

THE LITE SITE
AN EARLY SOUTHERN DIVISION HURON SITE
NEAR BELLEVILLE ONTARIO

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The author describes an Iroquoian site north of Belleville Ontario which he excavated during the summer of 1967. The artifacts recovered are described in detail with particular emphasis on the ceramics. Rim sherds have been analysed using both the pottery-type method and the attribute method. The occurrence of pottery decorated with a cord-wrapped-stick technique is noted and, being considered unique in this particular context, is reported upon in detail. In a discussion comparing site characteristics with diagnostic traits of the Northern and Southern Divisions of the Huron-Petun Branch of Ontario Iroquois, evidence is presented in support of a conclusion that the site is a Southern Division component.

RESUME

L'auteur décrit un site iroquois situé au nord de Belleville, Ontario, qu'il a découvert au cours de ses fouilles de l'été 1967. Les objets façonnés qui y furent trouvés sont décrits en détail et plus particulièrement ceux en céramique. Des morceaux de vase provenant du col ont été analysés tant par la méthode type que par la méthode analogique. La découverte de potteries cordées mérite d'être signalée et est abondamment commentée.

Au cours d'un échange d'idées, où les caractéristiques des sites sont comparées aux éléments intrinsèques des subdivisions nord et sud de la Branche Huron-Petun des Iroquois de l'Ontario, des arguments présentés, on peut conclure que le site en question appartient à un élément de la subdivision sud.

INTRODUCTION

The site first came to the author's attention in 1950 as a result of it being mentioned by Wintemberg in his report on the Roebuck Site (1936, p. 121). In the spring of 1951, it was located without difficulty and a surface collection was made from one field which had been ploughed the previous fall for the first time in some twenty years. At that time a map was made showing the concentrations of artifacts on the surface. In the fall of 1951 the site was visited by the author and Dr R.S. MacNeish, then Chief Archaeologist at the National Museum. At that time MacNeish noted the amount of Huron pottery present and suggested that the site was probably involved in the Huron tradition. Further small surface collections were made on a number of occasions in 1952 and these, together with the 1951 surface collection, were presented to the National Museum where the site is catalogued BbGi-1.

Subsequently the site gained recognition as a key site in the area because it was the only known Iroquois site on the southern end of the Trent River axis which is not located in peninsular Prince Edward County, and because it had been reported by Wintemberg (1936, p. 121) as belonging to people possessing a culture similar to that found on the Roebuck Site which is located a considerable distance to the east in Grenville County. It was, therefore, a component which could serve to test the local applicability of Wright's (1966, p. 69) hypothesis regarding the existence of Southern and Northern Divisions of the Huron. If Wintemberg was correct in his assessment of it being Roebuck-like, it could also serve to further illuminate Roebuck influences on the Trent River Iroquois sites which had been reported earlier by Emerson (1954, p. 203) at the Benson Site. It might also shed light on the

implications of the Roebuck-like material found on the Sidey-Mackay Site (Wintemberg 1946) which is located further to the west in Huronia.

Early in 1966 the author learned that the hill on which the site was located had been test-pitted to assess its potential as a gravel pit. If a quarry were to be opened the site would be threatened with extinction. With this in mind the author sought National Museum support to conduct a salvage operation. The proposal was accepted and early in 1967 plans were made to conduct excavations using a team of thirteen. Nine members had previous archaeological field experience and one had attended the University of Toronto archaeological field school at Cahigué. As it transpired, additional and welcome help was received from four members of the archaeological staff of the National Museum who provided two full days assistance.

THE SITE

The site is located north of Belleville in Sidney Township, Hastings County. Specifically it is located on the northwest shoulder of a high isolated hill which is characteristic of the many drumlin features in the area. The hill, whose long axis is on a bearing of approximately 44 degrees magnetic, rises 125 feet above the surrounding terrain in an elongated dome approximately 475 feet above sea-level. The shoulder on which the site is located is on the north-west side of the main feature, 75 feet above the level ground to the northwest and 425 feet above sea-level. Between the site and the main feature to the southeast is a small saddle approximately 10 feet deep and 150 yards wide in which is located a spring which drains southwest into Palliser Creek. This creek in turn drains into the Moira River two miles to the east of the site. Another spring is located at the foot of the steep west bank of the shoulder on which the site is located. This spring drains northeast into the Moira River a short distance above Palliser Creek.

Judging from surface finds and known deposits the site extends along the top of the shoulder from the point where it falls sharply to the west, for a distance of 250 yards north-eastwards in a belt which varies from 50 yards to 120 yards in width. By far the most productive region is located on the brow of the steep slope on the northwest side and it was there that excavations were concentrated during 1967.

There has been considerable erosion of the shoulder on which the site is located. It is most apparent where the damming effect of a stone fence on the southeast side has caused a terrace approximately four feet high to be built up. It is likely that the steep northwest side has also been seriously eroded but, there being no stone fence or other obstacle on that side to dam the eroded soil, there is no terracing effect to indicate the extent of the erosion as is the case on the southeast side. In any event the top of the feature has little or no topsoil, a fact which was verified by test-pitting and an examination of the faces of the numerous bull-dozer cuts which were made when the area was tested as a gravel pit. Nevertheless one natural hollow filled with midden soil was located on the top of the feature and it is possible others may have survived.

EXCAVATIONS

The map to show artifact concentrations on the surface, which was compiled by the author in 1951, greatly reduced the time required in 1967 to locate areas worth excavating. Excavations were conducted on a site grid whose long axis was laid out on a magnetic bearing of 44 degrees following the crest of the feature on which the site is located. The topsoil was stripped to expose the top of the undisturbed midden deposits. Initially this soil was screened, to obtain the artifacts it might contain but the small return for the labour involved was cause to eliminate screening in favour of cursory periodic examinations. The area was then laid out in five foot squares on the site grid and trowelled in six inch layers to the subsoil. All soil was removed from the feature using wheelbarrows. This served to reveal the configuration of the hollow or pit filled by the midden deposit. The walls of the five foot

squares were left intact to provide the basis for recording profiles at five foot intervals on both axes. The final action was the removal of these walls. As a result of using this method of excavating, it was possible to gather for analysis the whole of the site sample in bags which contain the artifacts from each square in six inch levels.

ARTIFACTS

CLAY

POTTERY

A total of 8,411 potsherds are included in the 1951 and 1967 samples. Of these 832 are intact rim sherds, 101 are gross castellations which could not be classified as a pottery type because of the distortion of the rim shape due to the castellation, 140 are collar fragments with the lips intact, 142 are collar fragments with the collar base intact, 992 are neck sherds, 537 are shoulder sherds, and 5,667 are body sherds.

RIM SHERDS

The result of an analysis of the intact rim sherds, following the pottery-type method suggested by MacNeish (1952), is set out in Table 1. An analysis of the same rim sherds using the criteria of rim shape and collar decorative technique is set out in Tables 2 and 3. Collar decorative motifs can be assessed from pottery types and the detailed description of motifs given for un-typed sherds. Miscellaneous characteristics of the rim sherds, including the incidence of lip decorations, interior decorations, and notches below the collar are set out in Table 4. Typical rim sherds are illustrated in Plates 1, 2, and 3.

CORD-WRAPPED-STICK. IMPRESSED RIMS

A total of 67 rim sherds, representing eight per cent of the total rim sherd sample, are decorated using a cord-wrapped stick technique. Typical sherds are illustrated in Plate 2, figs. 1, 3, 5, 6, 7. This is the first known occurrence of this trait on a Huron Site and its existence is considered sufficiently important to present the characteristics of these sherds in detail in Table 5.

CASTELLATIONS

The incidence of castellations by types is set out in Table 6. One classic pointed castellation in the 1951 collection is decorated with two punctate circles and a horizontal gash in the form of a stylized human face. The only other punctate circle face is that illustrated in Plate 2, fig. 7.

In addition to the normal type of castellation, there are five intact rim sherds which resemble castellations when viewed from above, because the collar protrudes horizontally' in the same manner as an overhanging castellation protrudes beyond the collar, but there is no vertical protrusion of the lip surface into a peak. Rather the lip surface is horizontal or nearly so. Because a search of data on Iroquois pottery has failed to disclose the occurrence of this pseudo-castellation trait previously, it will be reported upon in detail.

One specimen (Plate 3, fig. 5) has a collar 16 mm high decorated with incised opposed right-angle triangles filled with incised parallel lines. The lip surface is horizontal but at the point where the ridge extends beyond the neck of the pot 24 mm, the lip is thickened from approximately 5 mm to 17 mm. The extreme end of the horizontal ridge protrudes 2 mm below the remainder of the collar in a claw-like extension. Another specimen has a collar 16 mm wide decorated with incised left oblique lines on one side of the horizontal peak and incised right oblique lines on the other side. The lip surface is horizontal but at the point where the ridge extends 13 mm beyond the neck of the vessel it is thickened from 5 mm to 15 mm. The extreme end of the horizontal ridge protrudes 4 mm below the remainder of the collar in a claw-like extension. Another specimen has a collar 18 mm high decorated with horizontal incised lines which are broken at the edge of the ridge. The lip surface is horizontal but at the

point where the ridge extends 10 mm beyond the neck of the vessel it is thickened from 5 mm to 10 mm. There is no claw-like extension protruding below the collar at the bottom of the ridge. Another specimen (Plate 3, fig. 6) has a collar 18 mm high decorated with left oblique incised lines on one side of the horizontal peak and right oblique incised lines on the other side. The lip surface is horizontal but at the point where the ridge extends 20 mm beyond the neck of the vessel it is thickened from 5 mm to 9 mm. There is no claw-like extension below the collar on this specimen. The remaining specimen has a collar 20 mm high decorated with left oblique incised lines on one side of the ridge and right oblique incised lines on the other side. The lip surface rises gently to a slight vertical peak 4 mm above the lip surface to form an incipient castellation. The lip thickens from 5 mm to 13 mm at this point and it overhangs the neck of the vessel 14 mm. There is no claw-like vertical extension below the ridge on this specimen. The neck is decorated with incised oblique lines which converge below the castellation.

These specimens are not included in the analysis of the castellations set out in Table 6.

NECK SHERDS

Thirty-two per cent of the neck sherds in the sample are decorated. Typical examples are illustrated Plate 1, figs. 3, 7; Plate 3, figs. 8, 9. The principle decorations are incised horizontal lines, incised chevrons, and incised oblique lines.

Thirteen neck sherds are decorated with oblique plaits of decorations similar to those noted by Harper (1952, fig. 3h) on the Webb Site in Simcoe County. Ten of these neck sherds and two round shoulder sherds represent one vessel from which the collar is missing. They are decorated with a right oblique motif consisting of two rows of dots 8 mm apart separated by 44 mm from another two rows of dots 8 mm apart (Plate 3, fig. 9). One neck sherd is decorated with two rows of dots 8 mm apart with a long incised line between them. A rim sherd (Plate 2, fig. 4), with a collar 8 mm high and having the lip decorated with oblique paddle-edge impressions, has the neck decorated with two pair of horizontal incised lines between which, and below the lower, are rows of oblique dots 24 mm apart. The remainder of the neck is decorated with left oblique incised lines. The other neck sherd, which is part of a collarless thickened-lip rim sherd on which the exterior decoration is a stamped right oblique motif and the lip decorated with left oblique paddle-edge impressions, is decorated with a left oblique motif consisting of a number of rows of triangular shaped dots. The rows are 80 mm apart.

SHOULDER SHERDS

Shoulder sherd characteristics are set out in Table 7. Typical carinated shoulder sherds are illustrated in Plate 1, fig. 7 and Plate 3, fig. 8 while Plate 3, fig. 9 illustrates a typical round shoulder sherd.

BODY SHERDS

Body sherd characteristics are set out in Table 4.

PIPES

The 1967 sample of pipes from the site consists of 79 bowl fragments and 63 stem fragments. Typical pipe fragments are illustrated in Plate 4, figs. 1 to 9. There are no intact pipes in the sample.

The pipe bowl sample includes two intact items and 77 fragments. Forty-five of these include the lip of the bowl. The incidence of pipe types which can be identified are set out in Table 8. The remaining 36 bowl fragments are too small to be typed. These include two effigy-pipe fragments; one a human face (Plate 4, fig. 6) and one a bird, probably an owl (Plate 4, fig. 9). Fifteen of the pipe stem fragments have the mouthpieces intact. Two of these have slightly flared ends one of which is moulded (Plate 4, fig. 7). The remainder are straight tapered cylinders with the end at right-angles to the axis of the stem (Plate 4, fig. 8). Sixty-three of the

pipe stems have had the holes formed on straws, reeds, or twigs and range from 3-5 mm in diameter. None has been formed on cords or twisted grass.

