Annual Meeting

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ARTIFACTS FROM DUTCHESS QUARRY CAVE -- ORANGE COUNTY CHAPTER
FLUTED POINT DISCOVERED IN ORANGE COUNTY CAVE

Robert E. Funk    Van Epps-Hartley Chapter
George Walters    Orange County Chapter
William F. Ehlers  Orange County Chapter

In March, 1965, the Orange County chapter, N. Y. S. A. A., under the direction of chapter president George Walters, began archeological excavations at a fair-sized limestone cave, the "Dutchess Quarry Cave", located on the western rim of Lookout Mountain near Florida, New York. The cave, about 20 feet wide at the mouth and 60 feet deep, opens 100 feet above a valley, which constitutes a northward extension of the "Black Dirt Area", formerly a large, shallow lake, which was drained in the 19th century to create rich farmlands.

(Con't on next page)
Walters has been assisted by chapter secretary William Ehlers, who established a reference system on the site, and an enthusiastic group of chapter members and high school students. Special thanks are due to Ralph Robinson and his high school class, without whom the work would not have been possible.

Funk was invited to participate in the excavations and to help analyze the results. Before work started, the cave was almost completely choked by rockfalls. Though work was begun in the 1930's, most of the fall rock appears to be older than 30 years. The rock inside the cave is only slightly weathered. The rocks, most of which had apparently been dislodged by blasting on a nearby quarry, were removed after several weekends of heavy labor. Excavations were then commenced.

The details of excavation and cultural and geological phenomena will be published in full when work at the cave is finished.

Only a rough physical stratigraphy is to be found on the site. The principal artifact-bearing zone, stratum 1, consists of dark brown earth and heavy rubble. It is about seven feet thick at the cave mouth, diminishing to a few inches at a point some 30 feet inside the chamber. Scattered through the zone are occasional artifacts, animal bones, mussel shells, and tiny specks of charcoal.

The underlying stratum 2 is made up of white earth and rockfalls. The earthy constituent, often powdery, is apparently calcite, with certain minor ingredients. In its upper few inches, stratum 2 contains occasional bits of refuse bone and, rarely, artifacts. In some places, the lower part of the deposit is a hard crust, invariably sterile of cultural remains—with one important exception.

Below stratum 2, tests revealed yellow clay containing some rounded pebbles.

Despite the relatively low artifact yield, a cultural chronology of sorts can be suggested for the site.

There are entirely superficial traces of modern visits to the cave, including such items as bottle glass and an old coin. In one corner of the site, well inside the chamber, the uppermost levels of stratum 1 produced several Levanna type points (fig. 1-4) (Ritchie, 1961) and much refuse bone. No pottery has been found as of this writing, but a Middle or Late Woodland occupation seems to be indicated.

In deeper levels of stratum 1, a bone awl (fig. 5), a bone-weaving tool, pointed at one end, perforated at the broad end (fig. 6), a narrow side-notched point (fig. 7), and a broad side-notched point (fig. 8) were found. At the bottom of the zone was a classic Brewerton side-notched point with ground base (Ibid.) (fig. 9) and a retouched flake scraper.

In the top of stratum 2 another good example of a Brewerton side-notched point (fig. 10) was recovered.

Near one wall of the cave, in an indurated portion of the white lime, was made a startling and historic find—a perfect fluted point (fig. 11). The point is of the Cumberland variety, with full-length flutes, constricted lower edges, and flaring ears (Wormington, 1957, p. 263). It is the first fluted point to be found in a cave or rockshelter in the Northeast. In fact, it may be the first such find which has been reported for caves and rockshelters east of the Mississippi.

Cumberland points are considered by some authorities to be relatively late in the Paleo-Indian continuum (Mason, 1962). The single fluted point from the cave very likely represents a brief occupation by a solitary hunter or small hunting party of Paleo-Indian affiliation in early post-glacial times. Near the point in the stratum
were a deer antler flaking tool (fig. 12), mussel shells, and an elk bone, very slim clues to a subsistence pattern for which information is almost totally lacking in the eastern United States.

The cave was probably used as a stopping-off place in fall and winter months. Game must have abounded in the vicinity of the “Black Dirt Area”. We thus have a suggestion that at least some makers of fluted points in south-eastern New York were eating the same animals and following the same seasonal economic cycles as the later Archaic groups.

The Brewerton side-notched points in deep levels of the upper zone may well represent the first Archaic people to sojourn at the site. There is at present an unexplained hiatus between the Paleo-Indian occupation of the Northeast and the earliest recognized Archaic cultures. The side-notched points may represent part of the missing sequence. Though the points match a common Laurentian type, the early archaic complex of which they may have been an element was not necessarily of Laurentian affiliation. Associated refuse bone indicates an economy in which deer, elk, raccoon, turkey, bear, turtle, sturgeon, and mussel were consumed.

The cave has thus yielded archeological data which may foreshadow solution to crucial problems involving the earliest occupations of the Northeast. Excavation is expected to continue into the summer of 1965, and further surprises may be in store for us.

Mason, Ronald J.

Ritchie, William A.

Wormington, H. M.

SUPPLEMENTARY COMMENT

At the invitation of Orange County Chapter President George Walters and Secretary William Ehlers, I visited the Quarry Cave, Lookout Mountain, in May, and this visit is the occasion for the following comment.

1. The brown, humic soil, which constitutes the uppermost stratum where recognized types of Archaic period points were found, would seem to have been accumulated only after some event which widened the entrance and permitted the infiltration of humus making debris and wind-blown soil. That the Cumberland point was at some depth in Stratum 2, which consisted of white earth, mostly powdered limestone from rock scale and heavy rock falls, would seem to indicate that the cave was pretty well sealed during the fluted point period. The fact that only one fluted point was present and its uniqueness as an instance of fluted point discovery in a cave argues that the owner had probably sought refuge in the cave during some dire emergency, possibly pursuit. If the cave
were as nearly closed as the geology seems to indicate, it may well have been an excellent hiding place. The dampness of the cave—there is drip stone through the full stratigraphic column—devalues the cave as a suitable shelter for an extended habitation period, even during dry weather.

