

THE WALKER SITE

By

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ABSTRACT

This thesis represents the analysis of the Walker site, a large 10 acre, non-palisaded Neutral Iroquois town occupied circa 1640 A.D. Walker provides a comparative baseline for the study of the Neutral Iroquois, as well as, demonstrating trends and relationships extant during the late part of the Neutral sequence. The analysis also provides needed definitional refinement to the terminal period of Neutral development.

Twelve longhouse structures are analysed and reveal settlement pattern configurations that are unique to the historic Neutral. The analysis of the Walker artifact inventory includes both aboriginal remains and the abundant European (French) trade items. Historic Neutral subsistence patterns are largely defined on the basis of the Walker data, and burial practices of the historic Neutral are clarified by the Walker analysis.

In addition to the archaeological analysis an attempt is made to demonstrate the historic significance of the Walker town. Specifically it is proposed that Walker represents the capital village of the Neutral confederacy, shortly before their dispersal by the League Iroquois in 1650-51. Further, it is argued that Walker represents the main Jesuit mission to the Neutral, established by Fathers Jean de Brebeuf and Joseph Chaumanot in 1640-41.

ACKNOWLEDGEMENTS

The completion of this monograph could not have been realized without the assistance of various institutions and individuals to whom I should like to express my sincere thanks and gratitude.

The Canada Council provided substantial funds for the 1974 field excavations, and their assistance is most gratefully acknowledged. Too, McMaster University provided field and laboratory equipment necessary for the completion of the excavation and analysis.

The property owners, Grahmae and Mabel Dougherty offered their full support in 1973 and 1974, and their friendship will long be remembered. Mr. Roy Vansickle also provided invaluable aid in moving and setting up the 1974 field camp.

The 1973 Autumn excavations were undertaken by 3rd and 4th year students from McMaster University under the direction of Dr. W. C. Noble. This work resulted in the definition of two houses and sampling of the Walker midden areas. The 1974 summer excavations, also directed by Dr. W. C. Noble, included the following crew members: the author, Brian Wolfe, Paul Lennox, Eric Kuhn, Bill Read, Bob Rozel, Ken Lister, Debbie Rose, Julie Smith, Olga Klimko, Peggy Armstrong, Anita Osis and Barb Pearson. The industrious efforts of the field crew during that hot and extremely humid summer of June to August, 1974, are very evident in the pages to follow. Mr. Brian Wolfe served diligently as a pace-setting crew foreman, and the time-consuming plotting of the Walker settlement patterns was efficiently and accurately handled by Peggy Armstrong and Julie Smith. Dr. W. C. Noble mapped the

Walker site as well, as, plotted house 1.

Faunal remains have been most capably analysed by Anne Meachem Rick, Elizabeth Silieff and Stephen L. Cumbaa of the Zooarchaeological Identification Centre, Ottawa. Their analysis of the extremely large and complex Walker sample has provided a much needed baseline for future comparative faunal studies, and their analyses open insights into the Walker occupants' diet.

Various private collections have been utilized in the Walker study, including those of Messrs. George Gee and Brian Wolfe. Their generosity is gratefully acknowledged, as is the family donation of the extensive collection amassed by the late Alfred Wood.

The considerable task of typing this monograph was capably handled by Dorinda Sussex and my sincere thanks are extended to her for a job well done.

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CHAPTER 1

INTRODUCTION

The excavation and analysis of the Walker site (AgHa-9) provides the first comprehensive archaeological statements regarding an historic Neutral Iroquois town. As such, Walker helps to clarify certain inadequacies present in earlier brief Neutral studies (Noble 1970, 1972, 1974; Ridley 1961; Wright 1966), particularly those dealing with settlement, subsistence and burial patterns. While overall cultural similarities are seen between the Neutrals and other northeastern Iroquoian groups, the following analysis defines patterns that are specific to the historic Neutral who were a member branch of the Ontario Iroquois Tradition (Wright 1966).

The historic Neutrals were a confederacy of five to eight tribes, who lived primarily east of the Grand River between the present cities of Milton and Niagara Falls. Their greatest concentration of villages and towns lay within a twenty mile radius of Hamilton (Noble 1974). The Walker town, covering 10 acres, is the largest known Neutral site of the circa 1640 A.D. era, and it is believed to be the chief town of not only the Attiouandaronk, but the whole Neutral confederacy (Hunter, Jesuit Relation Vol 21:317 note 17). As such, this site has both archaeological and historic significance.

Brief Historical Background

Ethnohistoric accounts of the Neutral Iroquois are by no means prolific, and are largely the result of two eye-witness reports. One comes from the Recollet Dallion (G. K. Wright 1963) who spent three months in the Neutral country in 1626, and the other comes from a briefer visit by the Jesuit fathers Jean de Brebeuf and Joseph Chaumonot in 1640-41. These latter orally transmitted their reports to their superior Jerome Lalemant who included their accounts in the Jesuit Relation for 1640-41 (Vol. 21:187).

In each case the religious fathers met with open hostilities and personal abuse from the Neutrals, such that any real attempts to establish 'missions' were thwarted. The Jesuits, however, wishing to propagandise their religious efforts, did claim to have established 'missions' and published as much in their Relations and on various maps. From their brief, hostile and discontinuous stays in Neutralia, it is doubtful that either the Recollets or the Jesuits had any lasting influence on the Neutral culture.

Clearly of more significant historical impact was the Neutral involvement with the French fur trade of the 1630-50 period. It is known that various 'courier-de-bois' traders visited the Neutrals from Huronia during the 1630's (G. K. Wright 1963:11), and in all probability it is they who introduced the small pox epidemic of 1638-39 to the Neutrals. The copious volume of French trade goods on Neutral sites (Noble 1974) certainly demonstrates the desire for such items,

and involvement within the fur-trade-exchange system, but also, that historic Neutralia was a major terminus for the manufactured European goods. Walker, as the largest known Neutral village of the 1630-45 period amply confirms such observations.

Gordon K. Wright (1963) has compiled many pertinent sources in his review of Neutral history and ethnography, and a discussion of the historic record is presented in the concluding chapter. Suffice it to say here, that the Neutrals ceased to exist as a cultural entity sometime between 1650-55 (Noble 1974; White 1972) when they were dispersed by the League Iroquois.

Archaeological Background and History of the Walker Site

Recorded archaeological investigation of the Neutral Iroquois began in the late 1800's with the pioneering work of Frank Waugh (1902) and David Boyle (1903). Research since this early beginning has enumerated many prehistoric and historic Neutral sites, but only a few have been the focus for major archaeological investigations. A continuous sequence of Neutral occupation has been established from Middleport times to 1655 (Kenyon n.d.; Noble 1974; Wintemberg 1939; Wright 1966) and, thus, the broad picture of Neutral archaeological history is known. Perhaps, of all the periods of Neutral development, the historic period is the least known. To this end, Dr. W. C. Noble has undertaken excavations since 1969 at the protohistoric Cleveland village (ca. 1540), the contact period Christianson village (ca. 1615), and

the late historic towns of Walker (ca. 1640) and Hamilton (ca. 1650). When fully analysed such sites should help provide a firm foundation for understanding historic Neutral culture.

The Walker town has seen archaeological investigation since the late 1800's. Both Frank Waugh (1902) and David Boyle (1903) reported on the finds of early collectors at the site, and Boyle particularly noted the destruction created by these 'curiosity seekers'. In 1944 John Steele undertook some salvage work in the disturbed burial area, and opened a seemingly previously undisturbed ossuary. Twenty-nine years later, Dr. W. C. Noble of McMaster University held a fall excavation at Walker, during which time numerous midden areas were sampled and longhouse number 1 was completely excavated and recorded. In the following year 1974, it was learned that large portions of the site were slated for destruction. This was deemed critical, for a substantial section of the town had never been ploughed, thereby retaining its original living and soil floors. With the assistance of the Canada Council and McMaster University, full scale excavations were undertaken between June 26 to August 26, 1974 under the general direction of Dr. W. C. Noble. The author and Mr. Brian Wolfe acted as crew foremen.

The location and recording of house structures and possible palisades consumed most of our time at Walker. Since the terrain was most irregular, power machinery was prohibited and all excavation had to be done by hand. This proved extremely beneficial with the opening of twelve house structures complete with original soil stains

and profiles. The burial area also required hand operation. In all, over 20,000 square feet of this 10 acre town was manually excavated and backfilled in the years 1973-74.

It is the description, analysis, and interpretation of the features and artifacts excavated at Walker by McMaster University that comprises the main purpose of this monograph. To the McMaster collections also are added the private collections of the late Alfred Wood, and messrs. George Gee and Brian Wolfe.

In the following, Chapter 2 presents the Walker Settlement Patterns, followed by an analysis of the Artifacts in Chapter 3. Being largely descriptive, these two chapters alone constitute the bulk of this thesis. Chapter 4 deals with the Burial Patterns, followed by a discussion of Faunal remains in Chapter 5, and finally the analytic Discussion in Chapter 6. Three Appendicies summarize Soil Analyses (A), Rim Analyses (B) and Faunal Analyses (C).

CHAPTER 2

SETTLEMENT PATTERN

Settlement patterns at the Walker site (Fig. 1) provide a configuration of house structures, middens and burial plots in relation to soils, springs, creeks, ravine slopes and other elements of the surrounding environment. Specifically, because of its large 10 acre size, this site can be termed a town following Noble (1975:38) who defines Ontario Iroquois towns as exceeding 5 acres, while villages fall between 1 - 5 acres, and hamlets are less than 1 acre in extent.

* As a settlement configuration, Walker posed various research questions never broached before on a Neutral site. First, was Walker indeed a single site, or was it a double contemporaneous village as seen at the Huron town of Cahiaagué (Noble: personal communication)? Second, do the erosional features and irregular terrain at Walker have a bearing on house, midden and burial locations? Third, are there soil correlations with preferred house locations? Fourth, what range of variation exists within the Walker houses? Fifth, do undisturbed Neutral houses preserve any special interior features? Sixth, what if any would locational analysis of artifacts within the Walker houses reveal? Seventh, are the Walker houses grouped in any manner according to house style, particular middens, or other possible social factors? Eighth, do houses show any preferred orientation or other social/

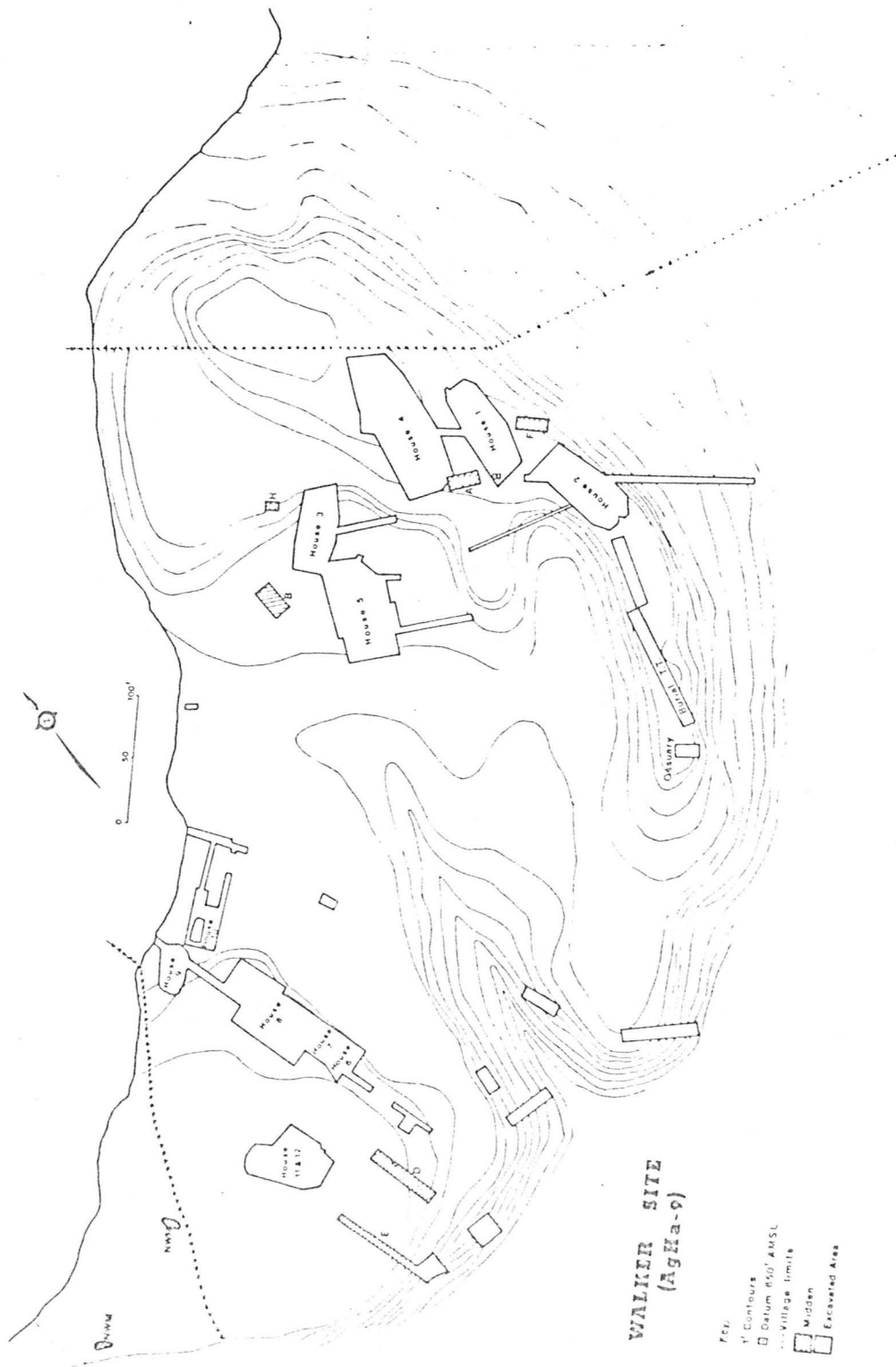


Fig. 1. Settlement patterns.

climate related factors? Ninth, are the Walker middens randomly distributed? Tenth, do Neutral burials of the ca. 1640 era occur within the village/town confines? All of these questions are in large answered or partly clarified by the Walker excavations. Indeed, the settlement pattern data from Walker constitutes some of the most significant information this site has to offer.

The Walker Site

The Walker site (AgHa-9) is located on lots 9 and 10, Concession 2, of Brant County (Fig. 2). Named after the original owner Frank Walker Sr., who homesteaded on the site prior to 1850, the site occupies a sand knoll 650 feet above mean sea level, and is bounded on three sides by intermittent tributaries of Big Creek. Erosional features have effectively split the site into two unequal portions, joined by a narrow band of sandy soils. The western portion of the site where excavations were undertaken had never been ploughed prior to 1974. Owned by Grahmae Dougherty, this area is dominated by a mature stand of pine and beech trees, which greatly hindered excavation (Fig. 3). The eastern end of the site lies on the property of Mr. Ron Smith, and is under cultivation; it was not excavated.

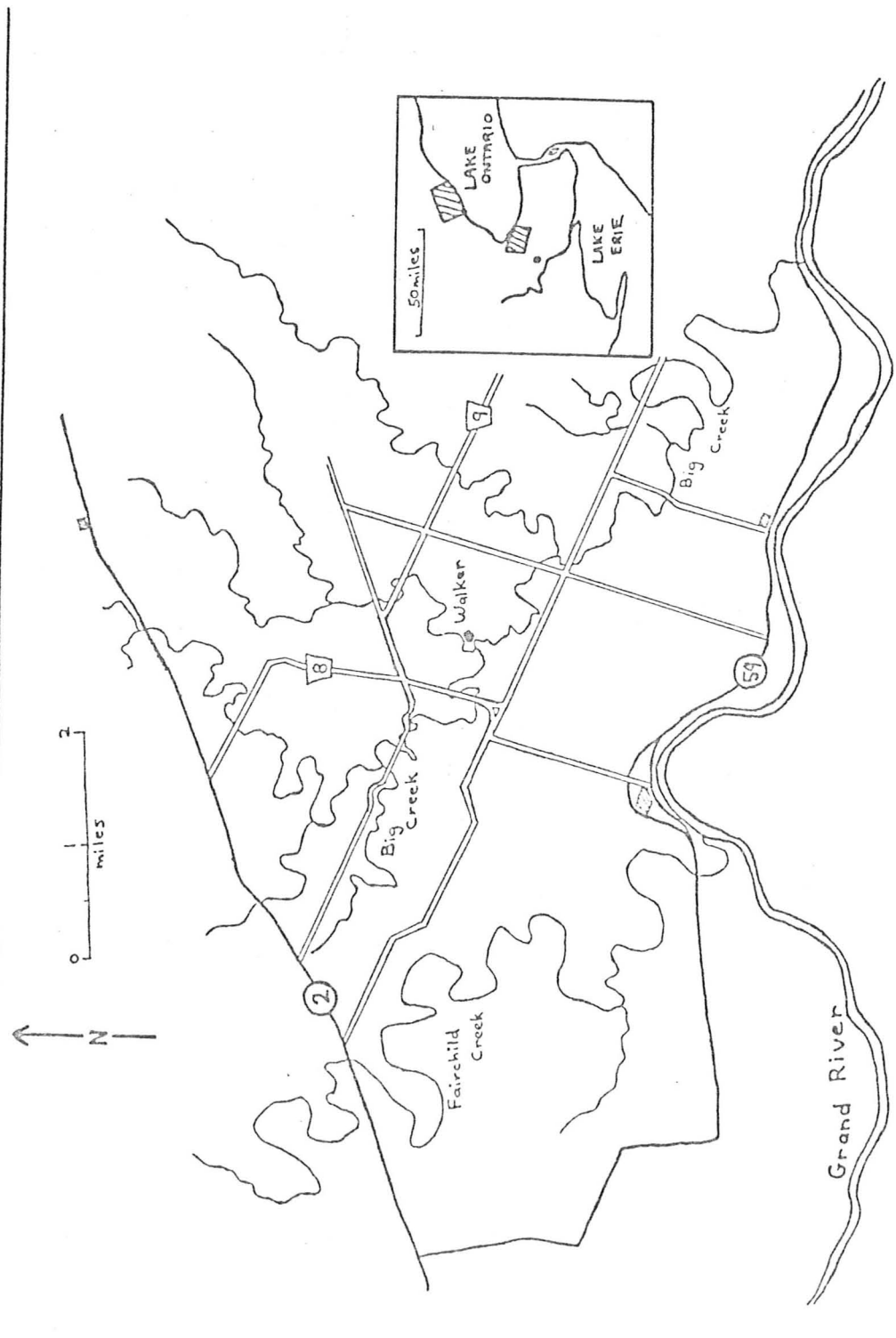


Figure 2. Walker site.



Fig. 3. The Walker site.

Soils at Walker

Three distinct soils are evident at the Walker site: the major unit being Fox sandy loams, which are developed on the glacially formed Norfolk Sand Plain (Chapman and Putnam 1966:251). Due to erosion by Big Creek and its tributaries this sand plain has been extensively eroded in the site area, revealing buried silt and clay soils. Indeed, the Walker town is split by one of these erosional channels which contain Tuscola silt loams in the upper regions, and Toledo clay loams in the bottomlands. Fig. 3 reveals the undulating topography created by this erosion.

The Fox sand loams are well drained soils while the Tuscola and Toledo soils are not, and would remain wet during periods of thaw and intensive rain. It is not surprising then, that the Walker people chose to inhabit the area of well drained Fox soils; avoiding the damp and low-lying silt and clay areas.

A complete analysis of the Walker soils is presented in Appendix A. Also contained in this appendix is an analysis of the depth of soil disturbance created by the Walker people, as well as, chemical analysis of the unique wall stain feature outlining some of the Walker longhouses.

Palisades

Despite diligent test excavations in traditionally favoured locations along hill and ravine crests (see Fig. 1), no definite palisade

lines were located at the Walker site. This is unusual, and yet, there is evidence to suggest that palisading was not a necessary prerequisite. First, the sheer size of the town at 10 acres invokes the inference of a large resident population at Walker, capable of providing a substantial repelling force. Second, during the 1630's and early 1640's the Neutrals in the Hamilton-Brantford area were not yet experiencing any tribal hostilities with the League Iroquois. Third, the topography itself at Walker forms a defensive feature. Walker is located on the highest land of the surrounding region and is bounded on three sides by streams and their associated steep ravines. The absence of palisading at Walker, while atypical from other historic Neutral villages (Noble 1974), is certainly not implausible.

Middens

Two types of middens were present at Walker: those located on hillsides and those located within the settled area of the village. The hillside middens were generally thin and eroded, and consequently, were not the focus of major excavations. Seven midden areas excavated within the town itself, however, provided an interesting sample of refuse.

The middens were excavated in five foot squares and contents screened. In all 2100 square feet of midden was excavated as summarized in Table 1.

Table 1. Walker excavated midden data.

Midden area	Sq. feet excavated
A	300
B	450
D	600
E	350
F	250
H	150
NWM	sample
Totals 7	2100

Despite the many years of indiscriminant 'potting' of the Walker middens, many had undisturbed lower levels. Also, it became apparent that the early collectors had totally ignored faunal and pottery remains, and had only retrieved unique or complete specimens. The 1973-74 excavations accomplished the task of getting a representative, unbiased sample of midden refuse.

In certain cases, it was possible to directly associate a specific midden with a specific house. As Fig. 1 indicates midden F is obviously linked with house 1, and in all probability house 4 residents utilized midden A.

House Patterns

Twelve houses, excavated in 20 foot squares and recorded by cross-tape triangulation, are analysed for the Walker site (Fig. 1). While typically early historic Ontario Iroquoian in construction they possess unique features considered definitive for historic Neutral. Too, of the known Neutral settlement pattern, Walker demonstrates developmental relationships to earlier house patterns, as well as, details seen in later Neutral houses. In particular, it is significant to note that both longhouses and the considerably smaller squarish 'cabins', first described by Noble (1970) at the Christianson village, occur side-by-side at Walker. Variability in houses is, thus, the expected norm on any given historic Neutral site.

In Table 2, five overall observations are tabulated for the Walker houses, whereas Fig. 4 summarizes house pit types and contents.

From these tables it is apparent that house lengths range from 21 to 116.5 feet, with a mean width of 23.3 feet. Hearths occur in all houses, but vary in their number according to the intensity of occupation in each house. In all cases, round and oval pit shapes dominate, while the majority of pits, 322 or 46.6%, contained discoloured soils due to chemical reactions. The remaining pits contained either midden-like refuse or compacted ash fill (Fig. 4).


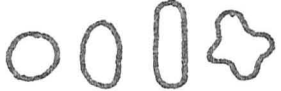

Pit Content	Soil Stain				Refuse Fill				Ash Fill				Pit Totals
Pit Outline													N
House 1	42	23	-	-	11	5	-	-	-	1	-	-	82
House 2	18	22	-	2	14	14	-	1	13	3	-	-	87
House 3	13	16	-	1	4	4	-	-	6	2	-	-	46
House 4	31	17	3	3	12	12	12	1	21	6	-	1	119
House 5	27	9	3	2	23	15	1	2	15	3	-	-	100
House 6	11	9	2	1	7	1	-	-	6	1	-	-	38
House 7	10	10	-	-	12	1	-	1	4	-	-	-	38
House 8	10	5	-	-	14	9	-	1	11	7	-	2	59
House 9	-	1	-	-	2	1	-	-	3	3	-	-	10
House 10	6	2	6	1	6	2	2	-	14	7	1	2	49
House 11/12	9	2	4	1	9	9	4	1	17	3	-	3	62
Pit Totals	177	116	18	11	114	73	19	7	110	36	1	8	
N	322				213				155				690
%	(46.6)				(30.8)				(22.5)				(99.9)

Fig. 4. Walker longhouse pit type and contents.

Table 2. Walker longhouse dimensions and interior features.

House No.	Orientation	Length (feet)	Width (feet)	Hearths	Pits
1	N-S	68	30	6	82
2	N-S	64.5	24	5	87
3	NE-SW	64	22	3	46
4	N-S	116.5	26	7	119
5	N-S	50 ?	23 ?	3	100
6	E-W	21	18.5	1	38
7	N-S	25	20	4	38
8	-	-	-	-	59
9	NE-SW	22	20	1	10
10	NE-SW	93	24	?	49
11	E-W	32	24	2	62
12	N-S	51	24.5	5	62

A random sample of post moulds from house walls and interiors indicates (Table 3) very little difference in their respective diameters and depths. Notable, large support posts occur in both the exterior walls and the house's interiors. In both cases posts are shallow into the subsoil.

Table 3. Walker post mould dimensions in inches.

Post location	N	\bar{X}	S	Range
House-wall-diameter	540	3.9	1.5	1.5 - 11.0
House wall-depth	441	8.2	3.2	2.0 - 19.0
House interior-diameter	141	3.6	1.6	1.5 - 8.5
House interior-depth	141	7.7	3.1	2.5 - 18.0

The Walker houses were numbered consecutively as encountered in the field, and are presented here in detail according to that series.

House 1: Excavated in 1973, this house is oriented N-S, and measures 68 feet long by 30 feet wide. A notable bulge in the house centre expands the house width beyond its normal 25 foot diameter (Fig. 5). Sandy soils have preserved good post mould definition along the north, west, and southern sides of the house, but the northeastern perimeter was obscured by clay deposits with pronounced ferrous oxide drainage stains.

Fifty-one wall posts sampled ranged in diameter from 1.5 to 10 inches, with a mean of 4.3; depths ranged from 2 to 16 inches with a mean of 6.8. Eighteen interior posts ranged in diameter from 2 to 8.5 inches with a mean of 4.3; depths ranged from 2.5 to 10 inches with a mean of 6.6. While classic 'bunkline' posts along the interior sidelines are absent, the large central posts probably

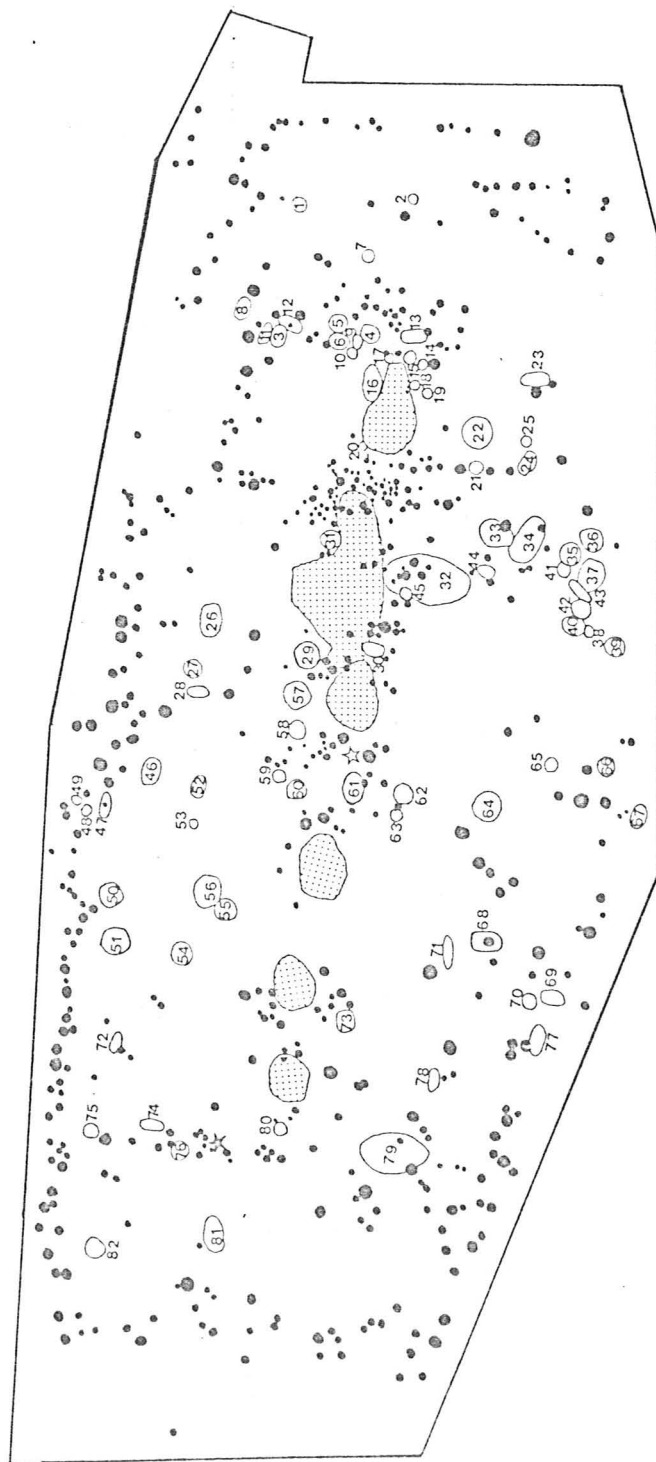
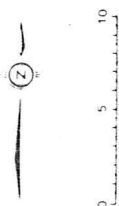
reflect roof supports. Door openings are clear in the north and south ends, the southern door being more of a slip-way than simply a straight opening. Post lines across both house ends indicate partitioned end cubicles approximately 10 feet long by 25 feet wide; effectively limiting the interior living space to a total of 1200 square feet.

Generally speaking, the interior of house 1 is the least ordered of the Walker houses. This may reflect intensive occupation, especially at the north end where there are a meriad of posts and pits. Notable, an iron awl hafted into a catlinite trade bead was located in the second northernmost hearth, and an anvil stone and iron trade knife were also found near hearths (Fig. 5).

Six medial hearths in house 1 are all closely spaced. Indeed, overlapping of hearths is noted in the northern half of this longhouse. The hearths range between 3 to 8 feet, with a mean diameter of 4.5 feet. Living area per hearth in house 1 is limited to 200 square feet; notably less than the 330 square foot average for all Walker houses.

Of a total 82 pits in house 1, 65 soil stain pits predominate over 16 refuse fill and a single ash pit. Pit outline, contents and measurements are summarized in Table 4.

In this and other tables, a 'soil stain' pit denotes a house pit devoid of any refuse, but one which is clearly demarcated by chemical discolouration of the soil. A pit with refuse fill obviously contains midden-type materials, while pits with ash fill are



- Key:**
- Post mould
 - ⑨ Pit
 - Hearth
 - ★ Iron knife
 - ☆ Anvil stone

WALKER SITE

House 1

self-explanatory. It is noteworthy that interior house 1 refuse pits are deeper than soil stain pits, a pattern that is repeated in other Walker structures. Pits in house 1, as in all other Walker houses, are predominantly basin-shaped in profile. Most house 1 pits are aligned along the interior peripheries of the house, as well as, clustered around the three northernmost hearths.

Table 4. House 1 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	65					
circle	(42)	width	5.5 - 23	11.8	4.48	37.9
		depth	1.5 - 14	4.3	3.01	69.8
oval	(23)	length	7.5 - 56	19.0	9.73	51.1
		width	4.5 - 33	11.3	6.49	57.6
		depth	1.5 - 10	4.6	2.43	52.8
Refuse fill	16					
circle	(11)	width	5.0 - 19	10.4	4.55	43.0
		depth	1.5 - 15	7.1	4.81	67.8
oval	(5)	length	11.0 - 44	22.2	12.75	57.4
		width	6.0 - 27	13.2	8.41	63.7
		depth	2.0 - 11	8.0	3.67	45.9
Ash fill	1					
oval	(1)	length	19			
		width	13			
		depth	6			
Total	82					

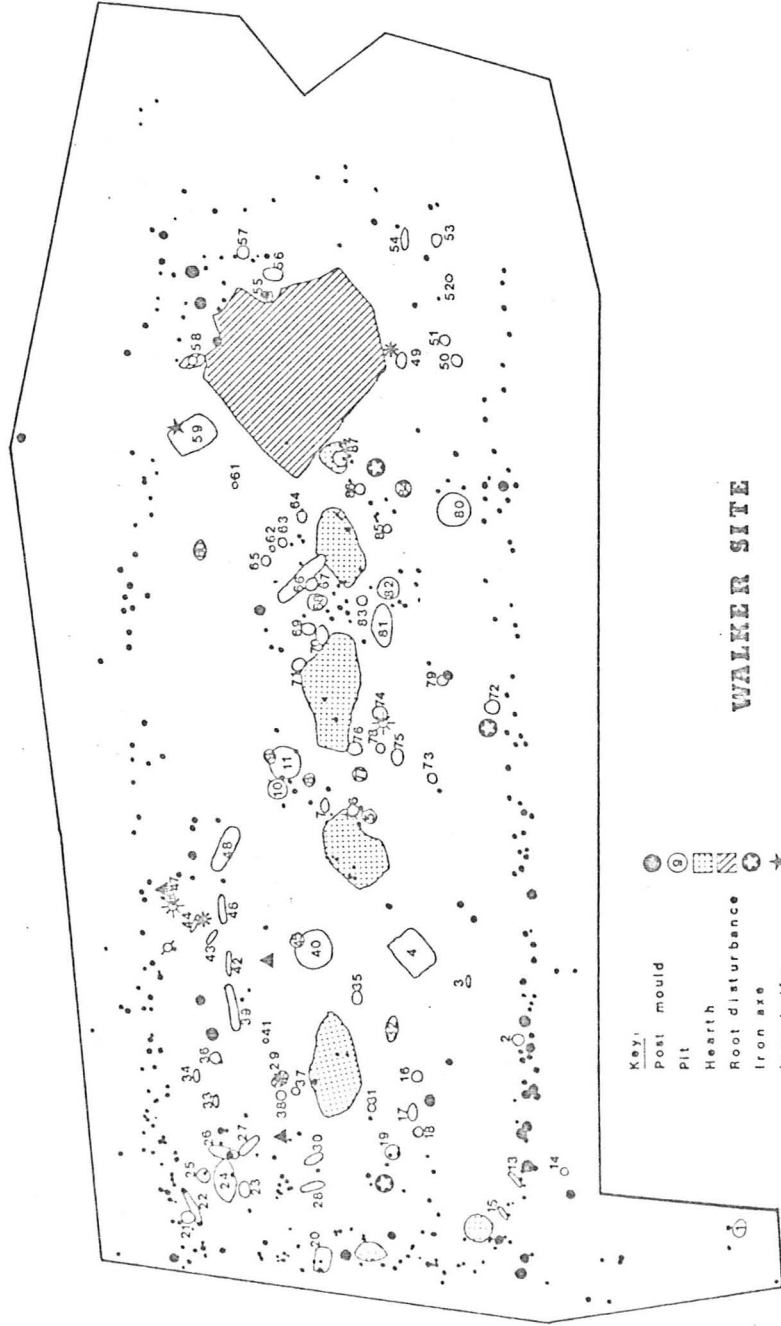
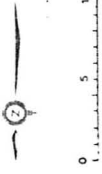
House 2: Also oriented N-S, this longhouse has a length of 64.5 feet and a width of 24 feet; it is located on a sandy ridge extremely close to the burial area of the town (Figs. 1 and 6).

Post mould preservation was generally good except for the dry sands along the southern end of the house. Here, too, a large tree trunk disturbance prohibited complete excavation.

Eighty-nine wall posts sampled ranged in diameter from 2 to 9 inches with a mean of 3.9; depths ranged from 2 to 16 inches with a mean of 8.8. Twenty-seven interior posts ranged in diameter from 2 to 8 inches with a mean of 4.0; depths ranged from 4 to 18 inches with a mean of 11.7. No recognizable door openings or interior partitions were found. Bunklines were also absent leaving an interior living area of 1,548 square feet.

At least five medial hearths and a small corner hearth occur in house 2. Root disturbance at the south end has probably obliterated an additional central hearth. While more regularly spaced than in house 1, hearths in house 2 are again closely-spaced reflecting intensive occupation. Central hearth diameters in house 2 range from 2 to 5 feet with a mean of 3.8. Interior living space per central hearth is approximately 310 square feet; a figure that is more in line with the mean for all houses.

A total of 87 interior pits include 42 soil stain types. In addition, 16 medial ash and 29 refuse pits bring the ratio of pit types into line with those from other Walker houses. Refuse pits continue to be larger than the soil stain pits, as evidenced in Table 5.



- Key:
- Post mould
 - Pit
 - Hearth
 - Root disturbance
 - Iron axe
 - Iron knife
 - Projectile point
 - Scraper
 - Pipe
 - Flake concentration
 - Stain feature

WALKER SITE
House 2

Table 5. House 2 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	42					
circle	(18)	width	6.5 - 24	10.1	4.34	42.9
		depth	1.0 - 8.5	5.2	3.84	73.8
oval	(22)	length	10 - 34	16.6	7.03	42.4
		width	4 - 11	7.1	2.41	33.9
		depth	2.5 - 15	5.7	3.48	61.3
irregular	(2)		pit 48, 59			
Refuse fill	29					
circle	(14)	width	8 - 27	13.1	5.74	43.8
		depth	2.5 - 12	5.3	2.79	52.6
oval	(14)	length	5 - 36	15.7	8.45	53.6
		width	4 - 12	7.7	2.58	33.5
		depth	1.5 - 20	6.5	5.28	81.3
irregular	(1)		pit 4			
Ash fill	16					
circle	(13)	width	6 - 15	9.2	2.33	25.5
		depth	2 - 14	6.8	3.36	49.4
oval	(3)	length	11 - 14	12.6	1.53	12.1
		width	no measurements			
		depth	5 - 8	6.3	1.53	24.1
Total	87					

In house 2, three French iron trade axes, an iron knife, 3 chert projectiles, 3 chert scrapers, and an apple bowl pipe were found in and around pits. Such goods reflect the acculturation nature of the

historic Walker residents. A flake concentration near pit 74 also testifies to a major activity area in the central-western sector of the house. A single human phalanx from pit 4 may be the only remnant of a poorly preserved child burial.

House 3: This house measures 64 feet long by 22 feet wide.

Located amidst mature white pines, large areas of the house could not be excavated due to overlying roots (Fig. 7). Indeed, the precise configuration and NE-SW orientation of the house was only clarified as a result of the exposure of staining features which outline the house walls. Soil analysis by Victor Konrad (Appendix A), indicates that the wall stains are high in organic carbon content. This precludes an initial hypothesis that the wall stains were drip lines. More plausible is W. C. Noble's suggestion (personal communication) that the stains have been left as a result of disintegrating bark from a wall flap buried just under the ground surface for purposes of insulation. Notable, the stain lines which measure 6 - 10 inches wide by 3 - 4 inches into the subsoil, not only encircle the house, but also are evident in an interior partition wall.

A door in the centre of the south end of the house opens into a partitioned area, 22 feet wide by 9 feet, which was probably used for storage. The absence of pits and debris in this cubicle (Fig. 7) further substantiates the belief that it was primarily a storage area, rather than a part of the main activity/living area. As such, actual living space in house 3 is confined to a 52 foot length, or

approximately 1,150 square feet.

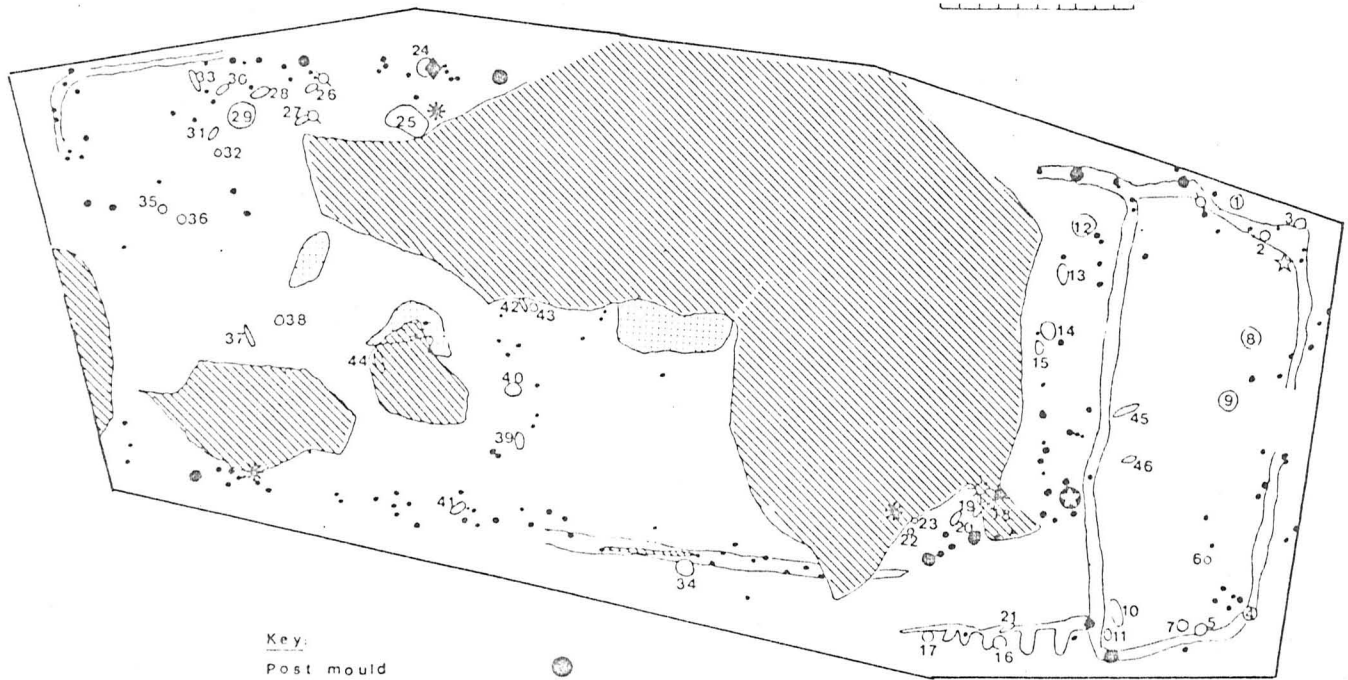
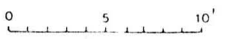
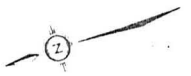
The northeastern corner of the house is delimited by a well-defined stain line, as are segments of the west wall. Significantly, stain patterns can be differentially preserved, even within the same house. Irregular, lobate stains at the southwestern house end are presently uninterpretable.

Seventy-four wall posts sampled range from 2 to 8 inches in diameter with a mean of 3.6; depths range from 3 to 20 inches with a mean of 8.8. Thirty-five interior posts range from 1.5 to 6 inches in diameter with a mean of 3.6; depths range from 3 to 10 inches with a mean of 7.7.

Within house 3, at least 3 medial hearths are discernible. They range in diameter from 2 to 4 feet with a mean of 2.6 feet. Despite the diminished length, house 3 still affords 381 square feet of living space for each medial hearth.

Although house 3 could not be completely excavated, 46 pits indicate intensive occupation. Simple stain pits again predominate over refuse or ash-filled pits (Table 6).

In house 3, 3 chert scrapers, a drill, 1 projectile, a pinch-face human effigy pipe, and an iron axe were found in locations contiguous to pits and house walls. The blend of native and European tools is again notable, as is the presence of 1 or more French iron trade axes in 6 of the 12 house structures at Walker.



