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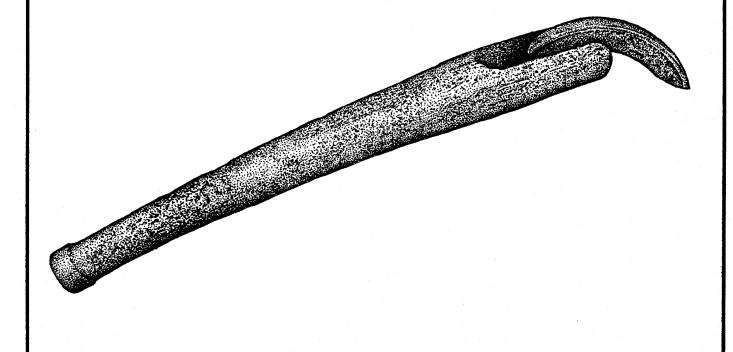
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THE RUDGE-BREYER SITE: A LATE ARCHAIC LONG ISLAND BASE CAMP?

Gretchen Anderson Gwynne Long Island Chapter

INTRODUCTION

Recent archaeological work on Long Island has shown that coastal New York is of great importance for an understanding of the full range of prehistoric northeastern North American lifeways. Long Island data, for example, throw into question the usefulness of the traditional pre-horticultural subsistence/settlement model (hunting and gathering, following a seasonal round) for environmentally beneficent areas. Although the idea that the first permanent human settlements developed as a direct result of the development or acquisition of horticultural techniques is now seen as much too simplistic, the traditional model for pre-horticultural subsistence and settlement in many parts of the northeast has been, and still is, one of seasonal relocation. For many years, prehistoric Long Island was thought to be no exception.

Recent findings are challenging this assumption. Given the extraordinary beneficence of the island, with its temperate climate, well-sheltered North Shore harbors, and year-round supplies of wild foods, it seems logical to hypothesize that non-horticultural native Long Islanders, having developed an efficient, broad-spectrum hunting and gathering economy, established year-round base camps in well-protected locations on the island, well before the introduction of horticulture to the area. And while year-round residence at a single location by all the members of a prehistoric cultural group is neither demonstrable nor (on the basis of ethnographic analogy) likely, the accumulated evidence from several Long Island archaeological sites suggests that the base-camp hypothesis is a valid one (Gramly 1977; Gwynne 1982a, 1984; Wisniewski and Gwynne 1982). This report presents data from a Late Archaic Long Island archaeological site in support of the hypothesis of Late Archaic sedentarism. (1)

THE RUDGE-BREYER SITE

Almost twenty-five years ago, in the summer of 1961, Mr. William J. Rudge of Lake Ronkonkoma, Long Island, began the excavation of what eventually proved to be one of the richest Late Archaic archaeological sites on Long Island.(2) Located on the shoreline of Mount Sinai Harbor in Suffolk County, the site was optimally placed to take advantage of several productive microenvironments at once: a (now-dry) freshwater stream, the estuary created by this stream as it emptied into the salt water of Mount Sinai Harbor, the benthic environment of the harbor and Long Island Sound, and the surrounding woodlands.

Mr. Rudge was a retired New York City fireman and an avocational archaeologist with a lifelong interest in prehistoric Long Island. He was not formally trained in archaeological theory and method, and the results of his excavation of the Rudge-Breyer site may disappoint those who understand what might have been learned from this unusually productive site. On the other hand, had Mr. Rudge not excavated the site, which he did with singular zeal for eight years (during which he discouraged other local collectors from working there), surely the area would have been pot-hunted by many different diggers, and its enormous artifactual yield scattered throughout the island.

Mr. Rudge was assisted in the excavation of the site by his wife, Adeline Rudge, and from time to tulle by his friend William Breyer of Holtsville, New York, and by his son, Robert Rudge. Because he was retired, Mr. Rudge was able to work weekdays as well as weekends, and his field notes show that he and Mrs. Rudge visited the site well over a hundred times between 1961 and 1968, often at rate of two or three times a week, except during the months of November through March.

At the time of excavation, the cultural remains from the Rudge-Breyer site were divided up according to the amount of interest each object held for the excavators. Many of the readily-

recognizable artifacts-mostly projectile points-were cleaned and mounted in fourteen shallow, glass-covered, framed cases, containing an average of 65 objects each (see Figure 1). Throughout the 1970s, the Rudges were regular exhibitors at local hobby shows and fairs, where they placed these objects on display.

Other objects, either particularly interesting to the excavators or not amenable to mounting under glass, included a fluted projectile point, a beaver tooth hafted in a bone handle (Figure 2), some particularly fine and undamaged projectile points, a piece of engraved bone (Figure 3), a few bits of pottery, and a number of objects of exotic raw materials. These were stored in several shoe and cigar boxes at Mr. Rudge's home. Eight large mortars, anvilstones and heavy mullers were placed in his back yard; other, smaller objects of this type were stored in his basement in peach baskets and cardboard cartons.

A portion of the collection was loaned by the Rudges to the Long Island State Park and Recreation Commission's Bayard Cutting estate and arboretum near Heckscher State Park in East Islip, New York, where a number of objects were placed on permanent display in a small museum in one of the rooms of the old manor-house. This part of the collection, consisting of five framed museum cases of projectile points and other small objects, averaging 62 objects per case, remains on display at the Bayard Cutting Arboretum. Besides many projectile points, this display contains net-sinkers, iron pyrites nodules, choppers (labeled "tomahawks"), bannerstone fragments, polished stone objects, and quartz knives.

All of these objects represent only a small part of what was recovered from the Rudge-Breyer site. The bulk of this enormous collection, consisting of non-diagnostic knives and scrapers, broken artifacts, lithic detritus, some shell refuse (most was not saved), and almost ten kilograms of animal bones and teeth, was placed in paper bags in the field and transferred, unwashed and uncatalogued, to the basement beneath Mr. Rudge's house, where it lay undisturbed for many years.

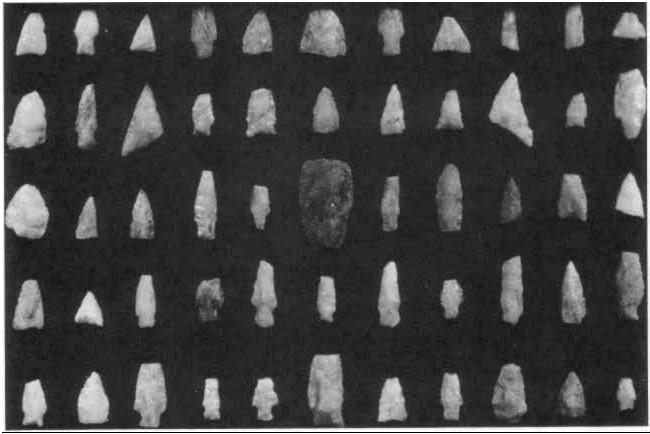


Figure 1. Representative projectile points. Rudge-Breyer site

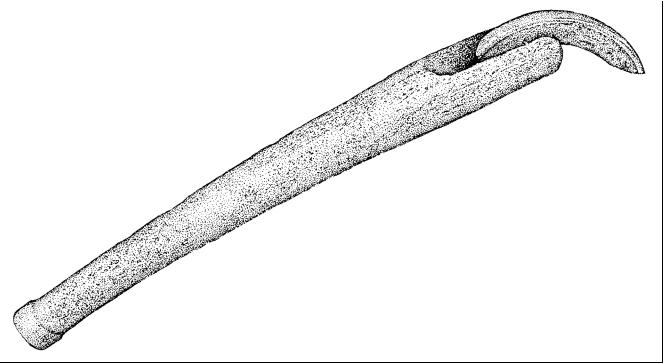


Figure 2. Beaver tooth and bone handle from the Rudge-Breyer site. Length approximately 17 cm. Drawing by T. Miller.

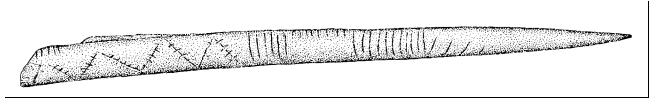


Figure 3. Engraved bone object from the Rudge-Breyer site. Length approximately 14 cm. Drawing by T. Miller.

During these years Mr. Rudge was reluctant to permit anyone access to his collection or field notes. This was entirely understandable, given the fact that his work had often been criticized by academic archaeologists. In October, 1980, however, he very kindly agreed to allow me to photograph, in its entirety, the collection of projectile points and other recognizable artifacts located at his home. He then accompanied me to Bayard Cutting Arboretum, where he opened the museum cases so that I could photograph the rest of the intact artifacts from the site, and to the site itself, where he pointed out to me the approximate locations of his excavations and the features he found within them.

In addition, Mr. Rudge generously loaned me the "refuse" from the site, still in its original containers. This collection, stored in 144 paper bags (3) packed into cardboard cartons, was removed to

the archaeology laboratory at the State University of New York at Stony Brook for cleaning, sorting and cataloguing. It was discovered that most of the paper bags had been damaged by paper-chewing insects during the period of storage, so that in some cases artifacts from various bags had dropped down into the bottom of a carton and could not be assigned secure provenience. Much of the collection, however, was still in the original bags (or at least in parts of them), and these objects were cleaned, re-bagged, and re-labeled. All faunal remains were removed at this time to separate, labeled plastic bags for shipment to a faunal-analysis laboratory.

Mr. Rudge also loaned me a large collection of heavy artifacts, mainly hammerstones and possible hammerstones, anvilstones, mullers, and large bifaces, from the site. Some of these bore numbers relating them to particular bags of artifacts, but most bore no markings. These objects were assembled in two one-bushel peach baskets and six smaller cartons, and together numbered 464 pieces. I was also permitted to photograph the collection of eight mortars, anvilstones and large pestles which remained in Mr. Rudge's back yard.

The enormous assemblage, all of which I was able either to photograph or to borrow for analysis, numbered just under 1,500 objects, not counting the thousands of pieces of "refuse" contained in the 126 paper bags (including the faunal remains) or the portion of the site's yield which remains in the possession of Mr. Breyer. Of the 1500 intact objects, more than 900 (60%) are projectile points, of which approximately 650 are diagnostic.

THE SITE

The Rudge-Breyer site is located along the western edge of the southwest embayment of Mount Sinai Harbor, today the eastern-most well-sheltered harbor on the North Shore. The excavators did no surveying by which to pinpoint the location of their digs, nor was the site's location marked in any other way. We must rely on Mr. Rudge's memory and the placement of his spoil-piles to define the approximate location of the site.

According to Mr. Rudge, the site was located roughly halfway along the present dirt road which connects Winston Drive with New Crystal Brook Hollow Road, on the sound ward side. He recalled that he worked southwestward of a three-to-four-foot rise which, in 1961, was topped with apple trees. No such rise exists now; nor do the apple trees, but Mr. Rudge's many spoil-piles are evident to this day in the area.

An area approximately 50 by 65 feet (15.24 by 19.81 meters) was excavated, in 130 or so five-foot squares. No subsurface testing was done to determine whether or not the limits of the site were reached, but since, by Mr. Rudge's account, digging did not proceed in unproductive areas, we can safely assume that much if not all of the habitation zone was examined. The entire parcel, the longer sides of which lay parallel to the water's edge, was excavated to subsoil, which Mr. Rudge estimated lay at an average depth of 10-12 inches (25.40 to 30.48 cm) below the surface. His field notes, however, indicate that greater depths were often reached: e.g., "May 23, 1964: 1 ft. topsoil mantle, 4 inches shell, 5 inches loam." Despite the fact that Mr. Rudge described the area of excavation, in an interview, as being "right on the shoreline," the placement of spoil-piles shows that he dug no closer to the present-day water's edge than about 10 feet (3.4 m). He also recalled that at no time did the waters of high tide reach the excavation, suggesting that the site lay even further back from the water's edge when occupied in prehistoric times.

In addition to the area excavated by the Rudges, Mr. William Breyer occasionally dug in "interesting-looking places" in the same area, without staking out excavation units. He customarily, worked beyond the boundaries of the very productive area that Mr. Rudge had defined as the site, and for that reason it is not clear whether or not his collection of artifacts from the area relates directly to the site. Mr. Breyer's participation in the excavation of the area was intermittent, and the amount of work he did was apparently considerably smaller than that of the Rudges.

Although I could find no published reference to it, Mr. Rudge believed that the area around the site had been tilled in the nineteenth and early twentieth centuries. He did not find objects dating to this period of time on the surface, but thought he recognized plough marks on some of the prehistoric artifacts. He related to me a story that lie remembered having read in the *Long Island Forum*, in which

the wreckmaster of Mount Sinai Harbor in the 1880s was alleged to have collected horse manure on a regular basis from the streets of New York City to use as fertilizer for the area of the site. I was unable to find such a story in back issues of the *Forum*, so it is possible that Mr. Rudge was in error about the post-contact use of the site as an agricultural field. It is known that for many years a working farm belonging to the Strong family lay close by the site, on the parcel now designated, on maps published by the Suffolk County Real Property "fax Service Agency, as Lots 1 and 2, Block 2, Section 006, District 0206 (Village of Port Jefferson). I was therefore not surprised to find some bones of domesticated farm animals among the faunal remains from the site.

FIELD METHODS

By today's standards, the field methods employed by the Rudges and Mr. Breyer left a great deal to be desired. Although the Rudges worked in measured five-foot squares, these squares were never located relative either, to a permanent benchmark or to each other. No map exists to show where individual squares were located, although hand-drawn sketches at the bottom of each page of field notes show the approximate area within the site where each square lay.

Trowels were used, but the excavated material was not screened. Mr. Rudge defended his excavation techniques by claiming that he and his wife were cautious excavators, and "no small things like beads or fishbones" were present in the archaeological remains. Earth was removed to the subsoil level as a unit, without regard for possible stratigraphy. Depth below surface of some artifacts was noted in the field records, although these notes tend to be quite general (for example: "5 quartz bifaces, 3 to 14 inches deep," July 17, 1963).

Field notes are rudimentary. In general, the date and the number of the bag filled on that date are given. Each bag represented one square, but there is no logical sequence to the bag numbers. Recognizable objects are noted, but their exact locations within squares are not. Regrettably, the field notes are incomplete; the notes corresponding to artifact bags Numbers 1 through 45 are missing. Mr. Rudge permitted me to photocopy all of the remaining field notes, and these notes, together with photographs of all the artifacts held by the Rudges and by Bayard Cutting Arboretum, are on file in the Department of Anthropology, SUNY/Stony Brook.

FEATURES

Although "several features" were discovered and excavated at the Rudge-Breyer site, their exact locations are unknown. Hand-drawn maps in die field notes show out, in what quadrant of the total excavated area sonic, features lay. Mr. Rudge was unable to remember their exact number, and his field notes specifically mention only one feature. But there are hints in the notes that suggest the presence of others, and Mr. Rudge recalled that hearths, storage and refuse pits, and one cache of six partial quartz bifaces (which fitted together to make three complete objects) were encountered. The one case in which the field notes do reflect the discovery of what was clearly a feature is dated Sept. 26, 1965: "scollop (sic)-clam-oyster and steamer clam all grouped together in pit."

Part of the difficulty in identifying features seems to have been that shell and other faunal debris was scattered throughout the site rather than concentrated in obvious refuse or storage pits. The field notes make only occasional reference to the presence of such debris beyond noting that it was ubiquitous; therefore, when a notation such as "Deer bone, clam and Oyster shell" (May 23, 1964) is encountered, it may indicate that a refuse feature was in fact found. The notation "Miss (intended to be "Misc.") Deer bone" is encountered frequently, but this probably reflects only Mr. Rudge's preservational bias for bone (all of it was saved) over shell (most of it was discarded), and not the fact that shell was lacking.

Fire-blackened or heat-shattered rock is never mentioned in the field notes, not, was it collected or pieces of it counted or weighed. However, Mr. Rudge recalled drawing excavated "several hearths," the approximate locations of two of which he pointed out to me during a visit to the site, and rock of this description is still to he found plentifully scattered on the surface of the site. One can safely assume that

a great deal of heat-shattered rock was encountered in the process of excavation. From this type of evidence, plus Mr. Rudge's own recollections and comparison with other sites of like antiquity in the area, we can conclude that both refuse and cooking features, in unknown number but certainly no fewer than six or eight, were present at the site.

FAUNAL REMAINS

Faunal remains from the Rudge-Breyer site presently consist of a few shells of various bivalves and gastropods, a few fish and bird bones, and an enormous quantity of bones of mammals. No reptile bone was found.

Shell debris was very common on the site, and had apparently been distributed throughout, but except for a few intact halves of bivalves and several whelk shells, none was saved by the excavators. (5) Shell debris litters the site's surface today. It is not possible to estimate the original quantity of shell debris present at the site, but it does appear from the field notes that the predominant species were oyster (*Crassostrea virginica*), scallop (*Pecten irradians*), and hard-shelled clam (*Venus mercenaria*). Mr. Rudge verified this fact in an interview, naming oyster and hard-shelled clam as the predominant species in the midden, followed by scallop. Because we have learned to associate these species with Late Archaic occupation at Mount Sinai Harbor, and the presence of the soft-shelled "steamer" or long clam (*Mya arenaria*) with the Woodland period, it appears, on the basis of the shellfish remains, field notes, and Mr. Rudge's recollections, that the site dates mainly to the Late Archaic period; only one reference to steamer clam is made throughout the notes.(6)

From the few saved shells, an interesting hint concerning possible winter occupation of the site is suggested by the presence of several very large (c. 9-10 cm) scallop (*Pecten irradians*) shells. East Coast scallops live only for 22 to 24 months, achieve their maximum size about four months before death, and die collectively at about the same time each year, in March (Knapp 1973). Very large scallop shells in an archaeological site may thus be a reflection of late fall or winter shellfish collecting. However, all species of shellfish grew to larger dimensions in the past on Long Island than they do now. Thus what seems to be a "large" scallop shell today may not have contained a mature scallop in the hate Archaic. The most we can say of these shells is that their presence may suggest winter collection.

The osteological remains from the site present quite a different story. Recognized by the Rudges as being of potential value, every piece of bone recoverable without the aid of a screen was saved. The total amount of bone recovered was by far the greatest from any site excavated to date at Mount Sinai Harbor: approximately 2,570 pieces of animal bone were collected, with a total weight of 9.758 kilograms.(7) Deposition in a matrix containing a high proportion of marine shell debris apparently prevented disintegration over the years. It is not clear whether this large quantity of bone-ten times more, for example, than was unearthed at the nearby Late Archaic Tiger Lily site (Wisniewski and Gwynne 1982)-is the result of more intensive use of the Rudge-Breyer site, longer use, both, or other factors such as preservation bias.

Analysis of this collection showed that the site's Late Archaic inhabitants hunted deer to the neglect of other species.(8) About 80% of the bones (2,057 fragments) are from white-tailed deer (*Odocoileus virginianus*), and although it is possible that not all of this deer bone is Late Archaic in age, its provenience (based on the field notes) suggests that most of it is. Another 10% is from domesticates (ovicaprids, pigs, cattle), hardly surprising considering the site's proximity to a working farm from some time in the 1800s until the 1930s. The remaining 10% of the bones represent non-deer, nondomesticated taxa.

Analysis also revealed that the deer represented in the faunal collection from the Rudge-Breyer site varied radically from a random sample of a natural population. Prime-aged adult animals had clearly been the main targets of these hunters. Based on tooth-wear age classes and the high frequency of fused epiphyses of postcranial bones, it appears that animals in the 3-to-4 and 5-to-7 year old age classes were routinely being selected. Prime-aged adult deer possess a higher proportion of usable meat than other members of a normal deer population, particularly in late winter, when young and aged specimens may yield relatively little food per kilogram of body weight. The Mount Sinai Harbor deer hunters were obviously able to choose their targets advantageously. This suggests that the hunters were not starving

at the time the remains were being deposited, since under conditions of starvation any animal would be an opportune target, with the weaker young and aged specimens somewhat easier to capture. Only a small portion (10%) of the faunal collection represented non-deer wild taxa. Raccoon (*Procyon lotor*), beaver (*Castor canadensis*), dog (*Canis*), bear (*Ursus euarctos americana*), and sturgeon (*Acipenser sturio*) were identified; also present were scanty remains from two unidentifiable species a large fish and a duck-sized bird. Sturgeon (represented by a few scutes) and bear (represented by a molar tooth and a right ulna fragment) are both seasonal, indicators - the sturgeon is anadromous, and the bear a hibernator - but the remains of these animals were too insignificant in quantity for any conclusions to be drawn from them. The bones of migratory birds, which formed a significant part of the collection from the nearby Late Archaic Pipestave Hollow site (Gramly n.d.), were absent from the Rudge-Breyer fauna, whether originally or due to preservation bias we cannot know.

However, other evidence of season of occupation was discovered. Three osteological specimens provided definite evidence of fall and winter deer hunting at Mount Sinai Harbor. The first was a left third deciduous deer molar which exhibited light-to-medium wear. This pattern occurs on DM3 when a deer is between five and nine months of age. Deer in the northeastern woodlands mate in November and, after a seven-month gestation period, calve in late May or June (Hamilton and Whitaker 1979:320). Adding five to nine months of life to this date results in a death between the beginning of November and the end of March.

The other osteological specimens that provided useful evidence on season of occupation were two deer parietal bones. Both had parts of small antlers still attached, with hard (mature) cortices. In the northeast, the antlers of white-tailed deer are shed between late December and February (Hamilton and Whitaker 1979:319). The animals represented by these bones thus must have been captured after their cortices had hardened but before the antlers fell off, i.e. in late winter. This substantiates the dental evidence for winter deer hunting. The quantity of this evidence is small, but seems nevertheless conclusive.

