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Salvage Archaeology at a Parking Lot: Orchid Site, Area B.

THE NEW YORK STATE ARCHEOLOGICAL ASSOCIATION

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THE ORCHID SITE, AREA B, FORT ERIE, ONTARIO

Joseph Granger Houghton Chapter

Introduction

Excavations were carried out in July, 1964, on the Orchid Site, Ft. Erie, Ontario, in two locations designated Area A and Area B. These excavations were conducted by the State University of New York at Buffalo in cooperation with the National Museum of Canada. Marian E. White of the former institution and William C. Noble of the latter were in charge of excavations while the author was supervisor of the field excavations and concentrated on Area B.

Operations were of a salvage nature with certain uncontrollable factors limiting stringently the time and areas available for careful excavation. Major portions of the site were sampled but emphasis was placed upon the excavation of a large prehistoric ossuary (White, 1966). This ossuary has also been referred to as the Marinacchio Site but both Areas A and B were given the designation Ar Gf-1 and called the Orchid Site by the National Museum of Canada. However, later this same designation was also used for the Surma Site (Emerson and Noble, 1966). Since the ossuary has been reported elsewhere, it will not be covered here.

"Area B" was a test trench which disclosed several burials and rich midden deposits. Attention was focused upon this area by reports that skeletal material had been noted on July 17 in the course of leveling the area preparatory to the laying of crushed stone for a parking lot. The stripped off overburden was removed from the site by truck while the Indian "bone" and "relics" were collected or displaced by the curious onlookers. When other materials were uncovered in the ossuary area, the Fort Erie police were called in and the area cordoned off. It was then that the State University of New York at Buffalo was asked to conduct the subsequent work.

Excavations commenced in Area B on July 23, 1964, when a careful scrutiny of the leveled surface disclosed several concentrations of bone, numerous flint flakes, and other artifacts. In three days of excavation we made an exploratory test trench primarily to delimit burials. Six burials and one refuse pit were excavated.

My sincere appreciation and thanks go to the following people and groups who aided materially in a taxing situation and thus made it both companionable and bearable: Marian E. White, over-all director; William C. Noble, Assistant, National Museum of Canada; Audrey Sublett, director of burial excavation; Frederick Houghton Chapter, New York Archaeological Association; and the citizens of Fort Erie, Ontario who willingly gave their interest and time.

Description and analysis were facilitated by the cooperation of the National Museum of Canada which loaned the materials excavated to State University of New York at Buffalo Archaeology Laboratory. Barbara Butler completed the faunal analysis while Sheila Parker did the analysis of human osteological remains of Area B.

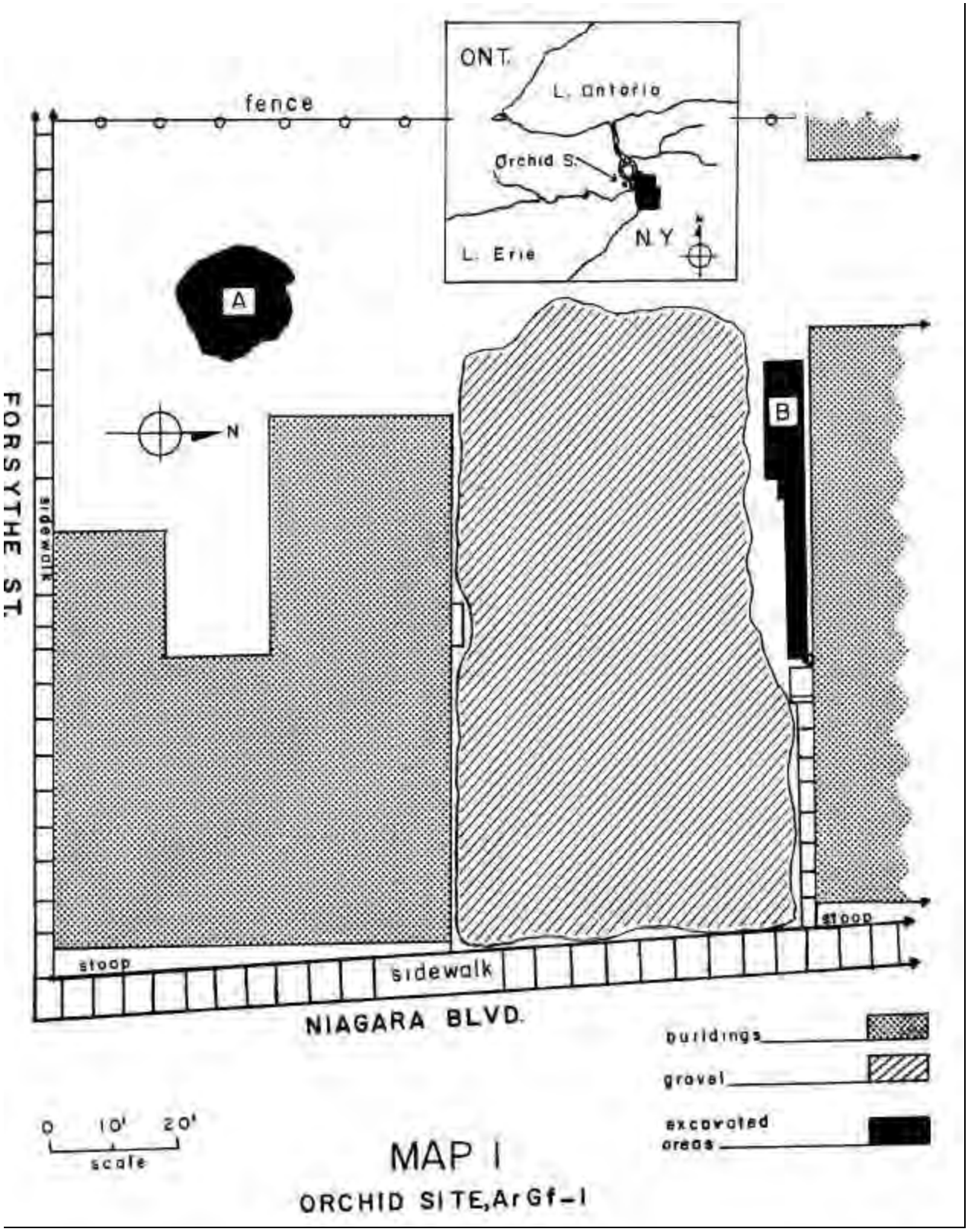
Physiography

The Orchid Site, Area B (Ar Gf 1), is located on Lot 2, Fort Erie, Ontario, Canada, directly adjacent to the west side of Niagara Boulevard on land owned by Anthony C. Marinacchio (Plate 1). It occupies a small sand knoll on the first riverine terrace at the 575-foot elevation. The growth of the urban area had obscured much physiographic detail. James Flake, the bulldozer operator, removed, during leveling, approximately 1.5' to 2.0' of the soil from this knolled terrace, the original surface of which stands approximately 10 ft. above present river level.

The freshly leveled lot between the Marinacchio grocery and the C. L. Young house was covered with crushed stone except for a twelve-foot wide strip on the north side directly adjacent to the Young house. Here the bulldozed surface of the exposed strip consists of black sand mixed with recent and aboriginal cultural and osteological debris. A sample of this black sand was washed in the laboratory where it separated into fine yellow beach sand with a black organic residue. This soil compares with that observed extensively in the areas directly adjacent to the Niagara River and represents an accumulating midden of long duration.

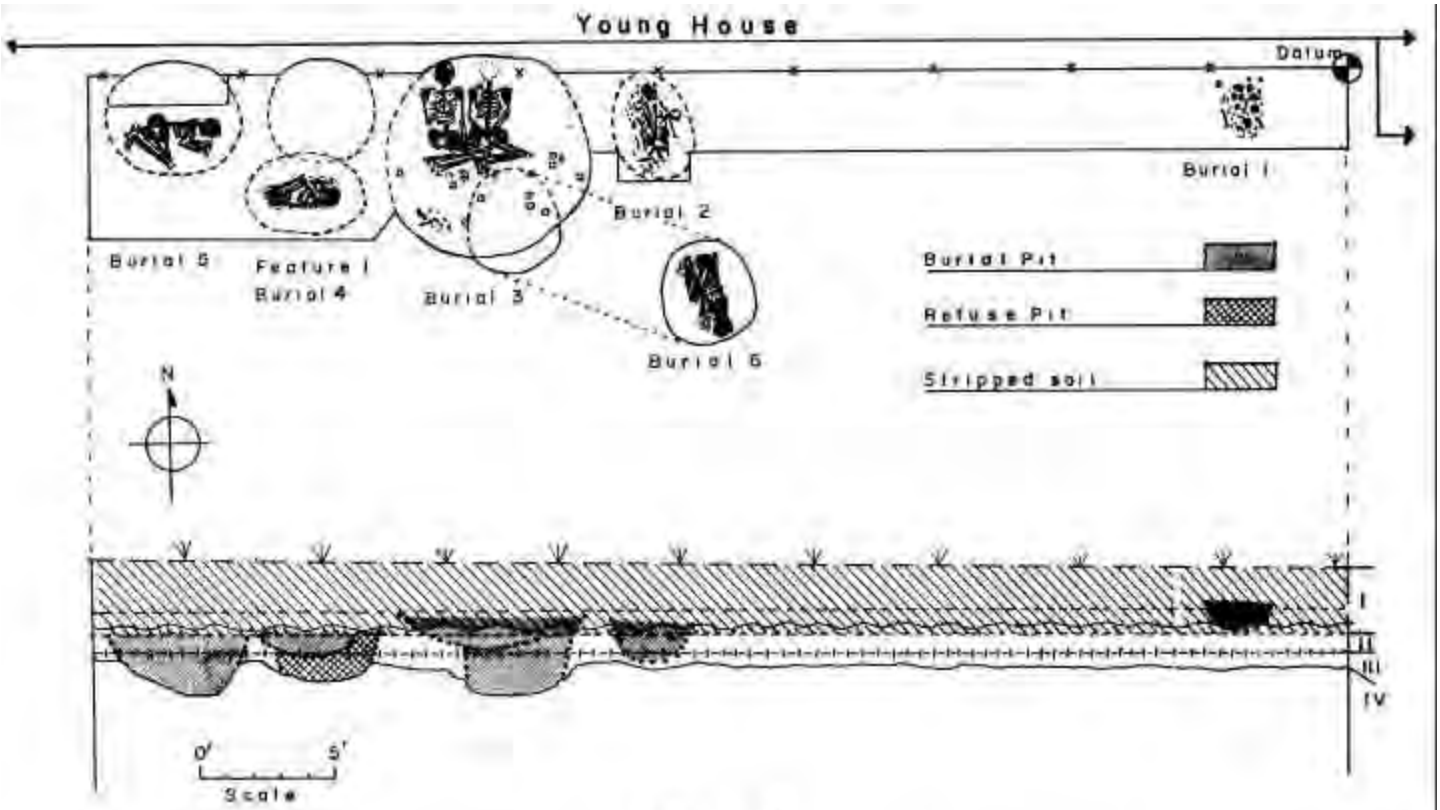
The midden encountered both in Area A and Area B was as an extensive sheet midden, as distinguished from such forms as refuse pits, hillside middens, and constricted or localized

COVER ILLUSTRATION: Salvage Archaeology at a Parking Lot: -Orchid Site, Area B.



MAP 1

ORCHID SITE, ArGf-1



MAP 2

PLAN AND PROFILE — ORCHID SITE AREA B

occupation middens, because it covers large areas where intensive occupation has taken place over a long period of time. The midden at Orchid Site and Surma Sites and most probably in the numerous instances of other finds in the Fort Erie, Buffalo, and Grand Island (White 1964; Kochan n. d.; and McCarthy: 1963) riverside areas could be referred to as the Niagara River Sheet Midden. Frequently, this sheet midden shows organic and cultural debris in a generalized and relatively uniform level on all sites in the riverine area. Indications are that while the depth varies there are likely to be isolated pockets of cultural material of Early and Middle Woodland with growing heavy distribution of Late Woodland and Historic materials.

Stratigraphy

Soil differences at Orchid Site Area B were observable in a vertical profile. Level I was not easily defined. Indications in a cut west of the house where the original surface could be seen, in contrast to the bulldozed surface, suggested that the upper soil zone was comprised of the same midden soil which lay below. This created some confusion when compared to Area A where the humus and root zone was evident. One explanation for this may be leveling over this portion of the site at some prior time. Level I, then, was defined as the stripped and removed soil and the 0. 3 ft. of severely disturbed midden which lay immediately below the bulldozed surface. In the disturbed segment of the midden there was a mixture of tarpaper, nails, and other objects of the recent historic occupation along with aboriginal artifacts.

Level II was a zone of black organically stained soil, 0.7' in depth. Disturbance in this level had been caused by intrusive burials and a pit either of early historic or prehistoric origin. It is in this level that the highest concentration of artifacts and occupational debris was noted. The majority of the features were first recognized in this level.

Level III consisted of brown organically stained sand. This difference in soil color between Levels II and III may be explained as the effect of water percolation through the heavily organically stained zone above. Organic material had been carried down into the natural yellow beach sand horizontally and in a decreasing volume proportional to depth. An alternative explanation has also been suggested. Level III may represent a time of lighter occupation in the area, although this cannot be proven by cultural association. This level produced a slightly smaller concentration of artifacts than Level II. Isolation of Levels II and III during excavation to recover these artifact contents separately was not successful. Factors which contributed to the confusion were: (1) removal of original surface to varying unknown depths, (2) no sharp demarcation between the black sand and the brown sand. Therefore, we were not able to estimate the extent to which the original vertical placement of artifacts was disturbed by later aboriginal activities or by 20th century works or by our own excavation techniques. At any rate, artifact differences were not discernible by level.

Level IV was sterile yellow beach sand and was not plumbed for depth.

The stratigraphic column of Area B agrees in substance with that of Area A (White, 1966: 5-7). On the whole these levels also agree with those found on the Surma Site located two blocks south of the Orchid Site on the same lower riverine terrace (Emerson and Noble, 1966:72-72).

