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Contents

The Bear Rock Petroglyphs Site                   1
Nicholas A. Shoumatoff

Editorial Policy on Date Reporting              5
L.A.B.

The Ryders Pond Site II                        6
Julius Lopez and Stanley Wisniewski

Minutes of 56th Annual Meeting                 20

Program, NYSAA Annual Meeting                  23

Iroquosia – Three Reviews                     24
Marion E. White
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THE BEAR ROCK PETROGLYPHS SITE

Nicholas A. Shoumatoff

Introduction

It is remarkable that the Bear Rock Petroglyphs Site has existed so long unrecorded, known only to a handful of native residents. Thorne Duel and M.R. Harrington were active in the vicinity of the site between 1898 and 1910, yet discovery of the petroglyphs escaped them. It is even more remarkable that the site was overlooked by Leslie Verne Case, a Westchester schoolteacher and amateur archeologist who worked with Duel and did extensive survey work within a half mile of the site. In his manuscripts Case mentions only a petroglyph that formerly stood in a cove north of Greystone Station in Yonkers.

The stone and its designs were known to two old Cross River-Poundridge families, the Whitman family and the Breuninger family. Carl Breuninger told the author that it was known as Bear Rock in his family. The author learned of its existence from Frank R. Whitman of Cross River, while employed in 1967 as state fire tower observer on the Ward Pound Ridge Reservation, where the rock is located. Preliminary photographs and drawings were shown to Louis A. Brennan of the N.Y.S.A.A., who encouraged the author to execute a recording of the site. During the summer of 1971, Western Connecticut State College and Charles E. Pound, Westchester County Parks Commissioner, sponsored an archeological field school in which the author participated. On July 6, 1971, the author, accompanied by two students from the field school, photographed and recorded the site.

Location

The rock on which the designs are found is located at about N41°13'30"-W73°36', interpolated from the U.S.G.S. Pound Ridge Quadrangle Sheet (1960), at an elevation of about 700'. The site is within the boundaries of the Ward Pound Ridge Reservation, a Westchester County park in Cross River, N.Y. The site itself falls within the borders of the Town of Pound Ridge, whose boundary divides the park. The site is reached, after entering the park, by proceeding by car down the Michigan Road, and then continuing on foot along the Michigan Trail, turning left on the Dancing Rock Trail; the petroglyph is on the north side of the Dancing Rock Trail 200yds, after the trail crosses the power lines. Detailed instructions and a map can be obtained at the Trailside Nature Museum on the park.

Recording Procedure

The author, assisted by Sharon Jackson and Benjamin Branch, completed the first recording of the Bear Rock Petroglyphs Site on July 6, 1971. The location of the rock was found on the survey map, the dimensions of the decorated area were taken, and a petroglyph record sheet was filled out, noting geology, position, condition, etc. The site was then photographed in both black-and-white and in color. The clearly pecked and rubbed designs were then chalked in and photographed. A string grid of six 3' by 3' squares was constructed over the chalked-in designs, which was then photographed and drawn onto a reduced grid (see illustration). Then the unclear, but probable, designs were chalked in, drawn into the main drawing in broken lines, and photographed. The making of a latex mould and full-size rubbings was discussed as a future possibility.

The rocks in the vicinity of the petroglyphs were examined and a smaller boulder 10 ft. to the northwest was noted as a possible associated feature due to a possible design, which was heavily obscured by lichen, yet evoked a serpent like ellipse design. Recording methods as established by Swauger (1961) were adhered to.

COVER ILLUSTRATION: Photograph of drawing on Front Cover by Dr. Harold C. Simmons, Metropolitan Chapter. Photograph of Bear Rock by Mary E. Koponen.
Bear Rock in natural light

General Description

The Bear Rock Petroglyphs are carved on the west-southwest face of a boulder identified as Pound Ridge leucogranite, a pre-Cambrian local intrusion which, along with Fordham gneiss, forms the foundation of the local geology. The rock sits on bedrock of the same type. The decorated area is 8 ft. 10 in. high at the lowest point. The clear designs begin at 1 ft. above ground level.

Twelve clearly pecked and rubbed designs were distinguished, with pecking measuring up to .5 in, deep. Seven unclear designs were also recorded which, though they had lost obvious pecked and rubbed character, still stood out (or rather in) clearly. The pecking pits were clearly distinguishable in many of the carved grooves. Weathering, probably exfoliation and surface frost action, has occurred but there is nothing to suggest any form of vandalism.

Designs

In this discussion of the designs, the imagination has been restrained with conclusions reached only after repeated observation and discussion with other observers. The author is an artist-painter and has not ignored certain aesthetic qualities of the site, which he feels qualified to mention.

Design 1, that of a bear, is the clearest and finest design. The contour of the figure, with its bulky shape, rounded ear, and profile, strongly suggests to most observers a reclining bear looking over its left shoulder. The design is a bold yet spatially graceful representation and only the elliptical shapes at the foot of the figure seem open to question; we shall call them feet. Note the clearly pecked eye in the head, whose size is smaller than the Design 2 eyes. One of the striking features of this figure that is not clearly revealed in photography and illustration is the manner in which the nape and upper back line travels around the corner of the stone face, using the corner bulge to add a three dimensional effect to the figure. The black bear, Ursus ameri-
canus, was found in the area until some twenty-five years ago.

Design 2 will be called a twin deer-bear profile, with a leaning toward the deer, though it is obvious that this figure is problematic. Its unclear elements contrast sharply with the clean simplicity of the contours in Design 1. The two eyes, which are considerably larger than the eyes in Design 1, may be larger in order to represent the prominent and large eyes of the white-tailed deer. The presence of the line running down from the upper eye, dividing the head region, and the three earlike ellipses, strongly convey a double head profile. The manner in which the rest of the figure is related to the head-profile section is problematical, especially the relation to the large hump formed by the upper line which is very deliberately pecked and rubbed. The internal designs within the body of the figure do not seem clear enough to establish their "x-ray" character. The primitive and representationally unsuccessful nature of Design 2, when compared with Design 1, even suggests two different artists at work.

Design 3 will be called a wild turkey-grouse, as is suggested by the three featherlike tail lobes and the elongated neck and head. This design, though distinguishable from the surface of the rock, does not have the same clear pecked and rubbed character of the two large designs and therefore is in the unclear category.

Design 4 will be left unidentified, though modern observers call it a starlike design. Natural contours in the rock are clearly used here to enhance the design.

Design 5, composed of two joined ellipses, is unclear and unidentifiable.

Design 7, composed of a series of U-shapes, is unidentifiable.

Design 13 is U-shaped.

Designs 18 and 19 are cuplike, unlike the other ellipses and are unclear.

Designs 6, 8, 11, 12, 14, 15, and 16 are clearly incised elliptical shapes. These problematical ellipses are unique to this site, to the best of the author's knowledge, and will be discussed further in the next section.

Designs 9, 10, 17 are unclear elliptical shapes, where pecking and rubbing are no longer obvious.

A clear elliptical design is to be found on the top face above design 16.

An elongated ellipse, called serpentlike, is found on the south face of a small boulder 10 ft. to the northwest of the main rock.

Comparisons

Existing literature, including many of Swauger's site reports, Mallery (1889), Grant (1967), has been examined in a search for comparisons or parallels between other petroglyphs and the Bear Rock Site. Very little in the way of clear comparative material has come out of these examinations, giving a unique character to the Bear Rock Site. The beauty and poise of the bear at Bear Rock has found no parallel as yet and indeed few other representations of bear were found. The carving of an animal head on a late Archaic pestle in Ritchie (1965, p. 131) evoked some possibilities for comparison. The zoomorphic "x-ray" figure in Harold B. Barth's tracing of the Midland Petroglyph Site design (Swauger: 1958) resembles the bear figure (Design 1) as both figures clearly show the animal looking over its left shoulder and the contour pecking and rubbing is similar in both. The Midland site is, however, an "x-ray" design and Design 1 is not. A figure looking over its left shoulder is also found at the Timmons Farm Petroglyphs Site (Swauger: 1964), though the character of the design seems less refined and almost infantile in comparison to either the Bear Rock or the Midland sites. In that a birdlike profile with a neck, head, and tail is present in both, comparison is suggested between the wild turkey-grouse (Design 3) and the "Dancing Duck" (Design 2) at Timmons Farm (Swauger: 1964).

Though they appear to be simple, no exact parallels have been found to match the ten elliptical designs at Bear Rock. Whether or not they represent efforts of the petroglyph artist to elaborate existing depressions in the rock, or whether they represent clouds, lakes, or stones hurled at the zoomorphic designs will probably forever remain conjecture. The material, Pound Ridge granite, of the design area cannot be worked with like material, and perhaps a tool of the abundant local white quartz was used in order to effectively make the peckings which are over 5 m, deep in places.
In most petroglyphs observed, appendages such as feet and legs are commonly and clearly present. All of the three-zoomorphic designs at Bear Rock lack such delineation of appendages.

Another important aspect of Bear Rock Petroglyph is that the boulder itself resembles an animal's head looking left and is similar in form to the head of Design 1.