Another kind of evidence from faunal remains also suggested that the Rudge-Breyer site had been occupied during the cold months of the year. We know from ethnographic data that among primitive hunter/gatherers animal bone marrow extraction can and does take place throughout the year, whenever an animal is killed. But the boiling of animal bones, which results in a collagen-rich soup stock, appears to be correlated with resource-poor times of the year (Leechman 1951; Binford 1978, 1981; Brennan 1981). We would thus expect to find, at a site that had been occupied by primitive deer hunters during the winter months, evidence of this activity in the form of deer long-bones that had not only been split open for their marrow but also chopped into fragments small enough to be boiled in skin bags.

I found that virtually all the post-cranial deer bones in the Rudge-Breyer faunal collection had been broken open, exposing the marrow cavity (see Figure 4). But what is perhaps more interesting was the size of the fragments: 98.78% of the deer limb bone refuse from the site had been broken into pieces less than 8 cm in length. Only 25 fragments were longer than 8 cm; these ranged from 8.2 to 11.5 cm in length. There were no tooth marks to suggest that the bones had been broken by non-human carnivores after they had been discarded. Since it is not necessary to create fragments of such small size simply to extract marrow, it is clear that extra effort was expended in order to reduce the deer limb bones to their present small size. I believe the reason for this effort was so that bones might fit conveniently into skin bags for boiling.

It might be argued that the weight of overlying archaeological material could have fragmented all formerly-large pieces of limb bone, over the centuries, into small pieces. This seems unlikely, however, since a polished and engraved long-bone object, a little over 14 cm in length, that had not been broken by the weight of overlying materials (Figure 3) was also unearthed. This piece shows that it was quite possible for longer lengths of bone to survive intact in the site.

ARTIFACTS

Because secure provenience is lacking for all of the Rudge-Breyer artifacts, and also because I was often obliged to work from photographs rather than from the objects themselves, the usefulness of these

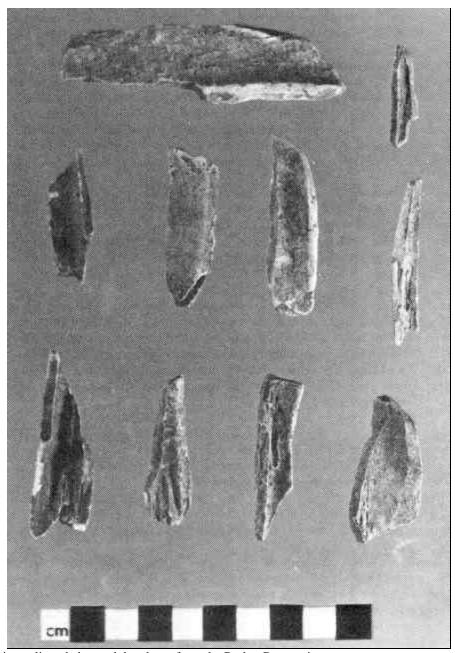


Figure 1. Representative split and chopped deer bone from the Rudge-Breyer site.

artifacts was severely limited. The most productive purpose to which this very large material-cultural collection could be put was typological - to suggest the cultural period of the most intensive prehistoric occupation of the site.

Table 1 lists the types of projectile points occurring in the Rudge-Breyer collection, together with the numbers of each identifiable type, (9) in order from the most commonly occurring to the least. Typing, which was done from photographs of the complete collection, follows Ritchie (1961).

The table shows projectile point types that are characteristic of the Late Archaic Squibnocket complex to be by far the most commonly-occurring types at the Rudge-Breyer site. The 373 narrow-stemmed points, together with 64 Squibnocket (possibly Beekman) triangles and 23 Sylvan Side-notched points (for a total of 460 specimens), are elements of an association highly characteristic of the Late Archaic period on Long Island, and dated at the nearby Pipestave Hollow site to between 3440 \pm 175 and 3965 \pm 140 (corrected) radiocarbon years (GX-4530, GX-4654, GX-4655) (Gramly n.d.:13). They represent nearly 3/4 (71.65%) of the (diagnostic) collection. If one adds to these the 11 Snook Kill points (also typical of the Late Archaic but considered by many New York archaeologists to be somewhat later in date), the percentage of Late Archaic types comes to just over 73%.

The presence of one fluted and five bifurcate-base points hints at some sporadic Paleo-Indian and Early Archaic use of the Mount Sinai Harbor area. A total of 46 Laurentian-tradition points (Brewerton and Vosburg types) representing 7.1% of the (diagnostic) collection, which some field workers would place earlier than the Squibnocket complex in coastal New York, is congruent with the numbers of Laurentian tradition points that were unearthed at predominantly Squibnocket Complex components of the Pipestave Hollow site.

Point types typical of the transitional period (Susquehanna and Orient Fishtail) number 51, or 7.94%. Early Woodland types (Adena, Lagoon, Rossville and Meadowood) account for only 41 specimens (6.38%). and Middle Woodland types seem to be nonexistent unless the ten Jack's Reef pentagonal points are considered to represent the late Middle Woodland period. Late Woodland types (Levanna, Madison) number only fifteen, or 2.33% of the collection. Untyped specimens, the next largest category after the Late Archaic types, represent just over 31% of the total.

TABLE 1: projectile Point Types from the Rudge-Breyer Site.

Type of projectile point Numb	er
Narrow stemmed	
(Lamoka, Squibnocket Stemmed,	
Wading River. Bare Island)	73
Untyped or untypable	92
Squibnocket (or Beekman) triangle	64
Contracting Stemmed	
(Adena, Rossville, Lagoon)	39
Orient Fishtaíl	37
Sylvan Side-notched	23
Vosburg	18
Susquehanna Broadpoint	14
Snook Kill]]
Brewerton Eared Triangle	11
Jack's Reef Pentagonal	
Levanna Triangle	9
Brewerton Side-Notched	9
Bifurcate-based	5
Brewerton Eared-Notched	4
Brewerton Corner-Notched	4
Madison Triangle	6
Otter Creek	2
Meadowood	2
Fluted	1
10(a)	934
Total number of diagnostic points 6	42

Besides projectile points, the artifact assemblage from the Rudge-Breyer site includes [in addition to the previously mentioned quartz bifaces (knives, scrapers, choppers), mortars, hammerstones, anvilstones, mullers, and adzes], two spherical objects which have been called "gaming balls" at other northeastern sites, 17 fragments of pottery (nine incised, five netimpressed, and three plain Vinette I ware), two fragments of steatite, two drilled and notched bannerstone fragments of a hard, non-native greenstone, several iron pyrites nodules (which may have been used as anvils in fire-making by the percussion technique), and two probable netsinkers. The relatively rare bone artifacts included four awls and two previously mentioned objects: the engraved bone object (Figure 3), similar in appearance to one found at Pipestave Hollow in a similar context and for which calendrical use has been proposed (Gwynne 1982b), and the polished bone handle, which the excavator fitted together with a beaver tooth found nearby (matching stains on each section) to form a chisel-like tool (Figure 2). Objects of exotic raw materials were rare, and were primarily of jasper or grey-black chert,(10) a phenomenon which is also true of other (predominantly) Squibnocket Complex assemblages from Mount Sinai Harbor.

DISCUSSION

The Rudge-Breyer site represents a major deer hunting and shell-fishing camp dating to Squibnocket Complex times. This complex was originally defined by Ritchie on the basis of the artifactual yield of only thirteen five-foot squares (325 sq. ft.) cleared at the Hornblower II site on Martha's Vineyard in 1964 (Ritchie 1969); since then, however, other, much more extensive, stations representing this complex have been described (e.g., Gramly 1977), and their artifactual assemblages have shown a remarkable consonance with Ritchie's original defining traits for the complex. The Rudge-Breyer site is no exception in this regard. The complex apparently endured for many generations, and there is nothing to indicate whether or not the several sites at Mount Sinai Harbor with Squibnocket materials were contemporaneous.

Perhaps the most interesting aspect of the Rudge-Breyer site is the evidence it provides for season of occupation. While the similar Pipestave Hollow site supplied clear evidence for spring, summer, and fall occupation, nothing in its extensive artifactual and ecofactual assemblages conclusively demonstrated winter occupation. At the Rudge-Breyer site, however, winter deer hunting, suggested by the evidence for bone-boiling, is conclusively demonstrated by the presence of osteological remains of animals taken between late December and February. Also probable is early spring (March-April) residence, associated in the northeastern North American archaeological literature with the presence of split and chopped deer bones (Brennan 1981). Spring, summer, or fall residence is indicated by the presence in the Rudge-Breyer midden of five fragments of sturgeon scutes. Either fall or winter (November to March) residence is indicated by the presence of a molar from a juvenile deer aged five to nine months, and winter collection of the relatively large scallop shells found at the site may be implied.

On the basis of this faunal evidence alone, the minimum number of seasons during which the Rudge-Breyer site could have been occupied is two: fall and winter. But this impression of cold-weather occupation is belied by the presence in the midden of what the excavators have reported were very large amounts of shells, including oyster and scallop, which live in the water rather than under the sand at the shoreline and thus suggest warm-weather rather than cold-weather collection. A large fish vertebra (species unknown) also hints at late summer or early fall residence, since fishing is most successful in coastal southern New England at this time. Grooved netsinkers (two were unearthed at the site) have also been associated with warm-weather activity in the prehistoric northeast, e.g. at Stratum I of the Hornblower II site on Martha's Vineyard (Ritchie 1969:45).

The seasonality data from the Rudge-Breyer site could be interpreted as evidence of year-round occupation, and I believe that this possibility is more likely than a limited, cool- and cold-weather occupation. Although indisputable seasonal markers for all seasons of the year have not been found in the various assemblages from the site, there are enough suggestions of year-round residence in the faunal assemblages alone to warrant proposing permanent occupation as a viable hypothesis. The location of the site in a sheltered cove, well back from the (prehistoric) shoreline, would have permitted separation of the site from the open water of the southwest embayment by a stand of trees (similar to the situation at the Tiger Lily site). More importantly, the most logical and economical answer to the

question (of alternatives for summer residence is the Rudge-Breyer site itself. We *know* that (a) the site was inhabited in the fall and winter, and (b) its residents captured (in addition to deer) both shellfish and fish. It is entirely unreasonable to hypothesize that a hunter/gatherer group would abandon such a camp in spring, or summer, when fishing and shell fishing could be comfortably and easily pursued.

CONCLUSION

In considering the various residence-pattern alternatives suggested by the archaeological remains from the Rudge-Breyer site, Caldwell's notion of "primary forest efficiency" (1958) comes to mind. A likely explanation for heavy concentrations of both deer bones and shellfish remains at the site is that the Late Archaic hunter/gatherers who lived there were reliant upon a double subsistence base: deer in the fall and winter, when they were the most easily available, and shellfish (and to a much lesser extent fish) in the spring and summer, when these taxa were more easily captured. The population seems to have optimized itself, in terms of location, for the most dependable, most efficient subsistence base then available: a combination of extractive strategies designed to make the fullest advantage of not just one but both of the reliable sources of high-grade protein available at Mount Sinai Harbor. It is regrettable that the size of the site and the number of features it contained are both unknowns; this information would be useful in determining the length of the Late Archaic occupation. It may have been only a year or so of intensive occupation by a relatively large group, or much longer occupation by smaller numbers of people. One thing is clear: the most parsimonious explanation for the presence and distribution of the Rudge-Breyer assemblage is that the site was a Late Archaic base camp, occupied by at least part of a cultural group throughout the year.

FOOTNOTES

- 1. I use King's (1974:39) definition: "A sedentary population (is) one that stays together at a single base for most if not all of the year during most years."
- 2. I owe a debt of thanks to the late William J. Rudge and his wife, Adeline Rudge, without whose cooperation this report would not have been possible.
- 3. Eighteen of these bags were discovered to contain artifacts and debris not from Mount Sinai Harbor but from sites at Asharokan, Strong's Neck, and Setauket, plus several "unknown" sites.
- 4. It is possible that other features were recorded in the missing portion of the field notes.
- 5. During excavation, one very large whelk shell was discovered to contain tightly-packed soil. Since it appeared to Mr. Rudge that this deeply-buried specimen had a secure Late Archaic provenience, he bagged it separately from other artifacts, retaining the soil inside. In 1980, I sent this specimen to a pollen laboratory for analysis Ms. Lyn Balchunas, then a palynology student of Dr. Gerald Kelso at Boston University. The results of this effort were disappointing. Ms. Balchunas reported that the long years of storage in a damp basement had obliterated any traces of prehistoric pollen which might have at one time been present in the soil sample. I wish to thank Dr. Kelso and Ms. Balchunas for this effort.
- 6. The field notes do not refer specifically "hard clam," but since they do contain a reference to "steamer clam" I assume that *Venus mercenaria* is meant where the word "clam" alone appears. The few shells saved from the site support this notion: there are no steamer clams among them, but 19 hard clam (quahog) valves.
- 7. These pieces of bone are quantified in tabular form in Gwynne 1982a, pp. 531-542. The number of pieces must remain approximate because some of the fragments, having been stored under damp conditions and, in some cases with the weight of stone objects directly on top of them, had obviously been further broken in storage.
- 8. I am most grateful to Dr. Arthur E. Spiess of the Maine Historic Preservation Commission, and Audrone Biknevicius, then a graduate student in physical anthropology at the Department of Anthropology, SUNY/Stony Brook, for their help in the faunal analysis.
- 9. The relatively large number of untypable points -292-reflects the fact that quartz, the most commonly used raw material on Long Island in prehistoric times, often results in a crudely-flaked finished product that is consequently difficult to type with accuracy.
- 10. The nearest sources to Long Island of grey-black cherts are in Greene and Ulster Counties, New York. Jasper has long been assumed to derive from well-known outcrops in Pennsylvania: a small amount is also found on Staten Island. Recently a jasper source area was discovered at Limerock, Rhode Island (H. M. Gramly, personal communication).

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CERAMIC ASSEMBLAGES FROM THE RYE MARSHLAND AREA OF SOUTHERN NEW YORK

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INTRODUCTION

Ceramic analysis is the basis for virtually all reconstructions of Woodland culture history in southern New England and southern New York (e.g., Rouse 1947; Smith 1950; Jacobson 1980; Lavin 1984; McBride, 1984). However, there are no published studies of prehistoric pottery from the Rye area of coastal New York. Not surprisingly, there is no published cultural historical framework for the region, either. In fact, we are unaware of any analyses of pottery from Westchester County except for Smith's (1950) work at two inland rock shelters in Armonk.

Smith placed the Finch Rock House and Helicker's Cave sites (Figure 1) in the Late Woodland Clason's Point focus of the East River tradition. These data, combined with Rouse's (1945, 1947) studies of Connecticut assemblages east of the Housatonic River, led both gentlemen (Rouse 1947, Smith 1950) to hypothesize that the boundary for the East River and Windsor traditions lay somewhere between the Hudson drainage in eastern New York and the Housatonic drainage in western Connecticut.

This article provides a quantitative, descriptive analysis of the known pottery assemblages from the Rye Marshland area. Its purpose is three-fold: (1) To initiate a ceramic sequence for the Rye area upon which other researchers may build; (2) To investigate the relevance of Smith's pottery types and sequences to the coastal area of mainland New York; (3) To test and refine Rouse's and Smith's hypothesis on the geographic extent of the East River ceramic tradition.

The Rye Marshland area of southern New York is located in Westchester County on the Northern shore of Long Island Sound, approximately 25 miles (40 km) northeast of New York City (Figure 1). Our study focuses on two archaeologically important localities within this district (Figure 2). The largest one is the Rye Marshland Conservancy, a wildlife sanctuary operated by the Westchester County Department of Parks, Recreation and Conservation. The Conservancy is in the City of Rye, New York. It extends southward to Milton Harbor where it overlooks the Long Island Sound. The total area is approximately 150 acres (61 hectares), consisting of woods, salt marshes and three small islands. The second locality is the Sherman site on Blind Brook, a stream that drains into Milton Harbor. The site was about a half mile (.8 km) from the harbor, and one mile (l.6 km) north of the Rye Marshland Conservancy. It was located on higher ground above the marsh which edges the stream.

This paper is based on the analysis of pottery from the previously unstudied private collections of Wilbur and Glenn Clark and Frank Vetere. We used the classification method explained by Lavin (1986a), as it seems to provide for reliable and maximum data retrieval. Attribute and typological analyses were performed. To alleviate the biases of differential artifact preservation and archaeological sampling reported by Newell and Krieger (1949) and others (e.g. Mason, 1966, Finlayson 1977, Petersen 1980) as inherent in individual sherd counts, frequencies were also recorded in terms of minimum number of vessels. The terminology for temper size, surface treatment and decorative techniques follow Lavin (1980).

Pottery was recovered from four sites. Three are within the Rye Marshland Conservancy and one is from the Blind Brook locality. Table 1 provides the individual sherd frequencies for sherd lots per site. Table 2 gives the minimum vessel counts for each lot per site.

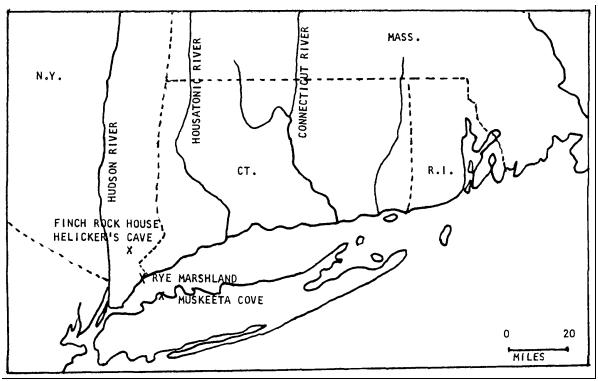


Figure 1. Map of the southern New England showing location of the sites discussed in text.

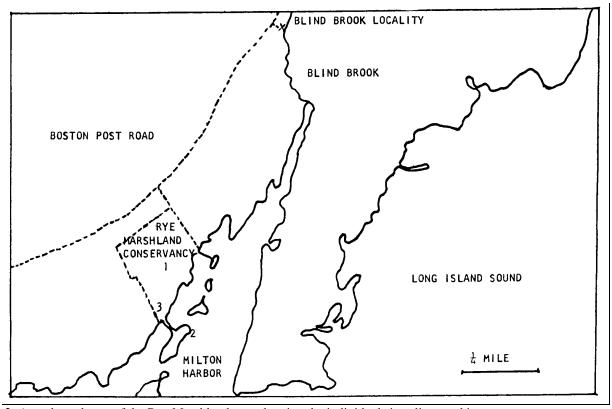


Figure 2. An enlarged map of the Rye Marshland area showing the individual sites discussed in text.

TABLE 1. Sherd groups per site

Sherd Grouping Sites	em/em grit	cm/sm grit	em/br or wiped grit	\mathbf{sm}	sm/ erod. grit	cm/sm int. notch shell	cord stick	Milo	Bow. Br.Inc. or E.Inc. shell	Bow.		River	Owas. Cord. Hor. or B.B.St. grit	Cord.	Cort.	em fm/br grit	Total
Rye Marshland 1	24	2	2														28
Rye Marshland 2		6		3	2											1	12
Rye Marshland 3 (Rockshelter) Rye Marshland 3								306									306
(Shell Midden) Blind Brook						l		5		1	12	6					25
Bind Brook (Burial) Blind Brook													4	51			55
(Shell Midden)							3		5						1		9
Total Sherds	24	8	2	3	2	1	3	311	5	1	12	6	4	51	1]	435

TABLE 2. Vessels per site

Vessels	cm/cm grit	cm/sm grit	cm/br or wiped grit	sm cm/sm grit	sm/ erod. grit		cord stick	Milo		Bow.		River	Owas. Cord. Hor. or B.B.St. grit	Cord.	Cort.	cm fm/br grit	Total
Rye Marshland 1	l	1]														3
Rye Marshland 2		1		1	1											1	4
Rye Marshland 3 (Rockshelter)								l									1
Rye Marshland 3 (Shell Midden)						1		1		1	1	1					5
Blind Brook (Burial)													1	1			2
Blind Brook (Shell Midden)							1		4						1		6
Total Vessels	1	2	1	1	l]	1	2	4	1	l	1	1	1	1	1	21

THE RYE MARSHLAND CONSERVANCY (R.M.C.)

Site #1

Site #1 is located on top of a long flat-topped hill, bordered by several streams. In 1974, the Clarks excavated a small shell midden here, and reportedly discovered a number of activity areas surrounding it (Wilbur Clark, personal communication 1983). The site yielded both pottery, lithic tools and debitage. Included were 19 identifiable Levanna points - time markers of the late Woodland period in this area.

Twenty-eight undecorated sherds were recovered. They were classified into three sherd lots representing a minimum of three vessels. The first and largest lot consists of 24 body sherds. It represents a vessel with medium coarse sandy grit temper and thick body walls (10-11mm) (Figure 3:1-3). Exterior (Figure 3:1) and interior (Figure 3:2) surfaces are cordmarked, and on both surfaces the impressions were partially smoothed over. Their paste characteristics and surface finish resemble the body sherds of early Woodland types assigned by Smith (1950), Lavin and Salwen (1983) and Lavin (1986b) to the North Beach and Fastener stages of the Windsor tradition.

The second lot includes two sherds fitted together to form part of the neck and shoulder area of a pot (Figure 3:3). They are tempered with medium to fine grit and are fairly thick (7-8mm). The exterior surface is cordmarked, while the interior surface is smoothed.

The third sherd lot consists of two sherds with grit temper and 6-7mm thick body walls (Figure 3:4). Their exterior surface exhibits smoothed over cordmarkings; the interior is wiped or possibly brushed. The small sherd size prohibits unequivocal identification of the interior surface treatment.

