

BULLETIN

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of New Jersey*



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THE ARCHEOLOGICAL SOCIETY OF NEW JERSEY

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CONTENTS

	PAGE
Dedication to J. Alden Mason	1
J. Alden Mason by Dorothy Cross and Kathryn B. Greywacz	3
The Tocks Island Reservoir Survey in Pennsylvania by W. Fred Kinsey	5
There Are Petroglyphs in New Jersey by Herbert C. Kraft	13
Hyperostotic Fish Bones from Archaeological Sites by Stanley J. Olsen	17
The Cape May Point Site: Ceramic Industry European Trade Material by Richard C. Cook	19, 20
Membership List	21

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THE ARCHEOLOGICAL SOCIETY OF NEW JERSEY

BULLETIN NUMBER 24

FEBRUARY, 1969



The University Museum

Philadelphia

J. ALDEN MASON

January 14, 1885 — November 7, 1967

The Archeological Society of New Jersey dedicates this Bulletin to the memory of Dr. J. Alden Mason, devoted friend, counselor, and editor of the Society, and an internationally eminent ethnologist, archeologist, linguist, and author.

J. ALDEN MASON

A year has passed since Dr. J. Alden Mason died in the Bryn Mawr Hospital, not far from his home in Berwyn, Pennsylvania. The passing months have emphasized our debt to this scientist who was also our friend, adviser, and editor.

John Alden Mason was born on January 14, 1885, in Germantown, Philadelphia. He graduated from the University of Pennsylvania in 1907 and remained until 1910 for graduate work with Speck, Gordon, and Sapir, the last an outstanding authority on Indian languages. From Pennsylvania, Mason went to the University of California at Berkeley, where he obtained the Ph.D. degree in 1911 after working with A. L. Kroeber.

From 1911 to 1913, Dr. Mason was a delegate from the University of Pennsylvania to the International School of Mexican Archeology and Ethnology. During 1914-15 he served as a member of the Puerto Rican Insular Survey, and in 1916 he was a research fellow at the University of California. In 1917 he became assistant curator of Mexican and South American archeology at the Field Museum of Natural History, Chicago, where he remained until 1924. Then came a year as assistant curator of Mexican archeology at the American Museum of Natural History. On January 1, 1926, Dr. Mason came to the University Museum in Philadelphia as curator of the section of American archeology and ethnology, a position he held until he retired as curator emeritus in 1955. Even then he continued to work at the Museum. One of his major concerns was the New World Archeological Foundation, of which he became editor and field adviser in 1958.

Dr. Mason married Florence Roberts in 1921. He was survived by his wife, a son, a daughter, and four grandchildren.

Members of our Society, who knew Dr. Mason as an archeologist, are sometimes surprised by the wide range of his training, his field work and research, and his publications.

His first expedition (to Utah in 1909 with Sapir) was devoted to folklore and pictographs. A year later he began to investigate the ethnology and linguistics of the Salinan Indians of coastal California. This was followed by similar studies in central Mexico and near Great Slave Lake, in northern Canada. In Puerto Rico (1914-15) Dr. Mason dealt with folklore as well as archeology, and in 1917 he made an archeological reconnaissance on the Gulf Coast of Mexico that took him into Maya country.

For the Field Museum, Dr. Mason studied the linguistics of the Pima Indians in Arizona and did a year's archeologic field work in Colombia. At the University Museum he carried on field work in archeology and linguistics in western Pennsylvania, Texas, New Mexico, Arizona, Mexico, Guatemala, Panama, and Peru. He took part in the first aerial survey of lowland Maya country (1930), directed the first two seasons of field work at the important Maya site of Piedras Negras (1932-33) and spent a month there during the Museum's fourth expedition in 1935. In 1940, Mason excavated graves in Panama, bringing back rich collections of goldwork and painted pottery. In 1948 he resumed field work in linguistics, continuing it in 1951 and 1953.

Investigations led to reports, of which Dr. Mason wrote many. One of his most important works is the "Languages of South American Indians" on pages 157-317 of Volume 6 of the *Handbook of South American Indians* (Bureau of American Ethnology, Bulletin 143). Dr. Mason's most widely known book, however, is his *Ancient Civilizations of Peru*, published as a Penguin Book in 1957 and revised in 1961. Although an unpretentious paperback, it contains excellent illustrations and is still the most comprehensive work in its field.

Archeology is notable for its encouragement of amateurs who want to do scientific work and for collaboration between professionals and those amateurs. Dr. Mason did much to pro-

mote collaboration. He helped to establish regional societies and assisted in founding the Northeastern States Conference of Archeological Societies in 1933-34. This, in turn, led to the organization of the Eastern States Archeological Federation in 1935. Dr. Mason was president of the Federation in 1942-46 and served as its editorial chairman from 1961 until his death.

At various times Dr. Mason also was president of the Society for Pennsylvania Archaeology, the Pennsylvania Folklore Society, the Philadelphia Anthropological Society, and the Pan American Association of Philadelphia. He also was a vice president of the American Association for the Advancement of Science and the American Anthropological Association. He edited the *American Anthropologist* from 1945-48 and received the Litt.D. degree from Franklin and Marshall College in 1958.

Our Society had both his scientific and his popular leadership in mind when it made Dr. Mason an honorary member in 1943. He had already visited some digs of the Indian Sites Survey of New Jersey (1936-41), sponsored by the State Museum and our Society with

W.P.A. funds, and directed by Dr. Cross. In 1944 Dr. Mason began to edit our *News Letter*, improving its format and contributing short, informative editorials. He then led the Society in establishing the *Bulletin*, became its editor, and brought out its first number in July, 1948. He also edited the second volume of Dr. Cross's *Archaeology of New Jersey*, published in 1956.

As editor, Dr. Mason regularly took part in meetings of our executive board. He also attended most of the Society's regular meetings, where he became acquainted with members and their problems, and gave thoughtful advice to those who asked for it.

Though Dr. Mason died a year ago, two of the articles in this *Bulletin* received his editorial approval. A third which he approved awaits illustration. In a very real sense, the good which this scientist did for us lives after him. We shall have one more chance to incorporate it into the *Bulletin* which he established and edited for many years.

DOROTHY CROSS,
KATHRYN B. GREYWACZ.

November 7, 1968.

THE TOCKS ISLAND RESERVOIR SURVEY IN PENNSYLVANIA

A REVIEW OF WORK IN PROGRESS

by W. FRED KINSEY

INTRODUCTION

The Tocks Island Reservoir is one of 52 Federal multipurpose river basin programs in the Northeast that are either authorized or are under construction by the United States Army Corps of Engineers. All are subject to archaeological investigation. Five such projects are in progress for Pennsylvania and adjacent states where the boundaries are determined by a river. Some of the larger river basin programs are the Kinzua Dam on the upper Allegheny, the lock reduction navigation program for the Monongahela and Ohio Rivers, and the Tocks Island Reservoir on the upper Delaware.

Physiographically, the upper Delaware valley is part of the Appalachian Mountain Section of the Ridge and Valley Province. As the river passes the Tri-State area it turns toward the southwest and flows into a broad fertile valley. To the east this valley is bounded by the Kittatinny Range and on the west by a steeply rising escarpment of Devonian shales. The flood plain varies in width as the river flows between the valley walls. The river terraces are composed of glacial gravels and clay overlain by varying depths of alluvial soils. At the Pike and Monroe County line the river makes a sharp hook to the east after which it turns to the southwest. In this section the valley is bounded by Silurian shales and limestones until it passes through the Kittatinny Range at the Water Gap and emerges into the Great Valley Section.

Usually the Delaware River is a peaceful stream that provides water for nearby cities and pleasure for residents and tourists. Occasionally it goes on a rampage, as it did in 1955, causing death and millions of dollars' worth of destruction. In order to meet the needs of an expanding population which requires more electrical power and has more leisure time for

recreation, and to check the waste caused by massive flooding, the United States Army Corps of Engineers undertook a comprehensive survey of the water resources of the Delaware River Basin which resulted in the recommendation that a large multipurpose dam be constructed in the vicinity of Tocks Island.

Although the precise area to be flooded is not certainly known, it appears that the top of the dam will stand 428 feet above mean sea level. The headwaters of the reservoir will be in the vicinity of Port Jervis, New York, approximately 37 miles upstream. It was, therefore, necessary to search these 37 miles of bottomland up to the 500-foot contour for historic and prehistoric sites.

The National Park Service of the United States Department of the Interior is the agency responsible for the survey and salvage of archaeological sites by federal river basin projects. Yearly contracts were arranged through the office of John Cotter, Northeast Region, with Franklin and Marshall College to carry out the investigations on the Pennsylvania side of the Delaware River. Similar agreements between the Park Service and the New Jersey State Museum for work along the New Jersey side are in effect. We acknowledge Dr. Cotter's contribution to the program.

Three field seasons had been completed by 1966, when this paper was written. The first phase of the Tocks Island survey began in the summer of 1964. Three individuals located and

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Photographs for this paper were made by David Miller, of the North Museum, Franklin and Marshall College.

mapped 49 sites in Monroe and Pike counties. The method of operation was relatively simple. Work was carried out on a south-to-north basis. We inquired of property owners and collectors as to the location of sites, and in the case of farmers we sought permission to surface collect on their open fields, and to make test excavations if the conditions seemed to warrant them. We were well received and rarely were we turned away. Additional help was provided by members of the Forks of the Delaware Chapter of the Society for Pennsylvania Archaeology, and Dr. Vernon Leslie of Honesdale shared his Pike County site numbers with us.

The second phase of the program consisted of extensive test excavations based upon the information gleaned from the 1964 survey. During 1965 there were 18 field workers in Pennsylvania, including three professional archaeologists. Supplementary support came in the form of a National Science Foundation Grant and a Franklin and Marshall College Institutional Grant to conduct a summer archaeological training institute for superior high school students. Portions of six sites were excavated. The results were not as significant as expected. During the first year three people, unfamiliar with this large area, located sites, sub-surface features, and artifacts with relative ease. It was expected that extensive testing would reveal settlement patterns and even deep stratified sites. The amount of exposure or excavation ranged from 1,800 to 5,700 square feet per site for an average of 3,600 square feet.

Upper Delaware sites do not compare favorably with sites in the lower Susquehanna Valley in terms of density of occupational features and cultural remains. For example, 39 burials were uncovered in less than 1,000 square feet at the Ibaugh Site in Washington Boro, Lancaster County, Pennsylvania. In the Upper Delaware Valley the total number of square feet excavated over the past three years exceeds 37,000 and only four burials, each devoid of grave goods, were encountered. There is a comparable paucity of postmolds. At a historic Susquehanna Site in York County, 3,600 excavated square feet revealed the presence of hundreds

of postmolds outlining a longhouse 92 feet long by 24 wide. Upper Delaware sites yielded relatively few postmolds and the patterns indicating the presence of structures are not always convincing.

Pre-ceramic settlements along the Susquehanna also yield many more artifacts than do sites in the Tocks Island area. In three weeks of excavation at the Kent-Hally Site on Bare Island, 219 projectile points were uncovered. The total number found along the Delaware during three years amounts to 414 surface and subsurface projectile points. These collections are considerably enhanced, however, by a tremendously extensive and useful surface collection donated to the North Museum of Franklin and Marshall College by J. Havard Macpherson of Bushkill, Pennsylvania.

In view of this small return in excavated materials and in subsurface features, it was determined that during the 1966 season our efforts would be devoted to obtaining as much exposure as possible at one or two sites. Accordingly, two crews of six members each began excavations on the Peters-Albrecht property in Bushkill. One group worked at a site on the first terrace, 28 feet above normal summer water level, where many triangular points and much incised pottery had been found on the surface. Previous testing suggested the possibility of the presence of a stratified site. On the second terrace, 42 feet above the normal water level, another crew began excavation. Many collectors attested that this was indeed a rich site. Again, however, results from both sets of excavations were less than anticipated.