It is often asked who made petroglyphs. Without presuming to answer such a question, let it be noted that the abundant artifacts found in the vicinity of Bear Rock have been of archaic traditions, ranging from Vosburg, Taconic, Snookkill, to Poplar Island projectile point types. The historic tribes resident in the area were Algonquians of the Wappinger confederacy and were Tanketekes (Ramaposachem), Kitchawanks, and Siwanoys, according to historical documents. Few or no artifacts have been found to support the occupation of Woodland cultures. The three main animals represented, if they are indeed bear, deer, and wild turkey, were major game foods of both the Archaic and the Woodland periods.

The evidence is strong that at least one of the figures depicted on the petroglyph is a bear, and possibly as many as three bears may be represented, with the shape of the rock itself being bear-like. The role of the bear in the magico-religious aspect of certain late Woodland tribes is well documented. Ritchie (1955) sums up this magical role as follows:

From later prehistoric times to the present, we know that certain Indians in the Northeast shared in a reverential attitude toward the bear and conducted ceremonial observances, which have been traced to northern Asia. An important food animal of the boreal zone, the bear became the center of a ritual complex involving the manner of its killing, eating, and even the disposition of its bones - all done in order not to offend the spiritual keeper of the bears, who might then withhold the supply of this game.

The Bear Rock petroglyph may then indeed be an expression of magico-religious ceremonialism as practiced by aboriginal inhabitants of Westchester, but little of the identity of these inhabitants and the nature of their practices is known.

The Bear Rock Petroglyphs Site is the only such site existing, to our knowledge, in Westchester County and perhaps the finest such site in New York State. Fortunately, the site is safe from destruction in that it is on a public park and has now been recognized as valuable, but it is not free from vandalism. Caution has been exercised regarding the publicizing of the site until efforts are made to protect it from vandalism. Fortunately, the location is two miles away from the main park activity. The author is especially grateful to Louis A. Brennan for many valuable discussions and the loan of research material. As may be evident, this article has to some extent followed the methods of recording and description established by James L. Swauger, which the author wishes to acknowledge.

REFERENCES

Grant, Campbell

Kraft, Herbert C.

Mallery, Garrick

Ritchie, William A.

Swauger, James L.
EDITORIAL POLICY ON DATE REPORTING

In the November issue of The NYSAA Bulletin there appeared an article by Minze Stuiver of the Yale Radiocarbon Laboratory and Hans Suess of The University of California entitled "On the Relationship Between Radiocarbon Dates and True Sample Ages", reprinted from Radiocarbon, Vol. 8, 1966, in which it was reported that substantial discrepancies had been discovered for the pre-Christian era between C-14 test results, expressed in years, and calendar time. My "American Dawn" (Macmillan, 1970) discussed this discrepancy further and explained the progress of checking it by the dendrochronology of the bristle cone pine.

The 12th Nobel Symposium, 1970, the proceedings of which were published as Radiocarbon Variations and Absolute Chronology (Wiley, New York, 1971) came to the conclusion that the discrepancy exists and that it begins to be significant at about 2200 years ago, that is, for all intents and purposes, at the end of B.C. and the beginning of the A.D. eras. The conferees at the Symposium disagreed only as to the exact value of the discrepancy, not its order of value, which increases from 2200 years ago to about 6000 years ago. Whether it remains constant, increases or decreases beyond that point in time has not yet been laboratory determined but at 6000 B.P. it amounts to about 700 years, a substantial factor.

Among the several calibration devices for converting C-14 results into calendar time presented at the Symposium was one by Seuss, co-author of The Bulletin article referred to above. It was reproduced in Scientific American, October 1971, in an article by Colin Renfrew entitled "Carbon 14 and the Prehistory of Europe". The thrust of the article was the profound effect the revised chronology has on the European Neolithic, upsetting dogma on the origins of farming and village life. In America re-calibration of C-14 results with true time will cause no such reversals, but it will give almost a millenium of time in the middle and late Archiac to account for.

It should be clear by now that there no longer exists any authority for the translation of dates B.C. into calendar dates by the simple subtraction of 1950, the base year from which C-14 results are calculated, from the test result. It is no longer admissible to report, for instance, that a result of 5950 C-14 years is the equivalent of the calendar date of 4000 B.C. Most decidedly it is not and no citation of current custom will make it so, for C-14 years and calendar years are not comparable for B.C. time.

In March of this year (1972) the editor was able to examine a list of C-14 results recently run on materials from the Savich Farm site by the University of Pennsylvania Radiocarbon Laboratory. The results given to the excavator, Richard Regensburg, were the conventional results, plus a correction factor; e.g. one result was given, approximately, thus: 3550 C-14 yrs=1600 B.C. + (MASCA correction) 200 yrs or 1800 B.C. In a list of results in the B.C. range the correction factor increased by increments of 100 years for each 400 years of greater age. MASCA
is the code designation of the laboratory indicating that the correction factor is its own value for that factor.

It may be that all C-14 laboratories are now supplying test results in this fashion, with the correction factor added. But until it is certain that they have adopted this practice the investigator who submits samples for dating should ask for corrected dates. For sometime to come all C-14 results will have to be reported as in the University of Pennsylvania example given above, so that the uncorrected calendar year correlation may be compared with the uncorrected dates that have been published since 1950.

Beginning with this issue The Bulletin will no longer print C-14 results in the B.C. range that have been translated into calendar dates by simple subtraction. Results reported from laboratories uncorrected may be reported only in C-14 years, without translation. The author may supply his own correction but only if he cites a proper reference for it, such as the Seuss calibration, or the Stuiver - Suess formula, which can be found in The Bulletin in the article mentioned in the first paragraph. Since for ages beyond about 6500 years the correction factor remains undetermined, the results must be reported only in C-14 years, unless a laboratory supplies the correction factor. For dates in the A.D. range the current calculation of calendar dates by subtracting C-14 results from the value 1950 is, of course, correct. For that era the length of C-14 and solar years were in equivalence. There can be no doubt that for sometime to come age-date reporting is going to be awkward if it is to be acceptably accurate.

To sum up: (1) The discrepancy between C-14 years and solar years for B.C. time has been accepted as tested fact by an international symposium of specialists, and the order of magnitude has been agreed on; (2) one article has appeared in a journal of general circulation in which the correction of the discrepancy has been shown to have a significant effect on the interpretation of prehistory; (3) one C-14 research laboratory has begun the issuance of corrected results, in at least one instance on materials from this region.

The editor may not, therefore, shirk his responsibility to readers and contributors alike to inform them of what has happened and how the new circumstances will affect them and this journal. To persist in error is hardly the mark of sound science or respectable editing. That this is his responsibility was pointed out to the editor by P. Schuyler Miller, an NYSAA member and a former editor.

L.A.B.

THE RYDERS POND SITE II

Julius Lopez NYSSAF Metropolitan Chapter
Stanley Wisniewski Metropolitan Chapter

Part I of the Ryders Pond Site report was printed in the November issue of the NYSAA Bulletin. It covered the history of the site and the lithics from site collections. Part II is devoted to the ceramics and other materials from those collections. All materials are from collections; there was no excavation of Ryders Pond. This completes the Lopez-Wisniewski part of the report. An addendum, by Geiger Omwake, on the kaolin pipes found at Ryders Pond, will be printed within the year.

L.A.B.

CERAMICS

The pottery at Ryders Point is divisible into three ceramic complexes, as reflected in the tabulation below. The first is Clasons Point of the Late Woodland era. The other two are earlier and consist of (1) what the author is tentatively calling "New York Abbott" pottery and (2) some Interior Cord-Marked pottery. There are also two indeterminant types.
TABLE 3
Pottery Types at Ryders Pond

<table>
<thead>
<tr>
<th>Classification</th>
<th>Grit</th>
<th>Shell</th>
<th>Minimum No. Vessels Present</th>
<th>Illus.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLASONS POINT ERA (Late Woodland)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eastern Incised</td>
<td>6</td>
<td>-</td>
<td>5</td>
<td>Pl. 1, Fig. 4, 5, 6, 7</td>
</tr>
<tr>
<td>Van Cortlandt Stamped</td>
<td>15</td>
<td>-</td>
<td>10</td>
<td>Pl. 1, Fig. 10, 11, 12</td>
</tr>
<tr>
<td>Clasons Point Stamped</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>Pl. 1, Fig. 8</td>
</tr>
<tr>
<td>Clam Shell Stamped Variant</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>Pl. 1, Fig. 9</td>
</tr>
<tr>
<td>Milo Cord-Marked</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bowmans Brook Incised</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>Pl. 1, Fig. 6</td>
</tr>
<tr>
<td>Bowmans Brook Stamped</td>
<td>11</td>
<td>-</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>East River Cordmarked</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>&quot;Trade Sherds,&quot; Other Cultures:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mohawk (Ostungo Incised)</td>
<td>6</td>
<td>-</td>
<td>2</td>
<td>Pl. 1, Fig. 1, 2, 3</td>
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<tr>
<td>Niantic Stamped</td>
<td>2</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>&quot;NEW YORK ABBOTT&quot; (Middle Woodland)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbott Horizontal Dentate</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>Pl. 3, Fig. 1</td>
</tr>
<tr>
<td>Abbott Zoned Dentate</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>Pl. 3, Fig. 2, 3, 4</td>
</tr>
<tr>
<td>Abbott Zoned Incised</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Fabric Impressed</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>INTERIOR CORD-MARKED POTTERY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Interior Cord-Marked</td>
<td>68</td>
<td>1(leached)</td>
<td>3</td>
<td>Pl. 3, Fig. 6, 7</td>
</tr>
<tr>
<td>Modified Interior Cord-Marked</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>INDETERMINANT TYPES</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Interior Bossed&quot;</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>Pl. 3, Fig. 5</td>
</tr>
<tr>
<td>Bowmans Brook Incised (?)</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>Pl. 2, Fig. 7</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>3</td>
<td>42</td>
<td></td>
</tr>
</tbody>
</table>

Clasons Point Pottery

As noted above, most of the materials are Late Woodland, which, in this area corresponds to the East River Aspect. Hypothetically, Bowmans Brook pottery, a collarless ceramic tradition with lower New Jersey-Pennsylvania-Delaware affiliations, came first in coastal New York during the Bowmans Brook focus. This was followed by Clasons Point pottery of the subsequent Clasons Point focus which started with new ceramic ideas -- collars, neck constructions, castellations, globular bodies, round bases and mixed late Owasco-Iroquois design concepts introduced from the north.

