THE SYNCRETIC CONTINUUM: A MODEL FOR UNDERSTANDING THE INCORPORATION OF EUROPEAN GOODS AT LE CARON, A 17TH CENTURY HURON VILLAGE SITE, ONTARIO

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ABSTRACT

The Syncretic Continuum: A Model for Understanding the Incorporation of European Goods at Le Caron: A 17th Century Huron Village Site, Ontario.

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This thesis examines the incorporation of European artifacts by the Huron peoples who occupied the Le Caron village site in Simcoe County, Ontario, ca. A.D. 1615-1640+.

Theoretical approaches used by archaeologists to understand culture contact are typically impeded by simplistic culture-histories with a reliance on Eurocentric documentation and outdated acculturation paradigms which mask dynamic Native actions. Therein, acculturative and syncretic processes are (re)assessed for their practical application to archaeology, and a local sequence for Huron development and interaction is examined through intrasite analyses of European goods recovered from the Le Caron site. Addressed within the context of syncretic theory (Nutini 1988) and viewed as a temporal continuum, this thesis demonstrates that Iroquoian, rather than European, objectives and motivations played the primary role in directing processes of cultural change during the first half of the 17th century.

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CHAPTER 1

INTRODUCTION AND THE LE CARON SITE

Introduction

Conventional archaeological and ethnohistorical interpretations of 17th century Iroquoian and European encounters, with rare exceptions (e.g., Hamell 1983, 1986, 1987) typically emphasize the significance of European 'effects' on Native traditions through the spread of disease, the introduction of 'novel and superior' trade items, and the realignment of trade networks to gain strategic access to these goods (e.g., Ceci 1990; Fitzgerald 1990; Trigger 1976, 1991). I critically examine these paradigms and propose an archaeological method which highlights Native, rather than European, protocols, actions and intentions. By viewing Europeans as one polity within the larger Northeast, I argue that Iroquoian power and motivations conditioned the outcome of events during the 17th century.

The following analysis of Le Caron (BeGx-15), an early 17th century Huron village site located in what is now Simcoe County, has two main objectives. The first is to describe, record, and quantify the artifact assemblage, with the intention of classifying acculturative and/or syncretic modification processes. Syncretism is one sort of cultural change which involves bi-cultural blending. In this study, syncretic elements exhibited among artifact types include a combination of European and Native attributes. The second objective is to examine the incorporation of European artifacts at this site and contextualize this within the broader Northeastern setting.

In meeting the second objective, spatial analyses and archaeological acculturation approaches are amalgamated to generate a preliminary framework which explores intrasite analyses of European goods recovered from Huron sites. Because ethnocentric interpretations are perpetuated through simplistic archaeological models (e.g., Wright 1966), and no one archaeological approach is methodologically and theoretically comprehensive, herein I assess acculturative and syncretic paradigms for their practical application to the problem at hand. Based on the types, frequencies, and distributions of European trade goods obtained from the intrasite spatial analysis at Le Caron it seems likely that there was both intrasite and intersite variability in responses to European contact.

This has implications for investigations of poorly understood economic and social organizations within historic Iroquoian villages (see Kapches 1990; Muir 1990), and in this thesis I hope to elucidate patterns of behaviour beyond the standard artifact descriptions and frequencies which inadvertently objectify Native roles in archaeological research. Nonetheless, this heuristic framework will be refined as future research provides correlations between contextual patterns and artifact frequencies among sites.

History of Excavations at the Le Caron Site

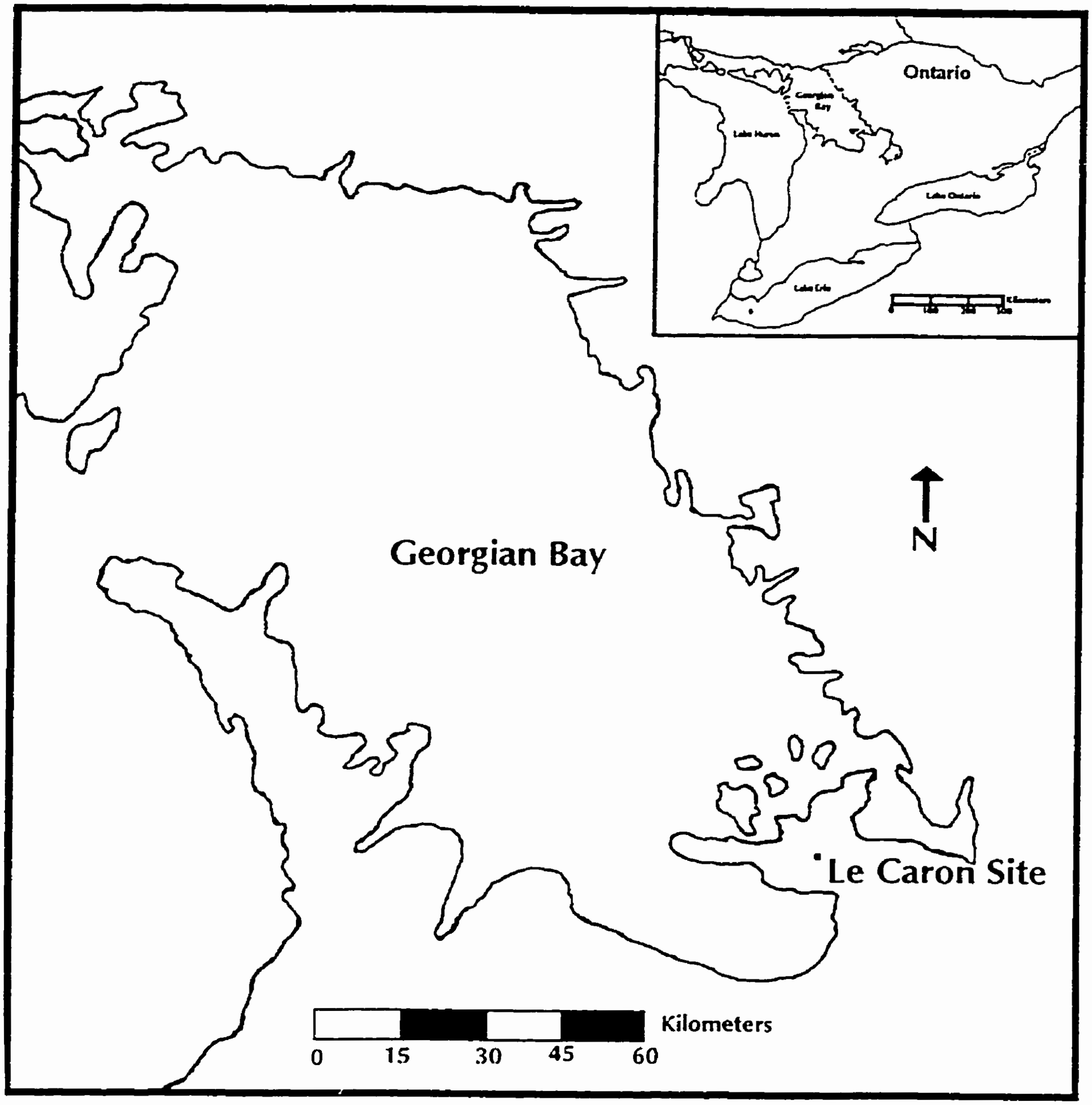
The Le Caron site is an early 17th century (ca. A.D. 1615-1640+) fortified Huron village, situated northeast of Perkinsfield, in Tiny Township, Simcoe County, Ontario (Figure 1.1). Initially recorded by Andrew Hunter in 1899 and named Santimo after the landowner, the site was subsequently tested by Frank Ridley in 1966, and renamed in 1968 after Joseph Le Caron - a 17th century Jesuit Récollect who visited Huronia (Butcher and Johnston 1977:1; Johnston and Jackson 1980:175).

The site area was largely uninhabited after the expulsion of the Huron until A.D. 1836, when European settlement was initiated in Tiny Township. Nineteenth century artifacts became intermixed with 17th century materials by intermittent ploughing of the site. In addition, the ravine along the northern boundary of the site has eroded by over one meter since the 17th century and also accommodates a 20th century refuse dump (Rexe 1971:B2). This has further mixed artifact assemblages.

During the 1970s, extensive excavations were conducted through eight annual field schools directed by archaeologists at Trent University (Johnston and Jackson 1980:175). These seasons of fieldwork were reasonably well documented and include artifact proveniences. In total, more than 50,000 Huron and European artifacts, typical of the early 17th century, were recovered from Le Caron.

An estimated date of A.D. 1630-1650 was initially proposed for the site (Johnston and Jackson 1980:198-199), and two subsequent analyses of European glass trade beads from Le Caron have altered the occupation date to ca. A.D. 1615-1640 (Kenyon and Kenyon 1983: 63-64, 74; Kenyon and Fitzgerald 1986:18-19, 23-24). These time frames are corroborated by my analysis of the

Figure 1.1: Location of Le Caron



glass beads from Le Caron. The analysis of 'all' glass beads indicate a time frame of ca. A.D. 1615-1640, while intrasite bead distributions among longhouses and middens display diverse dates. The results suggests there are slight variations among regions of the site, ranging from ca. A.D. 1615, through to ca. A.D. 1640+.

As with any archaeological assemblage, sample quality and quantity must be evaluated. These factors are directly related to the methods of excavation. Although the artifacts were catalogued and site reports were generated for each field season (Butcher and Johnston 1973-77; Rexe 1971-72; Vastokas 1970), cataloguing procedures varied throughout the years of excavation (see Muir 1990:10-13), and a lack of uniformity in specific proveniences for many of the artifacts is exhibited.

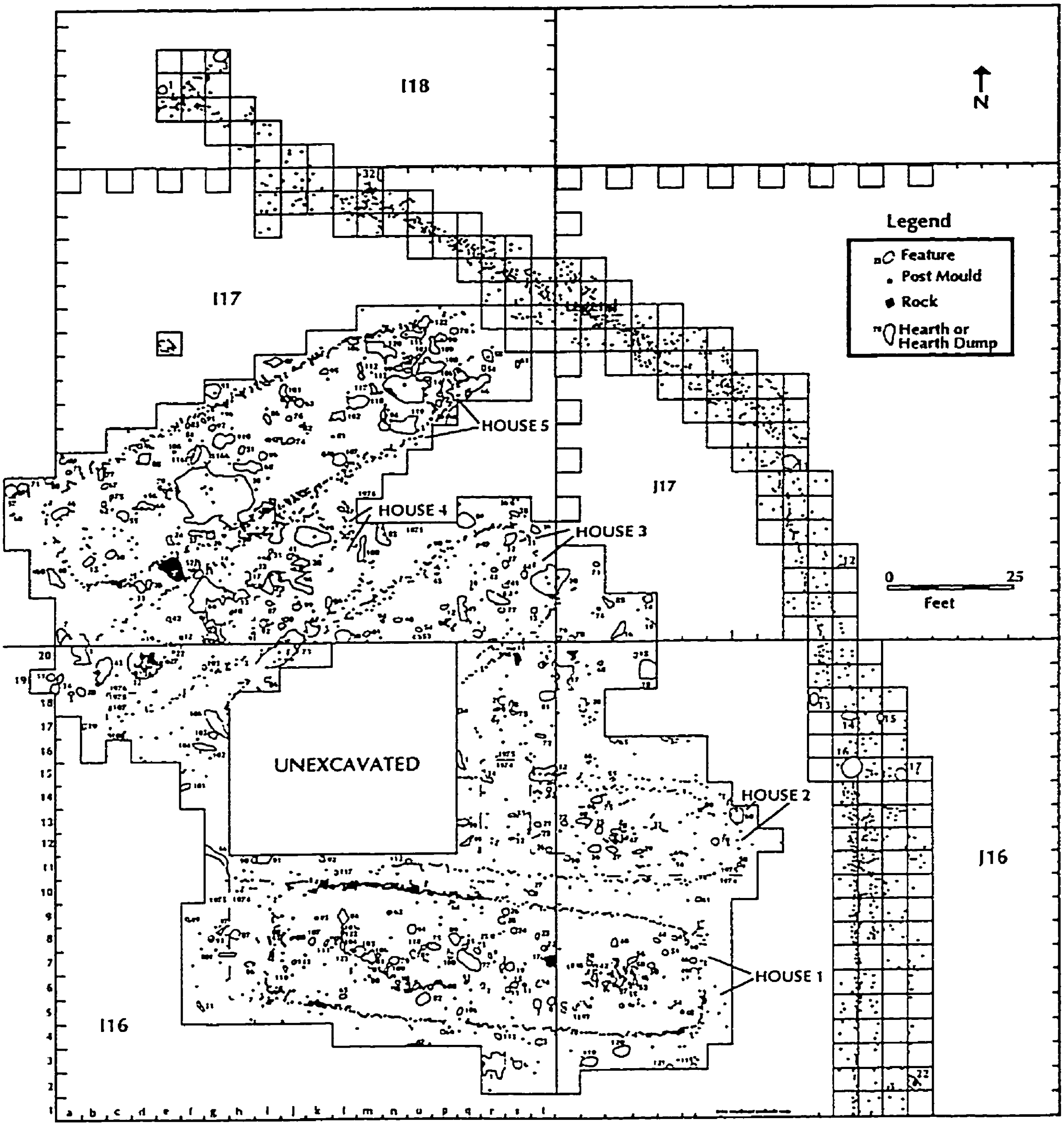
Particularly problematic are the varied excavation and documentation procedures used during the first three field seasons. These include sporadic shovelling techniques, poor documentation of excavation boundaries, and test trenches with unspecified lot designations. During the remaining five years, excavation at Le Caron was based on a five by five foot grid system to which artifact proveniences were tied. However, in some cases more specific locations were recorded, and every effort is made in this study to provide the most precise proveniencing possible.