- Key:
- Post mould
 - Pit
 - Hearth
 - Root disturbance
 - Iron axe
 - Projectile point
 - Pipe
 - Drill
 - Scraper
 - Flake concentration
 - Anvil stone
 - Stain feature



WALKER SITE
House 3

Table 6. House 3 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	30					
circle	(13)	width	4 - 9	6.0	1.69	27.9
		depth	1 - 7	3.2	2.20	68.2
oval	(16)	length	6 - 17.5	10.9	3.37	30.9
		width	3.5 - 6	4.4	1.33	30.4
		depth	1 - 6	2.8	1.71	60.8
irregular	(1)		pit 25			
Refuse fill	8					
circle	(4)	width	6 - 9	7.0	1.83	26.1
		depth	3 - 6	4.6	1.50	31.6
oval	(4)	length	8 - 17	13.3	4.50	33.9
		width	7 - 14	10.5	4.95	47.1
		depth	1.5 - 3	2.4	0.75	31.6
Ash fill	8					
circle	(6)	length	4 - 13	9.0	3.74	41.6
		depth	4.5 - 14	6.9	4.20	60.9
oval	(2)	length	8 - 15	11.5	4.95	43.0
		width	no measurements			
		depth	7 - 14	10.5	4.95	47.1
Total	46					

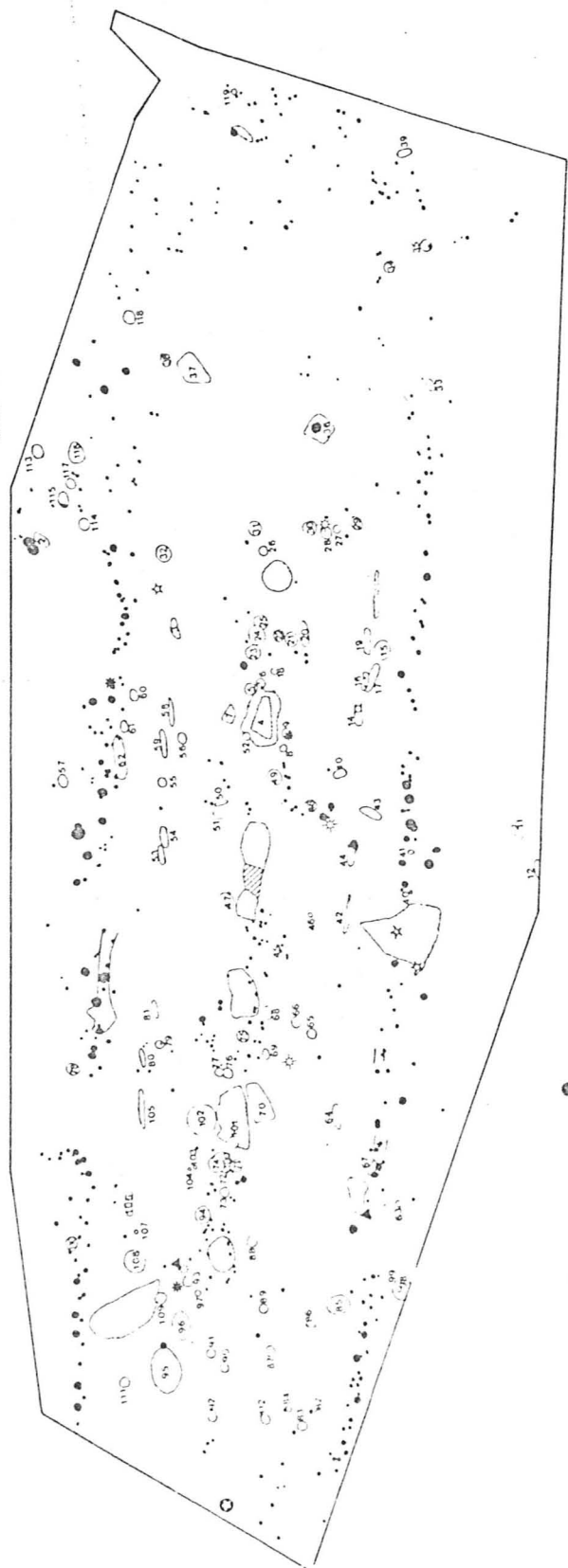
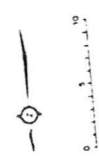
House 4: This house structure was the largest encountered during the 1974 excavations. Oriented N-S, house 4 measures 116.5 feet long and 26 feet wide. The northern end of house 4 ran onto the adjacent property and could not be investigated. However, the diminishing

concentration of pits, posts and hearths would argue for a length of no more than 120 feet (Fig. 8).

Soils in the house 4 area were not ideal and post mould preservation, particularly in the southern house end, was poor. This end of the house is immediately adjacent to midden A and extensive potting here may have disturbed subsoil features.

A total of 124 wall posts range in diameter from 2 to 11 inches with a mean of 4.3; depths range from 3 to 20 inches with a mean of 7.8. Forty-five interior posts range in diameter from 1.5 to 10 inches with a mean of 3.1; depths range from 3 to 10 inches with a mean of 6.3. Door openings were expected, but combinations of dry soil, root disturbances and indiscriminant digging have left the most likely areas for a door impossible to interpret. A stain feature midway along the west house wall is coincident with a gap in the wall posts. This stain is shallow and produced midden material. This may represent a side door along the west wall of house 4. No evidence of bunklines or partitions was evident but large interior posts may represent central support posts. House 4 also revealed the wall stain feature seen in house 3, but only in the form of two fragments along the east and west house walls. In total there is 3,030 square feet of living space within house 4.

Seven medial hearths in house 4 range in diameter from 2 to 5 feet, with a mean of 3.3 feet. Closely spaced the hearths are an average of 10 feet apart, with 432 square feet of living space per hearth.



- KEY
- Post - mound
 - Pit
 - Hearth
 - ▨ Roof disturbance
 - ▲ Iron ore
 - ▲ Projective point
 - Scraper
 - ☆ Flake concentration
 - Anvil stone
 - Stain feature
 - Pipe

WALKER SITE
House 4

Table 7. House 4 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	54					
circle	(31)	width	4 - 38	10.2	5.66	55.5
		depth	2 - 22	4.9	3.72	75.2
oval	(17)	length	5 - 26	13.5	5.36	39.8
		width	4 - 17	10.5	4.03	38.4
		depth	2 - 9	4.6	2.09	45.2
slash	(3)	length	14 - 42	26.6	14.18	53.3
		width	4 - 11	6.6	3.78	57.3
		depth	3 - 8	5.3	2.52	47.2
irregular	(3)		pits 36, 37, 7			
Refuse fill	37					
circle	(12)	width	8 - 22	12.7	4.41	34.6
		depth	2 - 9.5	4.8	2.45	50.7
oval	(12)	length	7 - 43	16.9	9.76	57.7
		width	5 - 30	10.7	7.78	72.6
		depth	3 - 12	6.5	2.56	39.8
slash	(12)	length	9 - 63	27.3	14.06	51.4
		width	4 - 8	6.0	1.71	28.4
		depth	2.5 - 15	7.3	3.27	45.2
irregular	(1)		pit 70			
Ash fill	28					
circle	(21)	width	7 - 19	12.1	3.88	31.9
		depth	1 - 11	5.8	2.74	47.4
oval	(6)	length	10 - 15	12.8	2.17	16.9
		width		9.0		
		depth	6 - 13	9.6	2.97	30.9
irregular	(1)		pit 4			
Total	119					

Of the 119 pits within house 4, 54 soil stain pits predominate. Refuse pits number 37 in total and 28 ash pits complete the assemblage. Notable, house 4 presents the first orderly interior of the Walker houses, largely due to the peripherally located linear 'slash' pits, and medial proliferation of ash pits. The linear 'slash' pits were first encountered at the late dating Hamilton site (ca. 1650 W. C. Noble: personal communication), where they dominate the house interiors. The linear pits within house 4 are of a similar nature with a mean length, width and depth of 27, 6 and 6 inches respectively. The Walker slash pits differ markedly from the Hamilton examples in that 12 of the 15 Walker pits contain refuse fill. The Hamilton pits contain no refuse and also occur in much greater numbers. No function has been attributed to these unique interior house pits.

The interior of house 4 yielded 1 iron axe, 4 scrapers, 3 projectiles, 1 pipe stem, 3 anvil stones and 4 chert caches. The chert caches are of particular interest as they yielded numerous chert cores in association with pre-Neutral lithic tools. This unusual provenience is discussed further under a general consideration of intra-site provenience.

House 5: Not recognized in the field, house 5 is inferred to have been oriented N-S, with a length of 50 feet and width of 23 feet (Fig. 9). Soils in the region of house 5 were sandy and post mould

preservation good. Some root disturbance was evident however, and tended to obliterate the subsoil features.

No sequential line of posts could be isolated for house 5 and consequently no measurements of post mould dimensions are presented. Features such as door openings, bunklines or partitions cannot be analysed for house 5 due to the poor state of preservation. However, sections of the east and west walls of house 5 are outlined by the wall staining feature discussed earlier. In the absence of any interior partitions, house 5 would provide 1,150 square feet of living space.

Five hearths are evident in the interior of the house, only three of which are centrally aligned. The medial hearths range in diameter from 3 - 4 feet with a mean 3.6 feet and each would afford 380 square of living space.

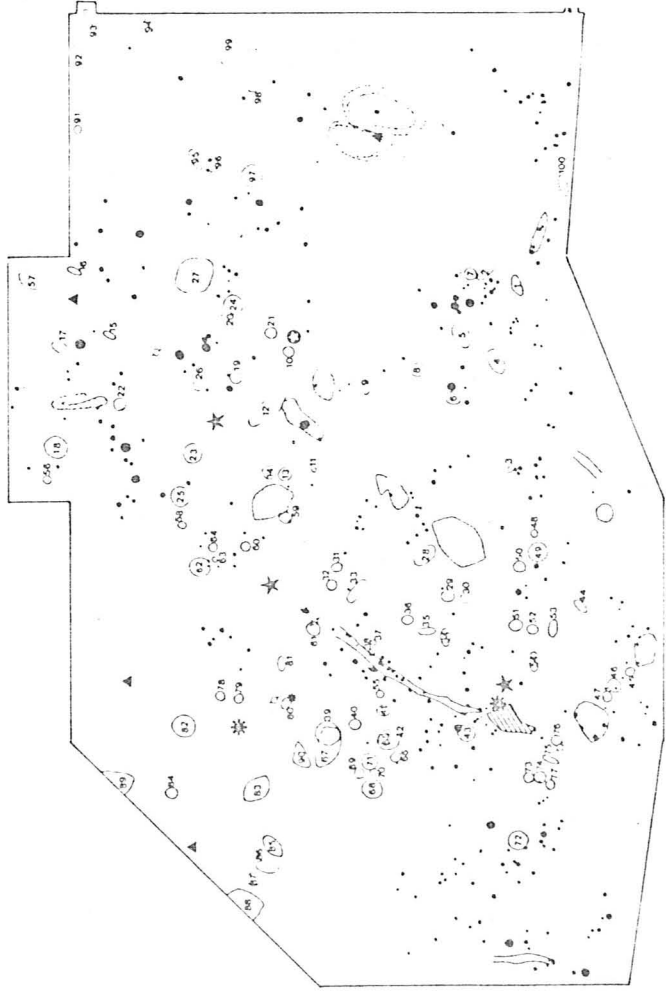
Pits total 100 with soil stain and refuse pits both represented by 41 examples. Ash pits number 18 and are distributed largely outside of the house area. The large number of refuse fill pits and the random distribution of ash pits presents a configuration unlike the other Walker house structures.

The house 5 area contained 1 iron axe, 3 iron knives, 4 projectiles, 3 scrapers and 5 pipes, one a snake effigy and the remaining 4 apple bowl pipes. Notable, pit 75 in the northeastern corner of house 5 contained the remains of an infant (6 months) burial.

House 5 is thought to represent one of the first houses at Walker, that was later removed for reasons discussed herein.



Scale 1:1000



WALKER SITE
House 5

- KEY
- Post mould
 - Pit
 - Hearth
 - Wood disturbance
 - Iron spike
 - Iron nail
 - Projectile point
 - Pipe
 - Scraper
 - Stain feature

Table 8. House 5 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	41					
circle	(27)	width	3.5 - 19	10.8	4.06	37.6
		depth	0.5 - 11	3.9	2.26	57.3
oval	(9)	length	11 - 24	17.8	4.63	26.1
		width	7 - 16	10.6	3.26	30.8
		depth	3 - 14	5.8	3.79	65.6
slash	(3)	length	12 - 17	15.0	2.65	17.6
		width	3 - 4	3.7	0.58	15.8
		depth	1 - 2.5	1.8	0.76	41.7
irregular	(2)		pits 88, 90			
Refuse fill	41					
circle	(23)	width	6 - 24	13.0	4.63	35.5
		depth	2 - 24	7.2	4.59	64.2
oval	(15)	length	11 - 39	20.4	7.02	34.4
		width	6 - 36	13.6	8.71	63.9
		depth	2 - 38	7.8	9.42	120.0
slash	(1)	length		12.0		
		width		3.0		
		depth		4.0		
irregular	(2)		pits 67, 89			
Ash fill	18					
circle	(15)	width	5 - 20	11.9	4.52	37.9
		depth	2 - 8	4.3	1.91	44.7
oval	(3)	length	19 - 39	27.7	10.30	37.1
		width	9 - 16	13.7	4.04	29.6
		depth	4 - 9	6.7	2.52	37.8
Total	100					

Evidence to support the latter hypothesis lies in three lines. The hearths are distributed in a pattern not characteristic of the other house areas. The respective ratio of pit types is uncharacteristic of the house patterns tabulated (see Fig. 4 and Table 8), and the provenience of the pits is largely random. Too, the post mould distribution is scattered and non-diagnostic as regards known house pattern configurations. It is proposed therefore, that while house 5 did exist, it was removed so that the area could be employed during the warmer periods of the year as an outside work area.

General house orientation and provenience reflects a concern for optimum economy of space, and as such it is not unrealistic that outside activities would be relegated to specific areas of the village. While this proposal regarding the disposition of house 5 is speculative, it offers the most reasonable explanation of this house area.

House 6: This house structure was the first encountered in the western portion of the site, and notably it is very small. Oriented E-W house 6 measures 21 feet long and 18.5 feet wide (Fig. 10).

Soils in this area were sandy and post mould preservation was good. Fortunately very little root disturbance activity had gone on in this house area.

Forty-eight wall posts ranged in diameter from 2 to 7 inches with a mean of 3.6; depths ranged from 5 to 16 inches with a mean of 9.8. Eight interior posts ranged in diameter from 2 to 6 inches with a mean of 3.1; depths ranged from 3 to 9 inches with a mean of 6.5.

The entire perimeter of house 6, except the west end, is outlined by the wall staining feature noted previously and encloses a living area of 388 square feet. Large interior posts are in line with the linear hearth, suggesting possible roof supports. Door openings are not readily discernible; however, the gap in the wall staining feature may locate a door in either the NW corner, or midway along the western end of the house. Partitions would not be expected in such a small house; however, the proliferation of posts in the east end of the house may suggest a small divider which effectively isolates the corner hearth.

The interior of house 6 is the most orderly of any of the Walker structures with the large linear hearth centrally placed, and with pits and artifacts refuse concentrated in the northern half of the house. This internal refinement would effectively free the southern half of the house for use as a sleeping area.

Of the 38 pits analysed for house 6, 23 soil stain pits are by far in the majority, showing consistency with other Walker structures. Eight refuse fill pits in house 6 are notably larger than their soil stain counterparts (Table 9), with seven ash pits completing the assemblage.

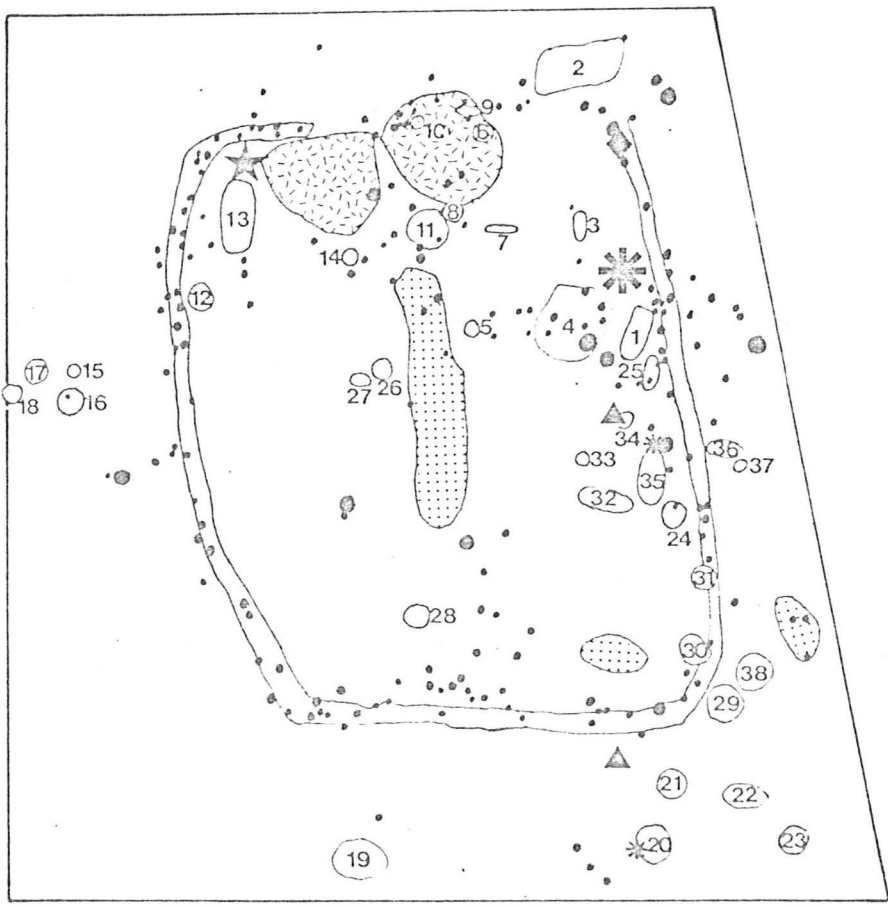
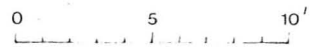
Artifacts recovered from house 6 included 2 projectiles, a drill, 3 scrapers and a single iron knife.

While house 6 is much smaller than other houses analysed, the posts employed in its construction are equitable with the dimensions of posts used in other longhouse structures. As such it is presumed

that the height of house 6 would be comparable with other houses, which would make this small house roughly equal in its length, width and height. This cubical shape is a dramatic departure from the normal rectangular form of Iroquoian longhouses.

Table 9. House 6 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	23					
circle	(11)	width	6 - 17	9.6	3.35	34.8
		depth	1.5 - 5	3.8	1.99	52.8
oval	(9)	length	9 - 24	18.1	5.62	31.0
		width	4 - 18	9.4	4.41	46.9
		depth	2 - 6	3.8	1.48	39.2
slash	(2)	length	16 - 18	17.0	1.41	8.3
		width	4 - 5	4.5	0.71	15.7
		depth	4 - 11	7.5	4.95	65.9
irregular	(1)		pit 4			
Refuse fill	8					
circle	(7)	width	7 - 17	11.4	3.41	29.8
		depth	3 - 6	4.7	1.11	23.6
oval	(1)	length		32.0		
		width		16.0		
		depth		15.0		
Ash fill	7					
circle	(6)	width	10 - 16	12.5	2.17	17.3
		depth	6 - 15	8.8	3.31	37.5
irregular	(1)		pit 2			
Total	38					



Key:

- Post mould
- Pit
- Hearth
- Iron knife
- Projectile point
- Drill
- Scraper
- Stain feature



WALKER SITE

House 6

First noted at the Christianson site (AiHa-2), a protohistoric Neutral village circa 1615 A.D. (Noble 1972b:4), this small longhouse pattern would appear to be a developmental element in Neutral settlement pattern. House 6 presents a very orderly use of interior space and offers obvious inferences into Neutral social organization. Like Christianson, it is presumed that one, or possibly two, small nuclear families would have occupied this house.

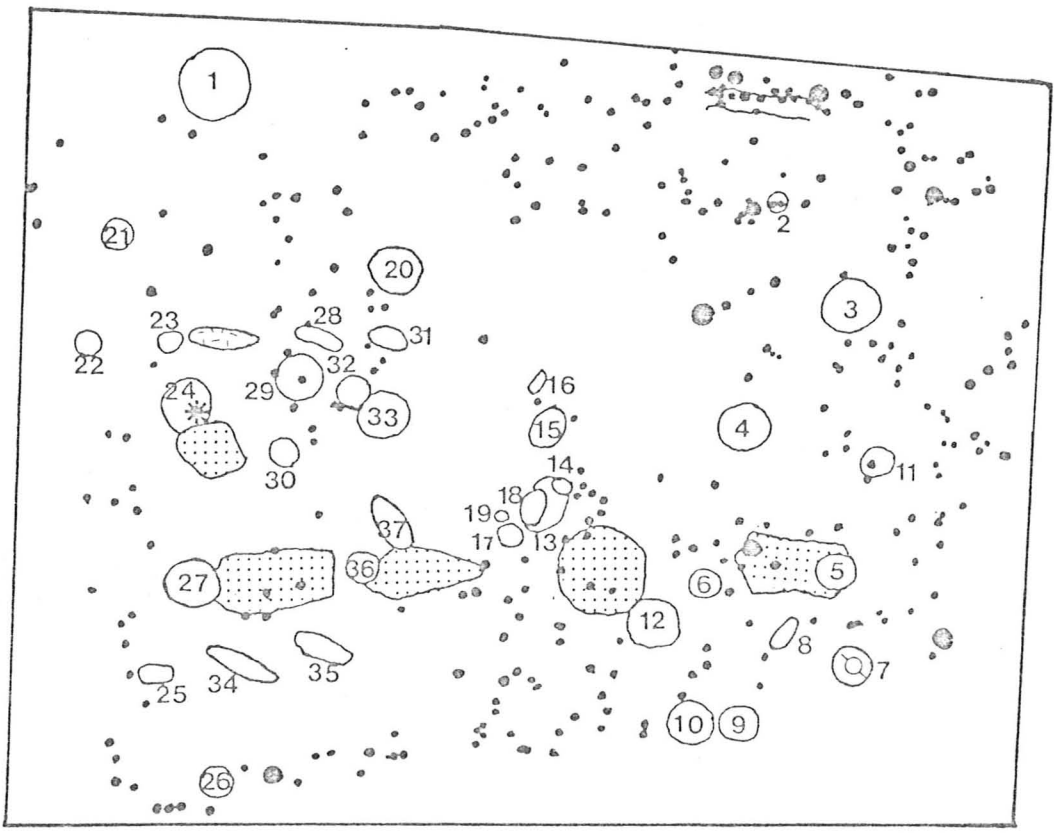
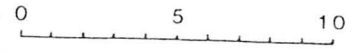
House 7: This longhouse is oriented N-S and measures 25 feet in length and 20 feet wide (Fig. 11). Located adjacent to house 6 (see Fig. 1), house 7 serves to underline the importance of this small longhouse in Walker settlement patterns.

Soils in the region of house 7 were sandy but extremely dry, making post mould identification difficult.





Eighteen wall posts sampled ranged in diameter from 2 to 5 inches with a mean of 3.9; depths ranged from 4 to 16 inches with a mean of 9.4. Seven interior posts sampled ranged in diameter from 2.5 to 5 inches with a mean of 3.6; depths ranged from 4.5 to 13 inches with a mean of 8.8. Post mould distribution in this house is somewhat erratic, rendering definition of door openings and interior structures impossible. The wall staining feature is evident in the form of a small fragment along the NW wall. This is unusual considering the excellent preservation in the adjacent house 6, and serves to demonstrate the variability of soils across the Walker site. The presence of large corner support posts and



40



Key:

- Post mould 
- Pit 
- Hearth 
- Scraper 
- Stain feature 
- Pipe 

WALKER SITE

House 7

connectinghouse walls defines a living space of 500 square feet for house 7.

The array of posts and pits within the interior of house 7 lacks internal order, and clearly represents a case of intensive occupation. Too, the distribution of hearths in house 7 is uncharacteristic of the other house structures analysed for Walker.

Five hearths are evident in the interior of this small house, none of which is medial. Four hearths are aligned along the east house wall, ranging in size from 2 to 4 feet with a mean of 3 feet. This distribution would only afford 125 square feet per hearth as living area. It is therefore unlikely that a family unit would be represented by each hearth in house 7. It is proposed that like house 6, house 7 would contain one or possibly two nuclear families.

A total of 38 pits are present in the interior of house 7, 20 of which are soil stain (Table 10). Refuse pits are represented by 14 examples, with 4 ash pits completing the assemblage. As is the case for other Walker houses, the ash pits in house 7 are clustered around the hearth areas.

The interior of house 7 produced 1 scraper and a plain conical pipe bowl from pit 7.

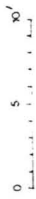
House 8: Immediately north of house 6 and 7, it was hoped that an additional small house would be located in the house eight area. This unfortunately was not the case and no longhouse structure is defined. It is hypothetically possible to derive a longhouse wall

running parallel to the western limit of excavation but this is speculative at best and would require further excavation for varification (Fig. 12).

Table 10. House 7 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	20					
circle	(10)	width	4 - 22	14.0	5.66	40.4
		depth	3 - 11	5.1	2.27	44.8
oval	(10)	length	10 - 27	18.9	5.53	29.2
		width	4 - 15	9.3	3.56	38.3
		depth	3 - 18	11.0	5.21	47.1
Refuse fill	14					
circle	(12)	width	8 - 17	15.6	5.67	36.4
		depth	3.5 - 18	9.5	4.23	44.7
oval	(1)	length		24.0		
		width		14.0		
		depth		8.0		
irregular	(1)		pit 14			
Ash fill	4					
circle	(4)	width	12 - 20	15.8	3.30	20.9
		depth	4.5 - 14	8.4	4.19	50.0
Total	38					

In addition, the character and distribution of the 59 pits in the house area would argue against the presence of a formalized longhouse



- Key
- Pest mould (circle with a dot)
- Pit (circle with a number)
- Hearth (triangle with a number)
- Projectile point (star with a number)
- Scraper (square with a number)
- Flake concentration (asterisk with a number)
- Stain feature (square with a number)

WALKER SITE
House 8

structure. In the case of house 8 area the 24 refuse fill pits far outnumber soil stain pits, a relationship that is not seen in any other house area. Too, the 20 ash fill pits also outnumber the 15 soil stain pits (see Fig. 4 and Table 11).

Combining the pit data with the absence of large hearths and lack of lines of posts, suggests a situation for the house 8 area that was earlier proposed for house 5, that being an area used predominantly during the warmer seasons. This explanation seems most plausible in the light of the data analysed for the house 8 area, which would be employed when temperature and smoke levels became untenable in the longhouses themselves.

House 9: This longhouse was oriented NE-SW, and measured 22 feet long and 20 feet wide (Fig. 13). This small house structure is also located in the proximities of houses 6 and 7 (Fig. 1).

Soils in the region of house 9 were extremely dry, a factor that was further complicated by the presence of a mature beech tree adjacent to the northern house wall. The consequent root disturbance has obliterated much of the north, east and west house walls, and virtually all of the interior.

Twenty-one wall posts sampled ranged in diameter from 2 to 5 inches with a mean of 2.9; depths ranged from 4 to 11 inches with a mean of 6.8. Only 1 interior post was sampled and it measures 4 inches in diameter and 9 inches in depth. The poor post preservation coupled with the pervasive root disturbance in this house precludes discussion

of possible door openings or interior structures. The southern house

Table 11. House 8 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	15					
circle	(10)	width	7 - 19	13.4	4.67	34.7
		depth	2 - 6	3.6	1.13	31.8
oval	(5)	length	3 - 25	13.8	8.17	59.2
		width	6 - 10	8.0	2.83	35.4
		depth	5 - 16	7.5	5.80	77.4
Refuse fill	24					
circle	(14)	width	4 - 20	12.5	3.78	30.2
		depth	2 - 6	3.7	1.39	37.6
oval	(9)	length	9 - 30	20.0	7.63	38.2
		width	5 - 16	12.0	4.34	36.1
		depth	2 - 13	5.7	3.64	64.3
irregular	(1)		pit 13			
Ash fill	20					
circle	(11)	width	5 - 22	11.4	5.54	48.6
		depth	1 - 5	3.2	1.42	44.9
oval	(7)	length	9 - 44	19.9	12.53	63.1
		width	5 - 28	12.3	8.73	70.8
		depth	1 - 5	3.1	1.64	53.5
irregular	(2)		pits 4 and 40			
Total	59					

wall is demarcated by the characteristic wall staining feature and extrapolation of the remaining house walls would give house 9 a

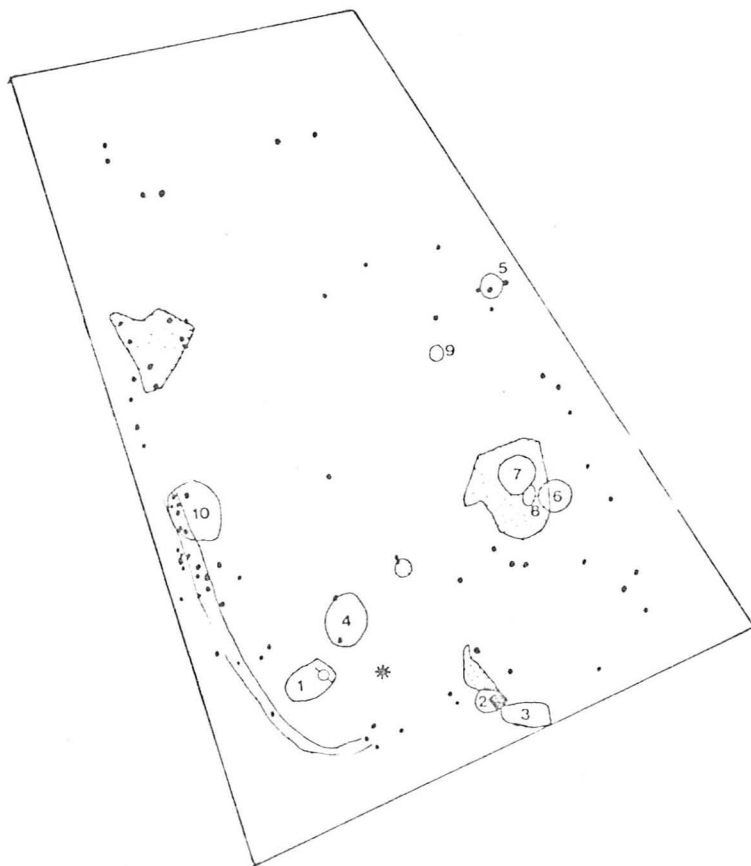
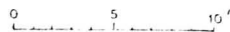
total of 440 square feet of living space.

Two small hearths are located in the NE end of house 9, both are poorly preserved due to the extremely dry soils (Fig. 13).

Table 12. House 9 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	1					
oval	(1)	length		43.0		
		width		31.0		
		depth		20.0		
Refuse fill	3					
circle	(2)	width	10 - 23	16.5	8.96	54.3
		depth	4 - 4	4.0		
oval	(1)	length		11.0		
		width		6.0		
		depth		3.0		
Ash fill	6					
circle	(3)	width	15 - 18	16.3	1.53	9.4
		depth	1.5 - 5	3.0	1.80	60.1
oval	(3)	length	32 - 34	32.7	1.15	3.53
		width	18 - 24	20.7	3.06	14.8
		depth	1.5 - 4	3.3	1.15	34.7
Total	10					

The interior of house 9 produced 1 scraper, a single drill and 1 pipe stem.



- Key:
- Post mould 
 - Pit 
 - Hearth 
 - Scraper 
 - Drill 
 - Stain feature 
 - Pipe 

WALKER SITE

House 9

Only 10 pits could be discerned in the interior of house 9, six of which were ash fill. Refuse pits numbered 3, with a single soil stain pit completing the assemblage (Table 12).

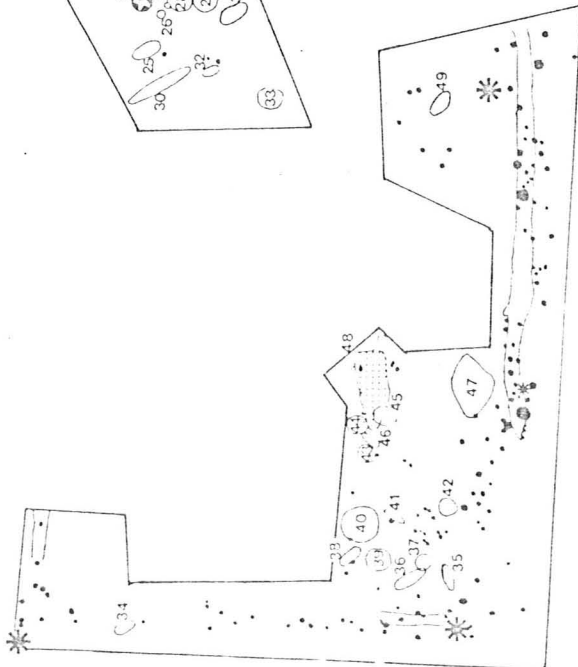
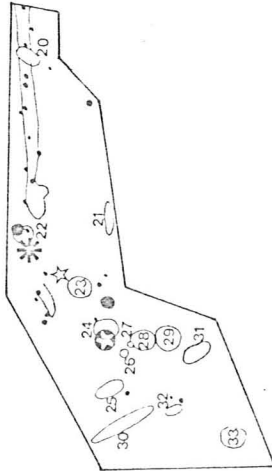
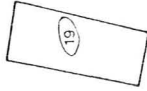
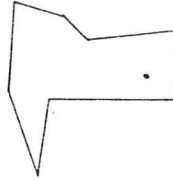
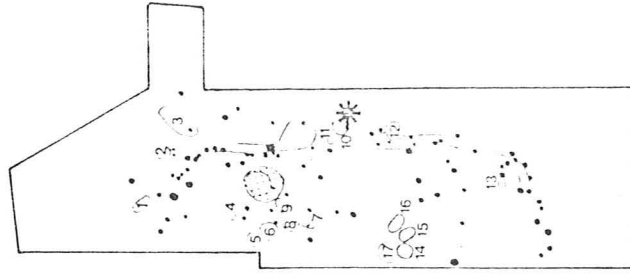
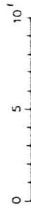
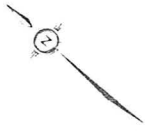
House 10: This house is oriented NE-SW, and measures 93 feet long and 24 feet wide. Notably this house is located on the thin sand ridge which joins the two isolated regions of the town (See Figs. 1 and 14.).

Soils in the area of house 10 were extremely dry, as was the case with house 9. Root disturbances in the region of house 10 were pervasive, and much of the house interior could not be excavated due to the forest cover of mature pine trees (Fig. 14). Despite the problems of soils and root activity however, the external dimensions of house 10 could be ascertained.

Sixteen wall posts sampled range in diameter from 2 to 7 inches with a mean of 3.5; depths ranged from 3 to 9 inches with a mean of 5.2. Samples of interior posts were insufficient to warrant statistical analysis. Door openings are evident in both the NE and SW house ends, the NE door opening being demarcated by the characteristic wall staining feature. The interior features of house 10 are too fragmentary to warrant a discussion of possible partitions or bunklines. The interior of house 10 would afford 2,230 square feet of living space in the absence of interior structures.

Table 13. House 10 pit type and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	15					
circle	(6)	width	10 - 23	14.3	4.76	33.2
	6	depth	2 - 7	4.4	1.91	43.2
oval	(2)	length	12 - 14	13.0	1.41	10.9
		width	6 - 7	6.5	0.71	10.9
		depth	6 - 19	12.5	9.20	73.5
slash	(6)	length	14 - 30	20.0	5.62	28.1
		width	4 - 9	5.7	2.07	36.5
		depth	3 - 24	6.3	4.19	67.1
irregular	(1)		pit 48			
Refuse fill	10					
circle	(6)	width	7 - 15	11.5	3.78	32.9
		depth	1 - 7	4.4	2.41	54.7
oval	(2)	length	12 - 16	14.0	2.83	20.0
		width	5 - 12	8.5	4.95	58.2
		depth	2 - 5	3.5	2.12	60.6
slash	(2)	length	22 - 48	35.0	18.38	52.5
		width	7 - 8.5	7.8	1.06	13.7
		depth	3 - 9	6.0	4.24	70.7
Ash fill	24					
circle	(14)	width	4 - 15	9.4	3.08	32.6
		depth	1 - 5	2.9	2.14	72.3
oval	(7)	length	12 - 27	17.7	5.82	32.9
		width	6 - 12	9.1	2.54	27.8
		depth	1.5 - 8	3.4	2.21	65.9
slash	(1)	length		20.0		
		width		9.0		
		depth		1.5		
irregular	(2)		pits 47 and 18			
Total	49					



WALKER SITE
House 10

- Key:
- Post mould
 - ⑨ Pit
 - ▣ Hearth
 - ⊖ Iron axe
 - * Scraper
 - ☆ Anvil stone

Three hearths are evident in the interior of house 10, none of which is medial. The concentration of pits in the excavated regions of this house would argue for intensive occupation and it is notable that the hearth in the NE end of house 10 was stratified.

Of 49 pits from house 10, the 24 ash pits predominate with soil stain and refuse pits represented by 15 and 10 pits respectively. This ratio of pit types is uncharacteristic of the other Walker houses, but may be attributed to the unexcavated portions of the house and the consequent missing data.

The excavated portions of house 10 contained 6 scrapers, 1 iron axe, 1 anvil stone and a reworked bail fastener recovered from the NW house wall.

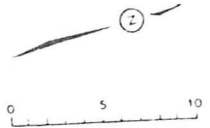
House 10 is notable for its size, as it is the second largest house at Walker, but more important is its intra-site provenience.

Located on the elevated ridge of Fox sandy loams, which joins the two areas of the site, house 10 suggests that the two areas of the site are contemporaneous. Indeed, if it were possible to excavate in the densely forested ridge which joins the two areas (See Figs. 1 and 3.), it is proposed that house structures would extend over the entire length of the ridge, from house 10 to house 3 (Fig. 1).

Houses 11 and 12: Due to the fact that houses 11 and 12 are superimposed they will be discussed together. House 11 is oriented E-W and measures 32 feet long and 24 feet wide. House 12 is oriented N-S and measures 51 feet long and 24.5 feet wide (Fig. 15).

Soils in this region were sandy and post mould preservation was good. Fortunately few root disturbances were encountered in this area.

Ninety-nine wall posts sampled range in diameter from 2 to 8.5 inches with a mean of 3.6 inches. The north, east and south walls of house 11 are well preserved, especially the northern wall which is outlined by the wall staining feature. The west wall of house 11 is located along the central hearth line of house 12, and extensive activity here has obliterated virtually all of the wall posts. Due to the lack of preservation along the west wall and the discontinuous stain feature along the east wall, no door openings are proposed for house 11. In the absence of any interior structures, house 11 would afford a total of 768 square feet of living area. The entire periphery of house 12, excepting the south end wall, is well preserved and demarcated by the wall staining feature. The south end of house 12 was disturbed by root activity, leaving the end wall very fragmentary. Yet, this area would have to be the main entrance to the house as the north end shows no gap in the wall staining feature. The wall staining feature is unusual in house 12 in that a bifurcated stain is evident in the northern half of the house (Fig. 15). This double wall effect may be the result of a re-building period, or more likely, an attempt to obtain a greater degree of insulation. No interior structures are evident in house 12, and in general the 1,250 square feet of living area within house 12 is not as intensively occupied as was seen in other Walker structures.



- Key:**
- Post mould
 - Pit
 - Hearth
 - Iron axe
 - Iron knife
 - Projectile point
 - Pipe
 - Scraper
 - Flake concentration
 - Anvil stone
 - Rock concentration
- 9
- ☆
 - ▲
 -
 - *
 - ☼
 - ☆
 - ☼

WALKER SITE
House 11 & 12

Two medial hearths in house 11 range in size from 2.5 to 3.5 feet, with a mean of 3.0 feet. This would afford 384 square feet of living area per hearth. The interior of house 12 contains 5 medial hearths ranging in size from 2 to 5 feet, with a mean of 2.9 feet. The hearth distribution in house 12 would allow 250 square feet of living area for each hearth.

Discrete pit-house relationships could not be obtained; pits are therefore analysed as a single unit. Sixty-two pits are analysed, and notably refuse content pits outnumbered soil stain pits, a relationship not seen in the complete longhouse structures previously analysed (Fig. 4 and Table 14). In addition there are numerous ash fill pits. This inordinate number of refuse and ash pits may be a function of the two different time periods represented by the super-imposition of houses 11 and 12. Consistent with the other longhouse structures is the presence of the slash pits containing refuse, the medial provenience of the ash fill pits and the overall pit provenience leaving clear regions adjacent to either house wall, presumably as sleeping areas.

The interiors of houses 11 and 12 contained numerous artifact remains including: 1 iron axe, 3 iron knives, 6 projectiles, 3 scrapers, 4 anvil stones and three pipes, one a dog or wolf effigy, a bird effigy and an apple bowl pipe. Also noted in the interiors are 5 concentrations of chert chipping detritus and 4 areas of rock concentrations (Fig. 15). All rock concentrations are located within

Table 14. Houses 11 and 12 pit types and dimensions in inches.

Type and Form	N	Axis	Range	\bar{X}	S	C.V.
Soil stain	16					
circle	(9)	width	8 - 17	11.9	2.94	24.7
	8	depth	3 - 8	4.6	1.79	38.7
oval	(2)	length	12 - 19	15.5	4.95	31.9
		width	5 - 10	7.5	3.54	47.1
		depth	2 - 4	3.0	1.41	47.1
slash	(4)	length	12 - 22	15.5	4.43	28.6
		width	6 - 8	6.5	1.0	15.4
		depth	3 - 6	3.9	1.44	37.1
irregular	(1)		pit 51			
Refuse fill	23					
circle	(9)	width	6 - 17	11.1	3.26	29.5
		depth	2 - 7	4.6	1.69	37.3
oval	(9)	length	10 - 30	18.3	7.09	38.7
		width	5 - 21	11.0	5.92	53.8
		depth	3 - 11	4.9	2.54	51.5
slash	(4)	length	11 - 20	14.8	4.11	27.9
		width	3.5 - 7	5.5	1.80	32.8
		depth	3 - 5	3.6	1.11	30.6
irregular	(1)		pit 61			
Ash fill	23					
circle	(17)	width	9 - 24	14.3	4.53	31.8
		depth	1.5 - 11	4.9	2.74	55.4
oval	(3)	length	10 - 18	14.0	4.00	28.6
		width	4 - 11	8.3	3.78	45.4
		depth	2 - 5.5	3.7	1.76	47.9
irregular	(3)		pits 2, 53 and 62			
Total	62					

house 12, one of which overlies the south wall of house 11, thus confirming the earlier presence of house 11. It has been suggested that this latter rock concentration, composed of fractured shale, may represent the remains of a sweat bath. This is best considered speculative.

