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LOT 18 SITE

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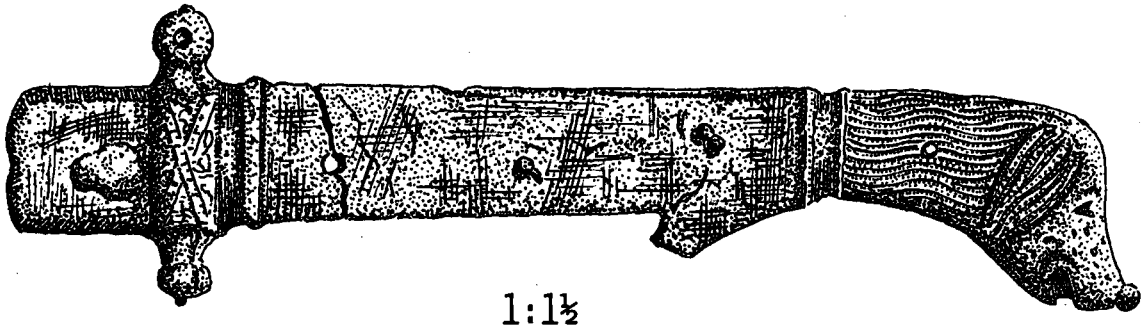

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THE POMPEY CENTER SITE:

THE IMPACT OF EUROPEAN TRADE GOODS 1600 - 1620

James W. Bradley

The Pompey Center site, one of the better known proto-historic Onondaga sites, is located on the west branch of Limestone Creek in the southern part of the Town of Pompey. Much of the site had already been excavated when Beauchamp examined it, but none of these early collections are presently available. Beauchamp dated the site's occupation about 1640 and based this on two factors, the relative abundance of European trade material and the lack of diagnostic mid-17th century artifacts such as firearms and religious ornaments. He also noted that the village had been fortified with a palisade roughly triangular in shape (Beauchamp, 1900:123 and Figure 77). Though both Parker and Tuck mention the site, neither added any significant new information (Parker 1922:244 and Tuck 1971:175-6). Both concurred with Beauchamp's initial estimate of the site's date, however, Tuck felt it should be re-examined.

Recent investigations confirm Tuck's suspicion. In fact, the dates for the Pompey Center site can be comfortably pushed back to approximately 1600 - 1620. This estimate is based on three considerations:

1. Where this site fits into a more carefully drawn sequence of proto-historic and historic Onondaga sites (Bradley, 1976 B).

2. Comparison with the better defined Oneida and Seneca sequences.

3. Inferences from the trade materials found on the site.

The Pompey Center site is not the first Onondaga site where European trade materials are present. Ornaments and utensils of brass first occur more than a half century earlier on the Temperance House and Atwell sites. Iron axes and adze blades were introduced a few years later. Even glass beads, though not common, were available to the Onondaga for several decades before 1600. What is different about the Pompey Center site is that all these European goods are suddenly present in quantity. The purpose of this report is to examine these trade materials in detail and see what they suggest about both the trade in general and its impact on Onondaga material culture.

It should be added as a methodological note that the artifactual material used in this study is from several collections and was either surface collected from the village site or recovered from previously excavated middens. While this may raise some question as to the exact provenience of the artifacts studied, I believe that all the material presented in this report is from the site's period of occupancy.

Glass Beads

The Pompey Center site is the first Onondaga site where European glass beads occur with frequency. In general, these are polychrome beads of high quality manufacture. In describing this sample, Kidd's terminology is used (Kidd, 1970).

Size - measured as bead diameter

VS - very small, less than 2 mm.
S - small, 2 - 4 mm.
M - medium, 4 - 6 mm.
L - large, 6 - 10 mm.
VL - very large, over 10 mm.

Shape

rd - round
c - circular (ring)
o - oval
f - flattened
tb/ut - tubular untumbled (sharp ends)
tb/t - tubular tumbled (smoothed ends)

Glass

op - opaque
tr - translucent
cl - clear

Color (abbreviations only)

RD - redwood
WH - oyster white
BK - lamp black

Of the total of 692 beads (including broken ones), 14 types accounted for nearly 70% of the sample. These are listed on the following page by frequency.

	Kidd #	Size	Shape	Glass	Description	Number	% of Total
1.	IV K 3	M-L	rd	op	"star" with RD core	98	14.2
2.	IV a 19	S	C	op	bright navy blue with light core - "seed bead"	88	12.7
3.	IV b 31	S	C	op	bright navy blue with light core and 6 WH stripes	54	7.8
4.	IV b 33	L	rd	op	bright navy blue with light core and 16 WH stripes (in 8 pairs)	40	5.8
5.	II a 2	S	C	op	RD "seed beads," no core	35	5.1
6.	II a 48	S-VL	rd	op	dark shadow-blue, no core	31	4.5
7.	II a 55	M & L	rd	tr	bright navy blue, no core	31	4.5
8.	II a 50	S-L	rd	tr	dark shadow-blue, no core	23	3.3
9.	II bb 1	L & VL	rd	op	RD with 3 bright navy on WH stripes, no core	20	2.9
10.	II a 11	M & L	rd	op	RD, no core	13	1.9
11.	II a 57	S-VL	o	tr	bright navy blue, no core	13	1.9
12.	IV a 1	S-L	rd	op	RD with BK core	13	1.9
13.	II a 40	M-VL	rd	op	Robin's egg blue, no core	12	1.7
14.	II b 15	M-VL	rd	op	BK with 3 broad RD and 3 broad WH stripes, no core	12	1.7
					TOTAL	483	69.9

A complete breakdown of the total sample indicates that 86 separate bead types are present. These are listed according to style of manufacture.

A. Tubular, no core

	Kidd #	Size	Shape	Glass	Description	No. in Sample
	I a 5	S	tb/ut	op	WH	2
*	I b 2	L	tb/t	op	RD with 6 thin WH stripes	1
*	I b 5	L	tb/t	op	BK with 3 WT and 3 RD stripes	2

B. Round, no core

	II a 1	M-7	rd	op	RD	
		L-6	rd	op	RD	13
	II a 2	S	C	op	RD "seed beads"	35
	II a 6	L	rd	op	BK	2
*	II a 13	M-2	rd	op	WH	

	Kidd #	Size	Shape	Glass	Description	No. in Sample
		L-7	rd	op	WH	9
	II a 15	L	o	op	WH	1
	II a 28	L	rd	tr	dark palm green	1
	II a 32	S	o	tr	turquoise	2
	II a 34	S	C	tr	light aqua blue "seed bead"	1
	II a 39	L	rd	tr	aqua blue	3
	II a 40	M-6	rd	op	Robin's egg blue	
		L-2	rd	op	Robin's egg blue	
		VL-4	rd	op	Robin's egg blue	12
*	II a 48	S-12	rd	op	dark shadow-blue	
		M-18	rd	op	dark shadow-blue	
		VL-1	rd	op	dark shadow-blue	31
	II a 49	M	o	op	dark shadow-blue	2
	II a 50	S-7	rd	tr	dark shadow-blue	
		M-9	rd	tr	dark shadow-blue	
		L-7	rd	tr	dark shadow-blue	23
*	II a 55	M-1	rd	tr	bright navy blue	
		L-30	rd	tr	bright navy blue	31
	II a 56	S	C	tr	bright navy blue "seed beads"	9
*	II a 57	S-5	o	tr	bright navy blue	
		M-7	o	tr	bright navy blue	
		VL-1	o	tr	bright navy blue	13
	II a 61	L	rd	tr	dark rose brown	4
	Untyped					
	II a	L	rd	tr	aqua blue with 8 spiral flutes	1
	II a	L	rd	op	plum	1
	II a	M	rd	tr	dark navy blue with faceted sides	1

C. Round, no core, simple stripes

	II b 2	S-1	rd	op	RD with 3 WH stripes	
		M-4	rd	op	RD with 3 WH stripes	5
	II b 3	M	rd	op	RD with 4 WH stripes	2
*	II b 5	M	rd	op	RD with 6 WH stripes	1
	II b 7	L-3	rd	op	RD with 12 WH stripes	
		VL-1	rd	op	RD with 12 WH stripes	4
	II b 9	M	rd	op	BK with 3 RD stripes	1
	II b 15	M-1	rd	op	BK with 3 broad RD and 3 broad WH stripes	
		L-6	rd	op	BK with 3 broad RD and 3 broad WH stripes	
		VK-5	rd	op	BK with 3 broad RD and 3 broad WH stripes	12

	Kidd #	Size	Shape	Glass	Description	No. in Sample
*	II b 18	L	rd	cl	light grey with 12 thin WH stripes "gooseberry bead"	3
	II b 31	M	rd	op	WH with 2 thin RD & 2 thin bright navy stripes	3
	II b 33	L	rd	op	WH with 3 thin RD & 3 thin green stripes	1
	II b 54	L	rd	op	light aqua blue with 8 RD stripes	1
	II b 55	L	f	op	light aqua blue with 8 RD stripes	1
	II b 56	L-1	rd	op	Robin's egg blue with 3 WH stripes	
		VL-1	rd	op	Robin's egg blue with 3 WH stripes	2
	II b 61	M-1	rd	op	dark shadow-blue with 6 RD stripes	
		L-2	rd	op	dark shadow-blue with 6 RD stripes	3
	II b 62	L	rd	op	dark shadow-blue with 8 RD stripes	3
	II b 64	M	o	tr	dark shadow-blue with 2 RD stripes	1
	II b 68	M	rd	cl	bright navy blue with 4 WH stripes	1
	II b 71	M	rd	tr	bright navy blue with 2 RD and 2 WH stripes	1
	II b 74	L	rd	tr	dark rose brown with 3 groups of 3 WH stripes	2
	Untyped					
	II b	L	C	op	dark green with 3 oblique RD stripes	1
	II b	VL	rd	tr	dark navy blue with 4 WH & 4 RD stripes	1
D.	Round, no core, compound stripes					
*	II bb 1	L-8	rd	op	RD with 3 bright navy blue on WH stripes	
		VL-12	rd	op	RD with 3 bright navy blue on WH stripes	20
	II bb 2	L	f	op	RD with 3 bright navy blue on WH stripes	6
*	II bb 7	VL	rd	op	BK with 3 RD on WH stripes	3

	Kidd #	Size	Shape	Description	No. in Sample
E.	**Tubular, multi-layered**				
	III a 9	S	tb/ut	shadow-blue with light core	2
	III b 7	M	tb/-	shadow-blue with light core & 8 WH stripes	5
	III bb 1	L	tb/ut	RD with dark core & 3 BK on WH stripes	1
	III k 2	M-1	tb/ut	"star" with teal green outer layer	
		VL-1	tb/ut	"star" with teal green outer layer	2
*	III k 3	S	tb/ut	"star" with bright navy blue outer layer	1
	Untyped				
	III b	L	tb/t	BK with WH core and 8 broad WH stripes	3
	III b	L	tb/-	dark navy blue with WH core & 8 thin WH stripes	1
	III k 3	S-6	tb	"star" with bright navy blue outer layer & champhered edges	
		M-1	tb	"star" with bright navy blue outer Layer & champhered edges	
		L-2	tb	"star" with bright navy blue outer layer & champhered edges	9
F.	**Round, multi-layered**				
	IV a 1	S-4	rd	RD with BK core (often flattened on ends)	
		M-6	rd	RD with BK core (often flattened on ends)	
		L-3	rd	RD with BK core (often flattened on ends)	13
	IV a 3	S	C	RD with light grey core "seed beads"	6
	IV a 4	S	o	RD with light grey core	1
*	IV a 6	s	C	RD with apple green core "seed beads"	10
	IV a 13	S	C	WH with light grey core "seed beads"	3
	IV a 19	S-73	C	bright navy blue with light core "seed beads"	
		M-15	C	bright navy blue with light core "seed beads"	88
	Untyped				
	IV a	S	C	RD with BK core "seed beads"	5
	IV a	M	C	maroon on RD with apple green core	1