In brief, 7,300 square feet were excavated on the first terrace (Figure 1). Five deeper test squares measuring 5 x 5 feet were dug to check for stratification with negative results. The site was found to contain 25 features in the form of pits, two burials (one young adult and one infant), a large rock-filled feature, oval in shape and measuring 18 x 22 feet, 53 minor disturbances with 286 possible postmolds some of which seem to suggest the presence of at least two circular houses with diameters of 20 feet. The large rock-filled feature, located in the southeast portion of the excavation, may repre-

THE TOCKS ISLAND RESERVOIR SURVEY IN PENNSYLVANIA

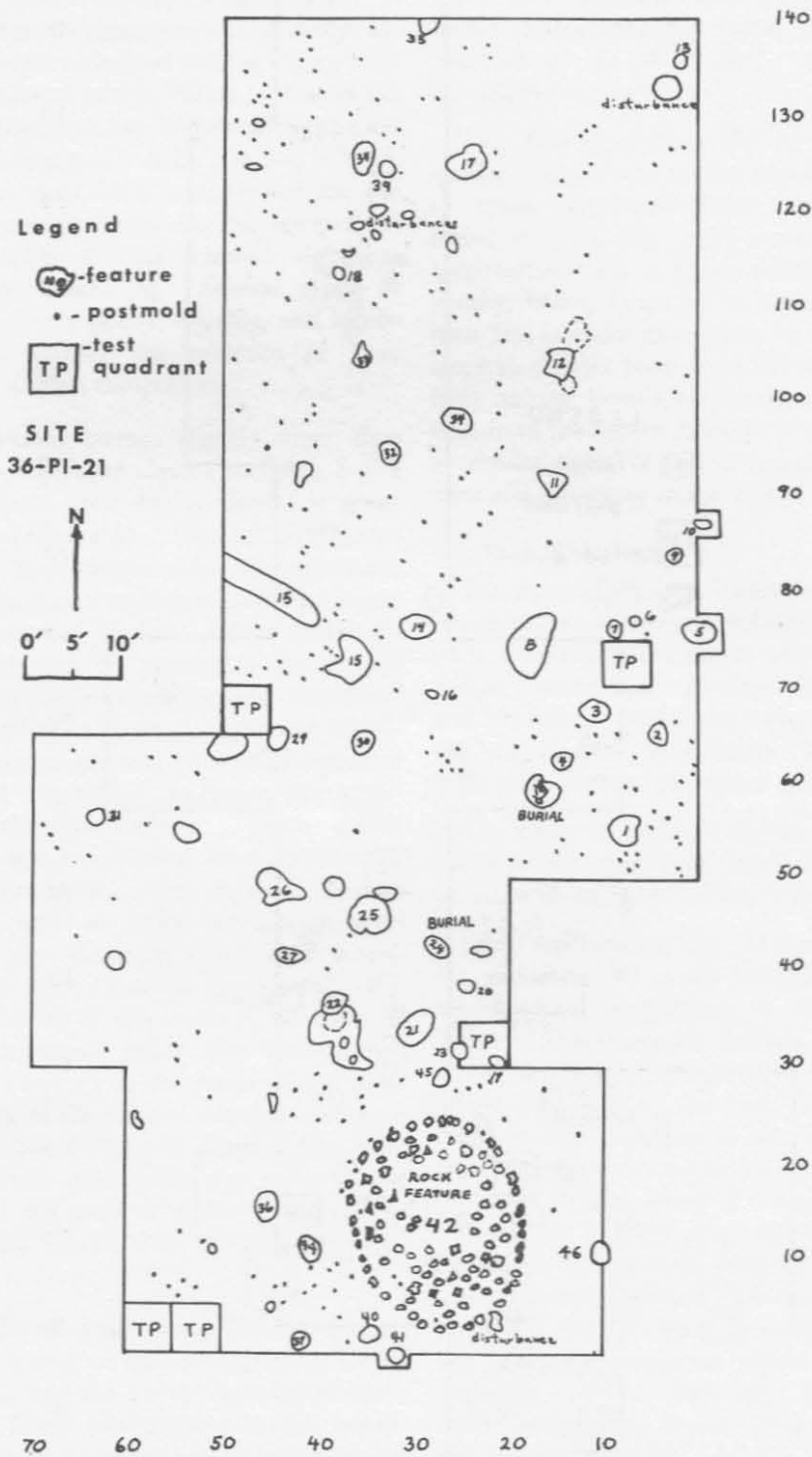


FIGURE 1. Excavation Plan of the Peters-Albrecht Site, 36-Pi-21, First Terrace.

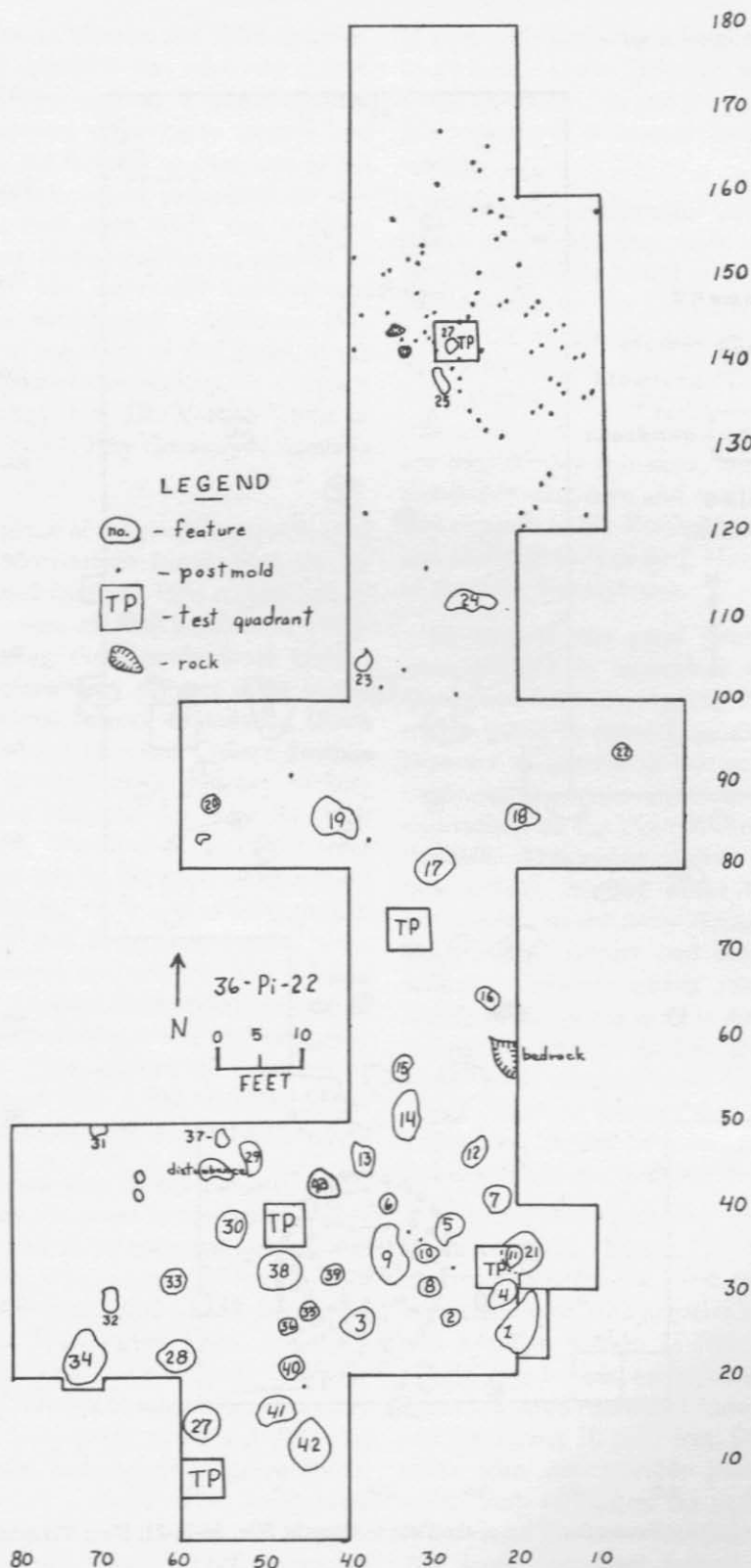


FIGURE 2. Excavation Plan of the Peters-Albrecht Site, 36-Pi-22, Second Terrace.

sent a large hearth. Postmolds close to the hearth form an arc but it was not possible to determine that a structure was actually associated with this rock-filled feature. Very little charcoal was found in this feature. Most of the features represent a Late Woodland occupation of the site dating about A.D. 500 to 1500. A date of about A.D. 1400 is suggested for the Chance phase component. Earlier occupations are represented by a Point Peninsula sherd exhibiting rocker stamping. Several types of stemmed projectile points, hearths, and workshop debris indicate the presence of Late Archaic and Orient components.

On the second terrace slightly more than 6,000 square feet were cleared and five 5 x 5 foot test squares were dug to depths as great as 64 inches (Figure 2). Discoveries included 33 pits, 15 disturbances, and 75 postmolds, several of which may represent a circular house with a diameter of 15 feet. Other postmolds are too scattered to present a meaningful pattern. The site is primarily Late Woodland in age, though some Late Archaic and broadspear components are also present. Suggested dates would be similar to those for occupation on the first terrace. These earlier occupations are represented by a number of diagnostic projectile point types. Several notched as well as some straight-stemmed points, and one Rossville point were found. At least five were found in the pit fill. We suspect that much of this (that is, the association of Archaic-point types with cord-marked and incised pottery) is the result of the accidental mixing of the cultural remains of diverse groups. In the process of digging pits Late Woodland Indians dug through older living surfaces and the tools of earlier peoples were unintentionally mixed with those of later inhabitants.

Perhaps the most significant find was a small undisturbed hearth on the second terrace which contained the base of a Lehigh broadspear made of jasper. There was nothing in this hearth except the basal fragment and charcoal, and it was obvious that the specimen had been fractured by fire. When this paper was first presented, it was estimated that the age of the

hearth would prove to be about 1500 B.C. Since that time the Yale University Radio-carbon Laboratory has found the age of the charcoal to be 1720 B.C. \pm 100 years (Y-1826).

This date provides a clue to the dating of similar components at two nearby sites. One of these, Brodhead-Heller, was previously tested and was dug in the summer of 1966 in cooperation with a group from Baylor University, Waco, Texas. The important Zimmerman Site is under excavation by a local archaeological chapter from Port Jervis. Both sites have strong broadspear components and the date from the Peters-Albrecht Site should apply to similar types of points found at these two sites and elsewhere in the valley.

GENERAL REMARKS

The upper Delaware Valley is a part of the Northeastern Woodland subculture area. As such, it exhibits the major cultural stages of Indian occupation (Paleo-Indian, Archaic, and Woodland) which are recognized throughout the Eastern Woodlands. However, this region has certain distinctive characteristics.

The upper Delaware Valley has yielded a few fluted point surface finds which demonstrate the presence of the Paleo-Indian in this region.

Sites representing the Archaic way of life are abundant and easily located, for they are found almost everywhere on the flood plain. There is a tendency for Archaic material to be more plentiful on the surface of the second terrace than it is on the first. This is because there is less depositional silt from overbank flooding, and because erosion on this terrace is greater. To date, none of the sites appears to be large or to have deep deposits. Generally they seem to represent temporary or semipermanent camps. Archaic sites are recognized by about 20 distinct types of stemmed, notched, and lanceolate projectile points. Major lithic materials are overwhelmingly black flint and chert, though shale is a distinctive and diagnostic minority material. Among 2042 projectile points 45.6 per cent are made of flint, 24.4 per cent are chert, 11.6 per cent are shale, and 8.3 per cent are argillite. Jasper forms 5.9 per cent

of the total, with rhyolite, quartz, quartzite, and other materials occurring in limited number. Laurentian notched types occur with the greatest frequency; Lamoka is poorly represented. Many of the point types are distinct forms which do not conform to any established types.

Figure 3 illustrates a distinctive Late Archaic point type that is narrow-bladed, stemmed, and made of shale. This type has only recently been recognized and its distribution has not been determined, though it appears to be centered in the upper Delaware Valley. Although there is some overlap between certain of these types, very few of those found in the upper Delaware Valley resemble types that are common below the Water Gap or in the Susquehanna Valley to the West.

Other tools include axes, spearthrower weights, and a wide range of rough cutting tools and scrapers. Artifacts of the Archaic period are generally found scattered throughout old living surfaces and in rock-strewn hearths rather than in pits.

The broadspear tradition (1700-1500 B.C.) is a distinct cultural manifestation of the Late Archaic period. Three diagnostic point types, commonly called broadspears, are typical. Each of the three types (Susquehanna, Lehigh, and Perkiomen) is distinct in some details, but in general they are broad-bladed and have an asymmetrical semi-lozenge shape. The stem varies in each type and constitutes the important distinction between the three types. A related type is the Orient point. Broadsppear and Orient types are made almost exclusively of jasper, flint, and chert, though a few, mainly Susquehanna broadspears, consist of rhyolite. Other distinctive artifacts associated with the broadspear cultures are soapstone bowls and rings. In the upper Delaware Valley, fragments of soapstone bowls are sparse and the other cultural materials associated with this period are poorly known. On the other hand, two of the types of broadspears are fairly common and conspicuous.

The last major stage is the Woodland Period. Agriculture is its most significant innovation. Corn, beans, and squash become the main food

sources, supplemented by fish, wild game, and fresh-water mollusks. Pottery is added to the cultural inventory evolving from interior-exterior cord-marked surface treatment to fabric-impressed exteriors, net-impressed exteriors, and finally to incised decorations on collared vessels. Late Woodland pottery is extremely varied and complex. Owasco (pre-Iroquoian) pottery is characterized by cord-marked bodies with decorative motifs impressed into the collar and neck with a cordwrapped paddle or stick. These techniques gradually give way to incised decorations made with a sharp pointed instrument such as a bone or antler stylus. The latter decorations are the hallmark of the conspicuous full-blown Iroquoian types.

Early and Middle Woodland sites are not abundant, but the opposite is true of Late Woodland sites. Time-markers for the former periods, Meadowood and Jack's Reef corner-notched points and the ceramic types normally associated with them are relatively scarce. Incised pottery, milling stones for grinding grain, pestles, triangular projectile points, celts for woodworking, netsinkers, flexed burials without mortuary offerings, circular pits dug into the subsoil for storage, refuse, and other purposes, and circular houses evolving into longhouses are typical features of the Late Woodland.

Late Woodland sites are omnipresent in the upper Delaware Valley and are diversified in both their distribution and in their ceramics. The more than a thousand sherds from local collections as well as from our excavations include a wide range of Owascoid forms, the most numerous being Owasco Corded Horizontal, Owasco Platted, and Owasco Corded Collar, plus a variety of intergrades and untyped styles that are probably unique to the upper Delaware Valley. Many of the incised ceramics are parallel with and related to the development of the Mohawk series of Eastern New York but there are significant variations (Plate I). In the upper Delaware Valley there occurs a pottery type of Mohawk ancestry, which Witthoft calls Munsee Incised (Witthoft 1959 pp. 51-56). At present this is a poorly understood late type. There are many problems relative to the identification of archaeological sites and ceramic

THE TOCKS ISLAND RESERVOIR SURVEY IN PENNSYLVANIA

complexes with historic Delaware Indians. European materials occurring as grave furniture suggest that certain sites, such as the one component at Bell-Philhower and the Van Etten Sites near Port Jarvis may be of Munsee Delaware origin. However, the problem has received only superficial attention and much more ethno-historical research coupled with archaeological investigations must be carried out before these identifications can be made with certainty.