Most Clasons Point components contain quantities of Bowmans Brook pottery leaving little doubt that it persisted, though on a diminishing basis, throughout most if not the entire Clasons Point era. Except for a few trade sherds from other areas all the Late Woodland pottery at
Ryders Pond is attributable to Clasons Point times.

Geographically, this Clasons ceramic complex occurs on Staten Island, Manhattan Island, and between the lower Hudson and Housatonic Rivers embracing the Bronx and Westchester counties and part of western Connecticut as well. It is also found on western Long Island in Queens county and, as we now know, in Kings county. Similar pottery is also found in northern New Jersey. This areal distribution coincides quite well with the territories occupied by the southern Wappinger, who dwelled on the mainland, the western Metoac and the Munsee. The pottery was undoubtedly shared by their immediate ancestors. It is highly probable that it was also shared by the historic groups.

It is not felt necessary in this paper to discuss the late pottery in detail as the types and their cultural characteristics are fairly clear as defined by Smith (1950, pp. 116-126, 190-91), and as elaborated by the author (1958, pp. 131-140). The following, however, is worthy of note:

**Eastern Incised:** As originally defined by Smith (1950, p. 190), Eastern Incised included all collared wares with incised decorations. As such, it bracketed both Iroquois productions and the locally made vessels, which were largely coastal interpretations and copies of Iroquoian pottery, if not always in design, at least in form.

Now that MacNeish (1952) has given a taxonomic breakdown of the Iroquois types the term Eastern Incised should be used in a more restricted sense and only in connection with incised collared sherds which are unmistakably not of Iroquois pottery styles.

In line with this, the Eastern Incised sherds from Ryders Pond are depicted in Plate 1: Figs 4-7.

**Van Cortlandt Stamped:** Diagnostically, this pottery type has cord-wrapped stick decorations on the collar (Plate 1: Figs 10-12, Plate 2: Figs 1, 8). Sometimes they also appear on the neck. The decorations are occasionally Iroquois-like but, most often are like those on the Owasco Corded Collar type (Ritchie & MacNeish, 1949, pp. 112, 114) found over much of New York State east of the Genesee Valley and in northeastern Pennsylvania and northwestern New Jersey.

The specimen, Plate 10: Fig. 11, is unusual in that it is the only Van Cortlandt Stamped rim known with an incised neck decoration. This is a typically Owasco trait when combined with a cord-marked motif on the collar. Rare as it is, the Ryders Pond specimen serves as an important link between Van Cortlandt Stamped and the Owasco Corded Collar, which is a major late Owasco form, and seems to confirm the derivation of the former from the latter type. Smith (1950, p. 186) makes note of a similar Owasco type found at the Pelham Boulder Site in Bronx, N.Y. Another rim specimen tentatively classified as Van Cortlandt Stamped (Pl. 2, Fig. 5) has an unusual profile due to contour variations of the rim area. This feature resembles Castle Creek, possibly coincidental.

The interior of Clasons Point pottery is usually fairly smooth, but one Van Cortlandt rim bears corrugations similar to the effect created by scraping the clay with the fluted edge of a scallop shell. (This trait appears on some of the Bowmans Brook Stamped sherds in the collection.)

**Clasons Point Stamped:** Neither the Owasco nor the Iroquois used shells to decorate their wares. This is a local innovation, inspired perhaps by the Sebonac or Niantic peoples to the east who did so habitually. The designs, however, resemble those of the two northern cultures. As defined by Smith (1950, p. 191), the technique used was stamping with a scallop shell as in Pl. 1, Fig. 8.

In Fig. 9, (Pl. 1) we have a Clasons Point Stamped variant involving stamping with a hard clam shell. At first glance, the lines on the sherd look incised. However, on close inspection, a series of closely spaced dots are discernible on one side of each "incised" channel corresponding to the underside milled edge of a hard clam shell. Only one other such sherd is known from this area. It came from the Pelham Boulder site, Bronx County, and also creates the illusion of incised lines.

A specimen of special interest is shown on Pl. 2, Figs, 2, 3. The collar is rather unusual,
PLATE 1 RIM SHERDS

Figs. 1-3, Mohawk (Ostungo Incised). Figs. 4-7, Eastern Incised. Fig. 8, Clasons Point Stamped. Fig. 9, Clasons Point Clam Shell Stamped Variant. Figs. 10-12, Van Cortlandt Stamped.
PLATE 2 RIM SHERDS

Figs. 1, 8, Van Cortlandt Stamped. Figs. 2, 3, Clasons Point Stamped Variant. Fig. 4, Eastern Incised. Fig. 5, Van Cortlandt Stamped Variant. Figs. 6, 7, Bowmans Brook Incised.
in as much as it defined by a grooving technique on the body below. This is uncommon for Clasons Point ceramics. No special significance is attached to these irregularities, as they may denote nothing more than an individualistic trait. The non-conformities are outweighed by the conformities, including the conventionalized face, which appears from time to time on Clasons Point rims.

Other Late Woodland Sherds: Not in the category of Clasons Point pottery are a few sherds indicating contacts which the Ryders Pond inhabitants had with other peoples during the Clasons Point period (Plate 1, Figs 1 & 2) are Mohawk sherds, namely Ostungo Incised which MacNeish (1952, pp. 76-77) states is late prehistoric and historic.

Also present are two shell-tempered Niantic Stamped sherds (not illustrated), which probably came from eastern Long Island where the contemporary Niantic focus, Windsor aspect, prevailed as well as in parts of Connecticut.

"NEW YORK ABBOTT" POTTERY

This complex is weakly present on the site. There are only ten small sherds. They resemble some of the incised, dentate stamped and fabric-impressed materials found at the Abbott Farm site below Trenton, New Jersey, on the Delaware River.

The author's research discloses that some Abbott and Abbott-like clayware is present, not only at Ryders Pond, but also at other coastal sites with a spatial distribution from Staten Island across Manhattan and Long Island to its eastern tip, and into Bronx County on the mainland.

Their precise relationship, however, with the New Jersey manifestation still awaits formal study. It is for this reason that the pottery is tentatively being called New York Abbott. Temporally, it seems to be Middle Woodland and to have come into being just prior to the Bowmans Brook focus. In terms of upper New York State chronology it would be just before Owasco times.

The Ryders Pond specimens are shown in Plate 3, Figs. 1-4. The temper is grit, mostly quartz in fine particle sizes, but some pieces range up to 4 mms. The texture is variable but in most instances it is well compacted and well fired. Breaks are inclined to be sharp and irregular; however, some coil breaks are evident. Colors are tan, reddish and brownish gray to a sooty black. Cores are usually black. Interiors are wiped or smoothed.

INTERIOR CORD MARKED POTTERY

Complete Interior Cord Marked: This is similar to Vinette from Central New York State and elsewhere in that both surfaces are completely cord marked (Pl. 12, Figs. 6, 7).

Sixty-six body sherds and one rim sherd, all from one vessel, show close similarity to Vinette I in terms of paste and coarse grit tempering. The pieces are brown, with a dark tone on the inside. They are 8 to 10 mm. thick with a generous amount of white crystalline and some quartz inclusions averaging 2 to 3 mm, in size but with some up to 5 mm. Some ocherous substance is present in the intermittent brownish-red stains and spots in the clay. A few particles break through the outer wall, but many more through the surface of the interior. The individual cord impressions in both surfaces are coarse looking, and disclose that the fiber was "S" twisted. The single lip fragment is slightly everted with an irregularly round to flattened lip. There are two more complete interior cord marked sherds. One is tempered with fairly fine grit; the other has flat angular cavities, as from leached shell; both however, have a firmer paste and are thinner.

Modified Interior Cord Marked: This pottery always shows an attempt to remove the interior cord marks while the clay was still damp by wiping or scraping. This type of interior cord marked pottery is not found in upstate New York according to Ritchie. It is considered somewhat later in time than the completely cord impressed variety, but both have been found together on coastal sites of the North Beach focus. The trait has also been identified with the Orient focus (Ritchie 1959, pp. 66-67). There is one such sherd in the Ryders collection. The exterior has fine cord impressions (1 mm. wide and "S" twisted) where the interior shows an almost com-
pletely successful erasure of the impressions; however, some are still discernible in one corner of the sherd. The paste is moderately compacted and tempered mostly with fine grit (1 mm. or less).