	Kidd #	Size	Shape	Description	No. in Sample
G.	**Round, multi-layered, simple stripes**				
	IV b 4	S-1	rd	RD with BK core and 6 WH stripes (in 3 pairs)	
		M-5	rd	RD with BK core and 6 WH stripes (in 3 pairs)	6
	IV b 13	M	C	WH with light aqua core and 6 broad RD stripes	1
	IV b 16	S	C	WH with light aqua core and 3 RD & 3 bright navy stripes	7
	IV b 23	S	C	shadow-blue with light grey core & 3 RD stripes	2
	IV b 29	L	rd	bright navy blue with light core & 3 thin WH stripes	1
*	IV b 30	L	rd	bright navy blue with light core & 3 broad WH stripes	7
	IV b 31	S	C	bright navy with light core and 6 WH stripes	54
	IV b 32	L	rd	bright navy with light core and 7 WH stripes	1
	IV b 33	L	rd	bright navy with light core and 16 WH stripes (in 8 pairs)	40
*	IV b 34	L-7	rd	bright navy with light core & 16 WH stripes	
		VL-3	rd	bright navy with light core & 16 WH stripes	10
H.	**Round, multi-layered, compound stripes**				
*	IV bb 3	M	rd	RD with apple green core and 3 BK on WH stripes	3
	IV bb 5	M	o	RD with BK core and 3 bright navy on WH stripes	2
	IV bb 9	S	C	bright navy with dark blue core & 3 RD on WH stripes	1
	Untyped				
	IV bb	VL	rd	dark navy with RD core and 6 yellow & 6 WH stripes	1
	IV l' 1	M	o	apple green with apple green core & 3 WH stripes	1
	IV k 2	M	rd	"star" with light grey core	4
*	IV k 3	M-57	rd	"star" with RD core	
		L-38	rd	"star" with RD core	
		VL-3	rd	"star" with RD core	98
	IV k 5	L	f	"star" with RD core	5
	IV k 6	L	rd	"star" with RD, WH and green stripes	1

	Kidd #	Size	Shape	Description	No. in Sample
	IV g 1	M	rd	bright blue with 3 "flush eyes"	4
	IV g	M	rd	dark navy with 3 "flush eyes"	1
	IV n 2	L-3	rd	oyster WH with light grey core with 6 RD & 6 blue stripes	
		VL-3	rd	oyster WH with light grey core with 6 RD & 6 blue stripes	6
*	IV nn 4	VL	rd	RD with 6 WH and 6 bright navy stripes	7

In addition to descriptive analysis, interesting results can be obtained from examining the chemical make-up of bead glass. This work was initially done by Dr. W. G. N. van der Sleen, a Dutch chemist. Van der Sleen's interest started with the discovery of beads, as well as other 17th century refuse, in areas where early Dutch glass houses had been. Speculating that these beads might be of Dutch, rather than Venetian manufacture, he devised a means for differentiating the two. (The beads which van der Sleen and others found have been catalogued (Karklins 1974). Those types which were found both at Pompey Center and in the Netherlands have been marked with an asterisk (*) in the preceeding list.)

Bead glass is composed of silica, coloring agents, and an alkali. In Venetian glass, soda ash (Na_2O) was used as the alkali, while in glass from the Netherlands, potash (K_2O) was apparently used. By testing specimens of glass with a spectrograph and comparing the amounts of Na_2O and K_2O, van der Sleen felt he had discovered an adequate means of identifying the place where the glass had been produced (van der Sleen 1963).

In an effort to test this hypothesis with Onondaga examples, five beads from the Pompey Center site were analyzed.

	Kidd #	Description	% K_2O	% Na_2O
1	II b 56	Robin's Egg blue with 3 WH stripes	2.4	13.0
2	II bb 1	RD with 3 bright navy on WH stripes	2.2	8.5
3	II a 50	Dark shadow-blue	1.0	10.0
4	IV k 3	"Star" with red core	1.0	5.8
5	IV u 2	Oyster WH with light grey core and 6 RD and 6 blue stripes	2.4	8.0

The results indicate that these beads were probably of Venetian, rather than Dutch manufacture, since the Na_2O content is appreciably greater than the K_2O content in all the specimens tested.

European Ceramics

Despite its early date, the Pompey Center site has produced two types of late 16th or early 17th century European ceramic-wares.

The first type is delft, or tin glazed earthenware, decorated with blue and yellow-orange bands. Two pieces of this ware have been found, each on differing parts of the site. One piece is a mere gragment of glazed surface, only about 6 mm in length. The second piece is a pendant, roughly tear drop in shape, measuring 29 mm in width by 29 mm in height. Although about half the glazed surface is now gone, it must have been a prized piece - the edges are carefully ground and the unglazed side has been partially hollowed out.

Both Ivor Noel Hume of Colonial Williamsburg and Paul Huey of the New York State Division for Historic Preservation were kind enough to make comments on this piece. Noel Hume felt that the pendant was re-worked from a large delft drug jar of either Dutch or English origin, datable between 1590 and 1640. (Noel Hume 1973). A similar drug jar is illustrated in Guide to Artifacts from Colonial America (Noel Hume 1970, Fig. 67, no. 1). Mr. Huey noted that this type of ware was quite similar to delft fragments found at Fort Orange (1624 - 1657). In fact, small, rounded discs fashioned from this type of delft, probably for use as gaming pieces, were recovered (Huey 1973).

Though these comments may seem to push the dating of this ware up towards the middle of the 17th century, this is not necessarily the case. As Noel Hume observed, nearly identical pieces were recovered by Jean Harrington during his excavation of the "Cittie of Ralegh" (Harrington 1962, p. 23, no. 21), a site established in 1587 and abandoned prior to 1590.

The second type of European ceramic from the Pompey Center site is also an earthenware, but of a rather different character. Once again, Ivor Noel Hume was kind enough to make the identification.

> "The (two) pieces...belong to a fairly well defined class, generally attributed to the Weser Region of Germany, probably in the vicinity of Bremen. The wares, which are characterized by a buff body coated with a yellowing lead glaze and decorated with rouletting in association with drops of green and orange slip, are known in the forms of bottles, chamber pots, and pipkins. As far as I know, only one example has hitherto been recorded as having been found in this country, and that comes from excavations at the second church in Hampton, Virginia...(dating) 1623 - 67."
> (Noel Hume 1976)

Two pieces of this ware, both body sherds, have been found been found at the Pompey Center site.

Brass

One of the notable characteristics of the Pompey Center site is the increased amount of brass present, dramatically more than on earlier sites. European brass (zinc and copper) were a new material to the Onondaga, but copper was not. Though infrequent, artifacts of Great Lakes native copper are found on late prehistoric Onondaga sites. Since brass and copper appear nearly identical (except to chemical or physical analysis), they were probably used interchangeably at first. With the expansion of trade contacts, the increased availability of brass caused it to quickly dominate and then replace native copper.

Implements: Brass projectile points, though not common on the site, occur in two forms - flat and conical. Unlike the later historic sites where flat brass points are a stylized triangular form, the flat points from Pompey Center show a diversity in shape - perhaps indicating experimentation with design. Of the 6 points recovered, 3 are triangular and 3 are stemmed triangular. They vary as follows:

	Shape	Sides	Comments
1.	Isosceles triangular	Excurvate	Puncture perforation
2.	Isosceles triangular	Excurvate	Unperforated (Beauchamp 1902, #140)
3.	Equilateral triangular	Straight	Unperforated
4.	Stemmed triangular	Excurvate	Truncated base, unperforated
5.	Stemmed triangular	Straight	Square base, perforated
6.	Stemmed traingular	Irregular & "barbed"	Square base, unperforated (Beauchamp 1902, #111)

Points 2, 4, 5 and 6 are illustrated on Plate 2.

Five conical points have been found on the site. They range between 30 - 40 mm. in length and seem to have been made for a shaft of 5 - 6 mm. in diameter. It should be noted that the site is prolific with well made triangular points of local Onondaga flint (see Bradley 1976 A).

Though not a particularly hard metal, brass was also used by the

Onondaga for knives and other blades. The 8 knife blades recovered show diversity in both form and quality. The simplest are little more than pieces of brass with a sharp edge. Two of the 8 are of this type. Two of the remaining examples are spatulate in shape with one edge and the blunt, rounded end sharpened. There is no evidence of how these were hafted. Two others are ovate, roughly reminescent of their chipped flint predecessors. These also have a single sharpened edge and one retains a small tang to which a thong could have been attached. The last 2 knives show a better quality workmanship. On 1, the side opposite the cutting edge has been reinforced by a series of folds. This results in a "sheep's foot" shaped blade. The other piece is of thicker material, possibly a re-used kettle bail, and has two distinctive features. A series of taper drilled holes run along the spine of the blade, serving as the means for attaching a handle. There is also a pronounced tang protruding off the front of the blade. This appears to have been formed by hammering and would have allowed for the attachment of a thong. These last 2 blades plus a spatulate example are illustrated on Plate 2.

Two other blades are present in this sample. One is broad and straight, roughly rectangular in shape. With rounded and sharpened corners, it would have been an ideal fleshing tool. The last blade is triangular in shape, isosceles with a truncated tip. This narrow, flat end was well honed and still retains a keen edge. Slightly concave, it fits neatly between the thumb and forefinger and would have been quite suitable for woodworking.

Ornaments: Brass ornaments are plentiful and occur in a variety of forms. Beads are predominantly tubular and come in roughly 2 sizes. The first are thin (5 - 6 mm.) and relatively long, ranging between 18 and 45 mm. in length. There are 4 of these beads in the sample and in general they are poorly made. Beauchamp also illustrated a bead of this type from the site (Beauchamp 1903, Fig. #255). The second style of bead is wider, about 10 mm. in diameter, and much shorter, 10 to 30 mm. long. The 5 beads of this type appear to have been made more carefully. Beauchamp illustrates a different kind of brass bead from the site, though none were included in this sample. These beads are slighly barrel shaped in form and are neatly cut and rolled (Ibid., p. 17, Fig. #249). These were probably of European manufacture.

Rolled conical bangles are another common brass ornament. These also vary widely in quality. Six examples are included in this study and average about 40 mm. in length. One additional piece is an exception. This extremely large "bangle" is 85 mm. long, 10 mm. wide at one end and 15 mm. at the other. It is possible this was used as a tube pipe.

Pendants cut from sheet brass are frequent and come in several shapes. Most common are discs, either flat or slightly dished. Usually they are singly perforated, although some examples have multiple performations. The sample includes 2 complete and 5 partial specimens. Another type, singly represented, is roughly diamond shaped with rounded lobes. Occassionally, zoomorphic, or animal shaped, pendants are found. Two are included in this sample - 1 is a representation of a bird, while the other depicts an abstract four-legged animal. These last 3 pieces are illustrated on Plate 1.

The last category of brass ornaments may be either bracelents or a type of hair decoration. They are circular loops of tightly rolled brass. Three partial examples are included in this survey, and they appear identical to specimens from 16th century contact Seneca sites.

As a final note, Beauchamp mentions a spherical brass bell being found on the site (Ibid., 1903, Fig. #264). None are present in the sample studied.

Kettle Fragments and Scrap: No intact kettles are known from the site and it appears that old kettles were commonly re-used. Five bails are included in the sample, all were of the square styple with folded corners. None of these are complete, all the usable portions having been cut off. Beauchamp does illustrate 1 complete bail of this typle from the site (Beauchamp, 1902, Fig #156). The only other bail present is of 1 piece construction and roughly triangular in shape. Four pieces of kettle rim have been found on the site and none show any evidence of being reinforced by iron wire. One other interesting kettle fragment shows native efforts at patching, 2 pieces are "laced" together with a "lace" or rolled brass.