House/Artifact Correlations

Middens, rather than longhouses, contained the bulk of Walker artifacts, a trait consistent with other Iroquoian villages. The longhouse structures at Walker were largely sparse of artifact debris, as evidenced by the rim sherd inventory, where only 11% of the analysable rims come from house proveniences. Similarly the proto-historic Cleveland longhouse possessed meagre artifact remains (Noble 1972a:6), as did the houses at the late dating Hamilton site (Noble: personal communication). Thus, sparse artifact debris within longhouse structures appears to be characteristic of Neutral settlement patterns.

It was unusual, therefore, to find that house 4 contained 36.7% of all cores at Walker, and 69% of all house-derived cores. Forty of the 58 cores from house 4 were deposited in 4 chert caches, some of which also contained pre-Neutral projectile points. None of the other houses showed a similar bias for chert cores. Analysis of the remaining house 4 lithic inventory, as compared to other houses, failed to reveal any significant bias in artifact content. While

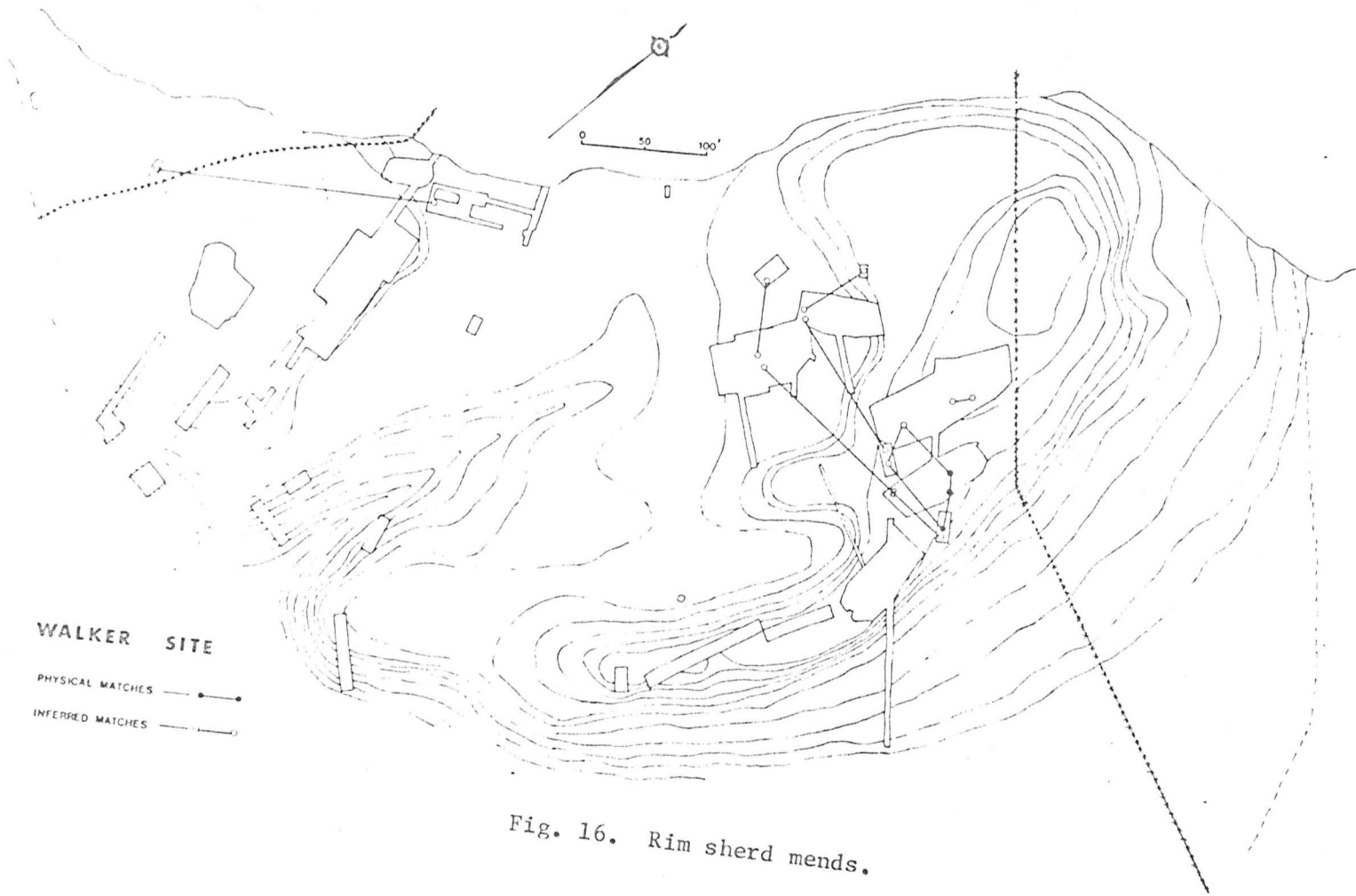


Fig. 16. Rim sherd mends.

this unusual occurrence may be correlated with the fact that house 4 is the largest house at Walker, the size of the core sample also implies specialized lithic activity in this longhouse.

Figure 16 presents a correlation of Walker rim sherd mends, both physical and inferred, between houses, and between houses and middens. Physical mends are those where rim fragments join along a fracture line, while inferred mends refer to those rims that display a similarity of temper, decorative technique and motif, rim form and paste characteristics, such that they are considered as part of the same vessel. Notable, rims from a given house were not restricted to one midden, as seen with rim portions of one vessel being distributed between houses 1 and 4, and middens A and F. The reasons for this disparate dispersal are not known. Unfortunately, there are no direct or inferred rim mends from one end of the village to the other.

For further information regarding specific artifact distributions across the Walker site, the reader is directed to Chapter 3.

Settlement Summation

With the completion of the descriptive data on settlement pattern several synthesis statements are possible. As well, questions presented at the outset of this chapter can be evaluated in the light of the preceding data.

① A major goal of the Walker excavations was to establish if in fact the Walker site had two distinct occupations. The preceding settlement pattern data suggests that only one occupation occurred at Walker. This stems from the presence of house 10 along the adjoining sand ridge, but more importantly by the homogeneity of artifact classes recovered from the two village areas. In addition, the absence of a palisade demarcating the two areas, would argue for a contemporaneous occupation of the Walker town.

What is evident from the split site distribution is the dramatic effect terrain has on house location and ultimately the overall site configuration. The large erosional gulley at Walker was obviously avoided when constructing the longhouses. This low region would be the natural drainage outlet for the village area and may even have afforded a freshwater spring when the Walker site was occupied. Clearly no house structure placed here could expect to remain dry for any length of time. It appears certain then, that the bifurcated configuration at Walker is simply a case of the Walker inhabitants adjusting their village layout to the local topography.

This awareness of the local environment is also noted regarding the soils which constitute much of the settled town area. It is clear from the site map (Fig. 1) and the soil map (See Appendix A.), that Fox sandy loams were the only soils suitable for house construction. Not only are the soils elevated and, therefore, well-drained, but they would also alleviate the task of driving wall posts

into compact silt and clay loams of the lower site areas. The factors of soil drainage and ease of house construction clearly played a significant role at Walker, as revealed by longhouse provenience (Fig. 1),

② The settlement patterns from Walker have also demonstrated that variability in longhouses is the expected norm for a historic Neutral town. Variability was also a feature seen in regard to interior organization of living space. The range in house size alone, from 116.5 to 21 feet in length, graphically demonstrates this variability. While it is evident that some house structures possess interior partitions and support posts, no consistent pattern is seen overall. It is also remarkable that none of the Walker houses revealed what could be termed 'bunklines'.

Part of the variability seen at Walker may result from the town's large size, and its inferred significant position held during the 1630's - 1640's.

The unploughed portions at Walker held particular promise of preserving undisturbed house features. While no distinct living floors were encountered, the Walker houses revealed hitherto unreported stain features along the housewalls. These stains, averaging 6 - 10 inches in width by 4 inches deep, are probably remnants of an entrenched bark flap which would provide extra insulation to the longhouse interior. This pattern of "wall flaps" has also been recorded at the unploughed portions of the prehistoric Draper site near Pickering (W. Finlayson: pers communication). Thus, it is

probable that many Ontario Iroquoian longhouses were insulated in this manner.

The unploughed portions of Walker also afforded an analysis of the depth of soil disturbance created by the activities of the Walker inhabitants. This data assists in determining the occupied area of the town despite the absence of palisade(s) (See Appendix A.).

(3) Although there were relatively few artifacts within the Walker house structures, it is significant that every house area produced evidence of French trading items. This not only demonstrates the homogeneity of occupation, but also the importance of French trade materials in historic Neutral material culture. In particular, French iron trade axes were found in 6 of the 12 house areas, and house 2 produced no fewer than 3 iron axes. Aside from the exotic metal trade items, the house structures at Walker contained few artifacts, and thus clean interiors are the expected norm for historic Neutral longhouses.

Groupings of longhouses are evident at Walker, with small 'cabin' structures occurring solely on the western portion of the site. In addition, the small houses are aligned along a N-S axis from house 6 to house 9 on the ravine edge (Fig. 1). The eastern portion of the town displays no definable grouping of houses, excepting the fact that no small houses structures are present. The reason(s) for this grouping of small houses is unclear, but may have its basis in a lineage system unique to the Neutral.

(A) All houses at Walker were oriented either N-S or NE-SW (Table 2), only in the case of house 11 is an E-W orientation seen, and this may be a function of the earlier existence of house 11. If Norcliffe and Heidenreich (1974) are correct, this preferred orientation of the Walker houses is linked with an attempt to increase thermal efficiency of the house interiors. This is accomplished by facing the smallest area of the house structure into the prevailing winter winds (1974: 22). The parallel orientation of the Walker houses, especially in the eastern section of the town, also affords more efficient use of interior village space.

(B) In the investigation of the Walker settlement pattern it was hoped that discrete midden-house relationships could be established. This was not the case, unfortunately, as previous digging disturbances had obliterated the midden outlines. Some midden-house associations are fairly certain, however, as in the case of middens A and F with houses 4 and 1. The major midden areas were distributed within the village confines, with little or no refuse distributed on the slopes of the site.

(C) While the burial patterns from Walker are discussed at length in chapter 4, several salient features of that analysis can be introduced here. The investigation of the Walker burial region had two major objectives: one, to establish the mode and distribution of the burials and second, to determine the amount of information that can be salvaged from a feature that has been 'pot-holed' for nearly a century.

The Walker burial pattern is unusual in that interments occur within and along the edge of the settled village area. This pattern is also seen at the nearby historic Seeley site (Ridley 1961), but is aberrant in terms of Huron burial practices (Noble 1968). Burials within the settled area appears to be a phenomenon of the 1630-1640 period for the historic Neutrals. In addition, the burials are of many different modes including: ossuary burial, small group interments, single burials and burials within longhouses (See Chapter 4.). It is noteworthy that burials at Walker were often dug into earlier interments, suggesting that numerous individuals were being rapidly interred. In light of this observation, it is suggested that the introduction of small-pox to the Neutral in the late 1630's and the resultant decimation, was the main cause behind the abandonment of traditional burial practices. A similar burial pattern to Walker has been recently discovered at the historic Grimsby site (personal communication: W. Kenyon and W. C. Noble). Also, since the 1974 excavations, ploughing on the western site area has revealed the second group of burials noted by Boyle in 1903 (See Fig. 42).

In summation, the settlement pattern at Walker has provided much new information concerning the historic Neutral, and indeed, some of their community features are unique for the Northeast.

CHAPTER 3

ARTIFACTS AND TECHNOLOGY

Artifact analysis from the Walker site affords the first major definitional statement for historic Neutral artifact assemblages. Previous analyses by Ridley (1961), White (1961), Wright (1966) and Fox (1972) have suffered from inadequate sample size; happily the Walker artifact assemblage corrects this inadequacy (Table 16). Several symbols used throughout the analysis, in tables and figures, are defined in the following Table 15.

Table 15. Walker artifact analysis symbols.

Symbol	Explanation
N	Frequency occurrence
%	Percentage occurrence
\bar{X}	Mean
S	Standard deviation
C.V.	Coefficient of variation
mm	Millimeters
gm	Grams

Table 16. Walker artifact classes.

Item	N	%
Lithics	4155	44.3
Ceramics	3994	42.6
Worked bone	336	3.6
Historic trade goods	323	3.4
Cultigens	305	3.3
Worked shell	155	1.7
Pipes and portions	113	1.2
Totals	9381	100.1

LITHICS

The lithic technology of the historic Neutral has largely gone undocumented until recent years. Initial work by Fox (1972), Ridley (1961), White (1961) and Wright (1966) has provided some insights into this rich artifactual assemblage, but much remains to be investigated. Lithic materials are abundant on historic Neutral sites as is evidenced by the 4155 specimens from the Walker village (Table 17).

Table 17. Walker lithics.

Item	N	%
Flakes	3246	78.1
Scrapers	333	8.0
Projectile points	258	6.2
Cores	158	3.8
Whetstones	69	1.6
Anvil stones	24	0.6
Worked slate	18	0.4
Drills	17	0.4
Gaming stones	15	0.4
Manos	8	0.2
Hammerstones	7	0.2
Pestles	2	0.05
Totals	4155	99.9

In the following, the Walker specimens are viewed from the standpoints of their raw resource materials, discrete tool types, and their intra-site provenience. In various instances, the analysis allows formulation of insightful overviews about historic Neutral lithic technology as a whole.

Raw Resources

Chert constitutes the primary lithic material on Neutral occupations and it is abundantly available from the Devonian and Silurian deposits of southwestern Ontario (Table 18).

Table 18. Walker lithic materials.

Item	N	%
Chert (Devonian)	3898	93.8
(Silurian)	106	2.5
(Other)	8	0.2
Dolomite	60	1.4
Sandstone	29	0.7
Slate	18	0.4
Other	36	0.9
Totals	4155	99.9

In previous studies, authors have endeavoured to indentify the location of these chert resources, obstensively by the use of geological phase names. While location and demarcation of chert sources is laudable, the results to date have been largely more confusing than revealing.

This confusion stems from the fact that names such as Lockport, Goat Island and Ancaster have been interchangeably employed to refer to the Silurian formation cherts of the Niagara Escarpment, while Delaware, Onondaga and Bois Blanc have been used to demarcate Devonian formation cherts located north of the Lake Erie shore line. Use of these different names infers that visible distinctions exist between the various cherts named. This in fact is not the case and personal discussions with Dr. G. V. Middleton of the McMaster University Geology Department, indicates distinctions between the two formations, Devonian and Silurian, are difficult in themselves and that phase name distinctions are impossible on the basis of visual examination alone. As most archaeological analysis rarely goes beyond visual inspection, it is suggested that geological phase name distinctions be abandoned, except where discrete differences of colour and chemical composition do in fact exist. Also, covering terminologies of either Devonian or Silurian should be used to differentiate chert provenience. Perhaps with more research into chert thin sectioning, as suggested by Fox (1972), a more detailed enumeration of chert sources can be obtained in future studies.

While it has been noted that the two formations can at times be indistinguishable, the Silurian cherts are characterized by a more whitish and granular appearance than the Devonian cherts which are mottled grey and more fine-grained. Due to its fine-grained texture and resultant superior flaking characteristics, it is not surprising to find that Devonian chert is the most abundant material at Walker

(93.8%, Table 18). As well, the close proximity (approximately 15 miles south) of the Devonian chert sources would be a major factor in the character of the Walker lithic assemblage. Other lithic materials employed by the Walker villagers are noted in Table 18.

Flake Analysis

A total of 3246 chert flakes are analysed according to raw material (Table 17) and categories (Fig. 17) believed to hold quantitative and qualitative significance in the interpretation of historic Neutral lithic technology. The flake attribute analysis follows Fitting (1966), with revisions by I. T. Kenyon (n.d.).

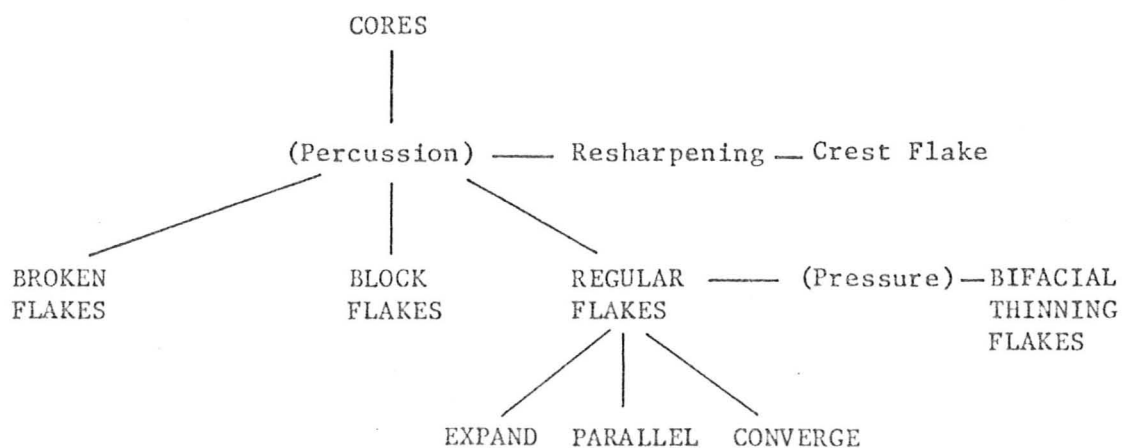


Fig. 17. Walker flake categories.

Percussion Flakes. The majority of flakes analysed (60.5%) are derived from percussion flaking of cores. Percussion flaking of chert cores results in four flake forms: regular flakes, broken flakes, block flakes and crest flakes (Fig. 17, Table 19).

Table 19. Walker flake categories and materials.

Flake type	Devonian chert	Silurian chert	Totals N	%
Broken	719	10	729	22.5
Block	532	28	560	17.3
Regular (expand)	822	18	840	25.9
(converge)	215	3	218	6.7
(parallel)	129	4	133	4.1
Bifacial thinning	704	13	717	22.0
Crest	14		14	0.4
Utilized	35		35	1.0
Totals	3170	76	3246	99.9

Regular flakes are denoted by the presence of a remnant striking platform, with a near 90 degree angle between the platform surface and the ventral face of the flake. Regular flakes are subdivided into three shapes: expanding, converging and parallel.

Broken flakes are those flakes possessing a dorsal and ventral flake surface, but are lacking the definitive striking platform due to breakage. It is taken that these flakes would be classified as regular flakes if the striking platform were still recognizable.

Block flakes are those flakes possessing no definitive flake attributes of striking platform, ventral or dorsal face, bulbs of percussion or radiating fracture lines. This is not to say that these flakes were not produced through percussion due to the absence of these formalized attributes. Indeed, the 560 block flakes identified illustrate an important feature of the Devonian and Silurian cherts employed, that being random fracture patterns. In the first case, the chert is naturally angular and produces numerous angular block flakes. As well, the micro-fossils within the chert (esp. Silurian) aid in the random pattern of fracture that produces many of the block flakes (pers. comm. G. V. Middleton 1975). Natural agencies may also be involved in the formation of block flakes.

Crest flakes (also called linear or prismatic flakes), are distinctive in the presence of bulbar scars of flake removal running transversely to the long axis of the flake. These flakes are also decidedly triangular in cross-section. All these attributes would suggest that after a core striking platform had become unusable, a transverse blow to the striking platform would remove the old platform, leaving a fresh striking face with the characteristic flake removed.

Pressure Flakes. A total of 717 bifacial thinning flakes (or 22.0% of sample) are derived from pressure flaking of tool preforms. These flakes are defined on the following attributes. A striking platform is present and reflects a platform-ventral flake face angle of approximately 45 degrees. The ventral face sometimes shows radiating fracture lines and a hinge element on the distal portion of the ventral face where it detached from the preform. Too, the dorsal surface usually shows faceted faces resultant from previous flake removal.

Lithic Detritus Weight

In order to further quantify the Walker chipping detritus all chipping detritus (exclusive of surface collections), cores and chert specimens not analysable as tools, are separated according to four weight categories (Fig. 18).

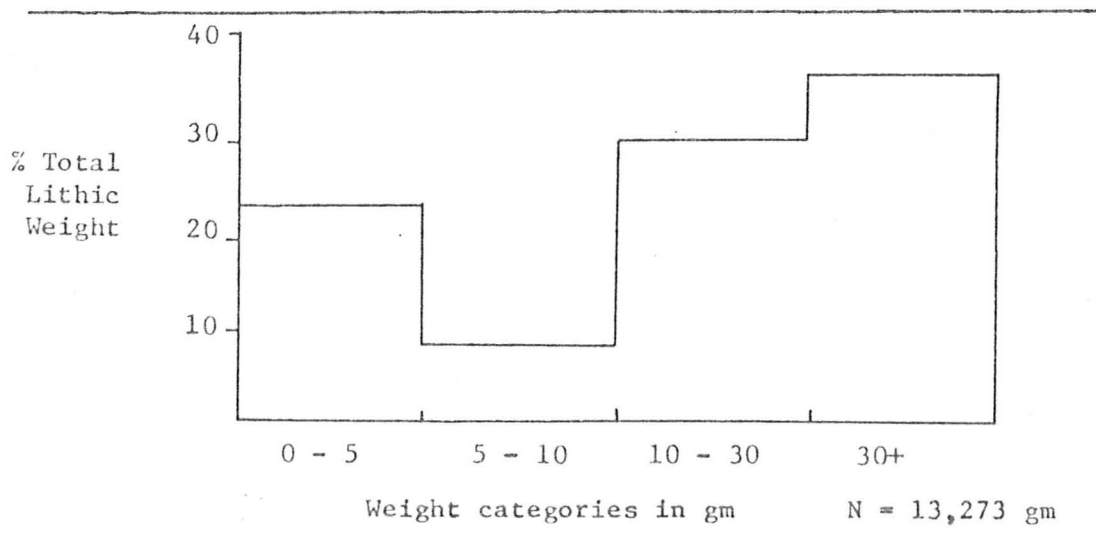


Fig. 18. Walker lithic detritus weights.

This analysis reveals that the vast majority (68.5%) of chert detritus falls within the heavier weight categories of 10 or more grams. Indeed, the largest weight category is found to be 30 gm and over, and as a result we may infer that the Walker knappers were not overly concerned with utilizing and conserving all pieces of chert. Since lithic weight categories are believed to vary over the entire Neutral sequence (Kenyon n.d.), the Walker data may provide significant seriation value.

Scrapers

Scrapers constitute the largest finished lithic tool class at the Walker site with 333 specimens (Table 20). Within this group, 218 snub-nosed scrapers (65.5%) clearly predominate (Table 20).

Complete metric data and bit angle measurements for all 218 snub-nosed scrapers is presented in Table 22. Scraper bit angle measurements for the Walker snub-nosed scrapers proved to be inconclusive (Table 22), revealing a mean difference of only 10 degrees between scraper categories. Scraper provenience is presented in Table 21, where it is noted that the majority of snub-nosed scrapers (123 specimens or 56.4%) are surface derived.

Table 20. Walker scraper types.

Item	N	%
Snub-nose (bifacial)	115	34.5
(unifacial)	49	14.7
Serrated snub-nosed (bifacial)	33	9.9
(unifacial)	21	6.3
Irregular	43	12.9
Serrated flake	35	10.5
Flake	22	6.6
Disc	15	4.5
Totals	333	99.9

Table 21. Walker snub-nosed scraper provenience.

Scraper class	Village surface	Midden	Longhouse surface	pit	N	%
Bifacial	69	20	24	2	115	52.7
Unifacial	23	10	12	4	49	22.5
Bifacial serrated	22	8	2	1	33	15.1
Unifacial serrated	9	4	5	3	21	9.6
Totals	123	42	43	10	218	99.9

Table 22. Walker snub-nose scraper metrics.

Scraper class	N	Range		X	S	C.V.
		Min	Max			
Bifacial						
L	101	27	68	41.9	3.5	8.4
W	108	17	40	26.0	1.6	6.3
T	111	7	22	12.0	1.2	9.8
Wt	100	3.5	35.1	13.7	2.7	19.8
Bt. A.	115	40	90	75.6	4.6	6.2
Unifacial						
L	45	26	73	45.1	9.2	20.4
W	47	16	47	27.2	5.4	19.9
T	49	6	18	11.5	3.2	27.5
Wt	45	3.7	44.5	16.3	8.9	54.6
Bt. A.	49	50	90	78.6	9.0	11.5
Bifacial serrated						
L	32	26	46	34.8	5.2	14.9
W	32	17	31	22.7	3.2	14.0
T	33	6	14	9.8	2.2	22.9
Wt	31	4	12.2	7.3	2.5	33.6
Bt. A.	33	55	90	69.1	7.9	11.5
Unifacial serrated						
L	16	25	51	36.6	6.8	18.7
W	20	16	35	24.4	4.4	18.2
T	21	6	15	10.5	2.2	21.3
Wt	16	4.1	29.8	10.1	6.4	63.6
Bt. A.	21	55	85	73.1	6.8	9.2

where L = Length, W = Width, T = Thickness, Wt = Weight in grams,

Bt. A. = Bit Angle

Previous analysis by Fox (1972), drew attention to the attributes of ventral retouch and serration of the scraper edge for the snub-nosed scraper class. Of the 218 Walker snub-nosed scrapers 148 or 68% exhibit ventral retouch, while 54 specimens possess serration (Table 23). This data supports Fox's (1972) contention that bifacial retouch and serration of snub-nosed scrapers has an increasing occurrence throughout the Neutral sequence.

Table 23. Walker serration and ventral retouch of snub-nose scrapers.

	Serrated		Non-serrated		Totals	
	N	%	N	%	N	%
Ventral retouch	33	(22.3)	115	(77.7)	148	(100.0)
Non-ventral retouch	21	(30.0)	49	(70.0)	70	(100.0)
Totals	54	24.7	164	75.2	218	99.9

Serration appears to be a specialized treatment of the scraper edge, perhaps for shell and wood working. Ventral retouching is most likely a finishing treatment in the manufacture of snub-nose scrapers. If this is a finishing treatment we would expect to see a significant difference between unifacial and bifacially retouched scrapers, especially with regard to tool size and weight. Histograms for scraper length and weight for all snub-nose scrapers is presented in Figs. 19 and 20.

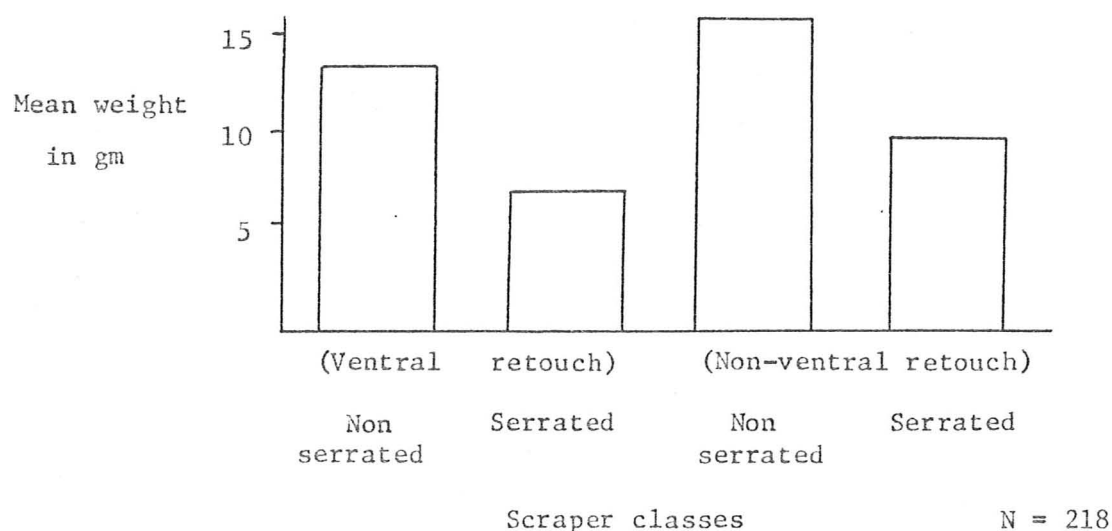


Fig. 19. Walker snub-nose scraper weight.

Two important relationships are derived from this data: one, that the ventrally retouched specimens are shorter and weigh less than their non-ventrally retouched counterparts, and second, that the serrated specimens are smaller than the non-serrated snub-nose scrapers.

Additional scraper categories include 15 disc scrapers, where 75% of the outer tool edge possesses a scraper edge (Table 20). Further scraper classes included: 22 flake scrapers, 35 serrated flake scrapers and 43 irregular scrapers. The serrated flake scrapers exhibited very delicate working surfaces and could not have been intended for heavy working tasks. The 43 irregular scrapers were manufactured on irregular block flakes, and exhibited no distinguishable form attributes.

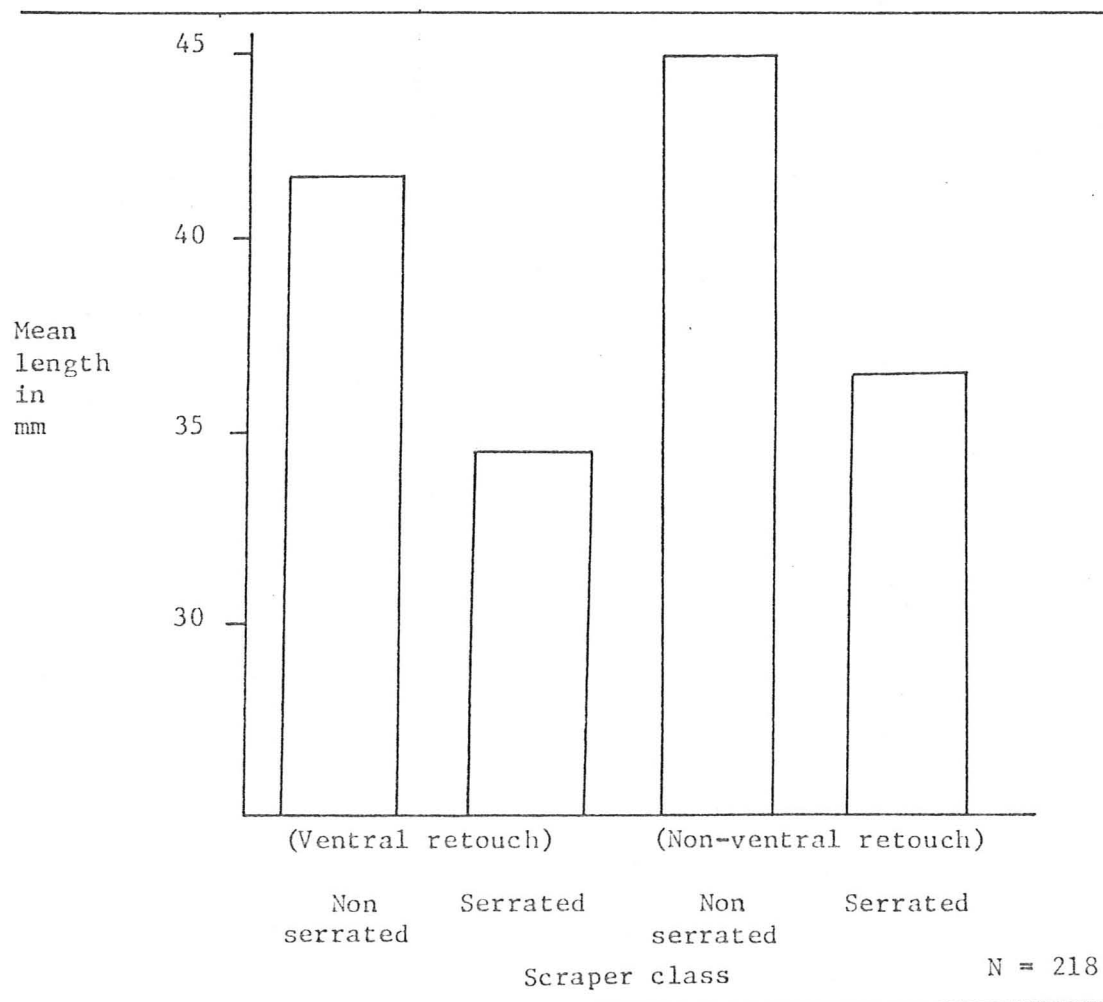


Fig. 20. Walker snub-nose scraper length.

Ridley noted (1961:31) that the tapered distal end of the snub-nosed scrapers is most likely a hafting device, and that a scraper was found hafted in a deer long bone, reputedly recovered from the Walker site.

Projectile Points

A total of 258 complete and fragmentary preforms and finished points are analysed for Walker. All points are of the common isocetes triangular form. The projectile point lateral edge configuration displays a slight bias towards convexity, while straight base is modal for basal configuration. Table 24 shows the preferential use of Devonian cherts over minor quantities of other regional cherts, as well as five exotic cherts possibly derived from Ohio.

Table 24. Walker projectile point materials.

	N	%
Devonian cherts	246	95.3
Silurian cherts	7	2.7
Other	5	1.9
Totals	258	99.9

In addition Table 25 shows that the overwhelming percentage (80.5%) of excavated points were derived from midden contexts, a feature previously noted by Ridley (1961:51).

Table 25. Walker projectile point provenience.

	N	%
Middens	109	42.2
Longhouse (surface)	16	6.2
(pits)	11	4.2
Village surface	122	47.3
Totals	258	99.9

Metric data for 80 complete finished projectile points reveals a mean length, width and thickness of 28.8, 17.7, and 4.0 mm respectively. The Walker assemblage also includes 7 serrated projectile points whose mean length, width, and thickness is 26.0, 17.3, and 3.4 mm respectively.

In order to investigate the variability of projectile point morphology histograms of point thickness and width are presented for all 258 specimens (Figs. 21, 22).

Clearly the distribution in both cases is unimodal, however slight skewing can be seen at 10 mm thickness and 22 mm width. This unimodal skewing is more readily discerned in the scattergram of 212 specimens (Fig. 23). This scattergram of point thickness and width shows two clusters, one at 4 mm thickness and 17 mm width, the other at 8 mm thickness and 21 mm width.

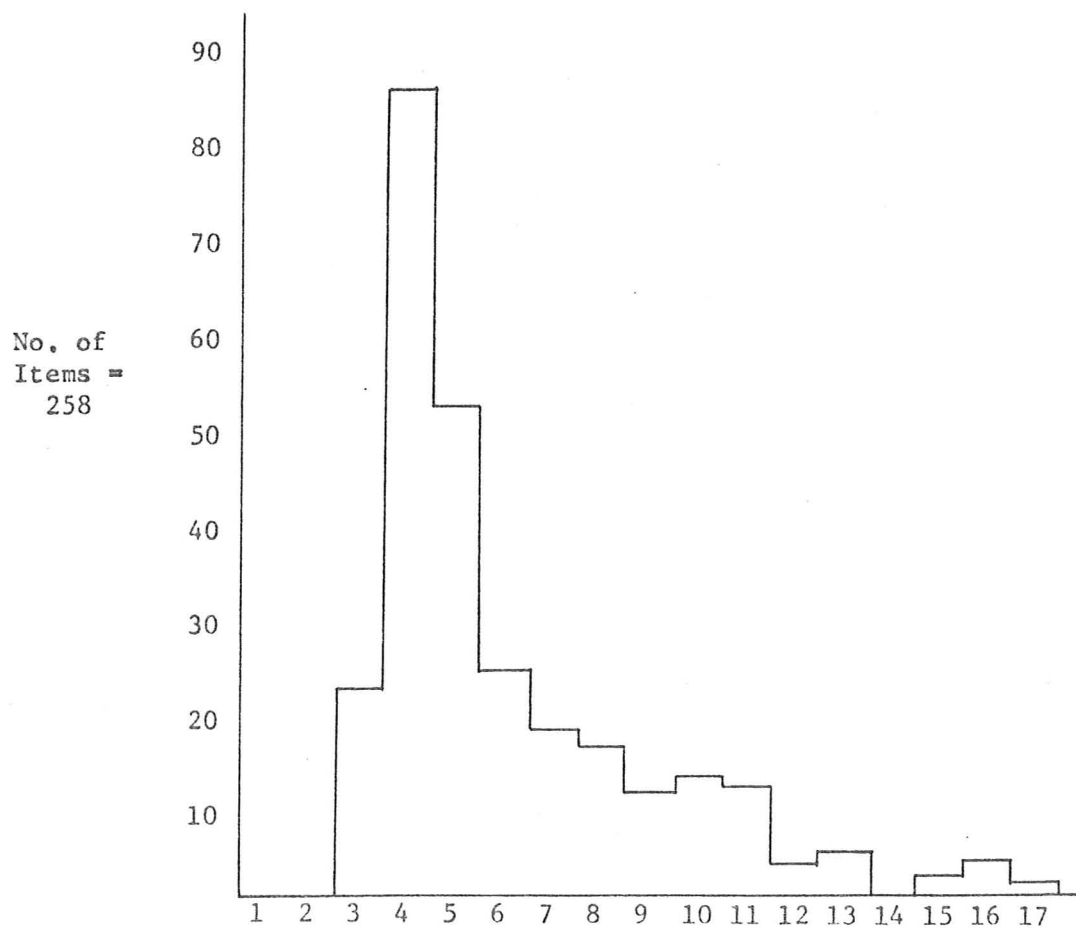


Fig. 21. Walker projectile point thickness in mm .

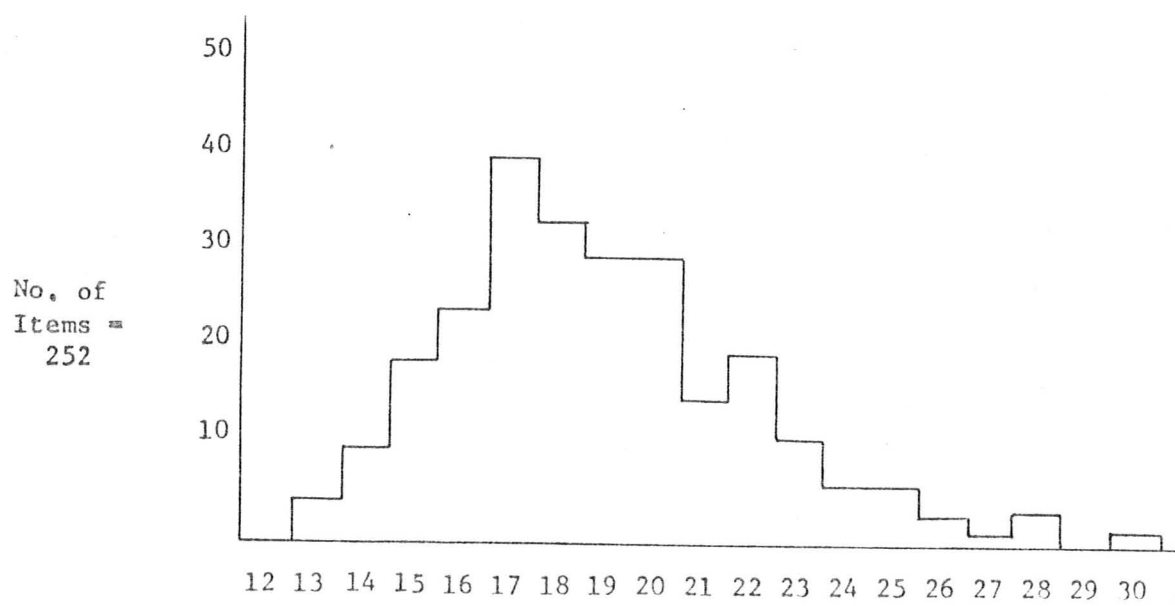


Fig. 22. Walker projectile point widths in mm .

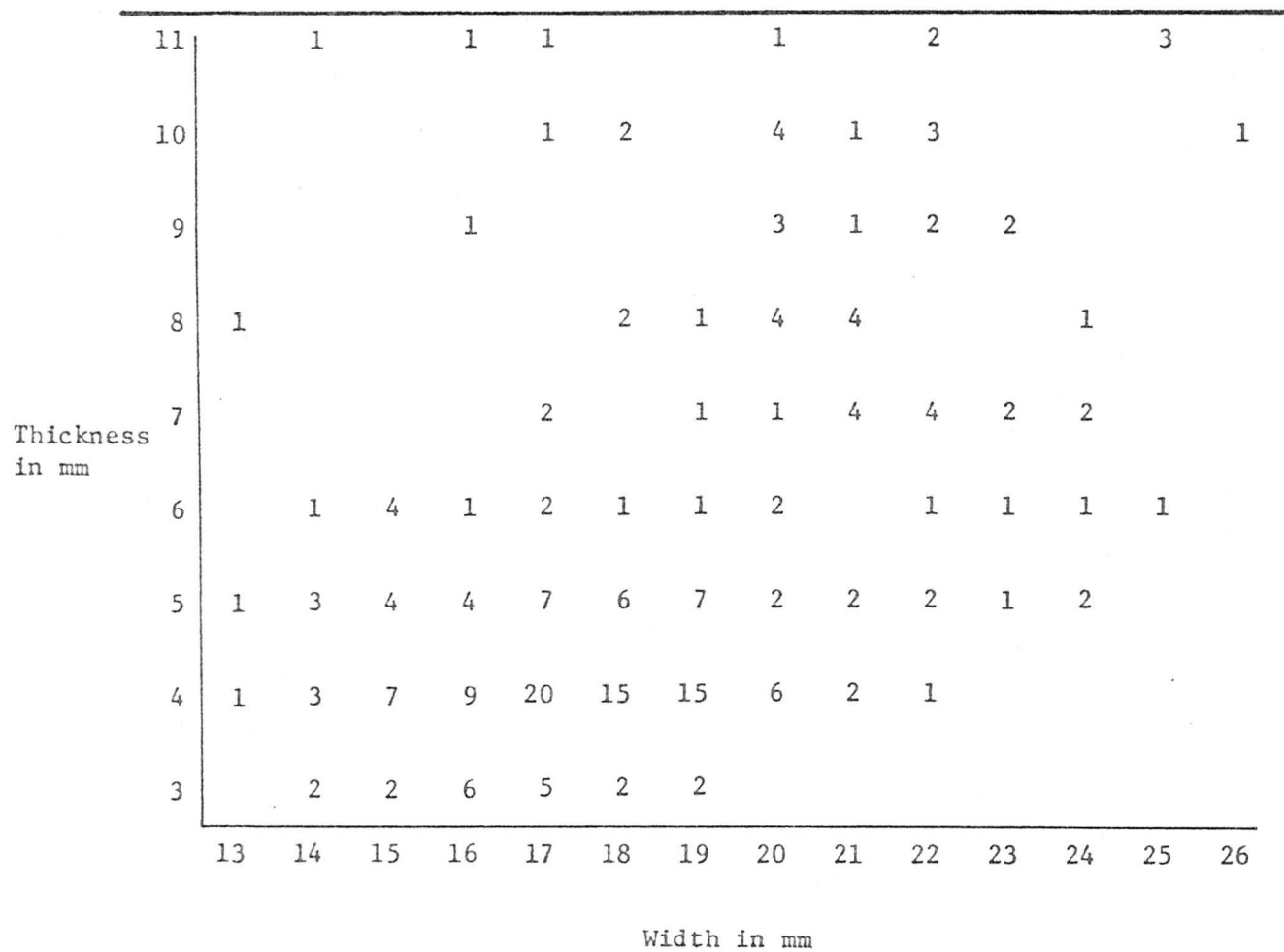


Fig. 23. Scattergram of thickness and width for 212 Walker projectile points.