An additional 16 pipe bowl fragments and eight pipe stem fragments are included in the surface collection made in 1951. The pipe types which can be identified are also set out in Table 8. Two of the pipe bowls which could not be identified by types are alike in that they are covered with shallow circular-shaped depressions. In one case the depressions are 2.5 mm in diameter and 5 mm apart spaced over the whole of the bowl fragment in parallel lines 5 mm apart. In the other case the depressions are 4.5 mm in diameter and 10 mm apart spaced over the whole of the bowl fragment in parallel lines 10 mm apart. Another unidentified bowl fragment is undecorated. It is cylindrical in shape much like Emerson's (1966, p. 238) Elongated Ring type. The remaining four bowl fragments are too small to be typed. Four of the pipe stems are straight tapered cylinders with intact unmodified mouthpiece ends which are at right-angles to the axis of the stem. One of these is not functional insofar as it lacks a hole in the stem.

BEADS

One cylindrical bead 19 mm long, which is 11 mm in diameter at one end and 14 mm in diameter at the other, has been made from a pipe-stem fragment.

PROBLEMATICAL OBJECTS

A sculpted elongated piece of clay 38 mm long and approximately 13 mm square may be either a strap handle from a pot or a loop from an effigy clay pipe of some kind.

Five pieces of fired clay showing fingernail marks and fingerprints are probably debris from the pottery industry.

A fragment of fired clay 28 mm long, 24 mm wide, and 12 mm thick has a raised ridge 3 mm high and 10 mm long. Possibly it is a fragment from an effigy clay pipe.

BONE

AWLS/PINS

Eighty-two bone awls, or fragments of bone awls, were recovered. Typical examples are illustrated in Plate 5, figs. 1, 2, 3, 5, 6, and 10. The more slender of these specimens may have been used as pins rather than as awls. Fourteen items are blunt basal fragments and 16 are pointed tip fragments none of which is decorated or in any way unique.

Of the 51 intact items 34 have been made from splinters which do not include any vestiges of the joint. One of these is 136 mm long, one 135 mm, one 130 mm, one 126 mm, two 119 mm, one 114 mm, one 110 mm, one 103 mm, one 97 mm, one 93 mm, five 90 mm, one 82 mm, five 76 mm, one 69 mm, three 66 mm, six 57 mm, and two are 44 mm long. One of the items 119 mm long (Plate 5, fig. 10) is extraordinary insofar as both ends are pointed. The item 135 mm long (Plate 5, fig. 2) is decorated with five 1.5 mm deep notches on one edge near the poll end giving the awl a scalloped-edge appearance. The item 126 mm long (Plate 5, fig. 1) is perforated with two holes, 3.5 mm in diameter, one above the other near the poll end. The edges are notched deeply with two pairs of notches in such a manner as to cause there to be two waist-like constrictions along its length. The first pair of notches are 4 mm deep, 11 mm wide, and 20 mm from the poll end. The second pair of notches are 4 mm deep, 14 mm wide, and 46 mm from the poll end. This item resembles the awl or hair pin called the carved "Swizzle-stick" type by Emerson (1954, p. 204, 210) to describe a similar item recovered at the Benson Site. The item 114 mm long (Plate 5, fig. 3) is 23.5 mm wide at the poll end and 17 mm wide at the opposite end before it tapers steeply to the point. It has been ground flat on the internal surface of the shaft and scraped and polished on the external surface. The external surface is decorated along one edge with fifteen incised lines spaced from 3-4 mm apart. These lines notch the edge to a depth of 1 mm and they carry-on to the internal edge where they are from 1.5 mm to 5 mm long. The external surface of the shaft is decorated with incised lines

which form right-angled triangles filled with three or four incised lines parallel to the vertical side of the triangle. Where these lines meet the edge, the edge is notched slightly and they carry-on to the internal surface where they are from 3-5 mm long. While the decoration is not similar, a decorated awl is reported from the Hardrock Site (Emerson, 1954, p. 190).

The 18 remaining specimens are splinter awls which incorporate a portion of the articulating surfaces which in every case has been considerably modified by grinding and polishing. Of the 16 intact specimens four are 154 mm long, one 130 mm, two 115 mm, four 100 mm, two 80 mm, and three are 66 mm long. The remaining two awls, one 106 mm long the other 95 mm long, are items from which the pointed end has been broken.

There are 12 awls in the surface collection made in 1951. Ten of these are made from bone splinters from which all articulating surfaces have been removed. One of these 43 mm long is polished and worked having three notches on each side arranged in pairs one opposite the other commencing 22 mm from the poll end. Four items; one 132 mm long, one 110 mm long, one 101 mm long, and one 68 mm long; are intact. Three items, one 82 mm long, one 58 mm long, and one 36 mm long, are tip fragments while two items, one 53 mm long and one 23 mm long, are shaft fragments. Two other awls are made from bone shafts which have a portion of the articulating surface intact; one is 144 mm long while the other is 71 mm long.

PHALANGES

A total of 86 intact and fragmentary worked deer phalanges are included in the 1951 and 1967 samples. Of these, five are of the cup-and-pin variety representing 5.8 per cent of the sample; 80 are of the toggle, or ground variety representing 94.2 per cent of the sample; and one is unidentified. Typical specimens of the toggle type are illustrated in Plate 4, figs. 10, 11, 12.

There are four cup-and-pin items in the 1967 sample. All have had the proximal end opened to form the cups; one having been burned through, one having had the whole of the proximal articulating surfaces broken off irregularly, and two having had the proximal articulating surfaces removed by cutting, grinding, and polishing. Only the last two mentioned have a hole in the distal end as is commonly the case with this artifact in eastern Ontario. The burned item has had the distal articulating surfaces scored by gnawing.

There are three distinct types among the 17 intact ground phalanges in the 1967 sample. One type (Plate 4, fig. 10), of which there are seven, has been extensively ground on both the superior and inferior surfaces in such a manner as to create a wedge-shaped item with the distal end being the thin edge. The grinding has resulted in a narrow slot through to the hollow centre on the superior surface for the greater part of the length. On the bottom the grinding has re-
 S uited in a large triangular-shaped hole near the proximal end and a small circular hole near the distal end. One of these is black in colour and highly polished. Two have been decorated by having been scorched transversely on the top spanning the narrow slot near the distal end. Both of these have had the slot in the top surface widened by chipping.

The second type (Plate 4, fig. 12), of which there are four, have had the inferior surface ground in the same manner as those described above but the top is unmodified except for a round hole near the proximal end. This hole is made by a V-shaped cut in one case, by breaking in one case, and by grinding in the other case.

The third type (Plate 4, fig. 11), of which there are six, have had the inferior surface ground flat, as was the case with the two preceding types, but the top has been ground round and an oval-shaped hole broken, or ground, through to the hollow centre. Three of them have been decorated by scorching transversely near the distal end (Plate 4, fig. 11).

There are 47 fragments of ground phalanges, 13 of which are proximal ends, which can not be classified according to the three types mentioned. Six other fragments can be classified as being portions of the wedge-shaped item. Eighteen fragments are portions of the type on which the top is ground round; five of these have been decorated by incising or grinding transversely and three have been decorated by scorching transversely. Ten fragments are too small to classify.

Eight phalanges have been ground flat on the inferior surface. Three of these have been broken through to the hollow centre leaving irregular unworked edges, one has been scored by gnawing, and two have been chipped on the superior surface. All of these items appear to be artifacts discarded during the process of manufacture.

One small phalange is broken at the proximal end. It may be a fragment of an artifact, or the breaking may have been due to gnawing as it shows many teeth-marks.

In the 1951 surface collection there are four additional intact worked phalanges, three of the ground toggle type and one cup-and-pin type, and five fragments four of which are of the toggle variety and the other may be of the cup-and-pin variety.

POTTERY-MAKING TOOLS

There are 34 bone artifacts with the ends or the sides, and sometimes both, worn blunt and smooth. These items do not resemble awls, or broken awls, because of the smooth blunt ends and sides; although they may be modified awls. Typical specimens are illustrated in Plate 5, figs. 8, 9, 13. While they are being called pottery-making tools here because of the possibility of their having been used as smoothers during the manufacture of pottery, there is no certainty that this was in fact their purpose.

One group of items in this category (Plate 5, fig. 8) are 14 rough angular splinters from the shaft of a thick bone which, except for a small smooth area on the end or on an edge, are unmodified. One of these is 128 mm long, one is 116 mm long, one is 103 mm long, one is 104 mm long, one is 84 mm long, one is 72 mm long, one is 69 mm long, one 68 mm long, one 64 mm long, one 62 mm long, three are 52 mm long, and one is 26 mm long.

The second group are three bone splinters with the articulating surfaces intact or only slightly modified. One is 97 mm long, the other is 71 mm long, and the last is 67 mm long. All three have smooth blunt points.

The third group are five small fragments of rib which are unmodified except for the smoothed areas on the sides or ends.

The largest group are 12 well worked and polished bone splinters which show little of the original surface. They closely resemble the splinter awls from the site with the exception that the end is blunt and worn smooth; even polished. Two of these items are 80 mm long, one is 76 mm long, one is 74 mm long, one is 68 mm long, four are 66 mm long, one is 58 mm long, one is 54 mm long, and the shortest is 38 mm long. There is a similar specimen in the 1951 surface collection which is 52 mm long.

BEADS

The sample includes nineteen intact bird-bone beads, fourteen fragments whose length only can be determined, and six fragments too small to determine either their length or diameter. A typical intact specimen is illustrated in Plate 4, fig. 13. There are also two pieces of bird-bone with the articulating surface intact and the shaft cut off cleanly, which are probably debris from the bird-bone bead industry.

The intact beads vary greatly in length and diameter. The intact bead with the lowest length-to-diameter ratio is a bead 69 mm long and 5 mm in diameter. The intact bead with the highest length-to-diameter ratio is a bead 28 mm long and 12 mm in diameter. The bead with the mean ratio is 34 mm long and 8 mm in diameter. Ten of the 19 intact beads have a length to diameter ratio between 4.0 and 5.1. Four of the nine remaining beads have higher ratios and five have lower ratios.

With two exceptions all of the beads are polished. The two exceptions have a dull grey granular surface. The surfaces of two polished beads have the remains of the muscle ridges. On one the ridges are entirely unmodified. The other has had the ridges modified by grinding and polishing.

A thick-walled hollow bone shaft is marked off with three finely incised lines around the circumference at 25 mm intervals which suggest it was being prepared for manufacture into beads.

There are two intact bird-bone beads and four fragments in the 1951 surface collection. One intact bead is 63 mm long and oval in shape 7 mm by 10 mm. The other intact bead is 23 mm long and 10 mm in diameter. The fragments are 41 mm long, 31 mm long, 28 mm long, and 24 mm long.

PROJECTILE POINTS

Thirteen bone projectile points and fragments of projectile points were recovered. Eight of these are conical hollow bone points, one is a fragment of a point made from the thick shaft of a bone ground and polished into a triangular-shaped cross-section, one is a flat bone wedge-shaped point, and three are fragments of conical bone points. Typical specimens are illustrated in Plate 5, figs. 11, 12.

The longest conical hollow bone point (Plate 5, fig. 12) is 86 mm long, 7 mm wide, and 5 mm thick with a socket 4 mm in diameter. The shortest, which is a sharpened hollow bone, is 46 mm long and 5 mm in diameter at the base with a socket 3.5 mm in diameter.

The flat bone wedge-shaped point (Plate 5, fig. 11) is 76 mm long, 11 mm wide at the widest point, and 4 mm thick at that point which is 16 mm from the base. The base is 7 mm wide and it is ground to a sharp edge. It is notched 1 mm deep 9 mm from the base.

The polished triangular-shaped cross-section point fragment is 45 mm long and 6 mm thick from the base of the triangle to the apex. The base of the triangle is 12 mm long and each side is 8 mm long. It is possible that this may be a fragment from the shaft of an awl.

The articulating portion of a hollow thick-walled bone has been cleanly cut from the shaft. The thickness and ovoid cross-section shape of the bone suggest the shaft was used as a projectile point rather than a bead.

There are two hollow flat bone points in the 1951 surface collection. One is 66 mm long, 7 mm thick, and 14 mm wide. The other is 50 mm long, 8 mm thick, and 14 mm wide.

NEEDLES

Nine fragments of typical flat Iroquoian bone needles with the hole mid-way along the length were recovered. A typical specimen is illustrated in Plate 5, fig. 14. The widest fragment is 8 mm wide and the narrowest 6 mm wide. All appear to have been made from the ribs of small mammals. Four fragments have been polished on both sides while the remaining five retain the cellular bone structure on the interior. Six of the fragments are from the ends of the artifact; five of these are elongated polished points, the sixth is abruptly pointed by whittling and remains unpolished.