The quantity of scrap brass is one of the factors which has tended to push the site's dates too far forward. Yet comparison of the scrap from Pompey Center and later historic sites reveals an important difference. On later sites, most scrap shows no sign of use, that is cut marks, perforations, or intentional folding. At Pompey Center, however, the evidence of utlization is very high - 92% of the 185 pieces studied. Most of these showed cut marks and in many cases the intention of the user is discernable. Beads, bangles and points are evident in various stages of scribing, cutting, and rolling. Only 7.5% (14 pieces) of the scrap show no evidence of use. The other .5% is a melted brass blob.

Iron

Though iron was a relatively new material to the Onondaga, it had become a material they could manipulate and use by the time they occupied the Pompey Center site.

Knives

Even though knives were evidently accessible, they appear to have been utilized to the maximum. Few complete blades are present in the sample and fragments account for most of the specimens.

The most common form of knife is a flat tanged blade with no collar. These simple blades are approximately 170 mm long and have two holes in the tang for pinning on handles. There are 5 knives of this type and they differ primarily in the degree to which there is a heel, or expansion, of the blade beyond the handle. One example has no heel at all, 2 show slight heels (both angling forward in a straight line) and the last 2 have pronounced heels (1 round and the other angling forward). The first and last of these knives are illustrated on Plate 3.

One other knife also has a flat tang. On this example, however, there is a thin raised collar between the tang and blade. This knife has been ground down so far that there is virtually no blade left (see Plate 3).

The other form of knife is one more common on later historic sites - a blade with a rat-tail, or tapered tang. Four of these are present in the sample. These knives are also characterized by a cylindrical collar between the tang and blade. On 3 of the specimens, this collar is slightly grooved while onthe other examples, it is not. Beauchamp illustrates 2 complete knives of this type from the site (Beauchamp 1902, Figs. #110, 112).

One of the knives of this type is unusual for two reasons. Not only is the entire tang intact, there is also an iron pommel, or cap, at the end. In general, knives of this type did not have caps like this. The second odd feature is that the blade has been worn down nearly to the heel. Though no longer usuable as a knife, this vestige of the blade was slightly scooped to give it a concave cutting edge. It probably made a very servicable hand gouge (see Plate 3).

Four additional blade tips are present in the samples and some are of surprising form - 1 sheep's foot point, 1 chipped point, and 2 that are symmetrically pointed (though sharp on only 1 edge). Three other undiagnostic blade fragments are also in the sample.

As some of the above examples demonstrate, knife blades were frequently re-ground and modified. For this reason, blade shape and dimensions are not discussed in greater detail.

Axes : Axes are well represented on the site. Though the number of fragments and battered examples indicate they were heavily used, complete and undamaged specimens indicate that axes were no longer the rarity they once had been.

Three complete specimens are present in this sample, as well as 3 additional measurable and marked pieces. These are summarized as follows:

	Total Length	Bit Width	Poll Width	Eye Length	Weight	Marks
1	222 mm	115 mm	62 mm	62 mm	3 lbs 6 ozs	Cross in circle, 2 right side
2	187 mm	91 mm	50 mm	56 mm	2 lbs 9 ozs	orb 2 each side
3	172 mm	92 mm	50 mm	53 mm	2 lbs 5 ozs	Cross in circle, 2 each side
4	140 mm (blade only)	85 mm	-	-	1 lb 8 ozs	anchor 1 left side
5	111 mm (blade only)	90 mm	-	-	1 lb 7 ozs	Cross in circle, 1 each side
6	-	Heavily battered	55 mm	-	1 lb 4 ozs	Modified orb 1 right side

Two sizes of axe seem to be present, number 1 is large and heavy, while numbers 2 and 3 are smaller and lighter. Of the partial axes, number 6 also seems to be of the lighter type. Four of the examples have straight backed blades. Only numbers 4 and 6 show any pronounced drop. Number 4 is also unusual in that it is marked with a clearly struck anchor. All the axe blade marks are illustrated on Plate 1. There are several other axe fragments in the sample. These include 5 bit and 7 socket pieces.

Several of these fragments show the effects of both heavy use and abuse. Some of the ruptures between blades and sockets appear to be the result of lateral stress. In general, metal fatigue in the socket or extensive chipping on the blade was the disabling factors. There is no clear evidence of split welds.

There is ample evidence that axes no longer suitable for cutting wood were re-used in a variety of ways. One blade (No. 6 above), is so mushroomed, that it retains less than half its original length. It appears this piece was used as a hammer or maul. Other examples of re-used iron are discussed in a subsequent section.

Other Iron Implements: Two types of double pointed iron awl are present in the sample. The first is 62 mm long, slightly curved, and diamond shaped in cross section. While only 1 of these has been studied, Beauchamp illustrates 3 from the site and says they are frequent (Beauchamp 1902 p. 75, Figs #124, 125, and 154). The other style of awl is straight, 85 mm in length, and square in cross section. Only 1 of these is present also.

The other distinctive iron tool from the site is a large, bar-like celt. This piece weighs 2 lbs, 15 ozs. and is 210 mm long. Roughly square in cross section at the center (35 x 38 mm), it tapers on 1 end to a blunt ovaloid poll (30 x 20 mm) and a curved cutting edge on the other. One other iron celt has been found on the site. It is smaller, about 60 mm in length, and more triangular in shape. Neither of these were made re-worked axe pieces. They appear to be European products designed specifically for trade.

Beauchamp mentions 1 other iron artifact from the site - a broad, leaf shaped, tanged spear blade (Beauchamp 1902, Fig. #115). No examples of this type of blade are included in this sample.

Evidence of Onondaga Iron Work: Perhaps the most unexpected finding is that by the early 17th century, the Onondaga were actively engaged in working iron. There is evidence of cold working and some indication that iron may have been experimentally forged, or hot worked.

The clearest examples of this ironwork are small celts or chisels reworked from broken axe blades. Plate 4 illustrates both a deeply scored piece of blade and a resulting celt. In addition, broken axe sockets were apparently hammered out and then cut or abraided to shape. Plate 4 also illustrates examples of this process. These include the grooved socket of a broken axe, a hammered out socket, and a scraper, probably made by this means.

It would be stretching things to claim the Onondaga were hot working iron, yet one piece fromthe site at least raises this as a possibility. This is a piece of round bar about 11 mm in diameter with flattened sides, possibly part of a large kettle handle. One end has been irregularly beaten out into a flat, somewhat spatulate shape. While this could well have been done by cold hammering, the way in which the metal has been deformed strongly suggests amateur forging. This piece is illustrated on Plate 4.

At this point, some discussion of the iron may be helpful. The metal provided by discarded axes is wrought iron - a high grade

iron with a quantity of slag uniformly distributed through it. The slag, or oxide impurities, give the metal its characteristic grainy appearance. Wrought iron has two important qualities, it is soft and malleable. The lack of carbon makes it soft and distinguishes it from steel. Soft is, of course, a relative term (roughly 70 - 90 on the Rockwell B Scale and 140 - 190 on the Brinell scale). On the Mohs scale, used by geologists for measuring hardness, wrought iron rates about 6 (Wray 1977). This means that the metal could be shaped with the harder granite and gneiss hammer stones which occur on the site. In addition,the softness of the iron would allow it to be abraided quite easily and shaping could have been done by this method.

The malleable quality of wrought iron, its ability to be shaped, is also due in part to the lack of carbon. But though soft, the metal is tough. The veins of slag give it a resistant internal structure which allows it to be worked without falling apart. These qualities of being tough, yet easy to work, make wrought iron an ideal material for simple toolmaking.

To sum up, there is no reason why the Onondaga could not have worked iron in these ways, and there are strong indications that they did.

Concluding Comments

1. Chronology of the site: As stated at the beginning of this report, 1600 to 1620, rather than 1640 is the probably period of occupancy of the Pompey Center site. The few datable articles support this - late 16th and early 17th century European ceramics. The extensive reuse of brass and iron also argues for a site of this period. In addition, artifacts diagnostic of the 1640 period, such as European clay pipes and evidence of firearms, are completely lacking. A further indication is provided by the spectrographic tests on beads. It was not until 1620 or so that the manufacture of beads in the Netherlands became well established (Karklins 1974, pp 65-66). With these beads becoming more available, especially as Dutch trade and settlement progressed, it is improbable that a sample of beads from a 1640 site would not contain any Dutch specimens. That none were found in the Pompey Center site sample points for an occupancy prior to 1620.

   Another factor in revising the site date is how it compres with other, better documented Iroquois sites. Pompey center shows the greatest similarity to Dutch Hollow in the Seneca sequence (Ritchie 1954) and Cameron among the Oneida

sites (Cotrell 1968 and Pratt 1976, pp. 121-124). Dutch Hollow has been dated in 1590-1616 (Wray and Schoff 1953, pp. 55-56) and while Pratt dates Cameron a bit earlier, he does indicate it probably extended into this same period (Pratt 1976, p. 140).

2. The trade in general: While it is not known whether the occupants of the Pompey Center site had direct contact with Europeans, European materials were certainly accessible. The source of many of these goods is not known nor exactly how they reached Central New York, but the presence of marine shell ornaments indicates the Onondaga did have contact with coastal areas. The sample also reflects the growing diversity of trade materials. Not only do new types of goods occur, but one made specifically for the North American trade, such as iron celts.

3. Impact on native culture: The effect of these new materials on the Onondaga can be seen in different ways. From a long term perspective, the impact of European goods on native culture was clearly degenerative. Native craft skills became obsolete as traditional tools were replaced by the more efficient imports. This process was just beginning at Pompey Center, but the indications are clear. Ground stone celts have been almost entirely replaced and few chipped flint knives remain.

   Yet it would be incorrect to assume that the Onondaga were passive in response to this process of cultural replacement. The extensive reuse of European materials indicates that new materials were readily absorbed into the existing cultural framework. Even the discards of European material culture, like broken ceramics, could be utilized. In particular, the reuse of European metals shows a sophistication of understanding. Though both brass and iron are soft, they become increasingly brittle, therefore hard, as they are cold worked. This property had been observed from working native copper, along with the discovery that softness and workability could be restored to the metal by heating or annealing it. While specific metalurgical tests would be necessary to clearly demonstrate this, it does appear that this knowledge was used at the Pompey Center site. Iron and probably brass, were cold worked with the intention of making them harder and as a result more serviceable as cutting blades.

   Though the long term consequences of European goods have been destructive to traditional Onondaga culture, the immediate impact, as seen at the Pompey Center site, was an improved standard of living.

Thanks are owed to the following for allowing their collections to be studied: Onondaga Historical Association, Drs. Anton and Greg Sohrweide, Albert D. LaFrance, Ferdinand LaFrance, and William Ennis.