The greatest restriction on the data lies in the unknown whereabouts of the field notes and maps from the 1971 and 1972 seasons. Unfortunately, a large percentage of the European artifacts were recovered during these initial years, and without the minimal benefit of general proveniences, in many cases, it is impossible from visual inspection alone to appropriate European artifacts to the 17th century Huron village or, alternatively, to the pioneer habitation constructed over the site during the 19th century. When possible, general proveniences of artifacts are deduced from the available data, and artifacts impossible to provenience are eliminated from spatial distributions, but referenced quantitatively with the remainder of the collection.

Based on the abundance of small trade beads and faunal remains excavated from Le Caron, the artifact collection from the site is surmised to be a reliable indicator of the types of 17th century material that constitute its archaeological record. However, the extent to which these frequencies accurately depict the original representation of artifacts from the ground is unknown and impossible to determine after the fact. Beyond the trade beads, the majority of artifact types analyzed for this study are moderately sized, and it is unlikely the 6mm mesh screens employed throughout the eight field seasons will pose the same recovery problems described by Muir (1990:20-21) for the faunal analysis at Le Caron.

Initially, Johnston and Jackson (1980) published a descriptive overview of settlement patterns based primarily on structural evidence for five contiguous longhouses and a palisade excavated at Le Caron (Figure 1.2). Particular care was given to delineating post moulds and features associated with these structures, and

1.2: Excavated Longhouses and Feature Distributions



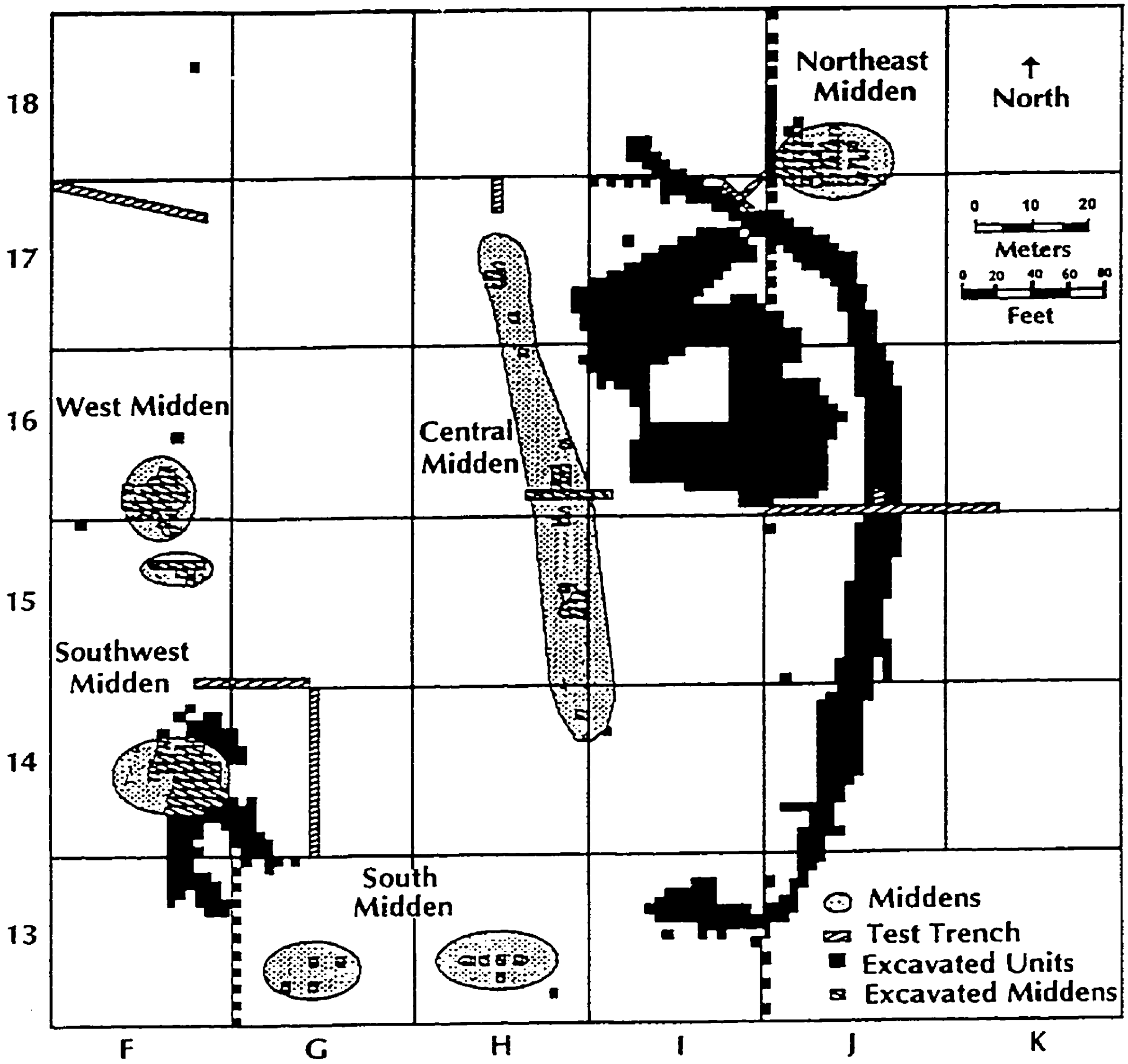
(after Johnston and Jackson 1980:179)

detailed descriptions of features are summarized in this early work (see Johnston and Jackson 1980:186-193, 195-196). Additionally, descriptive arrangements within longhouses including hearths, anterooms, sweatlodges, and spatial divisions also were summarized in detail (Johnston and Jackson 1980:176-193; Muir 1990:13-17). However, excavations were confined to the northeastern area, the eastern palisade, and a plausible sixth longhouse and palisade in the southwestern corner of the site. Site boundaries and middens were approximately located with test trenches, but were never formally or fully excavated (Figure 1.3). Consequently, real boundaries are unknown (see Johnston and Jackson 1980:178), and the borders designated by Muir (1990:12) are arbitrarily defined, named, and employed here to allow consistent comparisons between studies.

Approximately twenty percent of the entire four acre (1.6 ha) village area was excavated, and based on settlement patterns and the peripheral margins of the palisades, an estimated population of 1300 was proposed for the site (Johnston and Jackson 1980:176, 198). This preliminary work was later complemented by Muir (1990), who examined the spatial distribution of faunal material within the Le Caron village pattern. From this latter work, important conclusions about historic Huron subsistence, longhouse spatial organization, and ritual activity were proposed and supported with the available structural evidence.

Additionally, Doak (1993) and Kearsley (1997) broached spatial and semiotic interpretations at Le Caron by examining ceramic smoking pipes, and discussing the inter-relationships between Huron social, political and cosmological

Figure 1.3: Excavation Limits at Le Caron



(after Muir 1990:12)

structures. To date, however, most of the Le Caron artifact assemblage remains uninterpreted. As a preliminary step to rectify this omission, herein I study the site's total artifactual assemblage with particular emphasis on the distribution and modification of European items. I bridge acculturative and syncretic paradigms with archaeological methods in order to examine the Huron response to European materials and encounters.

Acculturation Paradigms

The concept of acculturation, like many other cultural paradigms, is borrowed from socio-cultural studies and modified to suit archaeological interpretation. Kraus (1944) initially revised the model which stressed the 'effects' of Western society on foreign 'primitive' cultures, to provide a theoretical structure amenable to understanding acculturation in Iroquoian archaeological studies. Although addressed in the anthropological literature for decades, the notion that acculturation affected European as well as Native groups is a relatively recent one for archaeologists. Most commonly, a donor-recipient model of acculturation has been employed (e.g., Helms 1992; Trigger 1976, 1991) despite the failure of the model to account for the modification of both cultures in a reciprocal and dynamic process of interaction.

Bradley (1987a:167) defines acculturation as "the process of reciprocal interaction that occurs when two autonomous cultures come into contact", and maintains the extent of influence does not have to be equivalent for each party. This definition allows for the conception of dynamic cultures as adapting and changing through time, thus playing a primary role in the outcome of choices, ergo equity by both groups to advance cultural change and/or continuity is maintained.

However, most contemporary historical and archaeological interpretations repeat rather than correct biases among secondary sources. For example, early understandings of acculturation were shaped, in part, by evolutionary models of cultural development. Within these models, European artifacts were viewed as 'technological advancements' and interpreted as desirable commodities for Native societies (e.g., Axtell 1988:134, 142-143).

Accordingly, European artifacts are often viewed as coveted commodities among 17th century Native cultures (e.g., Pendergast 1994:7) which in some instances, has led to arguments of 'dependence' upon European goods (e.g., Heidenreich 1971:274; Trigger 1991:1214). Moreover, European items are repeatedly interpreted as functional 'replacements' for past technologies (e.g., Fitzgerald 1990:46; Ramsden 1990:384; Trigger 1991:1207, 1211), and are periodically equated with Native aspirations to assimilate desirable European values and morals (e.g., Helms 1992:163-166). These interpretations are permeated with ethnocentric and non-anthropological interpretations that underplay Native factors.

Recent interpretations attempt to rectify these newly understood biases which negate the roles of Natives in shaping their own future, and imply a one-sided 'effect' on Native American culture change (e.g., Bradley 1987a:165-167;

Fitzhugh 1985a:6; Wilson and Rogers 1993:6-7). Additionally, research suggests Native groups were not dependent upon European goods (Thomas 1985:148), nor did these items 'replace' Native items. Rather, they acted as 'substitutions' in which traditional ideals are transferred to European goods (Feest 1986:30; Hamell 1983, 1986, 1987; Heidenreich 1971:226; von Gernet 1993:75). Regardless, the impact of Europeans on traditional Native societies during the 17th century still is emphasized (e.g., Trigger 1991:1204, 1210-1211).

Current investigators aspire to examine acculturation in a holistic manner in order to observe parallels among environmental and subsistence data, societal structure, trade networks, and dynamic cultural components of societies as sensitive indicators of assimilation. For example, Fitzhugh's (1985b) edited volume explores Native American adaptations to early European contact on a regional basis from Greenland to Florida. By directing discussion away from direct examination of material culture and technology, interpretations focus on structural culture changes including economic and social organization, ideational beliefs, and settlement and subsistence patterns, to better understand responses to acculturation and contact with Europeans (Fitzhugh 1985a:4-7).

One problem inherent in archaeological explanation entails the incorporation of biased historical accounts to supplement interpretations. Seventeenth century ethnohistorical documents are permeated with ethnocentric biases projected by early European explorers and settlers, and are bereft of direct commentary from Native sources. Consequently, Native views of Europeans during this period are difficult to ascertain from written documentation. Moreover, little attempt has been made to evaluate archaeological studies from a Native perspective (Fitzhugh 1985a; Jaenen 1974; Matijasic 1987; Morrison 1986; Ramsden 1978; Trigger 1980). Therefore, Native, rather than European political, religious, economic, and social objectives are highlighted in this study.

Objectives and Layout of Chapters

Since there are no paradigms which deal specifically with late 16th century sites (and by extension, 17th century Native sites), in this study methodologies are pulled from both 'prehistoric' and 'historic' archaeology whereby increasingly refined methods are obtained. Accordingly, ethnohistorical and archaeological material provide complimentary data to fortify interpretations with analogies and divergent theoretical positions (Charlton 1981; Fitzhugh 1985b; Leone and Potter 1988; Rogers and Wilson 1993; von Gernet 1993). Together, when broached within the framework of anthropological principles, they constitute a diachronic approach to understanding contact situations (Leonard 1993:31-32).

First, a general overview of the Huron during the ca. A.D. 1580-1650 period is explored within the broader context of archaeological Iroquoian populations in the Northeast (Chapter 2). This overview highlights weaknesses in archaeological theory and method and provides the necessary background to appreciate problems associated with the consolidation of acculturative and syncretic models (Chapter 3).