The attributes of sherd lot one suggest an Early or Middle Woodland occupation (See Lavin 1986b). Those of lots two and three, however, span the early and late Woodland periods.

Site #2

Site #2 is located on the largest of three islands belonging to the Conservancy. A causeway skirts the shore of Milton Harbor and crosses the tidal marsh to the island. Part of its eastern shore contains thin shell lenses which can be observed within the profiles of the eroding banks.

Twelve undecorated body sherds were recovered from this locus (Figure 4). They were classified into four sherd lots, representing the lower walls of a minimum of four vessels. Six sherds represent a vessel with grit temper, cordmarked exterior surfaces and smoothed interior surfaces. Wall thickness is 6-7mm (Figure 4:1). Three other sherds represent a second vessel with grit temper, smoothed over cordmarked exterior surfaces and smoothed interior surfaces. Wall thickness is 7-8mm (Figure 4:2). Vessel 3 is represented by two grit tempered sherds. Their exterior surface is smoothed and exhibits wiped marks; the interior surface is eroded (Figure 4:3). Vessel 4 is represented by one grit-tempered sherd. The exterior surface is cord or fabric impressed and the interior surface is brushed; wall thickness is 5-6mm (Figure 4:4).

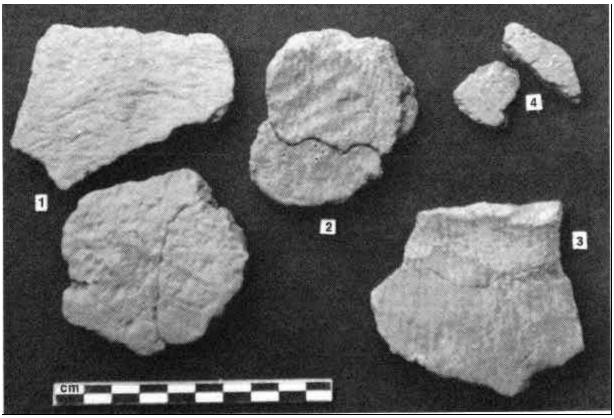


Figure 3. Sherds from Rye Marshland Site #1.

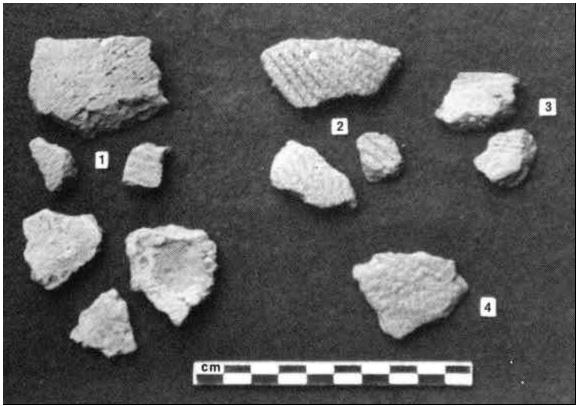


Figure 4. Sherds from Rye Marshland Site #2.

The attributes of all 4 sherd lots suggest that they may be the body sherds of any of several early or late Woodland pottery types. However, brushed interior surfaces like that in lot 4 are usually characteristic of Middle and Late Woodland occupations of the Windsor tradition, located in central and eastern Connecticut and on eastern Long Island (Rouse 1947; Smith 1950).

Site #3

Site #3 is situated on the mainland shore in the southwest corner of the Conservancy. It consists of two loci-a small rockshelter and a shell midden. The rockshelter is located in a southerly facing cliff at the base of a large rock outcrop. Twenty feet (6.1m) down the slope, and skirting the shore is the shell midden. A total of 331 sherds were recovered from the two loci, representing a minimum of six vessels.

The Rockshelter

Three hundred and six sherds were recovered from the rockshelter; 282 are body sherds and 24 are rim sherds. Most were enclosed in a small rock hearth. All the sherds represent a single dark brown vessel with an applied collar about 25mm in height (Figure 5:1, 3). There is a slight neck indentation at the base of the collar. The vessel is 7-8mm thick and tempered with medium coarse grit. Exterior surfaces are cordmarked. Interior surfaces are smoothed, except in the collar area where cord impressions are still visible (Figure 5:2). Wiped marks are also present. The collar exhibits a horizontal row of parallel, vertical cord impressions which were probably produced with the edge of a corded paddle. The top of the lip slightly flattened and deeply punctated, creating a crenellated or "pie crust"

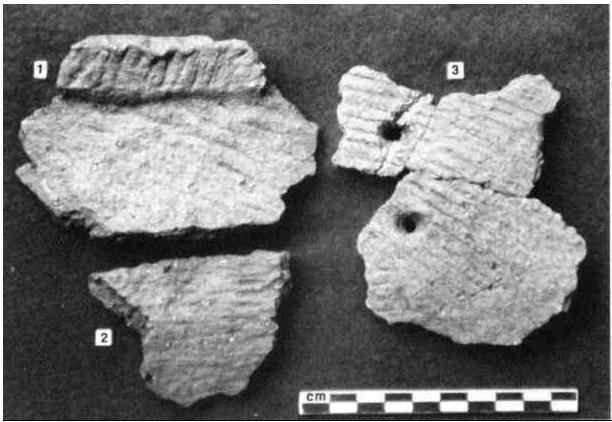


Figure 5. Sherds from Rye Marshland Site #3 (Rockshelter).

appearance. Some of the punctations are circular, others are oblong, suggesting that they were produced with the corner of the paddle used to treat the body surface. Enough sherds could be fitted together for measurement of rim curvature and estimation of the vessel's mouth diameter. This was about 40cm (or 16 inches), indicating a relatively large pot. The vessel fits the late Woodland type Milo Corded which has been reported from Bronx, County, New York, by Lopez (1958:133) and from northem New Jersey sites by Kinsey (1972:465) and by Kraft (1975:118).

The Shell Midden

The shell midden contained 25 potsherds representing a minimum of 5 vessels. Vessel 1 consists of 6 sherds that could be fitted together to form a curled rim with a strongly everted lip (Figure 6:1). It is tempered with a medium to fine grit and has a body thickness of 6mm. The exterior surface is cordmarked and the interior is smoothed. The vessel is undecorated. Its rim diameter is about 20cm (8 inches). It seems to fit the Late Woodland type East River Cordmarked, assigned by Smith (1950) to the East River tradition of western Long Island and metropolitan New York.

Five other potsherds were fitted together to form a second undecorated vessel with a low (25mm), slightly extruded collar (Figure 6:2). The vessel is tempered with medium to coarse grit. Body walls are 7mm thick. The exterior surface is cordmarked. The interior surface is eroded but exhibits smoothed areas. The lip is flattened and shows smoothed-over cord impressions which are evidently an extension of the body surface treatment to the lip area. The vessel fit the type East River Cordmarked except for its collar. In his description of the Milo Corded vessel from the Milo Rock site in Bronx County, New York, Lopez (1958:133) notes that it, too, is very similar to East River Cordmarked. This being the case, the vessel probably represents the type Milo Corded.



Figure 6. Sherds from Rye Marshland Site #3 (Shell Midden).

Vessel 3 is represented by two potsherds, a rim and neck/shoulder sherd (Figure 6:3). Both are decorated with horizontal rows of scallop shell stamping. The top of the lip also exhibits a row of scallop shell stamps, arranged perpendicular to the rim. The vessel is tempered with medium to coarse shell. Body walls are 4mm thick and the exterior surface was smoothed prior to decoration. The shoulder area below the decoration is also smoothed and the interior surface is brushed. Four coarsely shell tempered body sherds fitted together probably represent the lower walls of this vessel. Their exterior surface is virtually smoothed-a few brushed markings are visible. The interior surface is brushed (Figure 6:6). Six additional shell-tempered body sherds too small for unequivocal identification also may belong to this sherd lot. The vessel fits the type Sebonac Stamped of the Windsor Tradition (Smith 1950). Sebonac Stamped sherds have been radiocarbon dated from about A:D. 900 to A.D. 1500 at Connecticut and Long Island components (Salwen and Ottesen 1972, McBride 1984).

Vessel 4 is represented by a rim sherd, decorated with fine parallel incisions (Figure 6:4). Plasticine impressions suggest a push/pull technique. The rounded lip bears a horizontal row of parallel diagonal incisions that are virtually perpendicular to those occurring on the lip. The sherd is tempered with medium to fine shell and is 5mm thick. Its interior surface is smoothed; exterior surface was smoothed prior to decoration. Due to its small size, it is impossible to determine whether or not the rim was part of a collar. Its characteristics fit both the uncollared type Bowmans Brook Incised and the collared type Eastern Incised (Smith 1950).

The fifth vessel is also represented by a single rim sherd (Figure 6:5). It is finely shell-tempered and 4mm thick. Its exterior surface shows cordwrapped paddle impressions; the interior is smoothed and partly eroded. The vessel is undecorated except for deep notching on the interior of its lip, which produced a crenellated or "pie crust" appearance. Except for its interior notching the vessel is similar to East River Cordmarked pottery. Interior impressions or notching are common on vessels of Bowmans

Brook Stamped, another Late Woodland type of the East River tradition (Smith 1950). The potter seems to have combined attributes characteristic of the two East River types on this one vessel. We are unaware of any similar vessels, but we see no justification for imposing yet another type on the archaeological community. For the present the vessel is considered an untyped representative of the East River tradition.

The pottery attributes and types represented at Site #3 indicate Late Woodland occupations at both the rockshelter and the shell midden.

THE BLIND BROOK LOCALITY (B.B.L.)

The Sherman site was discovered during land clearing activities prior to house construction in the late spring of 1972. The bulldozer opened a shell midden and exposed a burial containing the flexed skeleton of a 40 year old male (Wilbur Clark, personal communication, 1983). Work was stopped and the Rye Historical Society was asked to recruit local amateur archaeologists for salvage operations. a total of 64 sherds, representing a minimum of 8 vessels, were recovered from the site.

The Burial

Fifty five sherds were excavated from the burial pit; they represent two vessels. Vessel 1 was discovered 50cm (19.7 inches) above and to the side of the skeleton. It is represented by 6 rim and 45 body sherds. Partial reconstruction indicates an elongated vessel with cordwrapped stick or paddle edged stamped decoration (Figure 7:1). It contains a constricted neck and a strongly everted lip. The vessel is tempered with grit and is 8-9mm thick. The rim and neck area had been smoothed prior to decoration. The body surface below the neck exhibits vertical cordmarkings but some areas were smoothed over or worn. The interior surface is smoothed and the neck and outer and inner lip areas are decorated with horizontal rows of cordwrapped stick stamping. The mouth diameter was about 20cm (8 inches). The vessel is a classic example of the type Owasco Corded Horizontal, commonly found on early Late Woodland (A.D. 1100-1200) components in both interior New York and northwestern New Jersey (Ritchie and MacNeish 1949:111-112; Kinsey 1972:462; Kraft 1975:114; Funk 1976:300).

The sherds of the second vessel were found on and directly beneath the skeleton. They consist of 3 rim sherds and one neck sherd (Figure 7:2). Partial reconstruction of its upper walls indicates that it is a miniature vessel with a mouth diameter of 8-9cm (3.5 inches). The vessel is collarless with a shoulder, straight neck and slightly everted lip. The neck is decorated with horizontal rows of cordwrapped stick stamping. It is tempered with medium grit and wall thickness is 5-6mm. Below the neck, the exterior surface is cord or fabric impressed and the interior surface is smoothed. The vessel fits the description of both the Bowmans Brook Stamped type of the East River tradition (Smith 1950) and the Owasco Corded Horizontal type of the Pahaquarra and Owasco traditions of northern New Jersey and interior New York, respectively. Several authors have remarked on the similarity of the two types (e.g. Smith 1950, Salwen 1968). When the vessel in question exhibits a flaring rim or everted lip, differentiation is difficult, if not impossible.

The Shell Midden

The general midden included at least one activity area. It contained lithic &bris and 9 sherds. They represent 6 vessels. Vessel 1 consists of two near rim sherds decorated with an incised herringbone design (Figure 8:1). The vessel is tempered with fine grit and is 4mm thick; its interior surface is smoothed. It fits the early Late Woodland type Bowmans Brook Incised, assigned by Smith (1950) to the East River tradition. Vessels 2, 3 and 4 are each represented by a single sherd bearing decorative motifs of opposed incisions (Figure 8: 2, 3 and 4). All three vessels are grit tempered, 4-5mm thick and smoothed on their interior surfaces. Like vessel 1, they have been assigned to the type Bowmans Brook Incised.

Vessel 5 is represented by a single decorated rim sherd from the collar and neck area (Figure 8:5). The collar is applied and 30-32mm wide; it bears corded stick impressions in a herringbone motif. The

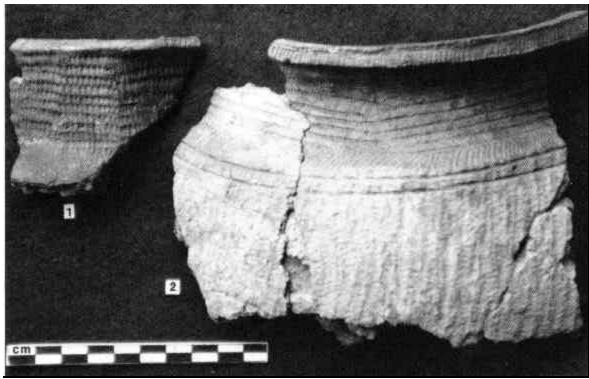


Figure 7. Sherds from Blind Brook (Burial).

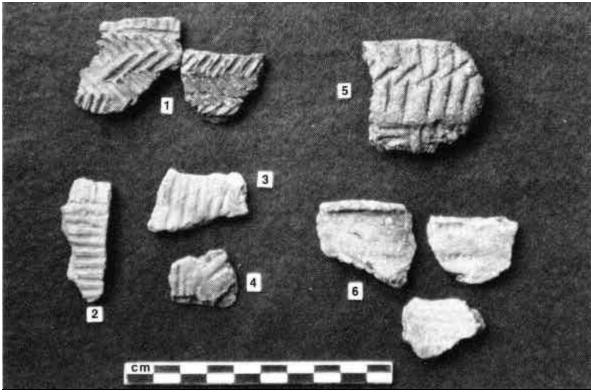


Figure 8. Sherds from Blind Brook (Shell Midden).

neck area is decorated with deeply incised groups of opposed horizontal and vertical lines. It is tempered with medium to coarse grit and is 7mm thick; its interior surface is smoothed. The vessel fits the coastal New York type Van Cortlandt Stamped and the upper Delaware Valley type Kelso Corded Variant. Although the decorative motif of Van Cortlandt Stamped pottery is usually described as parallel horizontal rows of cordwrapped stick stamping, vessels bearing herringbone designs have been reported in the literature by Skinner (1909: Figure 16 d, e,q; 1919: Figs. 8a, 9b, c, e-g), Powell (1958:Figure 5:11), Suggs (1958:35-36, Plate 1D), and Lopez and Wisniewski (1972). Incised or cordwrapped stick stamped neck decoration is not uncommon (Kaeser 1965: Figure 1:2; Lopez and Wisniewski 1972: Plate 1:10,11; Powell 1958:Figure 5:12; Skinner 1919:Figure 9a,12; Suggs 1958:36, Plate 1D).

Interestingly, the Kelso Corded Variant described by Kraft (1975:116-117) from northwestern New Jersey also exhibits herringbone motifs and incised or corded neck decoration (see also Heye and Pepper 1915: Plates 25, 27). The occurrence of this particular complex of attributes - grit tempering, smooth interior surfaces, constricted necks, collared rims, cordwrapped stick stamping in herringbone motifs, and incised neck decoration - on vessels from several sites in northern New Jersey and coastal New York suggests that the type may have been shared by both the Pahaquarra and East River traditions. An alternative hypothesis is that pots (or potters!) were being exchanged by communities in these two regions.

Vessel 6 is represented by one plain rim sherd and two neck/shoulder sherds bearing cordwrapped stick decorations (Figure 8:6). The rim is slightly curled and the lip is everted; the temper is coarse shell. The exterior surface shows smoothed-over cordmarkings while the interior surface is lightly brushed. The corded stick decoration appears to be arranged in plats down the shoulder of the vessel. The vessel resembles no known regional type. Rather it appears to combine East River form and decorative technique with brushed surface treatment characteristic of the Windsor tradition.

CONCLUSIONS

In this study we examined the pottery assemblages from four sites in the Rye Marshland area of southern New York. The collections contain a minimum of 21 vessels. Attribute and typological analyses indicate that one site was occupied during the Early or early Middle Woodland period, while the remaining three date to late Woodland times. The early Woodland component contains interior cord marked pottery typical of Early and early Middle Woodland components throughout the Northeast (Lavin 1984; Petersen and Hamilton 1984). It also contains cordmarked body sherds with smoothed interior surfaces; the interior of one sherd is wiped or brushed. The association of interior cordmarked pottery with exterior corded/interior smoothed sherds was reported by Ernest Wiegand (personal communication, October 1984) from features at the Indian River site in Westport, radiocarbon dated at 470 and 65 B.C. The late Woodland components appear to represent the early Clason's Point phase of the East River tradition.

All of the 12 typable vessels can be assigned to the Late Woodland period. Seven, possibly eight of these vessels represent types of the Bowmans Brook and early Clason's Point phases of the East River tradition which, according to Smith (1950), is centered in metropolitan New York and western Long Island. Only one vessel represents a Late Woodland type of the Windsor tradition. Three untyped sherd groups exhibit brushed surface treatment, also a Windsor attribute. Studies by Rouse (1947) and by Smith (1950) place the Windsor heartland east of the East River tradition, in eastern Long Island and central Connecticut. As noted above, both gentlemen have suggested that the boundary between the two traditions lies somewhere between the Hudson Valley in eastern New York and the Housatonic Valley in western Connecticut. Three, possibly four, vessels represent types characteristic of the Late Woodland Pahaquarra and Owasco traditions in northwestern New Jersey and interior New York.

The ceramic collections available to Smith allowed him to identify components of the late Clason's Point phase of the East River tradition as far east as Armonk in southeastern New York (Smith 1950:163-164, Figure 1). Our data indicate the presence of at least two early Clason's Point components east and south of Smith's sites. The Rye Marshlands Conservancy site #3 and the Sherman site on Blind Brook appear to be components of the early Clason's Point phase, as described by Smith (1950).

Notably, all of the East River vessels fit Smith's type descriptions very well. With one exception, combinations of East River and Windsor attributes do not occur on the same vessels, as is the case at the Muskeeta Cove site in Glen Cove, Long Island (Salwen 1968) and the Livingston Pond site in Lloyd Harbor, Long Island (James Truex, Suffolk County Archaeological Association, personal communication August, 1985). We believe this is because the Rye sites are located more firmly within East River territory, and not near its easternmost boundary as the Muskeeta Cove and Livingston Pond sites appear to be. The Rye data and descriptions of ceramics from southwestern Connecticut by Powell (1958), Suggs (1958), and Wiegand (1983) suggest that the Late Woodland boundary line between the East River and Windsor traditions lies somewhere between the Norwalk and Housatonic drainages (see Lavin 1984:23).

The presence of a single Sebonac Stamped vessel and brushed surfaces on three other vessels does indicate some contact with the more easterly Windsor tradition. Major influences, however, appear to have emanated from the west and northwest. The presence of Owasco Corded Horizontal and Milo Corded vessels indicates contacts with the Pahaquarra tradition of northwestern New Jersey and the Owasco tradition of interior New York.

Moreover, several pottery types of the East River tradition are similar to those of the Pahaquarra-Munsee and Owasco-Iroquois traditions. Some vessels of Bowmans Brook Stamped and Van Cortlandt Stamped are very difficult to distinguish from the Owasco series. Several researchers have remarked on these similarities (e.g., Smith 1950:148, 152-153; Powell 1958:20; Lopez and Wisniewski 1972:235). The stylistic correlations have led Suggs (1957:421) to challenge Smith's (1950:153) hypothesis of an invasion of East River tradition-bearing people from New Jersey to the New York coast. In contrast, Suggs views East River as "a coastal variation of Owasco traits" that diffused southward along the main waterways of New York and New Jersey.

As Salwen (1968:334) and Jacobson (1980:68) have pointed out, East River pottery exhibits attributes and attribute clusters representative of both cultural-geographic regions. The Bowmans Brook Incised vessels from the Sherman site are quite similar in surface treatment, vessel shape, decorative technique, and motifs to southern New Jersey types (see Lopez 1961), which have been radiocarbon-dated as early as A.D. 1085 in the lower Delaware Valley (Griffith 1982:50). As noted previously, the vessel shape, decorative technique, and motifs of the types Bowmans Brook Stamped, Van Cortlandt Stamped, and Milo Corded are strongly reminiscent of Pahaquarra and Owasco types from northwestern New Jersey and central New York, as is the presence of corded stick stamping on the interior rims of vessels. These attributes and types occur in various combinations at the Rye sites. Assuming that the pottery within each assemblage is contemporaneous, our data from Rye do not appear to support an East River invasion-replacement theory. They substantiate the findings of Salwen and Jacobson that East River vessels reflect a more peaceful contact situation with both southern and western-northwestern communities.

ACKNOWLEDGMENTS

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RECENT FIELD INSPECTIONS OF TWO SEVENTEENTH CENTURY INDIAN FORTS ON LONG ISLAND, FORTS MASSAPEAG AND CORCHAUG.