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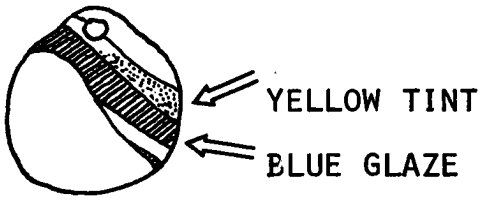
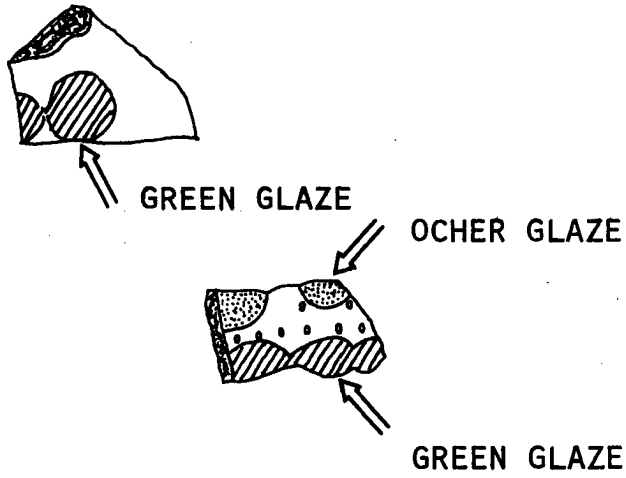
EUROPEAN CERAMICS

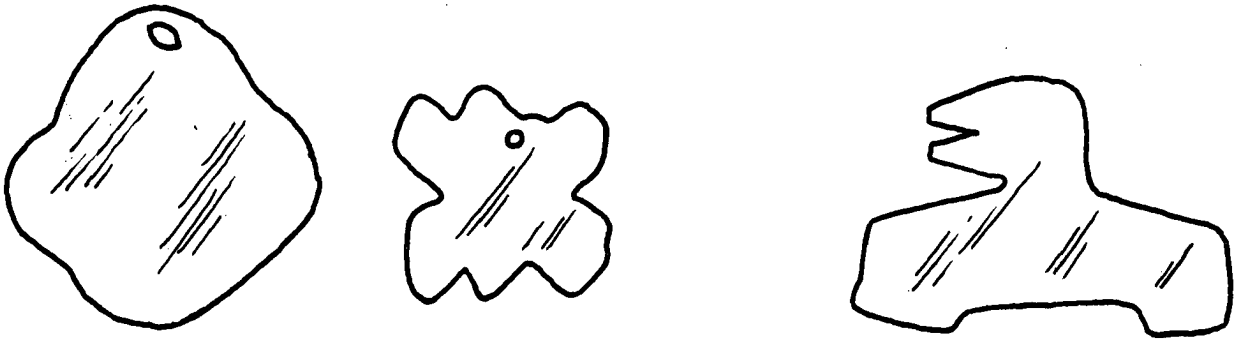


DELFTWARE PENDANT



BREMEN EARTHENWARE

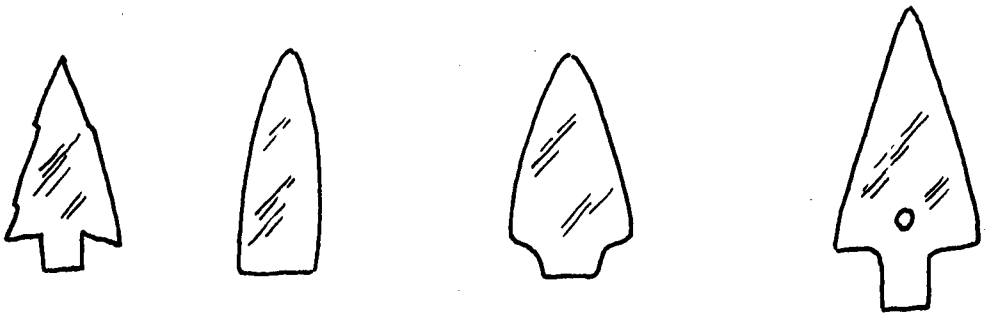
BRASS PENDANTS



AXE MARKS

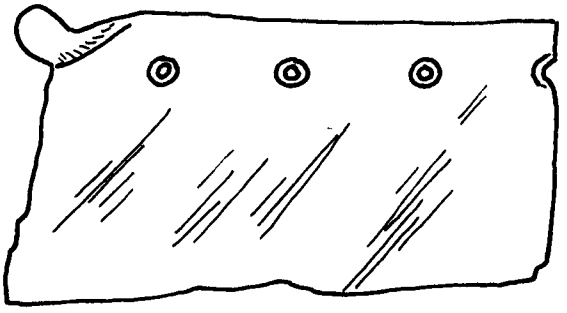
CROSS IN CIRCLE | ORB | MODIFIED ORB | ANCHOR

1:1



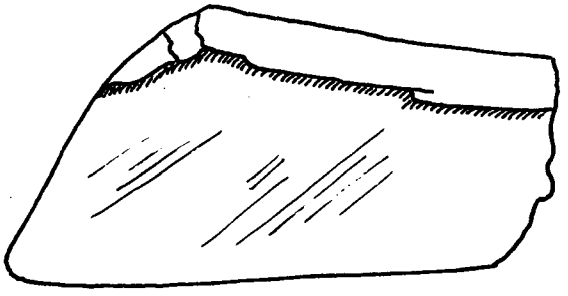
BRASS PROJECTILE POINTS

BRASS KNIVES



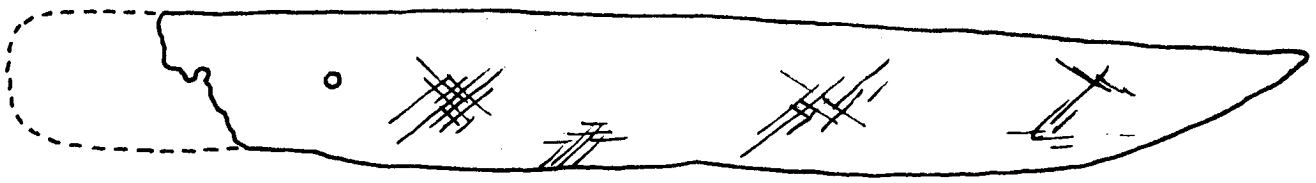
BLADE HAS PERFORATIONS
FOR HANDLE AND TANG
FOR THONG

SPATULATE BLADE

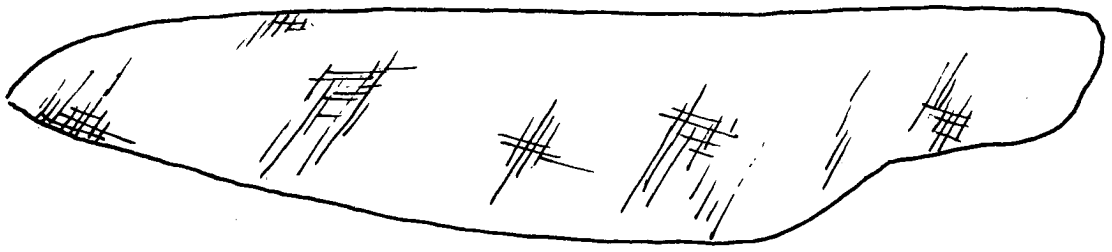


BACK OF BLADE IS FOLDED
OVER FOR REINFORCEMENT

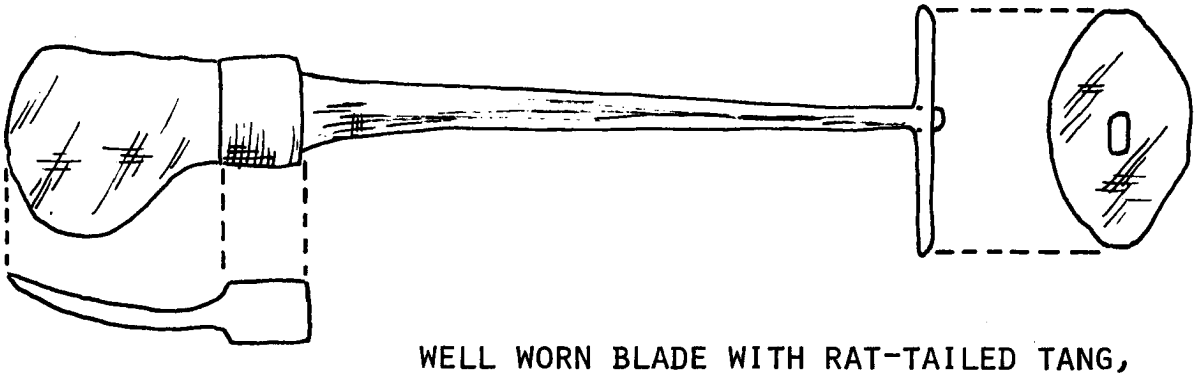
1:1



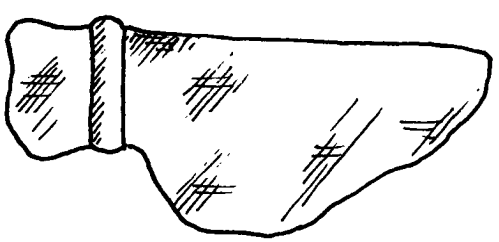
FLAT TANGED BLADE WITH NO HEEL OF COLLAR



FLAT TANGED BLADE WITH PRONOUNCED HEEL, BUT NO COLLAR



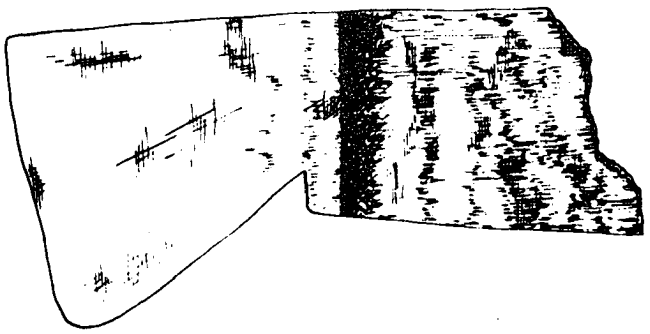
WELL WORN BLADE WITH RAT-TAILED TANG,
POMMEL CAP AND UNGROOVED COLLAR REWORKED
INTO A HAND GOUGE



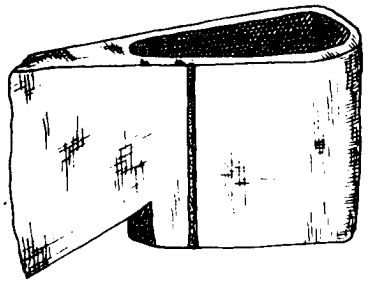
FLAT TANGED BLADE WITH NARROW COLLAR, HEAVILY WORN

1:1

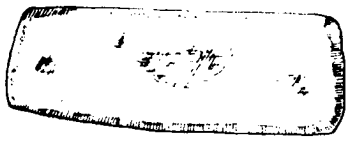
PLATE 4



BROKEN AXE WITH HAMMERED-OUT SOCKET

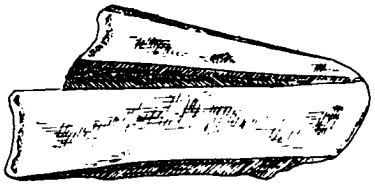


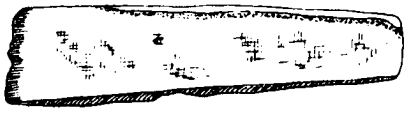
AXE SOCKET WITH SCORED GROOVE



IRON SCRAPER PROBABLY GROUND FROM PIECE OF SOCKET

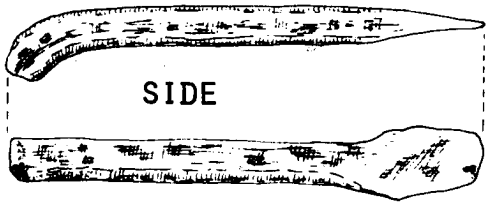
PIECE OF SCORED AXE BLADE





IRON CELT CUT FROM AXE BLADE

PIECE OF IRON SHOWING POSSIBLE FORGING



1:½

AN HISTORIC ONONDAGA HOUSE

Dr. A. Gregory Sohrweide

The Indian Hill site (Cza 8-1) is in the Town of Pompey, approximately two miles south of the village of Manlius. It occupies the entire width of a prominent, north-south oriented ridge. To the west of the site, the land descends rapidly to the west branch of Limestone Creek. To the east, it slopes gently to a smaller, more accessible stream which, undoubtedly, was the village water supply. North of the site the ridge gradually tapers to the valley floor. To the south, it broadens, forming a plain which must have offered fertile acerage for cultivation.

Currently, the site is divided between two groups of landowners. The northern portion, which has not been cultivated for at least several decades, is a field of thick grass and thornapple bushes. The southern half has been farmed annually for many years, but is presently fallow.