2. The Cumberland fluted point (Fig. 11), of which the Lookout Mountain specimen seems to be a particularly fine example, is a strictly east-of-the-Mississippi variety. The variety was once included in what was originally called the Ohio Fluted but was isolated by T. M. N. Lewis and Madeline Kneberg after a long study of fluted points from the Tennessee-Alabama region. Specimens are known from Ohio, but none were noted in "Traces of Early Man in the Northeast" (Ritchie, 1957) or in "Prehistory of the Upper Ohio Valley" (Mayer-Oakes, 1955), which between them covers the provenience of most fluted points in Pennsylvania and the Northeast. The Lookout Mountain Cumberland is, therefore, considerably east of its area of usual occurrence.

3. The side-notched point shown as Fig. 8 is, in my opinion, a Big Sandy II point, as described and illustrated by Cambron in "The Stanfield-Worley Bluff Shelter Excavations" (DeJarnette, Kurjack, Cambron et al, 1962) where typing is ascribed by Cambron to Lewis and Kneberg (1959). I do not mean that it merely resembles the Big Sandy II point; I mean that it is a classic example in size and workmanship of the Big Sandy II. There is no mistaking the basal yoke with the fine, evenly placed edge chipping and the carefully worked basal barbs—one of which is broken on the Quarry Cave specimen—at the corners. The Big Sandy pattern of side-notched points is most characteristic of the Three Mile phase in the Archaic of the middle south and is dated as beginning at about 3500 B.C. (about 5500 B.P.) and continuing to about 2000 B.C.

4. The significance of the Quarry Cave site may very well be this occurrence of the mid-west, mid-south Cumberland and the mid-south (though Ohio produces many varieties of points that would fall within the Big Sandy pattern, at least as typed by Bettye Broyles for West Virginia sites, I know of no instance of the Big Sandy II in the literature or my own collections) Big Sandy II in the same place but at two widely disparate archaeological-geologic horizons. There is no reliable chronological data on the Cumberland anywhere, but opinion would probably hold that it would be at least 8000 years old. This hardly fills the gap between the 9000-year-old Bull Brook, Mass. fluted points and the 6000-year-old Archaic of the oyster shell heaps of Croton Point on the Hudson which is certainly a millenium older, in all likelihood, than the Big Sandy II and two millenia older than the Brewerton side-notched points. Incidentally, these latter would, if found in the Ohio Valley, probably be typed in the Big Sandy pattern by the latest typological practitioners. In accompaniment with the Big Sandy pattern of the Three Mile Phase, according to Lewis and Kneberg, are long, relatively narrow-bladed, stemmed points, rather markedly different, to use a New York comparative, from the Lamoka or Taconic series.

5. It seems to me to be unwarrantable to call the triangular points at Quarry Cave Levanna points, simply because they are triangular and because there is no other type in Ritchie's "Typology and Nomenclature for New York Projectile Points" to which they could be assigned. Whereas Levanna points are given a specific chronological position, appearing about 700 A.D., and a specific cultural affiliation, Middle Woodland, in the "typology", no pottery was found at Quarry Cave and no chronological evidence. To imply that there is enough known about these Quarry Cave triangular points to call them Levannas is plainly incorrect. Triangular points of several different specifications
have been found in too many archaic contexts to use Levanna as though it were a synonym for early triangular point. The triangular point is not of itself so detailed a shape, so specifically wrought, that it can be, like a Big Sandy II or a Clovis fluted, identified on inspection. That much is not yet known about the triangular-shape tradition. The only acceptable statement that can be made of the Quarry Cave triangular points is that they are triangulars found in a non-ceramic context. They may be Levannas, without pottery, or they may be pre-ceramic, and there is exactly as much reason to believe the latter as the former.

6. Nothing about the Quarry Cave suggests it was ever an inhabited shelter. It would seem to have been more or less a kind of very occasional refuge resorted to under emergency conditions, found and then lost again and found again. The only other occurrence of fluted points in a cave that I am familiar with are the Folsom points in Sandia Cave, near Albuquerque, New Mexico. The circumstances of the find of the Cumberland point at Quarry Cave do not suggest that fluted point finds in caves in the Northeast will be any less rare.


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TWO SMALL STRATIFIED SITES ON LAKE GEORGE

Paul L. Weinman Auringer-Seelye Chapter

The Finley and Knox sites, located on the shores of Lake George, Warren County, New York, were both small and relatively unproductive of artifacts. However, they do contribute information concerning several aboriginal occupations and raise some questions on the recent geology of the area.

FINLEY SITE

The Finley Site (Btn 2-3) is on the property of Mr. Gardner Finley, located on the west side of Lake George in Basin Bay, several miles south of Bolton Landing, and approximately four and a half miles north of the Knox Site, which is on the opposite or east shore of the lake. The site faces east and is protected from high winds by arms of land that nearly enclose the bay. A swamp surrounds the site on all sides except for the waterfront. A small brook borders the area in the swamp to the north. A thin veneer of humus and early post-glacial sand covers most of the bedrock.