A further problem contributed to the mixture of cultural materials and definition of features. The homogeneity of the midden presented difficulties in distinguishing features. For example, an intrusive pit extending from the top of Level II through Level III and bottoming in Level IV had no distinguishable outline until it reached the juncture of Level III and IV. It was difficult to observe horizontal and vertical limits of these manifestations in the midden soil. Outlines of features in Level II and III often consisted only in slight differences of moisture, relative soil darkness, and firmness of compaction. When exposed to the summer heat with its rapid dehydrating effect, they were quickly obliterated.

The uniformity of the midden coupled with the artifact inventory suggests occupation of the site in varying levels of intensity from the Late Archaic through the Transitional and Woodland Periods to the Historic Iroquois. These occupations have had to be determined typologically rather than from the correlation of levels and diagnostic artifacts.

Excavations

Because of the salvage situation it was decided to determine the placement of certain skeletal remains uncovered by the bulldozer operations and to seek a profile of the interment area. Ac-

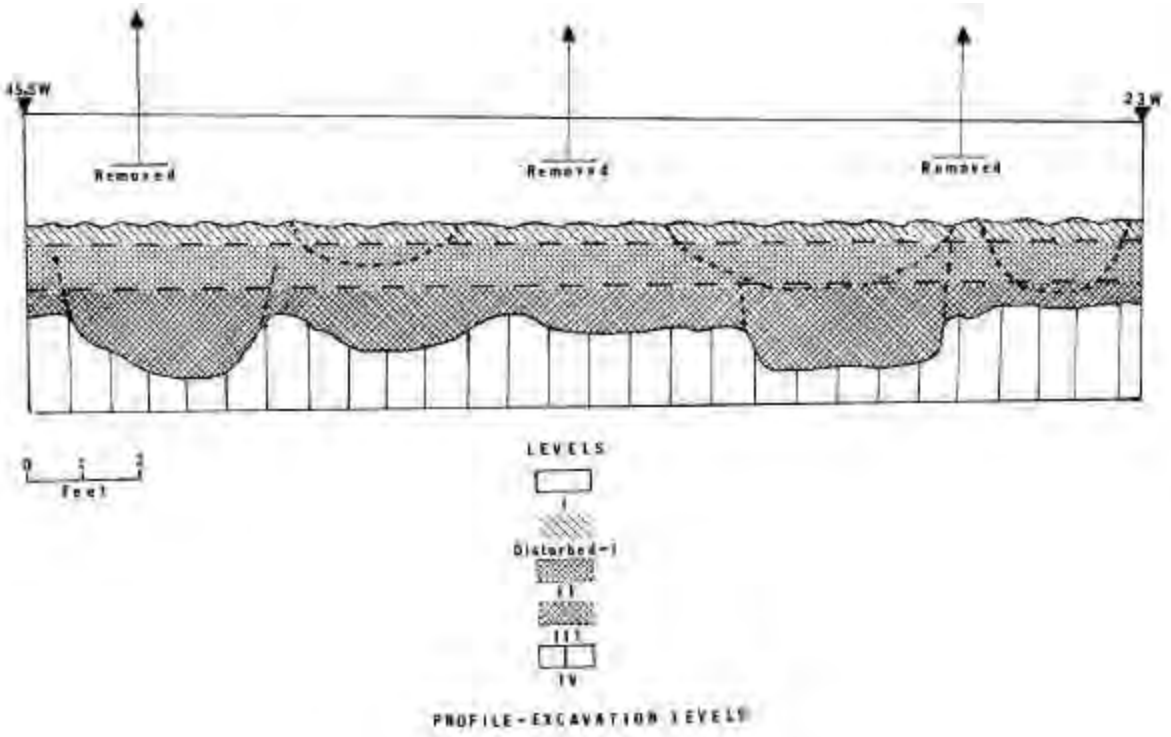


FIGURE 1

TABLE 1

	Designation	Description	Depth	Thickness
	Level I	Topsoil Disturbed Midden. Partially removed.	0'-2.3'	2.3'
Midden	Level II	Midden deposit and burial pits. Black organic stained sand. Undisturbed except by aboriginal features.	1.5'-2.9'	0.7'
Midden	Level III	Midden deposit and burials. Brown stained sand. Undisturbed except by aboriginal features.	2.9'-3.4'+	0.5'+
	Level IV	Yellow beach sand. Intrusive pit from Level II, undisturbed, sterile.	3.4'+-?	?

cordingly, a datum point was established and an east-west trench was begun close to the Young house leaving a balk in which to record vertical profiles (Map 2). The obvious burial features had been located preliminarily by several persons who had seen the earth-moving equipment dislodge bone immediately adjacent to the house foundation.

Secondary emphasis was placed upon excavation of the midden matrix. Since surface survey of the area had disclosed a mixing of artifacts from several time levels, the matrix around the burials was removed by shovel and sifted through .25 inch screens. Segregation of artifacts was attempted by level, burial, and feature where possible. All artifactual and non-artifactual cultural materials were saved. Provenience was taken on those artifacts recognized in situ. Burial pits were recorded as carefully as the circumstances would permit.

The excavated area consisted of a 3 ft. wide trench carried to sterile soil and extended 45. 5 ft west of the datum point which was established 1 ft. south and west of the 90° angle formed by the Young house and porch-stoop. At a point 26.5 ft. west of the datum a 3 ft. southward extension was made to encompass several burials. Where necessary other extensions were made to lesser depths than sterile soil to facilitate burial removal or to investigate probable pit outlines. The test trench was planned to impinge upon those areas marked in a surface survey as having bone distributed in the disturbed soil. This bone was later found to be segments of burials I, II, and III.

Features

Only one feature which was clearly not a burial was encountered. This feature was an ill-defined pit whose origin was probably in Level II. The pit was located approximately 38 ft. west of datum. It had a diameter of 4 ft. and depth of 5 ft. below the reconstructed surface. The horizontal outline of the pit was initially recognized in the floor of Level III. Thus it is difficult to assign artifacts to the pit alone. Many of the artifacts assigned to Late Middle or Late Woodland cultural manifestation (pottery, projectile points) may be accounted for by the intrusion of this pit from a higher, later level.

This feature was a straight walled pit with a slightly rounded bottom. The symmetrical circular aperture suggests initial use as a storage pit and ultimate filling with refuse. This pit type was found at the Martin Site (White, 1964: 49) and at other sites of the Late Woodland time level (Ritchie, 1965: 280).

The artifacts probably assignable to Feature I are: one Meadowood, one Jacks Reef, and two Levanna projectile points; Vinette I, Wickham Punctate, Levanna Cord-on-Cord, and Point Peninsula Plain pottery types; and several blades and blade bases in the proximity of the pit.

Five Meadowood blade bases, two Meadowood projectile points, a bird-bone bead, and an antler projectile point had definite provenience within the lower portions of the pit suggesting the possibility of Early Woodland affiliation. Presence of pottery types within the probable confines of the upper zone of the pit argues, however, for a placement between Early Woodland and Late Woodland time.

Burials

The skeletal material obtained from Area B may be classed into two categories, surface scatter and in situ burials. Surface scatter revealed the presence of 5-6 individuals. One of these was analyzed by the Fort Erie Town Coroner to determine if the remains were of legal interest; they were not. Much of the other surface remains can be assigned to several burials removed in the stripped fill. Some of the surface bone left at the site had intruded into the bulldozer-disturbed remnant of Level I over the in situ remains. This has lent some degree of uncertainty to osteological analysis; indeed, we can only be sure of the analysis of the undisturbed burials.

Surface Scatter

The initially disturbed skeleton designated Alpha which caused the subsequent interest and salvage in the Orchid Site was that analyzed by the Coroner's office. It was a young adult male, apparently quite robust as indicated by the thickness of the skull fragments with well developed supraorbital ridges as well as large mastoid processes and heavy muscle attachments particu-

larly at the nuchal line. Since most of the surface bone was picked up from the entire exposed surface of the area adjacent to our excavations, we have only the testimony of the bulldozer operator that this mass of bone appeared approximately 10 ft.-20 ft. west of the later established datum in the soil accumulated by the blade of the machine. Its shallow depth suggests that it may be Iroquois.

The other individuals represented by surface bone were: Surface Skeleton 1, an infant of undetermined age and sex. Surface Skeleton 2, an adult male of robust cranial and infracranial structure represented by a partial skull and several long bone fragments.

Surface Skeleton 3, an adult male represented by a partial skull with rather heavy muscle markings. Age was indeterminate but a portion of severely arthritic section of thoracic spine may indicate age not consistent with Surface Skeleton 2.

Surface Skeleton 4: 6 ft. south of the house and approximately 30 ft. west of the datum point the remains of a young adult female and an infant of 0-1 years age were found. The female was represented by cranial, mandibular, and infracranial fragments. Age determination by dental attrition and some infracranial material suggests an age of 20. Fragments representing the infant were very small but lack of epiphysial closure indicates death soon after birth (Parker, n.d.: 3,9).

The grouping of these remnant bones, though highly disturbed, suggests the presence in the vicinity of Burial III of a stratigraphically higher grave, possibly of Historic origin. This grave containing a young female and newborn child was removed with most of Level I by the stripping operation. Parker has speculated that this grouping was that of a mother and child, dead at child-birth (n.d.: 3).

Burial I

This burial was found 4. 5 ft. west of the datum and fragments were found to a depth of 4 ft. Several fragments of skull, long bones, ribs, and a portion of the left and right mandible were found. The position of the skull and mandible fragments indicated a northward orientation. Broken glass, tarpaper and leaves indicate thorough displacement of the majority of the upper zone of the burial, but the remaining bone was found within a diameter of 2.5 ft. to 3 ft. There are some indications for the association of skeleton Alpha with Burial I substantiated by the presence of certain fragments in complementary distribution. Burial I was analyzed as a young adult while Alpha was also diagnosed as a young adult, possibly a male. This was based upon the skeleton's robusticity. It is believed that Alpha and Burial I are one and the same individual. No grave goods were associated, although a side notched projectile point, some cordmarked pottery, and several blade bases were found directly below the burial in the undisturbed soil.

Burial II

25 ft. west of datum a cluster of bones was found partially disturbed, within an indistinct oval pit, about 2.5 ft. east-west by 4 ft. north-south and 1.2 ft. deep. The burial was either tightly flexed or a bundle burial. The upper portions of this burial were disturbed, the lower portion was undisturbed and the position of the long bones and skull suggest a head orientation toward the north. Analysis shows it to be a female over 50 yrs. of age and of medium stature. The long bones gave evidence of arthritis. (Parker, n.d.: 1). Osteological evidence clearly demonstrates that this individual is not the source of the fragments discussed as Surface Skeleton 4 above (female and associated infant). Directly associated with the cervical area were two red tubular beads and a dog or wolf canine, unperforated. Several pottery fragments were found (at the distal ends of the humeri). When reconstructed, they formed a portion of the smooth surfaced globular base of a vessel, the upper section of which had been carried away by the bulldozer. An incised neck sherd found on the surface near the burial and thought to be from this vessel shows it to be probably Iroquois. A red twisted tubular bead was found in association with pelvic fragments. In the grave fill several biface fragments and a biface base were found. Two fragments of corded pottery were not clearly associated with the burial.

The direct associations in this burial seem to indicate a late historic placement in the 1660-1700 time period if the dating of Seneca trade beads is assumed applicable here (Wray and Schoff, 1953:62).

Burial III

This double burial was discovered in a circular, shallow bowl-like pit 27 ft. from datum. The pit was approximately 8 ft. in diameter. The northeast quadrant of the pit was severely disturbed, but the disturbance was ambiguous. Severe crushing was noted in the long bones of the legs and arms, pelvis, and ribs, but an intact shell gorget was lying directly over crushed ribs.

Placement of the skeletons is illustrated in Figure 2. The upper portions of the bodies lay next to one another in a supine position (oriented northward). Individual 1 had his lower right arm drawn up with the hand resting upon a conch shell. His left lay at his side. Individual 2 also was supine with his lower arms and hands crossed above the pelvis. The lower limbs of both individuals were drawn up and oriented toward the east with the legs of Individual 1 overlapping those of Individual 2.

The skull of Individual 2 had been removed intact, according to observers, but could not be located. Suspicion locates this skull in the mass of cranial material recovered from the ossuary (Area A). The other skull had the facial region and frontal region of the cranium re moved by the bulldozer blade, perhaps accounting for some cranial fragments found in other sections of the disturbed surface of the burial. Distribution of these fragments was complementary.

Location of the grave goods was also instructive but often difficult to segregate from artifacts incidentally included in the grave fill. Much chipping detritus, a hammerstone, chopper fragment, 8 blade fragments, 14 cord marked body sherds, and a plain rim sherd were found either in the disturbed soil (Level I) above the burial or in the grave fill. One, a Perkiomen Broad spear, is illustrated in Plate 2. The others were Meadowoods, one unfinished (Plate 8: e.g.). These could not be securely classed as grave goods.

The grave goods proper were assigned arbitrarily by drawing a north-south line between the skeletons. 13 netsinkers at heights varying only by 1 ft. to 15 in. were grouped around the lower limbs of the two buried individuals. The pattern may be seen in Figure 2 and is suggestive of a net being laid over that portion of the interment. A grouping of 7 unworked round pebbles was located 1. 5 ft. to the south of the burial and may have been associated with the net. The skeleton designated Individual 1 was of a middle aged male of 31-40 yrs. and medium height (Parker, n.d.:2). The individual had moderately well developed brow ridges and fairly rugged muscle attachments in the occipital region. He was moderately robust with slight osteoarthritis evident in the clavicle-scapula region and lower vertebral column. Grave goods, exclusive of netsinkers, associated with this male were remarkable. In the mid-thoracic region was a conch shell gorget (discussed below) with 9 blue glass trade beads inset in prepared holes (Plate 13:a). Below the gorget in the abdominal region were 6 blue glass seed beads, 16 copper seed beads, and fragments of fine copper wire.