During the spring of 1975, a preliminary survey of the plowed field was conducted before planting to determine the southern extent of the village and to locate possible sites of house patterns and large middens. Early in 1976, an east-west base line and a grid of 5 x 5 foot squares were established in an area thought to contain a house pattern. This section of the field was chosen because the ground was level, very black with organic debris and rich in artifacts. The advantages of level land for construction is obvious. In addition, it would be expected that organic debris and household items would accumulate in and around a dwelling.

Careful excavation of several squares, however, revealed no evidence of a house pattern. All the squares examined contained broken bones, charcoal and artifacts, but no post molds or other indications of a house. Apparently the blackened area was a large village midden. Test squares were extended westward, away from the midden and across the highest point of land on the site. As these squares were extended, the soil color quickly changed from a black to a light brown and the concentration of artifacts decreased.

When the excavation commenced, we decided not to use machinery. But, as the digging became more difficult, the days hotter and the results less productive, the advantages of a backhoe became evident. Using this, a test trench was dug in a north-south direction, parallel to the long axis of the ridge. All but about the last inch of topsoil was removed. This was shoveled away and the sandy clay subsoil examined for postmolds and features. Two lines of post molds, oriented in an east-west direction, were soon exposed. The remainder of the 1976 season was spent excavating this apparent house pattern.

All post molds and features were cross-sectioned, examined and catalogued. Measurements were made at the subsoil surface level and from the approximate centers of each post mold. The average topsoil depth was 8 inches. This may be added to all depth measurements for an estimate of the original ground surface.

The average post was about 3.5 inches in diameter and extended about 7 inches into the subsoil or about 15 inches into the soil from the ground level. All posts under 6 inches in diameter tapered to a dull point, while posts 6 inches or over had blunt ends. Many of the tapered posts and all of the blunt posts had rocks of about 3 - 6 inches in length tightly packed around them in the post holes. Apparently a hole was dug, the post placed in the center and rocks added to the fill for strength and stability.

The post molds consisted of black organic material frequently streaked with gray ash or charcoal. Several post molds contained beads and/or small bones. The few artifacts and bones found in situ were all in the vicinity of the post molds. Evidently, the discarded household items and debris accumulated in the corners and along the walls of the house.

The structure was roughly square, about 38 feet long and 31 feet wide. The alignment of posts which formed the outer walls was very irregular. This may indicate that the walls were placed wherever convenient and only approximated the desired floor pattern. Hard soil and immovable natural obstacles like boulders may have influenced construction. The spacing between posts also varied widely from wall to wall. This may represent different methods of building, different periods of building or rebuilding. In addition, there was also a wide range of post depths within a wall. The depth of the average post, however, was the same in all walls.

South Wall

The closely spaced posts of the south wall followed a straight line. Most of the posts penetrated approximately 7 inches into the subsoil and were about 3 - 6 inches from adjacent posts. The uniform depth and close spacing of the posts suggests they were erected and secured in a trench, rather than in individual post holes. Two large support posts, each about 7 inches in diameter and 15 inches into the subsoil, were positioned at opposite ends of the wall in the southwest and southeast corners. The location, depth, and diameter of these posts indicate they may have functioned as main corner supports for the structure.

A 6 foot wide entrance, bordered by two large posts, was adjacent to the southeast corner. Just outside the entrance was a single post, which may have served as a trophy pole or a clan effigy.

East Wall

The east wall followed a wandering path that curved sharply inward before joining the north wall. Perhaps a boulder or other obstacle made it necessary to round the northeast corner.

The spacing of the posts was irregular. The posts appear to have been erected in groups of 4 or 6 with broad gaps between the groups. Adjacent to Feature 6 is a 6 foot space which may have been an entrance. The average diameter of the east wall posts was 2.8 inches; about 1 inch smaller than the average posts of the other three walls.

North Wall

The north wall was the shortest due to the irregular course of the east wall. Approximately in the center of the north wall was a 4 foot wide entrance. About 2 feet in front of the entrance was a large post which may have served the same purpose as the post in front of the southern entrance. The posts on the western side of the entrance were in straight alignment, but on the other side the posts deviated inward to join the east wall.

West Wall

The posts of the excavated portion of the west wall were broadly scattered along an almost straight line. This may be evidence of rebuilding or internal support posts.

Internal Structure

Accurate interpretation is not possible with incomplete data. However, excavation of the southwest corner of the house was sufficient to permit speculation on the internal structure.

The interior posts varied from 2 to 6 inches in diameter, with an average of 3 inches. Post depths varied from 2 to 17 inches below the surface of the subsoil, with an average of 6.2 inches. A series of 7 evenly spaced post molds ran north-south along the midline of the house perpendicular to the south wall. These posts may have been part of a partition which divided the house into family units. In addition, the posts may have provided internal supports for the roof. They ranged from 3 to 4 inches in diameter, with an average of 3.5 inches. The depths of the posts below the surface of the subsoil ranged from 3.5 to 8 inches, with an average of 5.9 inches.

About 4.5 to 5 feet west of the partition and parallel to it, was a series of 5 posts. The average diameter of the posts was 2.7 inches; the average depth was 5.8 inches into the subsoil. Two additional posts, which were in line with a main roof support of the south wall, extended about 3 feet out from the opposite side of the partition. The two series of posts, one on each side of the partition, may have been support posts for benches or bunks.

A third series of possible bench posts was positioned about 1.5 feet inward from and parallel to the south wall. It originated at the partition wall and stretched to the west wall. The average post was 2.3 inches in diameter and set 6.2 inches into the subsoil. These posts were angled approximately 45° toward the enter of the house and could have supported a 3 to 4 foot wide bench.

Associated Pits and Hearths

Features 5, 7, 9 and 10 were probably storage pits. If the internal post molds represent bench posts, then features 5 and 10 were conveniently located under benches and away from the central walk ways. Feature 7, positioned along the west wall, may also have been under a bench. Only feature 9 was in the center of a living space.

The soil of the storage pits contained no artifacts, seeds or bones; it was indistinguishable from the surrounding village topsoil. Before abandoning the site, the occupants must have removed everything from the pits, leaving them to fill by natural erosion. Feature 5 was 24 inches long, 20 inches wide and 14 inches in depth. In profile, it was basin shaped. The base of the feature contained a 1 inch layer of black organic material. It may represent a bark pit lining. Feature 7 was circular in cross-section with a 22 inch diameter. This pit was basin shaped and 12 inches in depth. Feature 9 was bathtub shaped, measuring 54 inches long, 33 inches wide and 10 inches deep. The central location of the pit and the curious clustering of the surrpounding post molds suggests it may have served a function other than storage. Perhaps it was associated with a drying rack. Feature 10 was a basin shaped pit 19 inches long, 19 inches wide and 5 inches in depth.

Two hearths were included among the features. Feature 6 was a saucer shaped hearth 28 inches long, 23 inches wide and 3 inches in depth near the center. It contained the charcoal and ash debris of the last fire. The illogical location of the hearth along the wast wall at first indicates that it may not have been associated with the house. However, if the adjacent 6 foot wide space is an entrance, then it may have had a ceremonial purpose.

Although feature 8 was not completely excavated, the ash and charcoal contents of the portion which was examined and the surrounding heat reddened subsoil

identifies it as a hearth. Feature 8, like feature 6, appears to have been placed dangerously close to a wall.

The pattern of the internal post molds and the arrangement of hearths and storage pits suggests the structure was probably a house. The artifacts found in association with the house pattern indicate it belonged to the historic Onondaga site of 1663 - 1682 at Indian Hill.

Because of the dearth of settlement pattern data on historic Onondaga sites, we cannot further define this house pattern. Perhaps after more settlement data is recorded and interpreted from this and other Onondaga sites, the features, internal structure, and outer walls will be more clearly understood.

TABLE I

	Diameter of Postmolds	Depth in Subsoil
NORTH WALL		
Range	2.5- 5	6-11
Average	3.91	7.6
SOUTH WALL		
Range	3 -10	3.5-11
Average	4.1	7.4
EAST WALL		
Range	2 - 3.5	5-12
Average	2.8	8
WEST WALL		
Range	2 - 5	5- 8
Average	3.8	6.1
INTERNAL POSTS		
Range	2 - 6	2-17
Average	3	6.2

All Measurements Are in Inches

TABLE II

	Feature Number	Depth into Subsoil	Length at Subsoil Surface	Width at Subsoil Surface
Storage Pit	10	5	19	19
Storage Pit	7	12	22	22
Storage Pit	9	10	54	33
Storage Pit	5	14	24	20
Hearth	8	Not Completely Excavated		
Hearth	6	3	28	23

All Measurements Are in Inches

Acknowledgements

We are indebted to Mr. C. Jefferson Randall, Richard E. White, and William B. Eberhardt for granting permission to excavate on their land. We also wish to extend our appreciation to Jim and Peggy Bradley, Gordon DeAngelo and George Waters, who volunteered their time during the excavation on the Indian Hill site.

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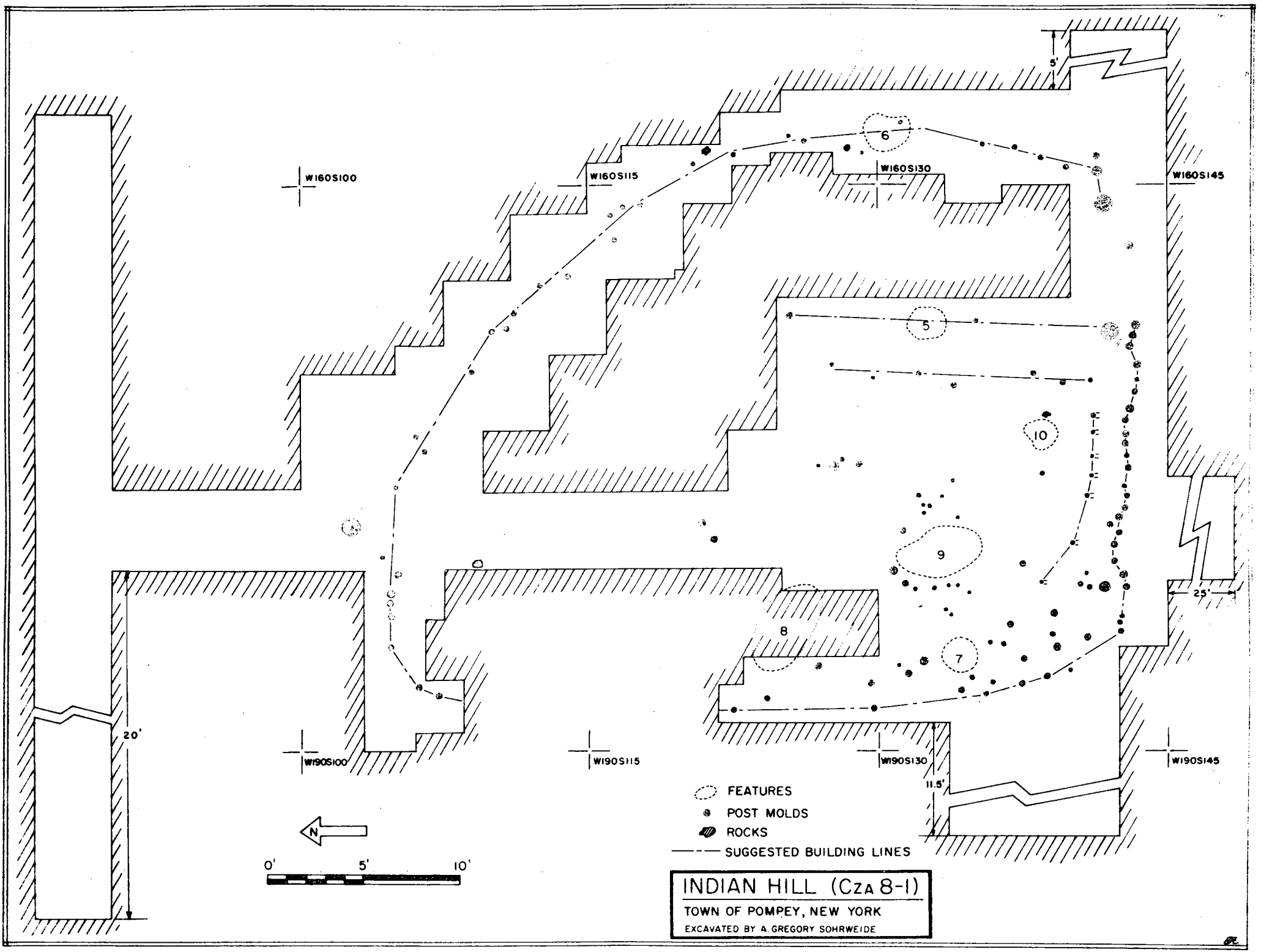