In preceding years, Mr. and Mrs. Gardner Finley and Mr. and Mrs. Sherwood
Finley have picked up many artifacts in the sand beneath the shallow water that fronts the site. The projectile points included: 9 Madison, 182 Levanna, 4 Jack's Reef Pentagonal, 20 Jack's Reef Corner-notched, 31 Bare Island, 5 Sylvan Side-notched, 9 broad bladed stemmed (related to Bare Island?), 6 Laurentian forms, plus traces of other Middle and Early Woodland, and Middle and Late Archaic types, as well as various untyped styles. Other stone objects included: several kinds of knives, scrapers, and drills, as well as netsinkers, a hammertoe, and a polished ridged ulo fragment. A lead trade pipe was also collected. Pottery was scarce, most likely due to water erosion. Body decorated sherds could be categorized into: 4 incised, 29 dentate, 2 rocker dentate, and 6 "pseudo-pseudo Scallop shell" as described from the Weinman Site (Funk, Weinman and Weinman, n. d.). Rim sherds were: 1 rocker dentate, 2 Point Peninsula Plain, 1 cored, 2 broad incised and 1 Levanna Corded Collar.

The number of artifacts found in the water and the constant wearing away of the land by wave and ice action indicates that part (and probably most) of the site has been destroyed. However, testing of a small area just north of the Finlay's summer home disclosed that a small stratified portion of the site could be excavated. Other parts of the area were tested and found to be unstratified. During the fall of 1964, the present writer excavated eleven 5' x 5' squares with the assistance of Mr. and Mrs. Gardner Finley and Mr. Nicholus Forte, all of the Auringer-Seelye Chapter of N. Y. S. A. A.

The excavated area was located in a depression 15 feet east-west by 30 feet north-south, 3 to 3 1/2 feet above water level. An outcrop of bedrock protruded about 8 feet above and directly to the west of the depression. To the north, the bedrock rose more gently to about 10 feet above water level and was capped with humus and sand. A ridge of cobbles and soil, pushed up by ice movement, rimmed the eastern part. The southern portion dipped gradually into a swamp.

Four distinct soil strata were found beneath a 2" -3" duff zone, the upper two of which contained occupational material. A base of a straight-stemmed projectile point was found in the duff zone, but must be considered to have been in a disturbed position.

Stratum 1 was a light brown, sandy topsoil 7"-11" thick (though generally 8") that thickened toward the east in the northern-most squares. This stratum probably consisted of the accumulation of leaf mold, cultural debris such as ash, limited soil creep, and sand washed down from higher ground by occasional floods. Late Middle Woodland people were the primary occupants of the site during the formation of this stratum. The artifacts recovered included: 2 Levanna and 1 untyped thin side-notched points, 7 flake knives, 11 end scrapers, 1 celt, 1 anvil stone, 5 hammerstones, 3 netsinkers, 3 pieces of polished shale, a muller, and various worked pieces of flint. The meager pottery included 1 dentate-marked rim sherd and one plain rim sherd. Evidence of Late Woodland occupancy was given by 1 sherd having oblique nicks on the rim above horizontally incised lines.

Stratum 2 was a reddish-brown sand 3"-8" thick, being thickest in the center of the depression. This soil stratum contained evidence of an early Late Archaic occupation characterized by Bare Island points, 3 of which were found in the upper 3" of this stratum. A fourth point resembling some stemmed Lamoka forms was also discovered within this zone and is believed to belong with the Bare Island type. Besides
these points, 2 flake knives, a possible massive end scraper, and a point tip were associated.

The suggestion of an earlier (Laurentian) visitation is given by a single broad side-notched point, which had been modified into a flake knife. Found at 14" (the deepest artifact excavated), this may have been a Brewerton Side-Notched point.

Stratum 3 was a sterile gray-brown sand of early post-pleistocene deposition that extended to 36" in square EON5.

Stratum 4 was a sterile hard-packed gray clay of untested depth.

The stratigraphic position of the newly defined Sylvan Lake complex (Funk, n. d.) below ceramic using people of the late Middle Woodland was confirmed at Finley, and its position above the Laurentian was barely suggested by the single possible Brewerton Side-Notched point. These relationships were shown more conclusively at the Weinman Site and the Sylvan Lake Rock shelter near Poughkeepsie (Funk, 1965). The diagnostic point type of this complex is the Bare Island point as described by Kinsey from the Kent-Hally Site in Pennsylvania (Kinsey, 1959). Also diagnostic of the Sylvan Lake complex are Sylvan Side-Notched points (small, thick side-notched points), narrow expanded stem types, narrow stemmed types, narrow expanded stem types, and certain broad-bladed stemmed types. Although only one of these later five types was found in excavation at Finley, they are present in the surface collection.

On the evidence of both the surface and excavated artifacts, the Finley site was occupied vigorously during the late Middle Woodland and early Late Archaic periods.

KNOX SITE

The Knox Site (Glf 18-1) is on the property of Mr. Paul Knox near the constricted neck of Assembly Point. It is in a small southward-facing cove 3 feet above the summer water level. Perpendicular to the site, approximately 250 yards south, is the culturally related Weinman Site. The two sites are separated by swampy land and, until the last decade, by a canal that crossed the peninsula at the neck. There is some evidence that at times in the past; this neck was naturally flooded, converting the Knox Locus into an island.

Through the kind permission of Mr. Knox, 500 square feet were excavated during the summer of 1964 by the present writer, with help from Thomas Weinman, also of the Auringer-Seelye Chapter, N. Y. S. A. A.

The upper 2"-15" of the site was a brown-black fill that contained modern trash as well as Middle Woodland artifacts. This origin of this fill is not certain, and thus, will not be considered in this report.

Stratum 1 was a brown topsoil 4"-5" thick, containing evidence of a sparse late Middle Woodland complex. Projectile points included 3 Levanna and 2 untyped thin side-notched types. Other stone artifacts were: 7 end and 3 thumbnail scrapers, 2 drills, 7 flake and 2 ovate knives, 2 pebble and 1 bi-pitted hammerstones, a netsinker, an anvilstone, an adz, and a 2" square piece of utilized graphite. Pottery was very poorly represented. Sherds showed cordmarking, dentating, and incising. The features associated with this cultural zone were: #1 and #2-small, shallow, overlapping hearths containing gray ash and flint spalls; #3-a pit (16" x 16" x 27") of dark brown fill. Within the latter, surrounded by three fist-sized cobbles, was a 2" x 2" lump of dark green worked clay similar to that found by Ritchie in glacial kame burials at the Pickton Site, Ontario (personal communication); feature #4 was a large hearth (3' x 4' x 1') containing
a quantity of charcoal and a cordmarked sherd.