Fragments of a turtle shell rattle (Plate 13: b) were found close to the flexed lower limbs. This rattle was probably intact until subsequently crushed during leveling operations. Individual 2 was a younger male, 26-30 yrs., of moderate stature (Parker, n.d.: 2). The skull was lost during level stripping. He was quite robust but demonstrated an early arthritic condition in the pelvis and on the lower lumbar vertebrae (lipping). Some degeneration of the fifth lumbar vertebra is seen which affected the stature but corresponding shifts in the upper vertebral column appear to have corrected this defect. The few grave goods consisted of netsinkers and river pebbles, with two small mercenaria shells under the pelvis.

Observations on this double burial are notable: (1) placement of two males side by side with lower limbs overlapping; (2) a net, or netsinkers grouped around lower limbs; (3) young robust men deceased with no apparent cause of death. These observations suggest that these males were drowned while fishing. Tooker states nets were set by canoe (1964: 63) and a canoe overturned in the swift current evidenced at this point in the Niagara River would be quite dangerous to its former occupants. Since a fear of displeasing the fish characterized the Huron and other Iroquois groups, attendant ceremonies might have dictated the form of interment and positioning of a net in the grave as an offering of placation. Ceremonial involvement is further suggested by the presence of a turtle shell rattle in the grave.

The assignment of the burial is to the Historic Iroquois Period of 1615-1675, on the evidence of the trade beads included with Individual 1 (Table 15). The maximum range indicated

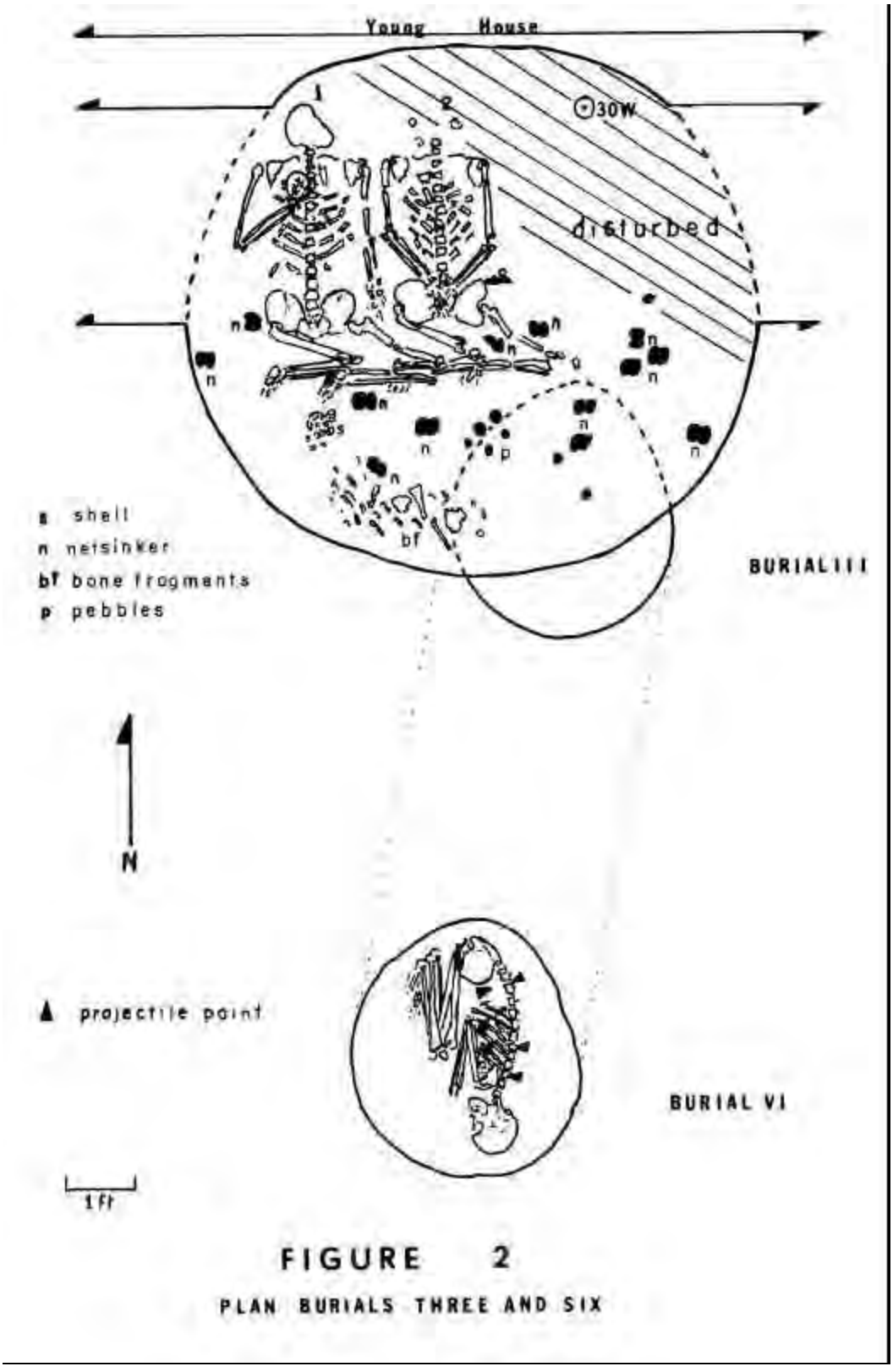


FIGURE 2

PLAN BURIALS THREE AND SIX

by Wray and Schoff (1953) is 1615-1675. This, taken with the popularity of shell ornamentation among the Seneca at about 1640, would argue for an even more restricted range of 1640-1650. Trade bead dating and popularity cycles are notoriously hazardous so that wider temporal range is considered to be more applicable in this case.

Burial IV

Burial IV (Plate 4) was a complete skeleton, severely crushed, found lying tightly flexed on the left side in the remnants of a pit approximately .5 ft. below the disturbed surface in Level II. The pit outline was indistinct and is reconstructed as 4 ft. by 2.5 ft. lying between 35 and 40 ft. west of the datum (Map 2).

The individual was an adult male over 50 years old. The skull exhibits strong muscle markings and large mastoid processes. The orbits are square with well-developed brow ridges. The maxilla and remaining teeth gave evidence of apical abscesses, one at the base of a canine, caused by fourth degree attrition on the teeth (Parker, n.d.:4). The mandible and associated teeth also give evidence of this pattern. Only two teeth, a canine on one side and first premolar on the other, remained prior to death. The picture of this individual with extreme dental attrition and tooth loss due to large and numerous abscesses are combined with infracranial evidence of severe osteo-arthritis. Arthritis in the form of lipping and pitting is present in the following: occipital condyles, glenoid fossa, rib facets on sternum, head of humerus, ulna, head of femur, acetabulum, and vertebral column. Severe deformation of the lumbar vetebrae was also noted (Parker, n.d.: 6).

No grave goods were associated although a Meadowood projectile point, two cordmarked body sherds and a blade fragment were found in Level II close to the burial. Placement of these within the burial pit is dubious. The cultural associations of this burial are unknown due to lack of associated grave goods but the shallowness of the burial suggests Historic Iroquois.

Burial V

This complete skeleton (Plate 5) of an adult female aged over 50 yrs. was found in a deep pit (2. 5 ft. from disturbed surface) at the west end- of the trench (40-45 ft. west of datum). The pit outline was noted in the profile of the north wall of the trench and appeared to be intrusive at least through Level II and Level III. The skeleton was loosely flexed, with the knees drawn up to a level with the pelvis, on its left side. The cranium was rather rugged, with well-developed mastoid processes, slightly developed brow ridges, and square orbits. The mandible is large and the chin square. The teeth exhibit extreme wear and the maxilla and mandible both have abscesses. Many of the roots of the teeth show hypercementosis (Parker, n.d.: 7).

The infra-cranial material is delicate (Parker, n.d.: 8). Osteo-arthritic evidence is seen in the glenoid fossa, head of humerus, rib facets, head of femur, acetabulum, and vertebral column. This individual exhibited in situ a severe twisting of the cervical vertebrae, which may have come about after death when the body was placed within the pit.

The position of grave goods in this burial was instructive. Near the skull, in the facial region, were the remains of a weasel skull (no infracranial bones of the weasel were found), a small fossil horn coral covered with red pigment, and an ovate biface knife. To the west and at the lower portion of the flexed legs but slightly above the bone were four netsinkers and two flaked cobbles. Several fragments of blades and pottery sherds were encountered in the upper reaches of the grave fill where it could be defined in Levels II and III. The lower portions of the pit (intrusive into Level N) contained only the burial and its associated goods.

The cultural affiliation of this individual poses a problem. Certain similarities to Burial III, such as netsinkers placed near the lower body, suggest late temporal placement, as do the findings of Cord-on-Cord sherds above, probably in the grave fill. The inclusion of a weasel skull indicates parallels to the medicine bundles as seen in one instance at Dutch Hollow, Burial 60 (Ritchie, 1954: 13, 68). European trade goods are, however, conspicuously absent. Other parallels to Burials 28 and 56 at Serpent Mounds such as loose flexing and inclusion of painted fossil coral would place the burial much earlier (late Middle Woodland [Johnston, 1968: 23-24]). Assignment is therefore made in the range of late Middle Woodland to Iroquois, since no solid demonstration can be made for the burial as Historic, coeval with Burial III, or earlier.

Burial VI

The individual (Plate 6) in this burial gave direct evidence that he was killed in warfare or by execution. The burial pit was located approximately 7 ft. south of the Young house and 30 ft. from datum. The large pit of Burial III lay almost directly over and intrusive into the pit of Burial VI, which was not noticed until the upper grave was fully excavated. Pressure from the bulldozer had crushed the skeletal material badly even though it lay 1. 5 ft. below the disturbed surface.

The body was tightly flexed, apparently to squeeze it into a small ovoid pit (3.4' by 3.0'). The southward orientation of the head and body suggest this since it has no correlation with that of the other in situ burials whose orientations were north or east. The individual died without serious physical abnormalities, beyond those which were the direct cause of his death. He was a well developed young adult male, aged 26-30 yrs. No grave goods were included. Six projectile points were associated with his body. They were distributed as seen in Table 2 and Figure 2. Any combination of two or more of these (Levanna) projectile points would have been sufficient to kill (Anderson, personal). The artifacts with this individual and the placement of the pit below Burial III suggest an assignment as Late Woodland or Early Prehistoric Iroquois, based upon the Levanna projectile points all of which seem too large to be typed as Madison.

Faunal Remains

A sample of 170 bone fragments of faunal remains was found, of which 60-80 fragments were directly identifiable and classed into species (Table 4). A count was made to determine the percentages of bone which fell into gross categories of Mammal, Bird, and Fish. Several of the fragments (15) were too small or calcined to be classified. Faunal remains utilized as artifacts were not counted into this analysis. Generally, the species were representative of the Western New York-Southern Ontario macro-environmental Lake zone defined by Burt (1957). Taggart (1967) suggests means whereby small faulty samples of faunal remains may be supplemented with artifactual data. Several burials in Area B contain netsinkers and suggest ceremonial involvement. This distribution seen in conjunction with the high percentage of fish argues for the popularity of fishing. Sheephead, Aplodirzotus, was an especially popular subsistence item at the Donaldson Site (Wright and Anderson, 1963: 42-43) while the catfish, Ictalurus, was popular at Riverhaven II (Ritchie, 1969: 188).

White tail deer, Odocoileus virginianus, is also well represented. This game was popular at the nearby Woodland period stations of Riverhaven II (Kochan, 1961) and Martin (White, 1964: 53) on Grand Island. The faunal sample at Area B covers an extremely long period of settlement and no definite associations can be made with any particular culture. It does, however, give selective insights into the range of available food resources and suggests activities which may have served to draw local inhabitants to the banks of the Niagara River.

TABLE 2
Distribution of Projectile Points in Burial VI

Projectile Point	Location
Plate 7, a	Lamina of third Thoracic vertebra (Tip imbedded)
Plate 7, b	Between second and third Lumbar vertebrae.
Plate 7, c	Right, Upper chest cavity
Plate 7, d	Vicinity fourth Cervical vertebra. (Tip lost, possibly imbedded)
Plate 7, e	Between fourth and fifth ribs.
Plate 7, f	Mid-Abdominal region

TABLE 3

Burial Data Summary

Skeletal Material	Grave Goods Associated	Type of Interment	Head Orientation	Age	Sex	Stature (Inches)	Cultural Affiliation
Surface 1	---	---	---	Infant	---	---	(?) Historic Iroquois
Surface 2	---	---	---	Adult	Male	---	(?) ---
Surface 3	---	---	---	Old Adult	Male	---	(?) ---
Surface 4	---	---	---	Adult 20-30	Female	---	(?) Historic Iroquois
Burial I (Alpha)	---	---	(?) North	Young Adult	Male	---	(?) Historic Iroquois
Burial II	2 red Tubular Beads; Twisted Red Tubular Bead; Smooth, Globular Vessel Base; Unperforated Dog Canine	Tightly Flexed or Bundle	North	Old Adult 60-70	Female	65	Historic Iroquois 1660-1700
Burial III							
Indiv. 1	4 Netsinkers; Turtle Shell Rattle; Conch Shell Gorget; 9 Blue Glass Beads (medium); 6 Blue Glass Beads (seed); 16 Copper Rolled Beads, (seed); Fragments Fine Copper Wire	Loosely Flexed (Supine)	North	Adult 31-40	Male	66	Historic Iroquois 1615-1675
Indiv. 2	9 Netsinkers; 7 Round River Pebbles; 2 Shells (Mercenaria)	Loosely Flexed (Supine)	North	Adult 26-30	Male	68	Historic Iroquois
Burial IV	---	Tightly Flexed (Right Side)	East	Old Adult 60-70	Male	70	Late Middle Woodland to Prehistoric Iroquois
Burial V	Weasel Skull; Horn Coral-red; Ovate Biface Knife; 4 Netsinkers; 2 Choppers	Loosely Flexed (Left Side)	East	Old Adult 50-60	Female	66	Late Middle Woodland to Prehistoric Iroquois
Burial VI	7 Levanna Points (Table 2)	Tightly Flexed (Left Side)	South	Adult 26-30	Male	67	Late Woodland to Prehistoric Iroquois

TABLE 4
Faunal Remains

Common Name	Latin Name	% in sample
Mammals		
white tail deer	Odocoileus virginianus	
chipmunk	Tamias striatus	
grey squirrel	Sciurus carolinensis	53%
woodchuck	Marmota monax	(90)
raccoon	Procyon lotor	
beaver	Castor canadensis	
muskrat	Ondatra zibethicus	
Birds		
duck	Athya	2%
		(4)
Fish		
catfish	Ictalurus	
drum/		36%
sheepshead	Aplodinotus grunniens	(61)
yellow walleye	Stizostedion vitreum	
Unknown		
unidentified by		9%
category or species		(15)
	Total - -	100%
		(170)

Artifacts

The projectile points from the Orchid Site were widely variant, ranging from Archaic to Late Woodland times. A total of 28 points were found in whole or fragmentary condition in the types listed in Table 5 and illustrated in Plates 7 and 8. In all cases when projectile points were not directly associated with a feature or burial they were assumed to have been in the fill at the level of burial intrusion. This may be seen in Table 5 where the burial association is in parentheses.