Notably all points in the 8 mm thickness and 22 mm width cluster, possess minimal secondary retouch on their lateral edges. Too, the edge-on profile of these points is sinuous. It is felt that this bimodal clustering reflects a distinction between finished projectile points which fall in the 4 mm thickness and 17 mm width category, and the projectile point preforms which cluster in the larger category of 8 mm thickness and 21 mm width. With further comparative data the validity of this distinction can be tested.

Lithic Cores

Of 158 cores, 90 (or 56.9%) are irregular in shape (Table 26).

Table 26. Walker core shape and material.

Shape	Devonian chert	Silurian chert	N	%
Irregular	87	3	90	56.9
Tabular	53	5	58	36.7
Tortoise	6		6	3.8
Cobble	4		4	2.5
Totals	150	8	158	99.9

Tabular shaped cores represent 36.7% of the remaining assemblage followed by the smaller categories of tortoise-shaped and cobble

cores. The tabular shape may be more apparent than real, due to the natural block form of the nodular bedded chert predominantly used (Middleton 1958). Material used for cores predictably reflects the preference for Devonian cherts (Table 26).

With regard to core provenience, longhouses and middens account for 83.5% of the assemblage (Table 27), although the large concentration in house 4 (see pg. 31) probably skews the distribution.

Table 27. Walker core provenience.

	N	%
Longhouse (surface)	59	37.3
(pits)	25	15.8
Middens	48	30.4
Village surface	26	16.5
Totals	158	100.0

Whetstones/Abraders

Contrary to what Wright once believed (1966:87), whetstones/abraders form a significant part of the historic Neutral lithic assemblage. No less than 69 specimens come from Walker, and most of these are manufactured from dolomite or sandstone. Largely rectangular, 21 sandstone specimens include 2 grooved arrow shaft abraders.

The 40 dolomite specimens are usually 'celt-like' in outline. Of the 69 Walker whetstone/abraders, 25 are from longhouses, 23 specimens are surface finds, and 21 come from middens.

Anvil Stones

Sandstone, siltstone and dolomite were used in the manufacture of 24 anvil stones at Walker, and an equal number are bi-pitted as opposed to uni-pitted. Rectangular outlines predominate in these tools, and usually the rounded edges exhibit pecked and polished surfaces, suggestive of secondary use as hammerstones and manos.

Worked Slate

A total of 18 polished and ground slate pieces include 8 fragmented pieces which may have been adzes or celts. Some of these fragments exhibit secondary use as ground whetstones. Excluding one banded green slate adze bit, all other specimens are made from black slate.

Catlinite, a form of slate, also occurs at Walker. Three pieces are undefined nodules, while 6 pieces represent 5 finished beads and 1 blank. Metrics for complete beads are presented in Table 28. One of the beads, recovered from house 1, has been used as a handle for an inserted iron awl (Fig. 60, 7).

Table 28. Walker catlinite bead measurements in mm .

	Range		\bar{X}
	Min	Max	
Length	28	60	38.6
Width	7	15	10.6
Hole dia.	3	4	3.2
No. of facets		4	4

N = 5

Drills

All 17 drills from Walker are reworked projectile points. Metrics appear in Table 29. Use-wear measurements (mean of 8.5 mm) reflect the size of the perforating shaft of the drill, and by implication the resultant drilled hole diameter.

Table 29. Walker drill measurements in mm .

	Range		\bar{X}	S
	Min	Max		
Total length	24	54	33.0	8.38
Use-wear length	11	21	15.6	3.2
Use-wear thickness	7	10	8.5	1.0

Gaming Stones

Fifteen water-worn pebbles from Walker are thought to be gaming stones. Averaging 38 mm in diameter, none exhibits use-wear, but because 11 are found within longhouses, they are presumed to have cultural significance. Notably house 4 contains 40% of these gaming stones (Table 30).

Table 30. Walker gaming stone provenience.

Longhouse	N	Midden	N	Surface	N	Total	N
House 2 - 1		D - 1			3		
House 4 - 6							
House 5 - 1							
House 6 - 2							
House 12 - 1							
Totals	11		1		3		15

Manos

Eight polished and flatly smoothed sedimentary mano fragments occur at Walker. The materials used are the same previously noted for anvil stones.

Hammerstones

Seven hammerstones from Walker are all fist sized and possess at least 1 to 4 hammering facets.

Pestles (Fig.49 , 1)

Two Walker pestles, presumably corn pounders, measure 261 mm long by 52 mm wide, and 110 mm long by 48 mm wide. The larger specimen weighs 764.5 gms and the other 364.3 gms .

Pre-Neutral Projectile Points

Previous occupations at Walker are reflected by 39 complete and fragmentary projectiles. Projectile points follow Ritche's (1961) types. Of 16 corner notched, 7 are Brewerton and 2 are Meadowood projectiles. Lanceolate points are represented by 12 specimens. Eight side-notched points include, seven Brewerton side-notched, and one stemmed Adena point. One Levanna point and unidentified stem complete the inventory.

Pre-Neutral Bifaces

In addition to the projectile point inventory, 31 complete and fragmentary bifaces come from Walker. It is noteworthy that virtually all are surface finds many from the north-east section of the site, adjacent to the fresh water spring. While this is an apparent

concentration, it is noted that pre-Neutral projectile points and bifaces can be found over the entire village.

CERAMICS

Ceramics constitute a major part of the Walker artifact inventory but by no means is it the largest (42.6%, Table 31). Both attribute and type analyses are employed in the Walker ceramic analysis; however, the emphasis is on attributes. In addition to pottery portions, pipes, and gaming discs also form an important part of the ceramic inventory (Table 31).

Body Sherds

Vessel form at Walker, as determined from shoulder and body sherd configurations, is predominantly of the globular type. Too, bodies of the Walker pots are usually plain (2066 of 2298 specimens or 89.9%). Short, squat vessels, with decorated bodies and flat bottoms, are also present in the Walker assemblage (Fig. 54, 6). Ridley illustrates such a vessel (1961:31, Plate 11 b) and notably the entire body is decorated with a trailed motif. Decoration of vessel bodies is not an important feature of Neutral pottery, with only 15 of 2298 cases revealing trailed motifs. These decorated sherds are felt to be derived solely from these small, flat bottomed vessels, rather than the larger globular vessels. Other decorative techniques involved: smoothed-over-cording, smoothed-over-rib-paddling, scarification and

a single sherd decorated with a fabric impression (Table 32). In addition, a single rib-paddled body sherd is decorated with a red ochre slip.

Table 31. Walker ceramics.

Item	N	%
Pottery		
Body sherds	2298	55.9
Rim sherds	807	19.6
Neck sherds	476	11.6
Shoulder sherds	220	5.3
Castellations	52	1.3
Wastage	51	1.2
*Appendages	15	0.3
Podial feet	2	0.05
Juvenile ceramics	71	1.7
Pipes		
Bowls	53	1.3
Elbows	35	0.9
Mouthpieces	29	0.7
Gaming disc	2	0.05
Miscellaneous	<u>1</u>	<u>0.02</u>
Totals	4111	99.9

* (Includes handles, straps and lugs)

Walker body sherds are usually grit tempered (2210 of 2298 specimens or 96.2%), but 88 cases (3.8%) of shell tempering appear. As expected, the grit tempered specimens are predominantly plain (2007 of 2298 specimens or 87.3%). However, smoothed-over-cord and

rib-paddling constitute significant grit and shell tempered minorities.

Table 32. Walker exterior body sherd treatments.

Decorative Technique	Temper		N	%
	Grit	Shell		
Plain	2007	59	2066	89.9
Smoothed-over-cord	113	13	126	5.5
Smoothed-over-rib-paddled	63	12	75	3.2
Decorated (Trailed)	15		15	0.7
Scarified	11	4	15	0.7
Fabric impressed	1		1	0.04
Totals	2210	88	2298	100.0

Thickness of body sherds can have temporal and cultural significance, as well as aid in delimiting what section of the body a given sherd represents. Basal sherds tend to be much thicker than other parts of the body. At Walker, shell tempered body sherds tended to be thinner than grit tempered wares. Overall, the body sherds from Walker are quite thick (mean of 8.5 mm), ranging between 3 to 17 mm in thickness (Table 33). This feature coupled with poor firing, again results in the observation that historic Neutral pottery tends to be poor quality ware.

Table 33. Walker body sherd thickness in mm .

Decorative Technique	Grit			Shell		
	N	X	S	N	X	S
Plain	2007	8.6	1.98	59	8.5	2.01
Smoothed-over-cord	113	7.8	2.23	13	6.8	2.15
Smoothed-over-rib-paddled	63	7.6	1.77	12	7.3	1.13
Decorated (Trailed)	15	6.7	1.53			
Scarified	11	7.6	2.24	4	7.0	1.63
Fabric impressed	1					
Totals	2210			88		

Rim Sherds

Analysable rim sherds from the Walker site comprise 807 specimens, with 52 possessing castellations. Analysis of the rims is formulated on the basis of eight select attributes considered to be significant for spatial and chronological indicators. These attributes include: exterior, lip and interior decorative technique and motif, castellation type, rim profile, temper, collar height and appendages on the rims. All mended rims and rims from the same vessel are counted as a single specimen. Previous study of Neutral pottery (MacNeish 1952, White 1961, Ridley 1961, Wright 1966 and Kenyon n.d.) has not concentrated on the historic, or terminal period of Neutral development, and

thus Walker affords a basis for definitive research on this important period.

Historic Neutral pottery, qualitatively speaking, is poorer than that of the Hurons (Noble 1975:6). Tempering material is usually medium to large, which renders the pots susceptible to flaking surfaces and easy breakage. Too, the overall paste characteristics are not well knit, a factor contributing to uneven firing, and the crumbly nature of the ware. Colour ranges from buff-orange-brown to black, with the interiors usually black. Decoration is absent in many of the sherds analysed, and when present is of a very simplistic motif and technique. The general conservatism exhibited in the Walker assemblage articulates well with Wright's contention (1966:99), regarding the declining complexity of decorative technique and motif throughout the Ontario Iroquois sequence. We may query whether the Neutral's apparent lack of concern with producing good quality pottery during the historic era is correlated with an increasing dependency and use of European metal pots. Elsewhere, historic Huron pottery shows no significant deterioration in quality during this period.

Exterior Rim Decorative Technique and Motif. The Walker exterior rim motifs and techniques are derived from Middleport and Lawson predecessors, and generally reflect cultural conservatism. Of the 684 rims analysable for exterior decorative technique and motif, 31.7% are plain, while trailed rims account for 30.7% of the assemblage.

A further 30.8% of the rims are decorated by impressed techniques which involve variously shaped stylus elements being impressed directly into the clay with little or no secondary movement. These impressed techniques involve the same motor habit as stamping but leave a single impression, as opposed to stamping, which often leaves multiple impressions. Incising is a minority technique (27 specimens, or 3.9%). Differentiation of trailing and incising follows Noble (1968:159) and is defined in Appendix B. Fig. 24 summarizes the principal techniques and motifs at Walker, while complete details of all motifs can be found in Appendix B.

The four techniques, plain, trailed, linear impressed and notch impressed, represent over 85% of the sample. Notably over 30% of Walker rims are plain, while four motifs account for over 68% of the decorated exteriors. Minority motifs are important and many can be noted among MacNeish's pottery types (1952). Wright's (1966:86) earlier interpretation of Ridley's (1961) analysis of Walker ceramics noted the significant presence of a Seneca pottery type, Dutch Hollow Notched (MacNeish 1952:43). This type is present in our sample, but only represents 19 specimens (3.3%). Ridley's analysis suffers from interpretational and sample problems. The Walker exterior rims are noteworthy in that many rim exteriors are plain (over 30%) and decoration when present is of a very simple motif.

Technique										Minority Motifs	Totals	
											N	%
Plain	217										217	(31.7)
Trailed		16	55	46	41	8	17	1	1	25	210	(30.7)
Linear Impressed		22	46	13	1	1	-	3	2	6	94	(13.7)
Notch Impressed		17	6	7	1	-	1	19	15	12	78	(11.4)
Incised		1	8	2	7	-	3	-	-	6	27	(4.0)
Cresentic Impressed		3	10	1	1	1	-	-	-	6	22	(3.2)
Fingernail Impressed		1	6	-	1	-	-	-	-	9	17	(2.5)
Corded Stick		3	1	2	-	-	-	-	-	1	7	(1.0)
Punctate		-	-	-	-	-	-	5	-	1	6	(0.9)
Push Pull		1	-	-	-	-	-	-	-	1	3	(0.4)
Fabric Impressed	3	-	-	-	-	-	-	-	-	-	3	(0.4)
N	220	64	132	71	52	10	21	28	19	67	684	99.9

Fig. 24. Walker exterior rim decorative techniques and motifs.

Lip Decoration. Of 807 rims analysed for lip treatment, 534 or 66.2% are plain. The preference for no lip treatment clearly supercedes decorated specimens, where notch impression represents the largest category of decorative techniques (Fig. 25). Linear impression is the next most common decorative technique, and together these two techniques were used for only two major motifs: verticals and obliques (30.1%).

Interior Rim Decoration. Interior rim decoration is not popular at Walker. Of 788 analysable rims, 702 are plain (89.1%, Fig. 26). With decorated specimens, only one motif/technique appears significant, that being lip edge notching (49 specimens, or 6.2%).

Neck Sherds

In keeping with the overwhelming preference for plain rims, the Walker potters preferred to leave the necks of vessels undecorated. Plain necks account for 445 (93.5%) of the 476 neck sherds analysed. Decorative techniques and motifs making up the remainder of the assemblage (Fig. 27) include 7 categories, of which rib-paddled, smoothed-over-cord, and scarified are different techniques than noted previously for rims.







Technique	Motif							Minority Motifs	N	%
	Plain									
Plain	534								534	66.2
Notch Impressed		103	18	11	6	6	3	4	151	18.7
Linear Impressed		36	26	4	0	2	2	3	73	9.0
Trailed		11	2	5	0	1	0	1	20	2.5
Fingernail Impressed		6	5	0	0	0	0	1	12	1.5
Incised		5	4	0	0	0	0	0	9	1.1
Corded stick		0	3	0	0	0	0	1	4	0.5
Punctate		3	0	0	0	0	0	0	3	0.4
Push-Pull		1	0	0	0	0	0	0	1	0.1
Totals	534	165	58	20	6	9	5	10	807	100.0

Fig. 25. Walker lip decorative techniques and motifs.

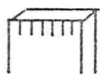
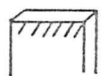
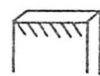
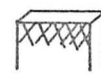

Technique	Motif					N	%	
	Plain							
Plain	702					702	89.1	
Notch Impressed		7	3	5	0	45	60	7.6
Linear Impressed		8	3	3	0	1	15	1.9
Trailed		1	2	2	0	1	6	0.8
Punctate		1	0	0	0	1	2	0.2
Corded stick		0	0	0	1	0	1	0.1
Fingernail Impressed		1	0	0	0	0	1	0.1
Incised		0	0	0	0	1	1	0.1
Totals	702	18	8	10	1	49	788	99.9

Fig. 26. Walker interior rim decorative techniques and motifs.


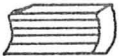

Technique and Motif	N	%
Plain	445	93.5
Incised 	10	2.0
Rib-paddled	8	1.8
Smoothed-over-cord	7	1.5
Trailed 	2	0.4
Scarified	2	0.4
Push-Pull (Corded stick)	1	0.2
Trailed 	1	0.2
Totals	476	100.0

Fig. 27. Walker neck sherds.

Shoulder Sherds

The 220 shoulder sherds in the Walker assemblage are analysed according to shapes and decoration following a precedent set by Noble (1968:150) for Huron pottery. The globular vessel form at Walker, associated with a gentle sinuous shoulder, clearly predominates (199 of 220 cases or 90.5%) (Fig. 28). Plain shoulders, (133 of 220 specimens or 60.4%), dominate the assemblage; however, decorated specimens exhibit 21 different motifs. Of the motifs, 8 variations of notching are in the majority. The single conically drilled mending hole noted at Walker was present on a shoulder sherd, and has a diameter of 12 mm.

























Technique and Motif	Form					N	%
	Sinuuous	Carinate	Incipient Carinate	Straight	Double Shoulder		
Plain						133	60.5
Smoothed-over cord						11	5.0
Rib-paddled						9	4.1
Incised 	2					2	0.9
				1		1	0.5
	1					1	0.5
Notch Impressed 	13	2	1			16	7.3
	11					11	5.0
	11					11	5.0
	2					2	0.9
	1					1	0.5
	3					3	1.4
	1					1	0.5
	2					2	0.9
Punctate 	7	1				8	3.6
Incised-Notched 	2					2	0.9
	1					1	0.5
Trailed 	1					1	0.5
			1			1	0.5
					1	1	0.5
Trailed-Notched 		1				1	0.5
					1	1	0.5
Totals	199	6	4	9	2	220	100.6

Fig. 28. Walker shoulder sherd form and decoration.

Castellations. Form characteristics for castellations follow the standardizations of Emerson (1956) and Noble (1968:183). Of 52 castellated rims, 46.2% are of the turret type, while 42.3% are simple rounded (Fig. 29). The remaining 11.5% are composed of simple pointed, a complex form incorporating a ceramic handle, and a single rim with scalloping.

Decorated castellations usually have trailed obliques and plain specimens are also common. The Walker castellations are nowhere near as complex as the highly decorated and multiformed castellations so evident in Huron ceramics (Noble 1968; Ramsden 1968).

Collar Development. Collar height measurements for 347 rims are presented in Fig. 30. Ranging between 3 to 80 mm the histogram shows that most are low collared between 6 and 25 mm with a mean of 19 mm. Noble's (1968;1974) and Ramsden's (1968:60) studies for Huron collar heights indicate that height variation can occur through time, but that Ontario Iroquois rims below 30 mm can safely be classed as low collars.

Rim Forms. Fig. 31 presents 10 basic rim profiles occurring on 578 Walker specimens. Exteriors are facing left. It is to be noted that the 10 forms are modal, and slight variations from the profiles can be expected. This is particularly true with regard to collar height and lip angle, which tend to be variable and could not be portrayed in the profile forms. Collared rim forms predominate


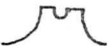


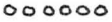





Form	Decoration						N	%
	 Trailed	Plain	 Notched	 Notch Imp.	 Grooved	 Punctate		
 Turret	12	6	3	1	1	1	24	46.2
 Simple Rounded	12	9		1			22	42.3
 Simple Pointed	3						3	5.7
 Complex	2						2	3.8
 Scalloped	1						1	1.9
Totals	30	15	3	2	1	1	52	99.9

Fig. 29. Walker castellations.

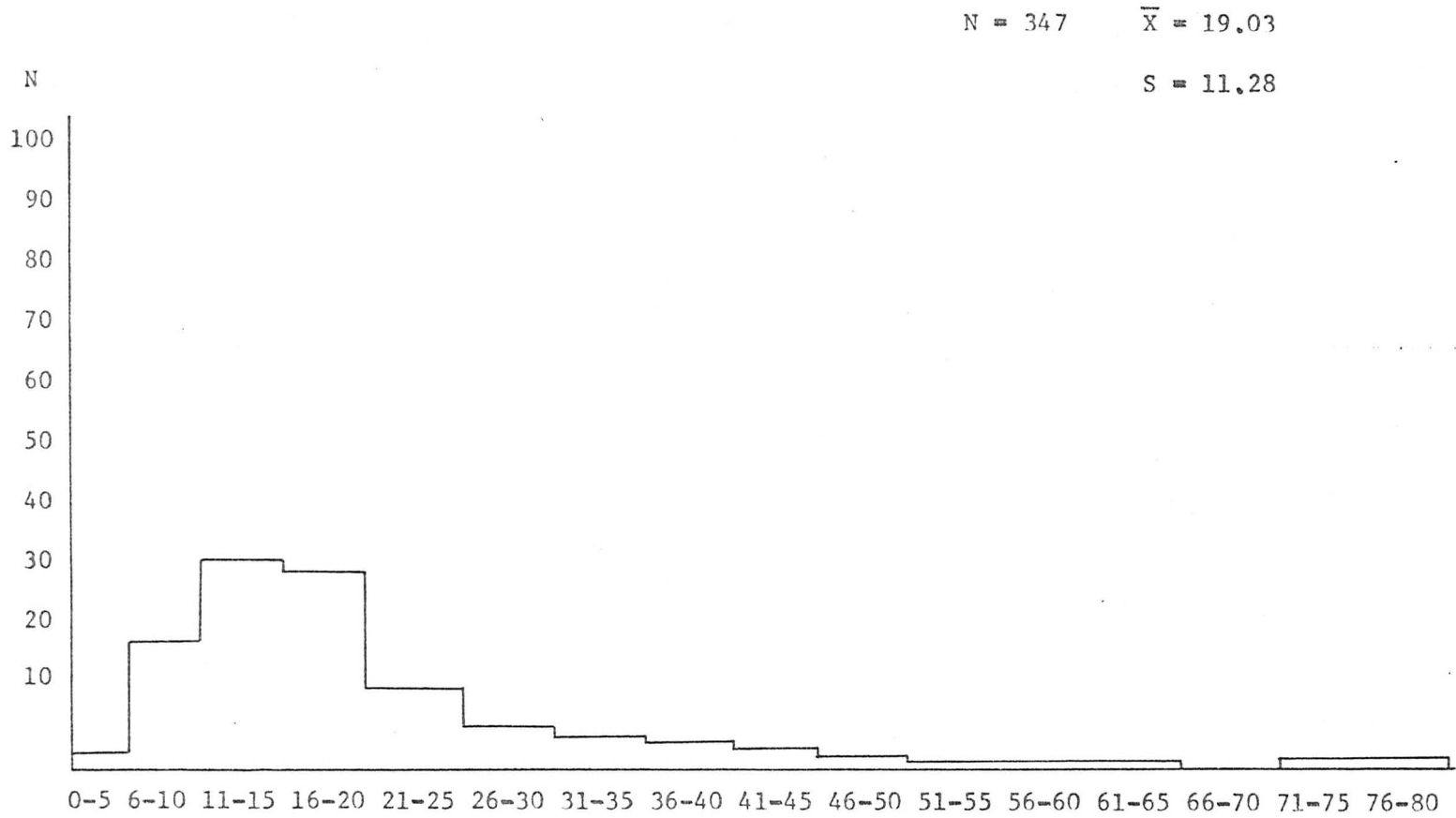


Fig. 30. Walker collar heights in mm .

with 256 specimens (44.3%), while everted wares account for 199 specimens (34.4%). Of the 256 collared rims 77 or 13.3% are channelled. Rolled and splayed rims are expectedly present, but have low frequencies of 5.4% and 5.0% respectively.







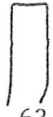



					N	%
Collared	90 (15.6%)	77 (13.3%)	62 (10.7%)	27 (4.7%)	256	44.3
Everted					199	34.5
	198 (34.3%)	1 (0.2%)				
Straight					63	10.9
	63 (10.9%)					
Rolled					31	5.4
	31 (5.4%)					
Splayed					29	5.0
	22 (3.8%)	7 (1.2%)				

Fig. 31. Walker rim forms.

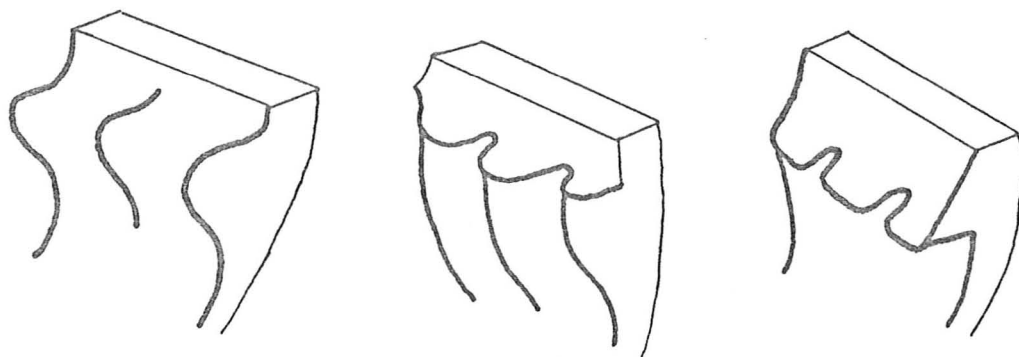
Temper: Tempering material is noted for 816 rim sherds. Of this grit tempering appears in 803 sherds (98.4%), while shell tempered rims number 13 (1.6%). Appendix B presents all data for rim sherd temper.

Appendages: Analysis of the Walker rim sherds includes 3 types of moulded appendages: handles, straps and lugs.

Handles: Handles, although possibly used for pot suspension, are more likely simply decorative. Their small size and poor method of attachment renders any functional interpretation questionable. Of 7 specimens at Walker, 4 are triangular in cross-section, and 3 have oval cross-sections. The triangular specimens are decorated on all faces, usually by horizontal trailing, whereas oval cross-section handles are plain. In all cases, the handles have been moulded separately from the vessel and later joined to the rim.

Straps: Straps are strictly decorative appliques to rim sherds, and 4 cases occur at Walker. Formed from flat strips of clay, the straps are laid against the exterior of a rim. Adhering along their entire length, the straps are sometimes placed in vertical or V-shaped positions. Only 2 of the Walker specimens have decoration, both being horizontally trailed.

Lugs: Lugs are defined as exterior, horizontal projections on a rim sherd. Often, they are located at the collar-neck juncture of the rim. Four lugs are defined in the Walker assemblage, one of which is an applique, the rest being sculpted or moulded from rim clay of the vessel. Profile forms for these distinctive ceramic features are illustrated below (Fig. 32). Certainly decorative, they may also have been functional in forming a projection under which an encircling lifting thong could be applied.



N = 4

Fig. 32. Walker lug profiles.

Podial Feet

Two podial feet are present in the Walker assemblage and both derived from a single vessel, as the paste and colour are identical for both specimens. One specimen is an asymmetrical foot with a flattened bottom, while the other is a fragment still adhering to the

vessel body (Fig. 55, 18). Similar specimens are more prevalent at the late dating Hamilton site (pers. comm. Paul Lennox 1976).

Juvenile Ceramics

The efforts of juvenile potters is recognized in 71 pottery fragments. Segregated from the adult ceramics on the basis of size, and the absence of, or poor ratio, of temper, the 49 rim sherds though crude, reflect copying techniques and motifs of adult wares (Fig. 54, 7).

Ceramic Gaming Discs

Ground sherd discs commonly identified as gaming pieces, are represented by 2 specimens at Walker. While one is complete, 25 mm in diameter, the other reflects initial grinding toward a circular shape. Ceramic gaming discs are not as popular on Neutral sites as they are on Huron villages (see Noble 1968:252).

Ceramic Handle

This unusual piece is highly polished and possesses incised triangular decoration. Certainly not from a vessel rim, this piece may have formed a handle for some type of cylindrical tool (Fig. 55, 15).

Table 34. Walker pottery types.

	Walker		Ridley	
	N	%	N	%
Ripley Plain (Neutral Plain)	192	33.2	16	9.4
Lawson Incised (Neutral Incised)	70	12.1	49	28.6
Huron Incised	53	9.2	-	-
Lawson Opposed (Neutral Trianguloid)	31	5.4	25	14.6
Ripley Collared	28	4.8	9	5.3
Niagara Collared	25	4.3	-	-
Dutch Hollow Notched (Neutral Nicked Lip)	19	3.3	30	17.5
Seed Incised (Neutral Punctate Lip)	13	2.3	29	17.0
Warminster Horizontal (Criss-Cross Incised)	10	1.7	3	1.8
Genoa Frilled	2	0.4	1	0.6
Others	135	23.4	9	5.3
Totals	578	100.1	171	100.1

Ceramic Wastage

Fifty-one lumps of ceramic wastage are known from Walker. Most have amorphous shapes, but of 17 spherical fragments, 9 have been fired.

Pottery Types

In order to facilitate understanding of the Walker rim sherds for those who prefer to use pottery types, instead of or along with attribute analysis, Table 34 is presented herein. MacNeish's pioneering terminology is preferred over that of Ridley (1961:47) (in brackets), whose sample frequencies are very different from the present analysis.

PIPES

As indicated in Table 35, a minimum of 57 pipes as represented by bowls are available from the Walker village.

Pipes were manufactured from clay and stone, and 107 clay specimens predominate over 6 lithic examples. Both effigy and non-effigy pipe types are present in the Walker assemblage, the latter outnumbering the former by at least 4 to 1 (Table 35). In the following, the pipes are analysed according to bowl form and decoration, elbow angle, stem cross-sections and mouthpiece forms. The Walker pipe assemblage is very fragmentary rendering most metric analyses impossible. Only in the case of the Apple Bowl (Acorn Cup) pipes are measurements taken

Table 35. Walker pipes and portions.

	Clay	Lithic	N	%
Effigy bowls				
Human	1	2	3	2.4
Bird	3		3	2.4
Snake	2		2	1.6
Dog		1	1	0.8
Problematical	1	1	2	1.6
Non-effigy bowls				
Apple bowl	29		29	23.6
Decorated collar	6		6	4.9
Conical plain	3		3	2.4
Conical decorated	2		2	1.6
Non-typed	2		2	1.6
Coronet	1		1	.8
Conical ring	1		1	.8
Miniature	1		1	.8
Juvenile pipe	1		1	.8
Pipe elbows	35		35	28.5
Pipe stems	29	2	31	25.2
Totals	117	6	123	99.8

and these involve lip thickness.

In general, the Walker pipes are well-made with fine grit tempering material and fired to a hard finish. No shell tempering appears in the pipes analysed. Clay pipe colours ranged from buff, brown, grey to black, and the pipe types recognized follow the styles formulated by Emerson (1954), Ridley (1961) and Noble (1968), with modifications noted as demanded by the specimens analysed.

Effigy Pipes

Human Effigies: A portion of a Pinch-Face or Blowing-Face pipe comes from a post mould in the east wall of house 3. Diagnostic face treatment and the presence of arm and hand development makes identification of this specimen certain. The head of the effigy is conical and possesses three encircling rings.

Two remaining human effigy pipes are represented by lithic bowl fragments. One bowl is extremely accurate in its portrayal of a human face, while the other appears to be of a conical form with a geometric incised human face. The face on the first pipe is carefully carved, with the head area exhibiting a low cap, much like the present day beret. This pipe is reminiscent of Emerson's (1954:63) Capped type. This specimen is secondarily drilled, perhaps for use as a pendant.

Bird Effigies: (Fig. 56, 6) All Walker bird effigy pipes are manufactured of clay. Two of the pipes are fragmentary beyond specific type attributes, while the remaining specimen offers a new variation of Emerson's (1954:50) Owl effigy pipe. Of the two fragmentary specimens one possesses an unmistakable tail, wing and crow foot elements, while the other effigy possesses portions of wing and body development. The Owl effigy is unusual in that the eyes are indented, perhaps for some form of inlay treatment; the beak is indented and head is capped with a small nubbin of clay (Fig. 56, 4). The entire periphery of the face is encircled by short radial incising, as is the chest area, perhaps demarcating rib treatment.

Snake Effigies: (Fig. 56 , 7) Represented by two clay specimens, neither pipe portion retains the head region of the effigy. However, characteristic coiling around the stem and elbow portions makes identification of these two effigies as the Coiled Snake variety (Noble 1968) certain.

Dog or Wolf Effigy: (Fig. 56, 5) Manufactured from banded slate, only the head and fragment of the bowl is present for this specimen. Exhibiting very fine workmanship, this effigy has been secondarily used as a pendant, reflected by the presence of a drill hole in the chest area of the effigy.

Problematical

Two remaining effigy bowl fragments, one of clay and one of slate, are not typed due to their incompleteness. The clay specimen, extensively worn, possesses a conical drill hole in the base of the conical bowl, presumably for insertion of a wooden stem. Viewed from above, the bowl is ovate and has a projecting lug facing the smoker. The bowl lip is encircled by a single incised line, while the lip edge is decorated by short vertical incisions around the entire bowl fragment. The stone specimen is fashioned from a slate pebble and measures 64 mm in height, 40 mm in width, and 32 mm in thickness. The edge facing away from the smoker and the bottom of the bowl is incised with horizontal gashes, outlined by a bordering incised line. This presents a motif reminiscent of a stylized tail. The stem hole is conically drilled for insertion of a wooden stem.

If as Noble (1968:296, 1969:24) suggests, Ontario Iroquois effigy pipes are linked to lineage eponyms, we would have at least 5 distinguishable lineages at the Walker village. Effigy pipe distribution fails to reveal clustering around individual houses. Significant distributions are seen across the village however, with 66% (or 4 specimens) of excavated effigy pipes, and 90% (or 27 specimens) of all excavated pipes located in the eastern area of the village. Sampling error could be a factor in this distribution, as more excavation was carried out in this, the richer area of the village. Table 36 provides provenience data for all Walker pipes.

Table 36. Walker pipe provenience.

Pipe Type	House	N	Midden	N	Surface	Total
Human effigy	3	- 1	F	- 1	1	3
Bird effigy	11/12	- 1	F	- 1	1	3
Snake effigy	5	- 1			1	2
Dog effigy	11/12	- 1				1
Problematical					2	2
Apple bowl	5	- 4	F	- 4	12	
	3	- 1	A	- 2		
	2	- 1	G	- 1		
	11	- 1	H	- 1		
			B	- 2		29
Decorated collar	5	- 1			5	6
Plain conical	3	- 1			1	
	7	- 1				3
Decorated conical			F	- 1	1	2
Non-typed			D	- 1	1	2
Coronet					1	1
Conical ring			D	- 1		
Totals		14		15	26	55

Non-Effigy Pipes

The majority of pipes from the Walker site are of a non-effigy form (47 specimens), and all are manufactured from fired clay.

Apple Bowl: (Fig. 57, 6) Termed Apple Bowl by Emerson (1954) and Acorn Cup by Ridley (1961), this pipe type is represented by 29 specimens. Unlike the usual Apple Bowl form, the Walker pipes tend to exhibit incipient collar development, while the decorative technique and motif conform to the usual pattern. The ratio of ring to oval punctate elements for 23 bowl fragments is presented in Fig. 33, while lip thickness measurements are noted in Fig. 34.



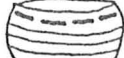

No. of Rings	No Punctate	Punctate Below Rings	Punctate Above Rings	Punctate Above and Below	N	%
						
3				2	2	8.7
4	2	1		9	12	52.1
5	1			6	7	30.4
6		1			1	4.4
7		1			1	4.4
Totals	3	3		17	23	100.0

Fig. 33. Walker apple bowl pipe decoration.

Bowls possess 3 to 7 encircling rings, with the majority having 5 rings. Oval punctations never occur singularly above the rings, with the majority of specimens possessing oval punctations above and below the encircling rings.

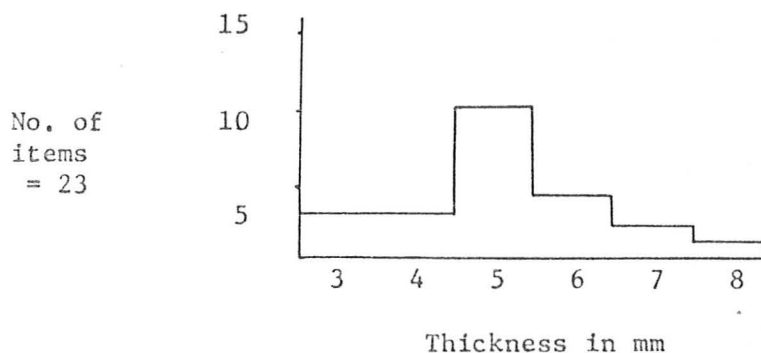


Fig. 34. Walker apple bowl pipe lip thickness.

Decorated Collar Pipes: (Fig. 57, 4) Six pipes possess well-defined, decorated collars. Decorative motif and collar heights for all pipes is presented in Fig. 35.

Plain Conical: (Fig. 57, 1) Three plain conical pipes in the Walker assemblage include two which are entirely plain, and a third specimen possessing a single ring encircling the bowl-elbow juncture. Below this ring lies a single row of punctates. Pipe bowls range in

diameter from 25 to 38 mm with a mean of 31.5 mm, while all three pipe bowl lips are 5 mm thick.

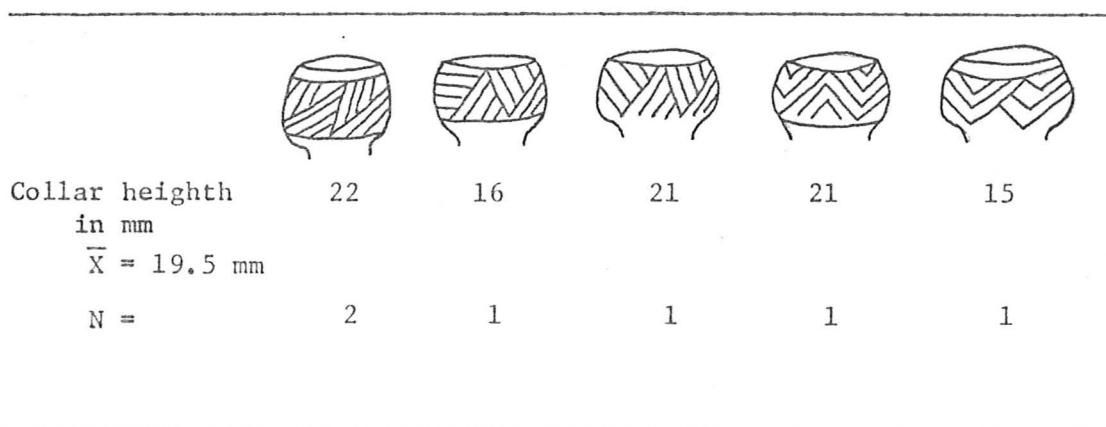


Fig. 35. Walker decorated collar pipe motif and collar height.

Decorated Conical: (Fig. 56, 14) Represented by small bowl fragments, only two pipes of this type are recognized. Both pipes display incised chevron motifs. One specimen has a single chevron just below, and pointed toward the lip edge. The other specimen has a double encircling chevron motif located just below the lip.

Coronet: (Fig. 56, 8) Only one coronet pipe was recovered and it is virtually complete except for the mouthpiece. Vertical notched mortices occur in all four corners and are 13 mm in height, while the intervening area is decorated by pairs of horizontally trailed lines and is 10 mm in height. The bowl, elbow and stem area facing the smoker, reveal three raised ridges, all of which are transversely

notched at regular intervals, resulting in a symmetrical motif.

Conical Ring: (Fig. 57, 3) Defined on the basis of a bowl fragment retaining a small portion of the lip, this pipe has six encircling rings on a large conical bowl.

Non-typed: Two pipe bowl portions are not typed owing to unusual forms and manufacturing techniques. Both specimens have large grit tempering material and do not reflect the high quality firing seen in other specimens. As well, portions appear to be a mixture of conical and bulbous configurations. Both pipes are decorated by incising and punctation. One specimen possesses an oblique motif encircling the bowl, above an encircling opposed motif, which in turn is framed by a ring of punctates above and below. The remaining specimen has a criss-cross motif below a single row of encircling punctates located just below the lip. In general, the pipes are very large and inconsistent with the standard Walker pipe assemblage.

Miniature: (Fig. 56, 10)

Noted previously by Emerson (1954) and Noble (1968) for Huron sites, one miniature pipe occurs at Walker. The pipe has an overall length of 57 mm with a bowl height and diameter of 32 and 16 mm respectively.

Juvenile: (Fig. 56, 11)

Recovered from midden A, this plain specimen is complete and has a bowl diameter of 11 mm . Non-tempered, it has an obtuse elbow and is no doubt the product of a juvenile attempt at pipe making.

Pipe Elbows:

A total of 35 specimens analysed for elbow form reveal that the Walker elbow-stem angles are consistently 90 degrees, except for the single obtuse juvenile specimen. All Walker elbow portions are oval in shape except for one specimen with a hexagonal form similar to a specimen recovered from the Donovan site (Ridley 1961:50).

Pipe Stems:

All 31 analysable pipe stems from Walker are circular to slightly ovate in cross-section. As well, these specimens clearly show that the burned-out-reed method (Emerson 1954:183) was preferred over the twisted grass technique of stem hole manufacture.

Pipe Mouthpieces:

Thirty Walker pipe mouthpieces occur in only two forms: tapered and knobbed (Table 37).

Table 37. Walker pipe mouthpiece form and material.

Form	Ceramic	Stone	N	%
Knobbed	17	1	18	60.0
Tapered	11	1	12	40.0
Totals	28	2	30	100.0

The knobbed forms slightly outnumber tapered ends, and it is noted that tooth grinding on most mouthpieces is a common occurrence.

WORKED BONE AND ANTLER

While it is acknowledged that years of indiscriminant digging at Walker has probably reduced the site's worked bone inventory, it is felt that the 336 specimens recovered and analysed herein (Table 38) are nonetheless representative. In general, bone preservation is excellent on Neutral sites and the large assemblages lend themselves to select attribute analysis. As well, the specimens analysed exhibit the Middleport ancestry alluded to by Wright (1966:67). Included in the 336 Walker bone specimens are 32 pieces manufactured from deer antler.

Table 38. Walker worked bone and antler.

Item	N	%
Bone beads and tubes	206	61.3
Bone awls	30	8.9
Antler flakers	18	5.4
Bone punches	13	3.9
Decorative items	12	3.3
Bodkins	9	2.7
Worked teeth	7	2.0
Toggles	5	1.5
Cup-and-pin games	5	1.5
Brads	4	1.2
Antler tines	4	1.2
Harpoons	3	.9
Thong preparers	3	.9
Bone chisel	1	.3
Bone comb blank	1	.3
Turtle shell rattle	1	.3
Human skull rattle	1	.3
Human skull gorget	1	.3
Miscellaneous	13	3.9
Totals	336	100.1

Beads and Tubes

The most prodigious bone artifacts, beads and tubes, constitute 61.3% of the bone assemblage at Walker (Table 38). Making up 206 specimens, they include 62 complete beads, 54 complete tubes and a further 90 pieces of fragments, wastage and blanks. Complete tubes and beads, totalling 116, are analysed according to length, width, presence or absence of decoration and the derivative faunal element (Table 39). cursory examination of the collection showed a marked size difference between small beads and large tubes. Metric analysis for length and width confirmed this observation (See Figs. 36 and 37).