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Metropolitan Chapter Long Island Chapter

Sometimes it is a good idea to make field Inspections of old published sites in order to bring up to date our knowledge of their present condition. With this objective in mind, this record of recent trips to inspect Forts Massapeag and Corchaug is submitted. It has been 30 years since Fort Massapeag was discussed in the literature in more than a passing note (Smith 1950). Fort Corchaug, which formed the basis for my report 35 years ago (Solecki 1950), had been revisited by Lorraine Williams (1972) more recently.

Fort Massapeag, which will form the basis of an enlarged report I am presently writing, is for the most part confined within the limits of a small park at Massapeaqua. It had been in danger of destruction by real estate developers, but was saved through the efforts of a local resident and former town historian, John O'Halloran, now Father O'Halloran of Brooklyn.

It had been my custom when giving a course in local archaeology at Columbia University to take students out to see Fort Massapeag. However, the last time I saw the site was on another occasion. This was a field trip with the Metropolitan Chapter of the NYSAA. The group included Anne Browning, the president of the chapter, her daughter and husband, Mr. and Mrs. Ken Hoffman, Mr. and Mrs. Robert Apuzzo and myself as group leader. The heavy rain in the morning cut down the attendance that day. Fort Massapeag proved to be fairly easy to find. Using an ordinary road map, we proceeded down Merrick Road, turning right and south down Cedar Shore Boulevard. I did not obtain the Map of Fort Neck at Massapeaqua (Figure 1), until later through the courtesy of Carlyle Smith, and so we made a few false turns at the end of the road before we found Fort Massapeag

The area was completely built up with single family homes, which appeared to be built in the main like English cottages, with green front lawns, deep tree shaded areas, ivy covered trellises, the whole lot. We found the fort site at the junction of Gloucester and Fairfax Roads. The site is in a miniature park, or green sward measuring about 117 feet east-west by 90 feet (35.7 m by 27.4 m) north-south. There are two clumps of free standing trees about 10 inches (25.4cm) in diameter in the southwest quarter of the area. They appeared to be more than 40 years old, and might he a remnant of the growth of trees on the site. At the northern end of the plot on Fairfax Road, facing in the direction of Gloucester Road is a white painted sign bearing the legend, "Fort Neck. Where Captain John Underhill in 1653 Overpowered the Massapeaqua Indians. An Historical Place Preserved and Maintained by the Town Board. Town of Oyster Bay." The battle has been disputed (Morice 1942).

Comparing the reality of the site with the original real estate plan of 1932 which was incorporated in the Oyster Bay Town Board map of 1950, it was obvious that a providential change had been effected. Gloucester Road is shown as bisecting the fort walls, and the whole site was swallowed up in lot parcels. Smith (1954) mentions that the site had been "virtually obliterated by action of bulldozers," and that the "north wall ditch had been dug away." It certainly did not look like what I had remembered from pre-World War II days (Figure 2). Unaware of the Oyster Bay Town board Map at the time of our field inspection, we had to rely on visual traces for cities to the palisade outline. It was also difficult for me to capture the original natural aspect.

Among the trees in the southwest quarter of the park and extending eastward could be seen a definite 1.5 to 2 foot (45.7 to 61cm) linear rise of the earth. In the area marked as the "clamshell area" on the 1932 real estate map were observed two shallow holes about 2 feet (61cm) in diameter and a few inches deep, cutting into dark mixed soil. Scattered around the edges of these holes, presumably "pot holes" dug by amateur archaeologists, were seen some broken clam shells. These were quite eroded and powdery looking, very obviously not of recent origin. It looked as though the whole of the refuse area and the southern part of the wall had been preserved within the park limits. Just to the south and

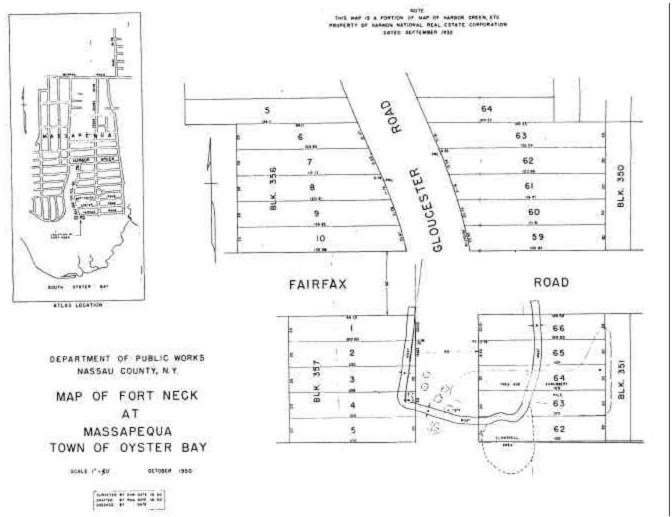


Figure 1. The -paper- street map of Harbor Green, Massapeaquea, and the Fort Massapeag area as surveyed in 1950.

adjoining the area is a large playing field, covering at least 5 acres (2.02 hectares). This field occupies what 1 remember as having been the salt meadow which had extended just to the south of the fort down to the bay. It was in this meadow in a southeasterly direction that 1 had observed a collection of badly broken and compacted shells about 500 feet (152.4m) from the fort site. I had never investigated the shell collection. The playing field, which is separated from the park by a high chain link fence, appears to have at least three feet (6.1m) of soil fill covering it.

Based upon my field measurements, I felt confident that the western wall of Fort Massapeag was preserved within the boundary of the park. There appeared to be a faint north-south linear trace running from the clamshell area toward Fairfax Road which could have been the eastern palisade wall.

This was later proven to be so from an examination of the Oyster Bay Town Board Map (Figure 1). I took a number of photographs of the site, including 10 black and white exposures on 120 film, and about 15 35mm exposures with another camera.

Of incidental note, a home owner across the street from the fort emerged demanding to know what we were doing. We told her that we were an educational group, which appeared to calm her. It is comforting to know that the local citizenry are taking an interest in any untoward happenings on the fort site. We spent about 45 minutes in our survey.

Our next stop was to find the house which was situated on the site of the Indian burial ground, where a number of skeletons were found by a John Wilson in 1936. He had showed me the site, which by then had a house on it. Using the photograph I had taken of the house at the time, we drove up and

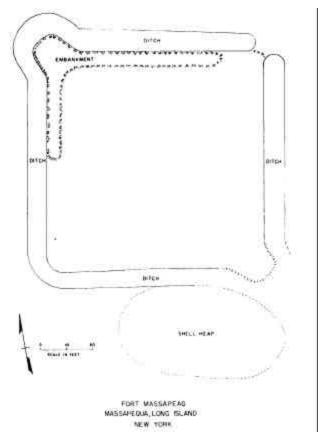


Figure 2. Map of Fort Massapeag from Carlyle Smith (1954) drawn from a composite of the Smith and Solecki maps.

down Bay Drive until one of the members of the party identified the property. The burial site is at the corner of Dartmouth Road and Bay Drive, and the house looks much the same as when I saw it over 40 years ago. In a short walk-over inspection of the area, Mr. Apuzzo found a small white quartz triangular arrowhead with a concave base right on the corner of the two roads, glistening in the wet turf. It was probably washed out by the recent heavy rains. I took several photographs of the area in order to compare with earlier views I had taken. My recollection is that the house stood alone on my first visit to the place in company with Mr. Wilson.

Through the kindness of Daniel Kaplan of the Nassau County Museum, a report by Mark Druss (n.d.), formerly associated with the museum, was made available to me. This report concerns a surface survey Druss made at Fort Massapeag. The report, dated Aug. 17, 1966, comprises three typed pages.

In it, he notes that the site is in -surprisingly good condition." He said that he could see almost all of the south and west embankments, which according to him measured an average of about 2[61cm] feet higher than the grass level. Evidently Druss did not have the Oyster Bay Town map of 1950 to use as a guide at the time of his visit. He appears to have confused the eastern property line of the park with the eastern palisade wall of Fort Massapeag.

Druss found no aboriginal artifacts in his surface survey. He noted about four pieces of clam shells which looked modern to him, they were localized in the southeast corner of the grassy park. From his description, it would appear that Druss was speaking about the locale where the shell refuse midden had been.

Druss did not find much disturbance. He noted one "pot hole" in the feature he identified as the south embankment about 78 feet (23.8m) from the southwest corner of the fort. This intrusion was 2.5

feet (76.2cm) in diameter and about 1 foot (30.5cm) deep. He noted nothing of interest in this open hole. There was an indication of another shovel test measuring 2 feet (61cm) square situated some 15 feet (4.6cm) "south of the entrance to the fort" and 21 feet (6.4m) west of the rail fence marking the eastern boundary of the park. The hole had been back-filled, leaving a small grassed in depression. Druss took 10 photographs of the site. Druss did not make any maps because Father O'Halloran's sketch map and Smith's (1954) published map were on file at the museum. We may add here that my own unpublished sketch map is on file with the Nassau County Museum records (Figure 3). Druss was of the impression that the site might still yield some good data for future investigations. My own opinion is that since the site had been bull-dozed over once lightly, any future investigations would have to take this into account. To my knowledge, the only part of the fort site where artifactual data had been recovered was in the shell refuse midden. The re-excavation of this feature would have to be in the nature of a salvage measure, because it had been churned through by amateur archaeologists before the site came to the attention of properly trained investigators.

Fort Corchaug, at Cutchogue, was the objective of a half hour reconnaissance made February 20, 1987. The site, registered officially in the National Register, is the second known extant Indian fort site on Long Island. The site did not quite resemble the open condition it was in when I began my investigations there over 45 years ago.

The occasion of this field inspection was to trace the boundaries of the palisade embankment in company with members of the Cutchogue-New Suffolk Historical Society. These members included James Grathwohl, John Halsey and Virginia McCaffery. Formerly the Downs Farm, and now the property of William Baxter of Greenwich, Conn., we found that the old farm road access to the property from Peconic Bay Boulevard to the south was blocked by a new house. Skirting this property on foot, we reached the old Downs farm road, which still appeared to be in good shape although it was obviously disused. Covered with heavy leaf mold, it is deeply incised (c. 1-1.5 feet) (c. 30.5-45.7cm) in the ground, indicating its age. It has not seen wheeled traffic in a long time, because twigs and new tree

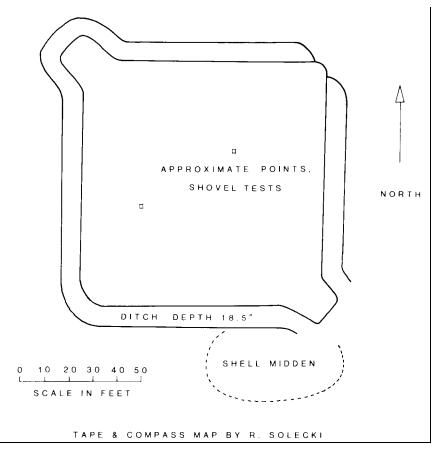


Figure 3. The Solecki map of Fort Massapeag (unpublished).

branches at eye level had to be watched out for. On the way toward the fort site, I showed the group where the Baxter site was located. This is the site which I had discovered and tested in my survey on Downs Greek, and which Bert Salwen (1966) and later William A. Ritchie explored (Ritchie, 1969:169-170). Flanking the road, we noted some old type bent-tree fencing.

I had some difficulty at first in identifying my old landmarks because new tree growth and bushes had obscured the ground so much. At the time of my investigations, the former owner, Mr. Downs, had cleared the land as a pasturage for his cows. Since then, the land had reverted back to trees and bushes-new tree growth sprouting from the old cut stumps. The trees were mainly oaks and maples, with a few cedars.

Approaching the fort site from the south, we found clues to its location in the form of broken clam shells peeping out of the sandy turf. It was with a little relief that I identified the area of the southeast corner of the palisade embankment. Looking north from this spot, we could trace the line of the east embankment, which goes through a low swale in this area. We took time to take a couple photographs of ourselves standing on the embankment. It appeared to be about 12 feet (3.7m) wide with a rather faint rise in elevation. Following the line of the palisade to the north, we came to the northeast corner of the fort where still prominent is a deep hollow. This may have been originally a well or a pit house enclosed by the palisade. On the northern periphery of the pit can be still clearly seen traces of Charles Goddard's old excavation.

Turning toward the west, we were able to see the northern embankment fairly clearly through the trees looking toward the old farm road. There is a very perceptible rise of about a foot in the embankment, accentuated by the flanking shallow ditches on both sides. As elsewhere, the palisade embankment is covered with leaf mold, fallen twigs, briers, etc. The "old cartway" dating from the latter half of the seventeenth century cutting diagonally across the fort from the northwest to the southeast was still fairly easy to make out. About the width of a wagon track, it is incised into the turf to a depth of about half a foot (c. 15.2cm) at least. On a slight diagonal to the west of the old cartway we were able to pick out the west palisade embankment as a broad low linear tumulus fading into the distance through the trees.

We were impressed by the quietness of the area. A few homes could be seen distantly on the opposite shore of Downs Creek, but other than that, the peacefulness of the area could transport one back to pre-colonial times. We saw a decrepit hunter's duck blind by the creek shore, and near it a couple large holes in the sandy soil. We thought that they might have been made by muskrats. There were two or three hummocks of marsh grass off shore which Grathwohl thought might be muskrat habitats.

Quite satisfied that the fort site was still intact and undisturbed, we retraced our steps back the way we came. It is hoped that the Corchaug fort site will one day be protected as part of Long Island's cultural heritage. It is without peer on the whole Atlantic seaboard.

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LATE WOODLAND DOG CEREMONIALISM ON LONG ISLAND IN COMPARATIVE AND TEMPORAL PERSPECTIVE*

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The relationship between man and dog is one of the more easily demonstrable examples of the "psychic unity" of humankind. The dog, a highly adaptable creature, appears to have domesticated himself very early in human history. Contrary to commonly held beliefs, the dog is not simply a domesticated wolf; he is a separate species. Whereas most zoologists agree on this point, there is no consensus about the evolutionary process itself (Allen 1920). Wolves, dogs and foxes, are believed by some scholars to have evolved from a common Miocene ancestor, the Cynodesmus (Davis 1949). Others are not so sure. More cautious experts suggest that the problem of origins seems, for all practical purposes, insoluble. One fact is clear; the dog was certainly more adaptable than any of the Canidae family. Unlike his cousins, the dog attached himself to wandering bands of human hunters rather than chancing a much riskier existence in the wild. We can only guess at the actual nature of man's first experience with the domestication process, but it seems likely that the initiative was probably taken by the dog. As people settled into more permanent camps, refuse piled up attracting a variety of forest denizens. It was the dog, however, who singled itself out for a special relationship. The widely accepted conclusion is that this domestication process took place in the Old World. Similarities between Old and New World dogs suggest that dogs accompanied their Asian masters across the Bering land bridge into North America (Allen 1920; Wissler 1917).

The practical nature of that relationship is suggested by the ethnographic data on the role of dogs in Indian culture. The early French explorers reported that the Micmac Indians used dogs for hunting (Baird 1616). In New England, dogs assisted in the hunt by harassing deer and moose (Russell 1980). Another account mentions the important role of dogs in hunting bear (Flannery 1939). This does not appear to be a universal pattern however, because the Iroquois and the southeastern Indians did not use dogs to aid them in the hunt. The most obvious universal trait was the role of dogs as an alarm system to protect the village from a surprise attack. Although the Huron (Flannery 1939) and the Micmac (Denys 1908) frequently prepared dog meat as a delicacy for visitors, the regular consumption of dog meat by North American Indians was not a widespread practice. When the hunt failed, of course, the dog probably served as a convenient food supplement during the time of crisis. There is no evidence, however, to suggest that the Indians of Southern New England and Long Island consumed dogs as a regular part of their diet (Butler and Hadlock 1949).

Although the records seldom comment on the more mundane everyday interaction between people and their dogs, we can assume that the dog was a companion who generously returned any small amount of affection extended to him. From colonial observers we have some reports which indicate a strong bond of affection. The Huron (Flannery 1939; Butler and Hadlock 1949) and the Shinnecock of Long Island (Fernow 1883) are reported to have demonstrated a strong attachment to their dogs. When the Shinnecock were ordered by the colonial authorities to kill their "excess" dogs and any others who "offended" settlers, they responded angrily and refused to comply. Local settlers wrote to Governor Andros complaining that the Shinnecock, ". . . utterly refuse and doe norish and bring up kennels of them" (Fernow 1883:776). When Whites took matters into their own hands and killed some dogs belonging to Indians, they were berated with "threatening speeches" (Fernow 1883:756). Nicolas Denys' account of his travels among the Indians in northern New England describes many examples of affection for dogs. The most quoted reference is his account of Indian women who acted as surrogate mothers by suckling pups (Denys 1908). This act, however, may have been part of a religious ritual rather than an indication of a more generalized feeling about dogs.

The role of the dog in religious ceremonialism was undoubtedly influenced by the practical function served by the dog in everyday village life. Dogs were closely associated with the domestic aspects of

*This paper was presented at the 1983 annual meeting of the New York State Archaeological Association.

village life, providing protection, companionship, hunting assistance, and an emergency supply of meat. Another factor which appears to have played a role in the development of dog ceremonial] sill is the relationship between an animistic belief system and the domestication of a wild animal. The dog is at home in the wilderness world of animals as well as in the domestic world of man. In a recent study of Middle Woodland dog ceremonialis m, Anne-Marie Cantwell noted that dogs embody a duality, which can easily be appreciated by peoples living close to nature. In animistic belief systems the distinction between humankind and animals is often blurred. Dogs, said Cantwell, are:

... interstitial; they are intermediate between the forest, the world of animals, and the camp, the world of man... like men they travel between the two worlds, but the dogs belong to neither and are, in that sense, liminal to both. Small wonder then that dogs appear in ritual contests, as parts of ritual meals, as sacrifices, as totems, as mediators with the spirit world, as grave goods with humans, or, ... buried as humans are where human humans live. (Cantwell 1980:191).

The role of the dog as an intermediator, messenger or guide between this world and the spirit world has been frequently documented by early European explorers and settlers. The Iroquois sacrificed an unblemished, pure white dog during their midwinter celebration of the new year (Wallace 1972). The dog was strangled, because it was considered taboo for the blood to be shed. The body was hung on a wooden statue of the creator god and decorated with ribbons and beads. A short time after this ceremony was completed, the dog was carried into the longhouse and cremated. It was believed that the smoke would carry the prayers of the shamans to the gods. To the Huron a white dog also had religious significance. They prepared a sacrificial feast during which the flesh of a white dog was eaten in order to obtain desired information from the spirit world (Brebeuf 1896-1901). The Fox Indians practiced a ritual that was somewhat similar to the Iroquoian white dog sacrifice (Underhill 1965). They strangled a dog and hung it on a post to serve as a guide for dead souls as they crossed into the spirit world. A similar custom was practiced by the Koryak and Chukchi peoples of Siberia. They hung the sacrificed dogs on poles with their noses pointed to the sky where the departed souls had flown (Campbell 1983).

The dog plays an important role in death rituals among a widespread number of cultures in both the old and the new worlds. The Maya and the ancient Egyptians both believed that the dog spirit served as a guide to the land of the dead. The Egyptian god Anubis who supervised the preparation of mummification rituals was always depicted as a human form with the head of a dog (Lurker 1974). Anubis was generally regarded as a psychopomp for departed souls and a guardian who protected the mortuary complexes. The religious cult founded by the Greek philosopher Pythagoras included a belief that a dog held near the face of a dying person would receive the departing soul (Davis 1949).

During the Neolithic period in Europe, and perhaps even earlier, the dog was closely related to the female essence. This association probably grew out of their mutual involvement in hearth and home. Neolithic pottery motifs and effigies indicate that the dog was the "principal animal" of a goddess who appears to be related to the moon (Gimbutas 1982). Human cults, night spirits, women and dogs are frequently interrelated in Old World mythology. The dog-headed god Anubis aided Isis in her quest for the body of her husband Osiris (Davis 1949). The quest was a crucial part of the Isis legends, which established her as the model of feminine virtue and courage. Here we see an interesting combination of death and domestic themes involving the role of the dog spirit. Egyptian villages often had cemeteries where mummified family dogs were buried.

The Romans, Greeks, and Aztecs in the New World all had legends which combined female and dog themes. Dogs were sacrificed by the Romans to Diana the woodland goddess, who was the patron of women and creatures of the wild. Diana was probably derived from the Greek goddess Artemis, who protected children as well as women and forest animals. Here again we see a combination of death and domestic themes. Artemis was also associated with the sudden and unexplained death of females (Grant and Hazel 1973). In the New World the Aztec human goddess, Xochiquetzel, patroness of love, sexual pleasure and childbirth, was also called Izcuinam or "bitch goddess" (Brinton 1868). The association of female sexuality and the dog has also been documented among Chipewyan peoples of northern Canada. In their origin myth the first woman has sexual intercourse with a dog and then gives birth to humankind (Sharp 1976).

The archaeological data from North America suggests that all of these themes are represented in various combinations in different spatial and temporal contexts. The earliest dog burials in North America are found in Archaic components although it is quite possible that dog ceremonialism has its roots in the Paleo-Indian period. On the Frontenac Island site in northern New York State dogs were found buried in association with adult males, suggesting perhaps a celebration of the dog as a hunting

partner. This relationship is also suggested by an Old Copper Culture burial in Michigan. Here two very old dogs were buried with an adult male. The grave goods included copper and flint projectile points. The advanced age of the dogs suggests that they were killed only after long years of service (Prahl 1967). In the southeast, however, dogs appear about equally distributed in both male and female graves (Cantwell 1980). Young females were frequently honored with accompanying burials of several dogs. The largest body of data on Archaic dog burials comes from the Eva site on the Tennessee River in northwestern Kentucky. Lewis and Kneberg (1961) found eighteen dogs buried here, four of them in a flexed position under the skulls of human burials. The dogs buried at the Koster site in Illinois, however, were not in association with human graves. These creatures were placed in carefully prepared burials within the village area.