One fragment (Plate 5, fig. 15) from mid-way along the needle is unique insofar as the remains of two eyes are present.

The one needle tip fragment in the 1951 surface collection is 25 mm long and 12 mm wide.

HUMAN SKULL GORGETS

Fragments of three human skull gorgets were recovered. All have been made from parietal bones.

The largest (Plate 4, fig. 16) is approximately one-half the original item. It is 97 mm long on the chord dimension, 55 mm wide, and 4 mm thick. It is grossly convex in shape, the exterior crest rising 23 mm above horizontal. Two conical-shaped holes 3 mm in diameter have been drilled 22 mm apart on the circumference, one 6 mm from the edge of the specimen the other 14 mm from the edge. The side opposite the holes is decorated with a V-shaped gouged line 3 mm wide which forms a right-angled triangle with the edge of the gorget. In-

side this triangular motif are three similarly gouged lines parallel to the vertical edge of the triangle. A similar line 25 mm long crosses the parietal dome. The edges of the specimen have been cut and ground into shape.

The next largest specimen represents about one-third of the original item. It is 88 mm long on the chord diameter, 39 mm wide, and 3 mm thick. It is slightly asymmetrically convex in shape, the exterior crest rising 16 mm above horizontal. However there appears to have been considerable warping which, either by design or as a result of being buried, has resulted in one edge being turned down sharply, the top being flat or slightly depressed, and the other side being turned down slightly.- There are two conical holes on the circumference of this item. One is 4 mm in diameter, the others 3 mm in diameter. They are 21 mm apart and 5 mm from the edge midway along the curved edge. Two other perforations exist on the broken edges; one at each end of the specimen. Two holes 5 mm in diameter and 1 mm deep have been drilled part way through the bone on the exterior surface. One of these is located 4 mm from a perforation and 2 mm from the edge. The other is 6 mm from a broken side and 3 mm from the edge. The edge has been ground into shape.

Neither of these two items have had the interior of the parietal modified and the exterior, while smooth, is not highly polished. Parallel lines resulting from scraping remain on the smaller specimen. The third fragment on the other hand is highly polished on the exterior and the interior has been worked smooth, but not polished. As a result it is only 1.5 mm thick. It is triangular-shaped; 13 mm long on the base and 47 mm high. There is a single curved incised line which is approximately concentric with the outer edge. The edge is finely ground into shape but is not polished.

CORN SCRAPERS

Three deer mandibles which have been broken off just anterior to the ascending ramus and and posterior to the third and fourth cheek tooth are included in the sample (Plate 5, fig. 16). They also occur at Roebuck where they have been described by Wintemberg (1936, p. 48) as corn scrapers used to scrape corn from the cob. Emerson (1966, p. 133) reports the Payne Site as the only other site in his experience where they occur in Ontario.

GORGE

A piece of bone 34 mm long, 4 mm wide, and 2 mm thick and pointed at both ends is assessed being a gorge used for fishing (Plate 5, fig. 17).

FISH-HOOK

A piece of bone 3.5 mm thick has been cut in a manner to suggest it was in the process of being made into a fish-hook (Plate 5, fig. 18). Apparently it was discarded when it broke while being worked. The fragment is 44 mm long and 17 mm wide.

TUBE

A small fragment of the decorated and polished shaft of a heavy bone may be a piece of a shamans tube or a large bead. It is a triangular-shaped fragment 3 mm thick, 8 mm long, and 18 mm high. The small size of the fragment makes it difficult to determine the nature of the original item. The decoration is in the form of two 2 mm wide lines incised around the circumference, the first 4.5 mm from the end and the second 5 mm from the first.

PROBLEMATICAL OBJECTS

One class of problematical bone objects somewhat resemble a guitar-pick in size and shape. In each case the object is triangular-shaped with the broad end ground, and sometimes polished, to form a short arc. The apex end is also rounded. None show signs of wear which might suggest their use. One is 41 mm long, 4 mm thick, and 18 mm wide at the base; another is 44 mm long, 3 mm thick, and 12 mm wide at the base; another is 68 mm long, 3 mm thick, and 15 mm wide; another is 50 mm long, 4 mm thick, and 9 mm wide; and the fifth, which is broken, is 48 mm long, 3 mm thick, and 13 mm wide at the base.

Another group of items in the problematical category are three thick pieces of bone from the wall of a bone shaft which have had the interior surface ground. Two of these items have been cut through on one end, the other piece is broken at both ends. Two similar pieces of bone have been cut off at one end but the interior is not ground flat.

Two pieces of bone are articulating ends which have been cleanly cut from the shaft. They may be the debris from making awls.

Four splinters of bone are worked. One has incised lines along one edge which are not sufficiently distinct to be classified a tally. Another is ground and polished on one side to form a sharp ridge. Another has a notch 49 mm long and 8 mm deep chopped into one edge. The other has had the end chipped even.

A deer ulna fragment 88 mm long (Plate 4, fig. 20) has had two triangular-shaped depressions 9 mm long, 6 mm high, and 2 mm deep cut into the anterior surface close to the proximal articulating surface. The result is an effigy which somewhat resembles a human face.

A long narrow piece of bone bluntly pointed at each end (Plate 5, fig. 4) is polished on the exterior surface, and ground flat on the interior-surface which still shows the cancellated structure. It is curved to the extent that the crest of the convex side rises 11 mm above the horizontal. It is 118 mm long, 4.5 mm wide, and 1.5 mm thick and, except that it lacks an eye med-way along its length, it closely resembles the Iroquoian netting needle.

There are three problematical objects in the 1951 surface collection. One is an animal rib 48 mm long, 11 mm wide, and 3 mm thick which has been worked flat; possibly it represents a stage in the manufacture of a netting needle. Another unidentified item is the vertebra from a small animal which has been ground into a circular shape 10 mm thick and 15 mm in diameter. One side has been ground to form a chord 14 mm long. No use can be suggested for the item. The remaining unidentified item is a triangular-shaped piece of bone 78 mm long, 28 mm wide at the base, and 2.5 mm thick. It is from the shaft of a heavy bone. All of the edges has been polished. No use can be suggested for this item.

ANTLER TINE

PROJECTILE POINTS

Three intact, or nearly intact, antler-tine projectile points and one fragment are included in the sample. One point which has been scraped into an ovoid cross-section point is 74 mm long, 12 mm thick and 15 mm wide at the base with a socket 10 mm in diameter and 19 mm deep. The second point has the tip missing. It is 51 mm long, 10 mm thick and 14 mm wide at the base with a socket 8 mm in diameter and 18 mm deep. It too has been scraped to be ovoid in cross-section. The third antler point is also without the tip but unlike the other two it has been ground into a symmetrical diamond-shaped cross-section which is 9 mm wide on each side at the base of the point. The intersection of two opposite sides have been cut back 3 mm at the base leaving the remaining opposite intersections to protrude to the extent they serve as barbs. The socket is 8 mm in diameter and 17 mm deep. The remaining item is a tip fragment 25 mm long which has been ground to a sharp point.

PROBLEMATICAL OBJECTS

An antler tine 177.5 mm long, which is generally oval-shaped in cross-section, 17.5 mm thick and 20.5 mm wide, is perforated with a hole 3 mm in diameter 49 mm from the blunt end (Plate 5, fig. 7). The blunt end has been spalled on one side for a distance of 73 mm along the length. The other side opposite the spall has been ground flat commencing 20 mm from the blunt end and extending 66 mm along the length. The widest part of the area ground flat is 14 mm wide and it is on that portion that the perforation mentioned has been made. The whole of the object has been scraped and polished particularly at the pointed end. Similar objects, on occasion called "daggers," are reported on the Payne Site (Pendergast, 1963, p.6), Roebuck (Wintemberg, 1936, Plate XVII, Figures 8 and 28, p. 65), Downsview (Emerson, 1954, Figure 49e), and Sidey-Mackay (Wintemberg, 1946, Plate XIX C, Figure 24).

Twenty antler tines, or fragments of antler tines, are worked to varying degrees. Five of these have had the last 10-20 mm broken from the tip and the resulting surface worn smooth. It is possible they were used as pottery-smoothers. Two small fragments from the tip and one large tine 115 mm long (Plate 5, fig. 9) show signs of wear on the extreme end of the point. Two fragments, both about 65 mm long, have had the pointed end removed some distance back from the end and the resulting surface shows signs of wear. One tine 57 mm long which shows signs of wear on the point also shows the marks of cutting and chopping at the base where it was removed from the beam. One tine 54 mm long is spalled on one side for a distance of 21 mm from the tip which has been broken off. All of the broken surfaces have been smoothed from wear. One item 84 mm long with the tip worn smooth has been extensively cut on one side and the base. The cut in the side, which commences 16 mm from the tip and extends for 25 mm to within 41 mm of the base, is 2 mm deep and uneven. The base has been cut obliquely commencing 33 mm from the blunt end. One tine 107 mm long which has been roughly broken from the beam has been extensively cut on one side for a distance of 43 mm back from the point to a depth of 2.5 mm. This cutting occurs on the concave side of the tine and as a result gives the item the appearance of a tool used for levering on the convex arc after the spatulate end 2.5 mm thick had been placed under the object to be moved. Another item in this group is 58 mm long and the natural roughness of the antler remain unaltered. It is a matter of conjecture whether the worn point is natural or the result of its use as a tool. One thick spall of tine has been ground into a rectangular cross-section shape and one end is ground at 45 degrees. Another piece of tine shows signs of separation from the beam using an annular cut 2.5 mm wide before being broken off at that point.

Two pieces of tine show how they have had the last few inches cut from the remainder by whittling. One piece 75 mm long, which is deeply spalled for 62 mm of its length on one side, has been whittled to a depth of 5 mm around the whole of its circumference before the remaining 7.5 mm was broken to separate the tine from the beam. The other item (Plate 4, fig. 15) is 53 mm long and is also deeply spalled on one side for a distance of 37 mm. It too has been whittled to a depth of 3.5 mm around its circumference before the remaining 8 mm was broken off. Both items have been roughly cut or broken from the beam in such a manner as to cause the deep spalling on one side. The piece from the tip of the tine was then removed by whittling around the circumference in shavings less than 1 mm thick which remain attached to the objects splayed in much the same way a "fuzz stick" used to light a fire is left with the shavings attached. This whittling method of working antler tine has not been noted before.

Five large pieces of antler beam have had the tines cut off, chopped off, or broken off. Four tines show signs of having been cut, chopped, or broken from the beam.

In the 1951 surface collection there are five worked antler tines. One curved item 84 mm long has been cut cleanly from the beam. It shows signs of having been scraped and in the base there is a socket 9 mm deep and 9 mm in diameter. It may have been a spear point or a hafted awl. Another item 64 mm long has been worked from midway along its length to the base in such a way as to change the natural tapered shape to a cylindrical shape; the proximal end is cut smooth while the distal end is broken cleanly. No use can be suggested for this object.

Another tine 61 mm long is notched on one side and another tine 32 mm long has been scraped to a point. Another item is 26 mm long and is cut and scarred in such a way as to suggest it may have been used as a flaker. The remaining item is a fragment of antler beam 23 mm long, 30 mm wide, and 12 mm thick from which a tine has been cleanly cut by scoring and breaking. The beam is grooved for its length to a depth of 1.5 mm.

TEETH

Six artifacts made from animal teeth are included in the sample. Four are chisels made from rodent incisors. One of them, probably that of the beaver, is split along its length and the cutting edge has been extensively modified by chipping and grinding. Another, also that of the beaver, has had the cutting edge modified by grinding it at 45 degrees to the long axis. The two remaining rodent incisors are from an animal smaller than that from which the previous two items came. The cutting edges of both these specimens have been spalled on the posterior surface. A bear canine tooth has been split along its length on the narrow side and the resulting surface has been polished flat. The canine tooth from a small animal (Plate 4, fig. 14) has had a large portion of the exposed end broken away leaving a rough surface. The root of this tooth has been notched and incised around the circumference 7 mm from the end, probably for suspension.

TURTLE SHELL

Nine fragments of turtle shell which had separated on the suture lines were recovered from the surface of the site in 1951. Their reconstruction (Plate 4, fig. 17) revealed that they had been perforated in two places near the edge. It is likely that this specimen is the remains of a turtle-shell rattle.

HUMAN BONE

Although no burials were encountered a significant quantity of human bone was recovered scattered in the undisturbed middens.