Chapter 4 addresses the method employed in this study and emphasizes syncretic attributes exhibited on European artifacts. This approach highlights both Native and European objectives equitably. Spatial distributions of traditional and modified European artifacts are then explored in Chapter 5, and cultural interpretations are broached with diachronic methods to understand the incorporation of European trade goods in 17th century Huronia. Finally, conclusions and proposals for future research are reviewed in Chapter 7.

CHAPTER 2

SEVENTEENTH CENTURY HURONIA AND NORTHEASTERN ARCHAEOLOGICAL PARADIGMS

The Early 17th Century Huron

During the first half of the 17th century, the Huron or *Wendat* were a horticultural Iroquoian speaking group who congregated to Simcoe County, on the Southeastern shore of Georgian Bay, Ontario, to distance themselves from the Iroquois proper and control northern trade transactions. The term *Huron* is used interchangeably to portray both the cultural population described in historic records, and 'archaeological cultures' dating from ca. A.D. 1400 to 1600 (after Ramsden 1990:361). Prior to this period, Huron antecedents are categorized within broad evolutionary stages delineated for Iroquoian development in Ontario. According to historical documentation, 17th century Huronia was comprised of 18-25 villages, and held a population of approximately 30,000 to 40,000 people - including two to three thousand warriors (Heidenreich 1971:91; Jamieson 1992a:77; Ramsden 1990:374; Tooker 1967:11).

Native and European interaction during the early 17th century is typically examined by cross-referencing historical, ethnohistorical, and archaeological data to develop what is believed to be the most comprehensive, and thus legitimate, interpretation of the past. Fortunately, a rich amount of ethnohistorical and historical documentation exists which details the Huron at this time. Undoubtedly, these works are burdened with numerous biases and inaccuracies typical of any research (Charlton 1981; Deagan 1982; Gagnon 1982; Lowenthal 1985; Trigger 1986; Wood 1990), yet important details may be extracted and correlated with archaeological data.

For example, historically derived boundaries for Huronia and its constituent tribal groups (Tooker 1967) are typically correlated with fictive 'archaeological territories and groups' (Wright 1966). However, historically known Iroquoian populations with highly permeable social boundaries may be addressed as archaeological polities engaged in extensive inter-polity interactions, economics, and trade (Cherry 1986: 23-26; Funk and Rippeteau 1977:8-9; Renfrew 1986:2-5; Snodgrass 1986:68; Snow 1994:3). These artificially imposed categories also render 'local' and 'regional' concepts problematic due to the cosmopolitan nature of 'groups' whose territories typically overlap and become obscured within buffer zones between contiguous populations (Upham 1992:140-145). Local interactions, groups, and places are herein defined as archaeological populations within the historically documented boundaries of Huronia, while the term 'regional' is meant to encompass Iroquoian and Algonquian populations within the greater Northeast.

Interaction with Europeans

In A.D. 1608, Champlain established a habitation post in Quebec and trade goods were distributed through direct contact along the St. Lawrence. The first encounter between Champlain and the Huron in A.D. 1609 was for the purpose of war alliances, and prior to this time, Algonquians acted as middlemen between the

French and Huron, with French goods distributed through networks originating from Acadia and the St. Lawrence, to the western Great Lakes, and south to the Susquehanna Valley (Crerar 1994:39; Heidenreich 1971:232-233; Kenyon and Fitzgerald 1986:29; Latta 1976:102; Tooker 1967:4).

Direct trade between the Huron and French was established in A.D. 1611. By 1615 Joseph Le Caron had entered Huronia as the first Récollect priest, and Champlain resided with the Huron for the winter. From A.D. 1623 to 1629, Récollect missionaries were continually present in Huronia acting as proselytizers of Christianity and middlemen in the fur trade, and Jesuit priests who arrived in Huronia by A.D. 1626 were permanently stationed by 1634. The increased presence of the French in Huronia during the 17th century led to the establishment of Christian colonies at Trois Rivières, Québec, and Tadoussac, with Ste. Marie constructed as a central mission by A.D. 1639 (Heidenreich 1971:233-238, 242-243, 277; 1972:93; Pendergast 1994:12; Ramsden 1990:384; Tooker 1967:3-6).

The first serious European-introduced epidemic hit Huronia in A.D. 1634, and episodic bouts of smallpox, measles, and influenza, in conjunction with warfare directed to population replacement reduced the Huron population to approximately 10,000 by A.D. 1640 (Bourque and Whitehead 1985:337; Snow and Lanphear 1988:23; Tooker 1967:11). Additionally, League Iroquois raids conducted for revenge, prestige, and hunting privileges increased in Huronia after 1640 (Heidenreich 1971:88-89; 1972:94).

These circumstances undermined the structure of the Huron Confederacy, and divided political factions that weakened group decisions and the ability to counterattack. Each village acted relatively autonomously, rather than collectively in response to pressures imposed by the League Iroquois, and Huronia was destroyed between A.D. 1649 and 1651. Many traditional Huron were assimilated by the Petun, Neutral, Erie, or Ottawa, or were adopted by the Seneca and Mohawk. Those who were more accepting of European lifeways sought refuge in the French missions (Heidenreich 1971:81, 276, 1972:94-95; Kenyon and Fitzgerald 1986:1; Tooker 1967:10; Trigger 1976).

Iroquoian Development and Interaction

To understand the context of 17th century Native and European encounters, traditional structures and interactions must first be outlined. From the Late Archaic to the Late Woodland, extensive Native trading networks, alliances, and interactions occurred on a continent-wide scale primarily through inter-ethnic connections (Dobyns 1984:23-24; Ericson and Baugh 1994:3-4; Stewart 1989:47-48; Wright 1994). Stewart (1989) presents broad based and focused networks as two major types of exchange systems that coexisted in the Middle Atlantic region from the Late Archaic to the Late Woodland time periods. These systems typify trading networks which existed throughout the greater Northeast, and illustrate the dynamic and cosmopolitan nature of prehistoric Iroquoian populations.

According to this model, broad based networks entail extensive geographic web-like interpolity reciprocal exchanges which are directed by various groups at different time periods. Focused networks are typically correlated with complex societies, and were periodically assembled throughout the Northeast from the Late Archaic through Middle Woodland. Here, cosmopolitan areas dispersed ideological beliefs and ritual goods on a regional scale - a notion supported with the presence of exotic items typically recovered from mortuary and ritual contexts (Stewart 1989:47; 1994:75-77), and distributed across the continent through inter-regional interaction and inter-polity trade.

Continuity in burial ceremonialism stemming from the Terminal Archaic period in the Northeast is manifested through homogeneous assemblages of copper, shell, and crystal artifacts (Bourque 1994:38-39; Hamell 1983:26). Grave offerings are almost non-existent on earlier Late Woodland sites, but become more frequent and lavish from the early to late 16th century. Additionally, high frequencies of European artifacts are typically recovered from mortuary sites in association with traditional goods of symbolic value. Native copper, shell, and crystal were accompanied by analogous European materials of metal and glass. Since burial goods and practices reflect traditional customs and tend to remain distinctively stable in most cultures (Bradley 1987a:110; Parrington and Wideman 1986:59; Ramsden 1990:380), ideological affiliations between European and Native materials are important factors related to the incorporation of European artifacts.

Therefore, beyond settlement patterns and environmental and subsistence reconstructions, mortuary practices and exotic materials are strong indicators for identifying socio-political continuity and change. Investigations of regional and inter-regional exotics and their distributions provide evidence of inter- and intra-polity wealth, prestige, interaction, and socio-politics (Jamieson 1996). In subsequent chapters I interpret exotic materials as indicators of traditional socio-cultural continuity. Accordingly, European materials were frequently modified to suit traditional practices.

It is difficult to choose an appropriate starting point to identify cultural continuity in Huronia. For example, a post A.D. 1500 time frame tends to emphasize a series of changes often attributed to European influence (e.g., Ramsden 1990:374-382; Trigger 1991:1204), rather than to Native roles and objectives. Since a longer time frame emphasizes Native socio-political mechanisms which likely governed change even after European contact (see Dodd 1984; Fox 1990; Jamieson 1989, 1992; Ramsden 1997; Warrick 1984, 1988), the latter model is chosen for this study.

Prior To A.D. 1600: Early European Encounters

The earliest evidence for European encounters and settlement in Northeastern America is found at L'Anse aux Meadows, a Viking habitation site in Newfoundland dated to A.D. 1010 (Axtell 1988:153; Fitzhugh 1985c:27-28). Sporadic contact between the Greenland Norse and Native groups likely continued between A.D. 982 and 1450, and traditional inter-polity exchanges moved European goods inland as early as the 11th century. Evidence to support this movement of European goods includes the presence of a Norse coin (ca. A.D.

1066-1093) recovered from a Middle Woodland site in Maine, a Norse zinc-lead artifact recovered from an Ontario 11th century Iroquoian longhouse, and Norse silver from the 11th century Boys site (Fitzhugh 1985c:28-30; S. Jamieson, pers. comm.; McKusick and Wahlgren 1980:1; Wright 1994:50).

By the late 15th century, British, Breton and Norman French, and Basque fished off the coast of Newfoundland (Axtell 1988:145; Crerar 1994:37; Hall 1987:1; Jaenen 1974:265). As a result, large quantities of European items were present along the Atlantic Coast during the early 16th century. Through historical and archaeological documentation, it is clear that initial encounters with Europeans were quite extensive. For example, significant volumes of trade goods were acquired by Acadian Algonquians and Cape Breton Island Micmacs at the turn of the 16th century (Pendergast 1994:12); numerous Native slaves were transported to Spain, France, and England between A.D. 1501 and 1534; hundreds of fishing vessels worked off the coast of Newfoundland by A.D. 1517; and by 1524, New England Natives had established trade protocols and were selective about which goods they wanted (Axtell 1988:145, 149-154).

Motivations other than trade attracted Europeans to the Maritimes and Gulf of St. Lawrence prior to the mid-16th century. These initial encounters were prompted by fishing, whaling, pirating, exploring, cartographing, accessing exotic items, establishing land claims for European countries, and the restocking of voyage supplies. Beyond these opportunistic encounters with European groups, the pilfering of abandoned settlements, installations, and shipwrecks could also account for the presence of European commodities in the Northeast during the 16th century (Axtell 1988:148-153, 174-175; Crerar 1994:37; Pendergast 1994:7-12). While significant historical and archaeological evidence substantiates the presence of European items along the East Coast, the availability of these goods in Iroquoia is less clear.

After ca. A.D. 1600

Based on the high frequency of trade goods recovered from sites, trade is often cited as a significant European enterprise only after A.D. 1580 (Kenyon and Fitzgerald 1986:5; Fitzgerald 1990:54-55, 92). For example, between A.D. 1580 and 1610 direct trade for furs originated in the Gulf of St. Lawrence, and indirect exchange of goods to the Gulf of Maine was maintained through Native trade networks, and sailing shallops along the East coast (Bourque 1994:35). Evidence for increased Breton French and Basque activity in the St. Lawrence trade between A.D. 1580 and 1600 is correlated with the appearance of trade goods in Huronia and Neutralia (Fitzhugh 1985c:32; Turgeon 1990:81-84). Isolated and scattered European items recovered from sites are generally attributed to the A.D. 1500-1550 time period, while the collective recovery of heterogeneous items of European kettles, knives, axes, and glass beads are attributed to the post-1580 era (Ramsden 1990:383).

However, this presumed post-1580 influx of European goods is based upon the association of glass beads with other European items recovered from sites. Without the benefit of specific temporal markers from early to mid-16th century

Iroquoian sites, it is difficult to evaluate the sequence and quantity of trade goods available throughout the 16th century. Accordingly, a steady increase in artifact frequencies throughout this century may have taken place, but would not necessarily be archaeologically visible (Fitzgerald 1990:54-55, 92).

Interaction and trade were based on reciprocal values of exchange equated with social status, rather than accumulated capital. Such exchanges date into prehistory, and are well established by the early Late Woodland Period where items were exchanged to maintain amicable inter-polity relations (Bradley 1987a:89; Jamieson 1992a:73). European items would likely be exchanged in Iroquoian societies where status and wealth was obtained through giving, rather than the acquisition of items, and accumulated goods were utilized to promote trade relations and social status. Subsequent to A.D. 1608, the sheer volume of items increased, yet the practice of relinquishing items to obtain status likely remained. Gift giving would increase obtained status, and there were many obtainable statuses possible for each person in a dynamic system. Otherwise, if the Huron were simply concerned with the accumulation and utilitarian aspects of European trade goods, sites would be filled with European merchandise (Crerar 1994:45; Heidenreich 1971:226-227; Jaenen 1974:266; Pendergast 1994:12).