The temporal position of the two interior cord marked varieties at Ryders Pond is not clear, but they can run from Late Archaic to Middle Woodland. They might have been coeval with the New York Abbott material.

PLATE 3 SHERD5, BODY AND RIM

Fig. 1, Abbott Horizontal Dentate. Figs. 2-4, Abbott Zoned Dentate. Fig. 5, Indeterminant Interior Bossed. Figs. 6, 7, Vinette, Cord-Marked Exterior and Interior.
INDETERMINANT POTTERY TYPES

Interior Bossed: Punctates pressed into the clay with enough pressure to raise a node on the interior wall without actually piercing the clay, categorize pottery under this general classification (Pl. 3, Fig. 5). It is fairly common throughout the Northeast. In central New York State it is known as Wickham Punctate, where it prevailed during middle Point Peninsula times. Locally, interior bossed pottery was also found at the Schurz Site (Lopez 1955, pp. 12, 17), at Bay Terrace Site (unpublished data).

MISCELLANEOUS ITEMS

Bone: The scarcity of bone tools, unless they disappeared from the collection, is rather surprising for a site the size of Ryders Pond and considering that the shell beds (an alkali media) would have tended to preserve objects of bone. Only one specimen is present. It is 2-3/4 in. long, 1/4 in. thick. One side, 1-1/4 in. below the tip, is broken along the rest of its length, and in such a manner as to preclude positive functional identification.

Animal Remains:
- Land Turtle, Box Turtle (Cistuda Carolina)
- Sea Robin (Skull) (Prionotus Carolinus)
- Sturgeon (scales) (Acipenser Sturio)
- Blackfish, jawbone frags. (Tautoga Onitis)
- Porgy (skull fragment) (Leiostomus Xanthurus)
- Land Snail (Triodopsis Albolabris)
- Cockle Shell (Laevicardium Mortoni)
- Mud Snail (Nassarius Obsoleta)
- Razor Clam (Solen Directus)
- Half Razor (Tagelus Gibbus)
- Deer Bone, antler fragments
- Dog bones.

Austin's map indicates where two mortars and a pipe were found but they were not in the collection.

HISTORIC ITEMS

Goods of white man's manufacture from the site area are partly colonial and partly postcolonial. Some from the earlier period clearly belong to contact days.

Trade Items: These consist of an iron point, a perforated triangular point of copper, and two beads. One is a small, of irregular globular pale blue glass, with three narrow white enamel stripes equi-spaced around it. The other is a small, almost elliptical bead with a solid dark blue surface color, beneath which some thin white lines are visible, running from pole to pole; both ends reveal a transparent core around the perforation, encompassed by a thin white line. An iron axe or tomahawk also qualifies as a trade item. According to Roy Latham, (the collector) some oval spoon bowls of metal were also retrieved from the site, with holes pierced through the bowls, presumably to receive a string for suspension. The site also produced 4 white kaolin pipes with barrel shaped bowls and flat heels. These pipes may have been traded to the Indians. [These pipes are to be discussed by Geiber Omwake in a later contribution.]

There are other pipes, besides the above, from mixed periods. One fragment consists of a long slanting bowl with its lip line parallel to the stem, a feature that did not gain acceptance.
until after 1690. The specimen lacks initials or other distinguishing marks; it also lacks a heel. Another is a "TD" bowl fragment from a rather late date, to judge by its shape. An ornately decorated pipe stem fragment bears the name Peter Dorni, a pipemaker in northern France about 1850. His pipes were so well accepted that the Dutch plagiarized his name and his stem style decorations, and made thousands for export ca. 1870. Some are from sites, which seem to antedate 1850, but these could have been intrusions. There are several styles of lettering, but the supplemental stem decoration seems pretty much the same.

In the collection are a copper coin, unfortunately illegible, with 5 perforations, and a large round shell, slightly concave, with 6 perforations. Both probably served as buttons, but it is not known if they were used during or after the Indian occupation. The same holds true of 3 bluish green rum bottle fragments; one is a roughly trianguloid piece and suggests, but inconclusively, that a futile attempt might have been made to chip an edge for an implement. There is also one disc-shaped piece of lead (unperforated), possibly from hammering a musket ball flat, and 3 oval spoon bowls of copper.

**Gun Flints**: The 3 specimens received from Ryders Pond seem to be late. One is a waxy amber tinderbox flint from within the 1750 - 1890 period, fashioned from blades of the stone, which is of French origin. A second flint, which also shows the prolonged and mixed nature of the site, is a good quality, black and semi-translucent British flint of 1800 - 1840, used for the small locks on rifles and civilian pistols of the late period. The third flint, possibly a variant of the wedge-shaped flint, is a creamy tan stone; it resembles the ballast rock found on beach piles in both Carolinas. The writer wants to thank John Witthoft, who inspected the flints, for his comments on which this information is based.

Last, but not least, are two numismatic objects; a coin, badly worn except for the seated figure of Britannia on the obverse side, which was probably of the George III period, ca. 1787 - 1788, and a brass medallion, one of a series of six struck to commemorate the English capture of the French fortress and walled city of Louisbourg on Cape Breton. The face of the medal bears a portrait bust of Admiral Edward Boscawen (1711-1761), or "Old Dreadnought," as he was sometimes called. The inscription "Adm. Boscawen Took Cape Breton" hovers over the man who is depicted in armor. The opposite side shows the harbor scene with 5 ships and a mortar shell about to strike the fortification. This obverse side reads "Louisbourg" along the top while on the bottom appears the date of July 26, 1758. (The writer wishes to thank Michael Cohn for his assistance in researching this item.)

**DISCUSSION**

Since there is no stratigraphic data from Ryders Pond and much that is not known about the archeology of Coastal New York, interpretation must, of necessity, be based in large measure on artifactual affinities as observed in other areas particularly as regards the various cultures which existed hereabouts prior to the Late Woodland era. Such treatment of the subject is, needless to say, far from satisfactory, especially since the coast was not primarily a donor but, instead, the recipient of progressive changes from outside cultural centers. This means that there might well have been various time lags with artifacts still being used here even after they went out of style in the main centers of origin.

In endeavoring to interpret the Ryders Pond collection, this discussion in a sense will be a review of today's problems and of some of the progress in the State's sub-areas around the mouth of the Hudson.

**The Archaic Period**: Archaic subdivisions have not been demonstrated on the coast except for the regionally distant Orient culture of eastern Long Island, which is the late Archaic with carbon date 2900 + 250 BP (Ritchie, 1959).

In upstate New York there are Lamoka, Laurentian and Frontenac manifestations of the Archaic. That the Hudson Valley was heavily frequented by Archaic peoples is disclosed by the 7 sites reported by Ritchie (An Introduction to Hudson Valley Prehistory, 1958), all of which might be said to have a northern character, not only in the typology of the specimens but in the
lithic materials, except for some small percentages of imported stones such as jasper. No doubt Archaic peoples reached the coast via the Hudson River Valley, but in neither place has a distinctly Lamoka, or distinctly Laurentian complex been found; local surface collections from the few Archaic sites known have mixed northern Archaic projectile points with elements added from the New Jersey and Pennsylvania directions.

Against this background we have in the Ryders Pond collection an assemblage of points which would be perfectly at home on an Archaic plateau and which serves to demonstrate the mixed archaic projectile types (Pl. 2, Figs. 10-16) are Lamokoid, and the others are Laurentian like (Pl. 2, Figs. 28-34). The fishtails and lobate stemmed points are also present. Triangular points are not characteristically Archaic as we know but some with excurvate sides are suspected by the writer as being late archaic. Also at home as Archaic artifacts are the grooved axe and the steatite sherds. While an Archaic period is postulated at Ryders Pond, we must allow that most, if not virtually all the pre-ceramic elements might have lingered longer on the coast. As Smith (1950, p. 147) states, and I concur, "many Archaic period traits survive into the Intermediate (Early and Middle Woodland) period on the coast."

**SUMMARY OF CONCLUSIONS**

The Ryders Pond collection is the only comprehensive one known for Kings County, about which hardly any archeological data exists. Its importance, therefore, is that it helps fill a void. Unfortunately, there is no stratigraphic information. All we know is that everything came from within plow depth but it is clear that Ryders Pond was a multicomponent site with a long history. It was used several times by different people with the heaviest occupation having occurred during the Clasons Point period, which is Late Woodland 2.

There is no verifiable data that Shanscomacoke was the name of an Indian Village but there is little doubt that the general area bore the name. As Bolton (1934) remarked, the colonial records describe the Ryders Pond body of water and surrounding terrain with enough accuracy to leave little room for skepticism. As for the term "Carnarsee" it is not very satisfactory except as a loose designation for the conglomeration of scattered, but probably related, historic aboriginal groups in Kings County and Jamaica district in Queens.

The presence of trade goods indicates contact. The Clasons Point pottery does not help in this connection but it may have crossed the historic threshold because it is the most recent clayware, which every Late Woodland site in the New York City region has produced. Not a single site in the area has yielded anything later looking. Thus, by default, it qualifies as contact pottery. It might be mentioned that it was present in small quantities at Fort Massapequa (Smith, 1950) which dates circa 1654, and at the Clasons Point Site in Bronx County which, Skinner (1919) believed, was the Siwanoy Village of Snakapins. It is also very similar to some of the ceramics from the Bell-Philhower site in northern New Jersey, which was thought to be a historic village of the Munsee in that State (Ritchie, 1949).