Ten triangular Levanna points were found, with 6 (Table 5:2-7) being located in and around Burial VI. The locations of these points are illustrated in Figure 3 and listed in Table 2. These are presumed to have been associated with the burial not as grave goods but as the instruments of death for this individual. One of these points (Table 5:3; Plate 7:2) had lost a tip already referred to above as being imbedded in bone. Number 5, Table 5; Plate 7: d, had also lost a tip but this was not located in the bone recovered. The position of the burial (under one of historic Iroquois date) and the attributes of the points argue for placement as Levannas and assignment to the Late Woodland Period. The other small Levannas are unremarkable except that all three (Table 5:Nos. 8, 9, and 10; Plate 7: h, i, j) are fragmented and are of poor workmanship. The points associated with the burial have a range in length between 46. 5 mm; thickness is not variable. Basal form is straight to subconcave in all cases. The series may illustrate the range of available forms at any one time among a homogeneous group.

Within the above sample of Levannas acceptable variation appears in only one significant dimension, length. All other dimensions are relatively constant with width varying less than 7

TABLE 5
Projectile Point Types

R—reconstruction

Number	Type	Length mm	Width mm	Thickness mm	Provenience by level	Plate No.	No.
1	Unclassified	76	36	5	III	7	g
2	Levanna	46.5	21.5	5	Burial 6	7	b
3	Levanna	45 R	27	5	Burial 6	7	a
4	Levanna	41	20.5	6	Burial 6	7	c
5	Levanna	40	23.5	5	Burial 6	7	d
6	Levanna	32	22	5	Burial 6	7	e
7	Levanna	26	21	5	Burial 6	7	f
8	Levanna	38 R	26	5.5	II	7	h
9	Levanna	37 R	25	5	II	7	i
10	Levanna	26.5	20	5.5	II	7	j
11	Jacks Reef Corner-Notched	46 R	27.5	6	II	7	1
12	Jacks Reef Corner-Notched	31 R	20	6	II	7	k
13	Meadowood	57	32	5	II (Burial III)	8	9
14	Meadowood	58 R	22	4	II	8	j
15	Meadowood	55 R	26	4.5	II	8	h
16	Meadowood	48 R	22	5.5	III	8	c
17	Meadowood	48 R	19	5	I	8	d
18	Meadowood	52 R	23.5	5	II	8	f
19	Meadowood	43 R	22.5	4.5	II	8	i
20	Meadowood	48 R	22	5. 5	III	8	b
21	Meadowood	44	18	6	III (Burial IV)	8	a
22	Meadowood	43	18.5	5	I	8	e
23	Perkiomen-Broad	52	32.5	8	II (Burial III)	7	m
24	Orient Fishtail	74	25.5	8.5	III	8	0
25	Orient Fishtail	52.5	20	7.5	II	8	n
26	Bare Island	47.5	20.5	5.5	III (Burial VI)	8	k
27	Brewerton Side-Notched	47	25.5	6.5	II	8	1
28	Brewerton Eared Notched	41.5	23.5	8	II	8	m

mm and thickness less than 1 mm. The outlines illustrate (Plate 7: a-f) variation in some degree in the lateral edges, incurvate (No. a), excurvate (Nos. b, f), and essentially straight (Nos. c, d, e). It may be advanced that variation in length is acceptable and minimally the outline of lateral edge, while non-acceptable variation includes basal outline, thickness, and width.

One large point excavated at a depth of 1.10 feet in Level III has been left unclassified (Table 5:1:Plate 7: g). It is extremely thin (5 mm) for its length (76 mm). There is slight basal grinding evidenced on both lateral edges about 1. 5 cm above the basal juncture, and the portions of these edges toward the distal end are mildly serrated by tertiary chipping which forms an S- curve beveling; the outline is triangular. Apparently of Levanna affinities by shape, the thinness, mild serration and S-curve beveling are characteristic of Meadowwood cache blades (Ritchie, 1955:42).

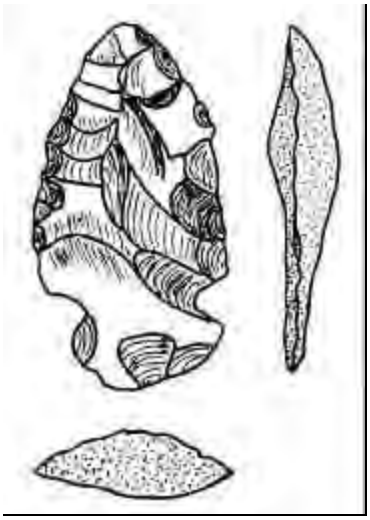
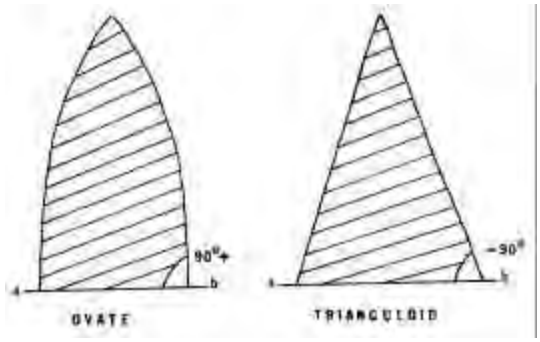


FIGURE 3
UNFINISHED MEADOWOOD POINT

Two fragments sum Jack's Reef Corner Notched in type. Reconstruction based upon illustrations and the direction of notches fit the type as illustrated and described by Ritchie (1961, Plate 11, p. 26, 27). Size range is 46 mm to 31 mm in length and 27. 5 mm to 20 mm in width. Thickness is also quite close to that described as typical (Table 5, Nos. 11, 12; Plate 7: k, 1).

Meadowood type projectile points were more numerous than the Levannas but are not quite as homogeneous a sample (Plate 8: a-j). Eight of the 10 points are to some degree fractured while a tenth is uncompleted. Partial reconstruction based upon illustrations, thickness, and width were made and all the points were partially or wholly reconstructed for measurement. The unfinished Meadowood point (Table 5: 13, Plate 8: g) illustrates some of the techniques utilized by aborigines in forming this type. The width exceeds that of any of the other Meadowood points by at least 8 mm. This point is illustrated further in Figure 3, in longitudinal and transverse sections with the chipping illustrated for one side. Work had progressed to the stage of manufacture where the artisan was ready to thin it by carefully controlled pressure flaking from the lateral edges of the blade to attain the appropriate thickness (approximately 4.5-5. 5 mm judging from the sample). This point may have been discarded because this thinning process would decrease the width below acceptable limits. Side-notching of the blank appears to have taken place prior to thinning which suggests that when haftable points were desired, certain intermediate steps such as finishing the blade were by-passed (Granger, n.d., 41).



a-b = endline

Figure 4. Blade Points of Basal Juncture

Three aberrant side notched points exhibit close technical affinities to the Meadowood type and have been so classified. These are Table 5: 20, 21, 22; Plate 8: a, b, e and fall close to those projectile points found in the Brock Street Burial illustrated by Kenyon and Cameron (1961, Plate 2: 4, 6, 7). The ranges of length (45 mm-58 mm), width (19-22 mm), and thickness (4-6 mm) encompass these points described (Ibid., p. 43). Further inquiries may reveal an Ontario geographical variant, or later temporal variant (Point Peninsula), to Meadowood projectile points, all of which have convex or rectangular basal elements of approximately 10 mm length or greater (Johnson, 1968: Plate 44: side-notched points; Plate 53: 8). Blade element width is generally less than the range for most Meadowood projectile points. Such points are illustrated from Surma Site (Emerson and Noble, 1966, Plate 3: 6) and Martin Site, Grand Island (White, 1964: 53). Others from more northerly sites such as Serpent Mounds (Johnson, 1968) and Cameron's Point (Spencer and Harper, 1968: Plate 4: 2) conform to this variant.

The remainder of the projectile points of Meadowood type have the ranges of 43-58 mm in length, 18-23 mm in width and thickness of 4-5. 5 mm. These are normal limits for Meadowood projectile points (Ritchie, 1961: 35-36). No significant distribution of Meadowood points was noted when plotted by level (Table 6) but disturbance may have been a factor.

`Two fragmentary projectile points have been tentatively classed as Orient Fishtails. One of these Table 5: 25) is extremely crude (Plate 8: n) while the other (Table 5: 24; Plate 8: 0) is more conformable to the type (Ritchie, 1961, Plate 17: 39). A Perkiomen Broad (Table 5: 23; Plate 7: m) of the morphology seen at the Piffard Site (Ritchie, 1965: Plate 50) is also present, but in disturbed context.

The Late Archaic is represented by a Brewerton Side-notched point (Table 5:27), a Bare Island point (Table 5: 26), and a Brewerton Eared Notched point (Table 5: 28). These are il

TABLE 6
Projectile Points Plotted Type, Level and Feature

Type	Level I%	Level II%	Level III%	Burial 6%	Total	% of Total
Levanna		3(21.3)		6(100)	9	(32.1)
Jack's Reef Corner Notch		2(14.2)			2	(7.1)
Meadowood	*2(100)	*5(35.7)	3(50)		10	(35.7)
Orient		*1(7.2)	1(16.6)		2	(7.1)
Perkiomen		*1(7.2)			1	(3.6)
Bare Island			1(16.6)		1	(3.6)
Brewerton Side-Notched		*1(7. 2)			1	(3.6)
Brewerton Earred-Notched		*1(7. 2)			1	(3.6)
Unclassified			1(16.6)		1	(3.6)
Totals	2(100)	14(100)	6(100)	6(100)	28	(100.0)

lustrated in Plate 8: l, k, m. Both Brewerton points were found in contexts which should be regarded with suspicion due to intrusion of several features (Burials IV, V and Feature 1).

With the exception of the Brewerton Side-notched point all of the above described points are made on Western Onondaga Chert of varying shades of gray. The Brewerton appears to have been made on a light gray silaceous chert of non-local origin.

Only very cautious remarks may be made upon the distribution of projectile points at Area B. Certain factors such as disturbance render much of the charted distribution open to question. An asterisk has been placed in Table 6 to indicate these questionable associations.

Leaving aside the dubious associations, there is a relation of Middle to Late Woodland points with Level II (5) and Late Archaic to Early Woodland points with Level III (6). While the sample is too small to be statistically valid in a chi-square, a Fisher's Exact Test shows the relationship to be significant.

Bifaces

A total of 108 whole blades, blanks and fragments were collected and the following categories were formed for analysis: 3 complete blanks; 10 complete or nearly complete blanks; 33 analysable blades and blanks; total, 46 analysable blades and blanks. A total of 62 fragments were unanalysable.

On initial sorting the blades/blanks fell into shape categories of triangular and ovate. Criteria used were the angle of juncture of the lateral edges and the end line drawn between the lateral points of juncture. If the angle formed was acute (less than 90°) the blade or fragment was called trianguloid and if right angled or obtuse (between 90°-110°), was called ovate. This simple sort-by-eye, revealed 17 trianguloid and 29 ovate specimens. Categories were then further segregated (Table 7). A series of statistical tests for depth and association gave no significant results.

In the trianguloid category the largest of the blanks measured 59 mm while the mean reconstructed blank length was 50 mm (Plate 9: a, b). The mean reconstructed blade length was 45 mm with a basal width of less than 30 mm (Plate 9: c, d). The blanks in this category were differentiated from blades by a mean thickness of 12 mm for blanks as opposed to a mean thickness of 6 mm for blades. Chipping in all cases on finished blades was fine secondary, working from the lateral edges and leaving a mildly plano-convex longitudinal section. Two wide trianguloid blades were encountered with all the above characteristics but a mean basal width of 35 mm (Plate 9: e). All the trianguloid blades have subconvex bases. No definite temporal assignment may be made for these blades, but they may be associated with Late Woodland in that the width (below 40 mm) coincides with that seen in Levanna projectile points.

The ovate blades may be described as cache blades, of the defined Meadowood style. These are mostly of the ovate-base subconvex and ovate-base convex varieties. The mean re-

TABLE 7
Blades and Blanks
Trianguloid
(Blade Thickness Range 4-8mm)

Category	Level II	Level III	Disturbed	Total
Blanks	3	3	4	10
Broad (Width over 30 mm)	1		1	2
Undifferentiated				
(Width under 30 mm)	2	2	1	5
Sub-total			17	

Ovate
(Blade Thickness Range 3-6mm)

Small (Length under 40 mm)		1	1	2
Large (Length over 80 mm)			1	1
Base subconvex	7	8	4	19
Base convex	2	2	2	6
Base subconcave		1		1
Sub-total				29
			Total	46

constructed length is 65 mm while the mean thickness is 6 mm. The shape of basal variation may be seen in Ritchie's illustrations of the Indian River Caches of Meadowood affiliation (1955, Plates 9 and 24). The blade thickness is unusual; with one exception (Plate 9: k) the range was 3-6 mm which, while it over-laps the trianguloid range of 4-8 mm, defines a group produced by more refined flaking. The ovate blades are illustrated in Plate 9: f-j (base convex) with the large ovate and miniature ovate blade of 37 mm seen as Plate 9: k, 1. The ovate, base subconcave, is seen in Plate 9: m.