The preceding remarks present a broad and general outline of the prehistory of the upper Delaware Valley. As a result of recent field work some more specific comments can be made:

This is pit archaeology. During the past three years we have cleared more than 240 pits which were dug and then filled by the Indians. Mostly they hold a surprisingly small quantity of cultural material and plant and animal remains. This situation has parallels at other places in the Northeast. William A. Ritchie, working at the Bell-Philhower Site in Sussex County, New Jersey, found 45 of the hundred pits excavated to be sterile (Ritchie, p. 167). In the Mohawk and Hudson valleys, a culture area that is closely related to the upper Delaware, Ritchie has often obtained a relatively small amount of information and material by a considerable expenditure of time and work. Still, many of the data for the interpretation of the Late Woodland Period must be derived from the ubiquitous pits.

The pits themselves were dug for various purposes. Some were originally dug for storage of food while others were refuse pits into which broken stone tools, chips, and sherds were thrown. A minority contain lenses of sand. Since coarse-grained sand is not found in the upper levels of the soil profile, it is apparent that this material was transported to the site. Possibly sand, available from nearby beds, was spread over the floor of the house, as a living surface. As the house was cleaned or swept out, the sand, together with all the household floor litter, came to repose in pits which were receptacles prepared for refuse.

Some pits are fire pits, but the function of others is not easy to determine. A few shallow pits may have been slept in.

Pits tend to occur in groups. Frequently large areas are devoid of pits, though in other sections of the site they are concentrated. At the Peters-Albrecht Site on the first terrace the pits tend to be in groups roughly parallel to the river in a northeast to southwest direction. They cluster in greatest numbers in the southeast portion of the site, which is closest to the river. This is also the location of the adult female burial and the infant burial.

A tentative classification of pit types has been established, according to the profile which individual pits exhibit in cross section. Profile data are not available for all pits.

TABLE 1
DESCRIPTIONS OF PIT TYPES—UPPER DELAWARE

	<i>Number</i>
1. Shallow Basin—6-12 inches deep; width over 3 times depth	17
2. Basin—over 12 inches deep; width over 3 times depth	5
3. Bowl—less than 20 inches deep; width under 3 times depth	25
4. Deep Bowl—more than 20 inches deep; width under 3 times depth	17
5. Straight side—less than 12 inches deep; vertical sides	4
6. Shallow undercut—undercut sides; less than 24 inches deep	10
7. Deep undercut—undercut sides; over 24 inches deep	4
8. Cone—cone shaped; at least 24 inches deep	2
9. Aberrants	5
Total	89

Postmolds and the pits have a generally negative association. Where the greatest concentration of postmolds is found we find few pits, although at the Peters-Albrecht Site on the first terrace there are two unusual deep conical pits, 18 inches in diameter by 30 inches deep, in the area of the greatest postmold concentration. At the site on the second terrace, postmolds (including the possible circular house pattern) cluster near the northern end of the site while the pits are most abundant in the southern portion. Indeed, they are very close to the edge of the second terrace. At both sites one can discern two generally parallel and straight rows of postmolds. On the first terrace they lie in rows 40 to 45 feet long and 20 feet apart, but on the upper site the rows are 30 to 42 feet long and 15 feet apart. In general the postmolds are small; about 2 inches in diameter

and less than 3 inches deep. Usually they are rounded, not pointed, at the bottom.

The more extensive excavations at the Peters-Albrecht sites confirm the previous survey and salvage work. Though Late Woodland sites are abundant, they are thinly scattered over a wide area. The inhabitants left behind little cultural or other material. This paucity of material is attributed to natural decay and especially to a scarcity of artifacts made of non-perishable materials. We believe that in this particular epoch Indians were living in small settlements and had very little contact with peoples outside the immediate area. One or two houses (or possibly a few more) constituted a settlement. The basic social unit was the nuclear family. Probably it was not until the arrival of the European with his prized trade goods that these small family-unit villages coalesced into large tribal villages. The desire for the coveted trade goods, especially the flintlock musket, led to intense rivalry for trading supremacy. Warfare erupted on a large scale and groups banded together for mutual protection. Villages became large, with numerous longhouses surrounded by a palisade or stockade wall.

If this theory is correct there should be many small short-term occupancy sites similar to Peters-Albrecht, McCann, Lee's Terrace, Brodhead, and Ministerium sites (dug in 1965) which have Late Woodland components and fit this description. To date the Bell-Philhower Site in Sussex County, New Jersey, is the most significant site with trade materials which may confirm this theory.

It is possible that, although the upper Delaware Valley was inhabited over a long span of time, there were very few concentrations of populations. Settlements may have contained few people and were widely scattered. Possibly the river valley was subject to seasonal occupation. The Indians may have lived in small

hamlets and villages on higher elevations, in protected glens, or on hilltops back from the river. The occupation of the bottom land may have occurred only in the spring of the year, for example. The abundance of netsinkers attests to an emphasis on fishing, and that may have been determined by the migration of shad up the Delaware River each May and June. The male population may have moved onto the floodplain for short periods while shad or other fish and game were in season. If a large assemblage of faunal remains were available for analysis it might be possible to support or reject this hypothesis of seasonal occupancy.

Encampments may have consisted of crude lean-tos or simple windbreaks of poles and hides. Perhaps the people slept in the open. As previously suggested, some of the pits may have served as beds. The scarcity and random distribution of postmolds seems to support the suggestion that only simple shelters were built.

Whatever the answers to these problems may be and wherever the sites that hold these answers, the interest of northeastern archaeology will be enhanced by continuation of the survey. More sites will have to be excavated and larger areas explored before the dam is built. The upper Delaware region does not have a long tradition of archaeological excavation similar to comparable areas of New York and Pennsylvania, and once the region is under the waters of the Tocks Island reservoir, the evidence will no longer be available.

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THERE ARE PETROGLYPHS IN NEW JERSEY

by HERBERT C. KRAFT

Petroglyphs have been observed in almost every corner of the world, from Scandinavia to South Africa, from Ireland to India, in Central and South America, and even on the islands of the Pacific Ocean. They are quite common throughout the United States, but it had become almost axiomatic that they do not occur in New Jersey. Until recently (Kraft, 1966), the only references in the literature to petroglyphs from this state were the reports of a possible "hieroglyph" from Westfield, which was carefully qualified by "if such it be" (Taylor, 1957:21), and the so-called pictographs described in *Art on Stone by the American Indian in New Jersey* (Comunale, 1963), which is too fanciful to merit serious attention.

For years, serious amateurs and professional archaeologists in New Jersey have had to cope with and explain away "rock carvings" that either were patently faked or showed only imaginary resemblances to genuine petroglyphs. It was, therefore, with some skepticism that I learned of the first petroglyph described herein. The occasion was a telephone call from Mr. Rudyard Jennings of Short Hills, inviting me to come with him to investigate a rock discovered by his son Jon on their Delaware River summer property—a rock with "lizards and deer carved into it." Mr. Jennings had no technical knowledge of the Indians that formerly inhabited this part of northern New Jersey, but he was certain that the rock was "carved" by aborigines. His description, however, was sufficiently provocative to warrant an investigation of the artifact *in situ*, whereupon the importance of the discovery immediately became apparent. Mr. Jennings assisted in the removal of the specimen and donated it to the Seton Hall University Museum, where it is now exhibited.

The Jennings property lies on the Delaware River about 2.5 miles downstream from Dingmans Ferry. On maps of the New Jersey Department of Conservation and Development, it is plotted as 21-24-1-5-6 (Cross, 1941, p. 4).

The site is densely wooded and rises steeply from the river to the Old Mine Road. To my knowledge, it has not produced many Indian artifacts, though prolific sites have been reported both north and south of the Jennings property.

The unusually severe drought of the summer of 1965, coupled with the impounding of a portion of the Delaware's waters in New York State, so seriously reduced the river's flow that wide stretches of normally submerged river bottom were left dry. This newly exposed area consisted of an accumulation of cobblestones overlying deeply pot-holed bedrock of igneous origin. The sandstone slab bearing the petroglyph was the largest flat rock in the immediate area.

I doubt that the petroglyph was originally located so near the water. It is more likely that it lay on higher ground in aboriginal times, and that it slipped to its present location when the river undercut the banks and carried away soil that once supported the slab. On the other hand, the fact that the location of the petroglyph coincides with the eastern terminus of a rapid suggests that it may have been placed there to indicate a crossing in the river. Today, at least, the Delaware is more easily forded at this point than at any other in the immediate area.

DESCRIPTION OF THE JENNINGS PETROGLYPH

The figures that make up the Jennings petroglyph are pecked into an irregular slab of rock that is exactly 5 feet in greatest length, 4 feet in maximum width, and 6 to 9.5 inches thick, and weighs an estimated $\frac{3}{4}$ tons. Consisting of compact sandstone, the rock belongs to the Stony Clove formation of the Sonyea group of Upper Devonian Age (Pratt).

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Submersion of the stone beneath the waters of the Delaware for many years may account for the surprisingly good condition of the figures. Such submersion would prevent the usual disintegration of the rock by differential heating and cooling, frost action, or chemical weathering. A limited portion of the surface has apparently scaled off (Plate IV, Fig. 1, below dotted line), but this has fortunately done only minor damage to three figures (Nos. 14, 15, 28).

The entire petroglyph contains 21 readily recognizable figures and about 12 that cannot be identified. These figures and their manner of execution not only indicate that this specimen is a genuine petroglyph; they also are quite different from those reported from Pennsylvania (Swauger, 1961-1965; Cadzow, 1934), and from other petroglyphs such as the Bald Friar rock in Maryland (Mallery, 1893, p. 84; Marye, 1938, p. 97), the Dighton rock in Massachusetts (Schoolcraft, 1853; Vol. 1, p. 114, Vol. IV, p. 120; Mallery, 1893, p. 86) and the petroglyph which Schoolcraft illustrates as having come from New York. (Schoolcraft, 1853: Vol. II, p. 85 and Vol. III., p. 88).

Each figure of the Jennings petroglyph was pecked and then was rubbed into the rock with a stone (Plate IV, Fig. 2). The depth of the pecking, except in the cup-shaped heads, ranges from about .07 to .15 inch. Fourteen pits or cups are also pecked to depths of 0.25 to 0.45 inch. Five of these depressions form the heads of manlike or lizardlike figures (Fig. 3, Nos. 3, 4, 5, 7, 13) and two (Nos. 16, 17) may represent the eyes of an incomplete face of which 18 and 19 suggest the nose and mouth. Manlike or lizardlike figures range from 3.8 to 7.2 inches in length, the largest of them (No. 23) being 7.2 inches long and 8.5 inches wide. The animal figures also fall within this size range.

The Jennings petroglyph is of interest not only for the multiplicity of its figures, but also because of the ways in which basic figures are often varied. Some figures are quite geometric and regular (Plate IV, Fig. 1, Nos. 4, 12, 22, and 16) but others are executed in curved lines (Nos. 2 and 3). Some figures have straight

limbs (Nos. 23 and 24), and still others are flexed upward or downward.

The petroglyphs have been carefully examined photographically and with the aid of a binocular microscope. There is nothing to suggest fakery or vandalism: no initials, no caricatures, no dates, no signs of fresh, unpatinated pecking; in short, nothing to indicate that the petroglyphs are anything other than the work of pre-Contact Period Indians. The petroglyphs appear on only the flat face of the rock; the sides and bottom are in no way altered from their natural state. The author has, furthermore, submitted a previous description of the petroglyph (Kraft, 1966), along with detailed photographs, to Dr. James L. Swauger of the Carnegie Museum, Pittsburgh. Dr. Swauger, a recognized authority on eastern petroglyphs, is in substantial agreement with the evaluations contained in this article, and is convinced of the petroglyph's authenticity. (Swauger, personal correspondence.)

The figures on our New Jersey petroglyph may be tentatively classified as follows, all references being to Plate IV, Fig. 1:

- I. Men with Sexual Appendages, or Lizardlike Creatures
 - a) With uplifted arms — Nos. 1, 4, 10, 22 and 15?
 - b) With arms extended — Nos. 5?, 12, 13? and 24.

With arms flexed downward —
Nos. 2 and 26.
- II. Manlike Figures without Tail or Sexual Appendages
Nos. 3?, 7, 10?, 13?
- III. Man (?) with Bow, Lance or Staff
No. 4.
- IV. Dragon-fly-like Creatures?
No. 23.
- V. Indeterminate Manlike forms
Nos. 3, 5, 10, 13, 15.
- VI. Mammal-like figures
Nos. 6, 8, 9, 11, 21.
- VII. Bird Track (Cadzow 1934, Swauger 1964)
No. 25.

VIII. Possible Face

Combination of Nos. 16, 17, 18, 19.

IX. Unidentified

Nos. 20, 27, 28 and others unnumbered.

In comparing the figures of the Jennings petroglyph with those already reported from Pennsylvania, Maryland, West Virginia and Massachusetts, we immediately notice two basic distinctions. First, the New Jersey petroglyph is composed of "stick" figures, while those from other states are for the most part two-dimensional outlines. Second, many of our figures have cup-shaped heads, a feature lacking from the petroglyphs reported by Cadzow and Swauger. Subjects shown in the Jennings petroglyph also are difficult to equate with those illustrated in Cadzow's *Safe Harbor Report* No. 1, Moorehead's 1938 *Susquehanna River Expedition Report*, and subsequent publications by Swauger. There are no identifiable spirit otters, thunderbirds, snakes, bear tracks, human footprints, or other comparable motifs identified by these writers.