W160S100
W160S115
W160S130
W160S145
W190S100
W190S115
W190S130
W190S145
5'
6
5
10
9
8
7
25'
20'
11.5'
N
0'
5'
10'
FEATURES
POST MOLDS
ROCKS
SUGGESTED BUILDING LINES
INDIAN HILL (CzA 8-1)
TOWN OF POMPEY, NEW YORK
EXCAVATED BY A. GREGORY SOHRWEIDE

THE APPLICATION OF TUCK'S ATTRIBUTE PERCENTAGES TO UNRECORDED ONONDAGA PREHISTORIC SITES

Ferdinand La France

Dr. Tuck has provided a valuable system in his work of tracing Onondaga village removals by pottery attributes. With this groundwork, newly found Onondaga sites can be fitted into his system. Even a handful of sherds, when considered with the site's location, can allow it to be compared with nearby, better documented sites.

Dr. Tuck did this with the Coye II site. Two collar sherds decorated with cord impressions set the site within a broad chronological range, but geographically it tied in with the Schoff, Keough and Bloody Hill sites. Only six rim sherds were available from the Nursery site, but since five of these were of the bi-concave variety, it strongly suggested placement with the nearby Garoga phase Cemetery and Barnes sites.

Four sites not recorded by Tuck will be briefly discussed here. By using selected attribute percentages and site location, these new sites can be incorporated with those that Dr. Tuck has described.

The Carley II site lies a few miles from the Chance Phase Christopher and Burke sites. Over 6,000 sherds were recovered from a hillside midden, making this an ideal site for comparisons. On the rim profile chart, Carley II lies between the Christopher and Burke sites in both the Chance round and Chance straight, the dominant styles of the mid-Chance period. Body surface treatment also places Carley II between Christopher and Burke. Finally, the percentages of cord impressions on collar sherds again show these three sites to be closely related.

The Fietta site lies about a half mile east of the Christopher site. It has been partially destroyed by Henneberry Road and new housing; however, the portion of the site west of the road is in cultivated field and a small surface collection was made. Only six rim sherds were found, four Chance round profile and two Chance straight. Over two per cent of the eighty-nine body sherds were check stamped. This evidence is sufficient to ally the site with its Chance Phase neighbors.

The Sperry site lies about a mile east of the Carley II site and, like the Fietta site, lacks a hillside midden. Only one rim sherd, a Chance round profile, has been recovered. Of the forty-seven body sherds, one was check stamped. Meager as this evidence is, these percentages and the site's location place it in the late Chance Phase.

The Indian Hill II site lies just south of the historic site at Indian Hill. The two sites are close together, but do not appear to overlap. When the field is plowed, a well stained dark rectangle indicates what probably had

been a longhouse. No glass beads or other historic material were found in this area, while celts, hammer stones and madison points of Onondaga flint were fairly numerous. Of the eight rim sherds found, three were of the bi-concave style. None of the one hundred and thirty-one body sherds were check stamped. These indications, plus a location near the Garoga Phase Cemetary site suggest these two sites were related.

Additional information on artifacts from the Fietta, Sperry and Indian Hill II sites is available in the William M. Beauchamp Chapter Newsletter, Vol. 7, No. 8, pp. 2-4. The Carley II site has been reported in the William M. Beauchamp Chapter Bulletin, Vol. 1, No. 1, 1976.

TABLE I

Rim Profiles

Site	# of Rims	% Collarless	% Low Channeled	% Chance Round	% Chance Straight	% Bi-concave	% Concave +
Castle Creek							
Chamberlain	5*	100.0	0.0	0.0	0.0	0.0	0.0
Cabin	398*	76.55	16.31	0.72	0.50	0.22	0.0
Oak Hill							
Furnace Brook	276*	25.0	51.09	5.80	9.42	1.81	0.0
Kelso	162*	11.62	33.31	20.91	25.30	4.30	0.0
Howlett Hill	28*	0.0	17.80	17.80	64.20	0.0	0.0
Coye II	1*	0.0	0.0	0.0	100.0	0.0	0.0
Chance							
Schoff	14*	21.30	0.0	71.40	7.10	0.0	0.0
Bloody Hill I	76*	36.71	6.51	46.0	9.20	0.0	0.0
Keough	16*	0.0	12.50	75.0	12.50	0.0	0.0
Christopher	95 ◐	7.36	1.0	58.0	32.63	1.0	0.0
Carley II	398 ◐	20.90	0.0	39.40	31.90	7.80	0.0
Burke	50*	26.0	4.0	36.0	18.0	14.0	0.0
Fietta	6 ◐	0.0	0.0	66.66	33.33	0.0	0.0
Sperry	1 ◐	0.0	0.0	100.0	0.0	0.0	0.0
Garoga							
Indian Hill II	8 ◐	25.0	0.0	37.50	0.0	37.50	0.0
Cemetery	65*	36.80	0.0	1.50	20.0	40.0	0.0
Nursery	6*	16.66	0.0	0.0	0.0	83.33	0.0
Barnes	144*	22.22	0.0	13.89	11.81	52.08	0.0
Quirk	43 ◐	9.30	0.0	2.32	23.25	44.18	20.93
Chase	210 ◐	15.71	0.0	3.33	10.95	23.81	46.19
Pompey Center	117 ◐	17.94	0.0	3.41	17.94	17.09	43.58

* Figures are from Tuck, 1969, Iroquois Cultural Development in Central New York.
◐ Figures are from Albert D. and Ferdinand La France
\+ See definition, page 38.

TABLE II

Site	Body Surface Treatment: % Body Sherds	Body Surface Treatment: % Check Stamped	Collar Technique: # Collar Sherds	Collar Technique: % Cord-wrapped Paddle Design
Castle Creek				
Chamberlain	334*	95.21	0*	0.0
Cabin	7204*	95.70	108*	89.80
Oak Hill				
Furnace Brook	4822*	98.40	397*	82.85
Kelso	2762*	25.10	412*	97.31
Howlett Hill	644*	92.24	131*	93.10
Coye II	0*	0.0	2*	100.0
Chance				
Schoff	134*	77.61	22*	13.60
Bloody Hill II	3387*	50.34	538*	19.89
Keough	170*	42.94	29*	24.13
Christopher	826	9.32	286*	2.09
Carley II	5632	3.94	398	1.66
Burke	3320*	2.80	530*	1.89
Fietta	89	2.24	12	0.0
Sperry	47	2.13	2	0.0
Garoga				
Indian Hill II	131	0.0	54	0.0
Cemetery	6000+*	0.0	380*	0.0
Nursery	0*	0.0	5*	0.0
Barnes	2000+*	0.0	99*	0.0
Quirk	597	0.0	118	0.0
Chase	4684	0.0	872	0.0
Pompey Center	1183	0.0	324	0.0

* Figures from Tuck, 1969, Iroquois Cultural Development in Central New York.

Figures from Albert D. and Ferdinand La France.

THE CHASE SITE (Cza 5-3)

Al La France

The Chase site lies on a peninsula of land in the southeastern portion of Onondaga County, New York. Located within the front edge of the glaciated Allegheny Plateau, the site sits on Military Lots 99 and 100 in the Town of Pompey. We would like to thank the Dwyer family, who graciously consented to the excavation which made this report possible. The site has been investigated by several people. These include William Beauchamp, E. R. Bradley, who worked this site in the 1930's, and Robert Ricklis. It has since been worked by numerous other collectors. Most of the recent attention has been directed toward surface hunting in the cultivated field which is the southerly area of the site (Plate I).

These investigations have resulted in the recovery of articles such as a brass knife, glass beads, a brass bead and scrap brass. However, on the northern area of the site where this report is most concerned, I found only one piece of scrap brass. This brings to mind the possibility of two villages. This is supported by Beauchamp, who noted that the site does not extend into Lot 100 (Beauchamp, 1900, p. 124). Based on the terrain, one very large village would have been on two levels, a situation I have not heard of or read about as yet. On the USGS topographic map (DeRuyter quadrangle), the southern area is on the 1200 foot contour, while the northern portion is some sixty feet lower.

The ceramic collection from the northern area on Lot 100 consists of some five thousand five hundred sixty-one sherds, of which eight hundred seventy-seven are marked. This collection represents some sixty man hours on the site.

Although I find no great difference in ceramic design, profile, height or any other attribute between the pottery from the northern and southern areas, I do find a difference in the amount of contact material. This, plus the existence of native material of every discription in the northern area, indicates to me that there are two sites. I also feel that the northern village is part of the southward movement of villages and is probably one of the earliest contact sites for this particular group. Other possibilities, such as two co-existing villages, cannot be ruled out, nor can a move from the northern area to the southern area by the same village.

These are only theories, but none can yet be ruled out. The only way to prove the point would be to excavate the southern area, which is under constant cultivation. I did manage to excavate a 2 x 15 foot trench in the southern area, which showed that this portion was definitely occupied.

The remainder of this report will be devoted to the northern wooded area, which I call "Chase 100" for the purpose of keeping artifacts from the two areas separate. I started working the site on 5 May 1976. I first located a midden on the eastern ravine, which was small, but very productive. My wife, Mary, was with me and while surface hunting, she picked up quite a few sherds up hill from me. She asked why the ground was so black. Rather than answer, I proceeded to where she was. Under the dead vegetation, I found the other end of the midden I had been working. This area was more level, blacker and deeper than my portion. This midden was large, being 5 x 10 feet and extending down the ravine to the point where I had started working. I returned on 6 May and during an eight hour day gathered eight hundred two sherds and one face effigy of excellent quality. From this time on I worked the site for fourteen days off and on between the "raindrops."

I excavated five other midden areas, all smaller than the one mentioned above. Oddly enough, these were all on the eastern slope, with the exception of a very small one on the northwest side. On the east side I also located an oval fire pit approximately two and one-half feet wide by four feet long, which varied from six inchest to twenty-one inches deep. This fire pit had quite a few sherds plus a piece of apparently worked animal skull. The hard red clay sides and bottom of the fire pit ware about six inches thick and were also interlaced with pottery sherds.

Artifacts

Bone

One complete and three partial antler tine flakers or punches. The complete example is 5 cm. long and was scraped, but not polished.

One bone awl, possibly rib, 9.5 cm. long and polished.

One conical antler point, 5.5 cm. long with a hollowed out base, 2 cm. deep. The exterior shows evidence of scraping.

Two unidentified pieces of polished bone.

One piece of animal skull showing tapering and marks on one side.

Stone

A piece of stone pipe bowl, which appears to have had an effigy or projection on the lip. Dark grey soapstone.

Thirteen broken projectile points. All but one have straight sides and slightly concave bases and range between 15 - 25 mm. wide and 25 - 35 mm. long. Onondaga flint.

One ovate knife, 6 cm. long and 3.3 cm. wide. While one end is finely flaked, the other is thick and unfinished, probably due to the percussion bulb, which could not be further worked. Onondaga flint.

