the Phillips site near Milford, Delaware.

The writer found another of these tools in an East African Cave. It was in an unexcavated area of Gamble's Cave which had been worked by Dr. L. S. B. Leakey. The cave is in the Rift Valley of Kenya, several miles south of the city of Naivasha. It was made from obsidian, collected from the slopes of Mt. Longonot, a volcanic cone which is still smoldering.

(B) Another tool, shown below, is more more difficult to explain than the shaft scraper mentioned above. It is jasper and two shades of light tan color, 4.0 cm. long and 2.0 cm. wide. One edge is finely serrated and worn in places so as to be difficult to see. The serrations measure 32 to the inch which equals those of a fine hack-saw blade. (Fig. 2.)

Just what method or procedure was used to make these fine notches is unknown. Of more interest might be the actual use of this stone tool.

It was suggested by the late Orville Peets that it might have been a sinew frayer. This is a possibility but the indentations appear to be too shallow for such practical use, and the contour of the edge of the stone, following its fracture, is too irregular.

A

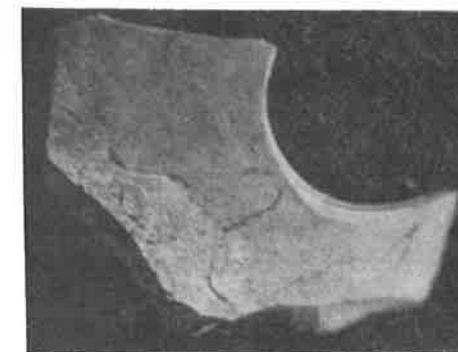


Fig. 1. A shaft scraper.

B



Fig. 2. A sinew frayer.