In Square 44 between 12 and 18 inches below the plough line, were found the left humerus of an adult which had the greater part of the greater tuberosity broken off; the left tibia of an adult with the shaft intact six inches from the distal end above which the posterior and medial portions are missing with the exception of a portion of the lateral condyle; a left unmodified adult calcaneum; four juvenile carpal bones; a left juvenile number two metacarpal; a left adult patella; four adult proximal and two middle hand phalanges; and a fragment of human skull. This skull fragment is approximately 18 mm square and 5 mm thick, and it is ground flat on one edge. In the adjacent Square 45 between 18 and 24 inches below the plough line were found a left and right juvenile first rib; a left juvenile rib; a fragment of a right juvenile rib; four juvenile distal hand phalanges; seven juvenile middle hand phalanges; seven juvenile proximal hand phalanges; a juvenile left number one metatarsal from which the distal end is missing a distal end fragment of a juvenile tibia with the medial malleolus intact; four juvenile carpal bones; a juvenile fibula head with its epiphysis; a juvenile tibia condyle with its epiphysis; five juvenile tarsal bones — cuboid, navicular, and three cuneiform; and a set of five juvenile right metatarsals, with centres present for the distal end of numbers two, three, four and five and the proximal end of number one.

Nearby in Square 41, at a depth of 18 to 24 inches below the ploughline, were found an adult left rib shaft; an adult lumbar vertebra; the greater part of an adult right foot including number one metatarsal with its proximal and distal phalanges, numbers two, three, four, and five metatarsals, two distal phalanges, and one middle phalange; and the greater part of an

adult left foot including the number one proximal phalange and metatarsals numbers two and four.

In Square 53, between 6 and 12 inches below the ploughline, were found two adolescent thoracic vertebrae, and between 12 and 18 inches below the ploughline a fragment of an adult parietal with portions of the sagittal and lambdoidal sutures intact. This fragment is approximately 10 mm in diameter and is from the area adjacent to the lambdoidal suture. It shows signs of having been crushed from the interior possibly in an attempt at perforation.

In Square 48, between 12 to 18 inches below the ploughline, was found a fragment from the left side of a maxilla containing the first and second deciduous molars, the left lateral incisor, and the left canine bud. It is estimated to be from a child five to six years of age.

In Square 60, at a depth of between 6 and 18 inches, two middle hand phalanges were found and in Square 83 at a depth of between 6 to 12 inches one middle hand phalange was found.

STONE

ADZES

Five intact, or nearly intact, adzes and fragments of 33 others are included in the 1967 sample. One complete specimen is plano-convex 133 mm long, 24 mm wide, and 23 mm thick; another is plano-convex 123 mm long, 46 mm wide, and 28 mm thick; another is double-convex 97 mm long, 37 mm wide, and 21 mm thick; another is double-convex 86 mm long, 49 mm wide, and 30 mm thick; and the other is 143 mm long, 57 mm wide, and 25 mm thick. This last item has been heavily battered on the bit end to the extent that it is not possible to describe the bit cross-section. Three of the 33 fragments are sufficiently intact to determine that they are double-convex in shape at the bit.

There are an additional 13 intact and fragmentary adzes in the 1951/52 surface collections. Five of these are plano-convex in shape; one intact item is 137 mm long, 46 mm wide, and 25 mm thick; one 80 mm long, 43 mm wide, and 17 mm thick is a fragment from the poll end; one 71 mm long, 56 mm wide, and 21 mm thick is a fragment from the bit end; and 84 mm long, 53 mm wide, and 29 mm thick is a fragment from the bit end; and one 64 mm long, 44 mm wide, and 15 mm thick is a fragment from the bit end which has been blunted probably from having been used as a hammer. Seven are double-convex in shape; one intact item is 151 mm long, 42 mm wide, and 25 mm thick; one 119 mm long, 73 mm wide, and 34 mm thick is a fragment from the bit end; one 111 mm long and 24 mm thick is a fragment from the bit end which has been blunted probably from having been used as a hammer; one 102 mm long and 49 mm wide is a fragment from the bit end; one 89 mm long, 59 mm wide, and 41 mm thick is a fragment from the bit end; one 73 mm long, 24 mm wide, and 11 mm thick is intact and due to its size and shape may be a chisel rather than an adze; and one 69 mm long and 26 mm wide is a fragment from the bit end.

HAMMERS

Eleven pebbles have battered surfaces which suggest their having been used as hammers; one oval-shaped 70 mm on the long axis, 62 mm on the short axis, and 31 mm thick is battered on one flat surface; one oval-shaped 75 mm on the long axis, 69 mm on the short axis, and 55 mm thick is battered on one end; one oval-shaped 87 mm on the long axis, 73 mm on the short axis, and 61 mm thick is battered on one end; one round 93 mm in diameter and 73 mm thick has been pecked into shape and battered on the edges; one oval-shaped 84 mm on the long axis, 78 mm on the short axis, and 63 mm thick has been pecked into shape and battered on the edges; one oval-shaped 85 mm on the long axis, 65 mm on the short axis, and 53 mm thick is battered on one end; one oval-shaped 98 mm on the long axis, 84 mm on the short axis, and 73 mm thick which has been pecked and ground into shape is battered on one end; one planoconvex 110 mm long, 80 mm wide, and 57 mm thick has been polished flat on one side and

is battered on one end and the convex side; one rectangular-shaped 101 mm long, 82 mm wide, and 84 mm thick is slightly pitted on one side and battered on one end; one plano-convex 132 mm long, 113 mm wide, and 83 mm thick is slightly pitted on one side and battered on one edge; and one rectangular wedge-shaped 95 mm long, 91 mm wide, and 40 mm thick is battered on the thin-edge-of-the-wedge surface.

MULLERS

Two mullers were recovered: one oval-shaped 140 mm on the long axis, 110 mm on the short axis, and 56 mm thick has one flat surface polished to form a long-radius arc; one flat polished pebble fragment 190 mm long, 84 mm wide, and 81 mm thick with one flat side polished to form a long-radius arc appears to be approximately one-half of the complete item.

MORTARS/METATES

Eight fragments of mortars are included in the 1967 sample. The largest fragment; 170 mm long, 161 mm wide, and 52 mm thick; is a corner from a rectilinear specimen on which the polished shallow concave surface appears to have been rectilinear closely following the out-side edges. The remaining seven specimens are small fragments with shallow concave polished surfaces.

CHISELS

Two intact chisels and two fragments are included in the 1967 sample. One intact item (Plate 4, fig. 18) is 80 mm long, 21 mm wide, and 10 mm thick with a plano-convex bit. The other intact specimen is 54 mm long, 22 mm wide, and 8 mm thick with a plano-convex bit. One fragment is double-convex at the bit end while the other appears to have been a narrow tool with the bit at the end of a elongated pyramidal-shaped green-stone spall.

ANVILS

Two pebbles are pitted in such a manner as to suggest their use as anvils: one oval-shaped item 89 mm long on the long axis, 76 mm on the short axis, and 61 mm thick is pitted on one side; one oval-shaped flat pebble 83 mm on the long axis, 67 mm on the short axis, and 35 mm thick that has been ground on the flat sides and pecked on the edges, is slightly pitted on both of the flat surfaces.

KNIFE

A fragment from a flint knife was recovered in 1967 (Plate 4, fig. 19). It is from the pointed end of the tool and it is 41 mm long, 30 mm wide at the fracture line, and 7 mm thick. The convex curved edges of the specimen suggest that it is fragment from a knife and not from an isosceles projectile point.

DISCS

There is one chipped stone disc in the 1967 sample. It is 31 mm in diameter on its short axis, 34 mm in diameter on its long axis, and 8 mm thick.

BEADS

One cylindrical black steatite bead 7 mm long and 11 mm in diameter with a 3.5 mm diameter hole was recovered in 1967.

WHETSTONES

A red sandstone pebble 59 mm long, 13 mm thick, and tapering from 11 mm to 17 mm in width has had the 13 mm wide surface grooved on both sides from having served as a whetstone.

PROBLEMATICAL OBJECTS

Six pebbles have worked surfaces but their size, shape, and the manner in which they are worked do not suggest their use: one rectangular-shaped 83 mm long, 46 mm wide, and 31 mm thick is ground flat on one side; one oval-shaped 56 mm on the long axis and 42 mm on the short axis is polished on one end; one rectangular-shaped 67 mm long, 47 mm wide, and 29 mm thick is ground flat on one end; one plano-convex oval-shaped is 105 mm on the long axis, 75 mm on the short axis, and 44 mm thick is ground flat on one side; one irregular-shaped fragment 130 mm long, 38 mm wide, and 35 mm thick has had all surfaces ground smooth and the corners rounded; one irregularly angular-shaped 94 mm long, 89 mm wide, and 89 mm thick has had two surfaces ground smooth.

An unworked natural dish-shaped limestone pebble, which may be a fossil imprint, is 33 mm in diameter and 11 mm high. The walls of the dish are 6 mm thick, and it is symmetrically concave-convex to a depth of 5 mm.

DETRITUS

A small amount of flint detritus was recovered during the 1967 excavation. Thirty-six irregularly shaped black pieces of flint vary in size from a pea to a large walnut. Some show signs of flakes having been struck from them. The two largest pieces appear to have been polyhedral cores. Three typical flint chips are also in the sample; two of these are black flint and one is mottled grey and black. A single piece of black flint, approximately a 25 mm cube, is included in the 1951/52 surface collections.

Twenty-three irregularly shaped pieces of quartz detritus are also included in the 1967 sample.

SHELL

Twenty-eight freshwater clam shells (*Elliptio complanatus*), or fragments of clam shells, have been ground or polished on their exterior surface. Only two of these have been ground on the edges. Twenty-six of these specimens were recovered during the 1967 excavation; the other two are included in the 1951/52 collection. Wintemberg (1936, p. 48) suggests that clam shells with a ground edge may have been used as spoons. Wintemberg (1946, p. 167), when describing similar specimens from the Sidey-Mackay Site, suggests shells with the exterior polished smooth may have been used as pottery smoothers.

One discoidal shell bead 10 mm in diameter and 2 mm thick with a hole 4 mm in diameter is included in the sample.

VEGETAL REMAINS

The inhabitant's vegetal foods are represented by the twenty-five corn-kernels, two cherry-pits, and one plum-pit included in the 1967 sample.

A birch-bark tube 41 mm long, 13 mm in diameter at one end and 11 mm in diameter at the other may be an artifact or a naturally curled piece of birch-bark.

HABITATIONS AND DEFENCE

Excavation was largely oriented to the recovery of artifacts with a view to identifying the culture of the site's inhabitants. Post mold patterns were maintained but, with the single exception of what may be a palisade pattern on the brow of the steep northwest slope, no particular pattern was discernable. Because the excavations were largely on the slope in hill, side middens, house patterns were not noted. It may be that house patterns can be located on the relatively flat top of the hill but, as has been noted, they may have been destroyed by erosion.

DISCUSSION

The coefficients of similarity derived from the rim sherd analysis using pottery types is set out in Table 9. Coefficients could not be computed on rim sherd attributes because rim sherd samples from the other Ontario Iroquois sites have been analysed using the pottery method. In Table 9 the Ontario Iroquois sites against which the Lite Site has been compared, have been arranged following the Branch and Division dichotomy and site sequence suggested by Wright (1966) to help illustrate the place the Lite Site is believed to occupy in the Ontario Iroquois sequence.

On the basis of the coefficients of similarity derived from the rim sherd sample the Lite Site is significantly more closely related to all the Huron-Petun Branch sites on which data is available than it is to either of the Neutral-Erie Branch, Neutral Division sites, reported upon; i.e., Southwold and Lawson. As a result it is concluded that the Lite Site is not significantly involved in the Neutral-Erie Branch, Neutral Division, tradition. Among the Huron-Petun Branch sites the Lite Site clearly most closely resembles Black Creek, Copeland, and Draper in that order of similarity; Black Creek with a coefficient of 129 or 64.5 per cent similarity, Copeland with a coefficient of 115 or 57.5 per cent similarity, and Draper with a coefficient of 109 or 54.5 per cent similarity. However, Wright (1966) considers the Black Creek and Draper sites to be components of the Southern Division of the Huron-Petun Branch and Copeland Site to be a component of the Northern Division. It is suggested that this apparent incongruity can be clarified by a comparison of Lite Site ceramic traits with the diagnostic ceramic traits on which Wright's dichotomy is premised to a significant degree.