If the Carnarsee made Clasons Point pottery, then it follows that while they were members of a Long Island Confederacy of tribes known collectively as the Metoac, the confederation was purely political because Clasons Point pottery is not found in eastern Long Island where different styles prevailed. The only late eastern Long Island pottery in the Ryders Pond collection is one Niantic trade sherd. Carnarsee relationships seem to be with the Siwanoy on the Bronx mainland and southwestern Connecticut, and with some peoples in Staten Island, to judge by the geographical distribution of Clasons Point pottery. Another possible linkage is with the Munsee because the ceramics resemble Munsee pottery. The Iroquois sherds from the site are interesting in the light of Furman's account of a tradition that the Iroquois engaged in a punitive expedition against the Canarsee. (Forman, 1875).

Notwithstanding the distinct likelihood that the Canarsee made Clasons Point pottery it is believed that most of this late material was proto-historic. This is based on the fact that there seems to be much pottery, relatively speaking, far too many triangular points and not enough trade goods for a late site. Even wampum, which was once legal tender and even counterfeited by the Dutch, is missing. It is well known that the more prolonged the degree of contact, the lesser reliance there was on pottery, which was quickly replaced by metal caldrons and copper points.
To witness the relationship between native craftsmanship and its rate of displacement by items of European manufacture, one needs to go no farther than Fort Shantok in Connecticut and Corchaug in eastern Long Island, both circa 1650, and the Montauk cemetery (circa 1675-1750) also on the island. The Forts yielded respectable amounts of aboriginal pottery beside trade goods, but at the 1675-1750 site only two Indian vessels accompanied the abundant trade objects. At that, the vessels reflect a radical distortion, due to a disappearing familiarity with the local ceramic styles of the earlier ca. 1650 period.

While the site’s late phase is fairly clear, there is not enough data in the residue of the collection for a well balanced synthesis of the cultural sequences prior to Late Woodland. To make order out of the many tangled skeins is presently fraught with complications. Among the artifacts there are persistent indicators of influence, which probably flowed through centuries into the area. The main difficulty in interpretation, aside from the lack of stratigraphy, is that there are items echoing widely spread cultural complexes which are not fully understood in their respective areas of origin. This is particularly true westward with regard to precise temporal positions. Besides, new developments in the archaeology of Coastal New York such as the discovery of various types of interior cord-marked pottery, Abbott and Abbott-like pottery, and the appearance of Steubenville points has been announced in preliminary papers, but have not as yet been fully interpreted. Obviously, these developments will call for a revision of some of the present concepts of cultural change and progression as originally postulated by Smith.

The factual record of the motley pre-Late Woodland materials from Ryders Pond will no doubt serve a fuller purpose in the future when more information is gathered from other sites on the littoral and in surrounding areas.

In the meantime, an Archaic period is postulated based on the Lamokoid and Laurentian type points, especially those of native quartz and Hudson Valley flints. The grooved axes, fragmentary adz, crude plummet (?) and possible bannerstone wing-tip are other indicators. What we do not know is whether separate groups of Lamokoid and Laurentian peoples left the materials, or if they were contemporaneously deposited during a Frontenac-like period.

A Middle to Late Archaic and Transitional Early Woodland interval also seems to be indicated by such occurrences as steatite vessels which, together with the fishtails, Susquehanna broad and lobate (and related type) points might represent an interplay or contact on the same time level between Orient to the east and transitional periods in lower New Jersey and Pennsylvania.

To revert to the Lamokoid and Laurentian points, the radiation from the north which brought them to the New York coast, also seem to have spread down the Delaware River Valley into New Jersey where the points were made predominantly of local materials to form part of an "Argillite culture". Laurentian (and some Lamoka) influence also seems to have spread into the Upper Ohio Valley, where, according to Dragoo (1959, pp. 210, 213-214), Laurentian-like groups intermingled with peoples using Steubenville Stemmed and Lanceolate points to form the Panhandle Archaic there; this, in turn, appears to be the base from which Early Woodland (particularly Adena) developed in the area. He also believes that Laurentian points persisted in the Upper Ohio Valley long after the introduction of pottery and visualizes the Adena as having pushed Archaic peoples away from the valley proper.

This is most intriguing as it might be of far-reaching significance once more is known about the Late Archaic to Middle Woodland stages in areas extending from upper Ohio to this coastal corner, and about possible interrelationships between Adena, Illinois Hopewell, Vine Valley, and Abbott which were probably contemporary in part. The possible dispersal of Archaic groups by the Adena might explain the Steubenvilles at the Abbott Farm site where they were apparently added to the "argillite complex." The coastal Steubenville specimens, probably mean that there was a time lag from the Upper Ohio Valley to the Delaware River Valley to the New York littoral, with pottery having been picked up somewhere along the line with some Adena and Hopewellian traits.

To be noted is that the Ryders Pond collection contains, beside the Steubenville in an argillite complex, a hematite pyramid, which is like similar Adena objects, the lobate stemmed points, a common Adena form, traces of Ohio Flint Ridge material, and a birdstone fragment. There is also pottery similar to Abbott culture types, which, according to Cross have vague Hopewellian
undertones.

Unfortunately, the assortment of early ceramics from Ryders Pond is limited. The presence of Complete Interior Cord-Marked is no doubt due to northern influence. However, the single Modified Interior Cord-Marked, or "Modified Vinette" also points westward, where similar pottery occurs in New Jersey and Pennsylvania but apparently not in upstate New York.

Thus, while much of the picture remains obscure in precise details it seems that traits from Lamoka, Laurentian, Pan Handle Archaic, Susquehanna Transitional, and dilute Adena and Illinois Hopewell meet in the Delaware River Valley, where the Abbott culture developed and spread to the coast on a Middle Woodland level.

EDITOR'S NOTE
The discussion and conclusions have been printed exactly as Lopez wrote them a little over a decade ago: Lopez was a keen student and the views he expresses here were sound enough for their time. That they now appear so quaint is due to the great advances in Hudson River archaeology since the dating in 1963 of the GO horizon at Croton Point at 5863± 200 yrs. Compare with Ritchie's "The Archaic in New York", NYSAA Bulletin 52, July, 1971.

L.A.B.

BIBLIOGRAPHY
For Parts I and II

Bailey, John H.

Bolton, Reginald P.
1922 Indian Paths in the Great Metropolis, (Indian Notes & Monographs, Museum of the American Indian, Heye Foundation, N.Y.C.) Note: This book does not have a volume or number reference.
1934 Indian Life of Long Ago in the City of New York, N. Y.

Bushnell, David I. Jr.
1937 Indian Sites Below the Falls of the Rappahannock, Virginia, Smithsonian Misc. Collection, Vol. 96, No. 4 Wash.

Byers, Douglas S.

Byers, Douglas S. and Frederick Johnson

Coffin, C. C.

Cross-, Dorothy
1941 Archaeology of New Jersey, Vol. 1, New Jersey State Museum, Trenton.

Dragoo, Don W.
1959 Archaic Hunters of the Upper Ohio Valley, Anthropological Series No. 3, Section of Man, Carnegie Museum.

Evans, Clifford
Ford, James A., Philip Phillips and William G. Haag
1955  The Jaketown Site in West-Central Miss., Vol. 45, Part 1, A Paper of the American Museum of Natural History, N.Y.

Fowler, William S.

Glynn, Frank

Hartle, Donald D.

Holland, C.G.

Kinsey, W. F.

Latham, Roy

Lopez, Julius

Mason, Ronald J.
1950  The Ware Site, Salem County, New Jersey, American Antiquity, Vol. 15, pp. 31521, Menasha.

McCann, C. J.
1957  Six Late Sites in Southern & Central New Jersey, Bulletin 13, Archeological Society of New Jersey, pp. 1-10, Trenton.

McKusick, Marshall B.
Moffett, Ross
Nero, Robert W.
Parker, Arthur C.
Patterson, E. D.
Pope, G. D. Jr.
Praus, Alexis A.
1945 The South Woodstock Site, Bulletin of the Archeo. Soc. of Conn., No. 17, pp. 152, New Haven
Richards, Horace G.
Ritchie, William A.
1944 The Pre-Iroquoian Occupation of New York State, (Rochester Museum of Arts & Sciences, Memoir 1, Rochester, New York).
Ritchie, William A. and MacNeish, Richard S.
Rouse, Irving
Sargent, H. R.
Skinner, Alanson
Smith, Carlyle S.
Solecki, Ralph S.
Tooker, William W.
1911 The Indian Place-Names on Long Island & Island Adjacent. New York, Webb, William & Raymond S.
1957 The Adena People - No. 2, The Ohio Historical Society.
Witthoft, John

Wray, Charles F.

Minutes of the 56th Annual Meeting
NEW YORK STATE ARCHEOLOGICAL ASSOCIATION
State University of New York at Albany
Albany, New York
April 14, 15, 16, 1972

Executive Committee Meeting
A meeting of the Executive committee was held on Friday, April 14, President Michael J. Ripton called the meeting to order at 8:45 p.m. The following members, including State officers, Chapter presidents and trustees, were present.