The problems encountered with essentially non-diagnostic blanks and blades is the assignment of these to a single phase when differences have not been defined within the long time span. The buried deposits at the Orchid Site did not allow such delineation. At best, descriptive categories can be set up which order the data in such a way that relationships to more securely placed types can be illustrated.

Scrapers

Seven scrapers of varying types were found. All were formed on native flint. The following table (Table 8) shows the scrapers divided into unifacially and bifacially worked objects. The working surfaces indicate classification as end, side, or thumbnail scrapers (end and side working) on small flakes.

The two unifacial side scrapers were found within the west end of the excavation in features, the smaller with Feature 1 and the other with Burial 5. Both appear to have occasional use scars only. The larger (Plate 10: k) was 86 mm in length, 27 mm in width, 7 mm in thick ness and had use scarring and battering on all edges, while the smaller (Plate 10: 1) was 27 mm long, 17 mm wide, 3 mm thick and had small utilization scars only on the lateral edges.

Two flake uniface end scrapers with occasional utilization on the one edge were noted. One was found in Level II and had a straight scraping surface which appeared to have been sharp until dulled by use. It was 19 mm in width, 24 mm in length and 2 mm in thickness (Plate 10: m). The other demonstrated wear on a portion of the striking platform which formed

a rather thick sharply angled (80°) edge. This end scraper was 23 mm wide, 28 mm long and 3 mm thick at the striking plat- form-scraping surface (Plate 10: n). It was found in the grave fill of Burial N but not associated with the skeletal material.

One unifacial thumbnail scraper was found in Level II. It showed utilization on approximately 2/3 of its circumference. All flake scars from use, detached from the dorsal surface forming a steeply angled scraping surface (800-900). It was 17 mm wide, 22 mm long and 5 mm thick (Plate 10:o).

TABLE 8
Scrapers

Uniface	5	
Side	2	(Plate 10: k, 1)
End	2	(Plate 10: m, n)
Thumbnail	1	(Plate 10: o)
Biface	2	
End	1	(Plate 10: i)
Side-Graver	0	
Trianguloid	1	(Plate 10: j)
Total	7	

There were two bifacially worked scrapers. The one was an end scraper (Plate 10: i) with an acutely sloped nose with a peripheral working surface. It was 29 mm in width at the nose and 21 mm at the shank. The thickness was 15 mm. The shank was broken just to the posterior of the primary working surfaces. Some battering on the shank indicates possible usage as a strike-a-lite. This type scraper, typical of Late Woodland and Iroquois assemblages, was found in Level III, evidently mixed by intrusion. A bifacially worked trianguloid flake of 48 mm length and 25 mm width gave evidence of both side scraper and graver usage. It has a beak, with scraper use scars along both lateral edges; the base has been thinned (Plate 10: j). This scraper was found in Level II and appears to be similar to one found at the Surma Site (Emerson and Noble, 1966, Plate N, No. 18).

No clear association of types of scrapers with various cultural horizons may be made with the exception of the typologically late end scraper and the trianguloid side scraper-graver which may be Meadowood in affiliation.

PLATE 1. The Orchid Site, Area B; Salvage Archaeology at a Parking Lot.

PLATE 2. Burial III-Partially excavated, looking southwest.

PLATE 3. Close-up of Burial III-Showing in-situ placement of shell gorget and fragmented cranial portions of Individuals 1 (Right) and 2 (Left). Looks north.

PLATE 4. Burial IV- Looking north-northwest

PLATE 5. Burial V-Looking North, Illustrates horizontal definition of the burial pit outline in Level N and in the profile of the North wall.

PLATE 6. Burial VI-Looking North.

PLATE 7. Projectile Points- a-f-Levanna Points associated with Burial VI; g-j-Levanna Points; k, 1-Jacks Reef Corner Notched Points; m-Perkiomen Broad Point.

PLATE 8. Projectile Points-a, b, e- Ontario Variant, Meadowood Points c, d, g-i-Meadowood Points (g-Unfinished); k-Bare Island Point; 1-Brewerton Side Notched Point; m-Brewerton Eared Notched Point; n-o-Orient Fishtail Points.

PLATE 9. Blade and Blanks-a, b, e-Trianguloid, over 30 mm; c, d-Trianguloid, under 30mm; f-h-Ovate, Base subconvex; i, j-Ovate, Base convex; k-Ovate, Over 80 mm; 1-Ovate, Under 40mm; m-Ovate, Base Subconcave.

PLATE 10. Miscellaneous Flint Artifacts--a, b-Asymmetrical Knives; c, d-Ovate Knives;-e-Ovoid Knife; f, g-Strike- a-Lights; h-Drill; i-Biface End Scraper; j -Trianguloid End Scraper; k, 1-Uniface Flake Side Scrapers; m, n-Uniface End Scraper; o-Uniface Thumbnail Scraper.

PLATE 11. Other Lithic Artifacts-a, b-Abrading Stones; c-Typical Netsinker; d-Drilled and Notched Steatite Rim Sherd; e-Quartzite Chopper Fragment.

PLATE 12. Bone, Antler and Fossil Artifacts- a-c-Animal Bone Awls; d-Antler Projectile Point (?); e-Unworked Antler Tine; f, g-Cut Antler Fragments; h-Catfish Spine Awl or Needle; i-Dog or Wolf Canine; j-Weasel Skull and Mandible; k-Fossil Horn (Lambeophylum) Coral; 1-Bird Bone Bead.

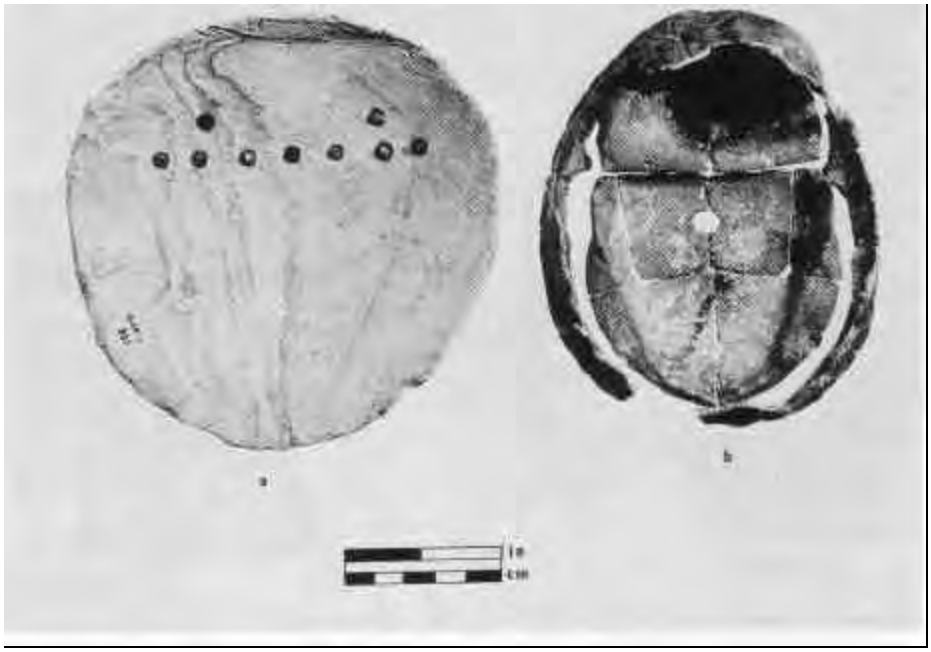


PLATE 13. Shell Artifacts - a. Drilled Conch Shell Gorget With Inset European Blue Glass Trade Beads; b. Fragmented Drilled Box Turtle Carapace and Plastron- Turtle Shell Rattle.

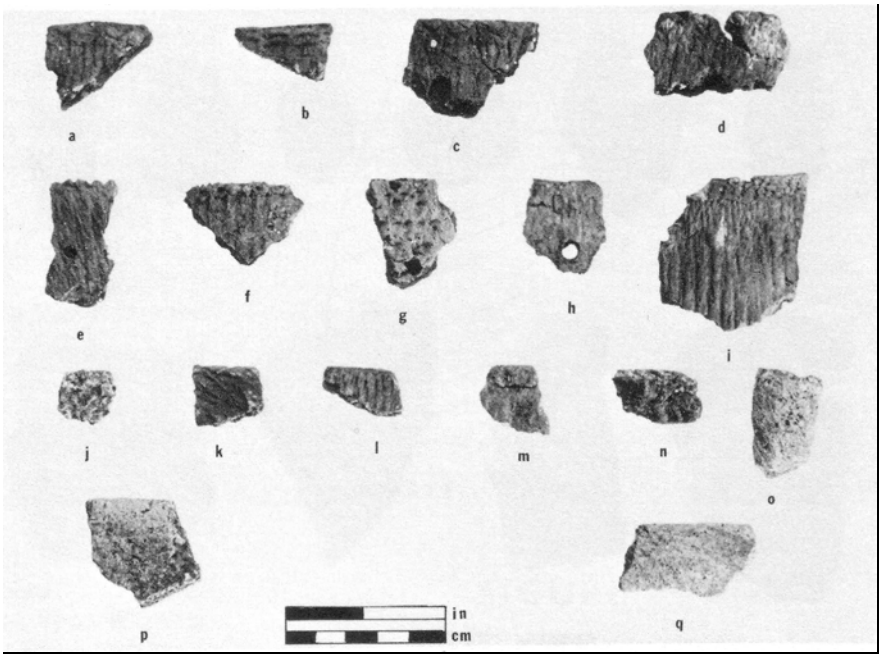


PLATE 14. Rim Sherds-a-i-Wickham Punctate; j-l, n- Indeterminate; o-Plain Pipe Rim and Bowl Fragment; p, q-Point Peninsula Plain.

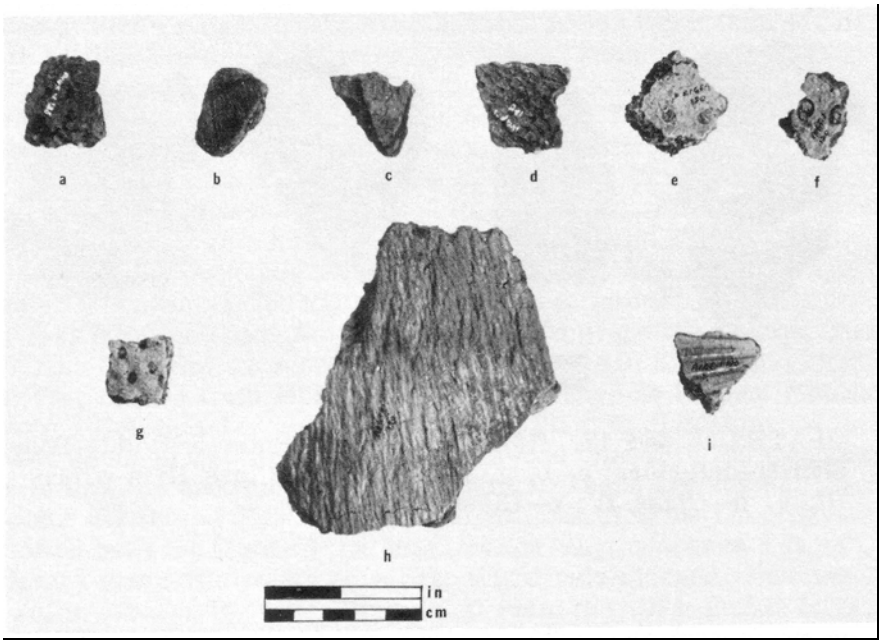
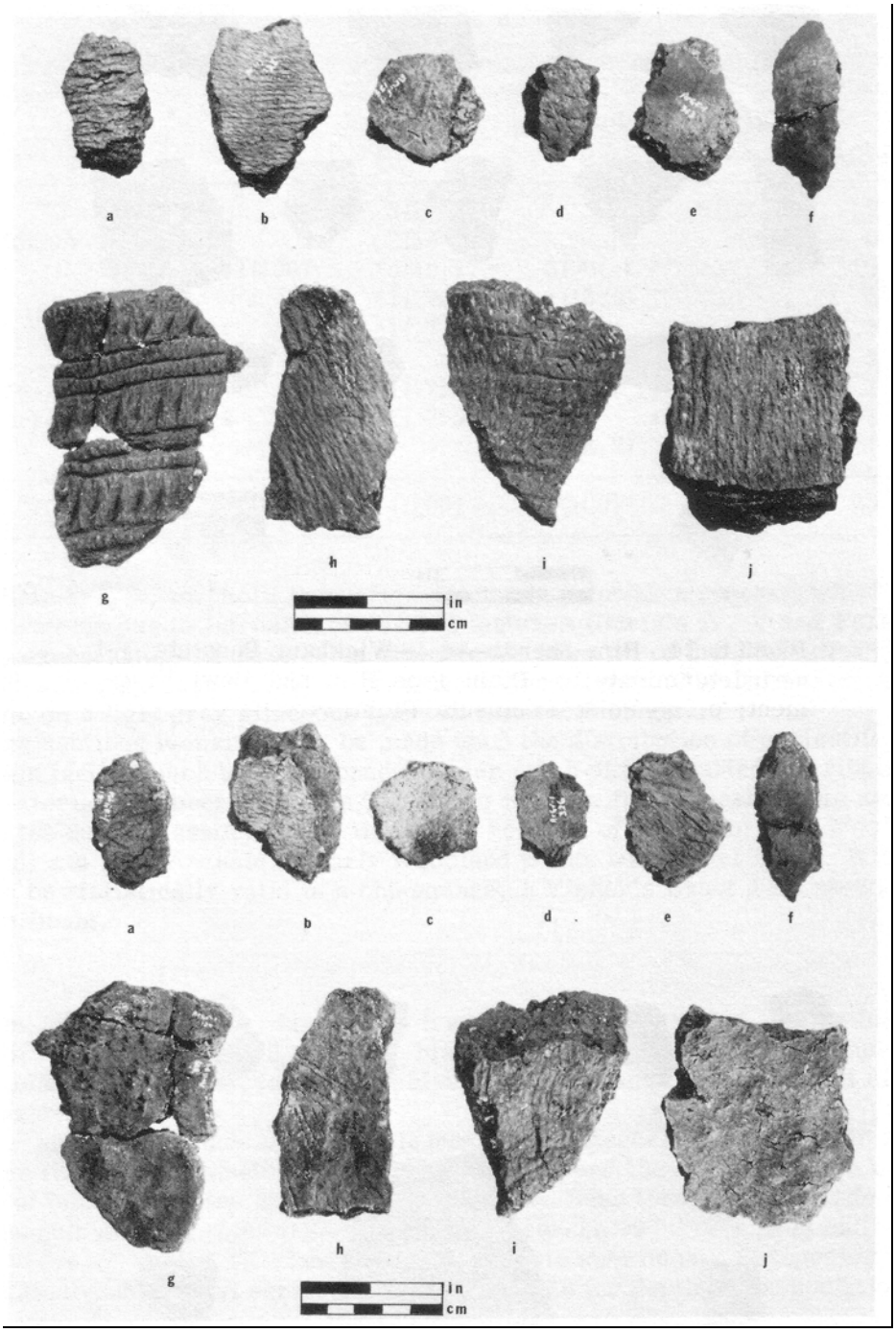


PLATE 15. Decorated Neck and Body Sherds-a-Triangular Punctated; b-d, h- Circular Punctated; e-g-Circular and Elliptical Punched; i-Broad Line Incising.