Subsequent to A.D. 1609, disparate frequencies of French, Dutch, Swedish, Spanish and/or English goods could have entered southern Ontario by way of several routes. French goods on Huron, Neutral, and Algonquin sites likely travelled from the St. Lawrence to the Saguenay, Ottawa, and French

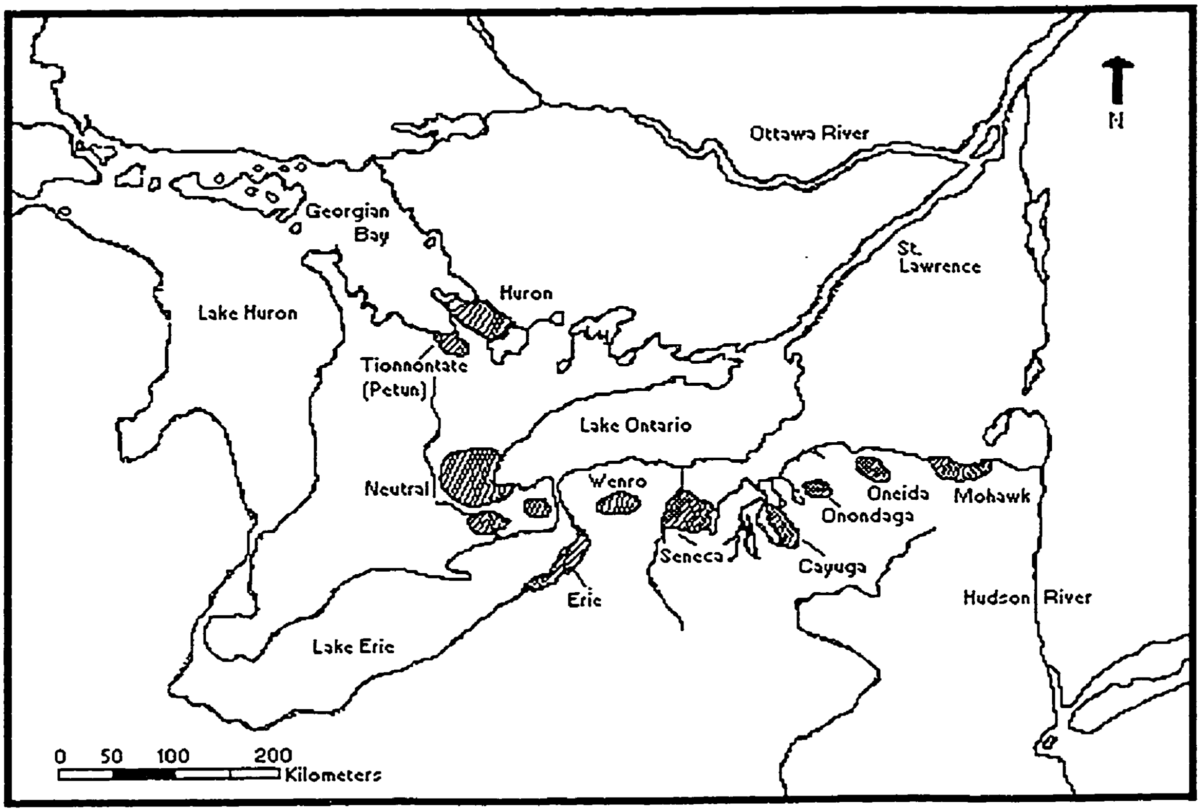
Rivers, while Dutch goods were predominantly acquired by Mahican, Five Nations Iroquois, and the Neutral by way of the Hudson River. Additionally, the Susquehanna River transported Dutch, Swedish, Spanish and/or English goods to Susquehannock, Delaware, Wenro, Erie, Neutral, and Huron populations (Heidenreich 1972:85; Kenyon and Fitzgerald 1986:2, 29).

From A.D. 1615 to 1629, the principal trading route between Huronia and the St. Lawrence entailed the Georgian Bay, French River, Lake Nipissing, Ottawa River riverine circuit, with the exception of A.D. 1622-1627 when peaceful relations with the Iroquois allowed access to the Ottawa route (Heidenreich 1971:243-246). From a European perspective, the French controlled trade along the St. Lawrence in the late 16th and 17th centuries except when temporarily defeated by the English between A.D. 1629-1632 (Heidenreich 1971:244; Kenyon and Fitzgerald 1986:5). From the Native perspective, when direct contact between Europeans and Native groups escalated during the 17th century, intermediary roles along the St. Lawrence were repressed, and exchange networks were altered. However, Native internal socio-economic mechanisms controlled European interaction until increased foreign stressors of Iroquoian warfare and European disease weakened Native cultures (Bourque and Whitehead 1985:336; Crerar 1994:37, 46).

Restricted access to the St. Lawrence by the Ottawa Valley Algonquians between A.D. 1615 and 1640 enabled the Huron to control the exchange of French goods and become intermediaries for Ottawa groups to the west, various eastern and northern Algonquian groups in Ontario and Quebec, and other Ontario Iroquoian populations. According to historical documentation, the Huron interacted predominantly with Algonquian groups, were allied mainly with Petun and Neutral tribes (Figure 2.1), but interacted with various Iroquoian groups at different times. Direct contact among the Huron, Neutral, Erie, Petun, Susquehanna, Delaware, and Cherokee Iroquoian groups, and various Algonquian groups was developed prior to European contact and sustained into the 17th century (Crerar 1994:37, 40; Heidenreich 1971:226, 278; 1972:85; Jamieson 1992b:11; Kenyon and Fitzgerald 1986:10; Morrison 1986:2, 10; Ramsden 1981:35).

Evidence of these external interactions and reciprocal exchanges demonstrates that Iroquoian groups acted as dynamic polities with permeable boundaries, yet variation among groups is also evident. For example, there are many distinctions between the Huron and Neutral and although both were likely influenced by southern and mid-Atlantic traits, Neutral activity was geared more to the south including the Ohio Valley and adjoining areas of Pennsylvania and West Virginia, while the Huron traded with the northern Algonquians. These factors indicate an enhanced social and/or ethnic identity of the Neutral with the southern ideational systems, including aspects of the 'Lizard Cult'. These differences in Neutral and Huron interaction patterns are attested as indicators of varying social, political and ideational practises (Jamieson 1992a:77, 79; 1996).

Figure 2.1: 17th Century Distributions of Northern Iroquoian Populations



(after Kenyon 1982:229)

Accordingly, incorporation must be viewed as a continuum from initial European contact and through later periods, not as a tailored unidirectional transaction, but as an intermittent and interchangeable process grounded in trade relations, degree of affiliation of the transacting groups, and the variety of unrefined or manufactured commodities exchanged. Cultural interpretations derived from these groupings are then linked as a multidimensional matrix (Hall 1987:5-6). It is these disparate motivations, capabilities, and cultural backgrounds that must be explored to develop a better understanding of the types of interaction and syncretic processes operative in any given period. Therefore, a brief historical overview of Ontario archaeological paradigms is presented below to highlight fundamental problems that developed when acculturative and syncretic processes were initially applied to Northeastern archaeology.

Archaeological Paradigms and Regional Interaction

Historical particularism dominated archaeological interpretive frameworks from the turn of the 20th century, well into the 1940s, with archaeological data serving as analogs derived and correlated with historical and ethnohistorical information. Within this broad framework, MacNeish's (1952) <u>in situ</u> model for Northern Iroquoian development replaced the migratory models which dominated archaeological interpretation of Iroquoian development during the first half of the century. The most common problem associated with the <u>in situ</u> model involved equating prehistoric trade with intersocietal contact simply through the distribution of exchanged items, which failed to account for the exchange of ideas as important links among societies (Charlton 1981:164-167; Jamieson 1989:307, 1992b:3; Leonard 1993:33; McEwan and Mitchem 1984:281; Schortman and Urban 1992b:235-241).

The Ontario Iroquois Tradition - a linear cultural-historical paradigm for Ontario prehistory introduced by Wright (1966) - continued to dominate archaeological interpretations by depicting cultures as stagnant bounds of spatial entities within temporal frames. As a result, archaeological evidence for external interactions are explicable only through the process of migration or conquest, which do not acclimate diffused and/or syncretized intangible ideas. This uni-directional cultural model emphasizes interpretations of settlement patterns by advocating connections between artifacts, features, and structures, rather than focusing solely on artifacts - as was the case with the in situ paradigm. It has resulted in research aimed principally at site description although cultural processes also are considered (Jamieson 1989:308; Willey and Sabloff 1980:184-185).

One problem inherent in Ontario's culture contact studies is the perpetual adherence to Wright's (1966) simplistic unilinear paradigm. While the taxonomic 'convenience' of employing this approach is recognized by archaeologists, problems are evident in squeezing data into rudimentary temporal-spatial designations that restrict our understanding of variation among dynamic cultures.

It is generally accepted that European influences and goods incorporated by Native North Americans were syncretized in distinctive ways based on social, political, economic, and cosmological components characterizing cultural polities. For example, it has been shown many times that the appearance of a ranked or stratified polity within an interaction network tends to be followed with shifts toward increased complexity among its trading partners (Schortman and Urban 1987, 1992b), while cosmological and social networks presumably influenced the incorporation and/or rejection of goods and ideas based on cultural perceptions of Europeans and/or trade goods at various stages of contact (Anthony 1990; Axtell 1981; Bradley 1987a; Fitzhugh 1985b; R. Hall 1977; T.D. Hall 1987; Jaenen 1974; Miller and Hamell 1986; Trigger 1982). Therefore, dynamic archaeological cultures adapt and change through time and thus play a primary role in the outcome of choices.

While studies pertaining to Iroquoian village sites subsequent to European contact are plentiful (e.g., Bradley 1987a, 1987b; Finlayson 1985; Finlayson and Phil 1980; Fitzgerald 1982a, 1990; Fitzhugh 1985b; Latta 1985a, 1985b; Lennox 1981, 1984a, 1984b; McEwan and Mitchem 1984; Noble 1971; Pendergast 1991, 1994; C. Ramsden 1990; P. Ramsden 1978, 1981, 1988), the dearth in published distribution patterns within structures and the lack of suitable methodologies to recognize and understand artifact arrangements as they pertain to intrasite patterning compound the problem. Social factors leading to interpretations of inter- and intra-site spatial relationships have yet to be extensively examined for Iroquoian sites (Jamieson 1989:309-310, 1992b:6-7; Muir 1990:36-40).

Since the mid-1980s, regional and interregional interaction paradigms were introduced, critically explored, and reworked (e.g., Anthony 1990; Baugh and Ericson 1994; Earle 1991; Renfrew and Cherry 1986; Schortman 1989; Schortman and Urban 1987, 1992a), to include modified interpretive frameworks for Iroquoian development through multi-linear models which challenged the assumptions and limitations of linear, and in situ paradigms (e.g., Caldwell 1964; Dincauze and Hasenstab 1989; Jamieson 1992a, 1992b; Niemczycki 1986; Seeman 1979; Stewart 1989, 1994; Williamson and Robertson 1994). These latter models were broached to encompass the sheer magnitude of excavated materials which do not conform to general regional chronologies, and in addition, explicated the presence of foreign artifacts through dynamic interactions, diffusion, and/or migration hypotheses, while still maintaining an in situ approach. Since trade is the main archaeological theme shaping the encounter process (Wilson and Rogers 1993:10), multi-linear paradigms satisfactorily illuminate syncretic processes among groups before and after European contact.

When socio-cultural syncretic and acculturative processes are applied to Northeastern archaeology, the result is an alternate perspective which accents Native objectives and actions. Here, ecumenical Native socio-political and ideological infrastructures are stressed in the incorporative processes. This position is circuitously supported by facets of archaeological and historic interpretations, and simply requires an amalgamated translation segregated from the preceding interpretive biases. Therefore, the following discussion includes an overview of syncretic and acculturative paradigms. These principles are then incorporated into a methodology suited to understanding Native objectives at Le Caron during the 17th century.

CHAPTER 3

THE THEORY AND PROCESS OF ACCULTURATION AND SYNCRETISM

Background of Acculturation Studies

Anthropological interpretations of acculturation are characterized by paradigms which attempt to correlate and gauge cultural modifications as a consequence of prolonged intersocietal contact. Queries into the meaning of acculturation as a stratagem for discerning social and cultural change were initially addressed by the Social Science Research Council through two conferences held in 1935 and 1953 (Tollefson 1984:229-230). The first council composed the following definition to provide a theoretical structure to study the 'effect' of Western society on foreign 'primitive' cultures:

> Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups (Redfield, Linton, and Herskovit 1936:149).

This definition depicts diffusion as a process in which two societies of relatively equal technological capacity interact: however, most anthropologists concerned with acculturation at that time envisioned it as a one-way flow of influences from a more technologically 'advanced donor' culture, to a culturally selective 'recipient' culture. Beyond describing simple material traits of culture at the 1953 inquiry, consultants stressed functional changes of intercultural contact.