Michael J. Ripton  (Morgan Chapter)
Charles S. Pierce  (Frederick M. Houghton Chapter)
William F. Ehlers  (Orange County Chapter)
Louis A. Brennan  (Metropolitan Chapter)
Carolyn Weatherwax  (Auringer-Seelye Chapter)
*Gloria Miller  (Auringer-Seelye)
Monte Bennett  (Chenango Chapter)
*Theodore Whitney  (Chenango)
Henry Wemple  (Chenango)
*Dr. Marion White  (Frederick M. Houghton)
*Dolores Laloce  (Frederick M. Houghton)
Charles Pierce  (Frederick M. Houghton)
William Harrison Case  (Incorporated Long Island Chapter)
Alfred E. Dart  (Inc. Long Island)
Hallock Wood  (Inc. Long Island)
*Alternate

*Charles F. Hayes, III  (Lewis H. Morgan Chapter)
Richard McCarthy  (Lewis Morgan)
*Charles Merritt  (Metropolitan)
*Richard Wingerson  (Metropolitan)
Alvin Wanzer  (Mid Hudson Chapter)
*Lady Dumont  (Orange County Chapter)
*Elizabeth Dumont  (Orange County)
Dr. Phillip Collella  (Triple Cities Chapter)
Thomas Elliott  (Triple Cities)
*Murray Shaprio  (Triple Cities)
Calvin Behenke  (Upper Susquehanna Chapter)
*Jackie Hesse  (Upper Susquehanna)
Frank J. Hesse  (Upper Susquehanna)
Paul Huey  (Van Epps-Hartley Chapter)
Arthur Glamm Jr.  (Van Epps-Hartley)
Charles Gillette  (Van Epps-Hartley)

Committee Chairmen present:
R. Arthur Johnson, Awards and Fellowships; Charles Merritt, Legislative; Charles Pierce, New York Indian; Dr. Kingston Larner, Nominating; Dolores Elliott, Publications; Dr. Gladys Haase, Public Relations.

1. Roll call was taken.
2. A motion was made to suspend the reading of the minutes and to accept them as printed, by Dr. Larner; second Thomas Elliott. Motion carried.
3. President Michael Ripton’s opening remarks noted the increase in membership and the need for veteran members to continue with the Association. He recalled the accomplishments of the past two years and outlined the challenges of the future. (The full president's report was read and distributed at the annual dinner.)

OLD BUSINESS
4. Slide Lecture Series - Dr. Elizabeth Kraus, (Orange County) appointed to prepare the first of a slide lecture series on archeological training, reported that the project would be completed shortly. An 80 slide and taped program will be available to the Chapters to borrow for various programs. It will be housed at the Library in Rochester and may be duplicated if any Chapter wishes to bear the expense.

5. Internal Revenue Report - In the absence of Mrs. Barber, the Treasurer, Mr. Ripton reported on the Tax Reform Act of 1968, Close attention is being paid to non-profit organizations and forms must be submitted annually to Washington to maintain our tax status. If Chapters do not conform to these regulations,
there is a good possibility of losing our non-profit status, causing Chapters to pay taxes on their income and holdings. Heavy fines may also be levied by the government. Each Chapter treasurer must submit a financial statement of the Chapter to the Association.

72-1 RESOLVED, The State treasurer will send to each Chapter, by the lst of January, of each year, an auditable form to meet the Internal Revenue Service requirements. Chapter treasurers must return the completed form by February lst. Motion made by Charles Gillette. Second Thomas Elliott. Motion carried.


New York Indian Charles S. Pierce, Chairman, reported that Co-chairman Mrs. Dorothy Taylor had moved to Mexico and that Mrs. Janet Kertzie, (Auiringe-Seelye) has been appointed to replace Mrs. Taylor. The committee has researched problems connected with archeology and the Indian. Most problems arise through lack of communications or misunderstandings. One course suggested was to place the organization on record as not being "pot hunters" but a scientific and educational organization.

72-2 RESOLVED, That Mr. Pierce be authorized to communicate with the New York Indians and resolve any conflict that may arise from scientific archeological excavations. Motion made by Thomas Elliott. Second, Henry Wemple. Motion carried.

Legislative - Mr. Charles Merritt, Chairman reported that Legislative bills 8704 and 7734 have been revised by the State Education Department and should be on the Senate and Assembly floors soon. (The bill subsequently failed in the Senate).

Publications - Chairman Dolores Elliott reported that no Occasional Papers or Researches and Transactions had been printed in the past year. The manuscript of Dr. Peter Pratt was not published by the NYSAA due to lack of funds. One manuscript was submitted by Dr. Engelbrecht. Dr. Engelbrecht wished to revise it and it has not been resubmitted for publication. Donations of $400 were received from the Chenango and Triple Cities Chapters. Mrs. Elliott commended Louis A. Brennan for all his dedication and hard work on The Bulletin.

Treasurers Report - In the absence of Mrs. Rose Barber the Treasurer's report was read by President Ripton. An error in typing or arithmetic brought the following motion from Richard McCarthy: The Treasurer's report be accepted with necessary adjustments made. Second, Lewis Dumont. Motion carried with one negative vote.

In accordance with the By-Laws, President Ripton appointed the following Finance committee to audit last year's books, records and IRS report and to publish their findings within thirty days. Chairman, Marion White, Richard McCarthy, William Cornwall.

Treasurers report - April 1 thru December 31, 1971 (9 months)

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7. Budget for 1972 Fiscal Year - Mr. Ripton read and explained the proposed budget. Motion made by Thomas Elliott to adopt the budget. Second by Elizabeth Dumont. Motion carried.

Motion: To authorize $1875.00 to publish three issues of "The Bulletin" and that a bid be considered from the printers in Deposit, New York. Motion made by Dr. White. Second, Henry Wemple. Motion carried,

Motion: To increase the number of "Bulletins" printed to eleven hundred per issue. That single or-
ders be increased to $1.50 beginning with Bulletin No. 54. Motion made by Louis A. Brennan. Second Lewis Dumont. Motion carried.
8. New Chapters - No petitions were received for Chapter affiliations.
9. Kraus Reprint Contract - Mr. Rippon explained the new contract between the NYSAA and the Kraus Reprint Company. Motion: To sign the agreement with the Kraus Reprint Company. Motion made by Henry Wemple. Second by Louis Brennan. Motion carried.
10. Mr. Brennan wanted to go on record, stating that this administration had been aggressive, hard working and had completed many projects.
11. President Rippon commended the Van Epps-Hartley Chapter on the exemplary job on the annual conference.
12. Mr. Rippon spoke on life membership in the Association and suggested Dr. William A. Ritchie be considered. Motion made by Henry Wemple and second by Paul Huey that Dr. Ritchie be granted a Life Membership in the Association. Motion carried unanimously.
13. Fred Dart made note of the various types of memberships. As most sustaining memberships are institutional a motion was made to change the membership classifications.
   Motion: That the NYSAA establish a new category of membership to be called institutional at the rate of $7.00 and that the present sustaining membership dues be increased to a minimum of $20.00 with no maximum. Motion made by Fred Dart. Second by Dr. Haase. Motion carried.
News of the sudden death of trustee William H. Rice brought condolences from the Executive committee.
Motion to adjourn by Dr. Colella, seconded by Lewis Dumont was carried and brought the meeting to a close at 12:15 a.m.

ANNUAL BUSINESS MEETING
1. The meeting opened at 8:55 a.m. EST on April 15. A quorum was present at the time.
2. Minutes of the Binghamton meeting were previously distributed. Motion made by Kingston Larner to suspend the reading of the minutes. Second by Lewis Dumont. Motion carried.
3. Reports from President Rippon, Vice President Pierce and Secretary Ehlers were read.
4. Mr. Rippon read the treasurer's report in the absence of Mrs. Rose Barber and the report was referred to the Finance committee.
5. In the absence of William Vernooy, Membership Chairman, Mr. Rippon reported an increase of over 150 members due to the membership drive. Henry Wemple, Chairman, Earl Casler, and Mrs. Francia Me Cashion were appointed to determine the Chapter membership Captain award and the Chapter recipient.
6. Nominating Committee report was read by Dr. Larner, Chairman. Dr. Larner apologized for the no-contest ballot but mentioned it was not because of lack of effort and that the Association had to sell itself to the Chapters to be able to obtain capable people to do the work.

SLATE OF OFFICERS
President Charles S. Pierce
Vice President William F. Ehlers
Secretary Mrs. Francia Me Cashion
Treasurer Volkert Veeder
E.S.A.F. Rep. Louis A. Brennan

7. Mr. Rippon reported on the NYSAA archives in the absence of John McMaster, Librarian-Archivist. In the past two years all publications of the NYSAA, exchange papers and library collections have been classified and catalogued. Mr. Rippon commended Mr. McMaster for an excellent job.