The manlike or lizardlike figures do seem to have a close affinity to petroglyphs from California (Mallery, 1893: 57), Colorado (Mallery 1886, p. 73), Idaho (Mallery 1886, p. 228; 1893, p. 77) or such distant and obviously unrelated places as Guinea (Mallery 1886, 42), and Brazil (Mallery, 1893, p. 151; Rouse 1949, pp. 498, 500). Only one figure (Fig. 3, No. 7) seems to be comparable to those which Cadzow describes from Walnut Island, Pennsylvania.

The animal figures do resemble Pennsylvania petroglyphs. Those of Fig. 3, Nos. 6, 8, 9, 11, and 21, appear to have counterparts among the petroglyphs on the little Indian Rock illustrated by Cadzow (1935, p. 42) and Mallery (1893, p. 108) although they are not as full-bodied. There are, however, no "X-ray" motifs such as we find on the Timmons Farm petroglyph (Swauger 1962, p. 34).

No interpretation of the meaning of the figures on the Jennings Petroglyph can be suggested. It is true that Swauger (1966) has attempted to interpret the petroglyphs from the Susquehanna and Ohio drainage areas, justifying his efforts by the fact that these petroglyphs

share characters such as the spirit otter, thunderbird, bird tracks, and other motifs in common with the Midewiwin medicine scrolls of the Ojibway (Chippewa) Indians, or with the notations made by Heckewelder and others. But no such analogy exists for the Jennings figures since they are obviously quite different and seemingly are more ancient. The temporal relationship of the Jennings petroglyph is uncertain, however, for it was not located in any datable archaeological context and radio carbon readings cannot be made from a sandstone slab. We simply have no way of knowing who pecked the figures into this stone or when the work was done.

THE MINISINK ISLAND PETROGLYPH

A very interesting, though smaller and simpler, petroglyph has been brought to my attention by Mr. Walter E. Franke, of Phoenixville, Pennsylvania. He found it in 1941 while surface-collecting on Minisink Island, which lies in the Delaware River and is part of Sussex County, New Jersey.

Mr. Franke's find is a slab of red sandstone 12 inches long, 11.5 inches in its greatest width, and about 2.1 inches thick. The upper edges of the slab, as it appears in Plate V, have been broken off, presumably by a plow. Most of the third to fifth fingers of the right hand, therefore, are missing. Except for this, the artifact is in excellent condition.

As is true of the Jennings petroglyph, nothing casts doubt upon the authenticity of this specimen. The hands were meticulously pecked into the sandstone to an average depth of 0.25 inch, after which the entire intaglio was rubbed smooth. The general impression produced is that of dainty, stylized hands with overlong fingers that show no hint of joints. The hands also are smaller than one expects of woodsmen or agriculturists. The left hand measures only 6.75 inches from base of palm to tip of middle finger, and 3.5 inches across the palm. The right hand is of comparable size.

A straight groove 3.5 inches long and about 0.25 inch deep lies obliquely between the base of the hands. It is not well finished and may have served as a shaft smoother.

In general shape, these carved hands are remarkably like mica and copper hands found in some Hopewell mounds (Kelemen 1956, pl. 193; Fundaburk and Foreman, 1957, pl. 107; Martin, Quimby, and Collier 1947, fig. 79) and bear some resemblance to a painted hand of the Mississippian tradition from Moundville, Alabama (Willey 1966, Fig. 5-54, p. 302). The Hopewell similarity may be more than coincidental, for Ritchie refers to a cremation burial on Minisink Island. The burial was accompanied by artifacts of the Kipps Island type, which suggests Hopewell influence (Ritchie 1965, p. 234).

As has been said of the Jennings petroglyph, we may never know the origin or purpose of the Minisink petroglyph. It was a surface find on an island that has undergone repeated and intensive cultivation, during which surface and subsurface deposits were intermixed. Still, both the Minisink and Jennings petroglyphs provide a glimpse of artistic and perhaps religious aspects of life in ancient New Jersey.

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HYPEROSTOSIC FISH BONES FROM ARCHAEOLOGICAL SITES

by STANLEY J. OLSEN

During the past twenty years I have examined many collections of animal bones from archeological sites. The remains came from occupation sites that ranged in age from pre-Columbian Indian mounds to kitchen-refuse dumps in 17th century Colonial Williamsburg. Almost every collection from excavations that were close to the Atlantic coast contained various peculiar pear shaped or swollen bones (Plate VI).

Some ichthyologists have interpreted these bones as "pathological fish-spine bases" but have not gone beyond this interpretation. The literature that refers to these interesting swollen fish bones dates back to the 1600's. However, it is scant at best and is scattered throughout uncounted volumes that deal with fish. At the present time a thorough study of these bones is being undertaken by Dr. T. Edinger of the Museum of Comparative Zoology at Harvard University. The resulting monograph may give the answers to many questions as to the taxonomic range of fishes possessing these bones and may indicate their function.

It is a matter of some question whether these hyperostotic bones remain fairly constant in shape and form within a species. Perhaps a large comparative collection of these fish skeletons will answer a part of this question.

Although some ichthyologists still adhere to the theory that these osteomas or swellings are pathological, revealing a diseased condition of the bone, it has been demonstrated, by A. Konnerth (1966) of Woods Hole Oceanographic Institution, that they seem to appear, and rather uniformly, in the older adult fish of some species. This is not to infer that all mishappen bones are considered to be normal and non-pathological in nature. Some diseased bones are present in many species of fish and in all age ranges.

The swollen elements, when sectioned, vary in internal structure from compact bone to that of spongy texture. This rules out exostosis,

which is an irregular outgrowth beyond the normal bone surface. Perhaps these elements are so commonly recovered and collected because they tend to survive longer than the other elements of the fish skeleton, which quickly disintegrate after burial.

Hyperostotic bones are found in Pliocene and Pleistocene fossil deposits in Florida (Plate VI) as well as in nearly every coastal Indian refuse mound or midden. A partial list of those fish in which hyperostoses are found includes the spade fish, *Chaetodipterus faber* (Plate VII); the common jack or crevalle, *Caranx hippos*; the yellowtail jack, *Caranx bartholomei*; the haddock, *Melonogrammus aeglefinus*; the angelfish, *Platax pinnatus* and a lancefish, *Lepidopus caudatus*. Hyperostoses are known mostly from salt water fishes, having been reported as occurring in only one fresh water form, the rainbow trout, *Salmo gairdneri* (McCrimmon and Bidgood 1965). The swellings are most commonly found in salt water fish that inhabit the warmer seas.

Some ichthyological reports mention the swelling of the supraoccipital, dorsal spines and other bones in the spadefish, *Chaetodipterus* but do not go into details as to the supposed reason or function of these bones.

In some instances the ecological range of the fish which bear these bones is considerable. *Chaetodipterus* is found from Cape Cod to Brazil.

Not only can these bones be an aid toward determining the food that was utilized by the early coastal inhabitants of the western hemisphere but in some instances they may indicate

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native fishing habits as well. Some of these "swollen bone" fishes are known to completely ignore a hook or lure and must be obtained by trapping or netting. Others are restricted as to the depth of water which they inhabit. Some are shallow water, coastal forms, others are found only in deep off-shore waters.

Once identified from these isolated osteomas or hyperostotic bones, the habits of the fish may give valuable clues to help the archaeologist

interpret his site in a way that no other material can do.

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THE CAPE MAY POINT SITE: CERAMIC INDUSTRY

by RICHARD C. COOK

This site is located in Cape May County, where the Delaware Bay opens into the Atlantic Ocean. During the past 50 years, erosion has steadily eaten into the shoreline, uncovering many camp sites. Primarily, it seems, these sites were small fishing and gathering centers where Indians camped in the summer months.

The author and his family have collected at Cape May Point for approximately 35 years. Over 4,000 stone artifacts have been found and catalogued, but only 86 pottery sherds have come to light. Their scarcity can be attributed in part to the rigorous nature of excavation by water, but it is unlikely that this site ever was inhabited long enough for many household utensils to accumulate.

Fortunately, however, a number of the pottery fragments are large enough in size (i.e. 4 to 9 square inches) to be thoroughly diagnostic. Indeed, all 86 pottery sherds show the following characteristics:

TEMPERING

Heavily tempered with mineral fragments and pebbles. Most of this material is quartz, but there also is some crushed jasper and chert. Several pieces contain a darker mineral. Two pieces contain large quantities of mica. The grit is medium to large, the average being about 3mm and the largest about 6mm in diameter.

TEXTURE

Coarse paste was used in the manufacture.

METHOD OF MANUFACTURE

The sherd edges are worn but the pottery appears to have been made by coiling.

COLOR

The sherds range from tan or buff to dark gray. The majority are in the gray spectrum. As a general rule, the interior surface is darker than the exterior. A number of pieces show signs of burning.

EXTERIOR SURFACE FINISH

Some sherds show definite impressions of cord-wrapped sticks. These impressions are about $\frac{1}{4}$ inches apart. Most fragments are smooth. In part, this may be the result of scouring by surf. The two holes drilled in one sherd are 3mm in diameter; a smaller hole in another sherd measures 2.2 mm.

INTERIOR SURFACE FINISH

All interiors are relatively smooth.

WALL THICKNESS OF SHERDS

The range is between 4.5 and 7.5 mm. All pottery fragments have been well fired.

VESSEL TYPE

Nothing can really be said about the shape of the vessels. All sherds appear to be from different pots. All fragments are slightly convex body pieces.

These characteristics indicate that all the sherds belong to the Riggins Complex. This is not surprising since Riggins is the most common type of pottery found in Southern New Jersey. Both Riggins Fabric Impressed and Riggins Plain are represented, but the latter type predominates.

Since the Riggins type of ceramics is associated with the Late Woodland period, their presence indicates that the Cape May Point site was used up to relatively late times.

Two unusual ceramic finds consist of elliptical discoid objects about 8 mm in thickness. One is 30 mm long and 21 mm wide; the other measures 27 by 24 mm. They are light reddish tan in color and show no obvious tempering material. Since care was taken to give them their present shape, they may have been used in some game.

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THE CAPE MAY POINT SITE: EUROPEAN TRADE MATERIAL

By RICHARD C. COOK

The site consists of several one-time villages scattered along about four miles of beach frontage at the mouth of Delaware Bay in and around the borough of Cape May Point, New Jersey.

The wave action, especially during winter storms, has uncovered numerous artifacts over the past half century. Over 4,000 identifiable pieces have been found and catalogued.

These artifacts show that the sites were occupied during the Late Woodland Period and into the Contact Period. Unfortunately, waves jumble all materials together, destroying the stratification of artifacts and making impossible a chronology of the site.

It is also difficult to determine which of the clay pipes, gunflints, musket balls, etc. were used by Indians during the Contact Period, and which by Europeans or white Americans. Early sailing ships frequently visited the Cape May Point beaches to obtain fresh water, and the whaling industry had several early rendering facilities at nearby Town Bank, New Jersey. During the War of 1812, local militia also patrolled these same beaches and probably discarded or lost such small articles as clay pipes, gunflints, musket balls, etc.

In spite of this confusion as to sources, several trade-type materials have been found in direct association with readily identifiable Indian stone and pottery artifacts. These articles, at least, must have been owned and used by the Indians.

KAOLIN PIPES

Sixteen fragmentary kaolin pipes were found scattered along the entire area. Two are almost complete. The others consist of fragments of five stems, five angles, and four bowls.

Five of the fragments are sienna-colored while the balance are white to grayish white. About half of the lighter fragments show signs of burning.

The stems are mostly oval in cross section and show some tapering. No mouthpiece is identifiable. The diameter of the holes in the stem remains consistent throughout the stem. The holes are centered in most cases, but are badly off-center in some stems. The holes vary

from round to oval. The holes range in diameter from 2 to 2.5 mm.

The angles vary considerably as follows: One at 60°, five at 90°, one at 100°, two at 120°, and one at 130°. As closely as can be determined, the bowl diameters ranged from 17 to 25 mm. The height varied between 29 to 37 mm. Five bowls had a spur at the base. This spur ranged from 5 to 10 mm in width and extended 6 to 10 mm below the bowl.

GUNFLINTS

Seven gunflints were found. These range in color from light honey brown to charcoal gray and were probably brought from England. All were made of flint, in the following sizes:

19 x 19 mm	28 x 35 mm
22 x 26 mm	31 x 32 mm
25 x 32 mm	35 x 38 mm
26 x 30 mm	

OTHER MATERIALS

A number of lead musket balls have been found; most of them are about 12 mm in diameter. Many coins, mostly modern, have been discovered, the oldest being a Spanish 2 reale piece dated 1784.

CONCLUSION

To repeat: Though some trade-type materials have been found in direct association with Indian artifacts, it is almost impossible definitely to state which of the other trade-type materials found at Cape May Point may have been used by the Indians. It seems reasonable that at least some of the older pipes, (i.e. those with bowl angles of 100° to 130° and with the larger and irregularly placed stem holes) could well have seen use in Indian settlements.