Stratum 2, directly and conformably below Stratum 1, was a reddish-brown sand containing some small round pebbles. This layer was 4”-8” thick, gradually thinning from the back of the site to the shore, and containing slight evidence of Archaic occupations. Projectile points included: 2 Bare Island at 5”, 1 Vosburg at 6”, 1 Otter Creek at 8”, and 2 Otter Creek at 9”. Stone tools were: 3 heavy end scrapers, 2 flake knives, 1 adz, 2 pebble hammerstones, and 1 milling stone. A single feature (#5) within this level was a pit (16” x 14” x 7”) that extended into Stratum 3 to 16”. Flint spalls, calcined bone, and charcoal flakes were included in the fill.

Stratum 3 was a 20” thick grayish-brown early post-Pleistocene deposit containing some varied-sized pebbles and cobbles.

Stratum 4 was a gray, hard-packed clay of untested thickness.

This writer interprets the projectile points in Stratum 2 to represent three complexes of the Archaic. The Otter Creek points correspond to the Vergennes Phase of the Laurentian (Ritchie, 1944, pp. 253-257), and were found below the single Vosburg point that is characteristic of the Vosburg Phase of the Laurentian (Ritchie, 1944, pp. 257-259). The finding of the 3 Otter Creeks at the bottom of Stratum 2 beneath a Vosburg point, in conjunction with similar, though more conclusive stratigraphy at the Weinman Site and that at Fish Club Cave (Funk and Johnson, 1964), contributes to the evidence that the Vergennes Phase is earlier than the Vosburg. The 2 Bare Island points, uncovered at the very top of Stratum 2, are typical of the Sylvan Lake complex assemblage.

The material found in both Stratum 1 at Finley and Knox adds to the growing amount of data for a new phase (tentatively called the Lake George phase) of the late Middle Woodland. This, as originally defined at the Weinman Site, includes a majority of Levanna points along with Jack's Reef Pentagonal and Corner-Notched types; unusually decorated pottery; the absence of trailing, net-marked and fabric-marked pottery, and the presence of "Pseudo-pseudo scallop shell" decoration made by slightly overlapping dentations.

The Sylvan Lake complex, as indicated from the Finley, Knox, and Weinman sites is gradually emerging as an important and very vigorous group, at least in the Hudson Valley. That this complex was pre-ceramic and pre-steatite using in this region is supported by negative findings at the 3 above mentioned sites.

As at other sites within the Lake George area, the Knox and Finley sites were typical in exhibiting only traces of certain Middle and Late Archaic and Early and Late Woodland materials.

Some clues to the geologic history of this area are given by these two sites in connection with findings at the Weinman Site. The primary geologic problem as related to these sites is the origin for Stratum 2 at each. The three sites are in the same area, (Knox and Weinman almost side by side) and have the same general physical and cultural stratigraphy, and yet Weinman is 3 to 4 feet higher than both Finley and Knox. This must rule out any suggestion that the lake was radically higher during the periods of occupation. If the lake were merely two feet higher during the Vergennes Phase, the people at Knox would have been under water. A lower level would have left the inhabitants at Weinman on a steep, high bank, an inconvenient position for fishing people, especially since they could have settled on lower ground a hundred yards to the north. The possibility that Stratum 2 is the accumulation of sand thrown up by high winds and violent storms must be ruled out as unreasonable because of the difference in elevation of the sites and by the fact that Stratum 2 exists so far back from the lake at both Knox and Weinman. Soil
creep could not account for the accumulation of such thick layers because the slope toward the lake is very gradual at Knox and Weinman. The most likely explanation for Stratum 2's origin is that the lake level may have had more rapid and wider fluctuations than at present. The resulting flooding could have washed down the early post-glacial sand that exists behind and slightly above all 3 sites.

Funk, Robert E.
and R. Arthur Johnson

1964  "Excavations at Fish Club Cave, Albany County, N. Y.”  *The Bulletin*, *N. Y. S. A. A.* , No. 30

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THE CHERRY ORCHARD ROCK SITE

Edward J. Kaeser

Archaeological investigations of the many glacial erratics and rock outcroppings in the Pelham Bay Park area of Bronx County, New York, have brought to light several focal points of aboriginal activity, Pelham Boulder Site (Smith 1950, pp. 185-6), Milo Rock Site (Lopez 1958, pp. 127-142), Archery Range Site (Kaeser 1962, pp. 4-7), Pot Holed Knoll (Kaeser 1964, pp. 25-29), Mishow Rock (Jenkins 1912, p. 316).

The majority of rock sites thus far examined by the writer and others have consisted of small circumjacent lenses of habitation refuse and occasional hearths situated against the leeward, vertical plain of a boulder utilized as a heat-retaining and reflecting surface. Subsequent fire and frost action split away slabs of the micaceous rock creating niche-like fire places which, no doubt, drew the attention of succeeding Indian family groups to the site and, consequently, even at the present time, several of these boulders have become favored picnic and camping places, the cooking fires being laid above the long cold embers and cultural remains of the prehistoric Indian.

The following describes the author's findings at another isolated glacial boulder, and he urges others working in similar coastal and riverside locales to examine closely the immediate areas of any boulders and rock outcroppings somewhat detached from known and comparatively easily located shorelines or shell midden-marked campsites.
In the early spring of 1962, the author was notified by the directors of the Pelham Bay Park that a small training and practice archery field was soon to be constructed which would render inaccessible to archaeological investigation an area suspected to hold undisturbed Indian cultural remains, although no definite surface indications were evident. This area, at the northern extremity of the park, approximately 200 feet east of the Shore Road, borders the south-east corner of a cherry tree orchard, which, when in spring bloom, provides a colorful photographic backdrop, particularly for newlyweds and their retinues. The grove, when first planted, was no doubt cleared of all easily movable surface rock. However, one boulder, because of its massive size, was left just as the glacial drift deposited it, thus preserving the boulder as a habitation feature with its cultural associations.