On Long Island the patterns of Archaic dog ceremonialism closely resemble those found at Koster. The earliest documented dog burials were excavated at Shoreham-Wading River (Wyatt 1982) and Mt. Sinai Harbor (Michael Gramly, personal communication). Gramly supervised these excavations and is in the process of preparing a full report which he expects will be published). Ronald Wyatt found the partially flexed burial of a mature female dog at the bottom of a refuse pit near a hearth which had been used for domestic food preparation (Wyatt, personal communication). There were no grave goods in association, nor were there any human remains in or near the pit. Michael Gramly found six dog burials in his Mount Sinai Harbor excavations. Three were excavated in association with village debris on Hopkins Point. The dogs were resting on their sides in a flexed position as if they had been sleeping. The absence of any sign of violence suggests the possibility of strangulation. This conjecture is supported by the data on the Huron and the Iroquois cited above. Nearby at Hopkins Landing three more dog burials were located, but none were as well preserved as those on the point.

The absence of human burials in close association with any of these dog inhumations strongly suggests that dog ceremonialism practiced at these sites was not part of a death ritual, nor is it likely that the dogs were messengers or guides to the spirit world. They appear to be part of a domestic ritual associated, perhaps, with the protection of the household. Anne-Marie Cantwell surveyed dog burials in midwestern Middle Woodland sites and found a similar pattern. Dog burials have not been found in the sacred mounds of the Hopewell. Instead they were located in the village sites, generally at some distance from the human mortuaries (Cantwell 1980).

The dog continued to play an important role in religious ceremonialism during the Transitional period, which followed the late Archaic in New York and New England. There were, however, some fascinating changes in the patterns of burial. The role of the dog in the elaborate funerary rituals of the Orient culture on Long Island was not recognized until Ritchie reexamined the skeletal remains in the cremation burials at Jamesport and discovered that dog bones were mixed in among the human remains. This led him to conclude that "the cremation of dog bones was a significant element of burial ritualism involved here," (Ritchie 1959:56). Clearly Orient dog ceremonialism was quite different from the Archaic practices on Long Island.

The nature of this ceremonialism may actually be even more complex than Ritchie believed. When he excavated a village which was related to the hilltop Orient mortuaries, he found dog bones among the domestic debris (Ritchie 1959). The skeleton was concentrated in a small area, but it was not fully articulated. Ritchie concluded that the animal had been killed for food rather than burial as a part of a ritual. His conclusions here are open to question for two reasons. If the dog had been butchered for food, it is highly unlikely that the bones would have remained in such a concentrated area. Parts of the dog would have been passed around, consumed and the bones scattered about the camp. A second factor was the presence of an infant burial about fifty feet (c.15.2m) away in the same strata. Although the two burials were not in close association, there is a suggestion of a burial program quite distinct from the one represented in the mortuary cremation. Here we have the possibility of dog ceremonialism which combined death and domestic themes. The data base, however, is far too slim for any solid conclusions, but we do see this combination of themes clearly demonstrated much later in Woodland sites on Long Island.

Many of the Middle and Late Woodland sites excavated on Long Island appear to have been villages. The most common features are pits ranging from two to five feet (.61 to 1.5m) in diameter and about five feet (1.5m) in depth. They served a number of functions which varied over time. Initially they were probably storage pits. Many were later filled with refuse or used as a grave. One of the more extensive of these sites was excavated in 1900 by Mark Harrington near the village of Port Washington

(Harrington 1982:83). He uncovered eighty pits, sixteen of which contained human skeletal remains. Infants in the burial population outnumbered adults by more than two to one. Harrington made no sex designations. The burials ranged in depth from eighteen to forty inches (45.7 to 101.6cm) below the surface and were generally in association with hearths or village debris. Dogs accompanied three of the human burials. Two of these were infants and the third was an adult. The grave goods associated with the adult included two bone awls and some pottery, suggesting that the adult was a female. On the edge of a bluff about five hundred feet (152.4m) to the east of the main concentration of pits, Harrington found an infant buried with three dogs. This unusual burial was in such poor condition that Harrington was unable to record precise associations or even to determine whether or not the burial was in a pit.

The other three burials were in a much better state of preservation, thus making a clear pattern distinguishable. The dogs were placed in the pits first, at depths ranging from twenty-nine to forty-two inches (73.7 to 106.7cm). Next a layer of soil was added; the human burials were laid on top of this and then covered over. Three different methods of killing the dogs are suggested by the data. The dog in the adult burial was probably dispatched with a spear or an arrow. Harrington found a projectile point among the ribs of the skeleton. The other two are more problematical. One may have been buried alive; at least Harrington thought so. The contorted position of the skeleton suggested to him that the creature died while trying to dig its way out. The remaining dog lay on its back and showed no sign of violence. It is possible that this dog was strangled in a manner similar to that used by the Iroquois and the Huron. The ritual significance of these differences in sacrificial procedures remains unclear.

Eight of the dogs buried in the village refuse pits at Port Washington were not in association with human remains. These burials may indicate a continuation of the Archaic dog and hearth burials. The dog-human and dog-hearth inhumations appear to be related to similar domestic themes. Women, children and the hearth are the vital center of village life. The dog may have come to represent that important essence in prehistoric religious thought. The practice of dog-human burials was fairly widespread during this period. Graves which included adult females, young children and dogs have been reported in late Woodland sites in Michigan (Prahl 1967) and New Jersey (Kraft 1978). The dog-human burials may have evolved out of earlier, more generalized dog-hearth rituals. The association of the dog with human burials does appear to indicate a more complex theological concept.

A second site located on the same bay at Beach Haven was excavated in 1927 by F.P. Orchard for the Heye Foundation, which had also sponsored Harrington's Port Washington dig (Orchard 1977:66-69). In spite of the institutional link between the two excavations, Orchard appears to have been unaware that Harrington had filed a detailed report in the Heye Foundation archives (Harrington 1982:83-90). Even Harrington's published article on New York shell middens, which included a brief account of the Port Washington excavation, was not cited (Harrington 1977:1-15). Orchard's only mention of Harrington's excavation cites as a reference an article by Allison Skinner in the *Anthropological Papers of the American Museum of Natural History*. This oversight was unfortunate because a comparative analysis might have inspired a closer attention to burial patterns and perhaps encouraged some shifts in Orchard's research strategy.

The similarities in burial rituals were striking. The Beach Haven site was also a village habitation. The concentration of pits containing fragments of cooking pots and animal bones and a scattering of hearths clearly indicated extensive domestic activity. The pits ranged from 22 to 84 inches (55.9 to 213.4cm) in diameter and ran from 16 to 73 inches (40.6 to 185.4cm) in depth. Mixed in the fill were the customary debris: oyster, hard and soft shell clams, mollusks, scallops, mammal, bird and fish bones, and some scattered artifacts. Five of the pits contained human skeletal remains. Two of them included dog burials in the same pit with the humans. Unfortunately, Orchard did not record the sex of the human burials.

The burial pattern followed here in the dog ceremony was similar to the one practiced at Port Washington. In pit number four (Orchard's designation) a small dog had been "carefully buried" near the bottom (Orchard 1977:68). A layer of dirt about a foot (c. 30cm) thick covered the dog. On top of this layer Orchard found a most curious feature, one that has, to the author's knowledge, never been mentioned in any of the Long Island excavation reports. Orchard described it as "... an oval of oyster shells set on edge about five inches apart ..." (Orchard 1977:68). It is possible, of course, that features similar to this may have existed in other burials. It would have been very easy to miss them given the excavation techniques used in the 1920s and the general profusion of shell throughout the site. Until

more of these features are found and recorded, the shell oval will remain a fascinating mystery. Nearly two feet (60.1cm) of earth was placed on top of the feature to prepare a grave floor for the human burial. An adult in a flexed position was laid in the grave and covered with fill, which included what appears to have been debris from a cooking hearth. The presence of this debris suggests that it was a fe male.

The second dog burial was prepared in a similar fashion. At the bottom of pit number five, Orchard found the badly decomposed remains of a dog. Only the skull and leg bones survived, but stains in the soil convinced him that a complete skeleton had been there originally. A layer over two feet (60.1cm) in depth covered the dog burial. On this grave floor rested, in somewhat of a tangle, the flexed skeletons of an adult and an adolescent. The younger person had apparently been placed in the grave first. Dual burials are not uncommon in North America, but the theological concepts involved remain a puzzle. Whether they were mother and child who died at the same time or were unrelated people who suffered a similar fate is impossible to tell. Clearly more comparative research into burial patterns is required before we can begin to understand the. beliefs which were expressed here.

Similar practices were briefly alluded to by Nathaniel Booth in a general survey of excavations on eastern Long Island written in 1949 (Booth 1982:74-60). "Dog burials." he said, "occur both in village sites and nearby. Usually the skull is missing, but two complete skeletons have been found." (Booth 1982:56). The reference to decapitated dogs suggests another ritual use of dogs which is associated with warfare rather than domesticity. The Wabnaki held a Dog Feast in preparation for warfare. They believed that the flesh of the dog would give the warriors courage (Morrison 1982). The head of one of the dogs was removed and singed in the fire. Then it was taken in the hands of the war chief who sang to it, telling the dog spirit who and where the war party would attack. He passed the skull to each of his fellow warriors. Those who accepted the skull and sang to it signified that they would join the attack. There is, however, evidence that rituals involving the beheading of dogs were observed during the Middle Woodland period in the midwest. Wray and MacNeish (1961) report the burial of two dog skulls in a pit beneath a house floor in a Havana Hopewell site. The significance of this was underscored by the discovery at another Havana site of three crude, headless, four-legged figurines, which may have been intended to represent decapitated dogs. These effigies were associated with the burial of an extremely old dog, which had been placed in a pit under a house floor.

One of the more fascinating graves excavated on Long Island was discovered at Lake Montauk by Roy Latham in 1927. A construction crew broke open a wooden coffin containing skeletal material and Indian trade goods. They called in Latham who was able to salvage most of the artifacts. The presence of copper pots, glass beads, pewter and clay pipestems clearly indicated that the burial was post contact. Latham set the date at about 1670, based on the nature of the European artifacts (Southold Museum display). There were two skeletons in the coffin. One was an adult female about 25 years old and the other was a dog. The important point here is that the practice of dog-human burial was still a part of local Indian religion some three decades after the establishment of European settlements.

CONCLUSIONS

Two major themes in dog ceremonialism appear to be represented in Long Island sites. The association of the dog with home and hearth was first expressed in the Archaic burials and continued into the Late Woodland period. Dogs were purposely buried in village sites near hearths. It is possible that the dogs were sacrificed to protect the household from danger. Such a belief could easily have been inspired by the every day function of the village dogs.

During the Late Woodland period a new theme appears in dog ceremonialism. In addition to the dog and hearth burials, we now find dogs in close association with human graves. The dog may have been viewed as a guide for the departed souls as they made their way into the next world. If this is the case, it raises another question. Why were these particular individuals given a guide when so many others buried on the same site were not? Voegelin's study of mortuary rituals among the historic Shawnee and other eastern tribes provides a clue to this question. Voegelin (1944) noted that variations in burial rituals in more complex cultural systems often reflect rank and status within the community. In smaller scale hunting and gathering bands, variations are more likely related to clan membership,

cause of death, age or sex. The Shawnee for example, had different burial patterns for infants, suicides and murder victims (Voegelin 1944:254). The criteria for the dog sacrifice by the Long Island Indian communities appear to have been based on these considerations rather than on the rank of the individual.

Much more research is needed in the library as well as in the field. The ethnographic data and the published archaeological material often contain important bits of information which are overlooked until new questions are asked. Particular attention should be given to reports written prior to World War II because they have tended to b ignored by the present generation of archaeologists. With the proper eye and a well constructed research model, many important bits of information can be gleaned from the reports. -New discoveries in the field can then be placed within this broader comparative context.

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SUSQUEHANNOCKS, BRULE AND CARANTOUANNAIS: A CONTINUING RESEARCH PROBLEW

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ABSTRACT

Between 1876 and 1878, General John S. Clark of Auburn, New York, developed his hypotheses regarding identification of the Carantouannais as the Susquehannocks, suggested the location of the village of Carantouan, and interpreted Etienne Brule's account of his journey of 1615-1618. His ideas were accepted with little dissent. This paper summarizes archaeological data refuting most of Clark's work, states the need to research old questions anew, and discusses dissemination and use, on a continuing basis, of existing data in applying a "direct archaeological approach" to history.

INTRODUCTION

"Archaeology offers a method of checking and criticizing the older theories of Indian prehistory and a technique for reconstructing the history of ancient peoples during late prehistoric times. This, the "direct historical approach" to archaeology, is beginning to clarify many realms of American prehistory" (Witthoft 1959:20). So wrote John Witthoft in 1959.

One pitfall in using the direct historical approach in reconstructing history, particularly during the early contact period, is a failure on the part of later researchers to continue to question earlier results or to accept contrasting data acquired through the practice of field archaeology. In order for the direct historical approach to have valid meaning, its results must he disseminated to and used by those who are actively engaged in the disciplines of anthropology and history. Both disciplines must be made aware of what the other is doing; must correlate and synthesize results; and must question and test theories. Lines of battle must be drawn. Strong offensive and defensive positions must be established. The mild, equivocating demural so common in our technical writing today, while intended to avoid conflict and confrontation, does little to advance knowledge. Those whose theories are to succeed, to stand the test of time, must be positive and forceful in advancing their theories. They must draw the criticism of colleagues, and their theories must either stand or fall upon their merits.

A case in point, illustrating how researchers have been ponderously slow in acting upon conflicting data, was General John S. Clark's treatment of the events surrounding the 1615 attack by Champlain and his Huron allies upon the Entohonoron. Therein, he identified the Entohonoron as Onondaga; placed their fort at Nichol's pond; identified the Carantouannais as the Andastes (Susquehannocks); located the village of Carantouan at Spanish Hill, identified two additional Susquehannock towns which he associated with the three-hamlet Susquehannock story of Brule; and even suggested the paths of march to Nichol's Pond of both Champlain and the Susquehannocks (cf. Murray 1931).

GENERAL JOHN S. CLARK AND NICHOL'S POND

For the past 106 years Clark, perhaps more than any other person, has had a profound effect upon researchers and scholars of the French/Iroquois relationship.

J. S. Clark of Auburn, New York, farmer, surveyor, civil engineer, philologist and antiquarian, devoted much of the latter half of his life to the study of the Iroquois, their language, and most

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specifically to the location of their villages as recorded by early French, Dutch and English explorers. His self-stated goal was to identify the position of every Indian town in New York (Ibid:xiv;4). In this he collaborated with several of the leading authorities of the day. Acceptance of many of his ideas and theories was swift and nearly total, not by way of proof which he offered but, it would appear, more by the force of his personality. Such certainly was the case in his equation of the Carantouannais as the Susquehannocks and the location of their village of Carantouan at the site of Spanish Hill. When J. S. Clark spoke, people listened! Most of his conclusions regarding Champlain's 1615 campaign were based upon either his comparative studies of linguistics and phonemics or upon his interpretation and interpolation of early maps. Upon what evidence he based his conclusion that Carantouan was located at Spanish Hill is not clear. Certainly, from the standpoint of today's requirement to present evidence in support of conclusions, Clark's hypotheses do not meet the test.

CREATING A LEGEND

By 1877, Clark had advocated the location of the Entohonoron fort attacked by Champlain and the Huron in 1615 at the foot of Nichol's Pond in the Town of Fenner, Madison County, New York. So firm in his advocacy of this location was he that in an address before the Pioneer's Association of Syracuse. Clark made the following pronouncement:

I claim especially to understand the record of Champlain by following his narrative *verbatim* et *literatum*, and accepting his estimates of distances, his map and illustrations, I stand on no uncertain ground. I understand the question thoroughly. I know that I am right. I desire no misunderstanding. I take the affirmative and throw down the gauntlet to all comers, and if am choose to enter the list, I have the most unbounded confidence that it will not be me that will be borne from the field discomfited. I identify the site as certainly as any gentleman can identify his wife at the breakfast table after ten years of married life . . . [Marshall 1887:44-45].

In 1955, at the urging of William A. Ritchie, Peter P. Pratt took up the gauntlet as the basis for his Ph.D. dissertation on the Oneida (Pratt 1977:51). As a result of Pratt's work, Clark's Nichol's Pond pronouncement was archaeologically disproved (Ibid:51-62).

The year following his Nichol's Pond discourse (1878) Clark turned his attention to the location of Carantouan and to the Andaste (Susquehannocks) of Pennsylvania. Following publication of the address on Nichol's Pond, the Reverend David Craft of Wyalusing, Pennsylvania, wrote to Clark offering his assistance in the planned study of the Andaste (Murray 1931:3). Craft had been independently working to establish the location within Bradford County of ancient Indian towns mentioned by various early writers (ibid), and had just completed writing a history of the county (Craft 1878). The collaboration of Clark and Craft was to have considerable impact upon future researchers as the location of Carantouan at Spanish Hill and the Carantouannais/Susquehannock equation came into general use (cf. Butterfield 1898; Beauchamp 1905; Grant 1907; Murray 1908; Biggar 1929; Jurgens 1966; Stewart 1970. Jennings 1978; and others).

In this same year (1878) Clark and Craft visited the location of Spanish Hill, which is situated on the east bank of the Chemung River near South Waverly, Athens Township, Bradford County, Pennsylvania. This archaeological site, which lies within sight of the New York State border, has been designated 36BR27 by the Pennsylvania Historical and Museum Commission. While there, they interviewed several local collectors and themselves collected artifacts from the site. Clark surveyed the hill, maps of which are contained in Murray's volume (1931:19; 23; 33).

Thus far we have touched upon events which led to Clark's interpretations of the works of Champlain, Sagard and Brebeuf. Clark never published the results of his work. Until his death in 1912 he continued to work on his mps, notes and manuscripts, making changes and adding marginal annotations (lbid: xv), apparently, we must assume, not satisfied that the manuscripts were complete. Following his visit to Spanish Hill, a local newspaper, the Waverly Advocate, published the result of interviews with Clark and of a written report which he prepared for them (lbid:18-33).

In 1908 Louise Welles Murray, of Athens, Pennsylvania (editor of *Selected Manuscripts of General John S. Clark Relating to the Aboriginal History of the Susquehanna*, 1931) published an excellent history of Tioga Point (see Murray 1908). This work is one of the best researched, most comprehensive and well written local histories of its kind. In this volume Mrs. Murray devoted some 190 pages

summarizing local and regional Indian archaeology and history. Much of an entire chapter was given to the story of Champlain, Brule and the Andaste. Being acquainted with, and having discussed the development of Clark's ideas with both he and the Reverend Craft, she fully accepted and amplified their hypotheses. Although she considered, even mentioned conflicting ideas, she wholeheartedly supported Clark. Again, in 1921, she authored a paper on sites located in the Athens area which was published in the *American Anthropologist* (Murray 1921). This two-part series contained a defense of her support of Clark's hypotheses (Ibid: 288-290). More will be said of this monograph later in this paper.

THE ARCHAEOLOGY OF SPANISH HILL

By 1918 Clark's ideas had come under serious attack, however, until then very little serious archaeology had been done on or near Spanish Hill. lit 1916, Warren K. Moorehead mounted the Susquehanna River Expedition under the auspices of the Museum of the American Indian, Heye Foundation. One of the primary purposes of this expedition was to locate and excavate Andaste villages and cemeteries. Arriving at Tioga Point, Moorehead was called back to Andover, leaving Alanson Skinner in charge of the party. Assisting Skinner at this location was George P. Donehoo, Secretary of the Pennsylvania Historical Commission. In 1918 Donehoo issued a report to the Commission on the archaeological investigation of Spanish Hill:

Spanish Hill has always been considered as being the site of this village of Carantouan. The hill itself is a natural fortification, overlooking, the Chemung Valley . . . It is an ideal site for a stockade fort. But it could not have been the site of the permanent village of Carantouan . . . An investigation of Spanish Hill gave no evidence whatever of it having been a permanent village site . . . many test holes and trenches were dug, not only on the hill, but also the sides of it. The soil at no place gave evidence of any long occupation, or even of a short occupation by a large number of people . . . If Spanish Hill was the site of the stockade containing 800 men, some evidence of that occupation should be found . . . We found a few scattered fragments of pottery on the surface. Nothing whatever in any of the test holes which we dug . . . Brule does not say that it was upon a hilltop. The hilltop contains several acres of land. It is difficult to ascend on all sides. There is no water obtainable on the hill. It could be used as a place of defense for a short time, but not as a permanent village site. . . All of the members of the expedition were disappointed in the very poor results in the investigation of this farmers hill . . . The author of this brief sketch wishes to emphasize the fact that the statements made concerning Spanish Hill are his own. General John S. Clark, so far as the author is aware, was the first writer to advance the theory that Spanish Hill was the site of the Carantouan of Brule and Champlain. This location has been accepted by nearly all of the local history writers, upon what seems to the author to be very unscientific grounds. Even the map of Champlain does not place a village on Spanish Hill, nor does it give the name "Carantouan" . . . Mrs. Louise Welles Murray, who has done so much historical work in the vicinity of Athens, does not agree with the author as to the situation of the permanent village site of Carantouan. She, and many others, insist upon the Spanish Hill location. Mrs. Murray- is conducting investigations on Spanish Hill, with a view of finding the village site. The author hopes that her work may be successful in every way, and that she may discover scientific evidence of a permanent, pre-historic Iroquois village site at this place. The author has no desire to cast aside traditions which are supported by scientific investigation. But, when scientific investigation is opposed in its results to the local traditions, the author accepts the former rather than the latter [Donehoo 1918:131-134].