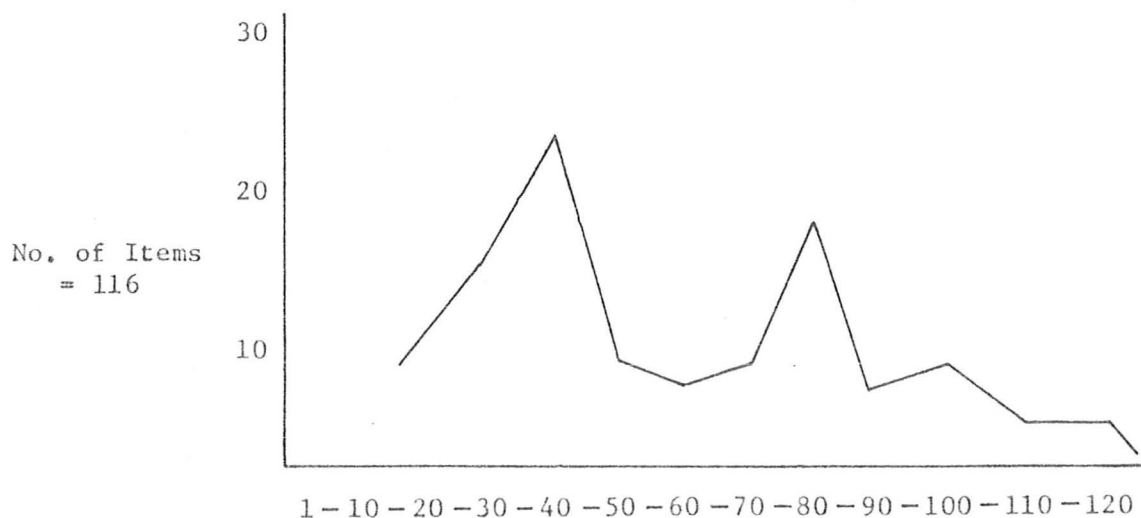


Fig. 36. Walker bone bead and tube lengths in mm .

A definite bimodal distribution appears with regard to specimen length; items over 55 mm long fall into a tube classification, and those under 55 mm are considered to be beads. Significantly, measured widths for both beads and tubes follows a unimodal distribution with only a slight skewing to the right of a 12 mm mean.

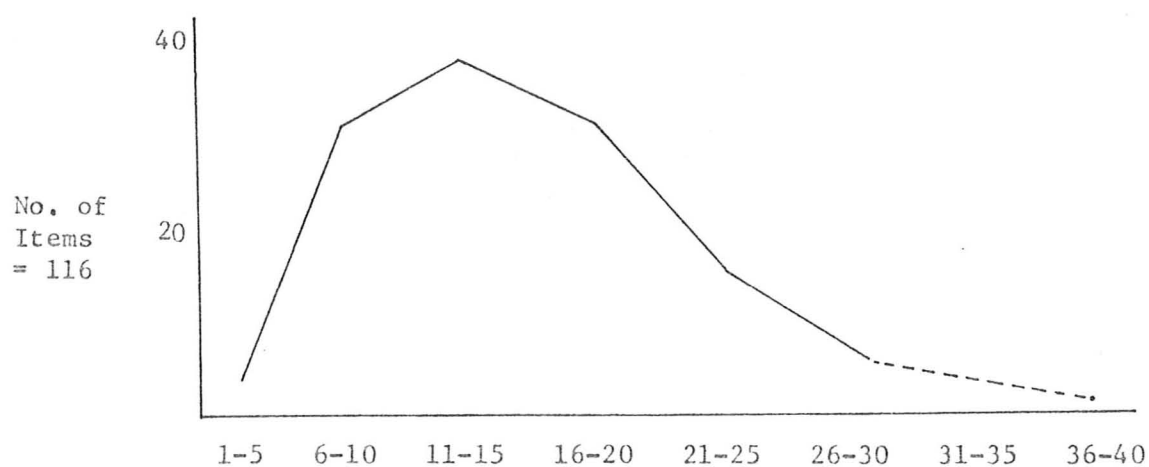


Fig. 37. Walker bone bead and tube widths in mm .

The bimodal distribution is a graphic distinction between the longer and thicker tubes, as opposed to the shorter, narrow beads. While bone beads were most likely used for purposes of ornamentation, it is proposed that the bone tubes, particularly the decorated specimens, functioned as "shamen's sucking tubes".

Further dichotomies are noted with regard to the presence or absence of decoration. Table 39 shows that only 11 (or 17%) of the 62 bone beads possess decoration, while decorated bone tubes constitute 14, or 35% of the 54 bone tubes. This dichotomy is further exemplified with consideration of derivative faunal elements. Of the 62 complete beads, bird bone is definitely favoured (61.2%) over deer radius elements. On the other hand, exactly one half of the complete tubes were derived from deer radius elements. More notable, however, is that 71% of all decorated tubes are fashioned from radius elements.

Table 39. Walker complete bone bead and tube decorations.

Faunal Element	Undecorated Beads	Decorated Beads	Undecorated Tubes	Decorated Tubes	N	%
Bird bone	32	6	7	3	48	(41.4)
Deer radius	2	2	17	10	31	(26.7)
Other	17	3	16	1	37	(31.9)
Totals	51	11	40	14	116	(100.0)

Thus, the evidence from Walker indicates that twice as many tubes are decorated in relation to beads. Further, tubes are preferentially manufactured from deer radius elements, while beads are largely derived from bird bone. Finally, it is noted that deer radii are overwhelmingly preferred for the manufacture of decorated tubes. Whether this preference for deer radius elements is merely attributable to the large quantities of accessible bone, or whether it represents a true cultural preference of the historic Neutral will have to await further comparative research.

The remaining 90 specimens relating to beads and tubes include 52 bead and tube fragments, 35 pieces of wastage from bead and tube manufacture, and three bead blanks. The size distinctions noted above for complete beads and tubes also hold true for the fragments recovered. Fragmentary specimens are primarily useful in determining manufacturing techniques of beads and tubes, and a standardized series of steps are recognizable. First, the bone shaft was scored around either end, then with slight pressure the distal and proximal ends could be easily snapped free. A third and final manufacturing step involved grinding of the ragged ends to a smooth finish.

Bone Awls

Awls are defined as perforating tools used in a twisting, rotational manner which leaves encircling, longitudinal use-wear striations on the perforating end of the tool (Noble 1968:134). The 30 awls from

Walker (18 complete) are all produced on mammal rib fragments, long bone splinters, fish spines and long bones with proximal articular faces intact. None is of antler and none is decorated.

Table (40) presents various measurements of length and width taken at the point exhibiting maximum use-wear, in an attempt to ascertain the size of perforation desired. A factor of error is present in regard to use-wear measurements as the striations often do not simply end, but rather they trail off. As such, all use-wear measurements should be considered as approximations rather than absolutes. It is notable however, that width of use-wear presents a very small standard deviation and further, that perforation size as reflected by bone awls is only 1 mm smaller than that noted for chert drills.

Table 40. Walker complete awl and punch measurements in mm .

Awls N = 18	Range	\bar{X}	S	C.V.
Specimen Length	48 - 180	86.9	36.0	41.42
Use-wear Length	12 - 76	33.9	16.0	47.34
Use-wear Width	3 - 12	7.3	2.4	32.06
Punches N = 11				
Specimen Length	47 - 103	64.1	16.2	25.24

Antler Flakers

Eighteen cylindrical lengths of antler are thought to represent chert flakers. Ridley (1961:52) points out that these tools may have been used as "drifts", an intermediary tool held against the preform and then struck with a percussion blow from a hammerstone. Other interpretations hold that the cylindrical antler lengths were simply handheld pressure flakers. Measurement of the Walker flaker indicates an apparent bimodal distribution in length (Fig. 38). In this scatter-gram the lengths and widths for 12 complete tools and 3 preform blanks indicates that tools and preforms fall into two clusters, either 40 mm or less and 65 mm or above in length. Perhaps the shorter tools served as percussion drifts, while the longer specimens served as handheld pressure flakers?

Bone Punches

A total of 13 complete and fragmentary bone punches are represented in the Walker assemblage. Portions of mammal bone ribs, long bone splinters, fish spines and long bones retaining their articular faces have been utilized in the manufacture of these tools. Again, none is of antler and none is decorated. Punches are differentiated from bone awls by the presence of use-wear striations running parallel to the long axis of the tool: such striations reflect a jabbing motor habit rather than the rotational awl motions. Metric data for the 11 complete punches is presented in Table 40.

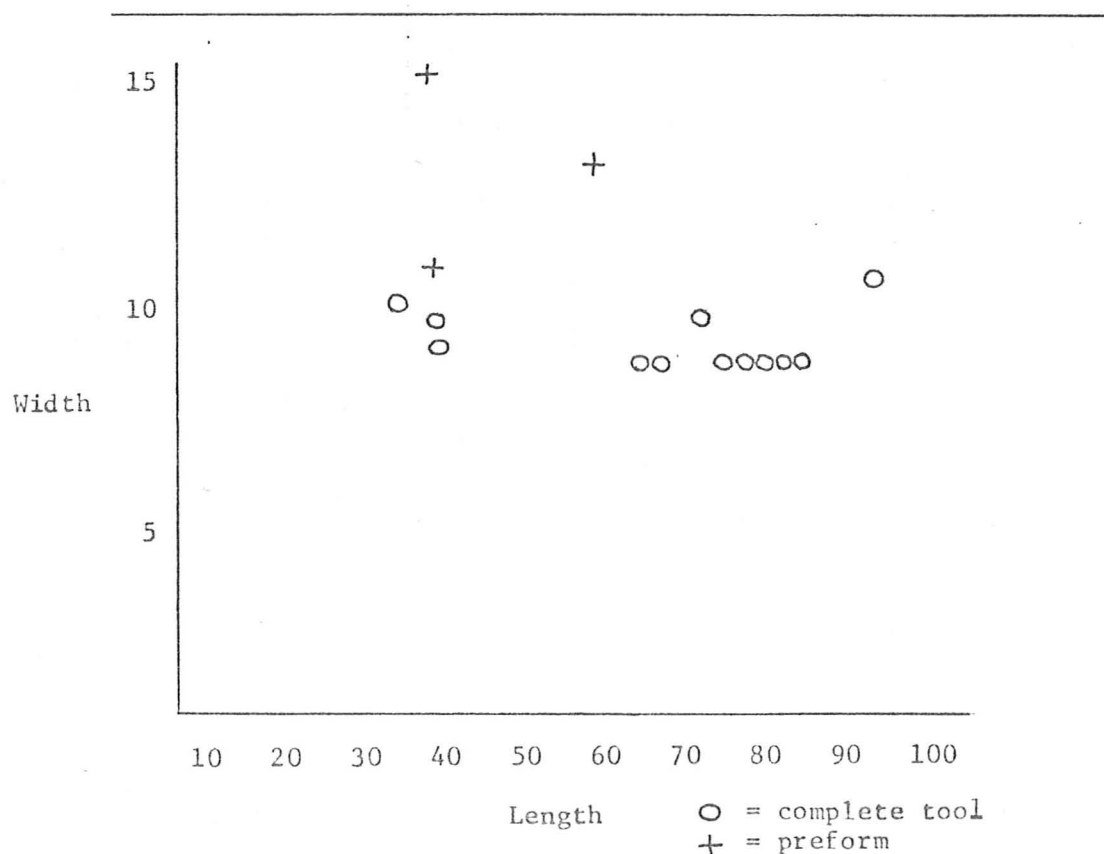


Fig. 38. Walker antler flaker and preform measurements in mm .

Decorative Items

The excellence of the historic Neutral bone assemblage is evident in one highly polished, carved bone shaft. Measuring 74 mm in length and carefully incised, this specimen may have been used as a hair pin.

An awl tip fragment whose base has been cut and polished, possesses no recognizable function.

A fine bone splinter, 75 mm in length, with no use-wear patterns, may have been used as a fine needle.

Produced on a rib fragment a final bone object measures 86 mm in length and 5 mm in width. Both lateral edges and one end have been carefully cut and polished, but no functional use can be attributed to this object.

Bodkins (One-Eyed Needles)

Of 9 Walker bodkins, 3 are complete. Lengths of these tools range between 100-134 mm with a mean of 118.5 mm and widths range between 6 - 7 mm with a mean of 7.5 mm. In all cases, the needle stringing hole is bilaterally gouged through the dorsal and ventral faces, with the hole being centrally positioned approximately one third along the tool's length. One specimen exhibits longitudinal centre channelling on the ventral surface, a feature also noted by Ridley (1961:53) for the nearby historic Daniel's site. The Walker specimen possesses a centre hole as well as the longitudinal channelling. Contrary to Ridley (1961:53), bodkins are present in the ancestral Middleport assemblage as illustrated by Wintemberg (1948:Plate 14 no. 34). It is of interest to note that despite the presence of chert drills in the lithic assemblage, they apparently were not used to perforate bone bodkins.

Worked Teeth

Only 7 worked teeth occur at Walker. Of these, 2 are modified black bear canines possessing ground tips, and in one instance, marked

grinding on the buccal and mesial surfaces. The remaining specimens consist of 1 porcupine and 4 beaver incisors, all exhibiting a humanly modified ground surface.

Toggles

Fashioned from deer toe bones, 5 toggles from Walker include 1 complete specimen. The remaining four units represent toggles in various stages of manufacture, with ground dorsal and ventral surfaces.

Cup and Pin Games

A major artifact class at the Middleport site (Wintenberg 1948:23) and to a lesser degree at Lawson (Wintenberg 1939:35), cup-and-pin deer toe bone gaming items are represented by only 5 specimens at the Walker site. Two of these specimens conform to the usual configuration of distal end-drilling combined with a cut-and-hollowed end. Of the remaining 3, 2 are drilled both proximally and distally; the remaining specimen possesses only proximal drilling. It seems clear that by historic Neutral times, the popularity of this gaming item is on the wane.

Brads

A total of 4 bone brads all come from the surface of the Walker site. Well polished with marked grinding on both the dorsal and

ventral surfaces, these specimens have a mean length of 51.5 mm and mean width of 6 mm .

Antler Tines

Only 4 worked antler tines come from Walker despite a prolific collection of raw deer and elk antler. All exhibit grinding and polish on the distal tip and may represent a qualitatively different form of pressure flaking tool than that previously discussed.

Harpoons

Of the 3 harpoons recovered, 2 are fashioned from antler and the remaining specimen is of bone. One antler harpoon measuring 210 mm long, is unilaterally barbed and possesses a single line-hole. The other antler specimen, from House 12, measures 181 mm long, is unilaterally barbed, but exhibits no line-hole. The entire specimen is incised with uniformly spaced encircling lines; the shoulder area in particular is deeply incised and this area may have served for line attachment. The final bone specimen, derived from Midden A, is unilaterally barbed and possesses a single line-hole. Contrary to Ridley (1961:54), harpoons do occur at Middleport (Wintemberg 1948:9), and they reflect an element of cultural continuity between the historic Neutral and their Middleport predecessors.

Thong Preparers

Three antler tools are of a type referred to as "arrow-shaft straighteners". Such tools have been noted in the Archaic and Ridley (1961:54) notes their presence in other temporal and spatial contexts. Discussions with W. C. Noble and examination of use-wear patterns suggest an alternate use for these antler tools as thong preparers. Usually, the tools are fashioned from a "Y" of two or more antler tines with a hole through the antler stem. Distinctive and pronounced, the edges of the biconically drilled holes are smoothed and U-shaped in a fashion suggesting that thongs have been rockered and drawn back and forth through the hole at varying angles up to 160 degrees.

Bone Chisel

A bone chisel recovered at Walker possesses a marked degree of polish, especially the bit end which is symmetrically bevelled over its 25 mm width. The proximal end of this tool has been incised to form a hollow which may have facilitated hafting, as proposed by Wintemberg (1948:17) for a similar tool found on the Middleport site.

Bone Comb Blank

This portion of a deer or elk scapula, has been cut and ground to a rectangular outline. From its shape and absence of any wear patterns, it most probably represents an intermediate stage in the manufacture of a bone comb.

Turtle Shell Rattle

A carapace fragment from a box turtle, possesses a single drill hole and is presumed to have been part of a rattle.

Human Skull Rattle

This nearly complete specimen is fashioned from a human parietal whose edges are smoothed and bevelled. The parietal has 11 drilled holes through it.

Human Skull Gorget

Also fashioned from a human parietal, this decorated gorget is highly polished with the characteristic smoothed and bevelled edge. A single drill hole for suspension is present, and fine line incising encircles the central and lateral margins.

Miscellaneous

Ten bone specimens are slightly modified, but it is not possible to assign specific functions to them. As well, 3 remaining pieces of antler have been variously cut and polished with no functional use discernible.

HISTORIC TRADE GOODS

The nature and quantity of the historic trade goods recovered from the Walker village helps to establish the village's existence during the late period of the Neutral confederacy (1630-1650). Such dating rests primarily upon comparisons with the relatively accurate trade good chronologies formulated by Kidd (1972) and Kenyon (n.d.). Also, the copious quantity of trade goods at Walker sheds light upon the degree of involvement the villagers had with the exchange system for acquisition of European iron, brass and glass trade items. In particular, it is obvious that metal items, both brass and iron, were especially favoured by the Walker people (231 of 323 items, or 71.4%, Table 41).

Table 41. Walker historic trade goods (1630-1650 A.D.).

Item	N	%
Glass beads and tubes	92	28.5
Modified brass and iron scrap	40	12.4
Unmodified brass and iron scrap	40	12.4
Rolled brass tubes and blanks	39	12.4
Strung brass beads	24	12.0
Iron axes and portions	20	7.4
Iron knives	18	6.2
Brass kettles and portions	9	5.6

(continued)

Table 41 (continued)

Item	N	%
Metal awls	9	2.8
Finger rings	6	2.8
Brass wire chain	6	1.9
Metal projectile points	4	1.2
Brass bangles	4	1.2
Metal saws	4	1.2
Metal punches	3	.9
Coiled brass wire pieces	3	.9
Iron spears	2	.6
Totals	323	99.9

Glass Beads and Tubes

Ninety-two European glass beads and tubes are analysed according to colour, shape, metrics and provenience. It should be noted that the majority of specimens come from the disturbed ossuary where years of looting have certainly depleted the original glass bead and tube count.

Table 42. Walker European glass beads and tubes.

Colour	Round Bead	Round Tube	Facetted Bead	Facetted Tube	N	%
Blue	44	4		1	49	53.3
Red	15	8	2	2	27	29.3
Poly- chromatic	2	1	4	4	11	11.9
Opaque	3				3	3.3
Brown	1	1			2	2.1
Totals	65	14	6	7	92	99.9

Blue glass beads and tubes predominate with 49 specimens (53.3%); included within these are 44 small round blue beads (Table 42). Forty-two of these small beads could be measured and they have a mean diameter of 5 mm with a range between 4 and 7 mm. The ossuary yielded 29 specimens, while 7 are from middens, 2 surface derived and 4 from House 4.

Of the remaining glass bead assemblage only the small round red beads permit metric examination, having 13 of 15 specimens complete. The beads have a mean diameter of 4.1 mm with a range between 3 and 5 mm. Ten come from the ossuary, 2 from midden D and one from House 1.

Similar specimens to the round blue beads at Walker are noted by Kidd (1949:142) at Ste Marie 1, and help to establish the mid-17th century position of the Walker village.

Metal Trade Goods

More prominent than any single category of trade goods are the collective items produced from reworked portions of disused metal trade goods. This secondary working of iron and brass goods clearly bespeaks of their importance to the historic Neutral, and while many of these items are tools, many are also simply decorative objects.

Modified Brass and Iron Scrap: Personal adornment is characteristic of the historic Neutral, as documented by the early ethnographers (Jesuit Relations), and this is reflected in the modified brass and iron scrap inventory.

A total of 40 pieces of scrap, 9 being iron, possess varying numbers of punched holes, presumably for use as pendants. They may also have served as segments of a breast plate for personal armour, as once suggested by David Boyle (1903:44). The shapes of these holed-scrap items range from 4 circular forms to 16 specimens with varying geometric shapes. A further 9 items defy any shape category, while 11 bail fasteners from brass kettles have been cut and ground, presumably to be hung by a thong from the original bail hole.

Unworked Brass Scrap: Forty pieces of brass exhibit no worked surfaces and are consequently considered as scrap.

Rolled Brass Tubes and Blanks: Rolled brass tubes comprise 21 complete specimens and 18 rectangular blanks. The complete tubes range in length between 20 and 61 mm with a mean of 35.8 mm , while diameters range from 3 to 11 mm with a mean of 7.3 mm . Noteworthy, if the blanks are folded into a finished tube their mean diameter falls within 1 mm of the complete tubes analysed above. Metric comparison of brass tubes with their shell counterparts fails to reveal any significance.

Strung Brass Beads (Fig. 61, 13): Twenty-four uniform brass beads with a diameter of 4 mm are strung on a thin 1 mm thick brass wire. They were found in a single clump in the middle level of the disturbed ossuary.

Iron Axes and Portions: French iron trade axes are represented by 16 complete specimens and 4 fragments. Of the 16 complete axes, half occurred within individual houses. Indeed, house 2 contained no fewer than 3 complete iron axes (Fig. 39).

Most axes possess distinctive hallmarks in the form of various patterned stamps. In order to ascertain the significance of these stamps, the complete axes are measured and correlated with particular stamps (See Fig. 40.). This procedure was first attempted in Ontario by Dr. Walter Kenyon on his Fort Albany axe sample (pers. comm. W. C. Noble), and has since been elaborated by I. T. Kenyon (n.d.).





Provenience					No Stamp	N	%
House 1		1				1	6.2
2	1	1			1	3	18.8
3		1				1	6.2
4			1			1	6.2
5	1					1	6.2
10	1					1	6.2
Midden B	1					1	6.2
Surface	1	2		1	3	7	43.8
Totals	5	5	1	1	4	16	99.8

Fig. 39. Walker iron axe stamps and provenience.

At Walker it was found that two stamp hallmarks predominated: those with a single four segment circle, and those with a set of 3, four segment circles. The metric analysis reveals that the three stamp axes are usually a little over one-third heavier than the single stamp axes. Within the Walker assemblage there are 5 axes with the single stamp and 5 axes with the three stamp marking.


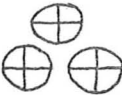


Stamp	Mean Length	Mean Bit Width	Mean Thickness	Mean Haft Length	Mean Haft Depth	Mean Weight	N
	180.5	98.7	39.3	55	58.7	1174.9	4
	196.4	100.0	40.6	59.4	60.0	1357.6	5
	183	105	41	50	61	1490.0	1
	170	-	36	53	45	-	1
No stamp	192.2	104.5	39.5	54.3	55.7	1238.4	4
Totals							15

Fig. 40. Walker iron axe metrics and stamps.

In view of the 90 years indiscriminant collecting from Walker, we may presume that the 20 axes analysed probably represent a small fraction of the total number of axes formerly at this site. However the proliferation of axes within individual houses (e.g. house 2), may mean that many axes remain at the site in contexts other than the middens favoured by former relic hunters. The village distribution of iron axes may also prove helpful in discerning those lineage households most actively engaged in trade. In any case, the Walker iron axe sample is relatively high, and it serves to further substantiate the important value placed on French trade goods by the historic Neutrals, and their ready access to these goods.

Iron Knives: All but one of the 18 fragmentary and complete Walker knives are in a marked state of corrosion. The single well preserved knife retains its original wooden handle (Fig. 60, 6), but displays an identifying hallmark. In C. Garrad's (1969:5) knife typology, this specimen is a type 3.

Brass Kettles and Portions: One near complete brass kettle comes from the bottom north periphery of the ossuary. This kettle preserved adhering bark lining the ossuary, as well as, preserved Hawthorn and Black Cherry seeds, and a fragment of a wooden ladle in its interior. Its diameter, depth and volume has been determined to be 22.8 cm, 20.3 cm and 6 litres respectively. The bail fasteners from this kettle measure 69 mm long by 58 mm wide with rivet heads 10 mm in diameter. A further eight portions of kettles are represented by one rim fragment and 7 bail fasteners,

clearly showing that the body portions of brass kettles were preferred for use as ornaments and tools.

Metal Awls: Of 9 metal awls recovered at Walker, 5 are iron. They range from 99 to 185 mm in length with a mean of 128.5 mm, while diameters range from 2 to 7 mm with a mean of 4.8 mm. Two other awls, manufactured from reworked knife blades, range between 126 and 133 mm in length with a mean of 129.5 mm, and both 12 mm in diameter. One of the iron awls has a diameter of 2 mm, and may have been used as a needle. Notable, one iron awl from within house one is hafted in a catlinite tubular bead (Fig. 60, 7). This unusual occurrence testifies to the contemporaneity of aboriginal and European exchange systems at Walker and also offers a different insight into uses for catlinite tubular beads.

Finger-Rings: Finger rings are fashioned from brass and iron. Six specimens of cut brass have a mean diameter of 19 mm and a mean thickness of 5.5 mm. The single iron specimen is most likely manufactured from a knife blade fragment and has a diameter and thickness of 30 and 7 mm respectively.

Brass Wire Chain: Constructed of 1 mm thick brass wire, this delicate chain has six surviving links each measuring 6 mm in length. Presumably the chain formed part of an individual's personal paraphernalia; it was recovered from the ossuary.

Metal Projectile Points: Projectile points occur in the form of 3 reworked iron knife tips and one eared point cut from brass. This latter specimen is highly stylized and may be more decorative than functional.

Brass Banglers: Of the 4 conical brass banglers analysed, only 3 could be measured. They range between 22 and 39 mm in length with a mean of 29.7 mm, while diameters range between 9 and 18 mm with a mean of 13 mm.

Metal Saws: Reminiscent of the serrated chert scrapers (See pg. 76) are 4 serrated saws. Three are fashioned from brass and one from the edge of a modified knife blade.

Metal Punches: Three tools, 2 produced on reworked knife blades and one from cut brass are thought to represent punches.

Coiled Brass Wire Pieces: Three pieces of coiled brass wire have diameters ranging from 17 to 24 mm with a mean of 19.3 mm. Precise functions for this commodity are unknown.

Iron Spears: Donated as part of the Wood collection, these two specimens have received extensive grinding and polishing to remove surface corrosion. Their assignment as spears, therefore, is tentative. One specimen possesses a serrated stem presumably as a hafting device and has an overall length of 93 mm. The second specimen measures 21.8 cm

long.

19th Century Items

Sixteen portions of iron and glass are intrusive at Walker and probably represent items associated with the original Walker homestead, formerly located in the hollow immediately northeast of the burial area. Among these goods are portions of a Kaoline pipe, blue ceramic ware, square cut nails and fragments of a glass globe, all dating to the late 1800's and early 1900's.

WORKED SHELL

Shell was employed in the manufacture of both decorative and utilitarian objects. Table 44 indicates that decorative specimens predominate at the Walker site, representing 93.5% of the worked shell inventory. Previous research into the use of shell (Wintemberg 1907), as well as ethnographic documentation (Jesuit Relations) assists in the analysis of the Walker assemblage. Absent from this analysis are the two-hole marine shell gorgets reported from Walker by Boyle (1903) and Ridley (1961:49). Most of these gorgets are manufactured from the shell mantle of the conch shell genera, Busycon or Strombosus, as well as the species Buccinum undatum (Whelk). All are members of the gastropod grouping derived from warm water marine coast areas of the American southeast and Gulf coast. Indeed, one specimen reported from Beverley Township was probably derived from the west coast of Central

America (Wintenberg 1907:88). The presence of such specimens at the Walker site argues for a rather complex and long range aboriginal trading (exchange) network.

Table 43. Walker worked shell.

Item	N	%
Discoidal beads	102	65.8
Tubular beads	34	21.9
Worked bivalves	9	5.8
Pendants	9	5.8
Gaming item	1	.6
Totals	155	99.9

Discoidal Beads

Marine shell disc beads are represented by 102 specimens. Most, if not at all, are manufactured from the species mentioned previously. Due to differential preservation, only 93 Walker specimens can be measured. These reveal bead diameters ranging from 4 to 16 mm. Fig. 41 indicates that small disc beads can be separated from the larger disc beads on the basis of a 10 mm division, and further suggests that perhaps different functions are inherent. Could the different sized

beads be correlated with different areas of wearing apparel or specific necklace chains?

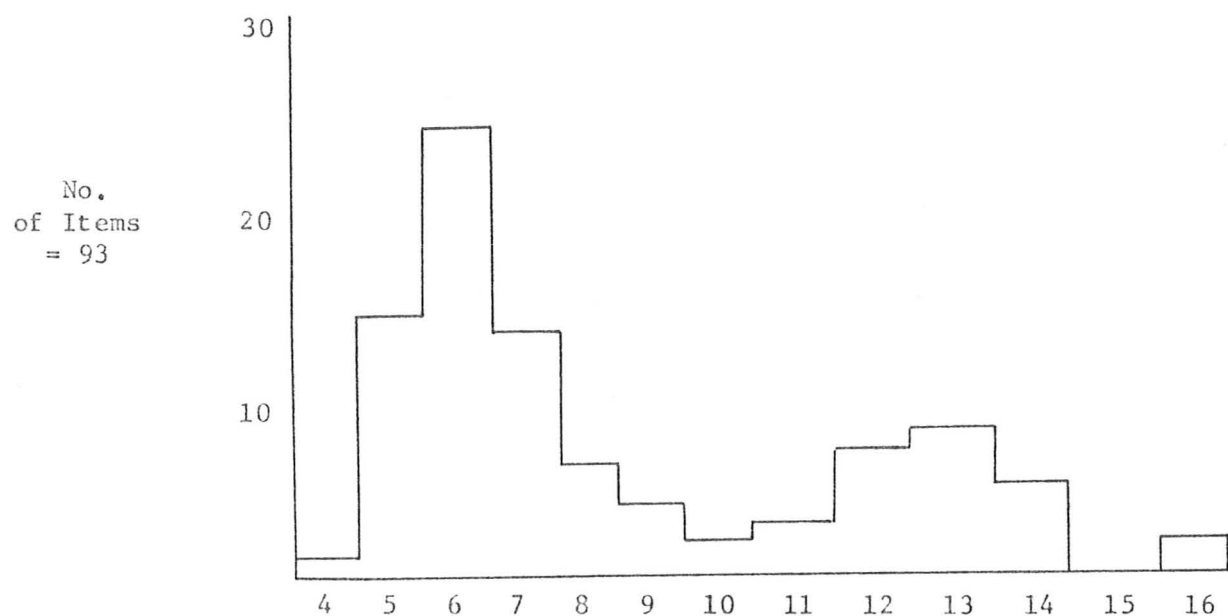


Fig. 41. Walker discoidal bead diameters in mm .

Tubular Beads

Of the 34 tubular beads analysed, 3 are formed from large columellia portions and are discussed separately below. Twenty-one of the remaining 31 small tubular beads could be measured, giving a mean length of 6.5 mm and mean thickness of 4.5 mm . Lengths of the small tubular beads range between 3 and 15 mm , while thickness is confined

between 4 and 6 mm . The large columellia beads range in length between 24 and 108 mm with a mean of 54.4 mm , while diameters range between 7 and 13 mm with a mean of 10.3 mm . All of the above specimens are fashioned from the marine shell genera mentioned previously.

Worked Bivalves

Nine worked bivalves all possess one or more ground edges, and presumably served as pottery smoothers, scoops or spoons. They are all of the fresh water genus Unio sp. (Wintemberg 1907).

Pendants

Nine pendants, all biconically drilled, include 7 manufactured from marine shell mantle portions, and one from a complete fossil Braichiopod. All possess a single line hole for suspension. The final two pendants are carefully shaped and incised about their proximal ends, presumably for thong suspension.

Gaming Item

A solid shell disc, 13 mm in diameter and 8 mm thick, is highly polished, and conforms to the shape of a gaming piece.

CULTIGENS

Floral remains from middens, house pits and burials include 305 items (Table 44). Most of this sample (65.3%) is non-carbonized, and includes remains of corn, beans, squash, nuts, wild plant fruits and seeds. The inventory serves to illustrate floral collecting activities, as well as the horticultural pursuits of the Walker villagers.

Table 44. Walker cultigens and fruits.

Item	N	%
Raspberry seeds	100	32.8
Corn	98	32.1
Hawthorn	75	24.6
Black cherry	20	6.6
Acorn	4	1.3
Squash	3	.9
Bean	3	.9
Hickory	2	.7
Totals	305	99.9

Copious non-carbonized wild raspberry seeds occur in the Walker middens and houses, and raspberry canes are plentiful on the site today. While some of the non-carbonized seeds could be intrusive, their predominant

distribution within house 3 substantiates use of wild raspberries by the historic Neutral at Walker. Raspberries are available in late July and can be used as a food additive (Yarnell 1964:59).

Of 97 carbonized corn kernels and a single cob fragment, all belong to the 8-row Northern Flint race of the Eastern Complex (Noble 1975:42, Yarnell 1964:107). Most of this carbonized corn (94 specimens) comes from middens while only 4 pieces are derived from house contexts.

Seventy-three Hawthorn seeds (Crataegus sp.) associated with a brass kettle excavated from the Walker ossuary in 1974, exhibit the extreme hybridization discussed by Yarnell (1964:99). Two or three different species are present. In addition, two hawthorn berries were preserved in pit 62 of house 4. Yarnell (1964:66) notes that hawthorn berries are available in late summer and have a variety of uses.

Black cherry pits (Prunus serotina) also occurred in the ossuary kettle. They too could have provided a food additive available in late summer (Yarnell 1964:62).

Four acorns (Quercus sp.) 3 from midden F and one from midden D are present. Only two of these specimens are carbonized.

Squash seeds (Cucurbita pepo) are represented by 3 complete specimens, all from midden D.

Three carbonized beans (Phaseolus sp.) include 2 from house 8 and one from midden H.

Hickory nuts (Carya sp.) are represented by 2 non-carbonized specimens, 1 from midden B, the other from midden F. A member of the walnut family, hickory nuts are available in early fall (Yarnell 1964:70). Wintemberg

(1939:6) noted their presence at the prehistoric Lawson Neutral village.

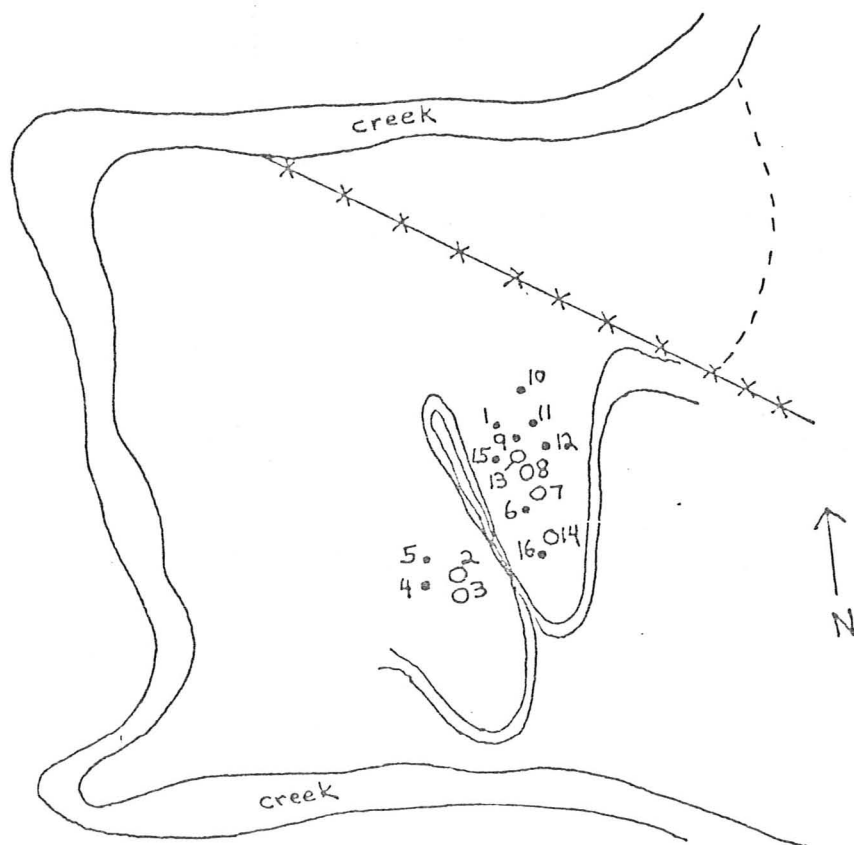
In sum the available evidence indicates that the Walker inhabitants were horticulturally engaged in raising corn, bean and squash crops, as well as collecting wild food supplements, particularly nuts and berries.

CHAPTER 4

BURIAL PATTERN

Walker burial patterns are elucidated through field excavation and the published reports of previous excavators. Burials concentrated on two knolls within the village limits have been extensively disturbed by years of indiscriminant digging. Two burials encountered in 1974 were located outside this area; an infant (6 mo.) placed in a pit outside house 5 and a single human phalanx from pit 4, house 2. Infant interments on Huron sites have been studied extensively by Mima Kapches, and the Walker infant burial is of a similar character. This burial pattern is thought to be the result of religious beliefs regarding the resurrection of infants (M. Kipaches 1976). Both ossuary and individual burial patterns occur at Walker and they help define the burial practices of the 1640 A.D. historic Neutral Iroquois.

Initial investigation and looting of the Walker burials began in 1880 with the opening of an ossuary by W. Dick. A report concerning this ossuary and its contents was published by Frank W. Waugh in 1902, and in 1903 David Boyle published a report based on the field notes of collector W. Dick who had extensively and destructively investigated the Walker burials. While Boyle's constructed site map (Fig. 42) and list of artifacts associated with the burials are interesting, it is unfortunate that many of the artifact and burial descriptions only state "...numerous relics of excellent quality and many different kinds..." were recovered (Boyle 1903:94).



Key:

1	2 individuals	9	8 individuals
2	65-70 individuals	10	1 individual
3	12 individuals	11	1 individual (infant)
4	9 individuals	12	1 individual
5	1 individual	13	12 individuals
6	8 individuals	14	'many' individuals
7	'many' individuals	15	1 individual (infant)
8	'many' individuals (one infant)	16	4-5 individuals

Fig. 42. Walker burial areas.
(after Boyle 1903)

Later in 1944 John Steele undertook excavations in the disturbed Walker ossuary areas and Frank Ridley (1961) published a partial account of Steele's excavations.

In July, 1974, the McMaster excavations attempted to more clearly define the nature of the burial pattern at Walker, as well as, to evaluate the extent of previous destruction.

Burial Test Trench

A 10 foot wide test trench, 155 feet long, was oriented along the crest of the sandy knoll immediately SW of House 2 (See Fig. 1). This trench passed through former "pot-holing depressions", and ossuary pits. Five burial pits are defined, all of which were badly disturbed and difficult to interpret. In two instances concentrations of disturbed bones from looted burial pits were noted (Fig. 43). Hearths, pits and post moulds were encountered, but presented no recognizable pattern.

Burial pits 1 and 2 contained fragmented human bone and European trade goods which included: an iron knife, a bit portion from an iron axe and a fragment of a brass kettle (Fig. 43). No depths could be determined for these badly disturbed burials.

Burial pit 3 was also badly disturbed, with a maximum depth of 2 feet 10 inches.

Burial pits 4 and 5 are closely spaced, and while pit 4 is small measuring 3 feet in depth, burial pit 5 may be the edge of a large

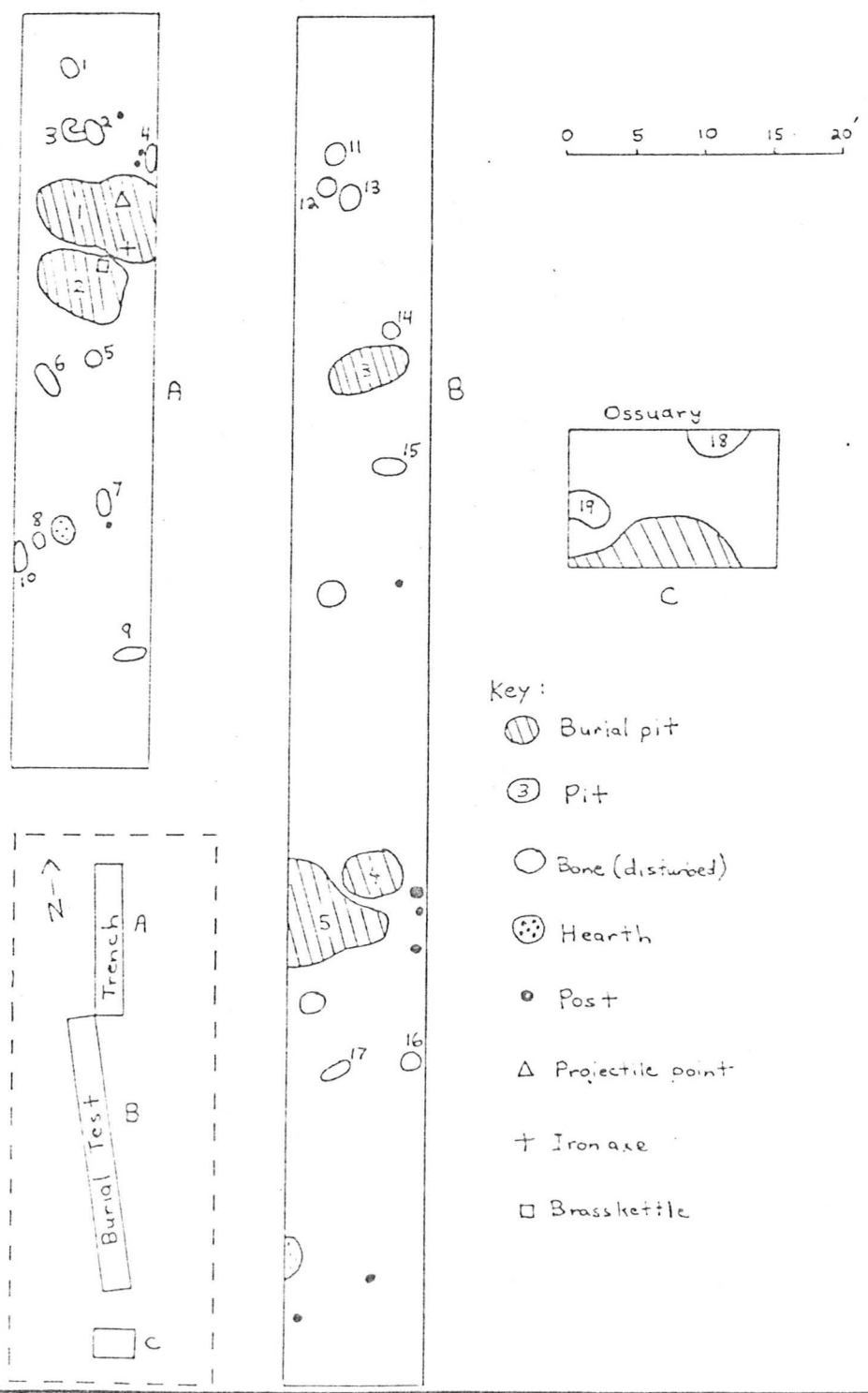


Fig. 43. Walker burial test trench and ossuary.

ossuary. Remains from four individuals were noted in burial pit 5, which is 2 feet 7 inches in depth and 7 feet wide along the west wall of the test trench.