Some anthropologists criticize these models as too general for understanding social complexity (Redfield et al. 1936:150-151; Tollefson 1984:230).

Subsequently, social scientists addressed politics, social structures, religion, and ethnic identity as influential aspects of acculturative processes (Anderton 1986:341-342; Tollefson 1984:231). However, the magnitude of Western influence and subsequent cultural modification is often exaggerated. For example, the term 'melting pot' was coined to embody contact situations in which culture groups willingly relinquish their previous ethnic identity and integrate completely with a new cultural context (Anderton 1986:341; Funk and Rippeteau 1977:10; Nutini 1988:79-80).

Tax (1960:193-194) argues convincingly that this idealistic model is grounded in Western ethnocentrism, and if evidence for cultural disintegration is anticipated from the outset of investigations, data is found to suit the supposition. Yet, some would say that to deny this aspect is to deny power relations involved. Regardless, if a society is unable to adapt or to adequately address external stressors, they inevitably become too powerful for cultural reformulation. Consequently, the society will either become acculturated or cease to exist (Kehoe 1989:123-124; Plog 1974:46-48).

Tax (1960) maintains that a complete acculturative process transpires only in theory. A successful progression of the acculturative cycle requires two interrelated and simultaneous processes: the migration of individuals outside the cultural core, and total immersion of the new population within the region. In culture contact situations where two or more societies interact, the replacement of one culture for another simply does not occur. Instead, social norms become intermixed and as a result, artifact traits are amalgamated. Therefore, rather than presupposing the cultural disintegration of one group by another, tangible traits may reflect a myriad of probable cognitive interpretations (Tax 1960:193-194).

Additionally, the one way process of acculturation and the dynamic of a 'recipient' culture encompasses both Iroquoian and European polities not as uniformities, but as cultures which are variable and undergo change. Accordingly, differences in the dynamics of interaction between 'Native' and 'European' groups may be detected and refined between particular Native polities (e.g., Huron, League Iroquois, Algonquians), and whether they were interacting with European French, English, Dutch, or Scandinavian groups.

Syncretism

The concept of syncretism also remains largely unrefined since its introduction during the 1920s. Syncretism was originally addressed as a political model to synthesize and explain the effects of two or more cultures in contact. Until recently, no preliminary methodical nor theoretical base existed to provide reasons or conditions that would help understand the syncretic process (Nutini 1988:16-17).

Anthropological applications of syncretism are commonly segregated into secular or religious categories. These distinctions themselves are problematic as neither is necessarily mutually exclusive. Researchers typically interpret amalgamated tangible elements among interacting cultures as evidence for the development of new cultural entities generated through the blending of two disparate societies. Accordingly, syncretism is simply one kind of change "conceived as a special kind of acculturation, in which the elements in interaction have a relatively high degree of initial similarity in structure, function, and form" (Nutini 1988:78). It is the most amicable and consolidating sort of interaction among cultural systems, where composite elements are not incorporated directly and literally, but through ancillary meanings revised through selective discretion (Nutini 1988:353).

Nutini (1988) provides the only framework to elucidate a presumed 'completed' syncretic cycle, through a study of amalgamated Christian elements in 17th century Mesoamerica. Since more power is appropriated to Europeans in this region, the model is less viable for application in the Northeast and poses the same restrictions attributed to acculturation paradigms. Interpretations regress to dominant and submissive cultural divisions as reiterated through two syncretic classifications: guided syncretism which entails direct encounters with Christian proselytizers, and spontaneous syncretism that occurs independent of first hand contact (Nutini 1988:17-19).

This model does not illustrate the syncretic process as a multidimensional process for evaluating cultural continuity and change. Instead, incorporated artifacts should be evaluated beyond literal translations to include symbolic meanings exhibited by traditional cultures. Therefore, a model is needed which deals with incorporated European materials not as indicators of compliance to ancillary cultures, but as a blending of 'subcultural' materials incorporated and submerged in conventional meanings (Anderton 1986:342; Feest 1986:29; Hayden 1984:85; Tax 1960:194). In this study, cultural and subcultural elements are perceived as independent Native and European traits to classify processes of continuity and change. In reality these traits are not mutually exclusive, but combined attributes exhibited as one syncretized form.

More specifically, syncretism may be viewed as an amalgam of extraneous cultural elements within the established culture's traditions, or conventional 'schemata.' In this way, extraneous subcultural elements are reinterpreted with internal and familiar cultural meanings. Thus, eclectic traditions are manifested in material culture which characterize societies - where physical traits represent aspects of the original cultural. Within this main structure, subschematic elements are introduced from the ancillary culture and then incorporated within the larger society. These outside cultural components are reconstituted with those corresponding to the traditional schema, and integrated as familiar elements (Bartelt 1991:61-63).

It is these physical elements and their corresponding symbolic meanings that are obtained empirically from archaeological data. While economic, socio-political, and religious factors shape cultural systems, *significant* amounts of symbolic elements must exist to reflect ritual components of culture. Accordingly, syncretism is identifiable when sufficient amounts of subschematic elements are adopted and manifested visibly on traditional artifacts (Nutini 1988:21-27, 353; von Gernet 1993:68-69).

These understandings of syncretism are suitable for all facets of culture, but are most applicable for religious applications. The discrepancy between the degree of ideological and structural syncretism is related to the social, economic, and political pressures the new culture introduces. Ideological and structural affiliations are not mutually exclusive cultural elements, but bilateral components of one cultural process manifesting a symbolic system. Even if the structural order has been successfully syncretized, the original ideological order often remains central and influential (Barbeau 1915:6; Nutini 1988:27, 78-81).

Longitudinal stability is considered when examining the process of syncretism among interacting cultures. While both structural and ideological networks are significant in the syncretic process, ideology is frequently distinguished as the most easily altered (Anderton 1986:350; Nutini 1988:350). However, based on his analysis of Onondaga collections, Bradley (1987a:173-174) found ideology to be less susceptible to change than technology and materials. Native ideology, therefore, constitutes one element of culture that concerns normative rules of behaviour and morals in society, yet penetrates and influences all aspects of everyday life. Consequently, religious conversion demands not only a renunciation of traditional belief systems, but also influences personal, social, and political components of culture (Jaenen 1974:278).

The amount of a/symmetry in beliefs and practices of converging cultures affects the syncretic process. When a high level of homogeneity exists among interacting systems, a large amount of stability and integration results during the incorporation process. However, asymmetrical convergence of beliefs and practices also contribute to the syncretic process - not with a stable and compatible outcome, but through the development of a more coercive acculturative process. Therefore, asymmetrical beliefs and customs are useful for identifying shortcomings in the syncretic process, which typically entails the inundatation of one ethnic tradition by one with more power (Nutini 1988:346-350).

Relating this concept to macrostructural paradigms of assimilation, the primary established culture is typically addressed as having the most power, followed by the assimilation of subsequent arriving immigrants who habitually introduce new heterogenities (Anderton 1986:341-342). On this premise, an ecumenical 'Nativism' may be addressed throughout the Northeast, albeit with *extensive* inter-regional diversity, where 'alien' groups and individuals enter the fundamental setting at intermittent times and places. In cultural theory, these newcoming 16th and 17th century immigrants, whether missionaries, explorers, or traders, are most sensitive to acculturative pressures.

However, recent evidence confirms that dynamic subcultural ethnicity may endure with little difficulty within a larger, principal culture. Therefore, subcultural ethnicity should not be viewed in traditional materialistic terms of assimilation, but as subcultural units within the broader context of Native national identity - with the potential for both entities to be mutually supporting (O'Brien 1982:196). However, if power *is* allocated in inequitable proportions, the prominent conventional culture should, theoretically, perpetuate more influence on processes of continuity and change.

This notion becomes problematic, however, when explicating processes related to ideological manifestations of syncretism. The syncretic process is commonly understood to necessitate a mild to strong affinity with structural, ideational, symbolic, and/or economic elements between interacting cultures (Feest 1986:29; Morrison 1986:16-19; Nutini 1988:81). However, subsequent criteria to understand processes of syncretism are ambivalent.

Arguments to support the initial stage of ideological homogeneity necessary for the onset of these syncretic processes is addressed below in general terms for the Northeast. For example, analogous symbols and practices correlate the Christian god with the Great Spirit; emblems of the cross with the four spiritual directions; the Feast of the Dead with All Souls Day; and parallels in the flood myth are also addressed by Feest (1986:29-30).

Additionally, many Native groups identified with European religious and military rituals, ceremonies, and emblems (Jaenen 1974:268-270), and according to Native mythology, perceptions of Europeans at varying stages of the encounter process sometimes involved interpretations of Europeans as 'gods' with powers akin to Iroquoian interpretations of 'other world beings.' However, these perceptions were prone to readjustments based on cultural disparities, and the dynamic nature of culture change (Bradley 1987a; Hall 1987; Hamell 1983, 1986, 1987; Rogers and Wilson 1993).

Accordingly, there was a cultural tier of homogeneous spirituality throughout the Northeast, and while inter-regional diversity undoubtedly existed, an ecumenical pan-Iroquoian religion may also be addressed on an regional scale (Barbeau 1915:11; Hamell 1983; von Gernet 1993:73). It is within this broad network that the success or failure of emerging Christian sects are best understood. Only twenty-nine missionaries were reported in Huronia over a period of thirty-five years (JR 1:25; JR 1:27), and the limited number and affluence of these clergymen must be weighed in relation to the affluence, prominence, and power of eclectic traditional spirituality. While documents indicate successful religious conversion was frequent during the first half of the 17th century, several missionary accounts depict individual and group resistance to Christian conversion (JR 1:8; 17:11-15; 20:27-31; 30:27-33). Additionally, Native Christian converts tended, at times, to revert back to traditional forms of spirituality (Latta 1976:274; JR 1:79).

When Nutini's (1988) model is applied to the incorporation of European goods in Northeastern Native cultures, it is impeded beyond the first stage of symmetrical convergence, i.e., if Native structures are understood to possess a more prominent and powerful infrastructure shaping societies, and the adoption of trade goods is not equated with syncretized Western ideals. The syncretic process within the context of this model suggests the manner in which anthropological models for acculturation are viewed is backward - European immigrants were more susceptible to adjusting to traditional Native lifeways.

This query is best understood within the realm of interpretations, where depictions of power in Western economic and structural terms suggest Native hegemonic operations overpower the modest socio-political, economic, and ideological influence ascribed to Europeans. However, as discussed above, if European goods were associated with conventional Iroquoian ideological power (Bradley 1987a:108-110) the weight of European influence and control within interacting regional systems amasses, albeit to varying extents based upon ecumenical and discrete renditions of ideological power.

Since ideological structures typically remain significant and relatively compliant to syncretic processes, asymmetrical syncretic processes would result between European and Native interactions. Asymmetry between Native and European polities is evident within the broad cultural categories of language, ideology, social tradition, and economic doctrine; while more specific cultural heterogenities include conceptions of warfare, alliances, morality, justice, power, and personal maintenance and property (Jaenen 1974:267-289; Morrison 1986: 3-9).

Therefore, based on syncretic and acculturative paradigms, a smooth incorporation process based on symmetrical syncretic processes characterized interactions among cosmopolitan and contiguous Native populations in the Northeast who were not engaged in warfare. In contrast, symmetrical convergences between European and Native cultures provided a feasible stage for the syncretic process to commence. However, the level of asymmetric, or heterogeneous lifestyles between these polities suggests any form of syncretism during the 17th century transpired in more conflicting, and thus more contrived circumstances.

The cultural components of 17th century Huronia reflect a syncretic convergence of Native and European networks, but one in which Native ethnic elements are habitually prominent. This suggests traditional practices and beliefs governed the interpretation of ideational and political structures, and are best understood in relation to revitalization processes.

Revitalization

Wallace (1956) proposes the term 'revitalization' to describe a uniform process of cultural innovation labelled under many terms. These include Nativistic movement, cargo cult, religious revival, social movement, etcetera. While the process of culture change is typically based on gradual inadvertent reactions to various events over an extended period of time, revitalization movements are characterized by abrupt deliberate actions of a society to intentionally change events (Wallace 1956:30-35).

Diverse developments in the revitalization process include cultures focused on reviving traditional cultures (revitalization process), or those with a desire to acquire foreign concepts and items (cargo cults). These categories are not mutually exclusive for any culture, but they identify cultural priorities entailed with the process of change (Wallace 1956:47). The revival process for the Huron at Le Caron is grounded mainly in the rekindling of traditional customs, and augmented by the incorporation and modification of European items to syncretized traditional forms. Based on the low frequency of European trade goods recovered from the Le Caron site and the potential for the Huron to accumulate massive numbers of these items, the inference is that the Huron were more concerned with gaining power through the trade of goods, rather than accumulating items (Chapter 6). Accordingly, these conditions provided the favourable setting necessary for the French to flourish successfully within the larger trading network.