So strong a disclaimer, by a man of such notable reputation as Donehoo, should have caused serious doubt in the minds of most researchers. Taking a much weaker stand, Moorehead said in the same publication that excavations at Spanish Hill were a great disappointment to him:

Over 400 test pits were sunk on the hill itself and on the neighboring flats, but no indication of a large site could be discovered [Moorhead 1918:121].

As previously stated, Murray published an article in 1921 which included a defense of Clark's theory. In that report she failed to mention anything which Moorehead and Donehoo had to say of their archaeological investigation of Spanish Hill.

Louise Welles Murray died in 1931, the same year that her collection of Clark's papers was published. In editing these papers, she never mentioned Donehoo, Moorehead, Skinner or the Susquehanna River Expedition of 1916. Nor did she mention them in her selected bibliography which she, perhaps craftily defined as "References and Sources Cited by Clark in "Carantouan" and "Andaste" (Murray 1931:133)," there by avoiding any outside references.

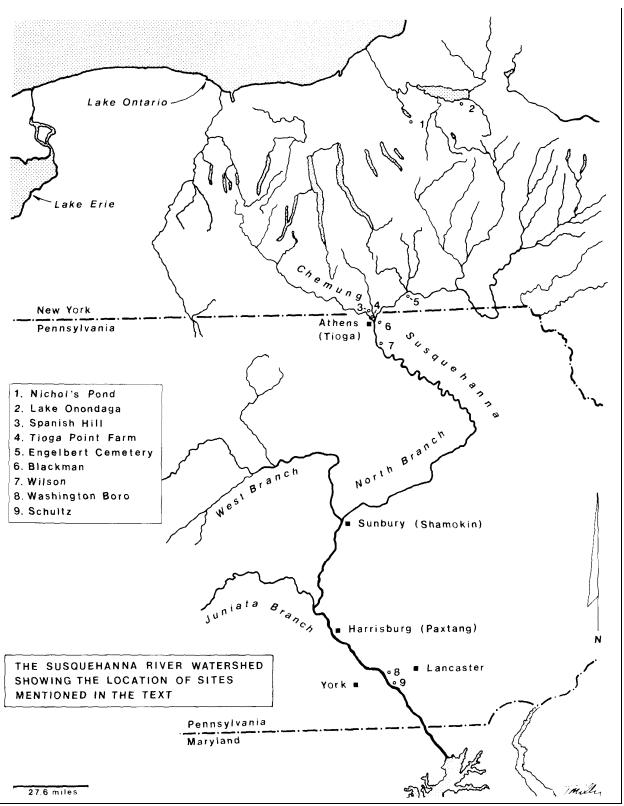


Figure 2. The Susquehanna River Watershed.

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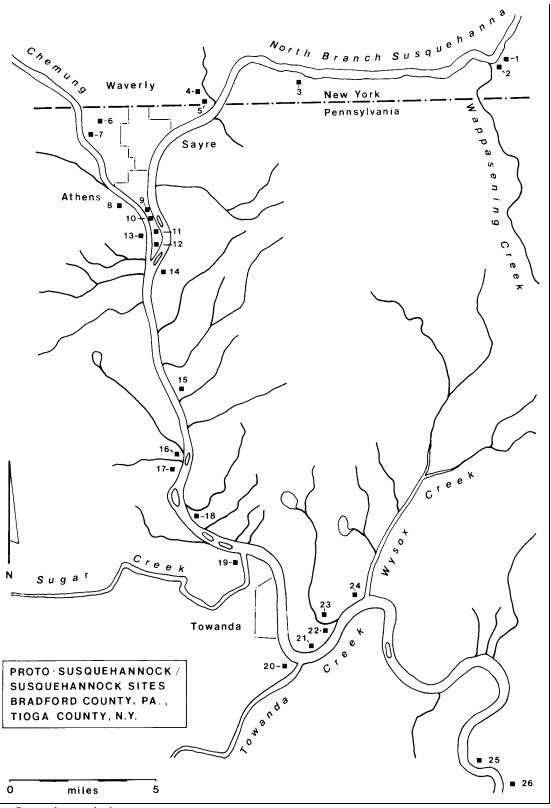


Figure 2. Proto-Susquehannock sites.

New York State sites, not numbered.

1.	Engelbert Cemetery.	SB, SI
2.	Engelbert Flats.	FS, KM
3.	Litchfield Station.	PS, RM, SI
4.	Ellis Creek.	SB, SI
5.	Winkelman.	PS, RM?

Pennsylva

lvania s	ites, with state-assigned numbers.	
6.	Spanish Hill (36BR27).	-
7.	Clapp-Liddard (36BR28).	=
8.	Heath (36BR144).	SB, SI
9.	Ahbe-Brennan (36BR42).	SB, SI
10.	Tioga Point Museum (36BR1).	SB, SI
11.	Murray Garden (36BR2).	SB, SI
12.	Tioga Point Farm (36BR3).	SB, SI, PS, RM
13.	Murray Farm (36BR5).	SB, SI
14.	Kennedy (36BR43).	SB, SI, PS, RM
15.	Nagle Farm (36BR15).	PS, RM, SI
16.	Ulster Creamery (36BR9).	PS, RM, SI
17.	Rockwell 1 (36BR 10).	SB, PS, RM
18.	Blackman (36BR83).	SB, SI, PS, RM
19.	Oscalui (Ogehage?) (36BR41).	PS, RM
20.	Sick (36BR50).	SI, RM, PS
21.	Wilson (36BR58).	PS, RM, SI
22.	Strickland (36BR76).	PS, RM. SI
23.	Cass (36BR57).	PS, RM, SI
24.	Wysox Flats (36BR56).	PS S1
25.	Ho mets Ferry (36BR70?).	PS, SI
26.	Wyalusing (Gonontoto?) (36BR68).	PS, SI

SB = Susquehannock burial(s).

SI = Schultz Incised pottery, in burials or found on surface.

PS = Proto-Susquehannock pottery, in burials? or found on surface.

KM = Richmond Mills Incised pottery, found on surface.

Figure 2.

Prior to her death she had arranged through a grant from the National Research Council to employ James B. Griffin to conduct excavations at sever-al sites in Bradford County, one of which was Spanish Hill (Kent 1984:301). Jessee Welles Murray succeeded her mother, Louise, as director of the Tioga Point Museum, and in this capacity she received and monitored the grant.

In his report of the 1931 excavations, Griffin wrote (1931:31-36) that eight trenches. 20 inches to 32 inches [50.8 to 81.3cm] wide, by 10 feet to 16 feet [3.05 to 4.9m] in length were dug to depths of from 36 inches to 45 inches [91.4 to 114.3cm] below surface, across the purported embankments surrounding the perimeter of the hill. In addition, "numerous test pits" were dug.

Within Trench 3, one grit tempered pottery rim sherd, exhibiting 45-degree incising, was found, and in Trench 1, a thin layer of charcoal upon fire-colored earth, which lie assessed as antedating the formation of the embankment by some considerable period of time, were noted. No additional artifactual material or features were located in any of the eight trenches, and contents of the test hits were not mentioned, thereby giving the impression that content was negligible. He noted that no post molds or evidence of interior/exterior trenching were present, and that the stratigraphy of the embankment indicated that it was created during more than one episode.

In conversation with Dr. Griffin, he stated to the author that the purported "embankment" reported by Murray and others (L. Murray 1908:58-59; E. Murray 1921:289-290) appeared to have been created through post-contact period cultivation. most probably during or shortly following the initial colonial period of occupation. He further said that it is his firm belief that the embankment was purposely created by farmers in order to forestall erosion of the tipper perimeter and sides of the hill (Griffin 1981).

Griffin's report on Spanish Hill has not been published, however, Barry Kent summarizes his work as follows: By this time considerable interest had been aroused concerning the archaeology of Bradford County. particularly in the area of Andaste (or Susquehannock) studies, and the identification of the occupants of Spanish Hill (36BR27)... Griffins work confirmed the presence of a few Indian artifacts on top of Spanish Hill, but had his report been published, it would have put to rest any further concerns about its being the site of Carantouan, or its having Indian earthworks around its top margins. (Kent 1984:33-34).

Jessie Welles Murray died in 1935 and was succeeded by her sister, Dr. Elsie Murray. In 1936, Elsie Murray reported on flood damage caused to the area surrounding Spanish Hill (E. Murray 1936:13-18). In this she wrote of a stockaded village on the flats beneath the hill which Ellsworth Cowles, a local historian and amateur archaeologist appointed by the Tioga Point Museum to investigate Spanish Hill, identified as Andaste. Retest of this site (36BR28) by the Pennsylvania Historical Commission in 1964 and their reanalysis of Cowles' material, proved it to be Owasco (Kent 1984:301) of c. A.D. 1300. Murray stated, "The rectangular palisade fell in line with Champlain's map of Carantouan, with which Gen. J. S. Clark in 1878 had identified the Hill (E. Murray 1936:14)." She went on to relate the Brule story and footnoted the article with the following: "Clark's conclusions were accepted by such authorities as J. S. Shea, Lewis Morgan and Justin Windsor (Ibid:17)." She did not mention the work of Moorehead's Expedition and of Griffin; she tenaciously clung to the belief that Spanish Hill was the location of Carantouan.

In spite of the accumulating archaeological evidence to the contrary, Elsie Murray continued to advance Clark's ideas through addresses and published papers (cf. E. Murray 1936; 1939; 1946a; 1946b; 1948a; 1948b). It is most unfortunate that she did not qualify her conclusions by presenting results of Griffin's work of 1931 and Donehoo's observations of 1918. Furthermore, the report of Moorhead's Expedition was published in 1938 (Moorehead 1938). It contained Donehoo's report of 1918 to the Pennsylvania Historical Commission (Ibid: 69). Moorehead stated in prefacing the quote that Donehoo's opinion was in accord with his own (Ibid).

In 1959 William A. Hunter, in "Historic Role of the Susquehannocks," questioned the use of Brule's story thusly:

In connection with these more localized stories, we should insert a word of caution regarding the story of Etienne Brule and his supposed exploration of the Susquehanna in 1615-1618... but not until three years later did Champlain again encounter Brule, from whom he of course demanded an explanation, not only for the failure of his mission but also for neglecting to make any subsequent report. It should be obvious that any story told by Brule under such circumstances should be taken with several grains of salt, especially since there was' no way of checking its accuracy. It may not be entirely irrelevant to note

that Brule was later a turncoat and that Champlain dropped his story from later editions of his works. [Hunter 1959:10-11].

Within the same volume (Witthoft and Kinsey 1959) John Witthoft fails to mention Brule, the Carantouannais or Spanish Hill in relation to the Susquehannocks. Clearly, he did not accept as much as the concept that there was any relevance here.

In 1979, Marilyn Crannell Stewart addressed Witthoft's southern migration theory for Susquehannock sites and its reliance upon the Seneca dating sequence established by Wray and Schoff (cf. 1953) as follows:

Most archaeologists have accepted the migration hypothesis on the basis of the arguments outlined above, but there is contradictory evidence in Bruhle's [sic] account of Carantouan, a large Susquehannock Village thought to be near Athens . . . in 1615. A Dutch map dated 1614 also places the Susquehannocks on the North Branch at this time. Both documents are in serious question, however. The problem can only, be solved by a better knowledge of Bradford County archaeology. [Stewart 1973:3].

Finally, Barry C. Kent's definitive treatise on the Susquehannocks, published this year, contains several disclaimers regarding Etienne Brule and the Carantouan/Spanish Hill association, among which is the following:

Historians have long puzzled over the people and location of the place which Etienne Brule described to Champlain as Carantouan . . . In the meantime Brule traveled in the area of Carantouan, including a trip down what is supposed to have been the Susquehanna River (Murray 1931:26) as far as the sea. Clark (Murray 1931) more than anyone else fretted over the location of Carantouan. Eventually, and with dogmatic assertion, he stated that it was "located beyond any possible question on the hill near Waverly, on the east bank of the Chemung, just south of the State line" (Murray 1931:22). Subsequent archaeological surveys at Spanish Hill (Moorehead 1918:121; 1938:68-69); Donehoo 1918:130-134; Griffin 1931a) and elsewhere in the Upper Susquehanna Valley (Witthoft 1959a; Lucy 1959; Stewart 1973) have failed to locate any evidence of seventeenth-century Susquehannock towns. Susquehannock materials which have been found in the region all relate to the Proto-Susquehannock and early Schultz periods of the sixteenth century. Here again, negative evidence from archaeology leaves us in doubt as to the significance of the interpretations of the Brule accounts, and for that matter any reference to seventeenth-century Susquehannock towns north of Lancaster County. [Kent 1984:33-34.]

The compilation of evidence thus far presented should put to rest the conclusion that Spanish Hill, or the flats beneath, could have been the site of Brule's Carantouan.

THE SUSQUEHANNOCK SEQUENCE AND THE CARANTOUANNAIS

In 1953 Wray and Schoff established a sequence of Seneca site locations based on the study of trade goods found in their cemeteries and villages (Wray and Schoff 1953). Using a similar technique, Witthoft began applying this direct historical approach to his study of the Susquehannocks, results of which were published in 1959 (Witthoft and Kinsey 1959). In his book he established a basic sequence for the evolution of the Susquehannocks as a tribal, unit and seriated their pottery sequence. One of his findings was that the Susquehannocks left Bradford County by 1575 and that, because of the absence of trade goods dating from c. 1550 to 1750 from this region, the area must have been depopulated for nearly 200 years. Subsequent archaeology in Bradford County, most notably in 1967-68 at the Engelbert Site (Elliott and Lipe 1970; Crannell 1970; Stewart 1973; Dunbar and Ruhl 1974), has failed to produce any evidence which would negate the dates previously established and, in fact, confirms Witthoft's earlier findings. (All references within this paper to Bradford County, Pa., as relates to the Susquehannock occupation, are intended to include the contiguous Southern Tier area of New York State.) Most recently, and in light of more immediate findings, Barry Kent has refined Witthoft's earlier sequence (Kent 1984:18). In his treatment of the Early Schultz Phase (i.e., the Bradford County Phase), Kent would establish 1550 as a terminal date for Susquehannock occupation within Bradford County and 1575 as a date for the establishment of the Susquehannocks in the large stockaded village at the Schultz Site, Lancaster County, Pennsylvania (Ibid:18-19).

Kent states that during their occupation of Bradford County the Susquehannocks were living in small, scattered hamlets (Ibid:17;297;306) and he points out that no large, stockaded Early Schultz Phase villages have been found in Bradford County or the Southern Tier of New York. The lack of Susquehannock stockades in Bradford County would be prima-facie evidence that Brule's Carantouan-

nais could not have been living in Bradford County. Kent also states (Ibid:115) that the Susquehannocks derived from a poorly known earlier Proto-Susquehannock Phase. Subsequent to Kents writing of his book, Lucy and McCracken have analyzed and prepared a report, soon to be published in the *Pennsylvania Archaeologist*, on the first identified Proto-Susquehannock village. One of the most notable discoveries at this, the Blackman Site (36BR83), was the post mold pattern of a stockade. Sherd counts at this site (7:1 ratio) support the identification of the stockade as Proto-Susquehannock (Lucy and McCracken n.d.; see Kent 1984:304-305 for a counter analysis). In their report the authors suggest that large, stockaded Early Schultz Phase Susquehannock villages have not been found in Bradford County because they are not recognized as such. Early Schultz Phase pottery is known almost exclusively from excavation of graves. With one exception, the Wilson Site (McCann 1962), living floors containing Early Schultz Incised pottery have not been found. Lucy and McCracken propose that the Bradford County Susquehannocks were using Richmond Mills Incised/Proto-Susquehannock Incised vessels in an everyday village life context and that the more fragile shell-tempered Schultz Incised pottery was used in a mortuary practice, reflecting a western Monongahela/Fort Ancient influence (cf. Crannell 1970; Stewart 1973). The association of Richmond Mills Incised pottery with Schultz Incised is demonstrated in the finding, in-situ of a Richmond Mills Incised pot nested within an Early Schultz Incised vessel in a Susquehannock burial on the Tioga Point Farm Site (36BR3) by Leroy Vanderpoel. Further, the authors point to a lack of Proto-Susquehannock Incised pottery in graves and of the immediate proximity of living floors containing Richmond Mills Incised/Proto-Susquehannock Incised ware to known Early Schultz Incised-furnished graves and cemeteries. That the Proto-Susquehannock Phase people lived within stockaded villages can now be demonstrated.

Equation of Proto-Susquehannock with Early Schultz as a single phase characterized by the discrete use of two distinct pottery types is an hypothesis which, while intriguing in concept, still needs additional study. Possibly relevant to this argument are Kent's observations that there are few instances of Proto-Susquehannock Incised and Schultz Incised intrasite associations (Kent 1984:297); that in later phases of the Susquehannock sequence most Strickler Cord-marked pottery was used as grave furniture (Ibid:139); and that there is a continuing Monongahela ceramic presence throughout this sequence (Ibid:142). The presence of stockaded Susquehannock villages during the Proto-Susquehannock Phase is indicated and their presence during the Early Schultz Phase (if the two phases were discrete) seems likely. Using a suggested absence of stockaded Susquehannock villages in an analysis of Brule's story is no longer valid. Once again, more archaeology needs to be done in Bradford County.

THE IMPORTANCE OF TRADE GOODS

The absence of trade goods from Early Schultz Phase sites in Bradford County is most significant in our analysis of the equation of the Carantouannais as the Susquehannocks. One of the artifacts most sensitive to dating is the European glass trade bead. This dating sequence has been worked out by American archaeologists who have found them in otherwise dateable contexts (Ibid:211). One reason why they are so valuable to the archaeological record is that they are the most numerous trade good found on contact period sites today (Ibid). Within Bradford County, Early Schultz Phase Susquehannock graves seldom yield more than one or two scrap brass or copper beads and many burials containing Early Schultz Incised pottery do not contain any beads at all. Glass beads are not found in these northern Susquehannock graves (see Kent 1984:297, who mentions an occasional glass bead in Susquehannock graves. The author is not aware of any specific occurrence of a glass bead in a Susquehannock grave from within Bradford County). At the next stage in the Susquehannock development, the Schultz Site in Lancaster County, brass beads average one per burial and glass beads begin to appear, clearly indicating increased trade and at a later date. Witthoft and Kent have refined the dating of these beads to establish chronometric sequences. Based on their findings they have stated that The Susquehannocks had departed Bradford County by 1575 at the latest. The evidence is clear. The Susquehannocks were living at the Washington Boro Site, in Lancaster Comity, when Brule made his journey to the Carantouannais in 1615. As Champlain states that Carantouan, was a short three-days journey from the Onondaga Fort, it is out of the question to continue to equate the Carantouannais with the Susquehannocks. While the journey between Spanish Hill and either Nichol's Pond or Lake

Onondaga may have been a short three-days journey in 1615, it could not have been made in less than six days from Washington Boro. This elimination of the Susquehannocks from the picture raises new questions:

- Who were the Carantouannais?
- Where was Carantouan located?
- Was it on the Susquehanna?

This last question is certainly open to debate, and for the most part, the answers to the first two questions rest upon finding the answer to the latter. Placement of Carantouan on the Susquehanna was done by Clark subsequent to his Carantouannais/Susquehannock equation. Champlain's map of 1632 locates the Carantouannais on the Delaware River. This was said by Clark to be an error, a determination he made based on the statement of Brule that he traveled south to Florida where the snow never stuck to the ground for more than a day. Annual mean temperatures upon the Chesapeake Bay are sometimes high enough to support this statement. As close as 50 miles east, the estuary of the Delaware River, with its many islands, could well have experienced a singularly mild winter in 1615-16. To summarily dismiss the Delaware River as the correct watercourse on which to place the Carantouannais is to second-guess the chronicler. If one were to move the location of the Carantouannais westward, it would not be completely improper to suggest the Allegheny River with its route to the Ohio-Mississippi drainage system.

The dotted line on Champlain's 1632 map is also asserted to be the route taken by Brule to reach the Carantouannais, however, mention is seldom made of the fork this line depicts at its eastern terminus. If one were to assume this to be Brule's route, with its dog-leg right hand turn near the terminus, what of the dog-leg left? May or must we assume this to be the route taken by Champlain and the Huron in their approach to the Onondaga Fort? Might we not assume that this line depicts a major path of communication over which natives traveled over long periods of time; a prominent highway so to speak?

CONCLUSIONS

The purpose of this paper has been to present current evidence which dispels forever the notion that Spanish Hill is the site of Brule's Carantouan and to propose several questions which remain unsettled:

- Who were the Entohonorons?
- Who were the Carantouannais?
- Did Brule travel the Susquehanna?
- Why did Champlain drop all reference to Brule's 1615-1618 trip in subsequent editions of his narratives?
- Could it be because Brule deserted him or because it was later known to be false?
- What distances are represented by a short three-days journey and a good three-days journey?

Today, 66 years after Donehoo's analysis and publication of the results of the first intensive archaeological excavations of Spanish Hill, the controversy still rages at the local level. Several attempts have been made in the past to enshrine Spanish Hill and there is currently, once again, an attempt being made to do so. The Daughters of the American Revolution have established a Carantouan Chapter and the area Boy Scout camp is called Camp Brule. Failure of the scientific Community to correct the record has aided in the perpetuation of a legend having no basis in fact, which has been archaeologically disproved, yet is accepted as fact by an unsuspecting public.