PLATES 16 and 17. (16)-Body Sherds-Exteriors; (17)-Body Sherds-Interiors: a, b, g, i-Class I; j-Class II; h-Class III; c, d-Class IV; e-Class V; f-Class VI.

Biface Knives

Five bifacially worked knives were distributed throughout Burials V and VI and Levels I and II. These are broken down typologically into three classes: Ovate (2), Ovoid (1), and Asymmetrical (2).

One ovate knife was found in the fill of Burial 5 and one in Level I. The knife in Burial 5, 51 mm in length, 24 mm in width, and 9 mm in thickness, displays battering on both lateral edges and the nose (Plate 10: c). It was presumably associated with a "medicine bundle". The second, from Level I, has both the nose and basal portions fragmented to a degree; it is approximately 50 mm long, 28 mm wide and 10 mm thick. Little or no use scarring appears on the lateral edges but the nose is highly battered (Plate 10: d). These knives bear striking resemblances to specimens found at Surma Site (Emerson and Noble, 1966, Plate N, Nos. 20, 21), Riverhaven II Site (Ritchie, 1965, Plate 64, No. 1) and Sinking Ponds Site (Granger, n.d., Plate 10, No. 12). Ovate knives had a rather long temporal distribution through the Archaic and Woodland and into Iroquois times, as indicated by the presence of a complete specimen in a "medicine bundle" included as grave goods for Burial V.

A fragmented ovoid knife (Plate 10: e) was found in Level II. It was 31 mm in width and 9 mm in thickness. No assignment was made for this knife. Two asymmetrical knives came from Level II and the vicinity of Burial VI respectively (Plate 10: a, b). That from Burial VI was 53 mm in length, 37 mm in width and 11 mm in thickness. It has a highly curved cutting edge and retains the striking platform basally. One lateral edge shows little working except near the tip. The other (Plate 10: b), fragmented basally, was 29 mm wide. Utilization was seen on the lateral edges. The specimen associated with Burial VI may be Late Woodland, if the highly tenuous association with the burial is valid; the other was unassigned.

Drills

A complete drill of the expanded base type (Plate 10: h) was found in Level III. It closely resembled several drills of Meadowood Phase found at Riverhaven II (Ritchie, 1965: Plate 64, 2). The shank and tip of this drill exhibited extreme wear so that several surfaces were worn smooth and the tip highly ground. It was 39. 5 mm in length with a basal width of 21.5 mm, a shank width of 7 mm and a thickness of 6 mm.

Strike-a-Lights

Two strike-a-lights were found in Levels II and III respectively. That found in Level II was ovate in outline, 51 mm long, 17 mm thick, biconvex in longitudinal section, and crudely flaked (Plate 10: f). Battering was seen on both lateral edges. The other was ovate in shape and sharply beveled near the base. It was 43 mm in length, 13.5 mm in thickness, and planoconvex in longitudinal section (Plate 10: g). This specimen exhibited battering on the basal edge and one lateral edge. Neither of these are typical strike-a-lights but are seen as bifacial blanks utilized as are typical strike-a-lights (Ritchie, 1965, Plate 60, 10: White, 1966, Plate 8, 1-4).

Net Sinkers

Twenty-five net sinkers were found variously distributed throughout the excavations and as grave goods. All were uniformly ovoid and flat, with notches battered out on the lateral edges. The mean length was in a range from 110-120 mm, while the mean width was between 90-100 mm and the mean thickness was 20 mm. The weight range was from 190 grams to 230 grams. All were smooth river pebbles of light gray shale (Plate 11: c). Distribution was as follows: Level I-2; Burial III-15; Burial V-4; Burial I-4; Total-25.

Abrading Stones

Three abrading or rubbing stones were found. All were nondescript sandstone pebbles displaying use striations on both flat surfaces. These were apparently tools of casual use only. Two were found on the surface and one in the grave fill of Burial V but not directly associated with the skeleton. Mean thickness of all specimens was 30- 50 mm (Plate 11: a, b).

Battered or Flaked Cobbles (Choppers?)

Three were found, 1 in Feature I and 2 in the fill of Burial V, not associated with the burial. All were fragmentary and all displayed flaking-battering on a11 edges. The 2 found in Burial V grave fill were on flat river pebbles and not greatly differentiated from net sinkers except for peripheral flaking. The other (Feature I) was a relatively flat sandstone pebble (30 mm thick) with battering and/or flaking on two edges (Plate 11: e).

Steatite Vessel

At a depth of .5 ft and 35 ft. from datum the rim sherd of a steatite vessel was found, in the area of Burial IV. The relatively high stratigraphic position was due to disturbance by the intrusion of this burial. The sherd was elongate (103 mm long) and L-shaped. The rim has notching approximately every 6 mm to a depth of 2 mm. A repair hole was biconically drilled 1.5 mm below the lip. Thickness at the lip was 13 mm while at the lower end 28 mm. The steatite was unleached fine grained talc with no crystalline inclusions (Plate 11: d). The presence of this sherd and two Orient Fishtail projectile points and a Perkiomen Broad Spear place Transitional traits at the site. Apparently these were part of a Transitional-Early Woodland complex as seen in other Western New York sites (Granger, n.d.). But there is no strong evidence for a Transitional-Orient complex at Orchid at this time.

Bone, Antler, Shell and Fossil

Bone

Three animal bone-awls and one catfish spine awl were found. Two bone awls and the fish bone awl occurred in Level II while a third came from Level III. These awls measured 685 mm, 47 mm, 145 mm and 102 mm in length respectively, with a mean width of 15 mm with the exception of the fish spine awl (3 mm in width). They are illustrated in Plate 12: b, c, h, a. All were fragmented, with the exception of the fish spine.

A bone bead cut from a bird long bone was found in Feature I. It was 13 mm in diameter and 37 mm in length. No drilling of the interior was observed. The interior diameter was 11 mm (Plate 12: i). A dog or wolf canine was associated with Burial II. This canine was unworked (Plate 12: i). A skull belonging to a weasel-like mammal (Mustela, ?) was found directly associated with Burial V (Plate 12: j). This skull was first thought to be of an intrusive burrowing animal but no trace of a burrow or nest was found. The location, close to the thoracic cavity of the flexed individual, suggested placement as grave furniture; a biface ovate knife and a red stained fossil (see below) located near this skull suggested that this may have been the remains of an amulet bag. A similar occurrence was noted at the Dutch Hollow Site where in Burial 60 a weasel skull and various amulets of brass, stone, shell, glass, and red paint were associated with the young female burial (Ritchie, 1954: 13, 68). Ritchie suggests that, following Morgan, this was regarded as a powerful talisman against evil (Ritchie, 1954: 68). The fact that Burial V was a female makes the parallel more striking. Other than the fossil and the knife no further ceremonial amulets were included with the skull.

Antler

Four fragments of antler were analyzed. Two of these showed no workmanship beyond some cutting on the distal end of one, possibly for the detachment of the tine. The other fragment shows wear on the distal and proximal ends where fracture had occurred but this appears to have been due to natural agency. These were located in Levels II and III respectively (Plate 12: f, g). An antler tine was found in Level III near the one discussed above. It showed no workmanship and was poorly preserved as was the other fragment in Level III (Plate 12: e). One distal end of an antler appeared to have been drilled at the base, possibly for hafting. It was located in Feature I and was even more poorly preserved than those discussed above. The surface had been lost and the tip was rounded. Use as an antler projectile point is possible but the specimen is too poorly preserved to be sure (Plate 12: d).

Shell

Two artifacts of shell were recovered, both of ceremonial or ornamental nature, and were included as grave goods with Burial III, Individual 2. One was a turtle shell rattle formed of the plastron and carapace of a Box Turtle (Terrapene carolina) (Plate 13: b). The carapace was highly fragmentary, no doubt due to the weight of the bulldozer, and many of the fragments were lost. The rattle is similar to specimens excavated as grave offerings at the Surma Site and also to specimens widely distributed on Iroquois sites. Reconstruction of the carapace shows it as 130 mm long and 11 mm wide, with two holes located 35 mm apart on the upper surface. Other fragments suggest further holes (5 mm in diameter) possibly in arrangements as illustrated by Ritchie (1954, Plate 10, No. 2). An attachment hole (2 mm in diameter) duplicated on both carapace and plastron occurs on the forward edge. On the plastron holes of 1.5 mm mean diameter are located at points where joining was necessary. A large hole (8 mm in diameter) centrally located was probably so placed for handle attachment, as is seen on ethnographic specimens where thin rods are put in the plastron or run back the length of the handle for re-enforcement. Box turtle rattles have a wide distribution, long history, and functional significance as paraphernalia for curing rites (False Face Ceremony) and in hunting (Ritchie, 1954:64).

A shell gorget (Plate 13: a) cut from the shell of channeled whelk (Busycon canaliculaturn) was found reposing concave side up on the sternum of Individual 2, Burial III. This large circular shell gorget is similar to two excavated by Houghton at the Van Son Site on Grand Island in the Niagara River (Houghton, 1909, Plate 3, No. 135: 359), although the largest, 127 mm (5 in.) diameter was found located in the lumbar region of a burial (Ibid., 1909: 359). A similar circular shell gorget was recovered at the St. David's Site, 19 mi. to the northwest (Annual Archeological Report of Ontario, 1911: 83).

An unusual feature of this particular gorget was an inlay of nine round blue glass beads in biconically drilled holes. These holes (5 mm mean outside diameter) gave no indication, under microscopic analysis, of having residual glue or adhesive substance. Remains of blue seed beads and fine copper wire beneath the gorget suggest that the blue beads were somehow attached from the back by wire run through the hole, the bead, and then out through the adjacent bead. Stains of oxidized copper in one bead support this contention. The angle of the bore, in situ, is acute and pointed in the direction of the next adjacent hole as if the wire had been tightened in that direction. Possible perishable ornamentation hid the bore wire from view. The two upper holes may have held beads with the wire looped back for attachment. The dimensions of this gorget are 135 mm in diameter, with 50 mm between the upper holes, 10 mm between the upper and lower rows and 10 mm between the holes of the lower row (Figure 3, Burial III).

In contrast to the Orchid specimen, the St. David's specimen was 108 mm in diameter and had a border of shallow indentations on the concave outer surface. Like the Orchid specimen, it had rows of holes out from the center (7 in one row and another apart from this row). Ridley (1961, Plate 11) illustrates a shell gorget and refers elsewhere to gorgets in the lower Ontario area. These have less resemblance in form.

Fossil

A horn coral (Lambeophylum okalitch) (Plate 12: k) of Middle Ordovician age and most probably from the Black River formation which outcrops in many places on the Niagara Frontier was found associated with Burial V together with the weasel skull discussed above. This fine paleontological specimen would be unremarkable were it not for the coat of red paint (probably red ochre) applied on all surfaces. Although it is well known that aboriginal peoples often collected fossils which were easily recognizable as animal or floral, the literature surveyed does not clarify the significance or function of fossils. The Orchid specimen appears to have been an inclusion in a medicine bag and, since it is painted with a ritual color, may have been an amulet or fetish. Similar occurrences of fossils in burials were noted at the Serpent Mounds, Burials 28 and 56 (Johnston, 1968: 23-24) (Plates 15 and 20) which were found in Mound E, where fossil coral was also favored. Although there was red staining on some of the artifacts in the above burials, none has been noted on the fossils.

Pottery

Rims (Plate 14): A sample of 16 rim sherds representing 11 vessels was found. One vessel was represented by 4 rim sherds, none of which could be joined. Initially three classes of exterior surface finish and decoration were represented in the following vessel frequencies: Cord marked, no punctations or bosses-4; Cordmarked, punctations or bosses-5; Dentate, punctations-1; Plain, undecorated-1.

None of the vessels was interior cordmarked, exclusive of lip or rim decoration. It must be noted here that the five vessels without punctations or bosses cannot be relied upon as a sample, since all the sherds were too small to illustrate punctations at the distance from the lip seen on the other sherds. Four of these sherds were thus unanalysable as to type (Plate 14: j, k, 1, n).