The Huron and Syncretic Blending

In Northeastern archaeology, descriptive publications of palisade and longhouse structural configurations as reflections of social and economic patterns were produced throughout the 1970s and 1980s (e.g., Dodd 1984; Finlayson 1985; Johnston and Jackson 1980; Kapches 1990; Latta 1985b; Knight 1987), with fewer studies consolidating intersite artifact classes to better discern social organization (e.g., Hayden 1979; Latta 1976; Muir 1990; Ramsden 1988; Warrick 1984). These approaches augmented the salient bias in contemporary definitions for archaeological acculturation and syncretism by disregarding the interactive complexity necessary to appreciate the reactions of Native North Americans to intersocietal encounters, and to adequately address anthropological cultural conclusions. Interactive models are better suited for interpretations of archaeological cultures which operate as 'dynamic' systems and exhibit patterns of syncretized behaviour (Fitzhugh 1985a:7-8; Wilson and Rogers 1993:5-6).

Native peoples exercised a variety of strategies for assimilating European influences into their own political, economic, and ideological systems. However, detecting evidence for these subtle and/or abrupt shifts in the archaeological record, and determining to the best of our knowledge the potential for understanding cultural activity from a Native perspective is problematic. For example, definition of the extent to which local groups incorporated diverse cultural materials and diffused ideas from other populations is difficult because the selective integration and modification of these diffused concepts would vary between contiguous populations. The degree to which syncretic attributes of culture can be recognized is dubious, but this is to be expected due to the limited nature of archaeological interpretation.

In the following chapter, the method chosen gauges both the frequency of incorporated European goods, and the degree of syncretic elements exhibited on recovered artifacts at Le Caron. Given the complexity of the afore-mentioned interaction spheres and the limited nature of archaeological approaches to delineate controls and corroborate emic perspectives with empirical data, etic categories described in Chapter 4 are modelled to reflect emic explanations for the incorporation of European goods. This Marxist materialist approach consolidates factors related to economies, exchange systems, and social organizations to decipher humanist idealism through a pragmatic approach (Barsh 1988:187-190;

Hamell 1983:5; Hayden 1984:79-86; Morrison 1986:4-6). While specifically geared for this particular site, this investigative approach has applications throughout the Northeast and is meant to serve as a comparative framework for intersite analyses.

CHAPTER 4

METHODOLOGY

Artifact Overview

In order to understand the processes of syncretism and/or acculturation during the 16th and 17th centuries in the Northeast, the intended European function of trade goods, and the perception, use, and modification of these goods by Native groups must be addressed. Over 1,100 European artifacts recovered from Le Caron (Table 4.1) are evaluated to determine the probability that they were used for their intended European function, or whether modification to new artifact forms display traditional continuity. The majority of European artifacts modified into traditional forms derive from axe, knife, and kettle scrap. These artifacts, and other unmodified European forms, are described extensively in Appendix A.

The frequency of all traditional artifacts was also recorded (Table 4.2) as the foundation for correlating and understanding the incorporation of European items, and detailed descriptions of these artifacts are provided in Appendix B. The sheer frequency of traditional artifacts (n = 57,261) outnumbers those of European origin (n = 1,149).

Method

As a prerequisite to analysis, the Le Caron collections catalogue was transferred to a computer database. This was a necessary preliminary step to interpretation since the original catalogue entries were not conducive to computerized

Table 4.1: Frequency of European Artifacts

EUROPEAN ARTIFACTS	NUMBER	PERCENT	MINIMUM NUMBER	PERCENT
Glass Beads	447	38.90%	432	71.05%
Kettle Scrap	397	33.55%	9	1.48%
Iron Knives	81	7.05%	26	4.28%
Miscellaneous Unidentifiables	56	4.87%	43	7.07%
Nails	33	2.87%	20	3.29%
Miscellaneous Identifiables	31	2.70%	26	4.28%
Ceramics	25	2.18%	3	0.49%
Axes	22	1.91%	5	2.47%
Glass	14	1.22%	3	0.49%
Ammunition	12	1.04%	1	0.16%
Awls	7	0.61%	6	0.99%
Worked Unidentifiables	5	0.44%	5	0.82%
Baling Seals and Tokens	4	0.35%	4	0.66%
European Rings	4	0.35%	4	0.66%
Iron Stakes	4	0.35%	4	0.66%
Iron Fish Hooks	3	0.26%	3	0.49%
Iron Fish Spears	2	0.17%	2	0.33%
Latten Spoons	2	0.17%	2	0.33%
TOTAL	**1,149**	**98.99%**	**608**	**100.00%**

Table 4.2: Frequency of Traditional Artifacts

TRADITIONAL ARTIFACTS	NUMBER	PERCENT	MINIMUM NUMBER	PERCENT
Prosaic				
Ceramic	36,641	65.44%	30	3.57%
Fauna	18,678	33.36%	164	19.52%
Worked Flaked Stone	143	0.26%	143	17.02%
Stone Triangular Points	84	0.15%	84	10.00%
Flakes	68	0.12%	58	6.90%
Gaming Discs	67	0.12%	67	7.98%
Debitage	61	0.11%	61	7.26%
Cores	39	0.07%	39	4.64%
Modified Bone	38	0.07%	31	3.69%
Ground Stone	28	0.05%	28	3.33%
Whetstones	28	0.05%	28	3.33%
Stone Scrapers	24	0.04%	24	2.86%
Netting Needles	23	0.04%	16	1.90%
Hammerstones	22	0.04%	22	2.62%
Projectile Points (Bone/Antler/or Stemmed Chert)	12	0.02%	12	1.43%
Boiling Stone	11	0.02%	11	1.31%
Bone/Antler Awl	8	0.01%	8	0.95%
Perishables	5	0.01%	4	0.48%
Miscellaneous Worked Bone	4	0.01%	4	0.48%
Stone Adzes	3	0.01%	3	0.36%
Stone Anvils	3	0.01%	3	0.36%
Subtotal	**55,990**	**100.01%**	**840**	**99.99%**
Percent Prosaic	**97.78%**		**70.65%**	

TRADITIONAL ARTIFACTS	**NUMBER**	**PERCENT**	**MINIMUM NUMBER**	**PERCENT**
Ornamental or Ceremonial				
Pipes	774	60.90%	35	10.03%
Beads	207	16.29%	207	59.31%
Unworked Shell	192	15.11%	12	3.44%
Effigies	39	3.07%	39	11.17%
Worked Shell	33	2.60%	33	9.46%
Ground Stone (Ornamental)	9	0.71%	9	2.58%
Unworked Stone	9	0.71%	6	1.72%
Pendants	6	0.47%	6	1.72%
Worked Stone	2	0.16%	2	0.57%
Subtotal	1,271	**100.02%**	349	**100.00%**
Percent Ornamental and Ceremonial	**2.22%**		**29.35%**	
TOTAL	57,261		1,189	

data manipulation. One major obstacle with this inventory entailed the correlation of discrepancies between artifact frequencies listed in the original catalogue with those existing in the collection. Total frequencies of bone and pipes were acquired from Muir (1990) and Doak (1993), and an estimate of Native ceramics was calculated from annual site reports. With the exception of these artifacts, all others were cross-referenced with the database and only those items physically present in the collection were included in this analysis.

While historical documentation indicates that European blankets and items of clothing were frequently incorporated by the Huron (Trigger 1976:358-360), the frequency of perishable items incorporated by the Huron at Le Caron is undetermined. Nonetheless, this method provides a reliable means for obtaining social and economic conclusions related to non-perishable items. These artifact attributes are connected to processes of continuity and change.

While the original database was effective for summarizing general contextual relationships associated with artifacts, in the majority of cases specific proveniences were not recorded. As a result, one of the greatest challenges in this study entailed distinguishing 17th century artifacts from those of later origin. This was not often possible on the basis of visual inspection alone and to maximize the potential for European influence at Le Caron, artifacts which could not be dated are included as part of the 17th century inventory. This method is chosen to maintain consistency among European artifacts lacking context, and to maximize archaeological evidence for 17th century European encounters at Le Caron.

Both Native and European artifacts are subdivided into more manageable categories of prosaic, and ornamental/ceremonial artifacts. The term prosaic includes common or everyday artifacts without imposing presupposed utilitarian interpretations and implying that these items are bereft of cosmological content. Accordingly, each artifact may have had several uses including technical, social, and even ideological functions. These are not necessarily fixed, and may change with time and space (after Jamieson 1997:11, 19). However when possible, artifacts are correlated to economic activities of skinning, food procurement, and tool production in order to decipher specific functional meanings. Accordingly, prosaic artifacts are those items believed predominantly unrelated to ritual, ornamental, and spiritual activities.

In contrast, ornamental and/or ceremonial items include artifacts predominantly utilized for personal adornment, or items with known or inferred religious significance connected to ritual activities. In this study, ornaments include personal accessories. Since ornamentation is frequently associated with individuals of status or elevated social positions, these artifacts are also categorized as prestige items.

Etic artifact classifications are defined below to distinguish physical attributes associated with religion and ritual. The classification of these artifacts is distinguished by correlating conceptual and stylistic attributes among artifacts through symbols (Morrison 1986:4-6). In this study, a socioreligious symbol "is a physical representation (a sign) or a social representation (a patterned action) that stands for a general or particular concept embodying a single or complex belief" (Nutini 1988:26).

Ritualistic behaviour is affiliated with exotic mortuary goods which represent a widespread belief system and perceptions of artifacts are often modified as a local manifestation of syncretic artifact forms. These artifacts are considered evidence for interaction reflected mainly through rituals to symbolize and reinforce political connections of establishing or annihilating political power (Jamieson 1997).

Background of Archaeological Acculturative Methods

Kraus (1944) introduced the first model to understand acculturative processes in Northeastern archaeology, while Quimby and Spoehr (1951, as cited in Farnsworth 1992:36) proposed a model specifically geared toward understanding acculturation in Iroquoian archaeological studies. They employed seven typological categories for defining culture change in Native populations, with emphasis placed on new artifacts introduced through European contact, and Native artifacts modified by European influence. The notion that acculturation affected European as well as Native groups was in its infancy at this time.

Quimby (1966:8-11) then employed these categories to define culture change in Northeastern Native populations and concluded that innovative artifact production occurred after intense European contact. This model inadvertently quan tified and addressed syncretized artifact forms despite stressing European influences on traditional cultures.

Latta (1976:16-28) adopted and modified Kraus's (1944) model to explain Iroquoian acculturative processes in the Northeast. The first researcher to correlate intersite analyses of all artifact types among Huronian villages, her model is based on the constructs of the unilineal in situ model of Iroquoian development now considered too rudimentary to account for variability (Jamieson 1989:307).

According to current archaeological paradigms, Bradley's (1987a) research is the most effective examination of acculturation assembled for the Northeast. Like Latta (1976), he relies on cultural-historical cells to identify general temporal and spatial frames for cultural designations, yet attributes change and continuity in assemblages as reflections of dynamic interactions both prior and subsequent to European encounters. By employing a six-celled cross-tabulation matrix, material preferences are evaluated as exhibiting continuity or change in form and function (Bradley 1987:169-173).

Mandzy (1994) employs a modified version of Quimby's (1966) method to understand the process of culture continuity and change. In her version, an artifact's origin is given less precedence than its function. Change is evaluated through the use of goods in Native eclectic terms, rather than subcultural European interpretations. Her six classifications, which incorporate function, form, and material, merge non-local Native (e.g., shell, exotic cherts) <u>and</u> European goods as new materials (Mandzy 1994:137-140). This method suits the view that Iroquoian trade systems were established prior to European contact and that European trade was incorporated into an internal network of developed value systems (see Crerar 1994).

Farnsworth's (1989) acculturation study focuses on the influence of Franciscan Missions on Native groups in Alta, California. Focusing strictly on activities and materials from one site, he groups artifacts into clusters according to function. With Native and European functions as the primary base for investigation, nine additional categories are correlated to each artifact which results in a cross-tabulation display of ninety cells (1989:195-203). This approach is too cumbersome to adequately decipher processes of continuity and change.

Farnsworth's (1992) second attempt at defining continuity and change is abridged to six primary categories with eleven attributes to constitute a sixty-six celled cross-tabulation matrix. Based on artifact frequencies for these categories, he provides a numerical index to synthesize the results and determine which attributes constitute continuity and change (Farnsworth 1992:27). Regardless, too many categories, overlapping traits, and 'assumed' interpretations of function, changed meaning, and direct replacement, make both approaches ineffective.

Method Employed for the Le Caron Collection

The following method is based on a combination of approaches taken by Bradley (1987a), Cheek (1974, as cited in Farnsworth 1992:35), and Mandzy (1994). Components of these three models, summarized below, are abridged and combined to secure an appropriate approach for extensively examining European artifacts recovered at Le Caron.