Data from the test trench (Fig. 43), and David Boyle's map (Fig. 42), clearly establish this sand ridge as the main burial knoll at Walker.

Ossuary

Ossuary burial, defined as mass secondary communal burial (Noble 1968:70), was also practised by the Walker villagers. Boyle (1903:94) noted 6 burials containing more than 10 individuals distributed on two knolls within the village limits (Fig. 42). This deviates from the normal Ontario Iroquois ossuary burials, which were normally located some distance from the settled area of the village (Noble 1968:70).

One ossuary (Fig. 43 unit C), investigated in 1974, and profiled in Fig. 44, proved to be badly disturbed. Only half excavated, it had a roughly circular configuration with a diameter of 16 feet, and a maximum depth of 6 feet. Several interesting features were present in this ossuary, one of which was a subfloor burial pit.

The subfloor pit is 34 inches in diameter and extends 23 inches below the ossuary floor. A male is represented by the fragmentary remains and while no grave goods were associated, a single fleck of red ochre was noted in the pit fill.

The ossuary has a flat floor and retains a portion of its 4 inch thick brown clay lining (Fig. 44). The bottom 13 inches of the

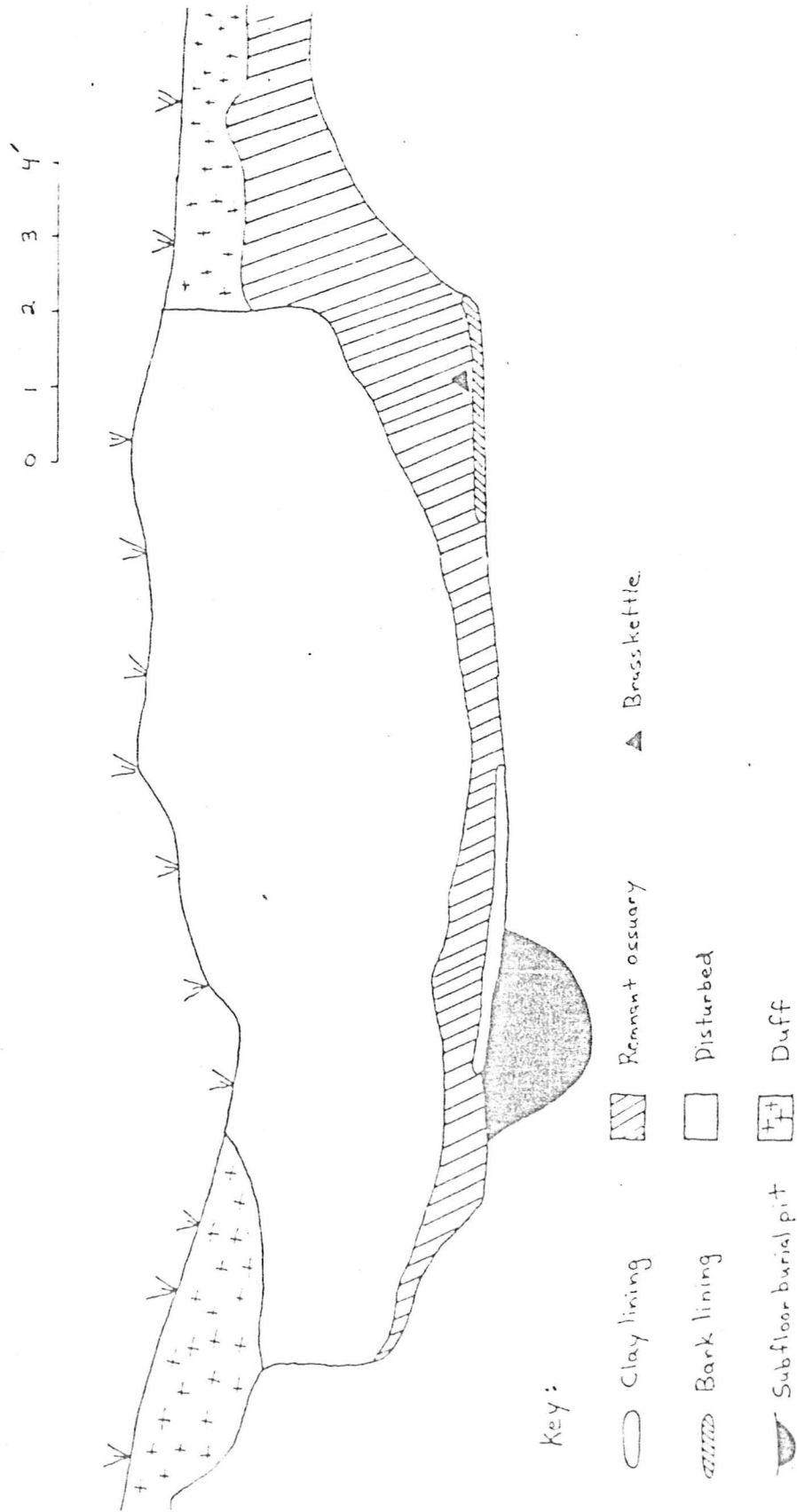


Fig. 44 . Walker ossuary profile.

ossuary was still intact, as was a larger portion in the extreme NW side. In this area a brass kettle was located, 4 feet 6 inches below ground level. Its interior preserved numerous seeds (See pg. 149); a portion of a wooden handle, and its exterior preserved a fragment of the ossuary's wall bark lining. Screening of previous excavator's backdirt yielded numerous European blue glass beads, discoidal shell beads and small brass and copper trade items.

Dimensions of recorded Walker ossuaries are summarized in Table 45. Notably the ossuary excavated by Steele in 1944 possessed a false floor, and the remains of wooden posts which supported the scaffold above the ossuary. None of these features were found in the ossuary excavated in 1974, and confirms the separate provenience of these two ossuaries.

Table 45. Walker ossuary dimensions in feet.

	Diameter	Max depth	False Floor
Waugh 1902	11	6 - 7	?
Boyle 1903	12	6	?
	8	5	?
Steele 1944	12	5	Yes 15"
Excavation 1974	16	6	No

The presence of a false floor in Neutral ossuary construction is unique in Northeastern Iroquois burial. The false floor consisted of a clay and sand layer upwards of 15 inches thick, which concealed a second burial chamber below the main ossuary. This pattern is noted prehistorically at the Fort Erie, Orchid site (Noble 1968:79), and at other historic Neutral sites (Ridley 1961:28) including Walker. None was evident in the 1974 ossuary, and Waugh and Boyle's notes are silent on the matter. Ossuary separation floors are thought to be an attempt to isolate discrete family-clan groupings, or perhaps as a distinction of social rank (pers. comm. W. C. Noble).

The burial pattern data from Walker defines several different modes of burial practised by the historic Neutral. Included here are single burials (especially infants) both within the village and on the burial knolls, small group burials surrounding the ossuary burials, and finally ossuary burial, with or without, the false floor construction. The range of burial practices at Walker displays a marked departure from the single ossuary interments which are the norm for Ontario Iroquois. There is evidence however that helps to explicate this pattern.

The period of Walker's occupation is approximately 1640 A.D. During the period from 1637 to 1640 disastrous smallpox epidemics are known to have swept the Neutral nation (Jesuit Relations 21:191). Walker's burial pattern is unlike the earlier Neutral sites, in that the burials are within the village limits, both single and group burials are practised and in two instances a burial pit was dug into an earlier

ossuary (Ridley 1961). This suggests that the dead are being quickly interred, rather than waiting for the traditional 'kettle' (Feast of the Dead) to be held (Noble 1968:70). It seems reasonable to assume that the panic created by smallpox epidemics would be sufficient for the Neutral to temporarily abandon traditional burial practices. Contemporary burial patterns for Walker have recently been discovered at the historic Grimsby ossuary site (pers. comm. W. Kenyon and W. C. Noble), as well as at the historic Seeley site.

CHAPTER 5

FAUNA

Faunal materials from the Walker site were submitted to the Zooarchaeological Identification Centre in Ottawa. The task of identifying the numerous faunal remains was carried out by Anne Meachem Rick, Elizabeth Silieff and Stephen L. Cumbaa. A summary of their analysis is presented here, while further details are presented in Appendix C. Table 46 summarizes the major faunal classes and representative individuals identified in the Walker assemblage.

Table 46. Walker faunal classes.

Class	Faunal elements		Individuals	
	N	%	N	%
Mammalia	7705	73.1	251	42.3
Pisces	1617	15.4	118	19.9
Aves	881	8.4	99	16.7
Mollusca	161	1.5	90	15.2
Amphibia	104	1.0	24	4.1
Reptilia	65	0.6	11	1.8
Totals	10533	100.0	593	100.0

Mammal

Clearly mammal remains dominate the Walker faunal assemblage, representing 73.1% of the identified remains. Thirty-five different species of mammal are recognized, with white tailed deer predominant and representing 70.2% of all identified mammals. Grey squirrel, raccoon and beaver provide the next major constituents of the remaining assemblage. Complete details of all mammal remains are tabulated in Appendix C.

Large game animals such as deer obviously provided a major source of food for the Walker villagers. Indeed, it has been determined that the 82 deer identified would have provided over 4 tons of usable meat (Table 47). In addition, the Walker artifact analysis has shown that deer bone and antler also provided an important source of raw materials for tool manufacture. Hides for clothing materials would also certainly constitute a significant use of the Walker deer.

Table 47. Meat provided by deer at the Walker site.

No. of individuals	Usable meat per individual	Total usable meat
3 (slightly under 6 mo.)	35 lb (15.9 kg)	105 lb (47.7 kg)
79 (over 6 mo. old)	100 lb (45.5 kg)	7900 lb (3594.5 kg)
Total		8005 lb (3642.2 kg)

Age estimates, formulated on 60 mandibular portions and degree of tooth wear (Table 48), indicate a wide range for the Walker deer, and suggests that no selective hunting techniques were employed. This further suggests that deer drives were probably the preferred hunting technique employed (G. K. Wright 1963:15). Too, the distribution of skeletal elements suggests that entire deer were brought back to the village for butchering.

Table 48. Age distribution of Walker deer remains.

Age Group	N	%
Less than 6 mo.	3	5.0
7 mo. - 1. years	9	15.0
1 - 2 years	9	15.0
2 - 3 years	11	18.3
3 - 4 years	10	16.6
4 5 years	15	25.0
5 years or more	3	5.0
Totals	60	99.9

It is presumed that the majority of deer hunting was undertaken during late summer until late January, the period when hides are in prime condition.

Pisces

Fish remains include 1,671 identified portions, or 15.4% of the faunal assemblage. The usable meat derived from this source is only 154 kg, or less than 1/20th of the usable meat provided by deer. While fish resources are not a major source of food for the Walker villagers, they no doubt provided a valued adjunct to the daily diet. Details of all identified fish species are presented in Appendix C, but suffice it to say that most of the 19 species identified would be available in the immediate site area, from the resource rich Grand River. Species obtainable in Lakes Erie or Ontario are minimal, with 26 elements representing 2 individuals of whitefish/cisco in the assemblage.

Aves

Twenty-nine bird species are present in the Walker assemblage, 18 of which are terrestrial birds. Passenger pigeon is abundant with 746 elements identified representing 59 individuals (Appendix C). Wild turkey is represented by 5 individuals; however, these birds would provide 20% more usable meat than all of the passenger pigeon combined. As in the case of fish remains, birds provide only a minor input into the Walker subsistence base. However, the wide range of species taken clearly bespeaks their importance as a desired food adjunct. Fig. 45 presents the seasonal range of the birds taken by the Walker villagers.

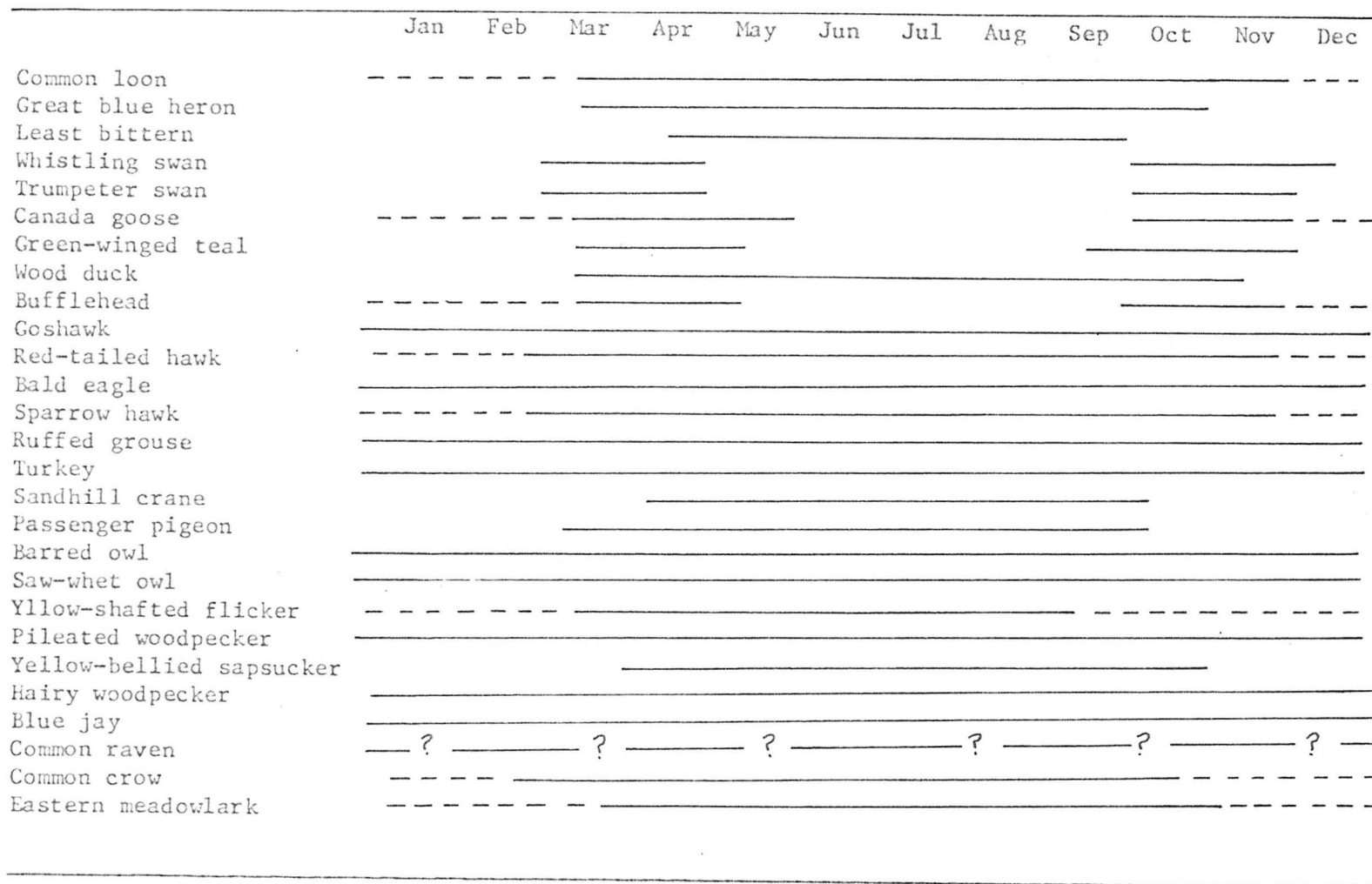


Fig. 45. Seasonal occurrence of bird species in the Walker site region.

(from Rick and Silieff 1976:22)

Mollusca

A complete tabulation of molluscs from Walker is presented in Appendix C. While many of the species may have been used as food additives, many could also have been used as utensils, especially the fresh water bivalves Unio sp. . Marked erosion on these specimens has obliterated many worked edges. Notable, fresh water mussels Lasmigona costata derived from the Grand River occur at Walker.

Amphibia

Represented by 104 elements, or 24 individuals, frogs and toads provided only .24 kg of usable meat. Clearly amphibians do not form an important part of the Walker subsistence base.

Reptilia

A total of 65 reptile remains are identified and only one is a member of the colubid (snake) family. The remaining specimens are dominated by snapping turtles and painted turtles. Truly a viable food resource, many of these turtles were probably also sought for their shells for making ceremonial rattles.

In conclusion it can be stated that the Walker people had a wide subsistence base that exploited the full faunal potential of their local environment. As well, the seasonality expressed in the faunal inventory indicates that the village was occupied year round, although

periodic fishing and hunting expeditions emanated from Walker. Most noteworthy is the Walker people's heavy reliance upon white tailed deer. Clearly the meat provided by these animals formed a major adjunct to the cultigen crops raised by the Walker villagers.

CHAPTER 6

DISCUSSION

Completion of detailed analyses allows formulation of synthesis statements regarding the Walker site and the historic Neutral in general. Also, data from the ethnohistoric records serves to augment the foregoing archaeological analysis.

Settlement Pattern

The study of Neutral settlement patterns can be traced to the pioneering work of W. J. Wintemberg (1939) with the excavation and analysis of the prehistoric Lawson site. For the late prehistoric and historic periods, however, work has only been undertaken during the last decade. This work has originated from McMaster University, largely under the direction of W. C. Noble whose major excavations at the proto-historic Cleveland village, the historic Christianson village and the large historic towns of Walker and Hamilton, have provided the first definitive statements regarding historic Neutral settlement patterns (Noble 1972). Notable, while Walker provides significant new data regarding Neutral settlement patterns, it also displays developmental relationships to both earlier and later Neutral house structures and village configurations.

The location of the Walker town is typical of historic Neutral sites in that it is situated on naturally defensible land, away from navigable water bodies, but endowed with a reliable water source (springs).

Walker is atypical only in its size, and this may be due to its function as a capital village. Dallion in 1626 noted different sizes and functions of historic Neutral villages when he related,

...nation (Neutral), composed of (in number) twenty-eight towns, cities and villages, made like those in the Huron country, and also of several little hamlets of seven or eight cabins, built in various parts convenient for fishing, hunting or agriculture. (G. K. Wright 1963:23)

Walker's 10 acre size and the diversity of material culture items present in the foregoing analysis strongly suggests that it was a major focal point for the peoples of historic central Neutralia. It is most probable that large sites such as Walker and Hamilton were capital towns surrounded by smaller local villages and hamlets. If Noble (1976:6) is correct, these large towns and their satellites represent specific clusters on specific drainage systems, that probably are discrete 'tribal' units and territories. Kenyon (1972:7) also notes this settlement configuration, and on the basis of preliminary analyses suggests that distinguishable ceramic differences may be extant for these site clusters. The clusters in turn may represent political units of the Neutral confederacy.

Palisades are expected on historic Neutral villages (Noble 1972:2), and Walker is atypical in its lack of defensive structures. Natural defensive features and village size may account for this apparent anomaly at the Walker site.

Twelve house structures excavated at Walker provide the first comprehensive statements regarding historic Neutral habitations. Although Dallion (1626) and the Jesuit fathers (1640) resided in Neutral

villages for short periods we have no specific details from these eye-witnesses concerning the methods of house construction or their form.

House size at Walker ranges from 21 to 116.5 feet in length, emphasizing an evident variability in historic Neutral houses. While house length is variable, overall house morphology exhibits homogeneity across the town. In particular, houses possess squared rather than rounded ends, and large corner support posts are evident. Door openings are usually present at either house end, and only in the case of house 4 is a side door proposed. Interior partitions are largely absent in the Walker houses, but large central supports posts are common.

The Walker houses have internal refinements with orderly placement of hearth and pit features. Medially aligned hearths are closely spaced and associated with ash pits which may represent 'baking ovens' as noted by the Jesuits in 1640 (Jesuit Relations 21:223). Both soil stain and refuse pits are present, and they are aligned in such a way as to leave the sides of the house clear, presumably for sleeping areas. The distinctive linear 'slash' pits are present at Walker, and although slightly different than the classic Hamilton site slash pits, they do represent a definitive feature of historic Neutral house structures (Noble: personal communication). Most diagnostic of the Walker longhouses are the wall staining features, interpreted as being the result of disintegration of an intrenched bark insulating flap.

Like the Huron, the Neutrals usually aligned their houses in to the prevailing winds, but at Walker there is also a concern with optimum economy of interior village space. Houses are placed very close to one another and are decidedly correlated with the direction of natural sandy ridges.

The small 'cabin-like' house, first seen at the circa 1615 A.D. historic Christianson site (Noble 1970), apparently continues to 1640 A.D. as evidenced at Walker. None, however, was found at the 1650 A.D. Hamilton site (P. Lennox: personal communication).

As the longhouse is the normal physical expression of the Iroquois lineage (Noble 1968), the presence of small house structures suggests that hard and fast architectural/social correlations such as the above may not apply in the case of the historic Neutral. On the other hand, some Neutral extended families (lineages) may have been genuinely small in number.

Middens are prolific at Walker, but unfortunately all had been disturbed by previous digging. Both side-hill and intra-village middens were used by the Walker inhabitants, and in some cases it is possible to correlate a particular dump with a specific longhouse.

Burial Patterns

As recorded by the Jesuits (Jesuit Relations 21:199), the Neutral held great reverence for their dead, and while they disposed of their

dead in a manner generally similar to that of the Hurons, several specific differences are noted. At Walker, the final cemeteries are within the settled village area, a feature most atypical of the Huron practice (Noble 1968). In addition, single, small group and ossuary interments occur contemporaneously at Walker.

The burial area at Walker is extensive and evidence exists that burials have been dug into earlier interments. This latter point suggests that some Walker individuals were dying and being interred without final 'Feast of the Dead' ceremonies. Such an occurrence is intelligible and entirely feasible in view of the massive small pox epidemic reported among the Neutrals during 1638-40. Taking many victims, the small pox epidemic is the most probable cause for disrupting the normal Neutral burial pattern of ossuary interment. A further point of departure between the Neutral and all other Iroquoian groups lies in the construction of ossuaries. Often, a 'false floor' (Noble 1968), and secondary burial chamber occurs in Neutral ossuaries (Ridley 1961:29). Notable, not all ossuaries at Walker had this unique feature.

Subsistence Pattern

The Walker people ate well, as testified by their extensive subsistence base which includes a wide and varied inventory of floral and faunal species. Like the Huron, the Neutral cultivated corn, beans and squash, and collected numerous wild plant fruits and seeds.

Unlike the Huron, however, the historic Neutral diet had a heavy faunal input, especially of white tailed deer. Dallion specifically noted the abundance of deer during his visit of 1626, and also commented on the communal hunting technique employed for their capture.

...There is an incredible number of stags, which they (Neutral) do not take one by one, as is done on this side (Huronian), but, making three enclosures in a spacious place, they run them (deer) all ahead, so that they enclose them in this place, where they take them...(G. K. Wright 1963:15)

Lalemant also noted the abundance of game exploited by the Neutrals for the years 1640-41:

The people of the Neutral Nation greatly excel in hunting Stags, Cows, wild Cats, wolves, black beasts, Beaver, and other animals...They have also multitudes of wild Turkeys, which go in flocks through the fields and woods. (Jesuit Relations 21:195)

The abundance of game noted by the early ethnographers is substantiated by the Walker faunal inventory. Moreover, it appears that the Neutral relied extensively on their faunal resources to the detriment of their cultigen stores. Brébeuf in 1640 noted this reliance on game,

...of which, notwithstanding, she had an abundance (of meat) at that season (fall), and on which alone the inmates of her cabin lived... (Jesuit Relations 21:198).

The shortage of corn supplies in Neutralia was also noted by the Jesuits.

The famine this year (1639) is rather serious; but it is worse in the Neutral nation, where children are sold like slaves in order to procure corn. (Jesuit Relations 15:157)

...there are at least twelve thousand souls in the whole extent of the country (Neutralia) able to furnish four thousand warriors, notwithstanding the wars, famine, and sickness which for 3 years have been unusually prevalent there. (Jesuit Relations 21:191)

It is clear from both the archaeological and ethnographic data that the Neutral relied heavily on a meat diet, with cultigens having a secondary preference and importance. This emphasis on a high protein diet may explain Lalemant's comment that the Neutral were healthier than the Huron (Jesuit Relations 21:199).

Artifact Observations

Although years of indiscriminant digging has depleted the artifact inventory at Walker, the Walker artifact analysis provides a comparative baseline for the interpretation of late historic Neutral material culture (i.e., circa 1640 A.D.).

Lithics, both artifacts and chipping detritus, are prolific on historic Neutral sites and Walker is no exception. The analysis of the Walker flake assemblage defines a secondary chipping industry, dominated by percussion flakes (76.9% of assemblage), resultant from the working of cores. The locally abundant nodular-bedded Devonian cherts provided numerous cores, many of which possessed ready made striking platforms. No bipolar cores are analysed for Walker, a feature in marked contrast to the Hamilton site lithic assemblage (P. Lennox: personal communication). Also, the categorical weight analysis of Walker chert detritus noted a bias towards large pieces, a feature also different than in the Hamilton assemblage. This bias towards large chert detritus deviates from Kenyon's (1975) proposal that the size of chert detritus diminishes with the progression from

early to late Neutral occupations. This too, may be linked to Walker's exceptional size.

The lithic artifact assemblage is dominated by scrapers and projectile points, with minor quantities of ground stone tools. Celts and adzes are vitually absent, presumably replaced by superior French iron trade goods. Serration of chert tool edges and flakes is an important attribute in the Walker assemblage, and as Fox (1972:6) suggests, this attribute may be useful in seriating Neutral sites.

Ceramic remains at Walker are represented by pottery vessels, smoking pipes, minor percentages of juvenile sherds and gaming pieces.

The attribute analysis of the Walker rimsherds revealed that three decorative techniques represent over 90% of the assemblage. They include: plain (31.7%); trailed (30.7%); and impressed/stamped (30.3%). Of the decorated rims, the oblique motif predominated representing 43.8% of the rim assemblage. Notably, lips and interiors of the Walker rims are usually plain (66.2% and 89.1% respectively).

Few castellations occur on the Walker rims, and when present they are usually either turreted or of the simple rounded variety. The majority of rims (44.3%) possess collars, but they are usually low with a mean height of 19 mm . Everted rims occur on 34.5% of the Walker vessels and most of these have no exterior decoration but do possess lip notching.

The necks of the Walker vessels are largely plain (93.5%), as are the vessel bodies (90%). Shoulders form the juncture of the vessel body and neck, and in 90.5% of the Walker sherds this juncture

profile is a sinuous 'S'. Consistent with other portions of Walker vessels the shoulder area is largely plain (60.4%), but a number of impressed shoulder decorations may hold seriatinal value. The Walker vessels are globular in shape, excepting a minority of small decorated body vessels.

Included in the Walker ceramic assemblage are minor occurrences of shell tempering, corded wares, rim appendages and podial feet. These distinctive ceramic attributes only appear on the proto-historic and historic Neutral sites (Kenyon 1972:4), and Kenyon suggests that Whittlesey components are prime candidates for some of these influences (Kenyon 1972:9). Ridley (1961:59) suggests that Ft. Ancient and Monongahela components may also be influencing late Neutral ceramics. While the aforementioned traits are only minor in the Walker ceramic assemblage, the Hamilton site contains abundant shell tempering and corded wares (P. Lennox: personal communication). This would suggest that ceramic differences are present in discrete areas of Neutralia, and/or that temporal considerations account for the observed differences, Hamilton dates circa 1650-55 A.D. (Noble: personal communication).

Smoking pipes are represented by non-effigy and effigy forms, with the former outnumbering the latter 4 to 1. The pipes are well made, in contrast to the ceramic vessels, and the lithic pipes in particular, exhibit fine workmanship. Many of the pipe effigies seen at Walker are replicated in Huron pipe assemblages where Noble (1968) has attempted to correlate pipe effigies with lineage eponyms. This may

also apply to Walker. The non-effigy pipes are dominated by the apple-bowl (acorn-cup) variety, and decorative motifs on these pipes may hold seriatinal value. Pipe stems are straight and are manufactured by the burned out reed method. Mouthpieces are knobbed, or tapered, with marked evidence of tooth grinding.

Worked bone and antler are well represented at Walker and served utilitarian, decorative and gaming functions. In particular, the rich bone tube and bead assemblage at Walker appears to have inferential value in the interpretation of Neutral religious beliefs. While bone gaming items are present, the idea of gaming appears to be on the wane during historic times.

Preservation of shell at Walker was generally poor; however, the specimens analysed are comparable with other historic Neutral sites and substantiates the presence of wide-ranging aboriginal trade networks. In particular, the bimodal distribution of the Walker discoidal shell beads, suggests that size may determine different functional uses. As well, the presence of marine shell gorgets at Walker (Ridley 1961:49) probably originate from the same southern source as the minority ceramic attributes discussed previously.

The Ethnographic Record

When first encountered by the early French explorers and traders, the Neutral Iroquois were concentrated around the west end of Lake Ontario, along the Niagara Peninsula and marginally beyond the Niagara

River into upper New York state. Later documentation by Recollet and Jesuit missionaries assigned tribal names to the historic Neutral, providing population estimates varying between 12,000 and 30,000, occupying some 40 villages (Jesuit Relations 21:189). There are also period maps locating the historic Neutral throughout the Niagara Peninsula, some of which provide tribal identifications (see G. K. Wright 1963:33). Research by Marion White (1972), and W. C. Noble (1974), has led to the delimitation of 7 named Neutral tribes and suggestions of 2 additional tribal divisions. The Walker town is located in the area attributed to the Attiouandaronk tribal unit (Noble 1974: map).

The name 'Neutral' was coined by Samuel de Champlain in 1615, when he observed that the Neutrals remained at peace with the then hostile Huron and Seneca nations (G. K. Wright 1963:1). This neutrality allowed for the safe passage of both Huron and Seneca groups while in Neutralia. The historic Neutral did engage in warfare however, and were allied with the Cheveux-relevés (Ottawas) against the Fire nation (Jesuit Relations 21:195). The Huron appellation for the Neutral was Attiwandaronk, or 'people of a slightly different language' (G. K. Wright 1963:2), and the converse is true for the Neutral appellation of the Huron. Data from the ethnographic record clearly shows that the Neutral were very similar to the Huron in many aspects of day to day life and their cultural milieu in general.

Specific details of historic Neutral social organization are few, but similarities with the Huron are suggested by Lalemant's statement that

...they (the Neutral) are, in almost all things, like the other Savages of these regions, especially in their irreligion and government, whether political or domestic (Jesuit Relations 21:199)

On the basis of this quote and other Iroquoian ethnographies, it is presumed that the Neutral practised matrilineal descent, the basic social unit being an extended family representative of a lineage, who lived together in longhouse structures. The Neutral were sedentary agriculturalists who cultivated "...Indian corn, beans and squashes..." (Jesuit Relations 21:195), but who also relied on a heavy faunal input into their diet (G. K. Wright 1963:20). Lalemant in the Relation of 1640-41 noted that the Neutral "...appear taller, stronger, and better proportioned..." than the Huron (Jesuit Relations 21:199). The heavy faunal input into the Neutral diet as exemplified by the Walker faunal inventory is perhaps one reason for Lalemant's observation. While Lalemant noted similarities between the Neutral and Huron, specific differences were apparent.

The Neutral held greater reverence for their dead than did the Huron (Jesuit Relations 21:199), by retaining the corpse within the longhouse for extended periods of time before interment. This concern for the dead may also have a bearing on the location of the Walker burial area within the settled village limits. The Neutrals are also noted for their practice of personal adornment, through painting and tattooing, a trait shared with the historic Petun (Jesuit Relations 1:279). A detailed account of this Neutral practice is provided by the Jesuit Francesco Bressani.

They paint their faces in various styles, and on sundry occasions, and many, their whole bodies...

and as regards tatooing,

...they perforate, or have others perforate, the skin. Thus they form on the face, the neck, the breast, or some other part of the body, some animal or monster- for instance, an Eagle, a serpent, a Dragon, or any other figure which they prefer...I know not whether a single individual was found, who was not painted in this manner, on some part of the body. (Jesuit Relations 38:249-53).

It is probable that many of the tatooed figures represented lineage eponyms of the historic Neutral (Noble 1974:6).

Lalemant also noted that throughout the Neutral nation were found 'Lunatics' (Jesuit Relations 21:197). These individuals (presumably always male) were supposedly possessed by a demon "...who speaks to them in dreams, and who makes them expect the fulfillment of their wishes for good success in hunting.", by performing extravagant acts (Jesuit Relations 21:197-201). Such extravagant acts would involve running through the longhouse scattering the fires and breaking objects in their path (Jesuit Relations 21:199). These 'Lunatics' may be linked with the activities of shamans in Neutral society.

As regards the Neutral dress, little difference is seen between the Neutral and Huron, except for the Jesuit comment that the Neutral were less modest (Jesuit Relations 21:197). Dallion noted further the similarity between the Neutral and Huron when he stated, "Their life, like that of the Hurons, is very impure, and their manners and customs are quite the same." (G. K. Wright 1963:13).

Trade Patterns

Both aboriginal and European trading networks are evident at the historic Walker town. European trade items are prolific at Walker, and help to establish its late date. The aboriginal trade networks are of particular interest, for it appears that both material goods and people are moving into Neutralia during the early 17th century.

The Neutral involvement in the French fur trade was indirect in nature, with most of the goods arriving through Huron middlemen (G. K. Wright 1963:10-12). This situation was resultant from the Neutral's inability to navigate large bodies of water, but moreso from the Hurons concerted efforts at keeping the French out of Neutralia (Grant 1967:304, Jesuit Relations 21:213). Much of the difficulty encountered by the early missions to the Neutral resulted from malicious rumours circulated by the Huron. Rumours of disease and sorcery were spread ahead of the French missionaries so that no direct trade links could be established which would eliminate the Huron middleman status (G. K. Wright 1963:24).

Trade items exchanged between the Neutral and Huron included furs and tobacco. Furs of 'outay' (black squirrel, Jesuit Relations 17:243n.8) were a valued Neutral trade item (Tooker 1964:111), and it is of interest to note that abundant squirrel remains are present in the Walker faunal assemblage. Exchange of people between Neutralia and Huronia is also a documented feature of the mid 17th century (Jesuit Relations 8:139, 151; 12:53; 21:233). While trade between the Neutral and Huron is historically documented, trade/exchange networks with more southerly groups

are less clear.

The historic era marks a significant increase in large marine shell artifacts and shell tempered ceramics in Neutral village middens (Kenyon 1972:5). These distinctive items could only arrive in the Hamilton area via the Niagara peninsula or the Detroit/Windsor area. The ceramics in particular are suggestive of ceramic complexes south and west of Lake Erie, including Fort Ancient, Whittlessey and Monogehela (Kenyon 1972, Ridley 1961). While the Niagara peninsula region served as a main route of travel/trade during the historic era, the region to the west (i.e. Michigan and N. W. Ohio) has been largely left uninvestigated. Recent evidence suggests that the Windsor area may be a possible route for some of the trade in large shell goods and shell tempered ceramics.

It is documented in the ethnographic record that the Neutral engaged in longstanding hostilities with the Mascoutin (Fire Nation, Jesuit Relations 21:195), a group of Algonkian speaking peoples to the extreme west (Jesuit Relations 21:125). The Atsistaehronons (Mascoutin) were a very populous nation and maps of the period (Sanson, Franquelin -- see G. K. Wright 1963:83), place the Mascoutin just west of the Windsor region. It was further noted by the Jesuits that this western nation

...which was not far removed from the sea; that the inhabitants of the place fished for Vignots, are a kind of of oyster, the shell of which serves to make porcelain beads, which are the pearls of the country. (Jesuit Relations 21:201)

Perhaps the sea referred to by Lalemant is in fact Lake Huron and a suggestion of trade in shell is certainly evident. Lalemant later

wrote of one engagement between the Neutral and Mascoutin which involved 2,000 Neutral warriors waging a 10 day siege against a palisaded village containing 900 Mascoutin warriors (Jesuit Relations 27: 25,27). Large villages are evident near Chatham and notably these villages contain abundant shell tempered ceramic wares. These village sites are probably the same as those reported by Lee as containing a mixture of Fort Ancient and Lawson ceramic traits (Lee 1952). It is historically documented that the Neutral returned with numerous Mascoutin captives in 1640 (Jesuit Relations 21:195), 14:285n.9), and this movement of people may have facilitated an avenue for the occurrence of unusual ceramic traits in historic Neutral sites. Thus, it appears that trade and warfare, both to the east and west of Neutralia, may have provided the previously discussed ceramic and shell traits seen on historic Neutral sites. The abundance of shell tempered wares on sites along the Bronte Creek drainage (Hamilton and Hood) may not be resultant from simple trade and adoption of captives, but could conceivably represent the intact movement of people into the Neutral area in response to League Iroquois hostilities during the late 1640's (P. Lennox pers. comm. 1977).

A major difficulty encountered when attempting comparisons between historic Neutral assemblages and contemporaneous groups in the Great Lake states, is the lack of published material in the latter area. In most instances no large scale excavations have been completed in the northern states and no historic settlement pattern studies are

available. Artifact collections are present but no analysis of a comparable nature to Ontario studies is available for review. In short, only until such time as large historic sites in the Great Lakes states are located, adequately excavated and analysed, can meaningful comparisons be formulated.

The Walker site, dating and historical significance

Throughout the Walker site analysis, several lines of evidence have been presented which assist in placing this large historic town during the terminal phase of Neutral development. Specifically, on the basis of trade beads and ethnographic data, the Walker site is thought to date circa 1640 A.D., shortly before the dispersal of the historic Neutral in 1650-51 by the League Iroquois. It is further suggested that the Walker town may represent one of the 'missions' claimed by the Jesuits in 1640-41, and there is evidence to suggest that the main mission to the Neutral, Mission des Anges, and Walker are one and the same. In order to substantiate this proposal a review of the pertinent data is warranted.

In a study of 1,245 trade beads from the Walker site, Ian Kenyon proposed a date of 1630 A.D. for the Walker occupation (I. Kenyon 1969:16). Kenyon noted however that differences in bead types between sites dating from 1630 to the late 1640's are minimal; major differences between these periods are evident in the quantitative aspect of bead types present. Due to this factor there is some overlapping possible

between sites dating from 1630 to 1640 A.D. It is also quite conceivable that the Walker site may have been continuously occupied for over 20 years and thus would encompass the period from 1630 till the collapse of the Neutral confederacy. That Walker may have been occupied for an extended period is suggested by overlapping house structures, pervasive midden deposits, the considerable burial area defined and the large size of the town.

A far more accurate means of establishing the chronological position of Walker would be its identification as a Jesuit mission site. The evidence which supports this identification can be drawn from the Jesuit Relations and the archaeological data.

Several Neutral 'missions' were claimed by the Jesuits in 1640-41, and while some of these are plotted on maps, accuracy is poor and some of the maps are not presently extant. Despite the efforts of early scholars, no precise mission sites have been established for the Neutral area. G. K. Wright provides a review of the postulated mission site identifications and the ethnohistoric data supporting these identifications (G. K. Wright 1963:76). It is evident that ethnohistory alone cannot lead to definite identifications, but in conjunction with the archaeological record 'mission' identifications may be possible.

In 1626, Joseph de la Roche Daillon noted that it took 6 days to journey from the Petun country to the first village of the Neutrals. From here, he passed through 5 villages to arrive at Ounontisaston, the capital town of the Neutral confederacy, and the residence of the

Neutral chief Souharissen (G. K. Wright 1963:79). Physical evidence of Daillon's 1626 visit may be present in the form of a large faceted bead (non-Jesuit), recovered from the Donovan site (AhHa-3) only 7½ miles northeast of the Walker town (Noble: personal communication). Daillon (like the later Jesuits) was attacked during his stay, with many of his possessions carried off (G. K. Wright 1963:25), thus offering an avenue for the occurrence of the glass bead at Donovan.

In 1640, the Jesuit Fathers Brébeuf and Chaumanot left the last village of the Huron, and travelling for 5 days arrived at Kandoucho, the first village of the Neutral which they named 'all saints' (Jesuit Relations 21:207). From this village the Jesuit fathers passed through "...many other villages and hamlets..." to arrive at the residence of Tsohahissen (Jesuit Relations 21:207). This town was also located in the midst of the country. Although there is a 14 year difference between the visits of Daillon and the Jesuits, it is probable that the towns noted were one and the same. This town was noted by both Daillon and the Jesuits as being located in the midst of the Neutral nation, and represented the capital of the entire confederacy. Daillon further noted that Souharissen (the Neutral chief) "...is the chief of the greatest credit and authority that has (ever) been in all these nations; for he is not only chief of his village, but of all those of his nation..." (G. K. Wright 1963:23). Similarly the Jesuits' reference to Tsohahissen also noted the fact that he was "...the chief of the country..." (Jesuit Relations

21:209). It seems clear too, that the town referred to is the 'mission' site of Notre Dame des Anges, the principle 'mission' to the Neutral in 1640-41 (Jesuit Relations 21:317n.17). In January of 1641 the Jesuits attempted to return to the village of Kandoucho, "...in which they seemed to be the least unwelcome..." (Jesuit Relations 21:225). However, mid-way on this journey a snow storm forced the fathers to take refuge at the village of Teotongniaton, named St. Guillaume. Here the fathers passed 25 days, during which they documented the Neutral grammar. After this Fathers Brébeuf and Chaumanot returned to Huronia.