Those vessels displaying punctations or bosses on the exterior surface show a range of technique which may be classed as: Punctate, hole pushed through vessel wall-1; Punctate, interior noded-2; Punctate, no interior deformation-1; Boss-interior punctate-1.

The two plain rims are separable primarily due to provenience and rim form, one lip being flat while the other is rounded. The possibility exists that these are from one vessel and, since temper, color and texture are similar they will be treated as one vessel (Plate 14: b, g). These have been typed as Point Peninsular Plain (Ritchie and MacNeish, 1949: 103). Although they do not exhibit incised lines crossing the lip they seem more conformable to this type than to Canandaigua Plain (Ibid., 110).

The decoration on one vessel may be traced by examination of several sherds (Plate 16: g; Plate 14: b, c) in the pottery sample. Thus while this vessel is represented by only four small rim sherds (Plate 14: a-d), neck and body sherds from the same pit (Plate 16: g) may be included to form a large reconstructed neck and rim sherd illustrative of the vessel's decoration. This thick walled vessel has a flat lip with a series of right oblique cord-wrapped stick impressions uppermost on the rim (Plate 14: a, c). Approximately 20 mm below the lip and 15 mm apart, was a line of large punctations. Below this was a series of 3 incised horizontal lines, below which were another series of right oblique cordwrapped stick impressions (Plate 16: g). The motif of horizontal lines and right obliques was repeated twice again. These exterior elements were applied over a primary corded surface on body, rim and lip. The interior of the rim was decorated by a series of what appeared to be fingernail impressions arranged in columns. This decoration is carried to an interior depth of 25 mm (Plate 14: b). The lower portion of the interior was smoothed over cordwrapped stick impressed (Plate 17: g). This vessel has been typed as Wickham Punctate, although the corded punctations may indicate this as a transitional variant somewhere between Wickham Punctate and Jacks Reef Corded Punctate (Ritchie and MacNeish, 1949: 104, 106).

One vessel, also Wickham Punctate, has a rudimentary collar (Plate 14: h, m). Lip form ranges from round to flat, with two rims displaying lipping to the exterior (Plate 14: e and g). Eversion was noted on only three vessels (Plate 14: a-d, h and m, i); it was very slight. One lip (Plate 14: e) has cord-wrapped stick impressions on its flattened surface.

The interior of the rims was undecorated in all cases save for the fingernail impressed decoration mentioned above and in one other case. This was the vessel which displayed bosses on the exterior (Plate 14: i); it has right oblique cord-wrapped stick impressions at the lip both on the interior and exterior. It has been typed as Wickham Punctate, conforming to the type in all but the reversal of the punctating procedure (Plate 14: i) (Ritchie and MacNeish, 1949: 104). Three vessels are represented by multiple rim sherds. In Plate 14 rims a-d, h and m, p and q, illustrate these three vessels. Rims a through i are typed as Wickham Punctate while p and q are Point Peninsula Plain (Ritchie and MacNeish, 1949: 103, 104). The rims designated j, k, 1, and n are indeterminate in type although all have cordmarked exteriors and smooth interiors. One possible exception may be k which has impressions of a cord-wrapped edge on the lip and could be Levanna Cord on Cord.

The distribution shown in Table 9 is weighted and tends to demonstrate a homogeneity of one type (Wickham Punctate), which is not borne out in the bulk of the pottery sample. One cause of the apparent concentration of rims in Level II may be the lack of precise information as to their position in that Level. None of the rims could be directly associated with any of the burials.

A wide-spread distribution of the occupation which produced the Wickham Punctate vessels over the entire Orchid Site is indicated by rims of that type found associated with the adjacent ossuary (White, 1966: 7-10). These illustrate the same range of variation seen in the type in Area B (White, 1966: Plate 1).

TABLE 9
Distribution of Pottery Types

	Level I	Level II	Level III
Levanna Cord-on-Cord	0	1	0
Wickham Punctate	0	5	0
Point Peninsula Plain	0	0	1
Indeterminate Corded	0	0	3
Total	0	6	4

Decorated (Neck) (Plate 15)

A total of 23 decorated sherds were found. These have been analyzed and the results placed in Tables 10 and 11. Four of the sherds were used for the reconstruction of the decorative motif for one of the Wickham Punctate vessels. One of these was punctated (Plate 15, b) while the others were of the cordwrapped stick impressed, "oblique-horizontal lines" motif. All of these sherds were related by thickness, color, temper, and texture. The other punctated sherds are most probably assignable to Wickham Punctate (Plate 15: a, c, d, h). One of these has a series of triangular impressions above the punctations (Plate 15: a), probably stick applied dentate impressions. A sherd with broad incised horizontal lines most certainly belongs to the Iroquois ceramic series, judging by style, the fineness of temper and hardness of the sherd (Plate 15: i). It was too small to determine motif and type. It was found in Level II close to Burial II.

The circular and elliptical punch motifs are on sherds with smoothed-over cord surface treatment and may relate to the type Castle Creek Punctate although assignment here is extremely tenuous. These sherds are quite thick and of crumbly texture.

Nine of the decorated sherds are colored red on one surface, probably the interior. The nature of this color is unknown and whether it is decorative or the result of use is uncertain. These sherds are cordmarked on both surfaces and are extremely thick and roughly made. Comparisons with sherds of the type, Vinette I, from the Sinking Ponds Site (Granger, n. d. , 54- 56) and Riverhaven II sites show them to be quite similar in temper, texture, thickness, and hardness. The majority fall in Level III and precise information on one sherd places it directly under the burial pit of Burial IV in apparently undisturbed soil. Two other fragments, however, were found in the disturbed surface area. An example of the red stained pottery is illustrated in Plates 16 and 17: a.

Body Sherds (Plate 16, Exteriors; Plate 17, Interiors)

Body sherds numbered 225, found throughout all levels in the excavation. There can be no doubt of the popularity of cordmarking as opposed to any other technique at all levels, since 38 or 58. 4% of the unidentifiable sherds gave evidence of cordmarking on one surface (Table 13 and Table 14). These have been analyzed into 6 classes of surface treatment and will be discussed within these classes.

Class I (Plates 16 and 17: a, b, g, i) Cordmarked exterior and Interior: this class of sherds formed the largest percentage of the total sample (33.3) and this was seen also at Levels I and III (Table 13). The largest percentage of occurrence was in Level II (Table 14). While these percentages seem

TABLE 10
Comparison of Decorated Sherds By Level

	Level I	Level II	Level III
Punctations	0	3	2
Circular Punch	0	3	0
Elliptical Punch Parallel Rows	0	0	1
Broad Incised Horizontal Lines	1	0	0
Red Stained	2	1	6
Cord-wrapped Stick Oblique-Horizontal Lines	1	3	0
Total	4	10	9

TABLE 11
Comparison of Decoration with Exterior-Interior Surface Finish*

	Cordmarked Exterior And Interior	Cordmarked Exterior Smooth Interior	Smoothed-Over Cord Exterior Smooth Interior	Smooth Exterior Smooth Interior
Punctation		5		
Circular Punch			3	
Elliptical Punch				
Parallel Rows			1	
Broad Incised				
Horizontal Lines				1
Red Stained	9			
Cord-wrapped Stick				
Oblique-Horizontal		4		
Total	9	9	4	1

*Does not include rim sherds.

significant, it seems more meaningful for this class to be further analyzed by technique of application into the following subclasses (Table 12): a Rough Cord Interior-Exterior; b. Fine Cord Exterior-Rough Cord Interior; c. Cordwrapped Stick Interior-Exterior; d. Cord on Cord Interior-Exterior. Close examination of the sherds did reveal a difference in each of the subclasses. Thus the rough cord interior and exterior (Plates 17 and 18: a) appears attributable in temper, thickness and texture to the type Vinette I and, significantly, its highest frequency is in Level III (67.7%). Separable from this category were the fine corded interior and exterior sherds (Plate 16 and 17: b). These had their highest frequency in Level I (40%), closely followed by Level II (38.3%). Note is made here of the similarity of distribution for the Cord on Cord Interior-Exterior category (30% and 29. 4% respectively) (Plates 16 and 17: i). The cordwrapped stick interior-exterior class might be considered as decorated and here the distribution and frequency is due to the fracture and spread of one vessel (discussed above). All sherds of this category were of uniform thickness, color, texture, and temper. All of the sherds in this class

TABLE 12

Comparison of Subclasses of Cordmarked Interior-Exterior
Class I Body Sherds at Each Level

	A Rough Cord Interior Exterior		B Fine Cord Interior Exterior		C Cord Wrapped Stick Interior Exterior		D Cord on Cord Interior Exterior		Total
	No.	%	No.	%	No.	%	No.	%	
Level 1	2	(20)	4	(40)	1	(10)	3	(30)	10
Level 11	6	(17.6)	13	(38.3)	5	(14.7)	10	(29.4)	34
Level III	21	(67.7)	8	(25.8)	0		2	(6.5)	31
Total	29	(38.7)	25	(33.3)	6	(8)	15	(20)	75

TABLE 13
Comparison of Body Sherd Exterior-Interior
Surface Treatment at Each Level

	Level I		Level II		Level III		Grave Goods		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%
I Cordmarked Exterior-Interior	10	(37.4)	34	(28.2)	31	(40.8)	0		75	(33.3)
II Cordmarked Exterior Smooth Interior	4	(14.8)	43	(34.3)	12	(15.7)	0		59	(26.3)
III Cordmarked Exterior Brushed Interior	0	(0)	1	(0.8)	2	(2.5)	0		3	(1.4)
IV Cord-Exterior Smoothed Interior	3	(11.1)	7	(5.8)	5	(6.6)	0		15	(6.6)
V Cordmarked Exterior Smooth Interior	2	(7.4)	0		0		0		2	(0.9)
VI Smooth Exterior Smooth Interior	1	(3.7)	4	(3.4)	0		1	(100)	6	(2.6)
Unidentifiable (one surface removed)	7	(25. 9)	32	(26.5)	26	(34.3)	0		65	(28.9)
TOTALS	27	(100)	121	(100)	76	(100)	1	(100)	225	(100)

were thick, with grit temper ranging from large grit in the Rough Cord subclass to medium in the other groupings.

Class II (Plates 16 and 17: j) Cordmarked Exterior, Smooth Interior. This class of body sherds was second in frequency (25. 3%) of the sample. Its distribution was highest in Level II (72.8%). Most of this group of sherds was unremarkable, with thickness from 6 mm to approximately 8 mm, with grit temper and brown to buff in coloring.

Class III (Plates 16 and 17: h) Cordmarked Exterior, Brushed Interior. All sherds were probably from one vessel. Thickness was 7 mm, color from brown to buff.

Class IV (Plates 16 and 17: c, d) Smoothed over Cord Exterior, Smoothed Interior. All sherds are compatible with being from one or two vessels and illustrate two surface finishes on the interior, smoothed over cord (Plate 17: c) to smooth (Plate 17: d). This is the third most frequent type surface finish (6.6%). Thickness was 7-9 mm with grit temper and color from buff to brown.

Class V (Plates 16 and 17: e) Smooth Exterior, Corded Interior. Two sherds of this class appear to be from one vessel. The exterior of these sherds exhibits fire-blotching (black) while the interiors are roughly corded. Provenience was not determined. The temper was medium grit and thickness was 9 mm.

Class VI (Plates 16 and 17: f) Smooth Exterior, Smooth Interior. These sherds were assigned as Iroquois due to color (buff exterior, black interior), to hardness (3.0), and to temper (fine grit) (MacNeish, 1952). One globular basal body sherd (not pictured) was found as burial goods in Burial II. The other similar sherds appear to be from that pot, including the decorated sherd (broad incising) discussed above. All were found at the top of Level II in a disturbed portion of Burial III or in Level I at the west end of the trench. It seems reasonable to conclude that this vessel was fragmented and scattered in the process of earth removal.

TABLE 14
Comparison of Body Sherd Exterior-Interior
Surface Treatment by Level

	Level I		Level II		Level III		Grave Goods		TOTALS	
	No.	%	No.	%	No.	%	No.	%	No.	%
I Cord marked Exterior Interior Cordmarked	10	(13.3)	34	(45.3)	31	(41.3)	0	(0)	75	(100)
II Exterior Smooth Interior Cordmarked	4	(6.7)	43	(72.8)	12	(20.3)	0	(0)	59	(100)
III Exterior Brushed Interior Smoothed-Over	0	(0)	1	(33.3)	2	(66.6)	0	(0)	3	(100)
IV Cord-Exterior Smoothed Interior Smooth Exterior	3	(20)	7	(46.6)	5	(33.3)	0	(0)	2	(100)
V Cordmarked Interior	2	(100)	0	(0)	0	(0)	0	(0)	2	(100)
VI Smooth Exterior Smooth Interior	1	(16.6)	4	(66.6)	0	(0)	1	(16.6)	6	(100)
Unidentifiable (one surface removed)	7	(10.7)	32	(49.2)	26	(40)	0	(0)	65	(100)
TOTALS	27	(12)	121	(53.7)	76	(33.7)	1	(.4)	225	(100)

The body sherds as a group do not exhibit the homogeneity of the rim sherds and show some types lacking in the latter. This discrepancy must at present remain unaccounted for and those body sherd type assignments be regarded with caution.

Pipes

One rim sherd of a pipe or small bowl was found in Level II in the vicinity of Feature I. This sherd was 7 mm in thickness and appeared to be tempered much like the rim sherds of Point Peninsula Plain (Plate 14: o). Both interior and exterior portions of the sherd were smooth although the lower portion of the interior did exhibit some fiber or brush striations. The curvature of the sherd suggests that the pipe was of the elbow or obtuse angle variety of Middle or Late Woodland times.

Historic Trade

European Glass (Table 15: 1-5)

A total of 19 glass trade beads were encountered in Burial II and Burial III. The beads found with Burial II are all red in color while those found inset in a gorget presented as grave goods with Individual 2 of Burial III were blue, as were the small seed beads found associated with copper beads (Table 15: 8) directly beneath the shell gorget in the chest region of Individual 2. These beads are dated by using Wray and Schoff's (1953) work on the Seneca sequence in central New York and Pratt's Oneida sequence (1961).