One single edged scraper, 3.3 cm. long and 3 cm. wide. Onondaga flint.

Two small thumb scrapers with rounded, finely chipped edges. One is 16 mm. wide and 25 mm. long with ten serrated "teeth." The second is a bit more crude and has fourteen "teeth." Onondaga flint.

One broken drill, 15 mm. wide and 20 mm. long. The point is 4 mm. wide.

Three complete and two broken anvil stones. These are centrally pitted on one side with slight pitting on the opposite. Some of the edges have been battered.

Three small grinding stones (?). These are spherical in shape and are smooth on the surface.

Trade Goods

One piece of brass, long and rectangular in shape. This is the only non-native artifact recovered.

Ceramic

Pipes: Bowls

one decorated proto trumpet

one acorn shaped bowl with incised concentric rings.

three probable trumpet fragments

Stems

one square stem, decorated on all sides

two round, plan stem pieces

Pottery

A total of five thousand five hundred sixty-one sherds were excavated, eight hundred seventy-seven of which were marked. Of these marked sherds, two hundred thirteen are complete enough to determine the rim profile.

A. Total Marked Sherds

1. Rim Profile (all sherds)

	Number	%
Chance round	7	3.3
Chance straight	23	10.8
Bi-concave	53	24.9
Concave	97	45.5
Collarless	33	15.5
	213	100.0

The terms used above are defined according to Tuck (1969, pp. 32-35). The one exception is "concave," a new profile occuring later in the proto historic period. In order to clearly distinguish between bi-concave and concave profiles, their definitions are included:

Bi-concave: collared vessels which feature a thickened lip and a thickened base, resulting in a concave interior opposite a concave exterior.

Concave: collared vessels with a convex interior and concave exterior opposite each other. Below this, the collar bends so that a concave interior is opposite a convex exterior. This results in an S-like profile. This appears to be a further evolution of the bi-concave profile.

2. Lip Decoration (all sherds)

	Marked	Plain	Total
Interior	20 (5.6%)	334 (94.4%)	354 (100%)
Exterior	81 (22.9%)	273 (77.1%)	354 (100%)
Top	156 (44.1%)	193 (55.9%)	354 (100%)

B. Collared Vessels

The above analysis is based on all sherds and is done in the manner that Tuck used. However, separating the collared and collarless pots and analyzing each brings out some important differences. The following analyses use only collared vessel sherds:

1. Profile

	Number	%
Chance round	7	4
Chance straight	23	13
Bi-concave	50	28
Concave	97	55
	177	100

2. Lip Decoration

	Marked	Plain	Total
Interior	12 (4%)	309 (96%)	321 (100%)
Exterior	55 (17%)	266 (83%)	321 (100%)
Top	135 (42%)	196 (58%)	321 (100%)

3. Collar

All collar decoration is incised, no fingernail markings were found. 90% of the incising is fine (under 1 mm.) and 10% is broad (over 1 mm.).

The dominant collar height is high, ranging between 35 - 40 mm. Low collar (0 - 25 mm.) accounts for about 30% of the sample and there is just a trace of medium collar (25 - 35 mm.), about 10%.

4. Collar Base

	Number	%
Notching occurs on the base ridge	226	86.5
Notching occurs above the base ridge	14	5.4
Notching occurs below the base ridge	3	1.1
No base notching	18	6.9
	261	100.0

Five examples of lugged or frilled pottery also occur. Of these two are truncated, two are pointed and one is lobed.

5. Neck and Shoulder

Two sherds show rows of oval punctates. Three other sherds show fine horizontal incising, as well as oval punctates. One of these sherds is also unusual in that a small face effigy is located in the subneck concavity.

6. Special Features

Effigies:	faces	3	(including the one mentioned above)
	figures	1	
	scars	2	
Raised beads:		3	(Two are pinched up, one is applied.)
Castellations:	Pointed	11	
	Rounded	1	
	Notched	1	

C. Collarless Vessels

1. Profile

	Number	%
Thickened lip	7	21
Everted lip	26	79
	33	100

2. Lip Decoration

	Marked	Plain	Total
Interior	8 (24%)	25 (75%)	33 (100%)
Exterior	26 (79%)	7 (21%)	33 (100%)
Top	21 (64%)	112 (36%)	33 (100%)

Two rims show sublip decoration. There are seven castellations, all pointed. One is unusual - a pronounced, out-sloping lip edge that is apparently cut to that shape.

D. Body

This includes unmarked neck and shoulder pieces for a total of four thousand six hundred eighty-four sherds. There is no evidence of check stamped or corded markings. One sherd shows possible evidence of a vertical painted line.

E. Other

Shell-tempered pottery: 8 pieces

This includes three rim pieces, four collar pieces (including one with base notching), and one piece of corded body. The collar pieces have a light incising and square punctates.

Other ceramic objects:

A pottery bead, 15 mm. long and 7 mm. wide. The hole is molded, not drilled, and may be a reworded pipe stem piece.

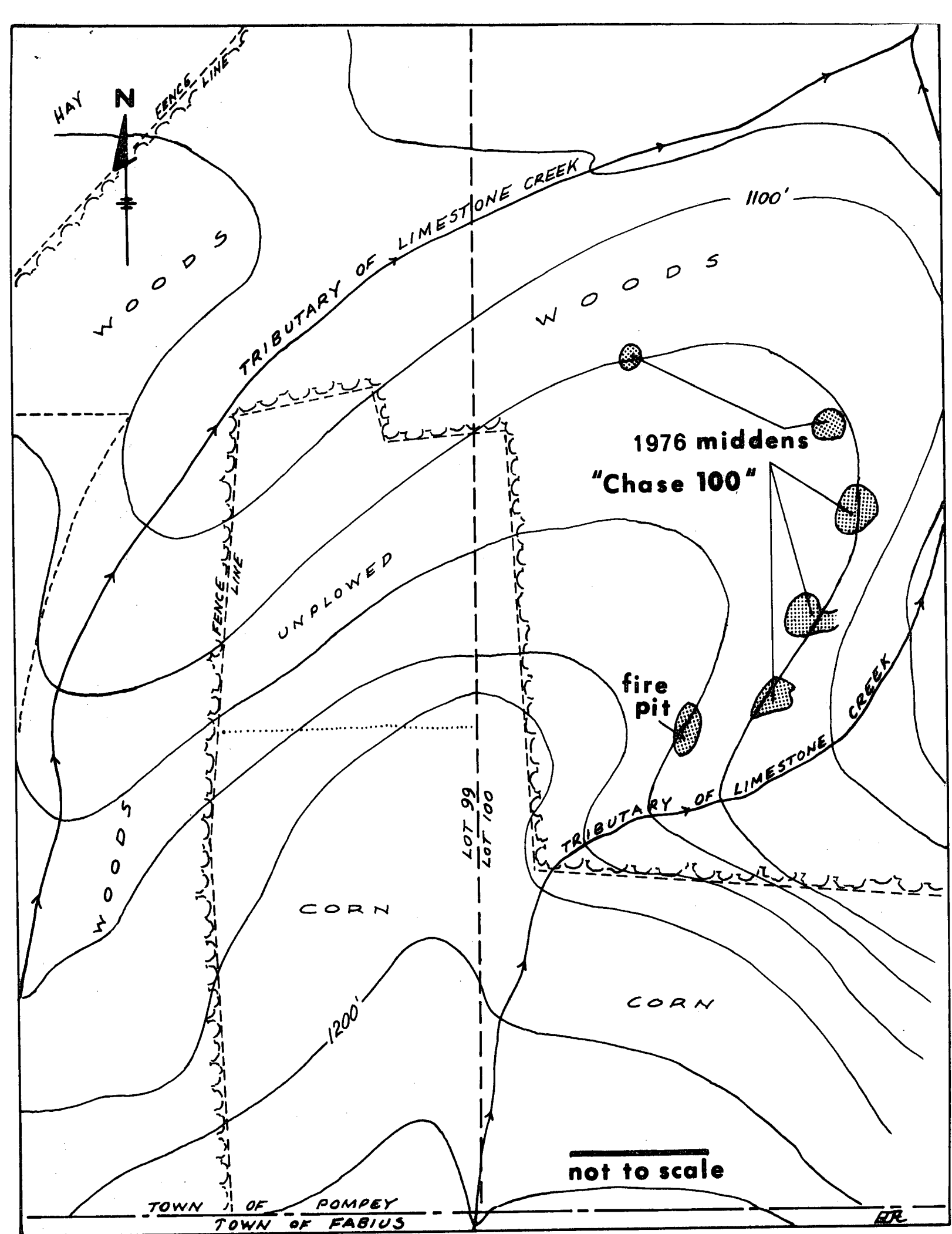
A pottery disc, 20 mm. wide and 5 mm. thick. This was apparently ground to shape from a pot sherd.

A round, pottery ball, approximately 15 mm. in diameter. These have been found on other Onondaga sites.

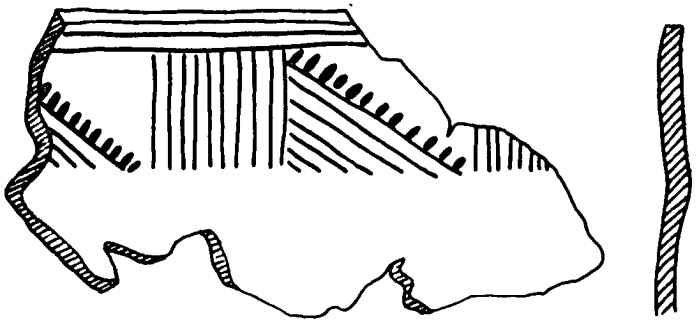
BIBLIOGRAPHY

Beauchamp, William M. 1900 — Aboriginal Occupation of New York. New York State Museum Bulletin No. 32.

Tuck, James A. 1969 — Iroquois Cultural Development in Central New York.

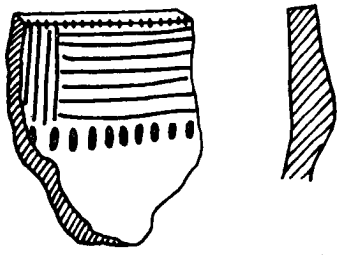

N
HAY
FENCE LINE
WOODS
TRIBUTARY OF LIMESTONE CREEK
1100'
WOODS
1976 middens
"Chase 100"
UNPLOWED
FENCE LINE
fire pit
TRIBUTARY OF LIMESTONE CREEK
WOODS
LOT 99
LOT 100
CORN
CORN
1200'
not to scale
TOWN OF POMPEY
TOWN OF FABIUS

MEDIUM HEIGHT COLLARS WITH CONCAVE PROFILE



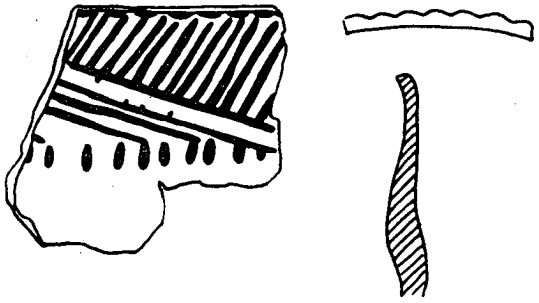
A MEDIUM COLLAR SHERD WITH CONCAVE PROFILE AND NO LIP OR BASE MARKING.

A.



A MEDIUM COLLAR SHERD, CONCAVE PROFILE, WITH A THICKENED BASE AND FINE EXTERIOR LIP NOTCHING.