The ovoid, schistose boulder, oriented north west by south east, measures 10 ft. in length at ground level, 8 ft. along the shorter axis, and rises above the ground 3 ft to the apex.

Features

Hidden by banked dry leaves at the lower southeast face of the boulder and protected from the prevailing north west wind, a shallow concavity was noted measuring 30 in. in height by 23 in, in width which, on excavation below sod and top soil, disclosed a fireplace containing a 9 in. thick by 41 in. diameter, basin shaped hearth, #1 (Fig. 1:1). Hearth #2, considerably smaller in volume, 15 in. in diameter and 4 in. thick, was located at the northern, unmodified end of the boulder (Fig. 1:2).

Both hearths contained a compact, black carbonaceous deposit of charcoal granules, blackened earth, burned bone fragments and teeth of deer, small fire-shattered stone spalls presumably from the parent boulder, and rectangular slabs and ovoid cobbles used either to contain the burning coals or as props for cooking vessels. The surrounding subsoil was hardened and burned a russet color.

Midden

Bordering the east face of the boulder, below a 3 inch mantle of sod and fine-grained, brown topsoil (A), a stratum of midden debris (B), was uncovered varying in thickness from 6 in. at its deepest concentration between hearths #1 and #2, feathering to a scattered trace 2 ft. beyond the northern end of the boulder and 4 ft beyond the southern extremity. The fan-shaped midden spread extended roughly 10 feet laterally from the boulder's eastern profile. This culture-bearing stratum was composed of black, greasy earth containing whole and crushed oyster and hard clam valves, shop flakes and nodules of quartz, chert and quartzite, split fragments of deer bone and fire-shattered stones. The subsoil (C) was excavated well below the midden stratum to insure the recovery of intrusive material. Except for a few whole mollusk valves which were either trampled below the surface of this stratum or naturally buried by rain and frost action, the yellow, sandy subsoil was found to be artifically sterile.

It can be assumed that contiguous lenses of midden debris and possibly oven and refuse pits exist beyond the range of the small area investigated; however, further excavation eastward of the boulder is at present impossible because of its hazardous location in the field archery target area. For this reason and because of the limited time available for excavation, the dig was carried out as a salvage operation to allow the maximum recovery of cultural data. All vertical and lateral excavation measurements to features and artifacts in situ were taken from the periphery of the boulder at ground level.
FIGURE 2: 1, Rim, Reconstructed; 2, Profile
Cultural Recoveries

Ceramics were the predominant cultural remains, comprising 149 potsherds representing an estimated 12 individual vessels diagnostic of the earliest phase of the Clasons Point focus, East River aspect, a coastal New York late Woodland manifestation (Smith 1950, pp. 116-129).

The sherds contain fine to medium mineral grit as the aplastic ranging from microcrystalline grains of mica and rounded quartzose sand to angular crushed fragments of quartz or feldspar. All sherds exhibit near uniform color throughout their thickness with few signs of fire clouding, indicating good control of heat and draft during firing.

One rim fragment and 79 body sherds, representing 5 vessels of East River Cord Marked, head the list in type frequency followed by 36 Van Cortlandt Stamped rim and body sherds from 4 vessels. Two body sherds of East River Cord Marked were recovered from hearth #2 and 15 sherds of similar type from hearth #1. The remaining 62 sherds, all non-contacting, were scattered throughout the midden stratum.

Figure 2:1 illustrates the reconstructed rim and shoulder portion of a Van Cortlandt Stamped vessel showing the typical horizontal and vertical linear cord-wrapped stick-stamped motif of rim lip, castellated collar, and shoulder. The sherds range from 5/16 to 3/8 in. in thickness. The flaring collared rim and shoulder profile (Fig. 2:2) shows horizontal, concave breaks revealing the coil method of vessel construction. Body sherds of this vessel are obliquely cord-wrapped paddle-marked on the exteriors. The interior surfaces are irregular but smooth. The collar interior exhibits faint, horizontal parallel striations as if smoothed with a grass bundle. The collar was applied to the vessel neck by adding a 1 1/2 in. wide by 3/16 in. thick band of clay. The top edge of the collar band was faired into the orifice edge, forming a rounded lip, and the bottom edge of the band was bevelled to the neck by rubbing the plastic clay downward to a feather edge. This edge had delaminated from a portion of the constricted neck below a castellation, clearly demonstrating the collar construction technique. An 8 1/2 in. vessel diameter is suggested by continuing the exterior line of curve of the shoulder. The Van Cortlandt sherds were recovered from and in close proximity to the fill of hearth #1.

Twenty-two contacting sherds were utilized in the reconstruction of a small, round bottom Bowmans Brook Incised vessel (Fig. 3:1) 4 in. high by 4 in. in diameter at the orifice. The fine grit-tempered body and rim sherds do not exceed 3/16 in. in thickness. The ware is smooth on the interior, vertically cord-wrapped paddle-marked on the exterior. The cord marking was partially obliterated prior to or while incising the slightly insloping neck portion of the vessel. No evidence of coil construction was noted by examination of the sherd break edges.