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Waldheim, Robert G.	530 Chestnut Street, Kearney, N. J. 07032	1968	Johnson, Mr. and Mrs. Meredith E.	113 Cadwalader Drive, Trenton, N. J. 08618	1943
Wyant, Howard	316 Gerard Avenue, Elkins Park, Pa. 19117	1962	Johnson, Mr. and Mrs. Stewart, Sr.	Box 206-A, Great Meadows, N. J. 07838	1958
			Johnston, Mr. Albert S., Jr.	54 Old Army Road, Bernardsville, N. J. 07924	1961

Name	Address	Date Joined	Name	Address	Date Joined
Kergides, Mr. George, Jr.	Hickstown Road, Lamb's Terrace, R. D.		Allen, Elizabeth N.	407 Mountain Avenue, Berkeley	
Sicklerville, N. J. 08081	.....	1959	Heights, N. J. 07922	.....	1967
Kinney, Mr. and Mrs. Robert E.	Fackler Road, R. D. No. 1, Trenton,		Alpaugh, James E.	52 Eglantine Avenue, Pennington, N. J. 08534	1965
N. J. 08638	.....	1964	Anderson, Richard R.	49 Hubbard Avenue, Red Bank, N. J. 07705	1955
Kugler, Robert G. and Alice	Plainsboro Road, R. D. No. 2, Box 146,		Ayers, Fred	Fort Mott Road, R. D. No. 3, Salem,	
Plainsboro, N. J. 08512	.....	1963	N. J. 08079	.....	1961
Lamson, W. Deane	35 Johnson Avenue, West Caldwell, N. J. 07006	1967	Barringer, Brandon	250 Ashwood Road, Villanova, Pa. 19085	1955
Lord, Mr. and Mrs. Victor G.	250 Charles Street, Chicago Heights, Ill. 60411	1961	Basford, Edward	104 Rutledge Avenue, Trenton, N. J. 08618	1966
Lord, Col. William A.	25 Stanley Road, South Orange, N. J. 07079	1956	Becker, Donald W.	37 Charlotte Drive, M. R. 12,	
Lukenda, Mr. and Mrs. John A.	430 Mercer Street, Hamilton Square, Trenton,		N. J. 08876	.....	1960
N. J. 08690	.....	1959	Benninger, Harry H.	595-C Ramapo Valley Road, Oakland,	
Michefelder, Mr. and Mrs. Walter G.	16 West Laurel Road, Stratford, N. J. 08084	1967	N. J. 07436	.....	1947
Miller, Mr. and Mrs. James H.	411 Bradford Road, Cherry Hill, N. J. 08034	1959	Benson, Edward A., Jr.	715 Hanford Place, Westfield, N. J. 07090	1932
Morris, George J., II	4 N. Broad Street, Penns Grove, N.J. 08069	1963	Bentley, Mr. A. R.	1735 Crestway Drive, S. W.,	
Powell, Mr. Charles A.	75 Cedar Lane, Clementon, N. J. 08021	1964	Athens, Tenn. 37303	.....	1967
Race, Mr. and Mrs. H. Arthur	R. D., Belvidere, N. J. 07823	1939	Berce, William E.	212 Parish Drive, Wayne, N. J. 07470	1953
Ruth, Mrs. G. Clifford	27 Park Lane, Essex Fells, N. J. 07021	1965	Bergmann, Frederick W.	405 Franklin Road, Glassboro, N. J. 08028	1948
Scholz, Mr. Lawrence C.	1480 Pleasant Valley Way, West Orange,		Bigelow, Mrs. Augustus W.	R. D. No. 2, Newfoundland, N. J. 07435	1960
N. J. 07052	.....	1966	Blenk, Michael H.	506 Curtis Drive West, Pennsville, N. J. 08070	1968
Schumann, Mr. and Mrs. Walter C.	54 Sterling Avenue, Weehawken, N. J. 07087	1962	Bockelman, Charles W.	Turnbull Bay Road, Route No. 1, New Smyrna	
Shelley, Mrs. Shaw	R. R. No. 2, Box 128, Perkasia, Pa. 18944	1965	Beach, Fla. 32069	.....	1959
Sheppard, Mr. and Mrs. Horace J.	79 Alexander Avenue, Upper Montclair,		Boissevain-Lesser, Dr. Ethel	Castle Point, Hoboken, N. J. 07030	1942
N. J. 07043	.....	1955	Britton, Clarence	56 Broad Street, Flemington, N. J. 08822	1932
Spiegel, Mr. and Mrs. George J.	R. D. No. 1, Box W-19, Chester, N. J. 07930	1964	Bullock, Mrs. A. Leslie	38 Lochatong Road, West Trenton, N. J. 08628	1948
Stewart, Mr. and Mrs. Charles C.	235 Beechwood Avenue, Trenton, N. J. 08618	1952	Butler, E. Wayne	R. D. No. 2, Canton, Salem, N. J. 08079	1965
Strayer, Mr. Robert B.	72 East Center Street, Midland Park,		Byers, Douglas S.	Phillips Street, Andover, Mass. 01810	1957
N. J. 07432	.....	1961	Caesar, Mrs. Philip D.	Honey Brook Drive, R. D. No. 2, Princeton,	
Struve, Mr. Edwin B.	29 Dellwood Avenue, Chatham, N. J. 07928	1960	N. J. 08540	.....	1951
Stuart, Mr. William J.	1184 Kearny Drive, North Brunswick,		Camp, Mrs. Helen B.	Round Pond Harbor, Maine 04564	1956
N. J. 08902	.....	1968	Cane, Phillip A.	Rosemont, N. J. 08556	1963
Van Weele, Dr. and Mrs. Marinus	6 Birch Street, Pennington, N. J. 08534	1960	Caruthers, Elmo, Jr.	285 Booth Avenue, Englewood, N. J. 07631	1952
Vis, Evert	Hurffville-Cross Keys Road, Sewell, N. J. 08080	1964	Cathers, Frank C.	3 Cathedral Avenue, Florham Park, N. J. 07932	1956
Weeks, Mr. and Mrs. Theodore	313 Princeton Road, Plainsboro, N. J. 08536	1964	Chew, Howard E.	81 North Broad Street, Penns Grove,	
Wershing, Glenn A.	R. D. No. 2, Box 143, Newton, N. J. 07860	1954	N. J. 08069	.....	1966
West, Mr. Louis P.	136 Cane Street, Bogota, N. J. 07603	1959	Clark, Warren F.	19 Southard Place, Basking Ridge, N. J. 07920	1968
Wilson, Eugene S.	Box 61, West Trenton, N. J. 08628	1962	Coleman, Joseph	707 Woodland Street, Trenton, N. J. 08610	1966
			Conlon, Miss Martha R.	58 Columbia Turnpike, Florham Park,	
			N. J. 07932	.....	1965
			Conway, James M.	106 North Jefferson Avenue, Wenonah,	
			N. J. 08090	.....	1952

Active Members

Abraitys, Vincent	Sergeantsville, N. J. 08557	1944
Adams, C. Denise	148 Suburban Terrace, Stratford, N. J. 08084	1968

MEMBERSHIP LIST

Name	Address	Date Joined	Name	Address	Date Joined
Cook, Richard C.	P. O. Box 32, Dayton, N. J. 08810	1938	Euler, Robert F.	Box 121, Pine Beach, N. J. 08741	1952
Coy, Miss Nancy	3303 East Claredon Avenue, Phoenix, Ariz. 85018	1961	Eyler, James M.	Salem and Main Streets, Elmer, N. J. 08318	1965
Crawford, Mrs. Dorothy J.	1284 Rahway Avenue, Westfield, N. J. 07090	1956	Ferrara, Joseph	85 Fuld Street, Trenton, N. J. 08638	1955
Cresthull, Paul	R. D. No. 1, Box 322, Abington, Md. 21009	1966	Fields, Charles, Jr.	11 Joseph Street, Chatham, N. J. 07928	1960
Croshaw, Allan J.	R. D. No. 1, Hightstown, N. J. 08520	1959	Fish, Harry G.	3 Summerill Avenue, Penns Grove, N. J. 08069	1940
Crouse, Tommie W.	28 Regional Drive, Penns Grove, N. J. 08069	1967	Fitzcharles, Mrs. William G.	127 Voorhees Avenue, Pennington, N. J. 08534	1964
Cunningham, Mrs. A. J., Jr.	2719 Nottingham Way, Trenton, N. J. 08619	1956	Flammer, Robert	18 North Main Street, Cranbury, N. J. 08512	1957
Cunningham, John T.	269 Brooklake Road, Florham Park, N. J. 07932	1958	Flemming, George D.	16 River Birch Road, Turnersville, P. O. Blackwood, N. J. 08012	1954
Cunningham, Robert J.	918 Schiller Avenue, Trenton, N. J. 08610	1961	Flynn, Mrs. Robert M.	38 Echo Hill Lane, Willingboro, N. J. 08046	1958
Dawson, Sandra J.	2 Prospect Avenue, Montclair, N. J. 07042	1966	Foley, Vincent P.	R. D. No. 2, Quakertown, Pa. 18951	1960
de Camp, Mrs. Michael	James Street, R. D. No. 18, Morristown, N. J. 07960	1964	Fortune, Mrs. William F. J.	121 East Delaware Street, Pennington, N. J. 08534	1964
Dehoney, Martyvonne	40 Macopin Avenue, Upper Montclair, N. J. 07043	1967	Franke, Walter E.	229 Washington Avenue, Phoenixville, Pa. 19460	1940
de Vries, Ralph E.	4 Ashford Street, Newton, N. J. 07860	1961	Fulton, John P.	Box 212, Towaco, N. J. 07082	1959
Dilkes, William A., Jr.	Apt. 504, Barclay Towers, Cherry Hill, N. J. 08034	1968	Furman, Donald E.	32 Lakewood Drive, Mountain Lakes, N. J. 07046	1961
Dilks, Mrs. John	St. George's Road, Mt. Airy, Philadelphia, Pa. 19119	1958	Gates, Major Franklin F.	1250 Lansdowne Terrace, Plainfield, N. J. 07062	1960
Dimock, Whitman C.	U. N. Spec. Fund, Karamoja-Ground Water Survey, P. O. Box 162, Entebbe-Uganda, Africa	1947	Gifford, Dr. James	314 Fisher Road, Jenkintown, Pa. 19046	1966
Dockstader, Dr. Frederick J.	Museum of The American Indian, Broadway at 155th Street, New York, N. Y. 10032	1961	Good, Warren L.	105 Grove Street, Elizabeth, N. J. 07202	1957
Donfried, Josef E.	R. D. No. 3, Box 281, Freehold, N. J. 07728	1964	Goodwin, Harvey D.	Box 325, R. D. No. 2, Mr. Horeb Road, Plainfield, N. J. 07066	1955
Dorrance, Miss Frances	38 Church Street, Dallas, Pa. 18612	1934	Gordon, Dr. Saul	12 Brookfield Way, Morristown, N. J. 07960	1964
Drake, Eugene P.	208 S. E. 10th Street, Fort Lauderdale, Fla. 33316	1940	Green, G. G., Jr.	43 North Woodland Avenue, Woodbury, N. J. 08096	1937
Dusel, James C.	Box 236, Gladstone, N. J. 07934	1963	Green, G. G., III	Fox Ledge, Sparta, N. J. 07871	1937
Dusenbury, Mrs. Grace J.	252 Walnut Street, Livingston, N. J. 07039	1963	Green, Jack B.	49 South Evergreen Avenue, Woodbury, N. J. 08096	1945
Dykstra, John W.	21 Canterbury Court, Clifton, N. J. 07013	1966	Greenwood, Robert K.	132 State Street, Elmer, N. J. 08318	1947
Ebert, Thomas A.	1638 Springdale Road, Cherry Hill, N. J. 08034	1960	Grimes, Kenneth J.	5518 84th Street, Elmhurst, N. Y. 11373	1968
Edwards, Robert H.	1212 Cedar Avenue, Glassboro, N. J. 08028	1961	Grunow, Dr. Albert C.	Box 307-D, Linwood, N. J. 08221	1959
Elliott, Helen E.	216 Swarthmore Road, Glassboro, N. J. 08028	1939	Hado, Dennis M.	579 New Vernon Road, Gillette, N. J. 07933	1966
Ellis, Mrs. Emily Taylor	Box 811, Union, N. J. 07083	1951	Hall, Marvin D., Jr.	Brookside, N. J. 07926	1961
Ely, Mrs. Lancelot	Morris Street, Oxford, Md. 21654	1931	Hartmann, Dr. George J.	147 71st Street, Guttenberg, N. J. 07093	1960
Erb, Elmer T.	1015 Columbia Avenue, Lansdale, Pa. 19446	1966	Harvey, Mrs. Dorothy C.	43 Mills Street, Morristown, N. J. 07960	1958
Erickson, John E., Jr.	38 West End Avenue, Haddonfield, N. J. 08033	1956	Harvey, Merrill	43 Mills Street, Morristown, N. J. 07960	1957
			Hoffman, Gary	89 Harcourt Drive, Trenton, N. J. 08610	1959