NEW BUSINESS
President Rippon reported the highlights of the Executive committee meeting. He spoke on the approval of the new budget, of proposed program services, antiquities bill and of its progress. He noted a surplus of $408.30 in administration monies.
9. RESOLUTION 72-1
RESOLVED, That the New York State Archeological Association expresses its sincere appreciation to Mr. & Mrs. John McCashion and their Program Committee, and the Local Arrangements Committee of the Van Epps-Hartley Chapter for their meritorious efforts in preparing for and executing all of the final details necessary for the successful 56th Annual Meeting of the Association.
10. RESOLUTION 72-2
RESOLVED, That, the New York State Archeological Association hereby expresses its sincere appreciation to Dr. William A. Ritchie for the many years of service he so generously gave to the Association, its Lewis Henry Morgan Chapter and Van Epps-Hartley Chapter and be it further,
RESOLVED, That the Association hereby grants to him all the privileges of Life Membership in the Association.

11. Report of Tellars - Mrs. Charles Gillette and Mrs. Dolores Lalock were appointed as tellers and reported as follows:

President          Charles S. Pierce
Vice President     William F. Ehlers
Secretary          Mrs. Francia McCashion
Treasurer          Volkert Veeder
E.S.A.F. Rep.       Mr. Louis A. Brennan

12. Dr. Marion White reported that nineteen professional archeologists had met in Syracuse to form the New York Archeological Council. The group was formed to insure a strong voice for New York State and also to support legislation. A steering committee was formed for emergency action such as salvage. Dr. White, Charles F. Hayes, III, and Bert Salwen are appointed to this committee and can be called in time of archeological emergencies.

13. Report of the Membership Awards Committee based their findings on the percentage of new members. The upper Susquehanna Chapter added the largest number of members for the size of the Chapter. Chapter Membership Captain Howard Chamberlain won the twenty-five dollar cash award.

14. Motion to adjourn was made and seconded. Meeting was adjourned at 9:27 a.m. EST.

Respectfully Submitted,
William F. Ehlers
Secretary

Program NYSAA Annual Meeting 1972

FRIDAY, APRIL 14, 1972

3:00 - 9:00 P.M.  Registration
7:30 P.M.        Awards and Fellowship Committee Meeting*
8:00 P.M.        Executive Meeting
7:30 A.M.        Registration
8:00 A.M.        Welcome: Dr. Dean R. Snow, Associate Professor, Department of Anthropology, State University of New York at Albany
8:15 A.M.        General Business Meeting
8:30 A.M.        A Vosburg Living Floor at Dogan Point
9:00 A.M.        The Weinman Site, A Stratified Site on Lake George
9:30 A.M.        Piping Rock Site
10:00 A.M.       The Gravesen Site, Probable Butten Kill Occupation

SATURDAY, APRIL 15, 1972

10:40 A.M.       A Macro-photographic Technique for Recording Edge Wave Patterns on Lithic Artifacts
11:00 A.M.       Some Recent Discoveries in Historic Seneca Archeology
11:30 A.M.       A Preliminary Report on a Paleo-Indian Occupation Site in New Jersey
1:30 P.M.        SUNY Oswego Excavations in Ontario Related to the Disappearance of the St. Lawrence Iroquois
2:00 P.M.        The Duchess Quarry Cave - 10,580 B.C.
IROQUOSIA - THREE REVIEWS

Late Woodland Cultures of Southeastern Michigan. James E. Fitting. XLVIII plates, 20 figs., 41 tables, 165 pp. $3. Anthropological Papers, No. 24, Museum of Anthropology, University of Michigan, Ann Arbor, 1965


Three recent monographs on Late Woodland cultures in adjacent areas contain much of interest to archaeologists working with Iroquois materials from New York. Each of these has, in addition to site descriptions, new interpretations of site sequences and cultural interrelationships.

The earliest of the three, the monograph by Fitting, presents a chronological sequence for a number of sites in Southeastern Michigan. Therefore, it fills in one gap in an emerging picture of Late Woodland cultural distribution around Lake Ontario. The Riviere au Vase Site, in Macomb County adjacent to Lake St. Clair, receives the most attention since it provided the largest sample of materials from excavations dating back to 1936. Fitting is to be complimented on his thorough analysis of Riviere au Vase pottery which sheds much light on this previously confused site. Certain problems resulting from the field excavations such as sampling procedures and controls could not be corrected.

A sample of rims representing 371 vessels was analyzed by attribute, and attribute combinations were sought using the chi square test. The rims were first sorted into six groups by noting the following outstanding differences in rim treatment: 1) oblique motif, 62%, 2) horizontal linear motif, 12%, 3) opposed motif, 2%, 4) no motif, cord-marked, 14%, 5) no motif, net-impressed, 1%, and, 6) miniature vessels, 9%. The first four groups were subdivided by technique of decoration and then regrouped or omitted with the results that five categories called "design and technique" categories were used for further analysis. These five were: 1) oblique...
motif, dentate-stamped, 2) oblique motif, tool impressed, 3) oblique motif, cord wrapped stick impressed, 4) horizontal motif, cord wrapped stick impressed and interrupted linear, and 5) no motif, cord marked.

The "design and technique" categories are the groupings which form the basis for all further rim analysis. Yet the manner of their composition receives little attention. It will be noted that the first three groups separate by one attribute difference, technique, whereas the fourth combines two techniques of decoration. These groupings are handled as if they had validity yet they are not equivalent categories taxonomically and arguments for the lumping and splitting are not presented. A table showing the frequencies of the original categories and the regrouped categories would have made it clear to the reader what was being reshuffled and would have provided some data to assess the validity of the groupings. As it is, it requires a search and a calculator to learn that the five design-technique categories account for about 325 vessel observations, the precise number differing, one supposes, because some rims were too incomplete to allow all observations.

Each of these five design-technique categories is then examined to seek the clustering of rim profile, tempering material, lip decoration, castellation, and excavation unit. The discussion of attribute combinations which follows is confusing due to inadequate explanation and captions on the tables and the lack of totals. The results point to some distinct combinations such as the strong association of cord-marked vessels and those with linear designs with burials. The stylistic attribute combinations form the basis for a further classification into wares and types.

Wayne ware and Riviere ware are defined. Wayne ware separated due to the association of fine to medium tempering material and undecorated rims consists of a single type, Wayne Cord-marked, with variants, Wayne Smoothed and Wayne Punctate. This ware has numerous similarities to Jack's Reef Corded in New York and other pottery finds throughout Michigan and the Ontario Peninsula. It dates towards the end of the Middle Woodland and the beginning of the Late Woodland. At the Riviere au Vase Site it is placed by cross-dating between 600 and 900 A.D.

Riviere ware, separated on the basis of larger tempering particles and a tendency for greater occurrence of collars and castellations, is composed of the types Vase Dentate, Macomb Linear, Vase Corded, and Vase Tool Impressed. The first is regarded as the earliest and has similarities to Jack's Reef Dentate Collar. A date of 900 to 1000 A.D. is suggested. Macomb Linear with several variants has equivalent types in Uren Corded, Owasco Corded Collar, and Iroquois Linear. Vase Tool Impressed is similar to Ontario Oblique and Uren Noded. Vase Corded has resemblances to Uren Corded and Owasco Herringbone. The time level implied by these parallels to the New York State Owasco and Iroquois ceramic series places the Riviere au Vase Site ceramically during a period spanning from the end of Middle Woodland through the first half of the Late Woodland. Fitting explained this as follows: "There seems to be a development paralleling that taking place in the New York Owasco sequence,... the Southwestern Ontario Glen Meyer sequence,...at the Boys and Barrie sites,...the Frank Bay site ..... and in the Straits of Mackinac at the Juntunen site.... These relationships are all of a generic rather than a specific nature, although several sherds from the Riviere au Vase site may be Uren types (47)."

The conclusions present a proposed cultural succession for the Late Woodland Period in Southeastern Michigan as well as a discussion of the Middle Woodland base. The dominant Late Woodland sequence is labeled the "Younge Tradition."

"The Younge Tradition is marked by such traits as collared and castellated ceramics with predominantly oblique or chevroned motifs; horizontal motifs are also common. There are a number of methods executing these designs. The projectile points are predominantly triangular types. Many of the Younge Tradition sites are comparatively large with large mortuary areas suggesting a sedentary or semisedentary population with an agricultural base. There is a tendency toward multiple burials with such mortuary specializations as clay packed into the skull, altered long bones, perforated skulls and skulls with disks removed (130)."

This general description sounds familiarly like Late Woodland Owasco and Iroquois cultures in New York and Fitting draws on these for parallels throughout. Only the mortuary complex sounds strangely different. This difference may be related to the particular Middle...
Woodland base in Southeastern Michigan represented by material from five sites including possibly some from Riviere au Vase. A discussion of certain trait similarities of these Middle Woodland sites to Ohio Hopewell, and a suggested sequence follows. Then the four Late Woodland sites of Riviere au Vase, Younge, Fort Wayne Mound, and Wolf are seriated into that order from Early to Late. These are grouped into successive phases, Riviere au Vase, Younge, Springwells, and Wolf.

Fitting notes strong ceramic similarities between the Southeastern Michigan sites and those from the Ontario Peninsula. He rightly notes the occurrence elsewhere of "Iroquois" pottery with non-Iroquoian speaking people and rejects an Iroquois ethnic label for Southeastern Michigan cultures. In the reviewer's opinion, this reservation should be extended across the international boundary into the adjacent Western Ontario Peninsula where it has yet to be demonstrated that the villages are ancestral to those of the Historical Neutral so far found only around the Grand River and east. In Southeastern Michigan no clear ethnic identity can be established for the Late Woodland sites, all of which precede the Historic Period by considerable time.