Wright (1966, p. 70-2) states that a major distinguishing characteristic which differentiates Northern and Southern Division sites is the comparatively high incidence of Lawson Incised and Lawson Opposed sherds on Southern Division sites and the comparatively high incidence of Lalonde High Collar and Sidey Notched sherds on Northern Division sites. The Lite Site, with 7 per cent of the sample being Lawson Incised and Lawson Opposed and no Lalonde High Collar or Sidey Notched sherds, meets these criteria for classification as a Southern Division component and excludes it from the Northern Division. Wright (*ibid.*) also notes that, "the most significant trend of the Southern Division pottery types running in an early to late sequence are the gradual decrease of Black Necked type and the increase of the Huron Incised type." The Lite Site with 32 per cent Black Necked pottery and 24 per cent Huron Incised pottery fits well into Wright's Southern Branch site sequence on the Black Creek time level without distortion. These characteristics, coupled with the sites location in the general geographical area in which Southern Division sites occur, supports a conclusion that the Lite Site is a Southern Division component. Its similarity to the Northern Division Copeland Site and the problems this similarity raises will be discussed later in the paper.

Emerson (1966, p. 180-1, fig. 17, Table 24; 1968, p. 38-9) has suggested an Ontario Iroquois site seriation based on the incidence of four ceramic traits; i.e., the incidence of Huron

pottery, Neutral pottery, neck decorated pottery, and Lalonde High Collar pottery. Assessed on Emerson's scale (*ibid.*) the Lite Site falls in one of two places. If the incidence of Neutral pottery is used as the criterion, the Lite Site with approximately 7 per cent Neutral ware falls between Orr Lake with 5 per cent and Seed with 10 per cent. However, as was explained, the low coefficients of similarity derived from the rim sherd analysis with regard to the Lawson and Southwold Neutral sites and the geographical location of the Lite Site remote from the area in which Neutral sites are found, suggest that greater importance should be placed on the incidence of Huron pottery and decorated neck sherds than on the incidence of Neutral pottery. If, on the other hand, the incidence of Huron pottery and decorated neck sherds is used as the criterion, the Lite Site with 46 per cent Huron pottery and 32 per cent decorated neck sherds falls between McKenzie (Woodbridge) with 64 per cent Huron pottery and 2 per cent decorated necks, and Black Creek with 29 per cent Huron pottery and 33 per cent decorated neck sherds. It is not judged as being closely akin to the Bosomworth, the next earliest site in Emerson's sequence, because Bosomworth has 11 per cent Lalonde High Collar sherds while the Lite Site has none. Further, the 46 to 32 relationship of the Huron pottery and decorated neck sherds in the Lite Site sample more closely approximates the 29 to 33 relationship of these sherds in the Black Creek sample than it does the 64 to 2 relationship in the McKenzie sample. From this evidence it is concluded that the Lite Site is more closely related to Black Creek than any other site in Emerson's sequence. This conclusion, derived from Emerson's data, confirms that derived from Wright's data and lends considerable credibility to the place suggested for the Lite Site in the Ontario Iroquois sequence.

Wright (1966, p. 71) indicates that "a low but significant percentage of Onondaga pottery types, such as Onondaga Triangular and Durfee Underlined, may be noted on all but the earliest site" in the Southern Division; i.e., Doncaster. On the Lite Site there are only three sherds, two Lanoraie Corded and one Syracuse Incised representing 0.3 per cent of the sample, which can be classified Onondaga in accordance with MacNeish (1952). MacNeish (*ibid.*, p. 63) believes Lanoraie Corded pottery occurs early in the Onondaga tradition. The occurrence of this small amount of Onondaga pottery in the Lite Site sample and the fact that most of it occurs early in the Onondaga sequence, coupled with the absence of such sherds on the early Doncaster Site, suggests a trend and may mean that the Lite Site is earlier in the sequence than Black Creek where approximately 3 per cent of the sample is Onondaga pottery. However, Wright (*ibid.*, p. 70, 148) indicates that a significant amount of Pound Necked pottery occurs on early Southern Division sites and there are no Pound Necked sherds in the Lite sample. Hence any suggestion, based on the incidence of the Onondaga pottery, that the Lite Site is earlier than Black Creek, must remain open to question. It is for consideration that the absence or paucity of Pound Necked pottery on the Lite Site may be a characteristic which will serve to contrast Southern Division sites on the Trent River axis and Southern Division sites on the Humber River axis.

It has been stated that Lalonde High Collar pottery does not occur in the Lite Site sample. No sherds occur which possess the typical combination of collar shape, nubbin castellation, and motif under the castellation associated with Lalonde High Collar (Ridley 1952, p. 205). Although nubbin castellations do occur on 2.7 per cent of the sample, they are not associated with sherds having the other Lalonde High Collar characteristics. However, it might be argued that the apparent absence of this pottery type could arise over a difference of opinion when typing the rim sherd classified Syracuse Incised and the few relatively high collars which have been typed Huron Incised and Black Necked in this paper; e.g., Plate 1, fig. 3. In the event these few high collared sherds were to be classified Lalonde High Collar the Lite Site would still fit best in the Southern Division and be more closely related to Black Creek than to any of the other sites in the Ontario Iroquois sequence. Wright (1966, p. 71) states that Lalonde High Collar sherds "have a low but persistent occurrence upon all" Southern Division sites and Emerson (1954, Fig. 61a, 62d) illustrates their presence in the Black Creek sample. The absence, or paucity, of Lalonde High Collar pottery on the Lite Site may be attributable to the

lack of liaison between Northern Division components on the same time level and the more distant Southern Division sites on the Trent River axis. This suggestion would not contest the likelihood of liaison between Northern Division components on the Lite Site time level and the closer Southern Division sites on the Humber River axis as is evidenced by the occurrence of Lalonde High Collar sherds on these Southern Division sites (Wright 1966, p. 148). Neither would it contest Northern Division liaison with later Trent River axis Southern Division sites on Payne Site time level where Lalonde High Collar pottery does occur (Pendergast 1963; Emerson 1966).

The 57.5 per cent similarity between the Lite Site and the Northern Division Copeland Site has been mentioned. The anomalous nature of this relatively close relationship requires an explanation if a clear case is to be made in favour of the Lite Site being a Southern Division component. Unfortunately at present no explanation can be suggested with any degree of certainty. During discussions with Wright when the Lite Site rim sherd sample was being typed, he remarked that the pottery I had classified Copeland Incised on the basis of published data (Wright 1966, p. 73; Ridley 1952a, p. 207, Fig. 67(25)) did not resemble in all respects the classic sherds from the Copeland Site with which he was familiar. In particular the collar, while undoubtedly short, was higher than that he had noted in the Copeland Site sample which had served as the basis for his establishing the pottery type. However, it was agreed that the Lite Site sherds were sufficiently similar in all other respects to be considered a variant of the classic type. Other than that there was general agreement on the pottery types represented in the Lite sample. The incidence of Copeland Incised pottery would therefore appear to be a propitious area to examine when seeking to explain the anomalous situation that exists. To this end a co-efficient of similarity was computed on the basis of the Lite Site Copeland Incised sherd sample being classified in the "untyped" category. This would establish the effect on the relationship between the two sites if a lumping error had been made when considering the Lite Site sherds to be a variant of Copeland Incised. The coefficient of similarity computed on this basis was 111, or 55.5 per cent similarity. This still suggests a close relationship between the two sites. Indeed it is higher than that for six of the seven Southern Division sites against which the Lite Site is being compared. It therefore appears that the close ceramic relationship between the Lite and Copeland sites is not attributable to a pottery typing discrepancy and that there is in fact a close relationship between the two sites. Unfortunately the lack of ceramic data on more Northern Division sites against which to compare Southern Division sites on the Trent River axis undoubtedly contributes significantly to the complexities of this problem. Possibly the explanation lies in the yet unclear manner in which the Southern Division, and the Trent River axis Southern Division in particular, fused with the Northern Division during Wright's Fusion phase of Huron-Petun Branch development, and how each fared.

The incidence of cord-wrapped-stick decorated pottery in the ceramic sample is worthy of note (Plate 2, figs. 1, 3, 5, 6, 7; Table 5). Personal enquiries to Wright, Emerson, Channen, and Ridley, all of whom have a detailed knowledge of Huron archaeological material, indicates that the presence of cord-wrapped-stick decorated pottery, of the type described as having been found on the Lite Site, is unique among Huron Sites at the moment. My own experience on a number of early Huron-Petun Branch and Middleport-like sites in nearby Prince Edward County to the south supports this observation.

Speculation on possible Lite Site connections which would explain the presence of this decorative technique in terms of present information focuses attention on the two Lanoraie Corded sherds in the sample. They suggest some connection with the St Lawrence Iroquois to the east, and with the Lanoraie and Ivey sites in particular. MacNeish (1952, p. 58) states that the Lanoraie Corded pottery type constitutes 16 per cent of the sample from the Lanoraie Site and 21 per cent of the Ivey Site sample. No C-14 dates are available for the Lanoraie or Ivey sites but MacNeish (op. cit. p. 87) suggests they are early in his Onondaga-Oneida sequence. Both Lanoraie Corded sherds from the Lite Site are decorated with the Durfee Underlined motif. As such it should be clear they do not meet MacNeish's criteria for classification as Oak

Hill Corded which he defines as being decorated with the Fonda Incised and Cayadutta Incised motifs using a cord-wrapped-stick technique (op. cit. p. 79). However, Lenig (1965, Fig. 8A, Fig. 12B and E, Fig. 13C and E, Fig. 15C and D) indicates that cord-wrapped-stick decorated sherds with the Durfee Underlined motif occur in the Oak Hill Horizon. He goes so far as to call them Oak Hill Corded (op. cit.). This raises the possibility of the Lanoraie Corded sherds in the Lite Site sample having some connection with the Oak Hill Horizon. Lenig places the Oak Hill Horizon in the time from 1200-1350 A.D. (op. cit. p. 63). Although results are not yet available on a charcoal sample from the Lite Site submitted to the National Museum of Canada for C-14 dating, site seriation based on artifact characteristics, principally pottery, suggests that the Lite Site is approximately coeval with the Black Creek Site which is dated at 1500 AD by Wright (1966, p. 101). On the assumption that a date of approximately 1500 AD is correct for the Lite Site, there is too great a time period to span to make the Oak Hill Horizon a credible source for the cord-wrapped-stick technique influence on the Lite Site. Similarly the Lanoraie and Ivey sites appear to be too early to have been the donors. This is a more speculative conclusion because site seriation and C-14 dates on the St Lawrence Iroquois sites are not sufficiently complete to make this statement with the same degree of certainty as is the case with regard to the Oak Hill Horizon.

The majority of the remainder of the cord-wrapped-stick technique decorated pottery closely resembles the Huron Incised pottery type as regards the attributes of decorative motif and shape. A few sherds which are decorated with the cord-wrapped-stick technique have a criss-cross motif which closely resembles untyped sherds in the sample which have a criss-crossed incised motif and is reminiscent of the Middleport criss-cross pottery with which they may be related in a yet unexplained manner. It is possible that this group of sherds, less those with the criss-cross motif, represents traditional Huron ware to which the inhabitants have simply added a newly acquired skill, or a fast disappearing traditional skill, in the form of the cord-wrapped-stick decorative technique. In either event it remains to be seen whether yet unknown kindred sites on the same time level can show the trait to be diagnostic temporally, spatially, or both.

In the castellation sample square castellations account for less than 1 per cent of the total and bifurcated castellations do not occur. Pointed castellations represent 50 per cent of the sample. These data suggest that the Lite Site is early (MacNeish 1952, p. 31) in the Southern Division sequence (Wright *ibid.* p. 72). However, Northern Division castellation traits (Wright *ibid.* p. 74) are represented by the nubbin and undulating multiple castellations, constituting 3.5 per cent of the sample, which makes it difficult to allocate the site to a Division on the basis of castellation types alone.

Wright indicates that pot handles are a Northern Division trait (*ibid.* p. 74) which does not occur in the Southern Division. The absence of pot handles on the Lite Site supports its being considered a Southern Division component.

A number of non-pottery Lite Site artifactual traits, some of which Wright (1966) considers to be good Southern Division chronological indicators, generally support the place allocated the site in the Ontario Iroquois sequence on the basis of the pottery analysis. The preponderance of pipes, 77 per cent of the sample, are plain trumpet pipes. This, together with the few effigy pipes recovered, 4 per cent, and the absence of coronet and mortice pipes, conforms with the pipe sequence Wright (*ibid.* p. 71) suggests for an early component in either the Southern or Northern Divisions. However, as noted by Wright (*ibid.* p. 74), the similarity of pipes in both Divisions makes it difficult to allocate the site to either Division on the basis of pipe types alone. Nevertheless the Lite Site pipe sample suggest that while the aesthetic tastes and skills necessary to make human and owl effigies had been developed by the Lite Site time level, effigy pipes did not enjoy the popularity they do on later Southern Division and Fusion sites. The same may be said of the moulded globular pipe-stem mouthpieces which are common on Fusion sites (Ridley 1952, p. 201). The absence of coronet pipes clearly differentiates the site from later Southern Division and Fusion sites where this pipe type is popular (Ridley 1952a, p. 201; Wright 1966, p. 71).