Name	Address	Date Joined	Name	Address	Date Joined
Horvath, Matthew J.	209 Lake Avenue, Trenton, N. J. 08610	1962	Lupton, Lewis M. G.	25 South Broadway, Pitman, N. J. 08071	1934
Hubbard, Mrs. John Clark	Pond Edge, Dellwood Park, Madison, N. J. 07940	1931	Lurie, Miss Andrea	Bryn Mawr College, Bryn Mawr, Pa. 19010	1967
Hudak, Miss Vilma	Brookville Apartments, Apt. 2-A, 1926 Riverside Drive, Trenton, N. J. 08618	1950	Macpherson, J. Havard	Bushkill Falls, Pike County, Pa. 18324	1931
Huffman, John M.	Box 336, Stockton, N. J. 08559	1949	McAllister, J. Howard	78 West Broad Street, Bridgeton, N. J. 08302	1937
Hunt, Malcolm E.	32 Evans Drive, Cranbury, N. J. 08512	1963	McConnell, Miss Sharon L.	4 Andover Drive, Short Hills, N. J. 07078	1964
Jacobson, Jerome	800 Riverside Drive, New York, N. Y. 10032	1963	McCoy, Mrs. Blanche Green	Green Road, Sparta, N. J. 07871	1968
Jeffers, Henry W., III	301 Princeton Road, Plainsboro, N. J. 08536	1964	Marchiando, Miss Patricia	2030 Riverside Drive, Trenton, N. J. 08618	1965
Jenkins, E. Edwin	R. D. No. 1, Woodstown, N. J. 08098	1948	Martini, Victor V.	1131 76th Street, Brooklyn, N. Y. 11228	1966
Jenkins, Robert	Avis Mill Road, R. D. No. 1, Woodstown, N. J. 08098	1948	Mason, Dr. Ronald J.	Department of Anthropology, Lawrence University, Appleton, Wis. 54911	1945
Jenkins, Walter E.	32 Second Street, Elmer, N. J. 08318	1948	Matsoukas, George	80 Appletree Row, Berkeley Heights, N. J. 07922	1967
Jenkins, William H., Jr.	318 Broad Street, Elmer, N. J. 08318	1948	Mehrkens, Ernest O.	35 Preston Street, Bogota, N. J. 07603	1942
Johnson, Leslie R.	5431 Mohawk, Shawnee Mission, Kansas 66205	1951	Merrill, Robert T.	11 Denison Drive East, Saddle River, N. J. 07458	1950
Jonas, Robert J.	809 Oak Avenue, Westfield, N. J. 07090	1964	Miller, Mrs. Ernest F.	29 Wickom Avenue, Trenton, N. J. 08690	1966
Jones, Hobart L.	Box 247, Newfoundland, N. J. 07435	1947	Miller, Nicholas C.	610 Chestnut Street, Lakehurst, N. J. 08733	1968
Keller, Mrs. Anne	285 Suffolk Street, Holyoke, Mass. 01040	1932	Miller, P. Schuyler	4805 Centre Avenue, Pittsburgh, Pa. 15213	1949
Kent, Mrs. Edward G.	73 Prospect Street, Madison, N. J. 07940	1932	Mitchell, Herbert F.	42 North Fellowship Road, Maple Shade, N. J. 08052	1956
Kier, Charles F., Jr.	Beaver Bend, Weymouth Road, R. D. No. 3, Hammonton, N. J. 08037	1943	Mittelmark, Abraham	252 Cedar Street, North Plainfield, N. J. 07060	1966
Kier, Mrs. Mary F.	Beaver Bend, Weymouth Road, R. D. No. 3, Hammonton, N. J. 08037	1957	Morris, George J., II	4 North Broad Street, Penns Grove, N. J. 08069	1963
Kindre, John Alvin	341 Lourie-Love Hall, Princeton, N. J. 08540	1966	Morris, J. Harry	4 North Broad Street, Penns Grove, N. J. 08069	1963
Kitchell, W. David	12 Woodfield Drive, Whippany, N. J. 07981	1943	Mount, Mrs. Hilton H.	7 Evergreen Road, New Egypt, N. J. 08533	1958
Klimowicz, Miss Mary	55 Ward Place, South Orange, N. J. 07079	1966	Moutenot, Mrs. Anna C.	Mott Place, Washington Street, Toms River, N. J. 08753	1959
Kovi, Louis S.	R. D. No. 1, Ringoes, N. J. 08551	1944	Mundy, Mrs. Laurence R.	Hilltop Road, Mendham, N. J. 07945	1965
Kraft, Herbert C.	15 Raymond Terrace, Elizabeth, N. J. 07208	1960	Ochsner, Eugene E.	Star Route, Johannesburg, Mich. 49751	1946
Larmer, Robert	107 E. Willow Street, Wenonah, N. J. 08090	1966	Ordos, G. Robert	46 Christie Avenue, Clifton, N. J. 07011	1967
Launer, Philip J.	33 Cedar Lane, Scotia, N. Y. 12302	1938	Ordower, Maxine Veintraub	1555 Maple Avenue, Hillside, N. J. 07205	1964
Leifeste, Mrs. Peggie C.	95 Broad Street, Matawan, N. J. 07747	1960	Orr, John William, Jr.	Dutch Neck Road, Hightstown, N. J. 08520	1941
Lenik, Edward J.	100 Deerfield Road, Wayne, N. J. 07470	1962	Orriols, Alice	Apt. 42, 752 Ocean Avenue, Westfield, N. J. 07742	1956
Lewis, Charles M.	Route 206, Box 187, Stanhope, N. J. 07874	1957	Oshonka, John	319 Old Boonton Road, Boonton, N. J. 07005	1962
Lippincott, J. Penrose	R. D. No. 4, Easton, Pa. 18042	1951	Pancoast, Bennett S.	R. D. No. 1, Box 43, Woodstown, N. J. 08098	1940
Littmann, Dr. Edwin R.	28 Burrington Gorge, Westfield, N. J. 07090	1959	Parton, Miss Carol A.	276A 14th Street, Brooklyn, N. Y. 11215	1966
Lukas, Julian	180 E. Salem Avenue, Sewell, N. J. 08080	1948	Pauli, Carl	84 Fanny Road, Boonton, N. J. 07005	1966

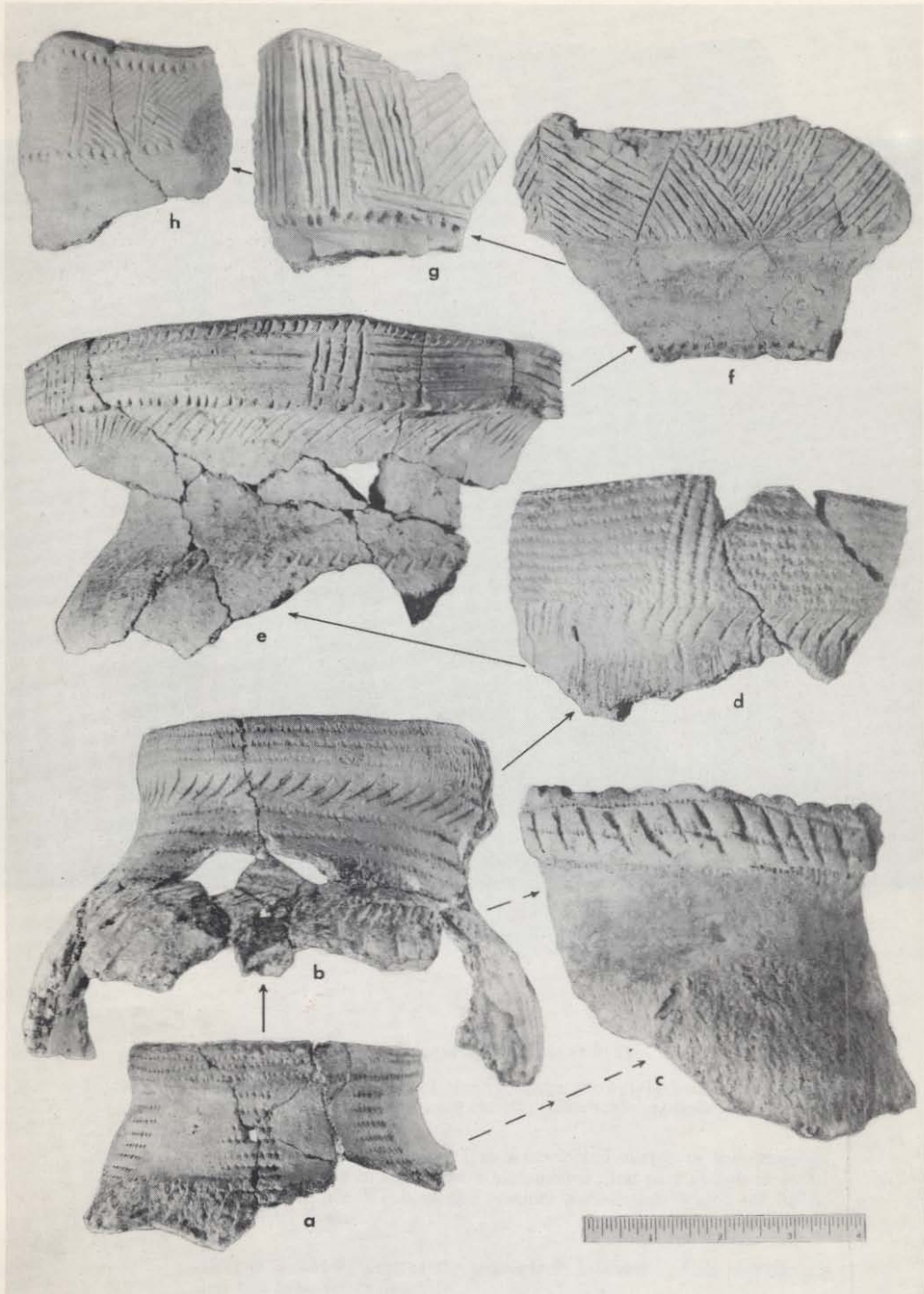
MEMBERSHIP LIST

Name	Address	Date Joined	Name	Address	Date Joined
Pearsall, Mrs. Leigh M.	Melrose, Fla. 32666	1931	Schilling, Richard J.	13 Riverdale Parkway, Riverdale, N. J. 07457	1960
Peek, Charles F., III	351 Peek Avenue, Millville, N. J. 08332	1965	Schirber, Walter R.	17 Lafayette Place, Freehold, N. J. 07728	1951
Pelascier, Raymond C.	111 Snyder Avenue, Westville, N. J. 08093	1967	Schulz, William P.	52 Old Farmer's Road, Long Valley, N. J. 07853	1968
Perry, William	General Delivery, P. O. Trenton, N. J. 08601	1966	Schwartz, Norman J.	8 Colonial Ridge Drive, R. D. No. 1, Yardley, Pa. 19067	1938
Petit, Alain J.	300 West 109th Street, New York, N. Y. 10025	1964	Schwartz, Stuart C.	14 Berkeley Road, Springfield, N. J. 07081	1963
Petrecca, Daniel S., Jr.	601 Osborne Avenue, Morrisville, Pa. 19067	1964	Sever, Ernest	50 Cooper Street, Beverly, N. J. 08010	1960
Petrtsch, Thomas J.	621 Park Avenue West, Bristol, Pa. 19007	1957	Sherk, Dr. A. Lincoln	2647 Westfield Avenue, Camden, N. J. 08105	1940
Pfeiderer, John A., Jr.	1007 William Street, Trenton, N. J. 08610	1962	Sibley, Scott	R. D. No. 1, Box 170, Penns Grove, N. J. 08069	1965
Pollak, Miss Janet S.	Cranbury Neck Road, R. D. No. 1, Cranbury, N. J. 08512	1959	Sjogren, Ernest	76 Laurel Avenue, Bloomfield, N. J. 07003	1967
Pomeroy, J. Anthony	Llewellyn Park, West Orange, N. J. 07052	1957	Slack, Harrison B.	143 Beal Street, Trenton, N. J. 08610	1962
Post, Leslie L.	Box 79, Newfoundland, N. J. 07435	1962	Smith, Thomas J., Jr.	87 Mead Street, Newark, N. J. 07106	1950
Preston, Robert C.	520 Washington Avenue, West Trenton, N. J. 08628	1968	Soday, Dr. Frank	5709 East 61 Court, Tulsa, Okla. 74135	1947
Rachlin, Miss Carol K.	2908 North Harvey Parkway, Oklahoma City, Okla. 73103	1952	Staats, F. Dayton	R. D. No. 1, Box 344-B, Oxford, N. J. 07863	1954
Reed, Thomas B., Jr.	15 Maitland Road, Trenton, N. J. 08620	1967	Staats, Harold	Box 105, Washington, N. J. 07882	1956
Reeves, John, Jr.	8 Nectar Lane, Levittown, Pa. 19054	1966	Stahl, Ernest H., Jr.	711 Lincoln Avenue, Palmyra, N. J. 08065	1968
Regensburg, Richard A.	123 Spruce Street, Audubon, N. J. 08106	1965	Stein, Charles L. W.	3121 Island View Road, Saanichton R. R. No. 1, British Columbia, Canada	1951
Riley, Roger W.	Sterling Forest, N. Y. 10979	1951	Sterrett, Henry	3129 West Queen Lane, Philadelphia, Pa. 19129	1959
Rodgers, Frank E.	28 Thompson Avenue, Mt. Ephraim, N. J. 08059	1962	Suydam, Willard	East Mountain Road, Belle Mead, N. J. 08502	1959
Rodrigues, Raymond J.	1340 Serape Circle, Apt. 1, Las Vegas, Nev. 89109	1952	Taebel, Miss Esther M.	920 McQuire Road, Bloomsburg, Pa. 17815	1966
Rosenstein, Mrs. Clara E.	50 Renner Avenue, Newark, N. J. 07112	1958	Taebel, Mrs. Wilbert A.	920 McQuire Road, Bloomsburg, Pa. 17815	1966
Rosenstein, Leon	50 Renner Avenue, Newark, N. J. 07112	1958	Tamboer, Miss Elizabeth L.	280 Grove Street, P. O. Box 331, Clifton, N. J. 07015	1966
Ross, E. Hunter	390 Morris Avenue, Summit, N. J. 07901	1962	Thompson, David	Round Hill Road, Woodbridge, Conn. 06525	1965
Ross, Norman H.	Route 4, Box 356B, New Brunswick, N. J. 08902	1940	Thompson, Harold S.	529 Hanford Place, Westfield, N. J. 07090	1932
Ross, Mrs. Norman H.	Route 4, Box 356B, New Brunswick, N. J. 08902	1946	Thornell, Harrison W.	77 Hillside Avenue, Chatham, N. J. 07928	1956
Rubin, Mrs. Robert	3927 Lankenau Avenue, Philadelphia, Pa. 19131	1968	Todd, E. Murray	Holmdel Road, R. D. Holmdel, N. J. 07733	1937
Russell, S.	514 62nd Street, West New York, N. J. 07093	1960	Tolton, Herbert E.	Espanong Road, Lake Hopatcong, N. J. 07849	1959
Rutsch, Edward S.	27 Mills Street, Morristown, N. J. 07960	1968	Toth, Dr. Stephen J.	187 Echo Avenue, Edison, N. J. 08817	1963
Salwen, Bert	Department of Anthropology, N. Y. University, New York, N. Y. 10003	1955	Turner, Kenneth A., Jr.	North Maple Avenue, Basking Ridge, N. J. 07920	1949
San Giovanni, Ralph	300 Watson Avenue, Plainfield, N. J. 07062	1967	Urion, Harold K.	327 North Main Street, Woodstown, N. J. 08098	1940
Savich, Milan, 2nd.	Old Marlton Pike, Marlton, N. J. 08053	1968	Venuto, Paul B.	44 Cooper Avenue, Cherry Hill, N. J. 08034	1963
Schemm, Kearn C., Jr.	410 Hillside Avenue, Nutley, N. J. 07110	1966			