Bradley's (1987a) six celled cross-tabulation display delineates continuity and change in general terms to address artifact frequencies among numerous sites in different time periods, and thus provides a solid synthesis for comparing a multitude of data. However in the Le Caron study, the extensive intrasite examination of recovered artifacts is not correlated to artifact frequencies from other sites. A method to extensively address continuity and change from one site is required.

Cheek's (1974) eight celled cross-tabulation matrix provides such a framework, and places equal weight on European and Native objectives. Cheek's

(1974, as cited in Farnsworth 1992:23-26) twenty-four celled cross-tabulation matrix for quantifying continuity and change entails form, material, and technique of manufacture as the primary European or Native elements, while still addressing hybrid forms (Table 4.3). Similar to Bradley's (1987a) technique in layout, this format was chosen to address European and Native influences equitably. Bradley's 'implied function' category is substituted for Cheek's 'technique of manufacture' in response to Mandzy's (1994) emphasis on function.

Table 4.3: Matrix of Continuity and Change

MATERIAL	FORM	FUNCTION (Implied)
1) European	European	European
2) European	European	Native
3) European	Native	European
4) European	Native	Native
5) Native	Native	Native
6) Native	Native	European
7) Native	European	Native
8) Native	European	European

(after Bradley 1987a; Cheek 1974)

All European artifacts in the Le Caron collection are examined separately to determine the degree of continuity and change in each artifact class. Since few European artifacts were recovered in their original form and the majority have been modified, a consolidated overview of artifacts is incorporated below for interpretive purposes. Detailed accounts of European items and references to support the foregoing interpretations are provided in Appendix A.

The entire artifact assemblage is correlated with Cheek's (1974) classification system and summarized below. By necessity, artifacts are quantified by total frequencies rather than minimum numbers. Additionally, European artifacts are categorized by function of modified goods at the time of site abandonment rather than the manner in which they were initially introduced to the site. This method eliminates problems associated with minimum numbers and total artifact frequencies. For example, a minimum of thirteen copper alloy vessels incorporated onto this site were modified into over three hundred traditional forms. Only the latter shapes are quantified and investigated below.

Artifact Frequencies in Each Cross-Tabulation Matrix:

Category 1

Cheek's first category deals with artifacts made of European material that retain their original European form or display signs of modification that reflect European use of an item. For example, complete and near complete axes with bits perhaps broken through use in their originally intended European function, are classified as exhibiting European function, form, and material. Similarly, knives which could have been damaged through use in a European function (e.g., damaged tips), and molten kettle scrap associated with cooking hearths that could reflect material debris from functional heating are classified as retaining elements of their intended European function. Additionally, it is assumed that unmodified

European artifacts, particularly those with no traditional counterparts, functioned in their intended European purpose (Table 4.4).

Fifty-six unidentifiable metal fragments recovered from Le Caron include mainly corroded irregular iron, thin wire fragments, and broken but unworked thin iron rods. These miscellaneous unidentifiable items are assumed to have served a European function since they display no signs of modification to suit traditional forms. All unmodified metals are presumed to be unrecognizable in form as a result of post-depositional decomposition, and are therefore categorized with a European function. Therefore, artifact frequencies which reflect strictly European materials, forms, and functions are inflated rather than underestimated in circumstances where the implied European function is ambiguous. This approach maximizes, rather than minimizes the degree of European influence in the final interpretive conclusions proposed for this site.

Forty-two irregularly shaped copper alloy fragments were heated to irregular shapes. These artifacts are assumed to have been heated as a result of their intended European function of cooking. However, since evidence of heating is associated with many copper alloy artifacts worked into traditional forms, these fragments may actually be debitage associated with copper alloy working.

Thirty-three unmodified nail fragments and four unmodified spikes recovered from Le Caron correlate with 17th century materials and include a variety of hand wrought nails and tacks (see Kidd 1949:Plates XXX, XXXI). Unmodified nails were likely adopted for use as awls but there is no evidence of

Table 4.4: Artifact Frequencies For Matrix Category 1

MATERIAL FORM FUNCTION (Implied)	FREQUENCY
European European European	
Miscellaneous Unidentifiable Metal	56
Unmodified/Molten Kettle Scrap	42
Nails	33
Unmodified Miscellaneous Identifiables	29
Unmodified Broken and Complete Knives	7
European Rings (Ornamental)	4
Iron Stakes	4
Unmodified Axes	3
Unmodified Glass	2
Number Ceremonial/Ornamental	4 (2.22%)
Number Prosaic	176 (97.78%)
TOTAL	180 100.00%

modification. Hence, the intended European function is attributed to these items. Twenty-nine miscellaneous identifiable prosaic items which do not correspond to traditional artifact forms consist mainly of iron and brass items and include: furniture and kettle hinge fragments, a large iron hook, a metal wedge or tomahawk fragment, a broken sword blade, a cotter pin, one large cylindrical iron weight, and a large iron latch. Mandzy (1994:141-142) proposes the shape of these items are simply not conducive to further modification and may have held spiritual or prestigious significance. Of the total thirty-one miscellaneous identifiable items recovered from the site, one iron bell and one hook and eye are the only artifacts which suit an ornamental rather than practical function. These are addressed separately in Category 2.

Seven iron knife blades are in a condition suitable to serve the intended European function. Frequently interpreted as "superior to Native counterparts" (e.g., Fitzgerald 1990:453; Mandzy 1994:141), they are often presumed functional replacements to lithics and underscored as a potential source of raw material for modifying traditional tools. Lithic and copper knives used for cutting share the same function as iron knives introduced by Europeans. Therefore, while seven nearly complete knives may indicate that they were used in the intended European function, they also serve the traditional Native function. Overall, the frequency of knives modified into traditional forms and those in a condition suitable for recycling outnumber knives which could be employed for the European function at the time of site abandonment. These are discussed below in Category 4.

Three of four European manufactured rings recovered from the Le Caron site are associated with missionary presence in Huronia, while the fourth exhibits a secular unidentifiable abstract design (Cleland 1972:209-210; Wood 1974:94-95). Two L-Heart, and one IHS ring were likely distributed by Jesuit priests as a symbol to communicate Christianity, and may thus be assigned religious significance (Cleland 1972:203; Mason 1976:115). However, secular interpretations or style drift manifestations unassociated with Christian symbols also may be suitable interpretations for these rings (see Cleland 1972:202-206; Petersen 1964:60; Wood 1974:92-94). Regardless of Native cognitive understandings for non/Christian symbols, the European purpose for finger rings as ornamentation is proposed for this site since they may have been an European introduction (Finlayson and Pihl 1980:10).

Because the Le Caron axes are not as extensively reworked as kettle and knife fragments, it is difficult to discriminate between those intensionally modified and those unintentionally broken. Just three axe fragments display qualities indicative of a European function at the time of site abandonment, and only one complete axe was in a state conducive for functional use.

Finally, two light green glass fragments recovered from Le Caron are unmodified and presumed remnants of one vessel. These artifacts likely served the intended European function as a container.

Category 2

The second classification of artifacts includes those made of European material which retain their European form but have an apparent Native function (Table 4.5). This category is sometimes problematic as certain artifact categories display both European and Native 'implied functions'. For example, beads constructed of Native or European material and form supply the same 'intended function' of ornamentation in both cultures. In this study, I give the needs of the Huron precedence over those of the culture from which artifacts derive (after Mandzy 1994).

Table 4.5: Artifact Frequencies For Matrix Category 2

MATERIAL FORM FUNCTION (Implied)	FREQUENCY
European European Native	
Glass Beads (Ornamental)	447
Unmodified European Ceramics	25
Ammunition/Gun Frizzen (Ceremonial)	12
Iron Awls: European Manufacture	7
Tokens/Coins/Buttons (Ornamental)	4
Iron Fishhooks	3
Iron Harpoons	2
Latten Spoons (Prestige)	2
Unmodified Miscellaneous Identifiables (Hook and Eye, and Iron Bell)	2
Iron Awl: Reworked Miscellaneous Metal (European Shape)	1
Number Ceremonial/Ornamental	38 (7.52%)
Number Prosaic	467 (92.48%)
TOTAL	505 100.00%

Multidimensional meanings for any one artifact class sometimes derive from the same culture. For example, European beads were manufactured to serve as personal adornment. However, on the North American continent, beads were interpreted and valued by Europeans more as trade items than as ornaments. Consequently, the North American European 'implied function' of beads as trade items was well suited for trade within the larger framework of Native exchange, and provided a means for subcultural florescence within the greater hegemonic culture. Since these trade items display symmetry with traditional Native forms, materials, and function, these subcultural elements were incorporated because they fit directly into traditional Native cultures throughout the Northeast (Hamell 1983). While the 'implied function' of beads as ornaments in Europe is analogous to Native implied functions, these symmetrical elements are secondary to the Native adoption of goods as a traditional continuum.

All imported beads, whether made of glass, shell, or siltstone are interpreted from the Huron perspective, rather than intended function of the places from which they derive (e.g., Europe, the Atlantic coastline, or areas of Georgian Bay and Manitoulin Island). This perspective addresses not only the physical form of the artifact, but syncretized local attributes of material, form, and function. Therefore, the high frequency of glass beads recovered from Le Caron (n = 447) suggests these artifacts were readily incorporated because of similarities with conventional ornamental forms and physical attributes related to traditional spirituality.

European ceramics are also included in this category since the vessel fragments recovered from Le Caron were unmodified, and thus are presumed to have served their intended (Native and European) function. Twenty-five European ceramic fragments represent a minimum of three vessels that date to the 17th century. These include an incomplete green-glazed white fabric vessel, one 17th century Delft ware fragment, and one friable piece of redware (Barton 1977:48-49, 66; Camp 1975:79; Cotter 1958:32; Kidd 1949:134). The low incidence of ceramic vessels indicates they were not employed for everyday use, and their glazed exterior surfaces (asymmetrical elements) indicates they were viewed differently than traditional forms and likely served a 'Native implied' function as ceremonial or status items.

Twelve artifacts represent the presence of at least one trade gun. These include one frizzen spring of a French style flintlock gun, lead shot, musket mould strips, several pellets, and fragments of lead sprue. While the gun was a novel item with no traditional counterpart in Native societies it was likely interpreted by the Huron as a thunder tube to create thunder and lightening effects. In 1633, Huron requests to shoot the Thunderbird support the idea that firearms were scarce during the mid-17th century (Axtell 1988:131; Given 1994:52, 62; Trigger 1976:629). Since the sum of ammunition constitutes evidence for one trade gun, and 17th century European guns were not noted for their accuracy, the European interpretation of guns acting as functional replacements for traditional lithic forms is problematic.

Subsequent to the French regaining control from the British, only limited quantities of guns were available to Christian converts, and the Dutch continued their ban on gun distribution to Native groups. Accordingly, an increased reliance on guns by Native groups occurred only after the mid 17th century (Given 1994:56-61; Trigger 1976:629-630; Worcester and Schilz 1984:105-113). Finally, the suggestion that firearms are a totally European item is based on the physical properties and intended European function of the artifact. However, when premised as a physical manifestation of traditional spirituality, ideational values more adequately suit the function of these gun fragments.

Other European artifacts which fit directly into the traditional culture, and served the same 'implied function' in both European and Native cultures include: metal awls, harpoons, and fishhooks. While seven iron awl fragments were recovered from Le Caron, two bone awls and two hafted beaver incisors suggest both continuity and change characterize awl materials, while continuity characterizes both form and function. This trend is true throughout the Northeast as traditional awls are never completely replaced by European counterparts (Fitzgerald 1990:487; Maxwell and Binford 1961:88, 119; Ritchie 1954:24-26, 37). Additionally, one thick iron rod bent centrally and pointed on both ends is a large replica of imported European awls and demonstrates creative construction of implements. This reworked European awl form suggests innovative manufacturing techniques developed to suit introduced European materials.

Three wrought iron fish hooks were recovered from the site while traditional bone fish hooks are absent. However, this need not indicate simple artifact replacement as traditional fishing practices were important economic activities. Traditional artifacts recovered from Le Caron which support this conclusion include one large perforated wooden net float (Rexe 1972:F15), netting needles, and a high frequency of fish bone (Muir 1990:94). Therefore, the use of fish nets was likely favoured by the Huron to yield larger catches (Trigger 1976:41).

Iron barbed harpoons manufactured by Europeans for distribution in the fur trade were distributed throughout the Northeast (Camp 1975:43; Fitzgerald 1990:428-431; Kidd 1949:126), and two recovered from the Le Caron site supplement two traditional unilateral barbed bone harpoons. Additionally, one iron barbed harpoon with a broken stem is folded close to the base, and likely functioned as a traditional point. This recycled fragment was modified (likely after breakage) into a traditional point form. Overall, the manufacture of traditional harpoons, awls, and fish nets at the Le Caron site indicates European items did not simply replace traditional forms, but mimicked and supplemented these artifacts.