The dating of these Late Woodland phases presented in a later article by Fitting (American Antiquity Vol. 31, No. 5, p. 738) is now based on radiocarbon samples unavailable at publication. They are as follows:

- Wolf Phase  After A.D. 1250
- Springwells Phase  1100 - 1250 A.D.
- Younge Phase    900 - 1100 A.D.
- Riviere au Vase    600 -   900 A.D.

At the same time Fitting's researches were being conducted and made ready for publication, James V. Wright was carrying out a major study which resulted in The Ontario Iroquois Tradition submitted for publication February 1, 1964. Neither Fitting nor Wright had the advantage of each other's published work (judging from the bibliography). Wright is dealing with "Iroquois speaking people involved in a general Iroquois cultural pattern in the Northeast" among which he focuses on the Ontario Iroquois Tradition, the historic product of the HuronPetun-Neutral-Erie.

He compares 38 sites systematically, relying especially on the pottery to establish their temporal and spatial relationship. The comparisons use relative frequencies and coefficients of agreement. Nine of these sites located in Southwestern Ontario are used to define the Glen Meyer branch of Southwestern Ontario. The western edge of the Glen Meyer branch distribution is closer spatially to the Michigan sites than it is to the eastern limits of its own distribution. Farther east and spatially separated from Glen Meyer are six sites stretching from near Hamilton on the west across the span north of Lake Ontario as far as its eastern end. These compose the Pickering branch of Southeastern Ontario.

Both the Glen Meyer and Pickering branches are assigned to the Early Ontario Iroquois stage which is considered to be the converging stage of the Ontario Iroquois Tradition. In Southwestern Ontario this stage terminated at c. 1300 A.D. when the Pickering branch conquered the Glen Meyer. The spread of the Pickering into Southwestern Ontario along with its continued development in Southeastern Ontario marks the beginning of the Middle Ontario Iroquois stage. The Uren and Middleport substages make up the 100 years of the Middle Ontario Iroquois stage. These represent a continuity from the Pickering with internal change and retention of certain Glen Meyer traits in Southwestern Ontario. The wide-spread similarity of these substages has led Wright to designate the Middle Ontario Iroquois stage the "horizon" of the Ontario Iroquois Tradition, 1300 - 1400 A.D.

The horizon stage of the tradition undergoes differentiation, especially in the pottery, which is recognized by designating the Late Ontario Iroquois stage as the diverging stage of the tradition, beginning at 1400 A.D. The developments led to the four historic groups, Huron, Petun, Neutral, and Erie. These groups are considered up to the time of their defeats around 1650 A.D. The Ontario Iroquois Tradition was contemporary during its early development with the New York Owasco and the Younge Tradition. Wright presents cogent reasons for avoiding the name Owasco or Owascoid.
The use of several names for the similar and contemporary developments taking place around Lake Ontario and Lake Erie from 900 A.D. on tends to emphasize the differences rather than the basic similarities. These similarities consist mainly of pottery styles, triangular projectile points, scrapers, celts, and other flint tools. The sample is small and yet the similarities are more striking to me than the differences. But most of these are long recognized Late Woodland artifact types. The few fragmentary pipes show formal differences which are too vague and limited in sample size to speculate on.

Precise pottery comparisons are difficult to make because of different classifications employed. Fitting used pottery attributes to describe the Riviere au Vase pottery and then defined wares and types to analyze and compare the remainder of these sites. Wright used pottery types, probably because he relied in part on published data which had been described by MacNeish's pottery types. Fitting's two wares are based on distinctive attributes which produce a dichotomy first in classification and secondly, sub-groupings or types within each ware. Wright's types are the same level of classification as Fitting's types.

The fact that Wayne ware has no analogous category in Ontario Iroquois is due to a temporal difference. In Michigan this ware does not last into the Late Woodland and its presence at the Fort Wayne Mound and Riviere au Vase is the basis for Fitting's assignment of some occupation of these two sites to Middle Woodland. The reader should note that a single name is used in Figures 17 and 18 for what are regarded as different occupational levels (typologically derived) at both the Riviere au Vase and Fort Wayne Mound sites.

The strongest resemblances are found between the Riviere types and the types which predominate in the Glen Meyer branch of the Early Ontario Iroquois stage. Wright in the publication next to be reviewed notes the following approximate equivalences: Vase Dentate-Stafford Dentate, Vase Tool-Impressed-Ontario Oblique, Vase Corded-Glen Meyer Oblique, Springwells Net Impressed-Stafford Stamped.

Ontario Oblique is the dominant pottery type of the Early Ontario Iroquois Tradition and the widespread similarity between Michigan and Ontario is most noteworthy at that time, 1000 to 1300 A.D., the time of the Glen Meyer and Pickering manifestations in Ontario and the Younge and Springwells Phases in Southeast Michigan. The techniques of linear stamping and cord wrapped stick impressing seem more popular in the Glen Meyer in contrast to greater occurrence of net impressed rims in the Springwells Phase. It is interesting to note the absence of an equivalent to Ontario Horizontal, the dominant type of the Middle Ontario Iroquois stage. This absence would support Fitting's reservations about the Wolf Phase lasting the 400 years to Historic times and suggests that the Southeastern Michigan sequence defined here ends not long after 1300 A.D.

The Early and Middle Ontario Iroquois stages and the relationship between the Pickering, Glen Meyer, and Uren manifestations receive further attention from Wright in the Bennett Site report, the purpose of which is to examine the thesis that the Pickering branch expanded into Southwestern Ontario and conquered the Glen Meyer people. The evidence consists of site distribution and the retention of some Glen Meyer traits in Uren after the Glen Meyer branch has ceased to exist. The sites of the Glen Meyer branch and the Pickering branch are spatially separated. This fact based on only 14 sites at present leads Wright to conclude that these were separate contemporary complexes. Then at the beginning of the Middle Ontario Iroquois stage he finds the Pickering spread across both areas and developing into the Uren.

The Pickering conquest did not entirely wipe out the Glen Meyer people and some of the latter traits hang on in the Uren in the west which are not in Uren in Southeastern Ontario. This is demonstrated by comparing Bennett (preconquest Pickering) with Goessens (preconquest Glen Meyer) with Uren (post-conquest product of the Pickering branch). The greatest similarity is between Bennett and Uren and the greatest dissimilarity between Goessens and Bennett. This does not agree with the chronological order of the three which is Goessens, Bennett, and Uren, from Early to Late. Therefore, it is concluded that the explanation for discrepancy between the similarities and the chronological order is the conquest of Glen Meyer and the assimilation of its remnants into the conquering Pickering accounting for the intermediate similarity of Goessens and Uren.

Wright suggests very tentatively that some of the Glen Meyer refugees may have fled to Southeastern Michigan, accounting for the sudden influx of Springwells pottery in the Fort Wayne
Late Woodland occupation of the Springwells phase. He notes the absence of bossing at this time level in Southeastern Michigan as an argument against Glen Meyer refugees there. One must note also certain Uren Noded sherds at Riviere au Vase (late in the occupation) thought to be foreign sherds and other particular stylistic similarities to Ontario during the Wolf phase indicating a long history of relationships between the two areas. The clues to the nature of these relationships lie in the area between where only the Krieger site near Chatham has been excavated.

The case for the Pickering conquest of Glen Meyer is based on a postulated break in the Glen Meyer sequence as well as the discrepancy with the chronological order. The Goessens site, selected as representative of the Glen Meyer, is dated at 1200 A.D, and is contrasted with Uren, representative of the Pickering conquered Glen Meyer and dated at 1300 A.D. Goessens and Uren are about 15 miles apart and the differences between them appear to Wright too great to be internal change over a hundred years. Three other Glen Meyer sites (Stafford, Too, and Reid) are found in the same vicinity and are candidates for filling this hundred year gap.

The samples from two of the three are too small to assess and the third, Stafford, is considered later than Goessens. The time interval itself must be regarded as tentative since the dates are derived from seriation alone. The reviewer is unconvinced that the change between Goessens and Uren must be attributed to outside conquest. The two sites are separated by perhaps three or four generations of potters during which surprising changes have been noted where site sequences are complete. A tighter sequence and an intrusive site are the usual minimum requisites for demonstrating conquest.

The osteological data on 15 skeletons are described by Anderson for each individual, including pathology and anomalies. A case of Potts disease is evidence for the pre-Columbian presence of tuberculosis. Comparative data are lacking to investigate the Bennett population's relationship to populations in Southwestern Ontario or Southeastern Michigan.

The Bennett site alone of those reported in these monographs has extensive data on settlement. This site is a farming village, presumably occupied for several decades in accordance with the Iroquois semi-permanent type. The Uren site, sprawling over 15 acres in contrast to the three to five acre villages previously mentioned, may be a different kind of settlement. The Riviere au Vase site is clearly different. The pottery is said to come from a time span of over 400 years. The Younge site is given a settlement interval of over 200 years. Not a single Southeastern Michigan site treated by Fitting seems to be a semi-permanent sedentary village on the basis of the artifact interpretation. This apparent difference presents one of the most interesting problems for future research.

Marion E. White
Frederick Houghton Chapter