Quite unlike the typical horizontally incised band of repetitious chevrons, herringbones, or triangles distinguishing the local type Bowmans Brook Incised, this vessel was decorated with grouped elements of nested, punctate-filled triangles, oblique plats and tally-like gashes, chevrons and a trianguloid pattern of three punctate circles. The latter elaboration is the first example of its kind seen by the writer. It would be tempting to postulate the possibility of the diversified design elements having a meaning of symbolic significance, but in the absence of supporting or conclusive evidence at this time, the decoration suggests to the writer either the result of a potter's practice design doodling or another instance of an individual craftsman's freedom from design conformity as similarly intimated by a restored, possibly
Mohawk, incised vessel from Barnstable, Mass. (Johnson 1962, pp. 45-7, Fig. 24). Sherds of a large Bowmans Brook Incised vessel were recovered on Staten Island bearing 3 horizontally divided bands of notched-border, parallel-line, filled triangles and a joined herringbone motif demonstrating a definite departure in advanced draftsmanship and design planning (Anderson 1964, pp. 131-9, Pl. 2). Figure 3:2, drawn approximately 1/2 scale, illustrated the continuation of incised and punctate design elements on the reverse of the vessel's rim. Two paired, exterior counter-sunk drilled repair holes appear on one side of the vessel. This pot, because of its small dimensions, would ordinarily be considered a drinking cup or a bowl to contain an individual portion. However, areas of the decorated rim exterior are encrusted with a black, tar-like deposit denoting the repeated boiling over and charring of grease often found on larger cooking vessels, which clearly demonstrates its use. The sherds of this restored pot and 7 decorated near rim and 4 plain-surfaced body sherds of comparable Bowman's Brook Incised paste representing 2 additional vessels were recovered from the fill of hearth #2.

The non-ceramic yield of artifacts is quite large considering the limited area excavated. The most significant find was a cache-like cluster of woodworking tools consisting of 3 pecked and ground celts, a chipped celt or chisel-like scraper, a hafted scraping or chopping tool of argillite bearing a broad, ground flat plane at its widest or bit portion and beveled roughly 45 degrees to a steep cutting edge. The implement is highly weathered, appearing water worn, typical of many argillaceous artifactual recoveries from the area. One can only speculate as to the function of the tool. It is probable that this distinctively shaped implement might have been utilized as a hand held adz or scraper for cutting away the soft char resulting from fire-assisted tree cutting and in the process of hollowing logs. Also found were: a salvaged bit portion of a broken celt, the cutting edge rechipped to a steep edge scraping tool; two thick quartzite spalls triangular in cross section, the thinner perimeter chipped to a curved, serrated cutting edge, this type of implement having possibly been used as an unhafted saw for cutting tree branches and saplings into staves for bows, arrow shafts, tool handles, etc.; a multi-grooved and faceted shaft abrader, made from an irregular shaped fragment of very fine-grained sandstone, this object having undoubtedly been used to smooth away splinters and roughened spots as the finishing process in the manufacture of small diameter shafts after scraping; a tabular-shaped object of fine-grained mica-schist, possibly utilized as an abrading tool for smoothing flat or broad wooden surfaces.

The above-described group of tools was recovered from the midden stratum 6 in. from the eastern periphery of hearth #1.

Lithic recoveries randomly scattered in the midden: 2 Levanna type points, equilateral triangular, concave base, 1 1/2", chert, 1 7/8" quartzite; 1 Levanna type point, equilateral triangle, straight base, 1", rose quartz; 2 trianguloid, projectile point blanks, quartz, chert; 1 Ovoid knife or side scraper, made from thin outer surface pebble spall, use or retouch flaking along the thinner edge, chert; 1 unmodified, 1 in. diameter, cup-shaped geode, limonite; 1 notched, pebble net sinker, mica-schist; 3 Ovoid, turtlebacks, quartzite, possibly utilized as coarse steep edge scrapers; 2 Ovoid pebble, shallow single pitted anvils, mica-schist; 3 Ovoid, battered end, pebble hammerstones, sandstone, quartzite; 1 unmodified, tabular fragment of yellow earthy ocher, 7 in. by 1 in. thick, possibly used as pigment.
BONE

1 Ulna awl, highly polished, deer?

ANTLER

1 flaking tool, made from 7 in. long beam section. Antler base ground, eliminating possibility of determining whether broken out from butchered animal or made from winter shed antler.

Discussion and Interpretation

Although excavation at this site was, of necessity, a salvage investigation of limited extent, examination of the modest cultural recoveries demonstrate both broadly and in some detail, a validation of Smith's hypothesis defining the ceramic sequence of the Clasons Point focus, East River aspect.

I find it fortunate and more than mere coincidence, that only vessels of Bowmans Brook Incised, Van Cortlandt Stamped and East River Cord Marked were recovered. The two former types have been defined as diagnostic of the earliest phase of the Clasons Point focus, and East River Cord Marked is consistently found at all component sites of the East River aspect.

While the presence of these types would be sufficient to lend support to Smith's theory of cultural continuity, the two hearths discovered 8 ft. apart at either end of the boulder, each containing, in their fill and in close proximity, the fragments of several vessels of two distinct types, serve as a means of separating the types not only physically, as in zones of occupation, but because the complete absence of evidence of a stratified refuse deposition sequence imply temporal difference.

A simultaneous occupation and use of the two hearths, separated by only a few steps, by people utilizing vessels so unlike in decorative technique, motif; and form without scattering and mixing the types during the course of habitation is extremely difficult to accept. The randomly scattered sherds of an estimated 5 vessels of East River Cord Marked, the dominant type represented at the site, amidst miscellaneous lithic artifacts, evokes no surprise due to their present inutility as diagnostics of any particular developmental stage within the East River aspect.

It is my interpretation that hearth #2, with its associated Bowmans Brook Incised sherds represents the establishment of the boulder as a campsite by a small group for a short time interval, possibly a single summer. The site was abandoned for a period long enough for weather and vegetation growth to obscure the shallow hearth and surface-exposed cultural debris and then reoccupied by people using Van Cortlandt Stamped vessels who dug hearth #1 at the leeward, most practical face of the boulder. The fire and possible frost-carved face of the boulder above this hearth attest to either an extended permanent habitation of a protracted, seasonal reoccupation of the site.