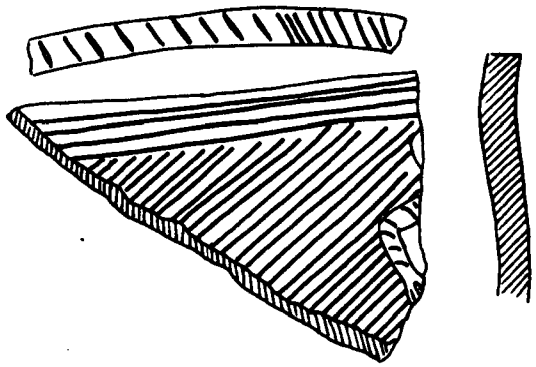
B.



A MEDIUM COLLAR SHERD WITH CONCAVE PROFILE. THE DECORATION APPEARS TO HAVE BEEN APPLIED WITH THE POT HELD UPSIDE DOWN IN THE LEFT HAND IN THIS ORDER: BASE NOTCHING, BROAD RIGHT OBLIQUE INCISING, BROAD LEFT OBLIQUE INCISING AND FINALLY EXTERIOR LIP NOTCHING.

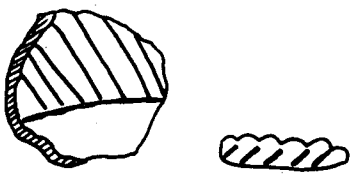
C.

1:½



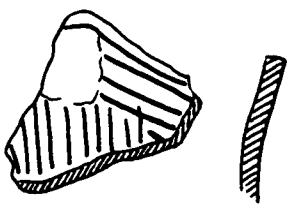
A.

A PARTIAL HIGH COLLAR SHERD WITH PART OF AN APPLIED FULL FIGURE HUMAN EFFIGY. THE COLLAR HAS A CONCAVE PROFILE AND IS FINELY INCISED. THE TOP LIP IS FLAT AND MARKED WITH LEFT OBLIQUE INCISING.



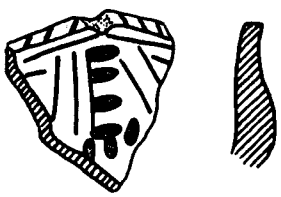
B.

A FRAGMENT OF COLLAR SHOWING PART OF AN APPLIED RAISED BEAD.



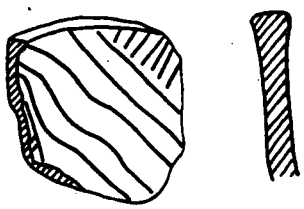
C.

A CLASSIC POINTED CASTELLATION SHOWING THE SCAR LEFT BY A DETACHED FACE EFFIGY. CONCAVE PROFILE.



D.

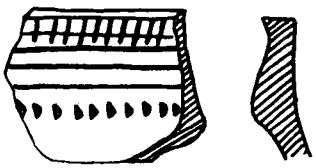
A DEEPLY NOTCHED CASTELLATION FROM A LOW COLLAR POT WITH A CONCAVE PROFILE. A ROW OF OVAL PUNCTATES RUN FROM THE CASTELLATION TO THE NOTCHED COLLAR BASE.



E.

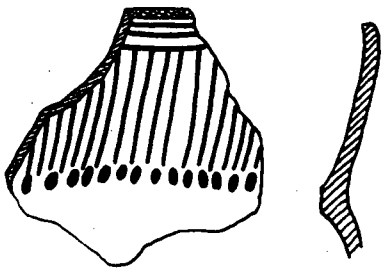
A ROUNDED CASTELLATION WITH A THICKENED LIP

1:½



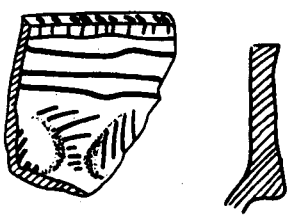
A.

A LOW COLLAR SHERD, CONCAVE PROFILE AND THICKENED BASE



B.

A HIGH COLLAR SHERD, CONCAVE PROFILE WITH CROSS-HATCHED TOP LIP MARKINGS AND SMALL OVAL PUNCTATES ON THE COLLAR BASE.



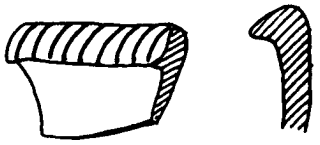
C.

A SHERD WITH A LUGGED OR FRILLED BASE. VIEWED FROM THE FRONT, THE LUG IS TRUNCATED RATHER THAN POINTED OR LOBED. THE LUG IS AN INTEGRAL, PINCHED-UP PART OF THE POT, NOT A SEPERATELY APPLIED PIECE.

1:½

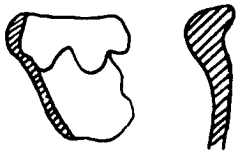
A.

A CLASSIC POINTED CASTELLATION FROM A COLLARLESS, EVERTED LIP POT. THE EXTERIOR LIP EDGE IS SLIGHTLY NOTCHED AND THERE IS FINE SUB-LIP INCISING.



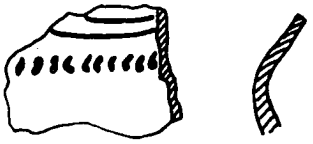
B.

AN EVERTED LIP, COLLARLESS RIM WITH AN INCISED TOP LIP DESIGN.



C.

AN UNUSUAL COLLARLESS RIM WITH A THICKENED LIP AND SCALLOPED INTERIOR LIP.



D.

A SHERD SHOWING NECK INCISING AND SHOULDER PUNCTATES.

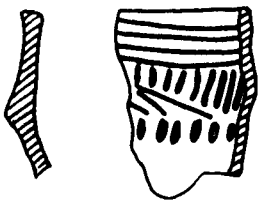
TWO SHERDS OF SHELL TEMPERED POTTERY. THERE IS FINE TOP LIP INCISING AND BROAD INCISING ON THE COLLAR. THE COLLAR ALSO HAS ROWS OF RIGHT OBLIQUE SQUARE PUNCTATES. THE COLLAR BASE HAS WIDELY SEPERATE OVAL NOTCHES. THESE ARE NOT TYPICAL OF ONONDAGA SHERDS.

E.

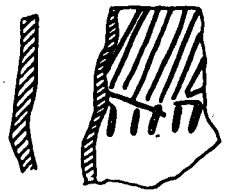
1:½

POTTERY

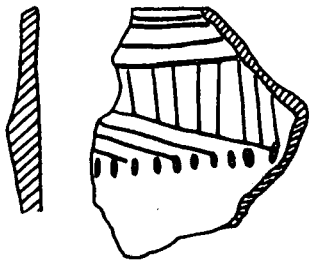
PLATE V



A. NOTCHING BELOW BASE RIDGE

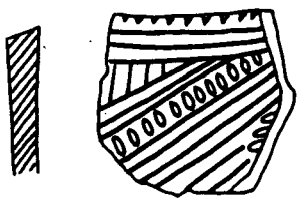


B.

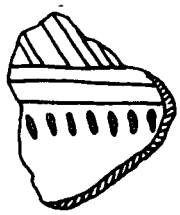


C.

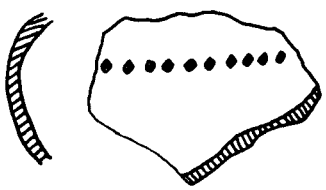
D. LOW COLLAR



E.

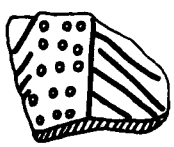


F. OBLIQUE OVER HORIZONTAL

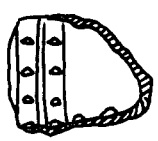


SHOULDER DESIGN

G.



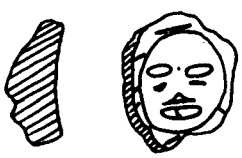
H. HOLLOW REED PUNCTATE



I. EFFIGY LEGS IN RAISED RELIEF

FACE EFFIGY APPLIED

J.



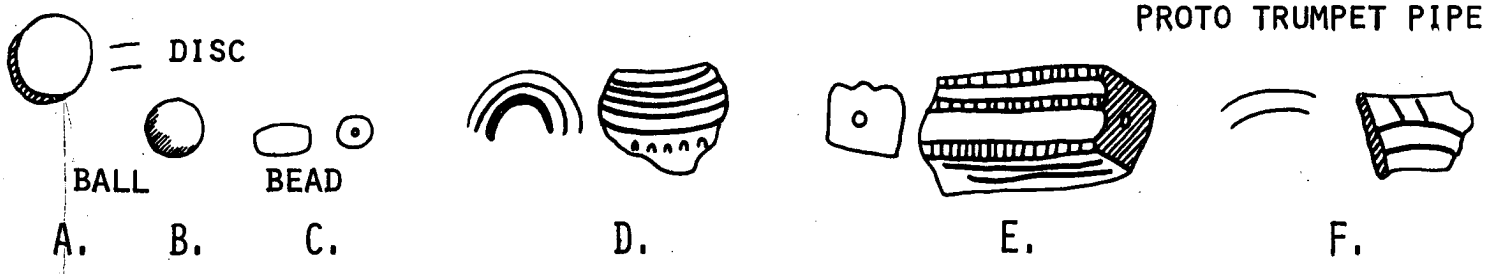
K.

FACE EFFIGY

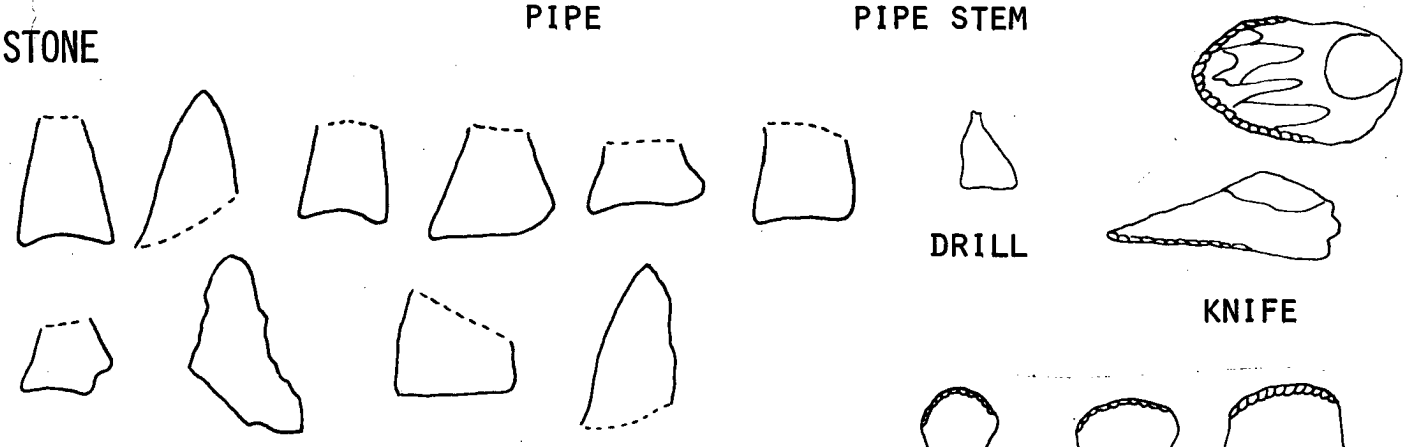
1:½

POTTERY

PLATE VI



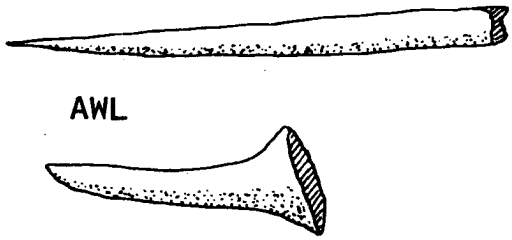
STONE



PROJECTILE POINTS

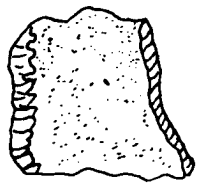
SCRAPERS

BONE



CONICAL POINT

STONE PIPE
POSSIBLE EFFIGY



WORKED SKULL BONE

POLISHED BONE

FLAKERS

1:½