The single stone disc in the sample suggests a closer relationship with the Northern Division than with the Southern Division where discs do not occur (Wright *ibid.* p. 72, 74).

Wright (*ibid.* p. 72) indicates that cup-and-pin-type worked phalanges predominate on early Southern Division sites and that they give way to toggle-type phalanges as the dominant type on late Southern Division sites. The Lite Site, with 94.2 per cent of the worked phalanges being of the toggle variety, does not follow this pattern. The apparent reversal of traits is not understood.

The presence of conical and flat bone projectile points in the sample and the absence of stone points supports Wright's observation (*ibid.* p. 72) that bone points predominate on early Southern and Northern Division sites.

Bone needles and antler flakers occur in the sample but being common to both Southern and Northern Division components they do not assist in attributing the site to either Division. Wright (*ibid.* p. 72) notes worked bear canines occur on Southern Division sites and indicates they are not found in the Northern Division (*ibid.* p. 74). A single split bear canine in the Lite sample allies the site with the Southern Division.

Emerson (1954, p. 204) notes the presence of bone awls or pins on the Benson Site, also located on the Trent River axis, that are decorated with deep notches or scallops on opposite sides. He calls them "swizzle-stick" awls. The presence of similar awls or pins on the Lite Site gives rise to the possibility that this type of decorated awl or pin may be a diagnostic trait of the Southern Division on the Trent River axis.

The paucity of chert artifacts and detritus is interesting particularly if some of the unidentified antler tools are in fact flakers. Notched and un-notched triangular chert points are relatively common on Northern, Southern, and Fusion sites (Wright 1966, p. 68-77) while they are rare on St Lawrence Iroquois sites where bone and antler points are common (Wintemberg 1936; Pendergast 1965). In this regard the Lite Site with no stone points more closely resembles St Lawrence Iroquois sites than it does Huron-Petun Branch sites. In particular the Lite Site is not similar in this regard to the Black Creek Site where triangular chert notched and un-notched points do occur.

Generally the non-artifactual traits of the Lite Site; i.e., its being sited on a hill for defence, the possibility of it having been palisaded, the size of the site, and the abundance of dis-articulated and fragmented human bone indicative of cannibalism; are traits common to both Northern and Southern Division components. As a result they are not as useful as the artifactual traits when seeking to allocate the site to one of the Divisions of the Huron-Petun Branch. Indeed most of these non-artifactual traits of the Lite Site are shared with Iroquoians outside the Ontario Iroquois group.

The location of the site on the shoulder of a high hill closely resembles some Southern Division sites on approximately the same time levels; e.g., McKenzie; but it is unlike the Black Creek Site which is on a river flat. It is also unlike sites in nearby Prince Edward County where locations on relatively unprotected knolls and slopes in flat terrain have been chosen (Pendergast 1963, p. 13; 1964, p. 69; Emerson 1966, p. 130). However, lacking firm dates for the sites in Prince Edward County, it may be that this difference is due to the absence, or unimportance, of warfare on a different time level. The Lite Site location is also unlike locations chosen by the approximately coeval St Lawrence Iroquois east of the Frontenac Axis which, with one or two exceptions; e.g., Roebuck; were not sited to make the maximum defensive use of natural obstacles. It is for consideration whether the Southern Division Huron on the Lite Site time level were already under attack from the League Iroquois and possibly, by association, the St Lawrence Iroquois. If this was the case the absence or minimal defence considerations shown by the coeval St Lawrence Iroquois in all but a few instances; e.g., Roebuck; suggests that the St Lawrence Iroquois did not concern themselves particularly with the impact of reciprocal invasions by the Southern Division Huron. However, with the exception of three sherds decorated with punctate circles and three Onondaga-Oneida sherds, there is no evidence on the Lite Site to connect it with the St Lawrence Iroquois of circa 1500 A.D.

CONCLUSION

The Lite Site is the location of a Prehistoric Ontario Iroquois Village. Its location on the shoulder of a high hill suggests defence was a factor when the site was selected. Possibly it was palisaded. The abundance of animal bone food debris and the paucity of vegetal food remains suggests the inhabitants relied more on hunting than on farming as a source of food. They probably depended on hunting, farming, and food gathering for their livelihood, in that order of importance. The amount of disarticulated and fragmented human bone recovered suggests the inhabitants were cannibals. The numerous potsherds recovered which are from children's pots indicates that children composed a significant portion of the population. The depth of the middens suggest the village was occupied for a considerable length of time. Judging from the similarity of the pottery, the Lite Site appears to be closely related to the Black Creek Site further west on the Humber River near Toronto. On that basis the Lite Site is assessed as having been occupied circa 1500 A.D. The site fits best in Wright's taxonomy as an early Southern Division component of the Huron-Petun Branch of the Ontario Iroquois.

(Authors Note: Subsequent to this paper having been written a C-14 date G.Sc-1197 (NMC-230) of 470 **BP** ±130 (1350 AD-1610AD) was received in September 1969 on a charcoal sample from a deep midden. Later in December 1969 a C12/13 correction on that date indicated an age of 500 BP± 130 (1320 AD-1580AD).

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PLATE 1 (*RIM SHERDS*)

Fig. 1: Sidey Crossed rim sherd.

Fig. 2: Huron Incised rim sherd.

Fig. 3: Black Necked rim sherd.

Fig. 4: Lawson Incised rim sherd.

Fig. 5: Warminster Horizontal rim sherd.

Fig. 6: Warminster Crossed rim sherd.

Fig. 7: Black Necked rim sherd with a carinated shoulder.

Fig. 8: Untyped rim sherd.

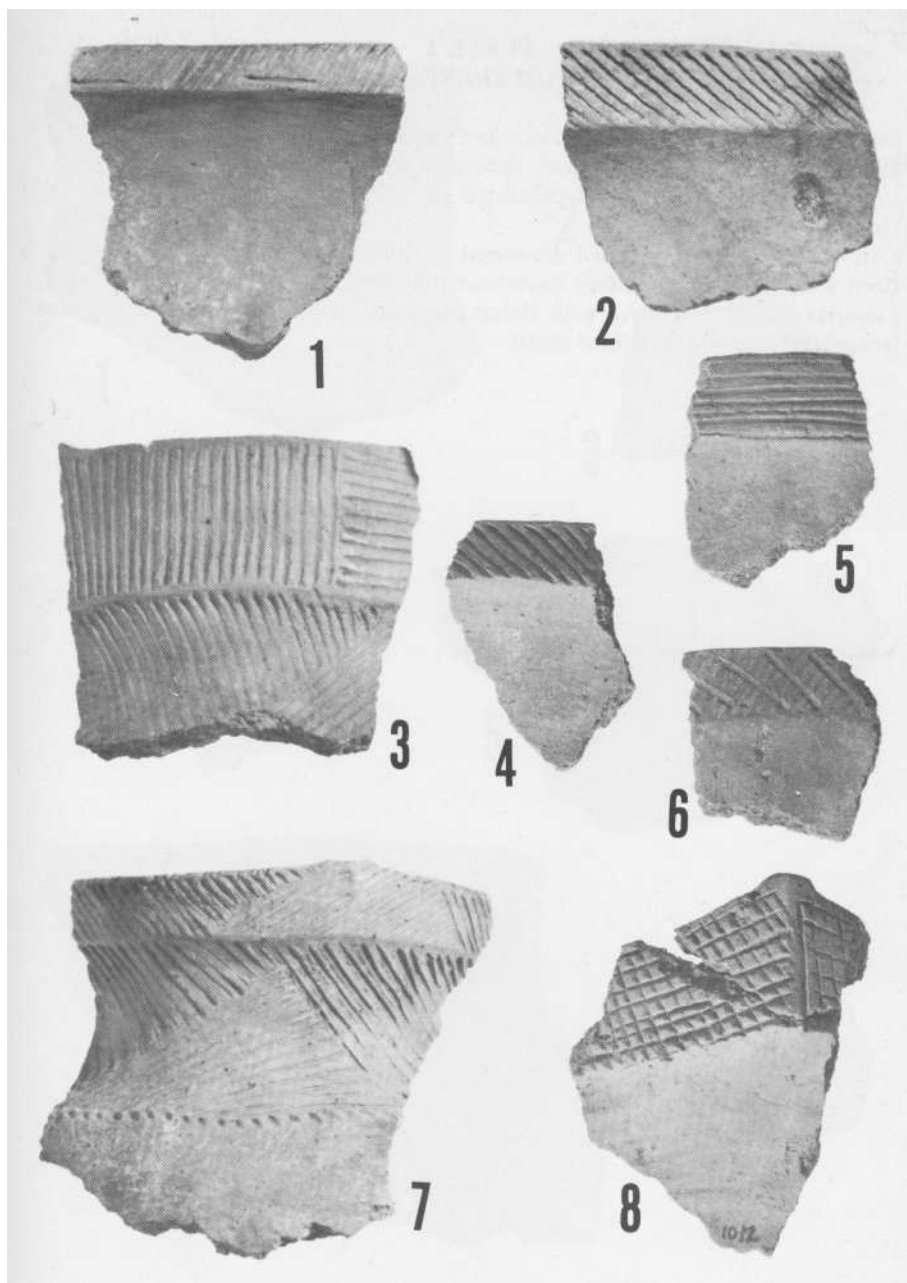


PLATE 2 (*RIM SHERDS*)

- Fig. 1: Cord-wrapped stick impressed decorated rim sherd; Sidey Crossed motif.
Fig. 2: Untyped collarless rim sherd with decorated lip.
Fig. 3: Cord-wrapped stick impressed decorated rim sherd.
Fig. 4: Untyped collared rim sherd.
Fig. 5: Cord-wrapped stick impressed decorated rim sherd with incipient castellation.
Fig. 6: Cord wrapped stick impressed decorated rim sherd.
Fig. 7: Lanoraie Corded rim sherd with classic pointed castellation and punctate circle human face effigy; Durfee Underlined motif.

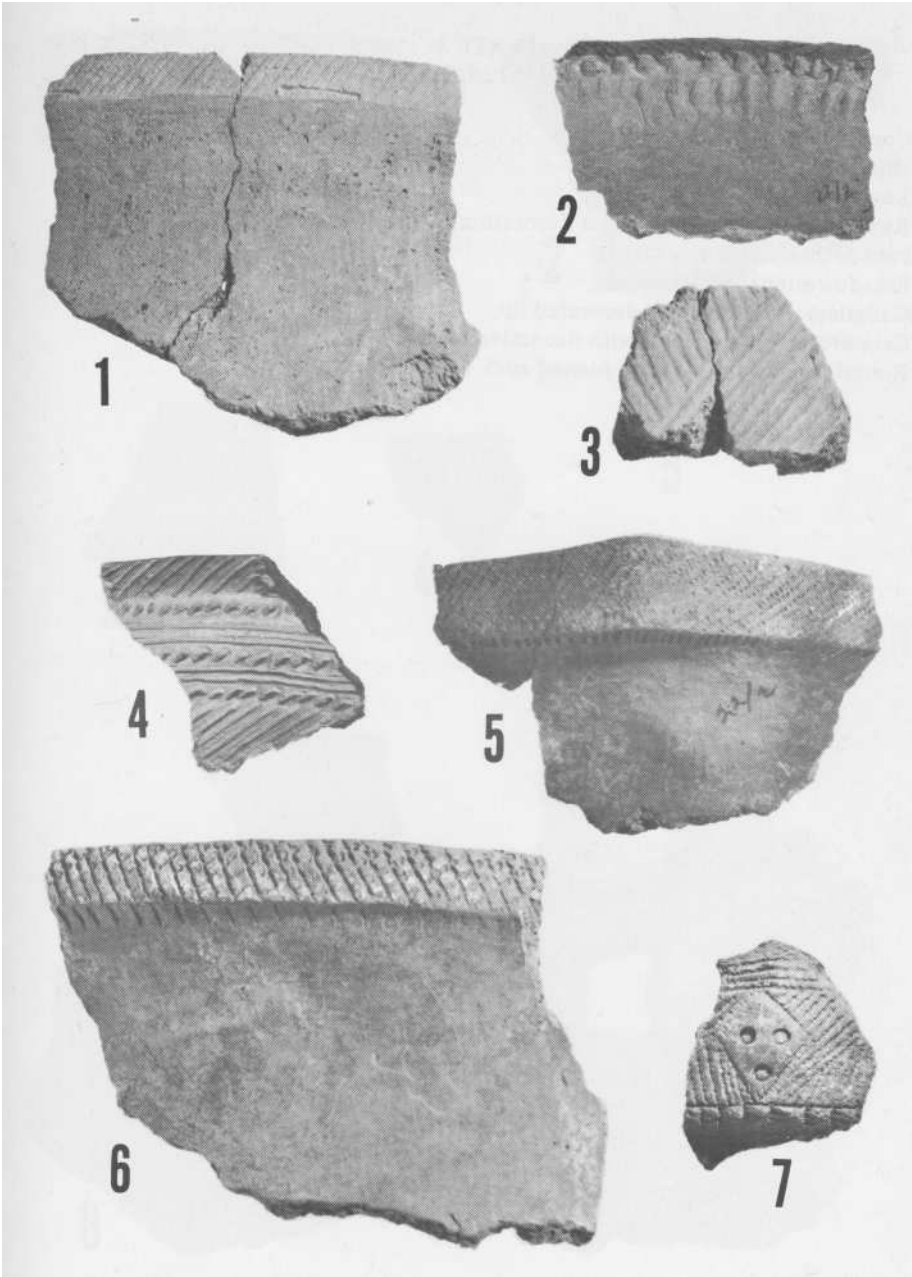


PLATE 3
(RIM AND NECK SHERDS)