If fine grit temper, compact paste, thin wall, round bottom, and diversified decorative motif of the reconstructed Bowmans Brook Incised vessel is accepted as an indication of cultural attainment reflecting a higher level of material technology, as I suspect, then this vessel represents an example of a final product of the type in the area.

As yet, no discovery has been made which positively links the uncollared type Bowmans Brook Incised in a physical transition in the presently accepted type progression to Van Cortlandt and Clasons Point Stamped, both of which introduced collared and castellated rims into the East River ceramic tradition (Kaeser, 1964, pp.
Probably only a collared vessel embodying unquestionable Bowmans Brook Incised type characteristics would solve the problem. A temporal progression in type was intimated during excavation of the nearby Pelham Boulder site where several sherds of a typical crude chevron motif, straight rimmed Bowmans Brook Incised vessel were found to bear a definite rim point or castellation, suggesting either survival of the type well into the later Clasons Point series or, it seems more reasonable to assume, because of the high content of coarse grit temper that resulted in the poorly consolidated nature of the paste, as evidence of a prototype reflecting a much earlier Iroquois-like, vessel form influence.

From the upper zone at this same site, numerous examples of collared, plain interior and cored paddle-marked exterior vessels were recovered embodying the ceramic traits of the type East River Cord Marked. Not until the discovery of similar sherds at Milo Rock, another late Clasons Point component at Pelham Bay Park, and a survey of museum and private collections, which established occurrence from New Jersey into western Long Island, did the newly recognized form suggest a typological relationship or progressive development from East River Cord Marked. This newly defined type was given the name, Milo Cord Marked (Lopez, 1958, p. 133).

The aboriginal manufacture and utilization of wooden items and the polished stone tools of the craft within the East River aspect has been given little consideration because of inadequate archaeological evidence of the industry. Smith's trait table for the Clasons Point focus (Smith 1950, p. 127), lists a three-quarter grooved axe from the possible multi-component Baker Hill site on Long Island and a celt exhibiting secondary use as a sinew stone from the Clasons Point site in Bronx County. As the list demonstrates, polished stone tools, archaeologically, are exceedingly scarce in the focus, and it is quite possible that the Baker Hill axe is listed out of context due to the occurrence of Windsor tradition sherds and the large percentage of notched and stemmed projectile points recovered from the site. By excavation and surface survey collecting throughout eastern Bronx County, the writer has found the three-quarter grooved axe in association with early Windsor ceramics and related lithic artifacts exclusively, and sites characteristic of the East River aspect have produced the celt only.

The concentration of 10 woodworking tools discovered within inches of the eastern periphery of hearth #1 points to the specialization in the woodworking craft by a group or an individual, who occupied the site during its final and longest period of habitation.

Anderson, Albert J.
Jenkins, Stephen
Johnson, George K.
Kaeser, Edward J.
A CACHE OF SPLIT QUARTZ PEBBLES IN ORIENT, LONG ISLAND

Roy Latham Long Island Chapter

A cache of split quartz pebbles has been excavated on the Jagger site in Orient, Long Island. The cache was 24 in. outside a large pit and just below the plow level. There were 80 sections of pebbles, about six quarts. A few had two or three additional flakes removed, and three were chipped down to nearly completed triangular Lavanna-type points used in the Sebonac culture, to which the site belonged.

The largest pebble is 2 by 2 1/2 in. and the smallest 1 by 1 1/2 in. the average about 1 1/2 by 2 in. This measurement is somewhat smaller than had been considered usual for the raw pebble stock in the Sebonac culture, judging from the thousands of blanks, in all stages, collected in the vicinity of shell heap sites in Orient for working into arrow points and scrapers by the Sebonac people. One of the 80 pieces is obviously started for a scraper of the circular type so numerous on the Orient sites, where several thousands have been picked upon the surface of the Jagger site, as well as in the pits and trenches.

The Jagger site is the largest Indian village remaining in Orient. It is pure Sebonac, as are all the Orient sites, with no evidence of Niantic pottery so far. None of the Orient sites were occupied by natives in the early settlement period about 1640.

The pits on the Jagger site are larger than on any other of similar size on the East End, and they are fewer in number. However, the trampled shell floor is unusually deep and thick. The pit near the quartz cache was eight feet in diameter, in heavy loam, and four feet in depth.

Associated with the split pebbles were 14 sherds of pottery, one grit tempered. There were two vertebrae of a large fish, a portion of an awl, four bones of a small mammal, including part of the jaw of a small dog with one tooth, and one land snail. Polygyra albolabris

There were two common methods of commencing on the flaking of quartz pebbles on the local sites. One was to split the pebbles; the other was to strike off a flake on one side at the end and then reverse the pebble and strike off a flake on the opposite side at the other end. The two methods were about equally in service on the Orient sites. Perhaps the split pebble was the most common for scrapers and the reverse
method more common for triangular points. I have not tabulated the many blanks connected with the local sites. The writer has more than a barrel full of these quartz blanks from the Orient sites with one or two flakes struck off, and many split pebbles similar to those in the cache. Many, of course, are rejects, cast aside after the first flake or two. The early stages are often as interesting as the finished object.

Less evidence is found on eastern Long Island for the early stages of the Bare Island type of arrowpoint, which is the most generally common point on Long Island. The Bare Island people evidently did not dig pits or leave shell spreads on eastern Long Island. However, the quantity of their points left on the surface would indicate that they were here for a considerable time within the Archaic period.

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New York State Archeological Association
1965 Annual Meeting at the State
University of Buffalo
Minutes of the Business Meeting.

The Business Meeting was called to order at 9:30 a.m. with an attendance of 44 people.
President Casler appointed Charles Gillette and Richard McCarthy as tellers.
It was voted to accept the minutes of the 1964 meeting as published in The Bulletin
The Secretary's, Treasurer's, and Auditor's reports were read and accepted.