Name	Address	Date Joined	Name	Address	Date Joined
Wanner, Walter W.	Glenwood Drive, Lake Valahalla, Montville, N. J. 07045	1968	Faust, Mark	80 Bayberry Lane, Watchung, N. J. 07060	1967
Watson, Stephen T.	476 Van Duzer Street, Apt. A3, Staten Island, New York, N. Y. 10304	1966	Gould, Miss Susan B.	701 North Pennsylvania Ave., Morrisville, Pa. 19067	1968
Weisgold, Martin	R. D. No. 2, Box 574, Lakewood, N. J. 08701	1960	Gutmann, James	18 Hillcrest Road, Caldwell, N. J. 07006	1966
Webb, Milton H.	101 S. Marion Avenue, Wenonah, N. J. 08090	1967	Halter, William H.	Town Hall Road, R. D. No. 3, Bridgeton, N. J. 08302	1968
Welsh, Wilfred R.	67 Lilline Lane, Upper Saddle River, N. J. 07458	1950	Ivins, Gordon D.	1001 Edinburg Road, Trenton, N. J. 08690	1968
Weltfish, Dr. Gene	Fairleigh Dickinson University, Madison, N. J. 07940	1964	Lewis, Joan Laura	1425 Stuyvesant Avenue, Trenton, N. J. 08618	1967
White, William H.	R. D. Box 297, Belmar, N. J. 07719	1951	Martin, Gary	19 Clinton Place, Metuchen, N. J. 08840	1965
Wieland, Robert G.	16 Frances Road, Lincoln Park, N. J. 07035	1968	McArdle, James B.	8 Tyler Court, Clifton, N. J. 07012	1967
Wilke, Charles M.	10 New Street, Mullica Hill, N. J. 08062	1966	Ohl, John D.	115 Vail Lane, Watchung, N. J. 07060	1967
Wilson, William B.	72 Elmwood Avenue, Chatham, N. J. 07928	1953	Reeves, Henry C.	601 King George Road, Cherry Hill, N. J. 08304	1968
Wittekind, Dr. John R.	99 West Trenton Avenue, Morrisville, Pa. 19067	1932	Roe, Richard	346 Front Street, Florence, N. J. 08518	1965
Wood, Kenton D.	36 East Shore Drive, Indian Lake, Denville, N. J. 07834	1956	Ruggio, Patrick	45 Jay Street, North Attleboro, Mass. 02760	1962
Woodruff, George J.	R. D. No. 7, Bridgeton, N. J. 08302	1931	Russell, Claire Helene	514 62nd Street, West New York, N. J. 07093	1960
Wrathall, Rosemary	7 Hill View Terrace, Summit, N. J. 07901	1967	Smith, David	737 Grove Park, Fort Dix, N. J. 08640	1968
Wright, Henry O.	167 The Fellsway, Murray Hill, N. J. 07971	1954	Stanzeski, Andrew	133 Jeremiah Avenue, Trenton, N. J. 08610	1962
Wuensch, Bernard J.	36 Southfield Road, Concord, Mass. 01742	1954	Sutton, Jonathan	314 Chapel Avenue, Cherry Hill, N. J. 08034	1968
Young, Miss Mary Elizabeth	Box 95, Lebanon, N. J. 08833	1959	Vine, Keith	523 Austin Avenue, Barrington, N. J. 08007	1968
Zamos, James A.	5 Division Street, Newton, N. J. 07860	1960	White, Richard S.	1 La Salle Drive, Burlington, N. J. 08016	1965
Zeh, Robert M.	R. D. No. 1, Box 469, Princeton, N. J. 08540	1966	Associate Members		
Zimskind, Dr. Joshua N.	210 West State Street, Trenton, N. J. 08608	1932	Bacon, John F., Jr.	14 West Avenue, Bridgeton, N. J. 08302	1961
			Affiliated Members		
			American Museum of Natural History, The Library, Central Park West at 79th Street, New York, N. Y. 10024		
			Bergen County Historical Society c/o Van Steuben House, North Hackensack, N. J. 07661		
			Carnegie Museum, Section of Man, c/o Museum Library, 4400 Forbes Avenue, Pittsburgh, Pa. 15213		
			Cumberland County Library 71-75 South Laurel Street, Bridgeton, N. J. 08302		
			Delaware Archeological Board Kirk Building, 17 The Green, Dover, Del. 19901		
			Elizabeth Free Public Library, Periodicals Department 11 South Broad Street, Elizabeth, N. J. 07202		
Eisenbrey, Roy	830 Cooper Street, Beverly, N. J. 08010	1966			

MEMBERSHIP LIST

Name	Address	Date Joined	Name	Address	Date Joined
Fair Lawn High School Library	P. O. Box 67, Fair Lawn, N. J. 07410	1949	Paterson State College Library	300 Pompton Road, Wayne, N. J. 07470	1965
Fairleigh Dickinson University	Florham-Madison Campus, Friendship Library		Peabody Museum Library	Harvard University, Cambridge, Mass. 02138	1950
	285 Madison Avenue, Madison, N. J. 07940	1964	Philadelphia Free Public Library	Serials Section, Middle City West District,	
Fairleigh Dickinson University	Rutherford, N. J. 07070	1964		Logan Square, Philadelphia, Pa. 19103	1951
Glassboro State College, Savitz Library	Glassboro, N. J. 08028	1965	Plainfield Public Library	8th Street at Park Avenue, Plainfield,	
Irrington Free Public Library	Civic Square, Irrington, N. J. 07111	1950		N. J. 07060	1950
Jersey City Free Public Library	472-476 Jersey Avenue, Jersey City,		Princeton University Library	Serials Division, Princeton, N. J. 08540	1951
	N. J. 07302	1950	Robert S. Peabody Foundation for Archeology	Box 71, Andover, Mass. 01810	1957
Kearny Museum and Historical Association	318 Kearny Avenue, Kearny, N. J. 07032	1941	Somerset County Library	County Administration Building, Somerville,	
Monmouth County Library	80 Broad Street, Freehold, N. J. 07728	1964		N. J. 08876	1950
Montclair Art Museum	3 South Mountain Avenue, Montclair, N. J.		South Plainfield Memorial Library	2484 Plainfield Avenue, South Plainfield,	
	07042	1935		N. J. 07080	1950
Morris Junior Museum	P. O. Box 125, Convent, N. J. 07961	1960	Southern Illinois University General Library,	Periodicals Recording Clerk, Carbondale, Ill.	
Morristown and Morris Township,	The Joint Free Library			62901	1960
	1 Miller Road, Morristown, N. J. 07960	1950	Sussex County Historical Society	82 Main Street, P. O. Box 252, Newton, N. J.	
Nassau County Library, Garvies Point Division	Glen Cove, N. Y. 11542	1967		07860	1962
Neptune High School	c/o May E. Cooper, Librarian, 55 Springdale		Temple University Library	Periodicals Division, Philadelphia, Pa. 19122	1960
	Avenue, Neptune, N. J. 07753	1966		Trenton Free Public Library	
New Jersey Historical Society	230 Broadway, Newark, N. J. 07104	1962		120 Academy Street, Trenton, N. J. 08608	1950
New Jersey State Library, Archives and	History, Department of Education, 185 West		University of Pennsylvania Museum Library	33rd and Spruce Streets, Philadelphia, Pa.	
	State Street, Trenton, N. J. 08625	1961		19104	1950
Newark Museum, The	43-49 Washington Street, Newark, N. J. 07101	1951	University of Utah	Periodicals Division, 1400 East 2nd Street,	
Newark Public Library	Order Department, 5 Washington Street,			South, Salt Lake City, Utah 84112	1965
	Newark, N. J. 07101	1948	Chapters		
Newberry Library, The	Serials Division, 60 West Walton Street,		Shongum Chapter, Archeological Society of New	Jersey	
	Chicago, Ill. 60610	1950		c/o Charles Fields, 11 Joseph Street, Chatham,	
North Jersey Highlands Historical Society	c/o Miss Vi Hill, Secretary, 177 Valley Road,			N. J. 07928	1958
	Wayne, N. J. 07470	1962	Unalachtigo Chapter, Archeological Society of	New Jersey	
Ocean City Public Library	Sixth Street and Ocean Avenue,			c/o Charles F. Kier, Jr., R. D. No. 3,	
	Ocean City, N. J. 08226	1950		Hammonton, N. J. 08037	1948
			Unami Chapter, Archeological Society of New	Jersey	
				c/o Matthew J. Horvath, 209 Lake Avenue,	
				Trenton, N. J. 08610	1962

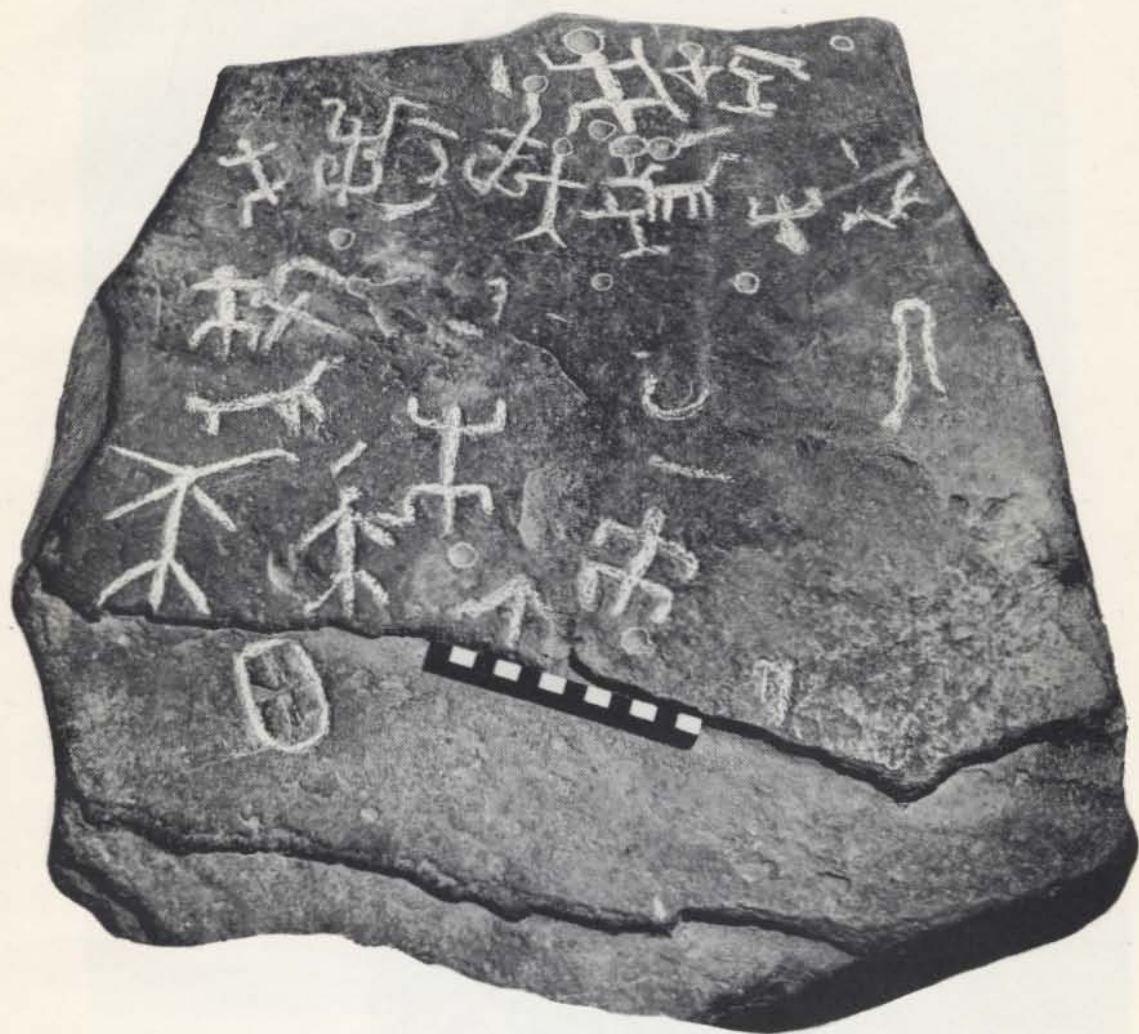


LATE WOODLAND CERAMIC TRENDS.