- Fig. 1: Copeland Incised rim sherd.
Fig. 2: Undecorated rim sherd.
Fig. 3 : Lawson Opposed rim sherd.
Fig. 4: Rim sherd with punctate circle decoration.
Fig. 5: Pseudo-castellated rim sherd.
Fig. 6: Pseudo-castellated rim sherd.
Fig. 7: Collarless rim sherd with decorated lip.
Fig. 8: Carinated shoulder sherd with decorated neck.
Fig. 9: Round shoulder sherd with plaited neck decoration.

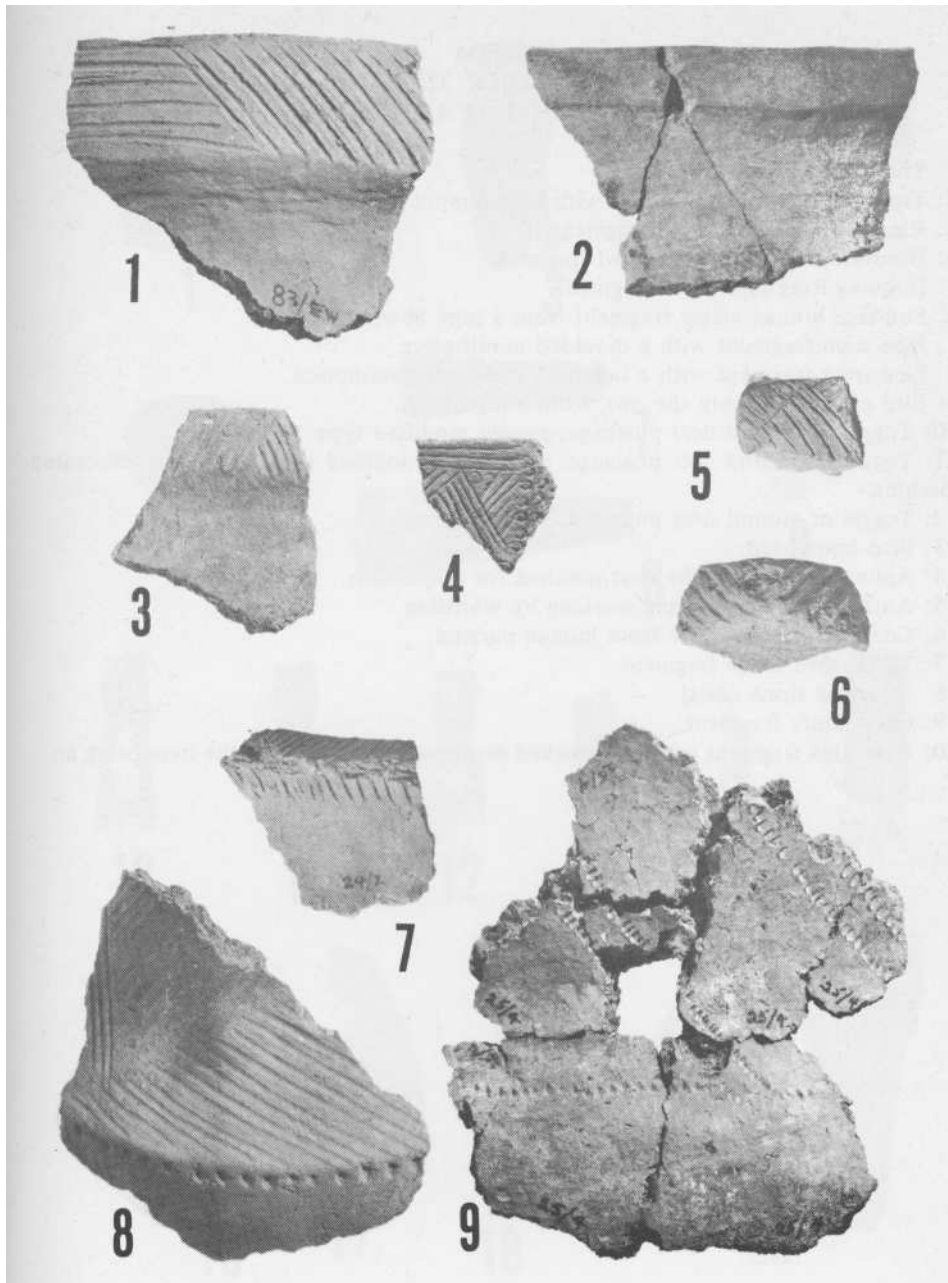


PLATE 4

*(PIPES, BONE, ANTLER, TURTLE-SHELL,
TEETH, AND STONE ARTIFACTS)*

- Fig. 1: Trumpet pipe bowl fragment.
Fig. 2: Trumpet pipe bowl fragment with the trumpet lip modified by grinding.
Fig. 3: Ring Trumpet pipe bowl fragment.
Fig. 4: Decorated Trumpet pipe bowl fragment.
Fig. 5: Iroquois Ring pipe bowl fragment.
Fig. 6: Full-face human effigy fragment from a pipe bowl.
Fig. 7: Pipe stem fragment with a moulded mouthpiece.
Fig. 8: Pipe stem fragment with a tapered cylindrical mouthpiece.
Fig. 9: Bird effigy, probably the owl, from a pipe bowl.
Fig. 10: Toggle or ground deer phalange; grossly modified type.
Fig. 11: Toggle or ground deer phalange; moderately modified type transversely decorated by scorching.
Fig. 12: Toggle or ground deer phalange; notched type.
Fig. 13: Bird bone bead.
Fig. 14: Animal tooth with the root notched for suspension. Fig.
15: Antler fragment showing working by whittling.
Fig. 16: Gorget fragment made from human parietal.
Fig. 17: Turtle-shell rattle fragment.
Fig. 18: Schistose stone chisel.
Fig. 19: Chert knife fragment.
Fig. 20: Deer ulna fragment with two worked depressions suggestive of the item being an effigy.

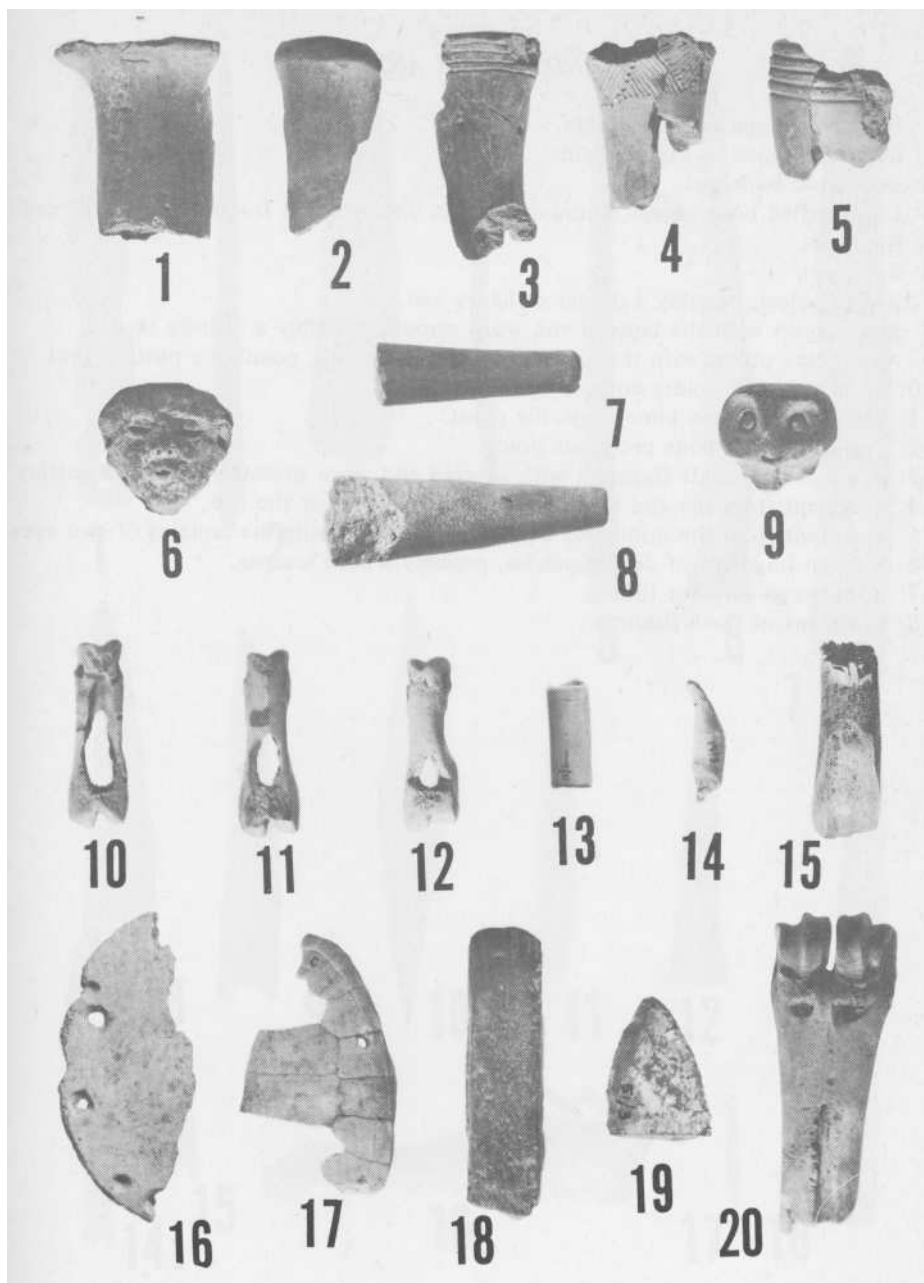


PLATE 5
(BONE AND ANTLER ARTIFACTS)

- Fig. 1: Decorated bone awl or hair-pin.
- Fig. 2: Decorated bone awl or hair-pin.
- Fig. 3: Decorated bone awl.
- Fig. 4: Unidentified bone object reminiscent of an unperforated Iroquoian netting needle.
- Fig. 5: Bone awl.
- Fig. 6: Bone awl.
- Fig. 7: Antler object, possibly a dagger or heavy awl.
- Fig. 8: Bone object with the tapered end worn smooth, possibly a pottery tool.
- Fig. 9: Antler tine object with the tapered end worn smooth, possibly a pottery tool.
- Fig. 10: Bone awl with points on both ends.
- Fig. 11: Flat wedge-shaped bone projectile point.
- Fig. 12: Conical hollow bone projectile point.
- Fig. 13: Worked bone shaft fragment with tapered end worn smooth, possibly a pottery tool.
- Fig. 14: Fragment from the end of a netting needle broken at the eye.
- Fig. 15: Fragment from the middle of a netting needle showing the remains of two eyes.
- Fig. 16: Worked fragment of deer mandible, possibly a corn scraper.
- Fig. 17: Bone gorge used for fishing.
- Fig. 18: Fragment of bone fishhook.