The reports of the chapters were read as follows: Auringer-Seelye, Weinman; Chenango, Whitney; Houghton, Granger; Long Island, no report; Metropolitan, Brammer; Mid-Hudson, Christiana; Morgan, Smith; Orange County, Brennan; Van Epps-Hartley, Gillette.

Committee reports:
Awards - Chairman Charles F. Wray announced that Stanley Vanderlaan, Morgan Chapter, and R. Arthur Johnson, Van Epps-Hartley Chapter, had been elected as Fellows of the N. Y. S. A. A.
Constitution (Henry Wemple): With the acceptance of the revised N. Y. S. A. A. constitution, as published in The Bulletin, all chapters must revise their constitutions to conform to it. First to be acted on are the Morgan and Van Epps-Hartley constitutions.
Finance (R. A. Johnson): Johnson summarized his audit of the Association books and emphasized the excellent job done by 1963-64 Treasurer, Mrs. Earl Schram, Jr.
Nominations. It was reported that eight of the nine N. Y. S. A. A., chapters made nominations for the 1965 slate.
Program. Chairman Faith Karas Moll briefly summarized the various arrangements for the meeting, including papers, exhibits, and parking facilities.
Publications. The following condensed report was submitted by Committee Chairman Dr. Marian E. White.

"We are happy to report that progress has been made on all three series of publications which the New York State Archeological Association prints. Three issues of The Bulletin, Nos. 31 through 33, have been published for a total of eighty pages. A cover has been added, and the number and quality of the drawings have been greatly
improved. Louis A. Brennan has continued as editor, and Mauck Brammer has been a assistant editor. The number of copies is 600 put forth by Moxon Printing, Perry, N. Y.

Occasional Papers, Parts IV and V of Alexander M. Stewart's "French Pioneers in North America" is nearly completed and should be out about July.

The next issue of the Researches and Transactions, Don Lenig's Oak Hill Horizon is in page proof and should be out in the next few weeks.

The following recommendations were submitted to the Executive Committee, which in turn accepted them:

1. We recommend that Editor Brennan be reappointed for a new three-year term, and that Brammer be continued as assistant. We urge the new Publications Committee to give due consideration to the appointment of a production assistant and an art assistant. We also charge them to establish machinery to control expenditures of The Bulletin's budget.

2. We recommend no new appointments for the editorship of the Researches and Transactions and the Occasional Papers. We urge that the new chairman of the Publications Committee seek suitable material for inclusion in these series following our past policies.

3. We recommend twenty-five authors' copies for the Researches and Transactions.

4. We recommend that the Publication Committee and the editor of The Bulletin make it possible for an author to have an option of either drawings at no cost or photographs at extra cost. In the case of the latter, the cost for photographs will be borne by the author or by the chapter and will cost approximately eight to ten dollars per plate. This recommendation must be taken into account in the consideration of a printer for next year.

5. We recommend that the new Publications Committee examine the selection of a printer with a critical eye, taking into account photographs and other printing bids.

6. We recommend thirty-five cents handling charges on all orders for publications over one dollar. This charge is necessary in order to break even on our publications.

7. We regretfully recommend a Bulletin budget of four hundred dollars. This reduction from eight hundred dollars is necessary because of over-expenditures during the past two years. We suggest that the next Bulletin; the July issue, be published on time, but not exceed two hundred dollars. The following Bulletin can be published when there is another two hundred dollars in the publications fund. The third issue can come out of the next year's budget of eight hundred dollars.

8. We recommend machinery to help the editor stay within this budget of four hundred dollars. It was moved and passed at the Executive Committee that the President of the N. Y. S. A. A. contact each chapter and make a plea for a special publication contribution.

The Chairman would express sincere thanks to the editors and assistant editors as well as to all members of the Publications Committee.

Old Business. The question of incorporation had been raised at last year's meeting. After consulting with the Law Division of the State Education Department, President Casler reported that the N. Y. S. A. A. is already incorporated as a Regents chartered organization.
The revisions to the N. Y. S. A. A., constitution, as published in The Bulletin, No. 32, were accepted by the membership.

New Business. The U. S. Department of Internal Revenue is currently checking on the certification of all tax-exempt organizations. Both the N. Y. S. A. A. and its chapters have received questionnaires. Charles Gillette was appointed by President Casler to look into the tax status of the chapters in relation to the parent organization, but the data were not available in time for the meeting.

The results of the election were announced as follows: President, Dr. Marian E. White; Vice-President, Henry Wemple; Secretary, Edward D. Patterson; Treasurer, Daniel M. Barber.

Mr. Casler announced that the next annual meeting would take place in Rochester, with Morgan Chapter as hosts, on April 23, 1966.

The Metropolitan Chapter has invited the Eastern States Archeological Federation to hold its 1966 annual meeting in New York City during the month of November.

The resolution expressing thanks to the Houghton Chapter for an enjoyable and interesting convention was approved.

The Business Meeting was adjourned at 10:30 a.m. Robert E. Funk, Secretary.

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NOTE TO AUTHORS

It will, hereafter, be required that authors observe the following rules:

1. All manuscripts must be submitted in original typed copy, double-spaced. No copies of any kind will be accepted. The reasons are quite simple. Manuscripts must be double spaced in order to allow space for editorial corrections and proofreaders marks. Copies are frequently not well reproduced, making it hard on both the editor and the printer. Furthermore, the paper on which multifax, ditto, and other reproductions are made is usually not suitable for pen or pencil marking.

2. Drawings must be submitted in the original, well-inked in India ink. Copies of drawings, as it has become the custom of authors to submit, cannot be reproduced by the printer. There is simply no use submitting them.

THE N.Y.S.A.A. BULLETIN

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