Archaeologically, the first Neutral village likely encountered by the early missionaries probably would be one of a group of sites on the upper Bronte Creek drainage. The recent discovery of a Jesuit ring on the historic Hood site (Ailla-7), located on Bronte Creek, offers a possible candidate for the village of Kandoucho. Walker is the largest known historic Neutral town and is approximately 22 miles south of Hood, located in the midst of the known historic site distribution (Noble 1974:map). Located in the immediate vicinity of Walker are 4 additional historic sites, including the large historic Seeley site (see Fig. 63). Similarities are apparent between Seeley and Walker, specifically with regard to type and number of trade goods, artifact assemblages and burial patterns (Ridley 1961). Indeed, it is quite plausible that Seeley is contemporaneous with Walker. The other 3 sites are all less than 1 acre in extent (Kenyon: personal

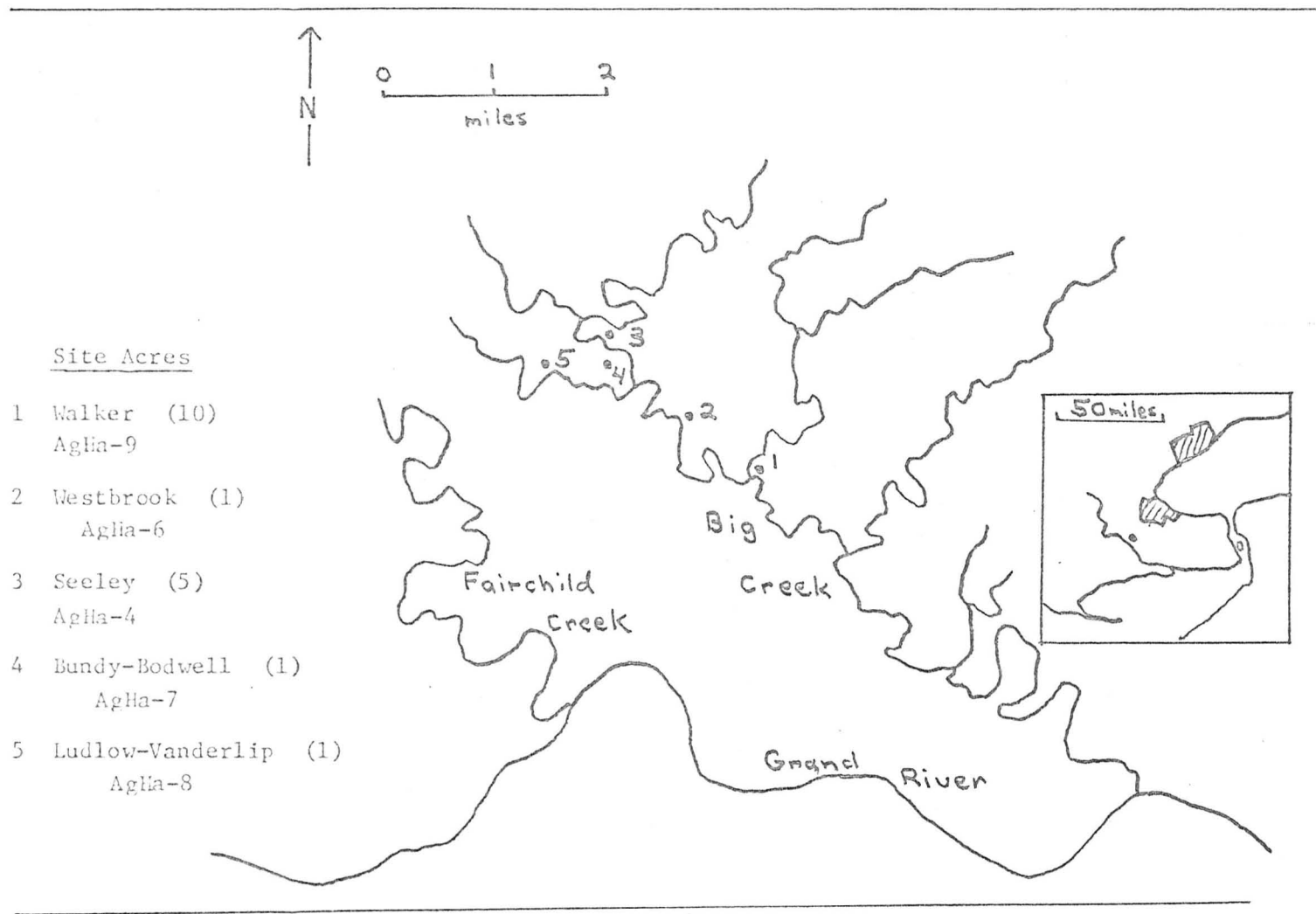


Fig. 63. Historic site cluster.

communication), and these may represent tribal units of the Neutral confederacy (Kenyon 1972:7, Noble 1972:6). This clustering of satellite sites has been noted by Heidenreich in Huronia (Heidenreich 1971:135), and Jesuit accounts of capital villages (Jesuit Relations 10:231) and rural cabins have been documented (Jesuit Relations 8:143, 14:49, 20:39). Thus, from the available ethnographic and archaeological records, it is proposed that Walker represents a capital village, at least of a tribal unit of the Neutral confederacy, located on Big Creek. It is further proposed that Walker's location in central Neutralia and its large size, argue for its position as the capital village of the entire Neutral confederacy and the main mission to the Neutral in 1640, Notre Dame des Anges. This proposal is supported by the archaeological data to date, and further investigations in Neutralia, especially in the northern site clusters that produce Jesuit material, may eventually define Jesuit movements during 1640-41. Once the Jesuit movements are placed on a firmer footing the status of Walker as a mission site can be reexamined.

Summary

The foregoing analysis has shown that the Walker site is a large 10 acre, non-palisaded Neutral Iroquois town occupied circa 1640 A.D. Walker provides the needed definitional refinement to the terminal period of Neutral development, as well as demonstrating trends and relationships extant during the late part of the Neutral sequence.

The absence of a palisade at Walker is atypical of historic Neutral villages, but natural defensive features are clearly evident. The 12

longhouse structures analysed are typical of the Ontario Iroquois, but do possess features distinctive to the historic Neutral.

Longhouses at Walker vary greatly in size, perhaps reflecting significant alterations of lineage structure during the late historic period. Internally the houses possess medial hearths and peripheral pits, with doors in either house end but no evidence of bunk lines.

Burials at Walker, though badly disturbed, define a unique pattern, and one that is directly linked to the impact of the historic era. Ossuary construction exhibits a unique Neutral practice, with the presence of a 'false floor' and secondary burial chamber.

Artifact trends are precluded in the absence of comparative material, but several notable characteristics of Neutral material culture are clear. Pottery vessels are largely non-decorated, collarless and grit tempered. Pipes display a range of effigy and non-effigy forms manufactured of both clay and stone. Lithics are most abundant and the assemblage is dominated by scrapers and projectile points. Worked bone and antler are well represented with many decorative and utilitarian functions. Shell, though poorly preserved, is diagnostic of this period and substantiates the wide ranging aboriginal trade networks. French trade goods are abundant and were clearly an important medium of exchange and personal esteem. Too, the Walker occupants made extensive use of disused trade items.

The subsistence base of the Walker villagers is represented by a wide range of both faunal and floral items. It is clear, however, that the fauna, particularly white tailed deer, accounted for a larger portion of the Neutral diet than did cultigens.

Specific comparisons between the historic Neutral and other groups would be premature at this time. Suffice it to say that relationships are clearly evident with the Huron and Petun, and certainly some influences are being derived from the Great Lake States, particularly those adjacent to Lake Erie.

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APPENDIX A

SOILS ANALYSIS

Pedological analysis of the Walker site was carried out concurrently with the 1974 archaeological investigation by Victor Konrad of the McMaster Geography Department. Three avenues of research were pursued; definition and analysis of soil types at Walker, delimitation of the settled village area as determined from depth of soil disturbance and analysis and definition of the unique wall staining feature, outlining some of the Walker longhouse structures. This appendix presents only the results of Konrad's analysis, and those interested in method and theory are referred to the original paper (V. Konrad 1975).

Soils

The Walker site is situated on a sand knoll which forms part of the Norfolk sand plain. Extensive erosion in the area has exposed underlying silt and clay deposits and effectively isolates the overlying sandy soils. The Walker site occupies one of these isolated sand areas.

To the west it (Walker site) is bounded by a steep ravine containing an intermittent stream which flows into Big Creek adjacent to the southwestern boundary of the site (Figure 1). On the south, the village site is bounded by a gentler incline which progressively decreases and extends to the flood plain of another intermittent stream which also feeds Big Creek. The relatively gentle slope of the southern boundary extends to meet the head of the ravine and forms the eastern boundary of the site. Their intersection marks the location of a spring. The site is well endowed with natural defences and a reliable water source.

A distinctive physiographic characteristic of the village site is its relatively extensive dissection by relict drainage



features which may still serve as seasonal runoff channels. These produce an undulating topography over much of the central portion of the site and effectively isolate the two areas of elevated and gently sloping sand plain (Figure 1).

Soils developed on the deltaic sands are classified as Fox sandy loams; soils developed on the silts and clays of the drainage channels and the slopes are classified as Tuscola silt loams; and soils developed on the poorly drained lower slopes and bottomland are classified as Toledo clay loams. (Konrad 1975:3)

It is noted that while the Fox soils are well drained the Tuscola and Toledo soils are not, and would retain higher moisture levels year round. Soil type appears to be a significant factor in the location of the Walker longhouses, a feature that is discussed in detail under soil disturbances at the Walker site.

Soil disturbance and the delimitation of the settled area:

The boundary between altered and relatively unaltered soils marks the perimeter of the village and may coincide with the location of the palisade and the limit of midden distribution. In the absence of any evidence of a palisade at Walker, and in the light of the extensive and irregular distribution of middens on the site, the evaluation of soil disturbance remains the viable rapid method for village delimitation.

While Heidenreich and Navratil (1973) employed the chemical indicators phosphorus and calcium in order to delimit the perimeter of the settled area at Robitaille, the delimitation of the Walker site is accomplished through an evaluation of the depth of physical soil disturbance caused by past human activity. The effects of subsurface, physical soil disturbance caused by house construction, pit excavation and other human activities should be in evidence in the soil profile if the village soils have not been altered subsequent to the Indian occupation. The upper soil horizons are highly susceptible to physical alteration and these effects are clearly visible in the profile for hundreds of years

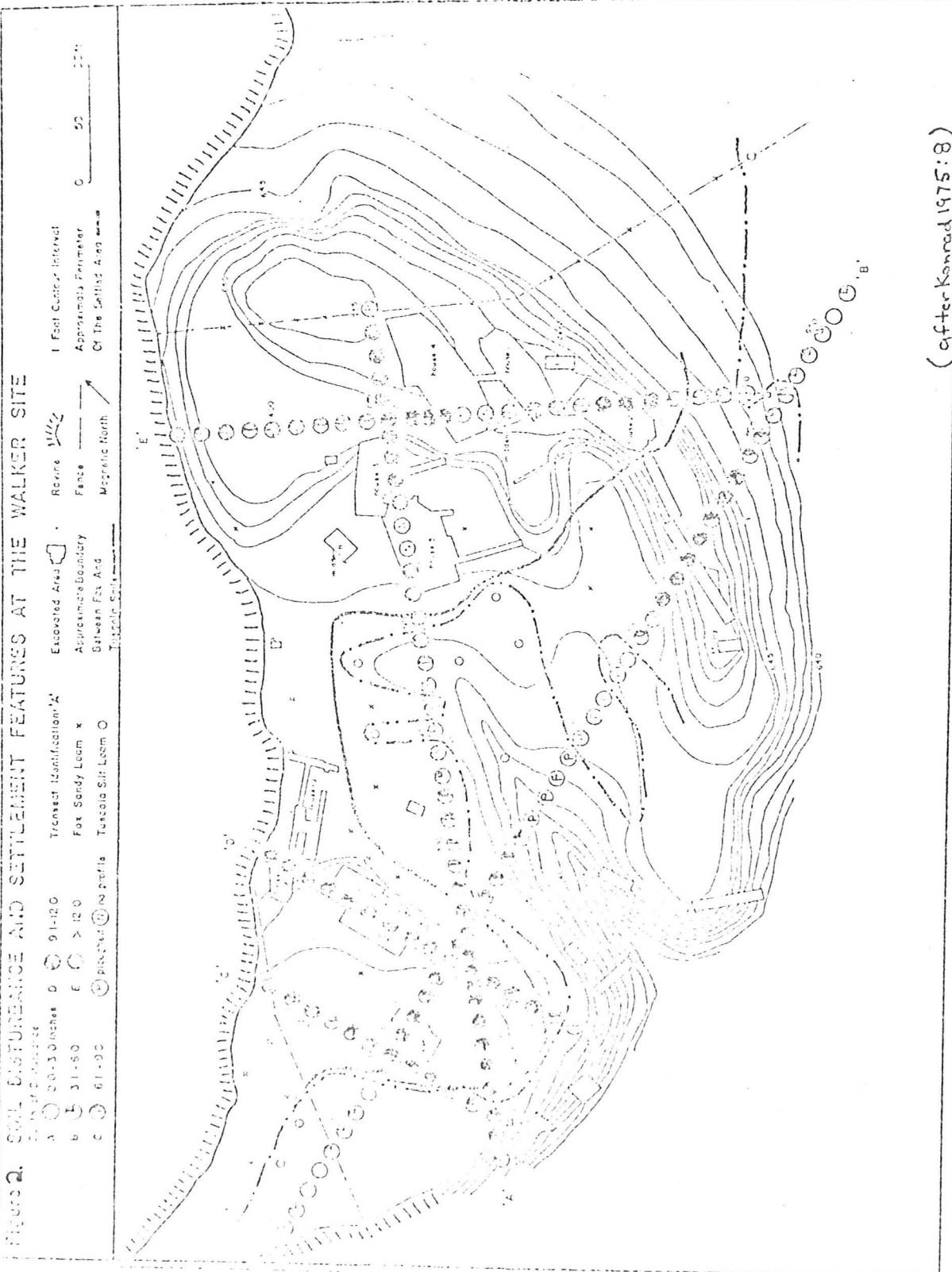
after the event, even after the A₁ horizon has re-established itself. A detailed evaluation¹ of the depth of disturbance across an Iroquoian site should then provide data on the distribution of soil alteration which can in turn be employed to determine the perimeter of the village site.

At the Walker site, the depth of physical soil disturbance was recorded in profile pits excavated at 20 foot intervals along intersecting traverses across the site between the ravine and the southern slope (Figure 2). The depth of disturbance varies from less than two inches to in excess of 12 inches. In order to establish the existence of any possible pattern in the depth of disturbance, the measurements are plotted by three inch class intervals. 'A' is the class of least disturbance and 'E' is the class of maximum disturbance. (Konrad 1975:7)

Figure 2 presents the relative soil disturbance across the site and shows that two areas are clearly demarcated. In turn these two areas are separated by the region of the poorly drained soils. Notably the soil disturbance profiles articulate well with the archaeological definition of the settled village area.

The proposed village limits define two distinct areas of concentrated settlement and a narrow band of occupation adjacent to the steep northern ravine. The narrow band of occupation joins the larger village segment to the northeast with the smaller settled area to the southwest. The overall settled area, excluding the untested portion of the site in the ploughed field and the burial area, covers approximately 5 acres. The entire village probably extended over an area of approximately 10 acres.

The most striking characteristic of the village morphology is the extensive unsettled area that separates the two village segments. It is clearly evident that the occupants of the Walker site avoided this interstitial area, consisting mainly of imperfectly drained and relatively compact Tuscola silt loams, in favour of the well drained and loose Fox sandy loams that bordered it. The advantage of a well drained and loose soil appear to have outweighed the disadvantages of spatial segregation. This certainly seems logical in that the compact Tuscola soils would inhibit house construction: posts could not easily be driven or dug into these soils. Perhaps more significant, the Tuscola soils would remain damp and cold for



a greater part of the year than the Fox soils. In fact, the area of Tuscola soils provided the channel for spring runoff. Any structures placed in this area would become uninhabitable during this season and also during winter thaws. (Konrad 1975:11)

Soil stains and the definition of longhouse walls:

At the Walker site, longhouse excavation in 1973 and again in the 1974 field season indicated the presence of dark stains in the Ae and upper B horizons, stains which followed the post mould patterns outlining the walls. The stains can easily be distinguished from the adjacent areas of Ae and B horizon soil by their colour when the soil is damp. They are characterized by brown hues while the adjacent soils are more of a yellow brown or orange brown (Table 2). The darker and brown colour of the stain suggests that they have a higher organic carbon content than the adjacent soils. The alignment of the stains with the posts that comprised the structural supports the organic materials employed in the wall construction. The organic carbon appears to have either leached into the Ae and B horizons since the construction of the longhouse, or was originally buried there as part of the structure itself.

If the stains do contain a high concentration of organic carbon, this element should be detectable in the soil. Furthermore, the amount of organic carbon in the stain should exceed the amount of organic carbon in the soil adjacent to the stain. The pH of the stain should be more acidic or lower than the pH of the adjacent soil.

In order to test these hypotheses, pH and organic carbon analyses were carried out on soil samples from the stains and the adjacent areas inside and outside the stains (Konrad, 1974: 29-30). Stain samples and corresponding control samples were taken from seven probable structures. (Konrad 1975:13)

Statistical analysis of the pH measurements failed to reveal a significant difference between the soil stain and the control samples. Konrad attributes this result to the variability of pH across the site.

Significant differences were seen in the levels of % organic content for the soil stain samples at Walker.

Since the stains follow the linear and curvilinear walls of the longhouse as defined by the remains of the support posts, and since these stains, when visible, are usually 8 to 12 inches wide, we can assume that they represent the remains of organic matter that once formed the walls of the structures. Although the stains may be the result of organic material that has been leached into the lower Ae and upper B horizons, more plausible is the explanation that the stains are the remains of decayed bark flaps which extended down from the walls and were buried in the soil by the occupants in order to insulate the gap between structure and ground surface. (pers. comm. W. C. Noble), (Konrad 1975:16)

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APPENDIX B

WALKER RIM SHERD DATA

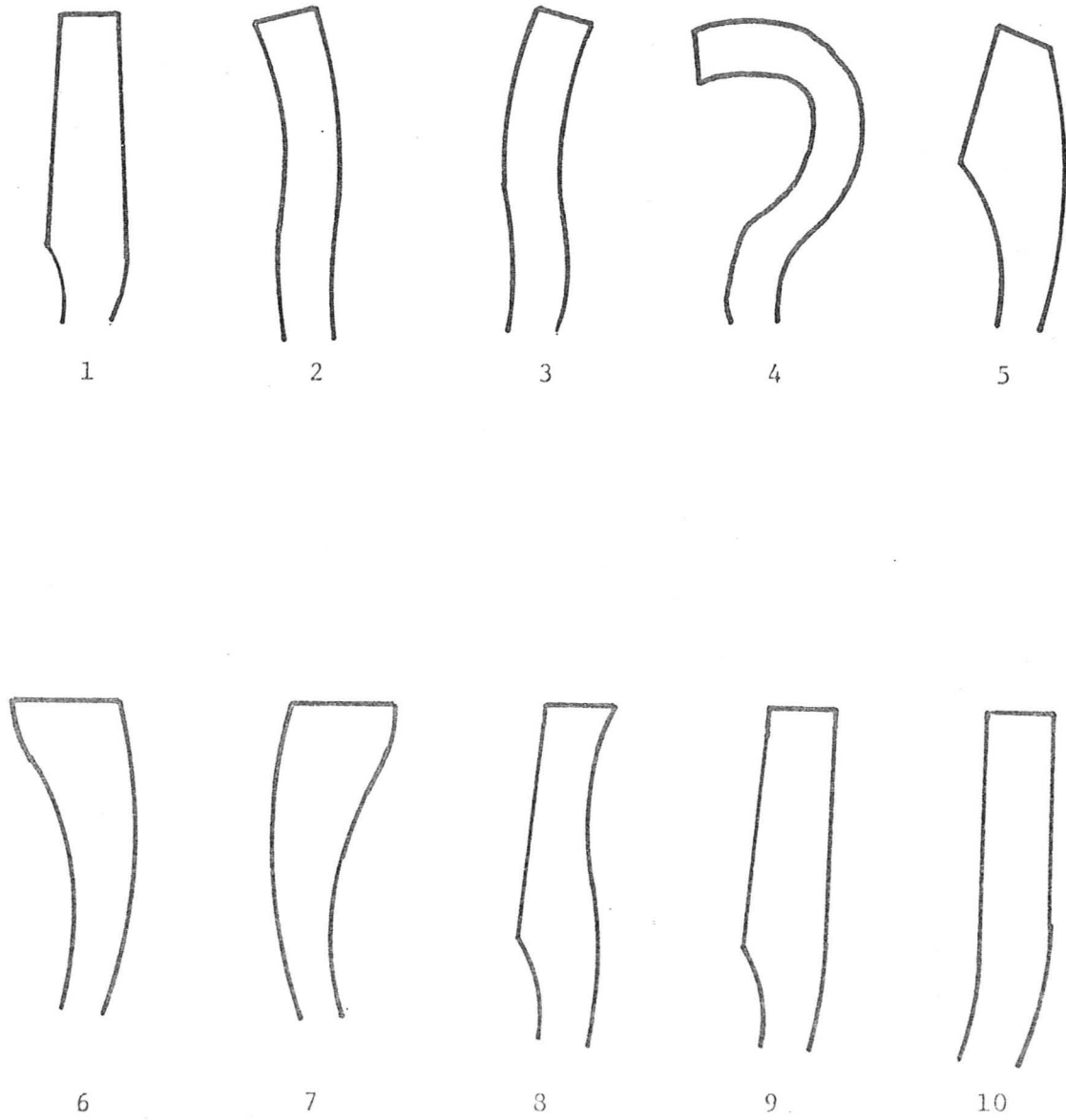


Fig. 1. Walker rim profile forms.
(exteriors to the left)

APPENDIX B

WALKER RIM SHERD DATA

This appendix provides detailed data regarding 684 Walker rim sherds. Under each major category of technique (such as Trailing) the following rim attributes are considered; exterior decorative motif, lip of rim decorative motif, interior decorative motif, collar, rim profile, castellation varieties, rim appendages and tempering material. The major technique given as the section heading applies to all motifs, except where an additional technique is cited.

Plain (Fig. 53)

Where the exterior has been left non-decorated, but often the lip and interiors do possess some decoration.

	Lip of Rim	
	N	%
Plain	102	47.0
Vertical/Notch imp.	36	16.6
Oblique/Linear imp.	16	7.4
Oblique/Notch imp.	16	7.4
Vertical/Linear imp.	13	6.0
Vertical/Trailed	5	2.3
Oblique/Trailed	5	2.3
Vertical/Fingernail imp.	4	1.8
Oblique/Fingernail imp.	3	1.4

	N	%
Triangular/Notch imp.	3	1.4
Vertical/Incised	2	0.9
Oblique/Incised	2	0.9
Vertical/Notch imp. (Ext. lip edge)	2	0.9
Opposed/Linear imp.	2	0.9
Vertical/Linear imp. (Ext. lip edge)	1	0.4
Triangular/Linear imp.	1	0.4
Triangular/Notch imp. (Ext. lip edge)	1	0.4
Oblique/Notch imp. (Ext. lip edge)	1	0.4
Vertical/Trailed (Ext. lip edge)	1	0.4
Destroyed	1	0.4
Totals	217	100.0

Interior Rim

	N	%
Plain	194	89.4
Vertical/Notch imp. (Lip edge zoned)	9	4.2
Vertical/Notch imp.	2	0.9
Oblique/Notch imp.	2	0.9
Oblique/Notch imp. (Lip edge zoned)	2	0.9
Vertical/Linear imp.	1	0.4
Oblique/Linear imp.	1	0.4
Destroyed	6	2.8
Totals	217	99.9

	Collar		Castellations			
	N	%		N	%	
Present	31	14.3	Rounded	9	4.2	
Absent	185	85.2	Turreted	6	2.8	
Destroyed	1	0.4	Absent	202	93.1	
Totals	217	99.9	Totals	217	100.1	

	Appendages		Temper			
	N	%		N	%	
Handles	2	0.9	Grit	216	99.5	
Lugs	1	0.4	Shell	1	0.4	
Straps	1	0.4	Totals	217	99.9	
Absent	213	98.2				
Totals	217	99.9				

Rim Profile

	N	%
1	1	0.4
2	115	53.0
3	8	3.7
4	1	0.4
5	3	1.4
6	10	4.6
7	4	1.8
8	9	4.2
9	5	2.3
10	33	15.2
Destroyed	28	12.9
Totals	217	99.9

Trailed (Fig. 51)

Where a stylus has been drawn across the clay surface, leaving a characteristic groove and ragged edge, with an accumulation of clay at the terminus of the trailed line. This technique is differentiated from incising by virtue of a groove width greater than 1.5 mm (See Noble 1968:159.).

	Exterior Rim	
	N	%
Obliques	103	49.1
Opposed obliques	41	19.5
Triangular zoned	18	8.6
Vertical	16	7.6
Criss-Cross	8	3.8
Herringbone	5	2.4
Vertical and oblique plat	3	1.4
Horizontal and oblique plat	3	1.4
Vertical (lip edge zoned)	2	0.9
Obliques over collar base notch imp.	2	0.9
Obliques over two collar base encircling lines	2	0.9
Obliques over collar base punctates	1	0.5
Opposed obliques over collar base punctates	1	0.5
Oblique (lip edge zoned)	1	0.5
Oblique over horizontals	1	0.5
Horizontal and vertical plat	1	0.5
Totals	210	100.0

Lip of Rim

	N	%
Plain	146	69.5
Vertical/Notch imp.	24	11.4
Vertical/Linear imp.	10	4.8
Oblique/Notch imp.	7	3.3
Oblique	6	2.9
Vertical	2	0.9
Triangular/Notch imp.	2	0.9
Vertical/Notch imp. (Ext. lip edge)	2	0.9
Oblique/Notch imp. (Ext. lip edge)	1	0.5
Criss-Cross	1	0.5
Destroyed	7	3.3
Totals	210	99.8

Interior Rim

Plain	177	84.3
Vertical/Notch imp. (Lip edge zoned)	17	8.1
Oblique	3	1.4
Vertical/Notch imp.	2	0.9
Oblique/Notch imp.	1	0.5
Oblique/Notch imp. (Lip edge zoned)	1	0.5
Vertical	1	0.5
Destroyed	8	3.8
Totals	210	100.0

	Collar		Castellations		
	N	%	N	%	
Present	130	61.9	Rounded	12	5.7
Absent	59	28.1	Turreted	10	4.8
Destroyed	21	10.0	Complex (Handles)	2	0.9
Totals	210	100.0	Pointed	1	0.5
			Scalloped	1	0.5
			Absent	182	86.7
			Destroyed	2	0.9
			Totals	210	100.0

	Appendages		Temper		
	N	%	N	%	
Handles	2	0.9	Grit	206	98.1
Lugs	2	0.9	Shell	4	1.9
Absent	205	97.6	Totals	210	100.0
Destroyed	1	0.5			
Totals	210	99.9			

	Rim Profile	
	N	%
1	31	14.8
2	31	14.8
3	16	7.6
5	7	3.3
6	2	0.9
8	28	13.3
9	34	16.2
10	11	5.2
Destroyed	50	23.8
Totals	210	99.9

Linear Impressed (Fig. 50)

This technique involves a smooth-edged tool, which is impressed into the clay, leaving a single narrow impression, with no discernible secondary movement. The motor habit involved is identical to stamping.

Exterior Rim

	N	%
Obliques	59	62.7
Vertical	22	23.4
Vertical (Collar base zoned)	3	3.2
Obliques above verticals	3	3.2
Opposed obliques	2	2.1
Vertical (Lip edge zoned)	2	2.1
Criss-Cross	1	1.1
Oblique above collar base punctates	1	1.1
Verticals above collar base notch imp.	1	1.1
Totals	94	100.0

Lip of Rim

Plain	60	63.8
Vertical/Notch imp.	13	13.8
Vertical	7	7.4
Oblique/Notch imp.	2	2.1
Oblique	2	2.1
Oblique (Ext. lip edge)	2	2.1

	N	%
Vertical/Notch imp. (Ext. lip edge)	2	2.1
Vertical (Ext. lip edge)	1	1.1
Oblique/Notch imp. (Ext. lip edge)	1	1.1
Oblique/Notch imp. (Int. lip edge)	1	1.1
Vertical/Incised	1	1.1
Destroyed	2	2.1
Totals	94	99.9

	Collar		Castellation		
	N	%	N	%	
Present	83	88.3	Turreted	2	2.1
Absent	9	9.6	Absent	91	96.8
Destroyed	2	2.1	Destroyed	1	1.1
Totals	94	100.0	Totals	94	100.0

	Appendages		Temper		
Strap	1	1.1	Grit	92	97.9
Absent	93	98.9	Shell	2	2.1
Totals	94	100.0	Totals	94	100.0

Rim Profile

	N	%
1	14	14.9
2	22	23.4
5	6	6.4
6	3	3.2

	N	%
7	2	2.1
8	22	23.4
9	15	15.9
10	6	6.4
Destroyed	4	4.3
Totals	94	100.0

Notch Impressed (Fig. 51)

Where a smooth-edged tool is impressed directly into the clay with no discernible secondary movement. In motor habit this technique is identical to Linear Impressed. The distinction between the two lies in the decorative element, where Notch Impressions must be half as wide, as they are long. Thus, Notch Impressions are basin-like in form, while Linear Impressed elements resemble straight line grooves.

Exterior Rim

	N	%
Vertical (Collar base zoned)	19	24.4
Vertical	17	21.8
Vertical (Lip edge zoned)	15	19.2
Oblique	13	16.7
Oblique (Lip edge zoned)	4	5.1
Oblique waved plat	2	2.6
Oblique above vertical (Collar base zoned)	2	2.6
Vertical (Lip edge zoned) and Collar based zoned	1	1.3

213

	N	%
Vertical above and below Horizontal/Trailed line	1	1.3
Triangular zoned	1	1.3
Opposed obliques	1	1.3
Oblique (Lip edge zoned) above Oblique/Incising	1	1.3
Vertical above and below Opposed/Incising	1	1.3
Totals	78	100.2

Lip of Rim

Plain	61	78.2
Vertical	8	10.3
Opposed	3	3.8
Oblique/Linear imp.	2	2.6
Vertical/Linear imp.	1	1.3
Opposed obliques/Fingernail imp.	1	1.3
Vertical/Push-Pull	1	1.3
Vertical/Corded stick	1	1.3
Totals	78	100.1

Interior Rim

Plain	67	85.9
Vertical (Lip edge zoned)	7	8.9
Vertical (Linear imp.)	1	1.3
Destroyed	3	3.9
Totals	78	100.0

	Collar		Castellations		
	N	%	N	%	
Present	48	61.5	Turreted	2	2.6
Absent	26	33.3	Absent	76	97.4
Destroyed	4	5.1	Totals	78	100.0
Totals	78	99.9			

	Appendages		Temper		
	Strap	1	1.3	Grit	75
Lug	1	1.3	Shell	3	3.9
Absent	76	97.4	Totals	78	100.1
Totals	78	100.0			

Rim Profile

	N	%
1	2	2.6
2	17	21.8
3	1	1.3
5	6	7.7
6	5	6.4
7	1	1.3
8	9	11.5
9	20	25.6
10	8	10.3
Destroyed	9	11.5
Totals	78	100.0

Incised (Fig. 50)

Where a sharp-edged stylus has been drawn across the clay, leaving a clean deep-V-cut. Incising is differentiated from Trailing by the width of the line. Incised lines are less than 1.5 mm in width (See Noble 1968:159.).

Exterior Rim

	N	%
Oblique	12	44.4
Opposed obliques	7	25.9
Triangular zoned	3	11.1
Oblique above Vertical/Notch imp. (Collar base zoned)	2	7.4
Vertical	1	3.7
Herringbone	1	3.7
Oblique over horizontals	1	3.7
Totals	27	99.9

Lip of Rim

Plain	14	51.9
Vertical/Notch imp.	4	14.8
Oblique/Linear imp.	3	11.1
Encircling punctates	2	7.4
Vertical	1	3.7
Oblique	1	3.7
Vertical/Fingernail imp.	1	3.7
Vertical/Push-Pull	1	3.7
Totals	27	100.0

Interior Rim

	N	%
Plain	26	96.3
Oblique/Linear imp. (Lip edge zoned)	1	3.7
Totals	27	100.0

Collar

	N	%
Present	17	63.0
Absent	7	25.9
Destroyed	3	11.1
Totals	27	100.0

Castellation

	N	%
Pointed	1	3.7
Absent	25	92.6
Destroyed	1	3.7
Totals	27	100.0

Appendages

Absent	27	100.0
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Temper

Grit	27	100.0
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Rim Profile

	N	%
1	3	11.1
2	3	11.1
3	2	7.4
5	2	7.4
6	2	7.4
8	4	14.8
9	5	18.5

	N	%
10	2	7.4
Destroyed	4	14.8
Totals	27	99.9

Crescent Impressed (Fig. 52)

This technique involves a 'curved' smooth-edged stylus, which is impressed directly into the clay with no discernible secondary movement. The motor habit is identical with that of Linear Impressed, differentiated through the 'crescent moon' form of the decorative element created by Crescent Impressed.

Exterior Rim

	N	%
Oblique	11	50.0
Oblique plat	4	18.2
Vertical	3	13.6
Oblique over criss-cross/Trailing	2	9.1
Opposed obliques	1	4.6
Criss-Cross	1	4.6
Totals	22	100.1

Lip of Rim

Plain	19	86.4
Vertical/Linear imp.	2	9.1

	N	%
Vertical/Incised	1	4.6
Totals	22	100.1

Interior Rim

Plain	21	95.5
Destroyed	1	4.6
Totals	22	100.1

Collar

Castellations

	N	%		N	%
Present	17	77.3	Absent	22	100.0
Absent	2	9.1			
Destroyed	3	13.6			
Totals	22	100.0			

Appendages

Temper

Absent	22	100.0	Grit	22	100.0
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Rim Profile

	N	%
1	3	13.6
2	2	9.1
3	2	9.1
5	2	9.1
8	3	13.6
9	6	27.3
Destroyed	4	18.2
Totals	22	100.0

Fingernail Impressed (Fig. 52)

This technique involves impressing the fingernail directly into the clay, with no discernible secondary movement. This technique is differentiated from Crescent Impressed on the basis of depth and length of impression. Finger 'prints' are also recognizable on some of the following specimens.

Exterior of Rim

	N	%
Oblique plat	8	47.1
Oblique	6	35.3
Opposed oblique	1	5.9
Vertical	1	5.9
Oblique above vertical (Collar base zoned)	1	5.9
Totals	17	100.1

Lip of Rim

Plain	15	88.2
Vertical/Notch imp.	1	5.9
Oblique	1	5.9
Totals	17	100.0

Interior Rim

Plain	13	76.5
Vertical/Notch imp. (Lip edge zoned)	2	11.8
Oblique/Linear imp. (Lip edge zoned)	1	5.9

Exterior Rim

	N	%
Vertical	3	42.9
Oblique	3	42.9
Herringbone	1	14.3
Total	7	100.1

Lip of Rim

Plain	4	57.1
Oblique	2	28.6
Criss-Cross	1	14.3
Total	7	100.0

Interior Rim

Plain	6	85.7
Criss-Cross	1	14.3
Totals	7	100.0

Collar

Castellation

	N	%		N	%
Present	6	85.7	Absent	17	100.0
Absent	1	14.3			
Total	7	100.0			

Appendages

Temper

Absent	7	100.0	Grit	5	71.4
			Shell	2	28.6
			Totals	7	100.0

Rim Profile

	N	%
1	2	28.6
2	1	14.3
5	1	14.3
9	1	14.3
Destroyed	2	28.6
Totals	7	100.1

Punctate (Fig. 52)

Where a circular ended stylus is impressed directly into the clay with no discernible secondary movement. Bossing was evident on one sherd, and that was an incipient interior boss.

Exterior Rim

	N	%
Collar base zoned	5	83.3
Collar base zoned and Lip edge zoned	1	16.7
Totals	6	100.0

Lip of Rim

Plain	2	33.3
Vertical/Notch imp.	3	50.0
Encircling row	1	16.7
Totals	6	100.0

Lip of Rim

	N	%
Plain	2	66.7
Oblique/Corded stick	1	33.3
Totals	3	100.0

Interior Rim

Plain	3	100.0
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Collar

	N	%
Absent	2	66.7
Destroyed	1	33.3
Totals	3	100.0

Castellation

	N	%
Absent	3	100.0

Appendages

Absent	3	100.0
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Temper

Grit	2	66.7
Shell	1	33.3
Totals	3	100.0

Rim Profile

	N	%
2	2	66.7
Destroyed	1	33.3
Totals	3	100.0

Fabric Impressed (Fig. 52)

Where fabric material has been impressed into the clay and cleanly withdrawn leaving the fabric marking.

		Exterior Rim			
		N	%		
	Fabric	3	100.0		
		Lip of Rim			
	Plain	3	100.0		
		Interior of Rim			
	Plain	3	100.0		
Collar				Castellation	
	N	%		N	%
Absent	3	100.0	Absent	3	100.0
Appendages					
Absent	3	100.0			
		Rim Profile			
			N	%	
	2		1	33.3	
	10		2	66.7	
	Totals		3	100.0	

APPENDIX C

FAUNAL ANALYSIS

Faunal remains identified from the Walker site numbered over 10,000 fragments, representing a minimum of 593 individuals. This appendix provides complete details of all species identified, minimum number of individuals (MNI), incidence of burned bone and presence of cut marks due to butchering and/or working.

Table 1. Walker mammal remains.

Species	No. of remains	MNI	Cut and/or worked	Burned
Deer, <u>Odocoileus virginianus</u>	5407	82	385	314
cf. Star-nose mole, <u>Condylura cristata</u>	1	1		
Varying hare, <u>Lepus americanus</u>	6	3	1	
Cottontail rabbit, <u>Sylvilagus floridanus</u>	3	1		
Hare or rabbit, <u>L. americanus</u> or <u>S. floridanus</u>	15	1		
Gray squirrel, <u>Sciurus carolinensis</u>	792	48	1	10
Red squirrel, <u>Tamiasciurus hudsonicus</u>	59	8		2
Woodchuck, <u>Marmota monax</u>	86	6	1	2
Eastern chipmunk, <u>Tamias striatus</u>	64	9		
Flying squirrel, <u>Glaucomys</u> sp.	5	2		
Chipmunk or flying squirrel, <u>T. striatus</u> or <u>Glaucomys</u> sp.	5			2

(continued)

Table 1. (continued)

Species	No. of remains	MNI	Cut and/ or worked	Burned
Squirrel family, <u>Sciuridae</u>	28	-		2
Beaver, <u>Castor canadensis</u>	278	10	10	10
Deer mouse, <u>Peromyscus</u> sp.	4	2		
Meadow vole, <u>Microtus pennsylvanicus</u>	4	3		
Mouse or vole, <u>Cricetidae</u> or <u>Zapodidae</u>	21	-		
Muskrat, <u>Ondatra zibethicus</u>	55	6	1	6
Porcupine, <u>Erethizon dorsatum</u>	6	2	1	
cf. Wolf, <u>Canis lupus</u>	1	1		
Dog, <u>Canis familiaris</u>	149	8	7	4
Red fox, <u>Vulpes vulpes</u>	6	2	2	
Gray fox, <u>Urocyon cinereoargenteus</u>	11	2	3	
Red or gray fox, <u>V. vulpes</u> or <u>U. cinereoargenteus</u>	45	-	8	1
Black bear, <u>Ursus americanus</u>	46	4	9	3
Raccoon, <u>Procyon lotor</u>	504	34	31	33
Ermine, <u>Mustela erminea</u>	1	1		
Mink, <u>Mustela vison</u>	5	2	2	
Fisher, <u>Martes pennanti</u>	7	4	1	
Striped skunk, <u>Mephitis mephitis</u>	8	2	1	
Otter, <u>Lontra canadensis</u>	12	2		1

(continued)

Table 1. (continued)

Species	No. of remains	MNI	Cut and/ or worked	Burned
Lynx or bobcat, <u>Lynx</u> sp.	6	2	2	
Domestic horse, <u>Equus caballus</u>	1	1		
American elk, <u>Cervus canadensis</u>	35	2	8	
Large cervid, probably elk, <u>C. canadensis</u>	29		4	6
Totals	7705	251	478	396

Butchering Marks

The following is taken from the faunal report by Anne M. Rick and Elizabeth Silieff, concerning the Walker white tailed deer remains.

Cuts occurred on 385 bones, or 7.1% of the identified deer remains...Skinning cuts, as defined by Guilday et al. (1962) are rare on deer bones from the Walker Site. A few marks on the horizontal ramus of some mandibles and on the metapodials seem to be skinning cuts but the majority of cut marks on bones probably reflect butchering of the carcass. Disarticulation of a Walker deer proceeded in a fashion similar to that reported by Guilday et al. (1962) for the early seventeenth-century Eschelman Site in Pennsylvania and by Parmalee (1965) for Tick Creek Cave, Missouri, a site occupied from Archaic through Late Woodland times. The upper limbs were taken apart at each joint and the non-meaty metapodials and phalanges often may have been discarded as a unit. Heads were removed at the skull's articulation with the cervicals and the vertebral column was probably separated from the rest of the carcass just below the articulation of ribs with vertebrae.

The discussion above is based on a rather small sample of cut bones, considering the amount of deer bone present at the site. Cuts at upper limb joints are not abundant (Figs. 2 and 3).

However, considering that these portions are the meatiest parts of the carcass, it seems illogical to postulate that the scapula-humerus and the pelvis-femur-tibia were each cooked as one unit. Certainly such units would be an unwieldy size. Numerous cut marks do occur at difficult joints, particularly the humerus-radius-ulna joint and the tibiotarsal joint. We can therefore postulate that the Indian butcher was so skilful that he was able to separate the upper limb bones without leaving much trace of his activities, only leaving numerous cut marks at the complex joints...Some of the miscellaneous cuts found along bone shafts may result from meat removal, as they are not properly placed for either disarticulation or skinning marks. (Silieff and Rick 1976:9)

Pisces

Fish were important in the food economy of the Walker site. Although they provided much less meat than deer, fish yielded twice as much edible flesh as birds. The inhabitants harvested a broad range of medium to large-sized fishes of more than 19 species. Fishing was probably concentrated in spring and early summer but may have been undertaken on a small scale for much of the year. Although some use may have been made of the Great Lakes, most of the fishing probably took place in nearby streams and the Grand River. (Rick and Cumbaa 1976:10).

Table 2. Walker fish remains.

Species	No. of remains	MNI	Cut and/or worked	Burned
Lake sturgeon, <u>Acipenser fulvescens</u>	39	2	2	1
Car, <u>Lepisosteus</u> sp.	5	2		
Bowfin, <u>Amia calva</u>	4	1	1	
Whitefish or Cisco, <u>Coregonus</u> sp.	26	2		3
Pike, <u>Esox</u> sp.	25	3	2	

(continued)

Table 2. (continued)

Species	No. of remains	MNI	Cut/and or worked	Burned
White sucker, <u>Catostomus</u> <u>commersoni</u>	3	2		
Sucker, <u>Catostomus</u> sp.	12	1		
Bigmouth buffalo cf. <u>Ictiobus</u> <u>cyprinellus</u>	1	1		
Redhorse, <u>Moxostoma</u> sp.	393	41	8	1
Sucker/Redhorse, <u>Catostomus</u> / <u>Moxostoma</u>	62	-		
Sucker family, Catostomidae	357	-		2
Brown bullhead, <u>Ictalurus</u> <u>nebulosus</u>	21	4		
Channel catfish, <u>Ictalurus</u> <u>punctatus</u>	219	12	12	4
White bass, <u>Morone</u> <u>chrysops</u>	4	2		
Rock bass, <u>Ambloplites</u> <u>rupestris</u>	67	10		
Sunfish, <u>Lepomis</u> sp.	1	1		
Smallmouth bass, <u>Micropterus</u> <u>dolomieu</u>	25	4		
Largemouth bass, <u>Micropterus</u> <u>salmoides</u>	2	1		
Bass, <u>Micropterus</u> sp.	35	-		
Crappie, <u>Pomoxis</u> sp.	1	1		
Sunfish family, Centrarchidae	16	-		
Sauger, <u>Stizostedion</u> cf. <u>canadense</u>	1	1		

(continued)

Table 2. (continued)

Species	No. of remains	MNI	Cut/and or worked	Burned
Walleye, <u>Stizostedion vitreum</u>	18	9		
Sauger or Walleye, <u>Stizostedion</u> sp.	148	6	1	2
Freshwater drum, <u>Aplodinotus grunniens</u>	132	12	4	6
Totals	1617	118	30	21

Aves

The Walker site Neutrals took advantage of the extensive bird fauna available to them, utilizing many species. Situated as they were in a rich forest region and fairly close to both small and large water bodies, it is not surprising that they made use of a variety of aquatic and terrestrial birds. However, terrestrial birds were most important. Not only were more terrestrial species taken (18 versus 11 aquatic) but they provided a larger quantity of meat (37.8 kg versus 30.7 kg). The incredibly abundant Passenger Pidgeon and the large Wild Turkey, both easily caught, are the two most important species in the faunal sample. (Rick and Silieff 1976a:16)

Table 3. Walker bird remains.