The author recently published two articles controverting the Brule legend in local historical society journals (McCracken 1984a; 1984b). A local newspaper subsequently ran a feature story which called the papers controversial. Due to the ingrained nature of the legend, reasonable people are still very reluctant to accept the facts. Within the local community it is unlikely that the Brule legend will ever be put to rest, and Spanish Hill may someday become a shrine, as some are currently working to achieve.

This would be extremely unfortunate, for of equal interest to some is the origin of the name "Spanish Hill," said by early colonizers to have been called "Espana" or "Hispan" by ancestors of contact-period Indians (Murray 1908:62-63). Enhancing the image which this creates is the reported

finding of fifteenth- and sixteenth-century artifacts attributed to Spanish origin, at or in the vicinity of Spanish Hill and near Owego, New York (Ibid). Also of interest is research being done by James F. Pendergast of the National Museum of Canada on the mid- to late-sixteenth century presence of the Spanish in the Chesapeake Bay (Pendergast 1983a;1983b). There is also the possibility of Spanish derivation of names or locations on the Block-Hendrickson maps of 1614 and 1616. . . This has the possibility of the beginnings of a replacement legend!

APOLOGIA

It is easy for one to sit back and review the works of others, particularly when one has the advantage of over 100 years of additional research and knowledge available. The author recognizes that this paper has been very critical of past researchers who have devoted much of their time and means to furthering knowledge. For this we apologize, and state that the paper has been prepared with both intent and purpose.

The intent has been to draw scholarly attention to a specific research problem and the manner in which it has been tacitly mishandled in the literature for over 100 years. The purpose has been to illustrate shortcomings in applying the direct historical approach to archaeological problems.

It is not enough to consult an authority of 25 to 50 years ago. New data is being recovered at such a rapid rate that this morning's accepted ideas may be rendered obsolete by noon. Two principals are involved: one is to write and publish timely reports so that the data is available to researchers in useable form; the other is to do our homework, ask pointed questions, and if the answers fail to satisfy, take decisive action.

For the researcher who fails to question his work or the work of others, or who fails to keep abreast of the current state of information, the example herein given may one day be his reward. If conclusions are erroneous, they cannot constitute facts, and it is then up to us to set the record straight. And unless we do, we will enshrine many false legends. Historians need to become more aware of the archaeology being done today and they need to apply the results in a "direct archaeological approach" to history.

ACKNOWLEDGEMENT

The author would like to acknowledge the assistance received from Dr. Barry C. Kent, State Archaeologist, Pennsylvania Historical and Museum Commission. Dr. Kent graciously allowed the use of several manuscript chapters of his book, Susquehanna's Indians, in the preparation of earlier papers on this subject. Also, from Dr. James F. Pendergast, Research Associate, National Museum of Canada, who permitted use of unpublished data, edited earlier papers, provided copies of obscure documents, and gave much-needed advice and guidance in the right direction. My deepest thanks to these scholars.

In spite of the assistance and guidance given, the author is fully responsible for the entire content of this paper.

To assist future researchers, the following sources of documents are provided: The collection of the papers of John S. Clark are in the possession of the Cayuga County Historical Society, Auburn, New York. The collection of the papers of David Craft are housed in the Tioga Point Museum, Athens Pennsylvania, as are papers of both Louise and Dr. Elsie Murray.

ADDENDUM

Subsequent to the preparation of this paper the author was shown an article published by Donald H. Kent (1976) which provides background data compiled from an historical perspective. This extremely well researched paper methodically and logically criticizes former research on the Brule

question. Dr. Kent's conclusions are, hopefully, complemented by the archaeological approach to which the present paper aspires.

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Map enhancements by T. Miller

MINUTES OF THE 69TH ANNUAL MEETING NEW YORK STATE ARCHAEOLOGICAL ASSOCIATION FOR 1985 HOLIDAY INN, ONEONTA NY 13820 APRIL 19, 20, 21, 1985

EXECUTIVE COMMITTEE MEETING

The meeting of the Executive Committee of the New York State Archaeological Association was held on Friday, April 19, 1985 at the Holiday Inn of Oneonta, New York. President Gordon C. De Angelo called the meeting to order at 7:55 P.M. After a brief opening address, the secretary was directed to call the roll. The following voting members, including state officers, chapter presidents and secretaries or their alternates were present:

President: Gordon C. De Angelo Vice-President: Charles E. Gillette Secretary: John H. McCashion Treasurer: Carolyn O. Weatherwax Editor: Charles F. Hayes III

ESAF Representative: Roberta Wingerson

Auringer-Seelye Chapter:

President: Carolyn Weatherwax (Alternate)

Secretary: Louise Basa (Alternate)

William Beauchamp Chapter:

President: Gordon C. De Angelo (Alternate)

Secretary: Dr. Peter P. Pratt (Alternate)

Chenango Chapter:

President: Gary Elliott Secretary: Earla Burton Frederick M. Houghton Chapter:

President: Lee Hunt (Alternate) Secretary: June Samcoe

Incorporated Long Island Chapter:

President: David Elliston (Alternate)

Secretary:

Incorporated Orange County Chapter:

President: Dr. Herbert C. Kraft (Alternate)

Secretary: William F. Ehlers

Lewis Henry Morgan Chapter:

President: Father John R. Lee

Secretary: Robert Gorall

Metropolitan Chapter:

President: Secretary:

Mid-Hudson Chapter:

President: Gladys Gilbert (Alternate) Secretary: Al Wanzer (Alternate) Louis A. Brennan Lower Hudson Chapter:

President: Allen Vegotsky

Secretary: Geary Zern (Alternate)

Triple-Cities Chapter:

President: Richard Jackson Secretary: Dolores Elliott

Upper Susquehanna Chapter Incorporated:

President: Helen Gutierrez Secretary: Ruth Wakeman

Van Epps-Hartley Chapter:
President: Harold Zoch

Secretary: Dr. Kingston Larner

Committee Chairpersons

1. Awards and Fellowships: Dr. Peter P. Pratt

2. Chapters and Memberships John H. McCashion (Alternate)

3. Constitution: Charles E. Gillette

4. Finance: Carolyn O. Weatherwax (Alternate)

5. Legislative: Paul Huey6. Library: Geary Zern

7. Local Program: Gordon C. De Angelo

8. Nominating: Richard Bennett
9. NYSAA/NYAC Liaison: Dolores Elliott
10. Public Archaeology: Dolores Elliott

11. Publications: Father John R. Lee12. NYSAA Editor: Charles F. Hayes III

Roll call having been taken and the required quorum (11) being present, the next order of business called for the reading of the previous executive committee minutes from the 1984 NYSAA annual meeting at Middletown, New York. Since these had been previously printed and mailed to the executive committee between September 14 and 19, 1984, Dolores Elliott made the motion to suspend the reading of the minutes and accept them as printed. Richard Jackson seconded the motion which went to the floor and was accepted unanimously. The executive committee then proceeded to the next order of business.

Report of the Officers

President: At 8:02 P.M., President De Angelo began his report by sadly stating the discontinuance of the

Backfill Newsletter. After three issues it simply did not fulfill its purpose. He reported on the survey results from the first issue sent out in April, 1984, to the thirteen chapters. Ten replies were received

between May, 1984, and January, 1985. The conclusions were as follows:

Number of members at meeting: 157/total; range 7-38; average 17 1/2

Regular meetings: 90% yes; 10% no Do you skip any months: 90% yes; 10% no

Regular meeting place: 70% yes; 30% most of the time. Do you own a building: 1 has use of part of church

1 leases building

Do you operate a museum: 1 out of 9; 1 partly in summer

Do you publish a newsletter: regularly 44%

sometimes 12% no: 44%

If so, does it contain articles: 40% yes; 20% no; sometimes 40%

Do you publish a bulletin or journal: Regularly 11% (1)

No: 78% Sometimes 11% (1)

Do you do fieldwork as a group: Regularly: 33%

Sometimes: 45% Never: 22%

Numbers of members voting on these items of concern to the Chapters: Total 144. (Not in order of question but in order of percentage) as follows:

9.	Important collections that may be lost from the local area:	63%
8.	Uncatalogued Collections:	59%
7.	Getting programs for the meetings:	57%
6.	Getting new members:	56%
5.	No contact with Association between meetings:	38%
4.	Raising money for chapter projects etc:	34%
3.	Contents of NYSAA Bulletin/Journal:	22%
2.	Professional/amateur relations:	22%
1.	Other unspecified concerns:	15%

Other concerns:

Liability insurance, contact with schools, increasing information on local area; how to get more active members, interaction/balance between younger students and older non-students, public access to sites, vandalism; lack of public ity/public relations with regard to who we are and what we do; too many members not documenting collections.

The situation concerning the Long Island Chapter was brought up but the secretary asked that all matters concerning this issue be deferred to New Business. The President's report concluded by thanking the Host Chapter.

Vice-President: Charles E. Gillette reported that there was no need to assume the responsibility of President. Report

accepted as given.

Secretary: John H. McCashion read the Secretary's report:

Like its predecessor, this NYSAA fiscal year (April, 1984-April, 1985) closed without much adieu.

Almost all correspondence received was answered immediately though one or two letters may have been inadvertently overlooked. 150 pieces were mailed and only 86 were received, down considerably from last year.

The first large secretarial mailing began on September 14, 1984 ending on September 19, 1984. Dispensed were the executive committee minutes from the very successful Middletown meeting. Included were four copies of the Informational Handbook and the usual cover letter.

The second large mailing began on January 22, 1985 and was completed on January 24, 1985. Within were the 1985 blue membership cards and the usual instructional letter.

The final large secretarial mailing came upon arrival of the 1985 Annual Meeting notices from the Upper Susquehanna Chapter which were immediately dispatched beginning February 13, 1985 and completed by February 15, 1985. As in the past random phone calls were made to the chapter secretaries to insure arrival.

Last year, sorry to report, there seems to have been a drop in overall memberships. The final totals for 1984 show 704 memberships and 921 total members. This figure was transmitted to Treasurer Weatherwax. Membership trend analysis computer print-outs such as those included in last years packages have been delayed and will be distributed as soon as the Long Island problem is solved.

Again, it is a pleasure to announce that we are fiscally healthy and there are no plans to raise the dues.

Contained in the chapter packets are the proposed agenda, NYSAA Officers reports, the Chapter Annual Reports, four copies of the 1985-1986 green covered Informational Handbooks and Special Postal Bulletin PB 21493 explaining the new rate changes courtesy of the U.S. Postal Service.

Expenses for this office are as follows:

1000 1985 blue membership cards	\$40.00
1000 1986 white membership cards	\$40.00
125 covers and backs for Informational Handbook	\$30.00
50 packages mailed	\$80.00
100 letters mailed	\$22.00
Total:	\$212.00
Received from treasurer	\$250.00
Reserve in postage	\$38.00

The motion was made to accept the Secretary's report. Dick Bennett made the motion which was seconded by Richard Jackson.

Treasurer: Carolyn Weatherwax read the treasurer's report which again indicated that the Association was in good financial health. This report in its entirety was to be attached to the executive committee minutes. Charles Hayes submitted the bill for \$4182.84 for the last Bulletin/Journal and the appropriate adjustment would be made. President De Angelo suggested that a motion be made to accept the report as printed. Herb Kraft made the motion and Al Vegotsky did the honors as second and the floor passed it unanimously.

Committee Reports

Awards and Fellowships: Dr. Peter P. Pratt reported that the awards and fellowship committee had met and the presentations would be deferred until the banquet. Accepted; deferred.

Chapters and Memberships: In lieu of

Gloria Miller, John H. McCashion reported that the membership had slightly decreased from the previous year. The final totals show 704 memberships with a total of 921 members. FY 1983 totaled 742 memberships or 997 total members. Therefore, we experienced a loss of 38 memberships and 76 total members. The award for the chapter with

the greatest percentage of increase was deferred indefinitely due to the absence of Gloria Miller. Report accepted as given.

Constitution: Charles E. Gillette reported that he had received copies of the chapter constitutions from Louis A. Brennan Lower Hudson Chapter and Incorporated Orange County Chapter and found them to conform with the State Constitution. He then made the motion that they be accepted. Richard Jackson seconded the motion which went to the floor and was unanimously approved.

NYSAA Editor. Charles F. Hayes III reported that the Bulletin/Journal situation was up to date with numbers 86, 87, 88 and 89 published and distributed. Number 90 was expected to be published in May and number 91 sometime in the fall. He sated that there were now enough papers to keep the Bulletin/Journal going. One of the problems encountered was the unacceptability of the graphics which must be submitted camera-ready. Once again, he asked the secretary to have the executive committee minutes ready by June. The secretary suggested that the back cover logo "Fellows of the Society" be changed to read "Fellows of the Association." Other monetary considerations were to be brought up under new business. Report accepted.

April 8, 1985 NEW YORK STATE ARCHAEOLOGICAL ASSOCIATION REPORT OF THE TREASURER

Adirondack Trust Co. 4/04/84 MMDA #7922385 NOW Acc't. #2945406	\$11,255.52 2,028.31	4/08/85 Int. 4/1/84–3/29/85 \$1,093.58 Int. 3/3/84–3/29/85 109.75	\$12,349.10 4,182.84
		TOTAL ASSETS	\$16,531.94
CASH RECEIPTS '84-'85		DISBURSEMENTS '84-'85	
Dues	4,151.50	1984 ESAF dues	151.00
Publication Sales	370.98	Bulletin #88	1,818.23
Int. NOW Acc't #2745406	109.75	Storage Neg. Flats	93.00
TOTAL CACIL DEC	#4 620 02	Secretarial Exp.	300.00
TOTAL CASH REC.	\$4,632.23	RMSC Postage, etc. (1st qtr)	56.47
		Membership Award	$\frac{25.00}{}$
		TOTAL DISBURSEMENTS	\$2,443.70
Total Receipts '84–85	\$4,632.23		
Bal. Ck. Acc't (4/04/84)	2,028.31		
TOTAL	\$6,660.54		
Disbursements '84-'85	2,443.70		
Bal. Ck. Acc't (4/8/85)	4,216.84		
Returned check	-34.00		
	\$4,182.84		

ESAF Representative: Roberta Wingerson reported that all was fine with ESAF. She requested that more input could be achieved if those chapters with newsletters would include her on their regular mailing lists. The Secretary stated that he would mention it again in the next newsletter. Report accepted as given.

Finance: In the absence of Mandalay D. Grems, Secretary McCashion reported that he had met with Ms. Grems and that the Treasurer's records had been reviewed and all was in order. Report accepted as given.

Legislative: Paul K. Huey again gave his usual excellent legislative report. Report accepted as given and as before reproduced herein. After Paul Huey finished his report Louise Basa, speaking on behalf of NYAC, provided handouts and discussed Subchapter M of Chapter I of Title 9 NYCRR which was amended by adding a new Part 429 Indian Burial Ground Designation (Statutory authority: Parks, Recreation and Historic Preservation Law 3.09 (8): Indian Law, 12-a). She stated that parks and Recreations Department were getting a number of requests to stop development on certain sensitive sites. Regulations for filing had been put out in October. President De Angelo reported that he and the Pratts had attended the hearings, but there were not many there. He stated that the State law was very complicated but if all else failed, a call to the troopers or the county coroner would usually alleviate the situation. Dolores Elliott then brought up a question concerning the lack of committees printed in the Informational Handbook concerning NYAC. The secretary stated that under "Good and Welfare" at the Glens Falls meeting, it was decided between Ms. Basa and the Secretary that the Burial Policy committee should be included and Ms. Basa provided what was available at the time. Charles Haves offered to correct any changes to the committees and forward them to the secretary for inclusion into the Informational Handbook. As long as they were ready to print, this was acceptable to the Secretary. Reports accepted as given and printed.

Local Program: Gordon De Angelo stated that considering meetings which were in progress at the same time as ours, out of 32 papers, 30 were promised by January. He apologized for not having the pre-program sent in advance but final preparations were not complete until 48 hours prior to this meeting. He also apologized to Herb Kraft who was to speak on the Upper Delaware valley, not the Upper Susquehanna valley. With no further comments on the program, the report was accepted as given.

REPORT ON LEGISLATION TO THE NEW YORK STATE ARCHAEOLOGICAL ASSOCIATION,

April 19, 1985

by Paul R. Huey, Van Epps-Hartley Chapter.

State

The Religious Properties Bill has not been re-Introduced this Near. However, there is a movement in the Assembly to find a sponsor for the bill, and the situation should he watched. The bill would exempt religious properties front protection under provisions of the National Register law.

Good news is that the Legislature has passed a resolution proclaiming 1986 as Architectural Heritage Year. The Preservation League of New York State is planning activities that include a search for buildings constructed in 1686, 1786, and 1886.

On March 26, 1985, the State Supreme Court announced a decision on the ownership of the two bronze cannons that were raised without a permit in 1968 from the bottom of Lake Champlain. The cannons were cast in 1748 in England and were lost from a scuttled French ship in 1759. They can be closely documented. The court confirmed that the State of New York owns the cannon and that the statute of limitations does not apply. However, the court agreed that the individuals who raised the cannon are entitled to receive compensation for their services. This sets a questionable precedent, since the State did not solicit these "services" from the salvagers, who did not have an archaeological permit to recover these important artifacts and were acting on their own.

Federal

The news from Washington is again grim. The Reagan administration once again proposes to eliminate the federal funding for state preservation programs which handle National Register nominations and project review to protect cultural resources. At the same time, the Treasury Department

wants to end the tax incentives that assist preservation activities by the private sector. The Reagan tax plan calls for removal of the 25 per cent investment tax credit for the rehabilitation and preservation of income-producing properties listed on the National Register. There is a good chance of this happening unless the program deverlops strong support in Washington. Last year, after hard lobbying, Congress rejected Reagan's proposal and appropriated \$21 million for state preservation programs. The Advisory Council on Historic Preservation was re-authorized through fiscal year 1989. Unless Congress again appropriates funding, state programs will be eliminated or severely curtailed. To us, \$21 million is a lot of money, but it is a mere fraction on the federal scale. It is 21 millionths of a billion, that is, .000021 billion. It can't affect the deficit.

Last September the Shipwreck Preservation Act was passed in the House, but it died in the Senate when it was blocked by the treasure hunter faction. It has now been re-introduced but faces continued opposition from the treasure hunters. If passed, the bill would open the way for states to protect their archaeological wreck sites by removing them from under the existing admiralty law.

Finally, another issue is the National Stolen Properties Act, which is the law by which the United States agrees with other countries not to allow the importation of stolen artifacts or of artifacts taken from a foreign country where all artifacts are declared protected or national property. Senator Moynihan has introduced a Senate bill (S.1559) to amend the National Stolen Properties Act. This bill would allow the importation of artifacts into the United States from countries where those artifacts have been declared protected. Senator Moynihan it is hoped will provide additional information on this issue, but his position seems inconsistent with his otherwise strong support for historic preservation funding in the United States. But can the United States expect other countries to assist it in recovering illegally obtained and exported objects if it does not reciprocate? There should be a reasonable solution.

NYSAA/NYAC Liaison: Dolores Elliott opened this segment with a suggestion that the various committees of NYAC including their addresses be included in the NYSAA Informational Handbook. This suggestion was well taken and Charles Hayes stated that he would send the list to the secretary by June. Ms. Elliott concluded her report by stating if anyone wanted to know what the various NYAC committee, were doing or what information was requested of them they could contact her. Report accepted as given.

Public Archaeology: Dolores Elliott reported that for the last few years an educational traveling archaeological exhibit has been in the planning stages. Its purpose when complete was to travel to smaller museums and libraries to better inform the public on archaeology. Progress was stopped when her assistant took another job. She asked for suggestions such as help from the New York State Museum or whether some type of grant was available. Fran McCashion stated that after her travels around the local area school districts that there was a definite need for a traveling exhibit and that the History of New York State was now more incorporated into the fourth grade curriculum. Geary Zern brought up a negative point on fourth graders excavating on sites in West Chester County. Lee Hunt stated that Anthropologists should have more say in the upcoming discussions on what should go into the K-12 State curriculum. He proposed that a letter be drafted stating our concerns and offering our involvement. It should be directed to the Board of Regents. President De Angelo directed that Dolores Elliott and Lee Hunt come up with a draft and forward it to him. There was still a lively discussion between Gordon, Monte Bennett, Charlie Haves and Herb Kraft which finally ended when President De Angelo floored everyone with one of his "tense" jokes. Report accepted as given.

Publications: Father John R. Lee reported that the publications committee consisting of Charles Hayes, Brian Nagel and himself had met. Bulletin/Journal numbers 88 and 89 had been published. 89 was one of the largest and Father Lee gave Charles Hayes great credit for it. No Occasional Papers had been planned though there existed a possibility of one in the future depending upon financing. Father Lee reiterated that the standardization of the cover was completed. The committee also discussed the possibility of increasing the price of certain NYSAA publications but didn't know if they had the power. While the secretary was checking the point a discussion continued on the matter of having drawings, photographs, etc. camera ready before publication. Father Lee stated that the chapters who have publications for sale will finally be contacted by him. He asked, if possible, to supply ordering information and the names and addresses of the editors or those chiefly responsible for the publication. He was particularly interested in

receiving monthly newsletters stating that it was a fine way to increase individual chapter membership and leave something to posterity. Secretary McCashion stated, concerning a previous point, that the NYSAA Constitutional bylaws allowed an increase in the publications after approval by the executive committee hence any motion would have to be brought up under "new business." The report was accepted as given and the motion was deferred to "new business."