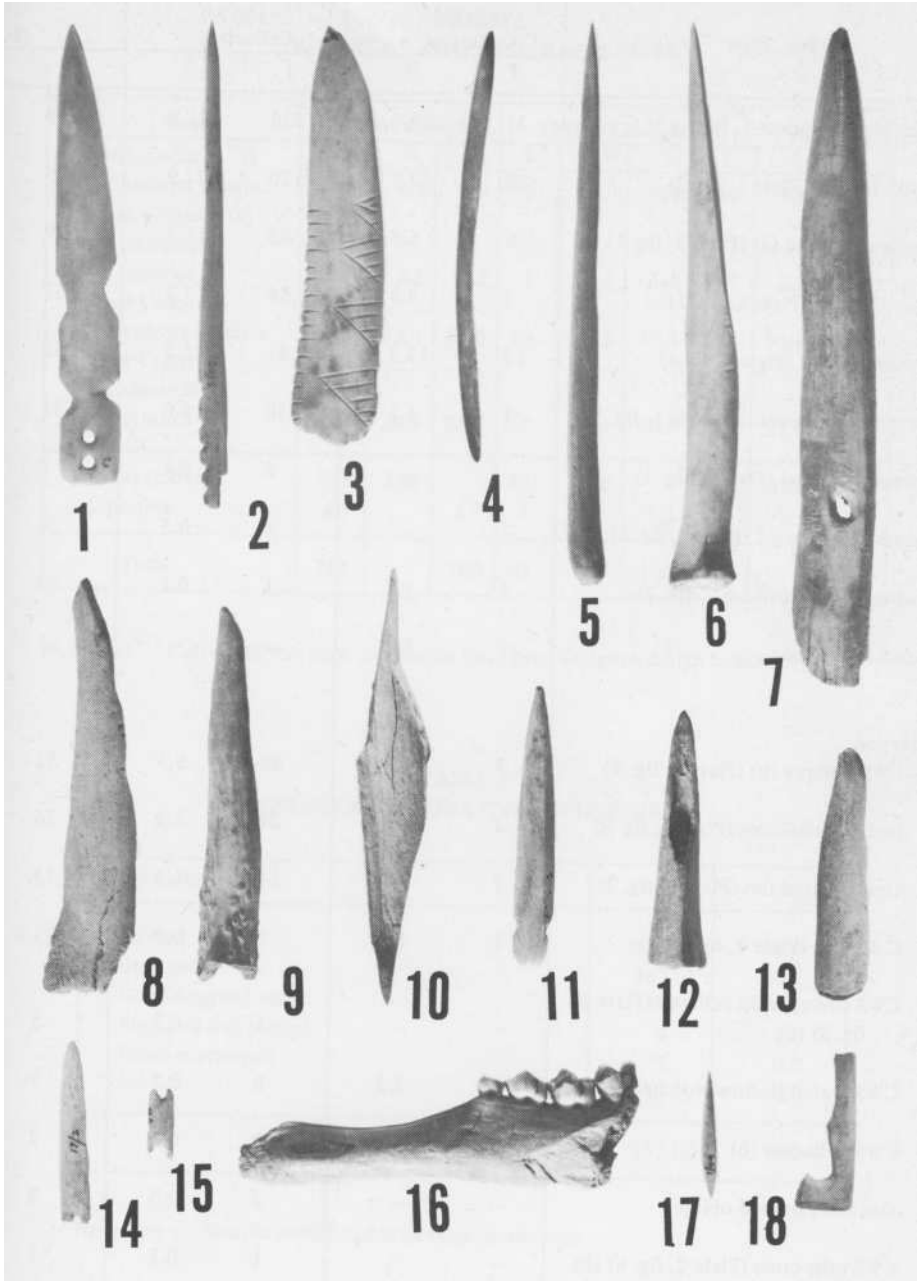


TABLE 1
POTTERY TYPES

Pottery Type	1951/52 Collection		1967 Collection		Total	
	F	%	f	%	f	%
Black Necked (plate 1, figs. 3.7)	27	30.0	236	31.8	263	31.6
Huron Incised (Plate 1, fig. 2)	29	32.2	170	22.9	199	23.9
Copeland Incised (a) (Plate 3, fig. 1)	6	6.6	83	11.2	89	10.7
Sidey Crossed (Plate 1, fig. 1)	3	3.3	54	7.3	57	6.9
Lawson Incised (Plate 1, fig.4)	12	13.3	41	5.5	53	6.4
Warminster Horizontal (Plate 1, fig. 5)	1	1.1	30	4.0	31	3.7
Lawson Opposed (Plate 3, fig. 3)	-	-	5	0.7	5	0.6
Warminster Crossed (Plate 1, fig. 6)	-	-	4	0.5	4	0.4
Lanoraie Corded (Plate 2, fig. 7)	1	1.1	1	0.1	2	0.2
Syracuse Incised	1	1.1	-	-	1	0.1
Untyped						
CWS oblique (b) (Plate 2, fig. 5)	3	3.3	48	6.5	51	6.1
Incised criss-cross (Plate 1, fig. 8)	2	2.2	24	3.2	26	3.1
Undecorated rim (Plate 3, fig. 2)	1	1.1	14	1.9	15	1.8
Collarless (Plate 3, fig. 7)	1	1.1	7	0.9	23.9	1.0
CWS chevrons, hi collared (Plate 2, fig. 3) (b)			5	0.7	5	0.6
CWS Dutch Hollow Notched (b)	2	2.2	5	0.7	7	0.8
CWS collarless (b)	-	-	2	0.3	2	0.2
Dentate stamped oblique			2	0.3	2	0.2
CWS criss-cross (Plate 2, fig. 6) (b)	-	-	1	0.1	1	0.1
Undecorated collar, decorated neck	1	1.1	-	-	1	0.1
Miscellaneous (Plate 2, fig. 4)	-	-	10	1.3	10	1.2
Totals	90	100	742	99.9	832	99.7

Notes: (a) A Huron pottery type proposed by Wright (1966, p. 73)
(b) CWS is an abbreviation for "cord-wrapped stick" impressed decorative technique.

TABLE 2
RIM SHERD SHAPE CHARACTERISTICS

Shape	1967 Sample			1951/52 Sample			Total		
	f	%	%	f	%	%	f	%	%
High Collared (a) convex interior	34	4.6	4.6	7	8.0	7.8	41	5.0	4.9
High Collared (a) channelled interior	16	2.2	2.2	1	1.1	1.1	17	2.1	2.0
Low Collared convex interior	527	72.3	71.0	52	59.8	57.8	579	71.0	69.6
Low Collared channelled interior	152	20.9	20.5	27	31.1	30.0	179	21.9	21.5
Total Collared	729	100		87	100		816	100	
Collarless	13		1.7	3		3.3	16		2.0
Total	742		100	90		100	832		100

Note: (a) Collars 35 mm high and higher have been designated high collared.

TABLE 3
RIM SHERD DECORATIVE TECHNIQUE

Technique	f	%
Incised	571	68.6
Stamped	167	20.1
Cord-wrapped stick	67	8.1
Stamped and incised	8	1.0
Dentate stamped	2	0.2
Nil	17	2.0
Total	832 (a)	100

Note (a) Sample consists of intact rim sherds only

TABLE 4 MISCELLANEOUS TRAITS

Trait	f	%
Castellated rims (a)	257	23.9
Lip decorated (b)	51	4.8
Interior decorated (c)	295	28.4
Notches <i>below</i> collar (d)	130	12.1
Stamped	128	98.5
Fingernail	2	1.5
Neck Decorated (e)	788	31.7
Carinated shoulder (f)	204	38.0
Body (g)		
Undecorated	6110	98.2
Ribbed-paddle	51	0.8
Decorated	34	0.5
Check-stamped	26	0.4
Cord-wrapped stick	1	—
Ladder-plait decorated collar	2	—
Punctate circle decorated collar	3	—

Notes

- (a) Sample 1,073 consists of 832 intact rim sherds, 140 lip collar fragments, and 101 gross castellations on untyped intact rim sherds.
- (b) Sample 1,067 consists of 826 intact rim sherds, 140 lip collar fragments, and 101 gross castellations on untyped rim sherds.
- (c) Sample 1,038 consists of 898 intact rim sherds, and 140 lip collar fragments.
- (d) Sample 1,075 consists of 832 intact rim sherds, 142 base collar fragments, and 101 gross castellations on untyped intact rim sherds.
- (e) Sample 2,482 consists of 992 neck sherds and 1,490 neck portions on intact rim sherds, rim sherd fragments, and neck/shoulder sherds.
- (f) Sample consists of 537 shoulder sherds.
- (g) Sample 6,222 consists of 5,667 body sherds and 555 portions of body on shoulder/body sherds.

TABLE 5
CHARACTERISTICS CORD-WRAPPED STICK DECORATED RIMS

COLLAR HEIGHT			CHARACTERISTICS									
			Interior Shape		Exterior Shape			Lip Decorated	Castellations*	Interior Decorated	Collar Base Notches	Neck Decorated
mm	f	%	Concave	Convex	Vertical	In-slope	Out-slope					
5	8	11.9	-	8	2	1	5	8	-	-	1	-
8	2	2.9	-	2	1	1	-	2	-	-	1	-
9	1	1.4		1		1	-	1	1-IP		-	-
10	2	2.9		2		2		2	-	-	2	-
11	3	4.5	-	3		3	-	1	-	1	2	-
12	6	9.0		6	-	6	-	1	1-IP	--	5	-
14	3	4.5	-	3	-	3	-	2	1-IP	-	3	-
15	1	1.4	-	1	-	1	-	-	1-IP	-	1	-
16	7	10.4	3	4	-	7	-	2	1-IP	3	1	1
17	3	4.5	2	1	-	3	-	1	-		3	-
18	7	10.4	6	1	-	7	-	4	-	-	7	-
19	3	4.5	2	1	1	2	-	1	-	-	3	-
20	5	7.5	2	3	-	5	-	-	1-IP	-	5	-
21	3	4.5	-	3	1	-	2	1	1-IP	1	2	-
22	4	6.0	3	1	-	4	-	-	-	-	4	-
25	2	2.9	1	1	-	2	-	-	-	-	1	-
27	1	1.4	-	1	-	1	-	-	1-CP	-	1	-
50	4	6.0	-	4	-	4	-			4		
Collar-less	2	2.9	-	2	-	-	-	2	-	-	-	-
Totals	67		19	48	5	53	7	28	8	9	42	1
Per cent	8.1	99.5	28.4	71.6	7.5	79.1	10.4	41.8	11.9	13.4	62.7	1.4

Note: * IP represents Incipient Pointed; CP represents Classic Pointed.

TABLE 6 CASTELLATION TYPES

Type	f	%
Incipient pointed	51	19.8
Classic pointed	38	14.8
Classic pointed overhanging	29	11.3
incipient pointed overhanging	8	3.1
Turrett	8	3.1
Turrett overhanging	3	1.2
Nubbin	7	2.7
Incipient pointed ridged	3	1.2
Horizontal	3	1.2
Square	2	0.8
Undulating	2	0.8
Undetermined	103	40.1
Total	257	100

**TABLE 7
SHOULDER SHAPE AND DECORATION**

Shape	Decorated		Sample	
	f	%	f	%
Round	126	37.8	333	62.0
Carinated	71	34.8	204	38.0

TABLE 8 PIPE TYPES

Pipe Type	1951 Collection	1967 Collection	%
Plain Trumpet	6	34	76.9
Ring Trumpet	2	1	5.8
Decorated Trumpet	-	3	5.8
Iroquois Ring	-	2	3.8
Deowongo Barred (a)	1	-	1.9
Owl Effigy	-	1	1.9
Human-face Effigy	-	1	1.9
Animal Effigy	-	1	1.9
Totals	9	43	99.9

Note (a) A pipe type used by Lenig (1965, p. 14) to describe a trumpet pipe decorated with a plait of horizontal lines on the side of the pipe bowl remote from the smoker.

TABLE 9
LITE SITE COEFFICIENTS OF SIMILARITY BASED ON RIM SHERD TYPE ANALYSIS

Branch/Division	Site	Coefficient	Approx. Date	Affiliation
HURON-PETUN BRANCH				
South Division	Doncaster	82	1450 AD	Huron
	Draper	109		Huron
	Black Creek	129	1500 AD	Huron
	Payne	77		Huron
	Parsons	62	1550 AD	Huron
	Woodbridge	69		Huron
	Seed	73		Huron
North Division	Lalonde	73		Petun
	Copeland	115		Pe tun
Fusion	Bosomworth	87	1550 AD	Petun
	Sidey-MacKay	76		Petun
	Graham-Rogers	29	1600 AD	Petun
	MacMurchy	49		Petun
	Orr Lake	62	1650 AD	Huron
	Warminster	62		Huron
NEUTRAL-ERIE BRANCH				
Neutral Division	Southwold	23	1500 AD	Neutral
	Lawson	16	1550 AD	Neutral

Note: Branch and Division dichotomy and site sequence derived from Wright (1966).