Species	No. of remains	MNI	Total usable meat in grams
Common loon, <u>Gavia immer</u>	1	1	3335.5
Great blue heron, <u>Ardea herodias</u>	2	1	980

(continued)

Table 3. (continued)

Species	No. of remains	MNI	Total usable meat in grams
Least bittern, <u>Ixobrychus</u> <u>exilis</u>	1	1	56
Whistling swan, <u>Olor</u> <u>columbianus</u>	2	1	4767
Trumpeter swan, <u>Olor</u> <u>buccinator</u>	2	1	7945
Canada goose, <u>Branta</u> <u>canadensis</u>	17	2	5404
Green-Winged teal, <u>Anas</u> <u>carolinensis</u>	1	1	224
Wood duck, <u>Aix sponsa</u>	3	1	476
Bufflehead, <u>Bucephala albeola</u>	1	1	287
Diving duck, <u>Aythya</u>	1	1	826
Unidentified duck	3	-	-
Goshawk, <u>Accipiter gentilis</u>	2	1	602
Red-Tailed hawk, <u>Buteo</u> <u>jamaicensis</u>	3	1	700
Bald eagle, <u>Haliaeetus</u> <u>leucocephalus</u>	1	1	3178
Sparrow hawk, <u>Falco sparverius</u>	1	1	77
Ruffed grouse, <u>Bonasa umbellus</u>	4	1	318.5
Grouse family, <u>Tetraonidae</u>	8	-	-
Domestic chicken, <u>Gallus</u> <u>gallus</u>	3	1	952
Wild turkey, <u>Meleagris</u> <u>gallopavo</u>	34	5	16210

(continued)

Table 3. (continued)

Species	No. of remains	MNI	Total usable meat in grams
Sandhill crane, <u>Grus canadensis</u>	3	1	3178
Crane, <u>Grus</u> species	2	1	3178
Passenger Pigeon, <u>Ectopistes migratorius</u>	746	59	13216
Barred owl, <u>Strix varia</u>	3	1	462
Saw-Whet owl, <u>Aegolius acadicus</u>	1	1	70
Yellow-Shafted flicker, <u>Colaptes auratus</u>	1	1	157.5
Pileated woodpecker, <u>Dryocopus pileatus</u>	1	1	189
Yellow-Bellied sapsucker, <u>Sphyrapicus varius</u>	2	1	35
Hairy woodpecker, <u>Dendrocopos villosus</u>	4	2	112
Blue jay, <u>Cyanocitta cristata</u>	2	1	70
Common raven, <u>Corvus corax</u>	7	1	665
Common crow, <u>Corvus brachyrhynchos</u>	7	2	602
Eastern meadowlark, <u>Sturnella magna</u>	1	1	63
Blackbird family, Icteridae	3	1	35
Perching bird order, Passeriformes	8	3	105
Totals	881	99	68475.5 (68.5 kg)

Mollusca

Table 4 summarizes the mollusca present in the Walker assemblage. All locally derived, these molluscs would have afforded a minor input into the Walker subsistence base. Certainly many of these species were sought for their shells, rather than as a food resource.

Table 4. Walker mollusc remains.

Species	No. of remains	MNI
Fresh water bivalve, <u>Unio</u> sp.	80	17
Land snail, <u>Anguispira alternata</u>	62	62
Fresh water mussel, <u>Lasmigona costata</u>	11	3
Water snail, <u>Helisoma trivolvis macrostomum</u>	7	7
Water snail, <u>Pleurocera subulare</u>	1	1
Totals	161	90

Amphibia

One hundred and four anuran (frogs and toads) bones were found. Of these, one was from a middle-sized frog of the genus Rana, six were definitely frog bones and remaining 97 could have come from either frogs or toads. Twenty-four individuals are represented. The anuran contribution to the Walker diet is tiny. The total meat contribution is 0.24 kg based on 25% usable meat. (Rick and Cumbaa 1976:14)

Table 5. Walker amphibian remains.

Species	No. of remains	MNI
Ranid frog, <u>Rana</u> sp.	1	1
Frog	6	5
Frog or Toad	97	18
Totals	104	24

Reptilia

Sixty-five pieces of reptile bone were recovered from the excavation, all but one of which were from turtles... Six turtle species were identified, five of which are definitely native to the region. Ten individuals were present. (Rick and Cumbaa 1976:11).

Snapping, spotted, painted and Blanding's turtles are found in weedy shallow-water habitat and would have been easy prey for the Walker villagers. Map turtles prefer larger water bodies but still could have been obtained without undue effort. (Rick and Cumbaa 1976:13).

Table 6. Walker reptile remains.

Species	No. of remains	MNI	Cut and/	Burned
Colubrid snake family, colubridae	1	1		
Snapping turtle, <u>Chelydra serpentina</u>	27	3	4	2

(continued)

Table 6. (continued)

Species	No. of remains	MNI	Cut and/ or worked	Burned
Spotted turtle, <u>Clemmys</u> cf. <u>guttata</u>	2	1		
Eastern box turtle, cf. <u>Terrapene carolina</u>	1	1	1	
Map turtle, <u>Malaclemys</u> <u>geographica</u>	1	1		
Midland painted turtle, <u>Chrysemys picta</u>	25	2	2	2
Blanding's turtle, <u>Emydoidea</u> <u>blandingi</u>	3	2		
Box and water turtle family, Emyidae	5	-	1	
Total turtle	64	10	8	4
Total reptile	65	11	8	4

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(36 La 12), Lancaster Co., Pa. Pennsylvania Archaeologist
32 (2): 59-83.

Rick A. M. and Stephen Cumbaa

- 1976 Fish, reptile and amphibian remains from the Walker Site.
Manuscript in possession of authors, Ottawa.

Silieff E. and A. M. Rick

- 1976 Analysis of white tailed deer (Odocoileus virginianus) remains
from the Walker Site (AglHa-9), a seventeenth-century Neutral
village near Brantford, Ontario. Manuscript in possession of
authors, Ottawa.

Figure 46.

Upper - Wall staining feature (bark flap), south end house 3.

Lower - Pit feature with insitu post moulds, house 3.

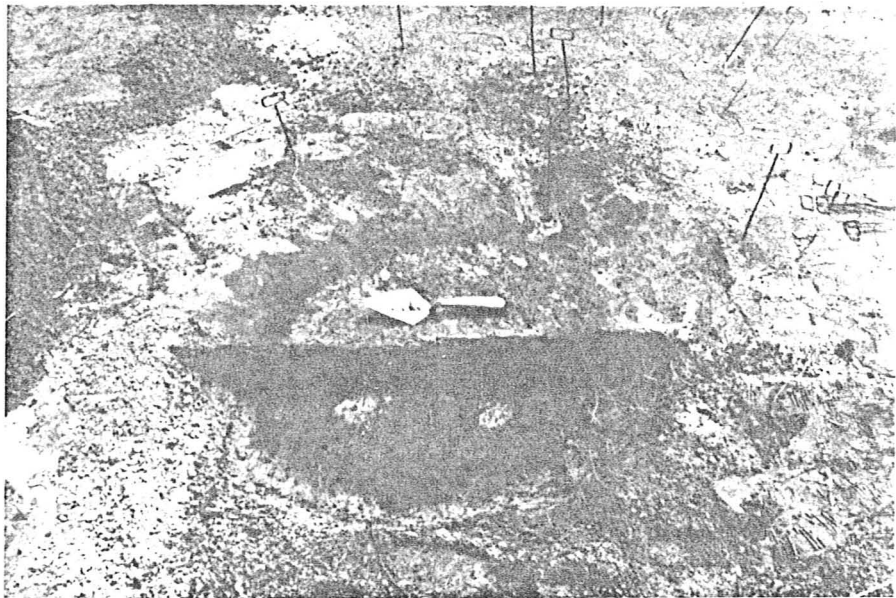


Figure 47.

Upper - Fractured shale feature, south wall house 11.

Lower - Ossuary profile revealing upper disturbance, and sub-floor
burial pit.



Figure 48.

- 1 - 4 Typical Walker projectile points
- 5 - 7 Serrated projectile points
- 8 - 11 Pre-Neutral projectiles
- 12 - 14 Drills
- 15 - 17 Bifacially flaked snub-nosed scrapers
- 18 - 20 Bifacially flaked serrated snub-nosed scrapers
- 21 Flake scraper
- 22 - 23 Disc scrapers
- 24 - 26 Catlinite tubes
- 27 Catlinite nodule



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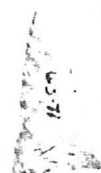
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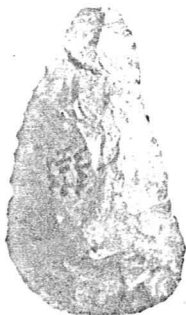
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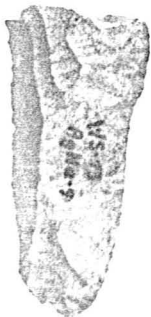
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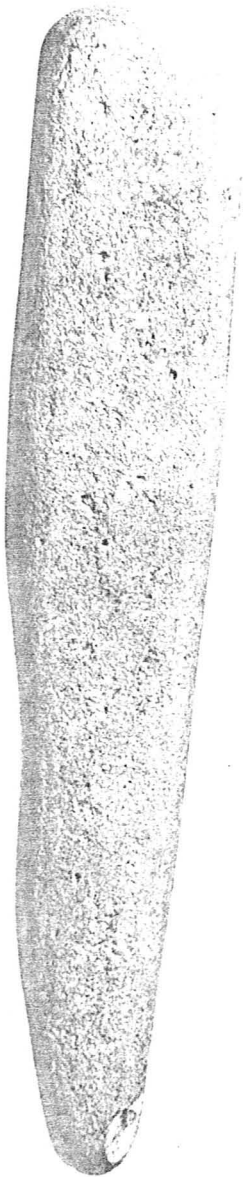


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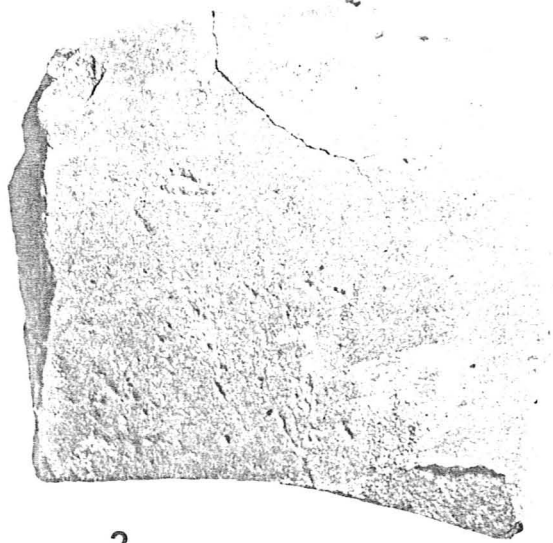


Figure 49.

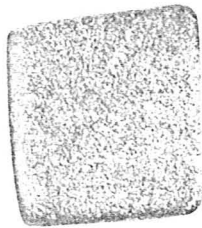
- 1 Pestle
- 2 Mano fragment
- 3 Sandstone abrader
- 4 Sandstone arrow-shaft abrader
- 5 Dolomite whetstone
- 6 Ground stone adze
- 7 - 8 Gaming stones
- 9 Bi-pitted anvil stone



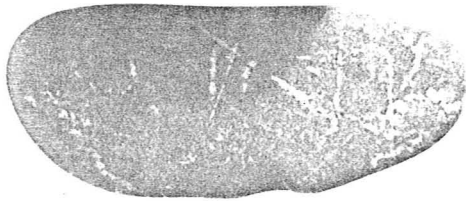
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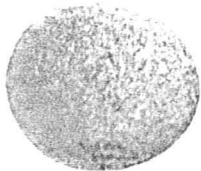
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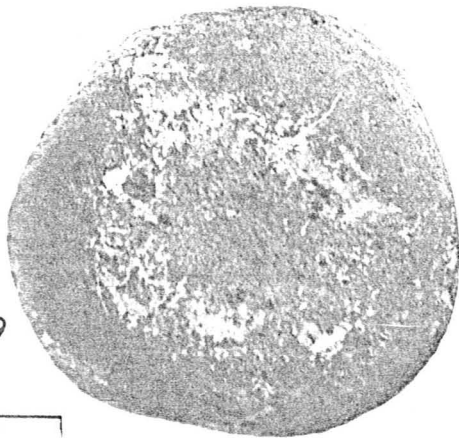
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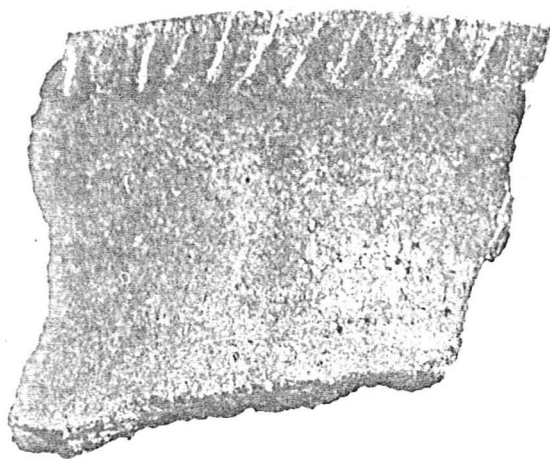


Figure 50.

1 - 4 Linear impressed rims

5 - 8 Incised rims

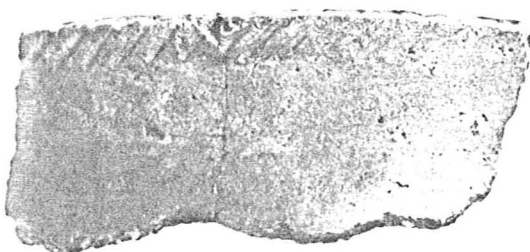
9 Push-pull rim



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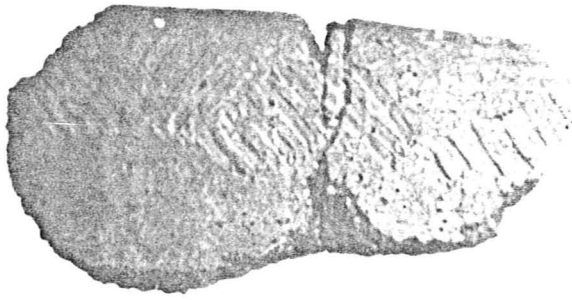
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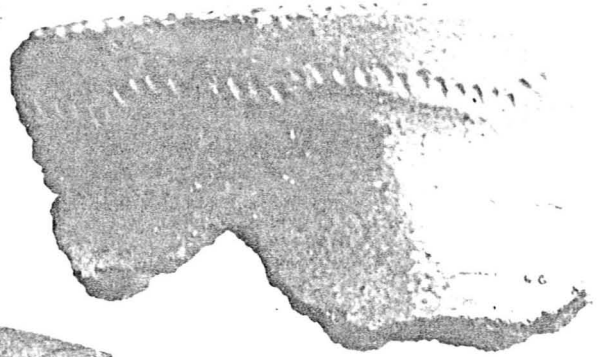
Figure 51.

1 - 4 Trailed rims

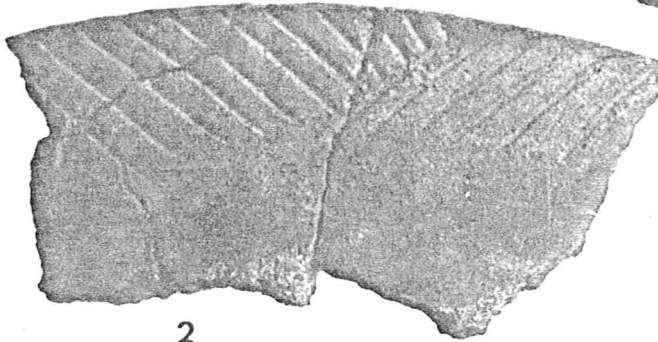
5 - 6 Notch-impressed rims



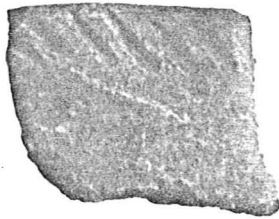
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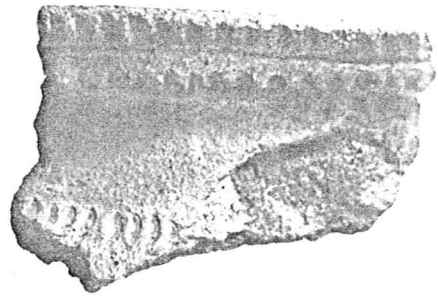
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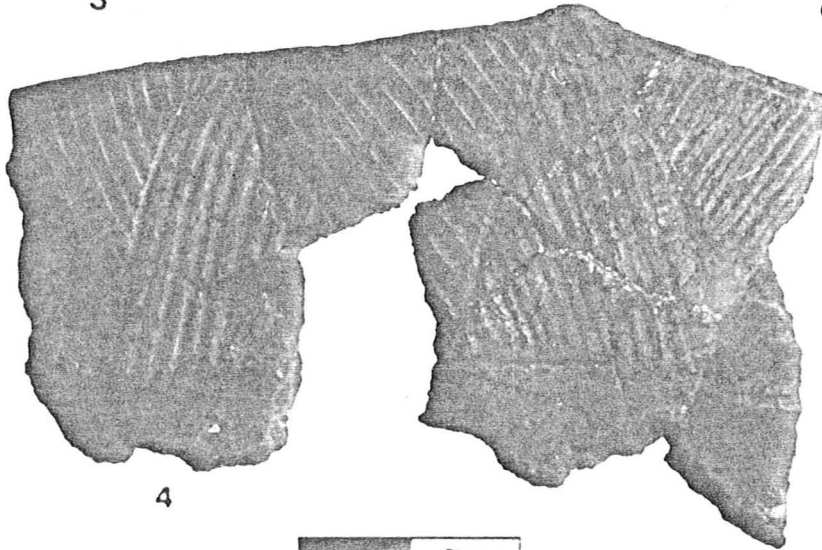
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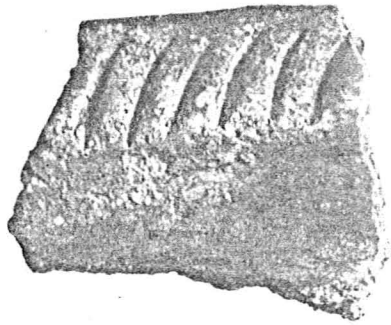


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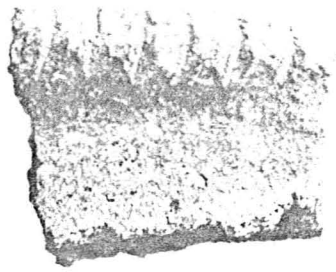


Figure 52.

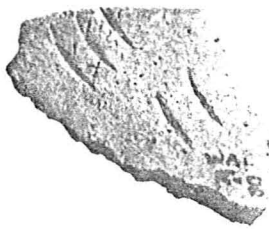
- 1 - 2 Crescent impressed rims
- 3 - 5 Fingernail impressed rims
- 6 Corded stick rim
- 8 Fabric impressed rim
- 7, 9 Punctate rims



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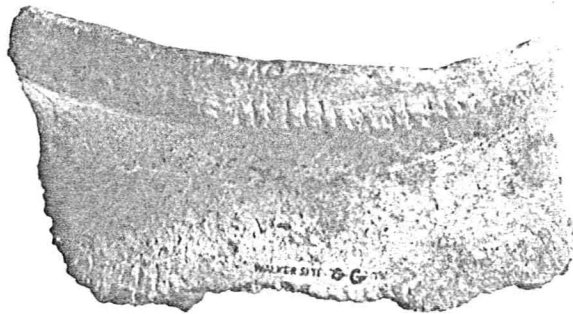
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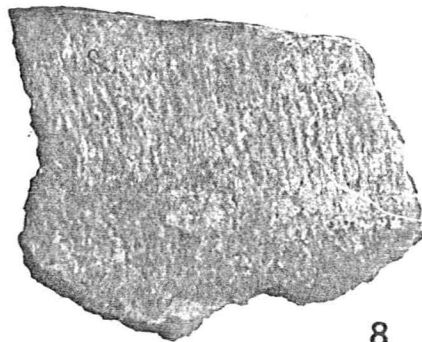
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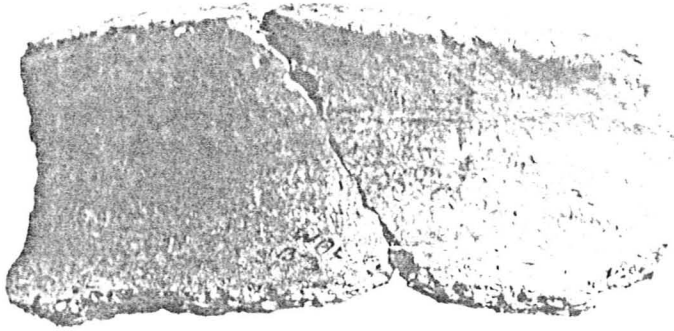


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Figure 53.

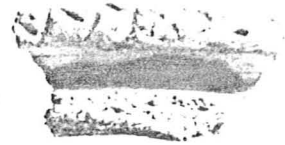
- 1 - 5 Plain rims
- 6 Shell tempered, plain neck sherd
- 7 - 8 Grit tempered plain neck sherds
- 9 Notch impressed shoulder sherd
- 10 Plain shoulder sherd
- 11 Corded-stick and punctate shoulder sherd



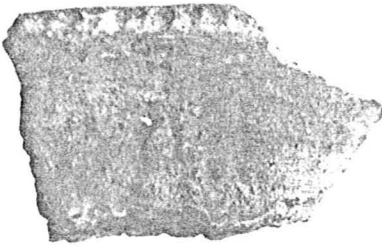
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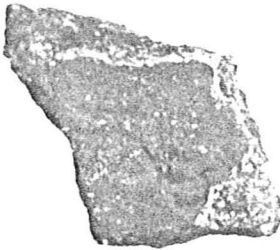
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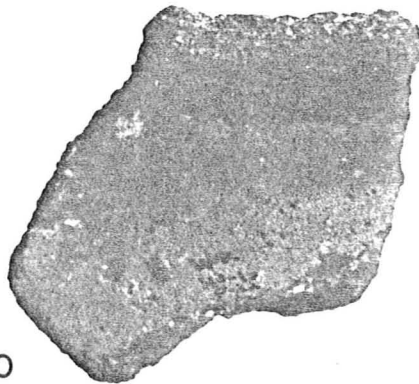
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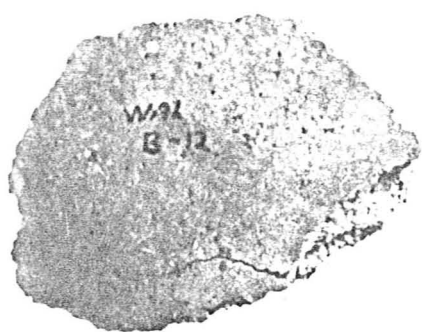


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Figure 54.

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|-----------|--|
| 1 | Plain body sherd |
| 2 | Rib-paddled body sherd |
| 3 | Smoothed-over-cord body sherd |
| 4, 5 | Trailed body sherds |
| 6 | Decorated body vessel, note squat base |
| 7 - 9, 10 | Juvenile rim portions |
| 11 | Decorated juvenile shoulder sherd |
| 12 | Juvenile vessel base |
| 13 | Ceramic waste |
| 14, 15 | Fired ceramic spheres |



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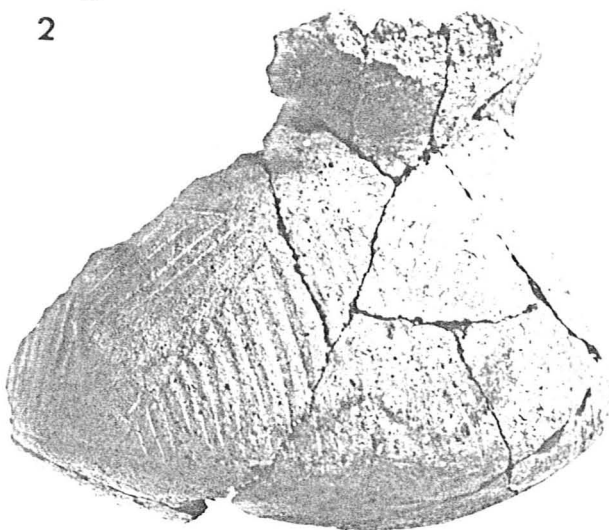
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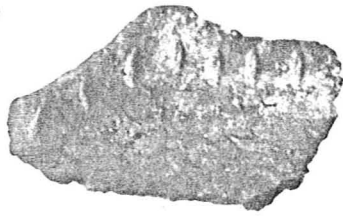


Figure 55.

- 1 - 2 Turret castellations
- 3 Turret castellation, notch decorated
- 4 - 6 Rounded castellation
- 7 Pointed castellation
- 8 Complex castellation (handle)
- 9 Scalloped rim
- 10, 11 Lugs
- 12 Strap appliqués
- 13, 14 Handle portions
- 15 Ceramic handle
- 16 Shoulder sherd with mend hole
- 17 Ground body sherd gaming disc
- 18 Podial foot and vessel portion



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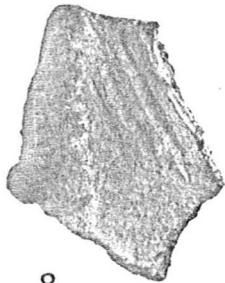
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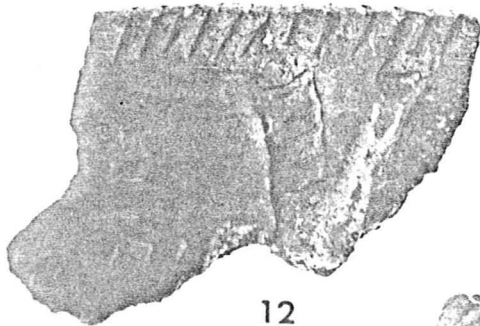
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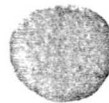
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Figure 56.

- 1 Blowing-face ceramic effigy pipe
- 2, 3 Lithic human effigy pipes
- 4 Owl effigy pipe
- 5 Dog or wolf effigy pipe
- 6 Bird effigy pipe
- 7 Snake effigy pipe
- 8 Coronet pipe
- 9 Decorated collar pipe
- 10 Miniature pipe
- 11 Juvenile pipe
- 12 Lithic pipe bowl
- 13 Decorated collar pipe
- 14 Decorated conical pipe



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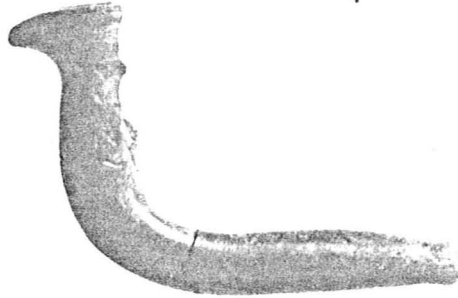
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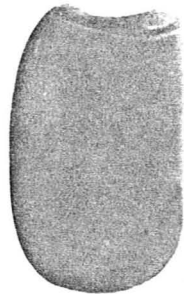
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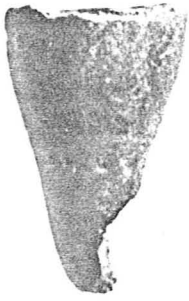


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Figure 57.

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| 1, 2 | Plain conical pipes |
| 3 | Conical ring pipe |
| 4 | Decorated collar pipe |
| 5 | Non-typed pipe bowl |
| 6 - 8 | Apple bowl (acorn cup) pipes |
| 9 - 11 | Elbow portions |
| 12 | Hexagonal elbow portion |
| 13, 14, 16 | Knobbed mouthpieces |
| 15, 17, 18 | Tapered mouthpieces |



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Figure 58.

- 1 - 3 Bone awls
- 4, 5 Bone punches
- 6, 7 Bodkins (one-eyed needles)
- 8 Bone brad
- 9, 10 Decorated bone tubes
- 11, 12 Bone beads
- 13, 14 Antler pressure flakers
- 15 - 17 Worked deer phalanges
- 18 Worked bear incisor
- 19 Worked beaver incisor

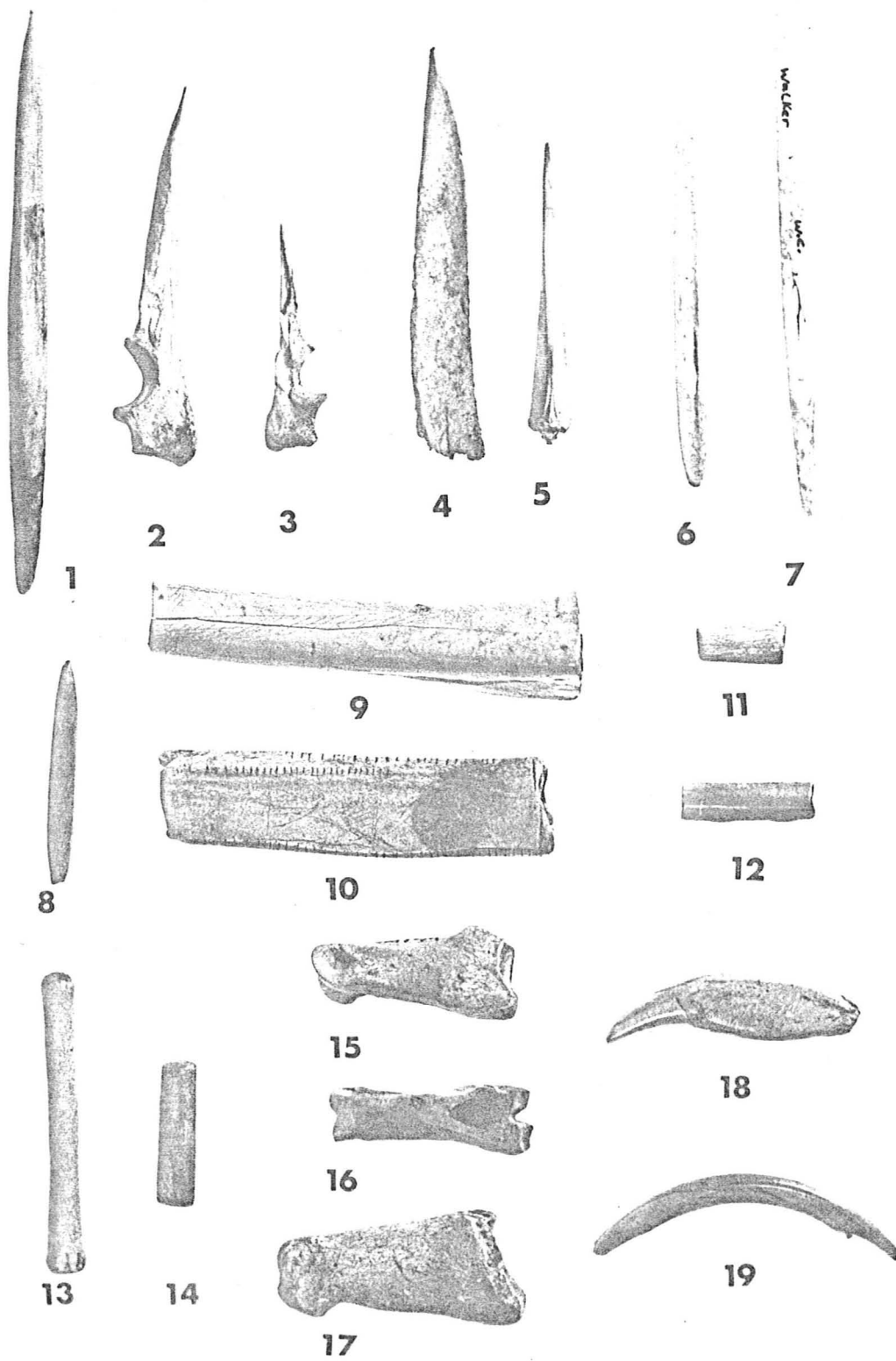


Figure 59.

- 1, 2 Antler harpoons
- 3 Antler thong preparer
- 4 Bone chisel
- 5 Decorative object
- 6 Antler pendant
- 7 Gaming piece
- 8 Worked antler tang
- 9 Human skull rattle
- 10 Tubular and discoidal shell beads
- 11 Cut and ground clam shell
- 12 - 14 Shell pendants
- 15 Shell gaming disc
- 16 Columnellar tube

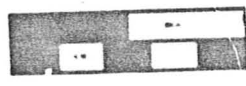
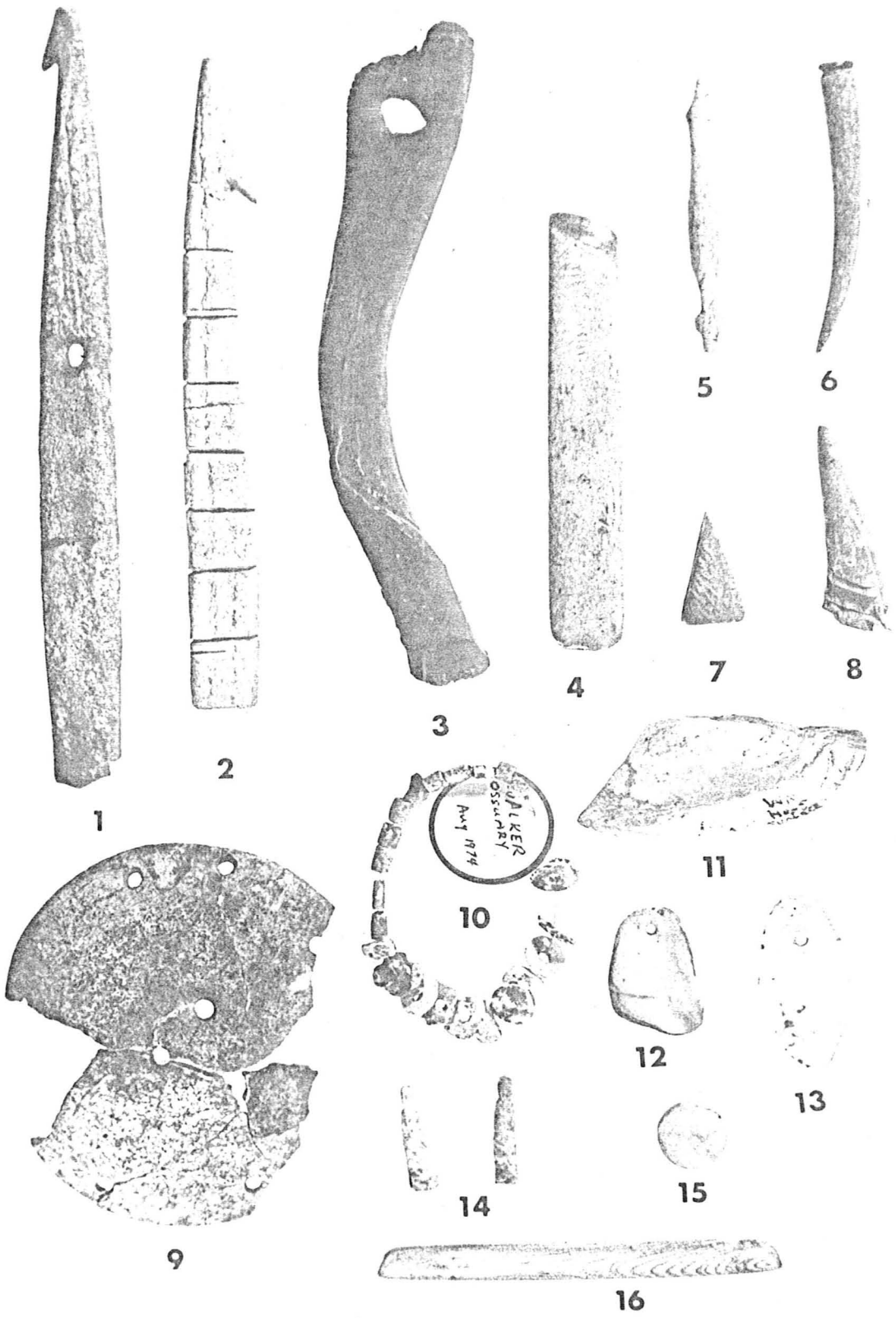


Figure 60.

- 1, 2 Iron trade axes
- 3, 6 Iron trade knives
- 4, 5 Iron awls
- 7 Iron awl, hafted in catlinite bead
- 8 Iron needle

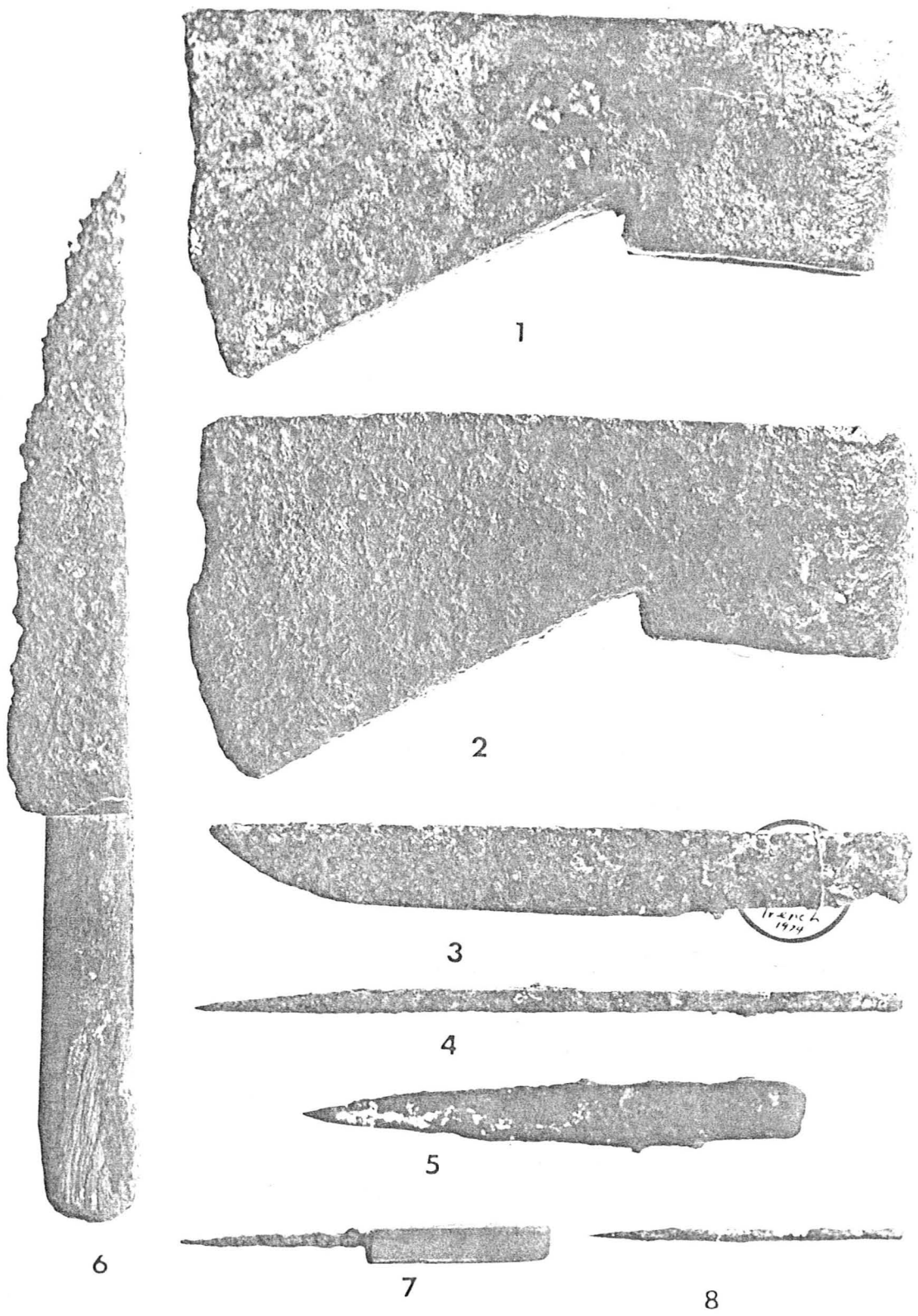


Figure 61.

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| 1, 2 | Iron spear points |
| 3, 4 | Serrated brass and iron portions |
| 5 | Rolled brass ring |
| 6, 7 | Brass bangles |
| 8 | Coiled brass wire |
| 9, 10 | Rolled brass tubes |
| 11, 12 | Rolled brass beads |
| 13 | Brass beads (strung) |
| 14 | Brass chain portion |
| 15 | Worked bail fastener |
| 16 | Punched and cut brass portions |
| 17, 18 | Decorative brass objects |
| 19-21 | French glass trade beads |
| 22 | Graphite paint stone |



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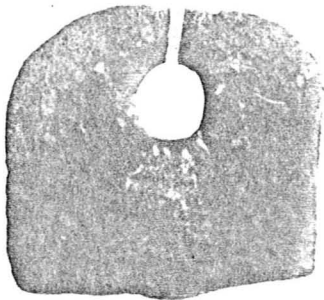
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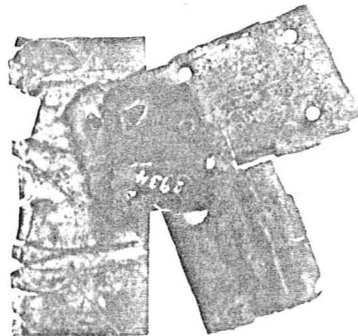
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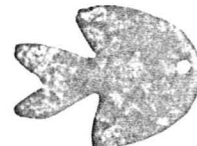
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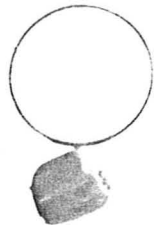
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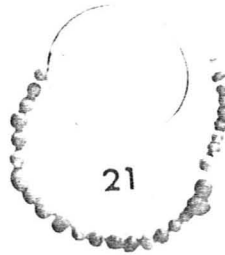
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Figure 62.

- 1 Brass kettle recovered from Walker ossuary (Note bark fragments adhering to outside of kettle).