Old Business

The first order of "old business" opened with a statement by President De Angelo concerning the condition of the NYSAA library. Geary Zern stated that cataloguing had been postponed. In his contact with librarians he was told that the Federal Government was in the process of cataloguing everything on massive computers and a catalogue would probably be available for a nominal fee in two or three years. He also stated that he had a problem receiving the Bulletin/Journal from Rochester and this matter was discussed. Geary then asked the members of the library committee to meet with him after this meeting. The secretary stated that the library committee had not existed since the Buffalo meeting. President De Angelo promptly resurrected this committee and appointed Geary Zern as its commander.

The second order under "old business" concerned the status of the Kraus Reprint Company. It was stated that the company had been sold though they were still maintaining their book list. It was suggested that a letter be written concerning their current status. Dr. Dumont was to investigate but no report was received. Therefore, President De Angelo stated that he would assume the responsibility. The third order of "old business" concerned Resolution 83-1, Memorial Volume in Tribute to Louis A. Brennan. This resolution had been brought up by Dr. Dumont at the Glens Falls annual meeting. The Secretary was requested to read the Resolution which he did. It stated, "Considering the healthy financial condition of NYSAA, a memorial volume in tribute to the memory of Louis A. Brennan be published consisting of his Lower Hudson material and that someone be appointed editor of this particular volume and someone be appointed to write the memorial preface." This resolution was voted on and passed at the General Business Meeting. Under "old business" at the annual meeting held in Middletown, the subject was again brought up and a letter was read from Herb Kraft stating that his workload was too heavy at the time. Bert Wingerson stated that this matter should be brought to the attention of the publications committee to be solved. This matter was tabled until a meeting with Herb Kraft could be effected.

At this meeting the discussion continued. Herb was not sure what his position was in regards to the memorial volume and the publications committee had not been advised of their role, either. So, with the preliminaries still up-in-the-air, the matter was again tabled.

New Business

New Business began at 10:02 P.M. First order was the increase in prices of some of the NYSAA publications. After Charles Hayes discussed the surplus available and the desirability of moving them, it was suggested that raising the price would not be feasible. The Secretary suggested that we follow methods used by the Virginia Society and offer lots at reduced rates. The more recent issues then could be raised to \$5.00 a copy and thereafter. Discussions continued between Charles Hayes, Dolores Elliott and Bob Gorall. After a bit of parliamentary juggling the motion was made to raise the price of the Bulletin/Journal to five dollars. Dr. Larner so moved; Helen Gutierrez seconded. There was no opposition from the floor.

The second order of new business" involved a situation of deep concern to the Association. A letter was received from the Incorporated Long Island Chapter by President De Angelo which stated:

"Though the Inc. Long Island Chapter is not at the critical financial point it was a few years ago, the Chapter continues to be faced with monetary problems. The improvement is because we have actively sought membership, contributions from civic groups, and grants. Nevertheless, we find the need

to maximize our income just to pay continuing expenses, maintain the Museum and make slight capital improvements."

"The suggestion continually comes forth: Why not leave the State organization and keep the dues sent to the State for our own use? To date our Board has strongly resisted this idea."

"When William Golder, our past President, raised our general problems at the State Board Meeting, he was informed that a compromise arrangement might be reached under which the amount of dues sent to the State for some members might be substantially reduced, if we did not ask for Bulletins for these members. We have conducted a survey of our membership and determined that a large number of them are not interested in the *Bulletin/Journal*."

"Therefore, the Long Island Chapter would like to open negotiations for a reduction in State dues to go into effect for the membership year 1985. We are willing to handle this by mail, at a small meeting at a mutually agreed time and place, or a full meeting of the Board in the fall." End. Signed, Edward Weiss, David A. Detrich.

After the letter was read, discussion began. President De Angelo stated that in communication with the Long Island chapter it was stated that if a cash short flow was their only problem that would be alleviated by a private grant of a thousand dollars for them in July. Charles Gillette suggested that the Board create an associate membership category for those who desired membership but did not want to receive the Bulletin/Journal. President De Angelo stated that this type of membership might bring in other groups. However, opposition was aired by Bob Gorall, Dick Bennett, Bert Wingerson and the Secretary all of whom felt that the Association would be weakened, even fragmented as a result. Bert Wingerson drew an interesting parallel. MALFA has its own organization with the larger membership while Louis A. Brennan Lower Hudson chapter has the smaller membership and both coincide nicely. She suggested a Long Island Museum organization and a separate Long Island Chapter for those who so desired to retain their State affiliation. Helen Guttierez brought up a similar comparison with the Upper Susquehanna chapter. She felt that it was a problem they could solve themselves. Bob Gorall said that any problems that they had concerning money in the Morgan Chapter had been solved by raising funds. Our President then called for a consensus. It was felt that the associate member idea was not satisfactory and perhaps more dialogue was needed. The Secretary then offered the ultimate solution. Since all communication and dues had been withheld, it might be feasible to disband the chapter, send out letters to each of the members offering membership-at-large, and let the matter rest there. President De Angelo stated that he had received registered correspondence from them. With two options ruled out the President felt that the executive committee wished him to continue negotiations. Bob Gorall asked how long they could remain in their present status. The Secretary replied according to the constitutional by-laws, one year. The executive committee was polled and it was decided to table the matter pending negotiations.

Next under "new business" was the reading of a resolution put forth by the Incorporated Orange County Chapter, to wit; "Inasmuch as the Incorporated Orange County Chapter, New York State Archeological Association, as well as other chapters have been experiencing financial and other problems related to the indemnification of owners of archeological sites: And inasmuch as it is in the common interest of the New York State Archaeological Association to address this problem, BE IT RESOLVED THAT, the committee of the New York State Archaeological Association be directed to investigate the feasibility of a common insurance policy covering all chapters, and to report their findings at the next annual meeting of the Association." Bill Ehlers amplified the problem. A discussion arose between Gordon De Angelo, Richard Bennett and Charles Hayes. President De Angelo directed Richard Bennett to investigate the matter, communicate with Bill Ehlers and report at the next annual meeting. Resolution 85-1 was brought up to the membership by Bill Ehlers, seconded by Richard Bennett and unanimously approved.

The next order under "new business" was in the form of Resolution 85-2 brought forth by one who also deserves praise for his handling of the local program, Gordon De Angelo, to wit, "BE IT RESOLVED THAT, NYSAA extend its most profound appreciation to all the members of the Upper Susquehanna Chapter and others for their superb management of the 1985 Annual Meeting. Special thanks are due to Cal and Roberta Behnke, Howard Chamberlin, Dick and Ruth Wakeman and Helen Gutierrez." Father John Lee officially brought forth the motion and Charles Gillette seconded it. There was a round of applause indicating total acceptance.

The final order under "new business" was directed towards hosting the 70th NYSAA Annual Meeting in 1986. The secretary suggested that any date in April would be no problem as Easter Sunday fell on March 30th in 1986. He also stated that now would be a good time to plan for the BIG 75th Annual Meeting. Dolores Elliott brought up a point on the dates and questioned where the meeting was to he held. The secretary referred her to the General Business Meeting at Glens Falls where the final motion was passed which stated, WEST: Houghton, Morgan, Beauchamp, and Upper Susquehanna

CENTER: Auringer-Seelye, Van Epps-Hartley, Chenango and Triple Cities EAST: Long Island, Mid-Hudson, Orange County, Metropolitan and Louis A.

Therefore it was CENTER's turn to host the Annual Meeting in 1986. As there were no volunteers, the matter was suspended and would be brought up at the General Business Meeting in the morning. With that new business was concluded.

Good and Welfare

The secretary reminded anyone who was interested that the excavations begin at the Saratoga National Battlefield, July 22 through August, under the direction of Dr. David Starbuck with staff historians Paul Okey and Richard Patterson. Volunteers are welcome and may call Paul Okey at the Park Superintendent's office.

The Mohawk Valley project continues this year and those interested are urged to contact Dean Snow, department of Anthropology, SUNY Albany, Albany, New York 12222.

The Call for Papers has been sent out for the 52nd Annual Meeting of ESAF to be held at the Hilton Hotel and Buffalo Museum of Science in Buffalo. Dates are October 31 through November 3 and the local arrangements director is Michael Grande, whose telephone is (716) 896-5200.

This concluded "Good and Welfare." As it was getting late (10:37 P.M.) there was no problem finding someone to make the adjournment motion which was done promptly by Charles Haves, seconded by Father Lee. Thus ended the 1985 NYSAA executive committee meeting.

General Business Meeting

The General Business Meeting of the New York State Archaeological Association began a bit late. Scheduled for 8:15 A.M., President De Angelo convened the meeting at 8:50 A.M. After a brief welcoming speech the secretary was asked if a quorum were present. Eleven members were present and just barely at that. Business commenced. The Secretary was asked to read the previous minutes from the 1984 NYSAA Annual Meeting at Middletown. Since these had been printed and distributed, Dolores Elliott entertained a motion to waive the reading of these minutes and accept them as printed. Richard Jackson seconded the motion which was accepted by the membership.

Under "Old Business" President De Angelo again inquired of the Secretary if there was any outstanding old business worthy of mention. The Secretary stated that there was none and since there was no discussion from the floor the meeting rapidly progressed to "New Business."

Under "New Business" President De Angelo announced the demise of the Newsletter Backfill because it was simply not accomplishing its task. The first order under "New Business" concerned the situation in the Incorporated Long Island Chapter. After much debate and careful deliberation the executive committee decided to further pursue negotiations with them and the matter was tabled.

Next came *Resolution 85-1* which had been introduced by William F. Ehlers, Incorporated Orange County Chapter. This resolution concerned obtaining an overall insurance policy to protect diggers and landowners during excavations. After a considerable amount of discussion, Richard Bennett was directed to investigate the matter and report directly to Bill Ehlers and we would bring it up at the next NYSAA Annual Meeting. This Resolution offered as a motion by Bill Ehlers was seconded by Richard Bennett but was tabled pending further research.

Following was Resolution 85-2: then presented as a motion by Gwenyth Gillette, to wit, BE IT

RESOLVED THAT: NYSAA extend its most profound thanks and appreciation to all the members of the Upper Susquehanna Chapter and others for their superb management of the 1985 Annual Meeting. Special thanks are due to Cal and Roberta Behnke, Howard Chamberlin, Dick and Ruth Wakeman, Helen Gutierrez and local program director Gordon De Angelo." Geary Zern, Louis A. Brennan Lower Hudson Chapter, Seconded the motion after which there was an arousing round of applause from the floor.

The last order of "New Business" was directed towards hosting the 70th 1986 NYSAA Annual Meeting by location CENTER. There were no volunteers. At 9:04 A.M., Richard Jackson made the motion to adjourn which was quickly seconded by Dolores Elliott and the 69th NYSAA General Business Meeting passed into history and the program commenced.

Awards Presentations

Deferred until the banquet, the awards presentations were superbly presented by the chairman of the Awards and Fellowships Committee, Dr. Peter P. Pratt. For MERITORIOUS SERVICE, the following members were honored:

- 1. Dr. Ellis E. McDowell-Loudan-Beauchamp and Chenango Chapters.
- 2. Gary Loudan-Beauchamp and Chenango Chapters.
- 3. Stanford E. Gibson-Chenango Chapter.
- 4. Theodore Whitney-Chenango Chapter.
- 5. Dr. Jonah D. Margulis Houghton Chapter.
- 6. Frank Parslow-Mid-Hudson Chapter.
- 7. William F. Ehlers, Jr.-Incorporated Orange County Chapter.
- 8. Mrs. Helen Tolosky-Incorporated Orange County Chapter.

Two special awards were presented:

The Royal Order of the Bead was presented to Dr. Peter P. Pratt.

The Royal Order of the Plumb Bob was presented to President Gordon C. De Angelo.

Respectfully submitted,

John H. McCashion Secretary, NYSAA

PROGRAM SIXTY-NINTH ANNUAL MEETING NEW YORK STATE ARCHAEOLOGICAL ASSOCIATION

April 19, 20 and 21, 1985 Holiday Inn Oneonta, N.Y.

Host: Upper Susquehanna Chapter

FRIDAY, APRIL 19, 1985

10:00 A.M. NYAC BOARD MEETING
12:00 Executive Conference Room
1:30 P.M. NYAC GENERAL MEETING
2:30 P.M. Executive Conference Room
2:30 P.M. NYAC PROGRAM

2.50 F.M. NTAC FROOKAM

5:00 P.M. Executive Conference Room

Presentations by G. De Angelo, B. Fullem, K. Hartgen, L. Basa and B. Nagel.

(GUESTS WELCOME AT THE AFTERNOON SESSION)

2:00 P.M. NYSAA REGISTRATION

9:00 P.M. ROOM 110.

7:30 P.M. NY5AA EXECUTIVE COMMITTEE MEETING

10:00 P.M. Executive Conference Room

SATURDAY, APRIL 20, 1985

8:00 A.M.

12:00 NYSAA REGISTRATION

ROOM 110

ALL SESSIONS NYSAA DISPLAY AND PUBLICATION ROOM

Executive Conference Room

8:15 A.M. NYSAA BUSINESS MEETING

BANQUET ROOM NO. 1

MORNING SESSIONS

BANQUET ROOM NO. 1

9:00 A.M. ARCHAEOLOGICAL OPTIMISM: PLANS FOR THE FUTURE AT ERIE CANAL VILLAGE

Ellis E. McDowell Loudan and Gary L. Loudan, SUNY Cortland, Wm. M. Beauchamp and

Chenango Chapters.

9:15 A.M. MOHAWK SYMPOSIUM

Chaired By Dean Snow, SUNY Albany

9:25 A.M.

OBSERVATIONS ON AN EARLY SEVENTEENTH CENTURY MOHAWK INDIAN SITE

Donald A. Rumrill, Van Epps-Hartley Chapter

9:50 A.M. MIDDEN FORMATION AND TRANSFORMATION AT THE JACKSON-EVERSON SITE Robert D. Kuhn, SUNY Albany 10:10 A.M. FAUNAL ANALYSIS: THE ELWOOD SITE Mary Schwarz, SUNY Albany 10:30 A.M. COFFEE AND DANISH 11:00 A.M. PRELIMINARY TESTING AT THE OTSTUNGO SITE: A NEW PATTERN IN IROQUOIS LITHIC **TECHNOLOGY** David Cushman, SUNY Albany 11:20 A.M. THE TRANSITION TO SOCIAL STRATIFICATION: AN IROQUOIS EXAMPLE David B. Guldenzopf, SUNY Albany 11:40:A.M. LUNCH (Place of your choice) BANQUET ROOM NO. 2

9:00 A.M THE OSWEGO CANAL AND THE WEIGHLOCK CULVERT: TWO CANAL FEATURES LOCATED

IN AN URBAN SETTING RECORDED DURING SEWER LINE CONSTRUCTION

Marjorie K. Pratt, Wm. M. Beauchamp and Chenango Chapters

9:20 A.M. THE BRICKS SPEAK: REQUA-MAGEE SITE

Louis C. Raymond (read by Allen Vergotsky), MALFA

9:50 A.M. A PREDICITIVE MODEL FOR PREHISTORIC SITE LOCATIONS IN THE NORTHERN NEW JERSEY

HIGHLANDS

Edward J. Lenik and Kathleen L. Ehrhardt, Sheffield Archaeological Consultants.

10:20 A.M. (10:30 A.M. COFFEE AND DANISH)

11:00 A.M. COASTAL ARCHAEOLOGY IN SOUTHERN NEW ENGLAND: RECENT RESULTS FROM

NARRANGANSETT BAY

David J. Bernstein, SUNY Binghamton

11:20 A.,M. A MULTICOMPONENT SERIES OF OCCUPATIONS N BROOME COUNTY, N.Y.: FINDINGS,

PROSPECTS AND RESEARCH POTENTIAL

Alen D. Beauregard, SUNY Binghamton

11:40 A.M. LUNCH (Place of your choice)

AFTERNOON SESSIONS

BANQUET ROOM NO. 1

1:00 P.M. CULTURAL RESOURCE MANAGEMENT SYMPOSIUM

Chaired By Bruce Fullem, Office of Parks, Recreation and Historic Preservation

1:10 P.M. USING A NEGLECTED SYSTEM: PUBLIC ARCHAEOLOGY REPORTS IN THE MOHAWK VALLEY

PROJECT

Dean Snow, SUNY Albany

1:30 P.M.	STAGE II AND III CRM REPORTS FROM NEW YORK STATE AS A VALUABLE SOURCE FOR DEVELOPING METHOD AND THEORY FOR THE STUDY OF INDUSTRIAL SITES J. Owen Keatley, Public Archaeology Program, RPI
1:50 P.M.	PERSPECTIVE ON URBAN ARCHAEOLOGY: A VIEW OF NEW YORK CITY Bert Herbert, Louis Berger and Associates/Archaeologist
2:10 P.M.	SOME ISSUES IN THE ARCHAEOLOGY OF THE REVOLUTIONARY WAR PERIOD Charles L. Fisher, Office of Parks, Recreation and Historic Preservation
2:30 P.M.	UNDER THE BRIDGE, OVER THE DAM: CULTURAL RESOURCE SURVEY - REPORTS AS A DATA BASE FOR INDUSTRIAL RESEARCH Philip Lord Jr., Director, Cultural Resource Survey Program, NYS Museum
3:00 P.M.	COFFEE
3:30 P. M.	CANALS: A SPECIAL PROBLEM Louise Basa, NYS Department of Environmental Conservation
3:45 P.M.	EFFIGY MASKS OF THE UPPER SUSQUEHANNA RIVER VALLEY Herbert Kraft, Seton Hall University
4:05 P.M.	THE BUSH 4 SITE AND THE PALEO INDIAN OCCUPATION OF WESTERN NEW YORK Mark S. Rosenzweig, Senior Archeologist, Ecology and Environment, Inc.
4:25 P. M.	ADJOURN
	ADJOURN
4:25 P. M. BANQUET RO 1:00 P.M.	ADJOURN
BANQUET RO	ADJOURN OM NO. 2 RECENT EXCAVATIONS AT THE BOLAND SITE: AN OWASCO VILLAGE IN THE LOWER CHENANGO VALLEY
BANQUET RO 1:00 P.M.	ADJOURN OM NO. 2 RECENT EXCAVATIONS AT THE BOLAND SITE: AN OWASCO VILLAGE IN THE LOWER CHENANGO VALLEY Vincas P. Steponaitis, Robert L. Ewing and Sue Prezzano, SUNY Binghamton THE ROBERSON SITE: A MULTI-COMPONENT OCCUPATION AT THE CONFLUENCE OF THE SUSQUEHANNA AND CHENANGO RIVERS Nina M. Versaggi, Archaeology Consultant, Roberson Center for the Arts and Sciences.
BANQUET RO 1:00 P.M. 1:20 P.M.	OM NO. 2 RECENT EXCAVATIONS AT THE BOLAND SITE: AN OWASCO VILLAGE IN THE LOWER CHENANGO VALLEY Vincas P. Steponaitis, Robert L. Ewing and Sue Prezzano, SUNY Binghamton THE ROBERSON SITE: A MULTI-COMPONENT OCCUPATION AT THE CONFLUENCE OF THE SUSQUEHANNA AND CHENANGO RIVERS Nina M. Versaggi, Archaeology Consultant, Roberson Center for the Arts and Sciences. Binghamton AN INTRODUCTION TO THE BINGHAMTON GRAVESTONE PROJECT
BANQUET RO 1:00 P.M. 1:20 P.M.	ADJOURN OM NO. 2 RECENT EXCAVATIONS AT THE BOLAND SITE: AN OWASCO VILLAGE IN THE LOWER CHENANGO VALLEY Vincas P. Steponaitis, Robert L. Ewing and Sue Prezzano, SUNY Binghamton THE ROBERSON SITE: A MULTI-COMPONENT OCCUPATION AT THE CONFLUENCE OF THE SUSQUEHANNA AND CHENANGO RIVERS Nina M. Versaggi, Archaeology Consultant, Roberson Center for the Arts and Sciences. Binghamton AN INTRODUCTION TO THE BINGHAMTON GRAVESTONE PROJECT Randall H. McGuire (read by Lynn Clark), SUNY Binghamton CHARLIE BROWN IS DEAD: A STUDY OF LATE 19th CENTURY BURIAL CUSTOMS

3:30 P. M. CHILDREN'S GRAVESTONES: REFLECTIONS OF IDEOLOGY OR REALITY Katherine Fleming, SUNY Binghamton

3:50 P. M. RURAL vs URBAN: INTERPRETATIONS OF GRAVESTONE DIFFERENCES

LouAnn Wurst, SUNY Binghamton

4:05 P.M. ADJOURN

EVENING PROGRAM-BANQUET ROOM

6:30 P.M. HAPPY HOUR, WINE FOUNTAIN, CASH BAR

7:30 P.M. ANNUAL BANQUET

Presentation of Awards: Peter P. Pratt

KEYNOTE ADDRESS:

THE ARCHEOLOGY OF THE SHAKERS

Dr. David Starbuck, Ass't Professor of Anthropology Rensselaer Polytechnic Institute

SUNDAY, APRIL 21, 1985 MORNING SESSION BANQUET ROOM NO. 1

9:00 A.M. HIGHLAND PARK SOUTH CEMETERY 1984: EXCAVATIONS AND PRELIMINARY ANALYSIS

Brian L. Nagel and Lorraine P. Saunders, Rochester Museum and Science Center

9:30 A.M. THE ABRAHAM VAN WYCK PRIVY

Roberta Wingerson, Louis A. Brennan Lower Hudson Chapter

9:50 A.M. THE PREHISTORIC EVIDENCE AT THE THEODORUS VAN WYCK SITE

Geary Zern, Louis A. Brennan Lower Hudson Chapter

10:10 A.M. AN EXPERIMENTAL DATA BASE SYSTEM

John E. Griffith, Etude Concepts Courses, Inc.

10:30 A.M. MEETING ADJOURNMENT