TABLE 15
European Glass Trade Beads

Type	Number	Mean Diameter	Mean Bore Diameter	Mean Length Where Applicable	Association	Age Wray And Schoff (1953)
Red Twisted Tubular Glass	1	6	1.3	9	Burial II	1590-1675 (1650)
Red Tubular Glass	2	4	2.5	35	Burial III	1630-1675 (1650)
Red-Round Black Center	1	6	1.5	--	Burial II	1590-1675 (1650)
Blue Glass Medium	9	4	0.9	--	Inset in Shell Gorget (2 in situ) Burial 11I	1615-1675 1625)
Blue Glass Seed	6	1.5	0.3	--	Directly under shell gorget Burial I11	1590-1650 (1625)
Copper Rolled Seed	16	1	0.3	1.5	Associated with Blue seed beads Burial III	Unknown (1590-1650)
TOTAL	35					

Copper (Table 15: 6)

Copper beads are very close in diameter, bore, and association with the blue glass seed beads and may be presumed to have come from the same necklace. On the interior of several, traces of the copper wire, .2 mm in thickness, used to string the beads are seen. Sixteen of these small copper beads were found. Their age is unknown but by association with the blue glass seed beads it is suggested as A. D. 1625 or in the range of A.D. 1590-1650. All the above beads are dated by using Wray and Schoff and again guess dated by the figure in parenthesis.

Conclusion

Excavation of Orchid Site Area B revealed several burials and features intrusive into an extensive stratified sheet midden. The situation in Area B differed markedly from that in Area A, which was a large ossuary penetrating the midden soil. Here, individual burials of many cultures occupying different levels in the stratified midden were observed. Where the surrounding midden in Area A had to be largely bypassed in the interest of time, the midden matrix of Area B was a challenging context often defying interpretation, and yielding its information only under careful analysis in the laboratory.

The individual burials found at the site are representative of cultures which had occupied this river bank area from the Late Woodland through the Historic Iroquois period. They prob-

ably reflect single groups moving into the region for short intervals to avail themselves of the excellent fishing available in the "bottleneck" exit of the Niagara River from Lake Erie.

Three of the burials (Burial I, II, and III) are classed as Historic Iroquois. Head orientations distinguish these from all others. In all of them the head was oriented to the north, a pattern remarked upon by Houghton as present at the Van Son Site (1909). White, in her reexamination of Van Son relates most of Houghton's orientation trait to cultures to the northwest or west (White, 1968: 13). Head-east orientation represents a departure from the pattern seen in easterly Iroquois cemeteries (Ritchie, 1954: 80- 93). The difference is especially striking in comparison with the Kleis Site, an early Historic Iroquois cemetery in nearby Hamburg, N. Y. where the majority of the burials had an eastward head placement (White, 1967: Figure 2). The extent to which the Niagara River formed a boundary for this trait must await further evidence, but these data combined with those at Van Son, which White suggests as markedly differing from Kleis (Ibid., 39), may illustrate the Erie-Neutral boundary and imply that the Orchid Historic Burials are Neutral.

Some of the Historic grave goods found at Orchid Area B in Burials II and II also point to interesting parallels with Van Son Site, notably in the multiple burial (III) and its the shell ornament with blue Venetian glass beads. (Burial I lost whatever inclusions which may have existed to the stripping and leveling operations).

Although eastward head orientation might suggest that Burials IV and V were eastern Iroquois in affiliation, no definite association can be made. A suggestive trait is the possible medicine bundle found in Burial V. However, similarities in placement, flexing, and inclusions with interments at the Serpent Mounds and Brock Street Burial argue for an earlier assignment. These are: fossil coral placed as grave goods, loose flexing, left side position, and east-west orientation (Johnson, 1968: 23-24; Kenyon and Cameron, 1961: 41). If this be the case, the burials would be roughly contemporaneous with the Area A ossuary as dated by White (1966: 13). The burials (1, 9, and 11) at the Surma Site which have not, at this writing, been fully analyzed culturally, also date to the Middle Woodland period (Emerson and Noble, 1966: 79). The Area B burials (IV and V) would represent a more prevalent pattern of single flexed burial established for this period. Ritchie remarks (1969: 230) upon the fact that grave goods in this period are more modest and infrequent, which may account for the lack of goods in Burial IV at Orchid and Burials 5 and 7 at Surma (Emerson and Noble, 1966: 80).

No explanation can be advanced for the presence of two dissimilar burial patterns, ossuary and single burials, in such close proximity. It is not inconceivable that a ceremony much like the later Feast of the Dead (Hickerson, 1961) saw its inception in the Niagara riverine area during Late Woodland times at about 900 AD (White, 1965: 10).

A later burial demonstrated that warfare may have come to the region in the later phases of the Late Woodland period. The individual in Burial VI had associated with him several Levanna projectile points; direct evidence showed that at least one had been shot into his body. Placement of the skeleton was aberrant from east-west oriented Surma burials with Levanna point associations (Burials 3, 6, 8, and 10) showing very tight flexion and a southward head orientation (Emerson and Noble, 1966: 79). The Orchid Area B burials which resemble closely those at Surma Site and other Ontario sites span a temporal range of approximately 1200 years and encompass the late Middle Woodland through Historic Iroquois periods. This distribution coincides with the artifactual evidence from the midden matrix, with the exception of Historic Iroquois of which no trace was found in the in situ deposits. Along with the majority of bone of 5 surface scattered individuals, this evidence may have been lost to the bulldozer.

The midden at Orchid Site, Area B, presented several problems. The loss of up to 2 ft. of deposit and the haste of excavation hampered recording and interpretation. Aboriginal disturbance of the stratified deposits and homogeneity of the organically stained sand, also were hindrances. In the subsequent analysis artifacts of several occupations of varying intensity were delineated. These may be listed as:

Historic Iroquois (Niagara Frontier)	1500-1700 AD
Late Woodland	700-1100 AD
Late Middle Woodland	500- 700 AD
Early Woodland	1000- 500 BC
Transitional	1500-1000 BC
Late Archaic	2000-1500 BC

The Historic Iroquois Period was represented solely by burials and the Late Woodland only by the presence of projectile points of Levanna affiliation, Levanna Cord-on-Cord pottery, and one burial. The lack of heavy occupation debris of these periods, as well as Prehistoric Iroquois, suggests only light use of the site as a living area during the span from 700 to 1700 AD. Since during this time the custom of sedentary living was on the increase (Ritchie, 1969: 253-324), the absence of occupational refuse and presence of single burials indicates that large communities of these times levels are somewhere in the vicinity. Members of these communities utilized the resources of the river but did not occupy extensive areas of the shore. Most probably higher ground situated away from the river was the more favored location. Evidence for this view is seen in the recollections and collections of some Fort Erie residents, who report the finding of Madison type points and a variety of other late artifacts in the higher western portions of the town.

The terminal phase of Middle Woodland is better demonstrated, by the burials discussed above and by the pottery types, Wickham Punctate, Point Peninsula Plain, undifferentiated Cord-on-Cord and cordwrapped stick varieties, Jack's Reef projectile points and, possibly, post-Meadowood variants of side-notched points. During this period the area was probably more intensively occupied, since the period is well represented at the adjacent Surma Site as well as in numerous locations to the north and south on the riverine first terrace. Weir-fishing appears to have been the dominant form of activity as illustrated by the numbers of netsinkers and the lesser frequency of projectile points and associated chipping detritus. The frequency of fish bone is corroborative of this practice.

Ceremonialism in interment at Surma is evidenced by conch shell columella breast-plates, gorgets, and platform pipes but may have been diminishing, as indicated by burials lacking inclusions. In this period of intensive and extensive use of the shoreline of the Niagara, ossuary interment might have evolved with the increase of numbers of groups participating in the spring-summer fishing.

The Early Woodland Meadowood occupation is represented by projectile points and Vinette I pottery; also present but less diagnostic are large numbers of characteristic blade fragments. Surprisingly, few tools such as triangular end scrapers and drills were found. Sites attributable to this phase are located in adjacent areas (Grand Island, N. Y. and East Aurora, N. Y.). Fishing was a basic subsistence activity at both the Riverhaven II and Sinking Ponds sites (Ritchie, 1969: 186; Granger, n.d.: 76) as well as in the eastern stations of the phase (Ritchie, 1969: 183184). The Saugeen Focus, as well, illustrates predominant subsistence preoccupation with fishing at several stations in southern Ontario coinciding in time with the later portions of Meadowood Phase in New York State (Wright and Anderson, 1963: 53-55). The larger number of projectile points and the remains of deer suggest fishing was supplemented by inland hunting as at Riverhaven II (Kochan 1961).

The Sinking Ponds Site produced a well developed Meadowood habitation pattern with quantities of steatite. This may be the case at Orchid but the evidence at hand would tend to favor the view that a Late Archaic-Transitional pattern formed the basal cultural expression at Orchid Site, Area B, and Surma Site. The latter had an assemblage of broad bladed Genesee points and Transitional cache blades, while at Orchid B there were fishtail points. An assortment of other Archaic points at both sites indicated an unspecific Late Archaic. The Transitional Period as represented in this area differs from the eastern Frost Island expression. Here Genesee points and related cache blades form the major artifact type; typical eastern Transitional items such as fishtails and steatite probably reached the area quite late, circa 1000 BC. The Genesee Transitional Archaic is well delineated at the Surma Site where the Meadowood expression is weak. This situation is reversed at Orchid, Area B, where Meadowood is strong and the Transitional and Late Archaic are weak. Further archaeological exploration of the adjacent areas should disclose that prior to late Middle Woodland time, settlement and utilization of the region resulted in small scattered seasonal components. These were drawn together by the ecological opportunities into restricted contexts; in this case, the river shore.

The Orchid Site is typical of the frustrating job of reconstructing the distribution and succession of cultures from excavations carried out to salvage material from incipient parking lots, backyard plots, varying forms of construction activity, unfloored cellars or urban gardening. The opportunity for observing in situ occupation of the Buffalo side of the river is gone and at

Fort Erie is rapidly disappearing. That further work must be done is a cliche, but in this case the need is desperate. If what remains is lost, a unique opportunity for interpretation of Niagara Frontier prehistory will have passed and reports such as this, based upon what can only be described as limited evidence collected under disadvantageous circumstances will be our only clues to cultural expressions in an important transitional area.

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60TH ANNUAL MEETING, SARATOGA SPRINGS

FRIDAY, APRIL 23, 1976

4:00 P. M. REGISTRATION -

8:00 P. M. EXECUTIVE COMMITTEE MEETING -

SATURDAY, APRIL 24, 1976

8:00 A. M. BUSINESS MEETING

8:50 A. M. WELCOME, Raymond Watkin, Mayor, Saratoga Springs; James P. Walsh, President Auringer-Seelye Chapter

MORNING SESSION - Spa Summer Theater

Chaired by Dr. Robert E. Funk, New York State Archeologist

9:00 A. M. MATTICE II: AN IMPORTANT STRATIFIED SITE OF REPEATED LAMOKA OCCUPATIONS IN THE UPPER SUSQUEHANNA VALLEY, Franklin Hesse, Upper Susquehanna Chapter, Inc.

9:30 A. M. THE HUNTER BROOK ROCKSHELTER, Roberta Wingerson, Metropolitan Chapter.

10:15 A. M. KANADESAGA: A SENECA IROQUOIS VILLAGE SITE, c. 1640-1687, George R. Hamell, Morgan Chapter.

10:45 A. M. ARROWHEAD CASINO: A MEDDLE TO LATE ARCHAIC STATION AT SARATOGA LAKE, N. Y. , James P. Walsh, Auringer-Seelye Chapter.

11:15 A. M. THE JAMBA SITE, A PROGRESS REPORT, Theodore Whitney, Chenango Chapter

AFTERNOON SESSION

Chaired by Dr. William A. Ritchie, New York State Archeologist (Retired)

1:30 P. M. PROPOSITIONS CONCERNING THE ARCHAIC AS SEEN FROM THE LOWER HUDSON VALLEY, Louis A. Brennan, Representative, E. S. A. F., Metropolitan Chapter

2:15 P. M. EARLY ARCHAIC IN THE UPPER DELAWARE VALLEY, NEW JERSEY, Dr. Elizabeth M. Dumont, President, NYSAA

3:15 P. M. EARLY TO MIDDLE ARCHAIC TRACES IN THE UPPER SUSQUEHANNA VALLEY, Dr. Robert E. Funk, Van Epps-Hartley Chapter

3:45 P. M. THE OTSININGO PROJECT. INDIANS AND ARCHEOLOGISTS MEET THE PUBLIC, Dolores Elliott, Triple Cities Chapter

4:15 P. M. A RE-EXAMINATION OF THE MIDDLESEX COMPONENT FROM THE ROSENKRANS SITE, UPPER DELAWARE VALLEY, NEW JERSEY, Dr. Herbert C. Kraft, Seton Hall University

7:00 P. M. ANNUAL DINNER

KEYNOTE ADDRESS: THE SEIP MOUND MEMORIAL, Dr. Raymond S. Baby, Ohio State Historical Society

SUNDAY, APRIL 25, 1976

GENERAL SESSION

Chaired by Richard F. LaBrake, Auringer-Seelye Chapter

9:30 A. M. AN HISTORICAL REVIEW AND CONSTRUCTION OF FORT STANWIX, Louis A. Kupris, Jr., Chenango Chapter

10:00 A. M. A REPORT ON PAINTED PREHISTORIC IROQUOIS POTTERY FOUND IN THE BRISTOL HILLS AREA, Mary Louise Gerek, Morgan Chapter

10:30 A. M. EUROPEAN CERAMICS ON 17TH CENTURY IROQUOIS VILLAGE SITES, c. 1640-1687, George R. Hamell, Morgan Chapter

11:00 A. M. A GEOLOGICAL INTERPRETATION OF THE SARATOGA MINERAL SPRINGS (Walking Tour), Richard F. LaBrake, Auringer-Seelye Chapter