- | | |
|--|--|
| a. Owasco Platted, Brodhead-Heller Site | d. Kelso Corded, Camp Ministerium Site |
| b. Owasco Corded Collar, Brodhead-Heller Site | e. Bainbridge Lineal, McCann Site |
| c. Owasco Corded Collar Variant, Macpherson Collection, Dimicks Ferry Site | f. Chance Incised, Camp Ministerium Site |
| | g. Munsee-like, Egypt Mills Site. |
| | h. Macpherson Collection, near Egypt Mills |



A Distinctive Late Archaic Point type, Egypt Mills Site, Pennsylvania.



EXPLANATION OF PLATES III AND IV

PLATE III (Above). Photograph of the Jennings petroglyph, with the figures lightly chalked in to increase clarity. The scale represents 12 inches.

PLATE IV (Following page). Figure 1 is a numbered sketch of the Jennings petroglyph, with much of the rock omitted; the part shown is about 37 inches wide. Much of the original surface has scaled off below the dotted lines.

FIGURE 2 shows part of the petroglyph in detail. This photograph has not been retouched.

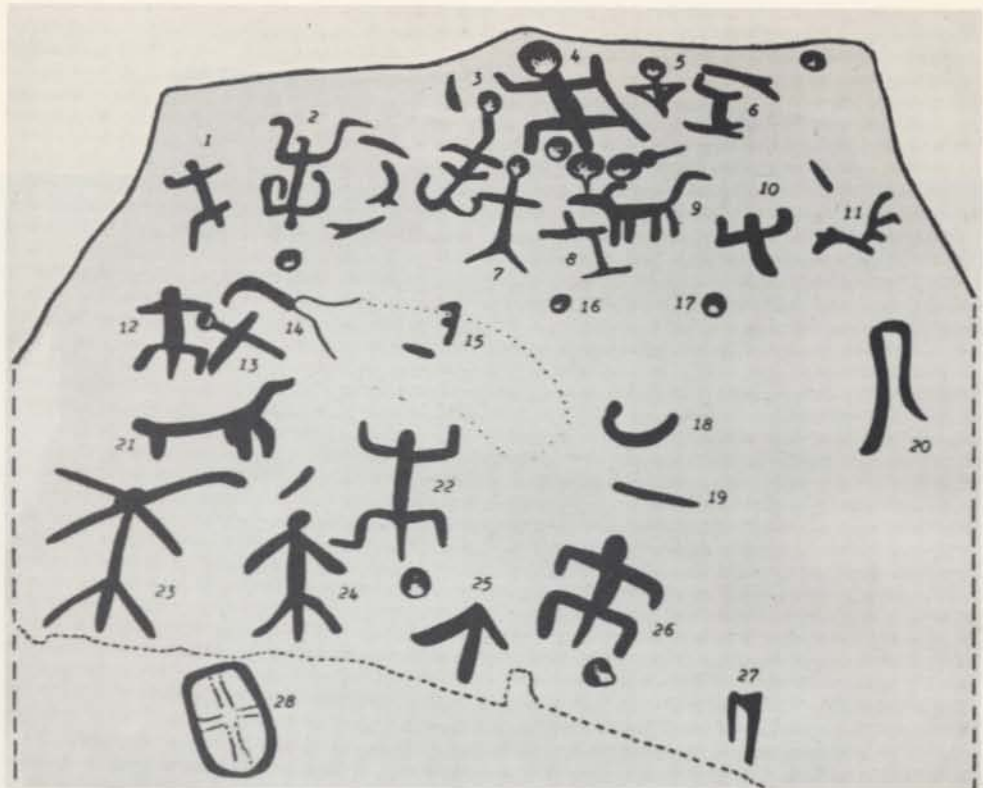


FIGURE 1

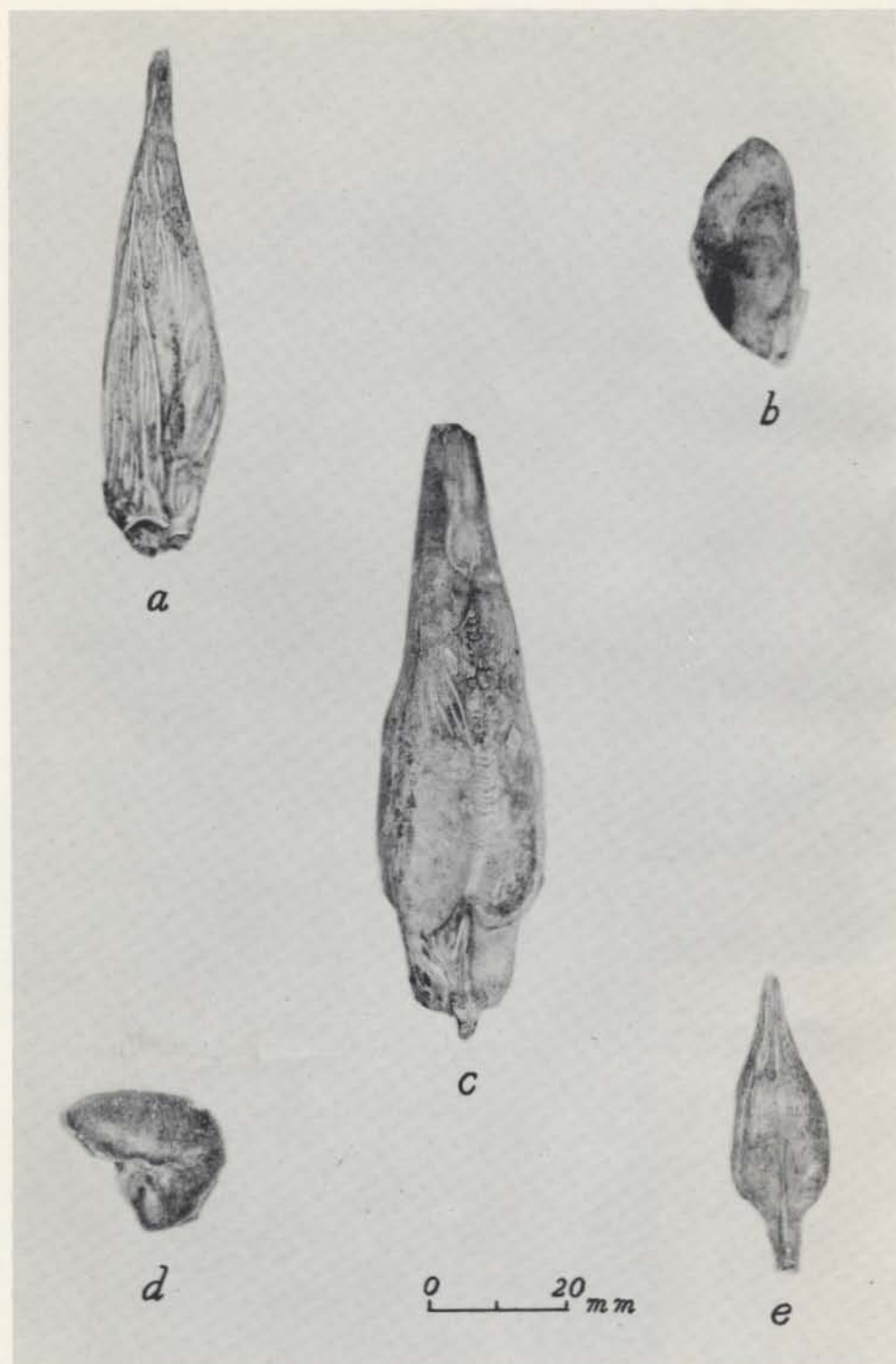


FIGURE 2

(Explanations are below Plate III.)



The Minisink Island petroglyph, found by Walter E. Franke, of Phoenixville, Pennsylvania. The size of the fingers and the position of the thumbs show that the hands were not traced from human hands pressed against the stone.



Several hyperostotic fish bones from fossil and archaeological sites in Florida. a, b, Guest Mound, Palm Beach Co.; c, Pleistocene deposit, Cross-Florida Barge Canal, Putnam Co.; d, Pleistocene deposit, Charlotte Co.; pre-Columbian Indian Mound, Hillsborough Co.



FIGURE 1 The spadefish, *Chaetodipterus faber* was evidently an important item of food of pre-Columbian Indians as well as of European colonists.

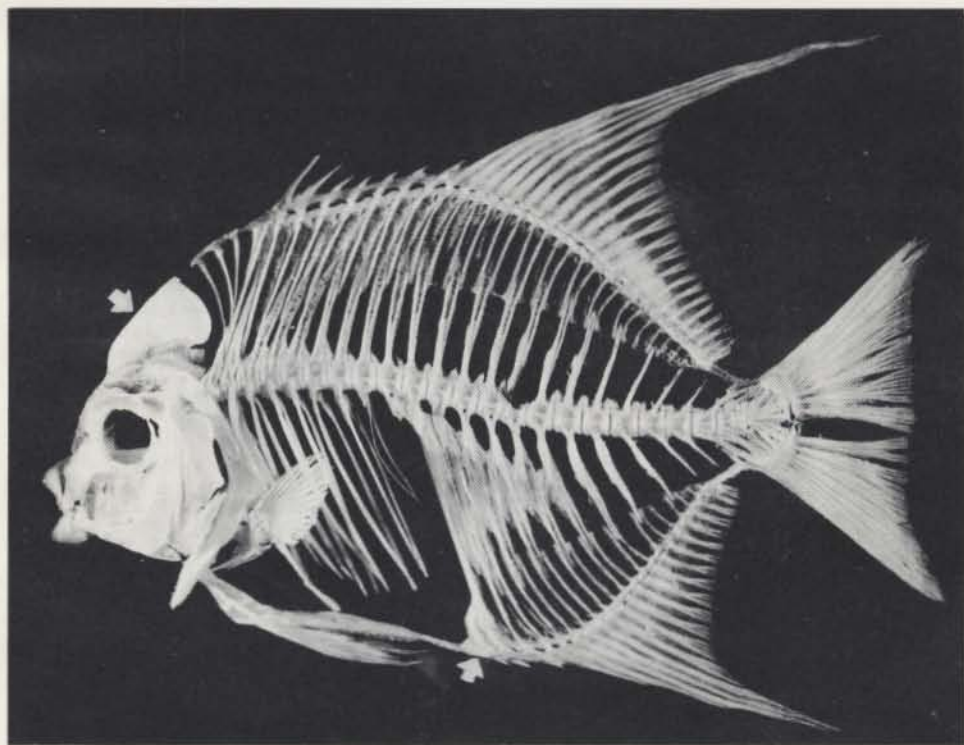
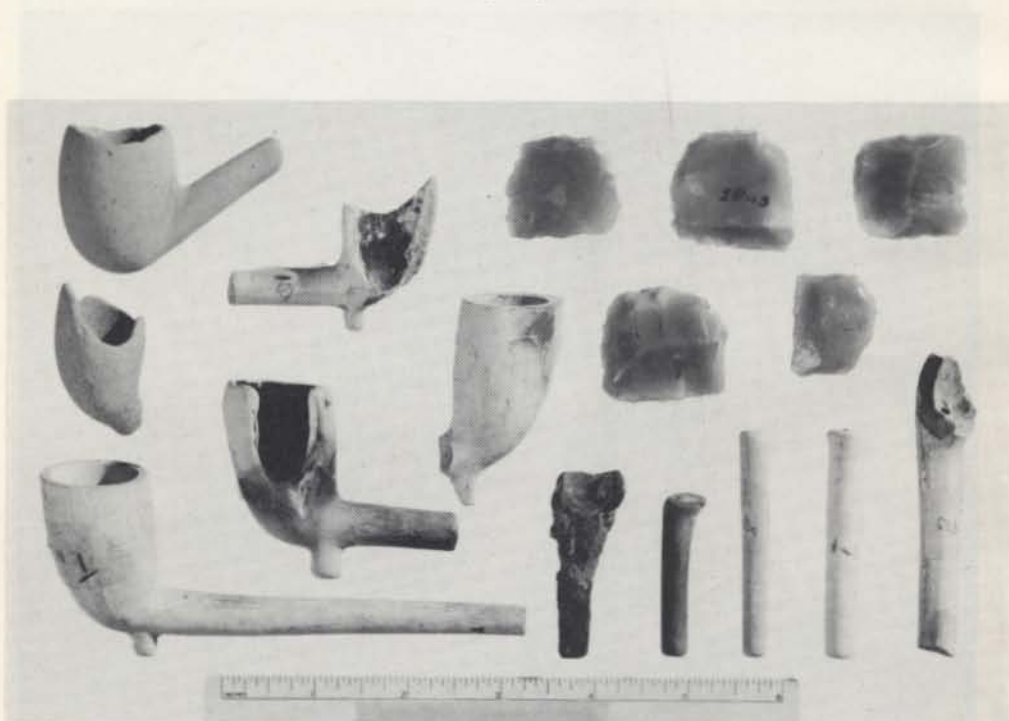


FIGURE 2 Skeleton of spadefish, *Chaetodipterus faber*. Arrows indicate hyperostotic bones. (Photo: D. Bourne, Woods Hole Oceanographic Institution.)



Pottery Fragments; Including Two Small Elliptical Discoids, from the Cape May Point Site; New Jersey.



European Trade Material from the Cape May Point Site, New Jersey. Gunflints at Upper Right; a Nearly Complete Clay Pipe at Lower Left. Other Specimens are Fragmentary Bowls and Stems of Pipes.