Four corroded and circular disc fragments of European manufacture include coins, baling seals, or buttons. One thick round copper coin or casting counter likely held the same significance as simple brass buttons, or functioned as a token of exchange for European goods. Two baling seals used to bind bundles of cloth or blankets were usually ripped off and thrown away by Europeans but likely held a different meaning for Native groups. Finally, one plain brass button, cuff link, or baling seal likely functioned as ornamentation on clothing, or was strung as a bead. These items are sometimes recovered from burial contexts which suggests symbolic meanings are attributed to these artifacts (Bradley 1987a:135-136; Camp 1975:48; Cleland 1971:23, 25-26; Cotter 1958:191; Maxwell and Binford 1961:89; Petersen 1964:42-43, 62-65; Quimby 1942:549, 1966:75-79; Woodward 1965:24-26, 31-33).

Two miscellaneous identifiable fragments are believed to have functioned as adornment in Native culture. One hook and eye which resembles the inside hook or pin to secure 17th century Jesuit garments (Folkes and Penny 1988:25-26) likely functioned as decoration on Native garments, while the bell recovered from Le Caron is constructed from iron and resembles two bells recovered from Ste. Marie I. Correlated with religious functions, these items were used for European celebrations of the Mass (Kidd 1949:127, 144), but undoubtedly mimicked traditional tinkling cones as ornaments on clothing (Bradley 1987a:134-135). Assuming the iron bell was employed by the Huron people rather than the Jesuit priests it likely served the same function as traditional tinkling cones, rather than the European intended function as a religious item.

Substitution of traditional artifacts with several European forms does not indicate a change in culture - it reflects a simple change in artifact designation and European influence should be weighted lightly (Tax 1960:193). For example, two Latten spoons recovered from Le Caron include one with a human figurine on the stem (Price 1908:32; Rupert 1929:3-4, 11-20, 26-33), and one 16th century writhen knop spoon (Price 1908:29-30). These items were employed as domestic implements by Europeans during the 17th century (Price 1908:3, 13). However, as numerous examples have been recovered from mortuary contexts (Robinson, Kelley, and Rubertone 1985:120-122) status and spirituality were sometimes attributed to these items by Indigenous peoples.

Category 3

No artifacts with European material, Native form, and European function were recovered from the Le Caron site (Table 4.6). Facsimiles of European goods are absent. However, a myriad of ornamental and prosaic forms manufactured on site (see Category 4) indicate a strong affinity with traditional rather than introduced European artifact forms.

Table 4.6: Artifact Frequencies For Matrix Category 3

MATERIAL	FORM	FUNCTION (Implied)	FREQUENCY
European	**Native**	**European**	
No Artifacts			0
TOTAL			0

Category 4

This category includes artifacts constructed of European material, but which display attributes of traditional form and function. The majority of these specimens include finished ornamental and prosaic items, and worked expedient tools manufactured from European materials (Table 4.7). These artifacts clearly emphasize the production of traditional forms from European material.

Of the 397 kettle fragments recovered from Le Caron, 355 (89.42%) pieces are characterized as worked (n = 109), recycled (n = 70), or modified (n = 134). Worked pieces are those having two or more modified sides, recycled

Table 4.7: Artifact Frequencies For Matrix Category 4

MATERIAL FORM FUNCTION (Implied)	FREQUENCY
European Native Native	
Modified and Recycled Kettle Fragments (All Prosaic)	313
Modified and Recycled Knife Fragments (Five Ornamental)	74
Finished Copper Alloy Ornamental Artifacts	29
Modified and Recycled Axe Fragments (All Prosaic)	19
Finished Copper Alloy Prosaic Artifacts	13
Modified Glass	12
Iron Awl: Reworked Miscellaneous Metal (Traditional Shape)	3
Iron Harpoon, Native Manufacture	1
Iron Pressure Flaker	1
Number Ceremonial/Ornamental	34 (7.31%)
Number Prosaic	431 (92.69%)
TOTAL	465 100.00%

pieces have one worked side, and modified fragments display ragged edges but were manipulated by heating or folding.

The majority of worked copper alloy pieces are worked into rectangular, square, and trapezoidal shapes and likely functioned as scraping and cutting tools. Since cut square and trapezoidal scraps were also rolled into beads and tinkling cones (Quimby 1966:72), it is also possible these pieces were intended as ornamental preforms.

Copper alloy fragments with one worked side are classified as recycled since their intended function is unknown, but are considered reduction fragments associated with the production of unformalized tools (after Bradley 1987a:72). Since 37.75% of kettle scrap is considered reduction debitage, large fragments of sheet brass, or once near-complete kettles account for the materials recovered from Le Caron. As with other 17th century sites, scored and cut copper alloy kettles at Le Caron were valued more as raw material for constructing traditional artifacts rather than as cooking vessels (Axtell 1988:168; Bradley 1987a:131-132; Hancock et al. 1995:339-340). The presence of tools shaped into traditional forms, partially worked scrap pieces with cut edges, and unfinished items with evidence of scoring, cutting, or folding indicate artifacts were manufactured on site.

Finally, modified artifacts consist of fragments with irregular edges as a result of heating or folding, yet they retain workable bodies. Several fragments with scored bodies indicate an intent to further manipulate the artifact. However, approximately half of the fragments are simply irregular in form. This leads to one problem associated with this twenty-four cell matrix: how to categorize items with no specific Native or European function.

Here, a minimum of thirteen copper alloy vessels was recovered from the site, yet there are no complete vessels in the collection. One hundred and seventy-nine copper alloy fragments are categorized as worked and recycled artifacts and indicate reuse of materials to suit traditional Native functions. However, modified scrap fragments (n =134) do not 'fit' either category of European or Native 'implied functions'. In this study, modified copper alloy scrap fragments are assumed debitage or preform fragments associated with tool manufacture and are categorized as a product of Native 'implied function' rather than as a result of post depositional decomposition. The same approach is employed for European knife fragments. Nine scrap fragments are lumped with the sixty-five modified knife forms and are associated with a Native 'intended function'.

While the majority of knife fragments are worked into new forms their function in some cases is uncertain. However, many items were employed as expedient tools or unfinished ornamental forms (n = 74). The majority of knife blades were worked into varying sized rectangles by scoring one or two edges. Artifacts with two cut edges (n = 30) are classified as 'worked' knife forms, while those with one worked edge (n = 39) are considered 'modified' unfinished expedient thin rectangular knives, scrapers, or thin adzes used for scraping skins or woodworking (see Bradley 1987a:147, 149). This conservative system is employed to avoid overemphasizing deliberate modification of copper alloy fragments.

A variety of expedient tools with scored edges were crafted from copper alloy. For example, five triangular knife tips acted as expedient projectile points (Fitzgerald 1990:454; e.g., Lennox 1981:331); one ovate blade probably functioned as a chisel; five sharpened trapezoidal knife blades were likely hafted into handles and employed as cutting tools (see Bradley 1987a:147); and one blade worked into an unfinished unilateral barbed harpoon is similar to those crafted from one-piece iron knives by the Petun and Neutral (Garrad 1969:6, 10).

Finally, five rectangular knife fragments are classified as ornamental forms. These pieces, cut with one rivet hole positioned close to an edge, are consistent in shape and size and are believed to have functioned as ornaments. Similar to gorgets, these personal adornments have a long antiquity in prehistory (e.g., Ferris and Spence 1995). However, only one of the five artifacts was recovered from the longhouse area - in a skin processing region. Therefore, an alternate explanation for these artifacts includes their use as rectangular tools with perforated handles to function as scrapers or knives (Bradley 1987a:72, 75).

A high frequency of near-complete axes recovered from the Le Caron site indicates complete axes rather than scrap materials were carried onto the site. Axes are considered modified if there is physical evidence of heating, straight-line cuts, or folding.

Iron axes distributed among Northeastern groups have a range of conceivable functions including functional replacements for traditional tools (Ritchie 1954:22-24, 37; Trigger 1976:412), personal adornment and status items (Barbeau 1915:269; S. Jamieson, pers. comm.), or sources of raw material for manufacturing traditional artifacts (Bradley 1987a:139-140, 146-149). Axes are frequently found cached in subfloor pits which suggests elevated economic or other ideological value (S. Jamieson, pers. comm.). However, since no ethnohistorical information depicts the Huron using axes as ornaments, prosaic interpretations are appropriated to all items. Therefore, nineteen of the twenty-two axes display evidence of modification for use as prosaic artifacts.

Fourteen glass fragments recovered from Le Caron represent a minimum of three vessels. These glass pieces which are black with deep gold deterioration, white, and various shades of light green, are typical of those distributed in the Northeast during the 17th century (Kidd 1949:136-138; Quimby 1966:74). Twelve glass fragments are modified and display characteristics of heating, patination, and/or folding which suggests use other than the intended European function.

Of forty-two finished copper alloy artifacts, thirteen (30.95%) are prosaic tools, while twenty-nine (69.05%) are ornamental in form. Prosaic artifacts include one ovate cutting tool, six brass points rolled into conical shapes as analogs to traditional antler points (see Houghton 1922: Plate VIIA), and four flattened brass points which mimic triangular lithic forms.

Additionally, two stemmed brass points recovered from Le Caron were likely manufactured by Europeans specifically as trade items (Trigger 1976:411). Traditional stemmed points were not manufactured by the Huron during the 16th and 17th centuries (P. Ramsden, pers. comm.). However, the mixed lithic assemblage comprised of both Madison and Lamoka points suggests that Le Caron was situated on top of an Archaic site, and the Huron likely made opportunistic use of these available stemmed points (S. Jamieson, pers. comm.). Similarly, the two stemmed brass points recovered from Le Caron were likely incorporated as supplements to the traditional tool kit.

Twenty-nine copper alloy fragments worked into ornamental forms include sheet brass rolled into tinkling cones, tubular beads, and one hair pipe; two finger rings constructed from brass strips rolled in circular form; seven sheet brass strips of similar size and shape which acted as unfinished ornamental forms; two corrugated bracelets constructed from curved and folded copper alloy fragments, and one unfinished folded ornamental form.

Several artifacts indicate the process of substitution helped Native groups sustain a separate religious identity (Feest 1986:30). For example, one brass spiral recovered from the site is connected to the underwater panther and associated with medicinal knowledge of plants and power over people and animals (Bradley and Childs 1991:6; Armour 1977:13). Additionally, tubular copper alloy beads have bone antecedents, while five round, half circular, and octagonal metal discs recovered from the site served as ornaments similar to traditional shell and stone pendants (Bradley 1987a:70, 75).

Finally, several artifacts constructed from European metals display attributes of traditional tools. Two bail fragments are worked into awls - one to a pointed tip, and the second is worked into an elongated awl with both ends sharpened. The latter elongated bi-pointed awl has traditional bone antecedents and at least one complete iron counterpart (Fitzgerald 1990:489, 493-494; Pendergast 1972:258-259; Ridley 1966). A third locally manufactured elongated iron harpoon with a thick round stem is unlike those manufactured by Europeans (see Fitzgerald 1990:428-431), while one nail point is curled into the traditional shape of hafted beaver incisors to act as a chisel or awl. Finally, one iron rod is thinned to a flattened tip to mimic the form of traditional antler pressure flakers.

Category 5

Artifacts included in this category are strictly traditional in material, form, and function. Fauna and traditional ceramics constitute the majority (96.61%) of these items (Table 4.8), and detailed descriptions for each artifact class are presented in Appendix B. The high frequency of these artifacts indicates traditional hunting, fishing, horticulture, tool production, and ceremonial rituals were practiced on site.

Indisputably, traditional artifacts outnumber items in all other matrix categories. Since the frequencies of all remaining artifacts are obscured to small percentages when faunal remains and ceramics are totalled with them (Table 4.9), these two large artifact classes are eliminated from the final interpretation.

Category 6

Artifacts in this category are composed of Native materials, constructed in traditional form, and display an 'implied' European function. No artifacts fit these criteria which indicates one of two positions: either the volume of European items found on the site filled the demand for their intended use; or the European function of items was not considered vital enough to copy (Table 4.10).

Table 4.8: Artifact Frequencies For Matrix Category 5

MATERIAL FORM FUNCTION (Implied)	FREQUENCY
Native Native Native	
Traditional Ceramics	36,641
Fauna	18,678
Subtotal	**55,319**
Pipes (Ceremonial)	774
Beads (Ornamental)	207
Unworked Shell (Ceremonial)	192
Worked Flaked Stone	143
Stone Triangular Points	84
Flakes	68
Gaming Discs	67
Debitage	61
Cores	39
Effigies (Ceremonial)	39
Modified Bone	38
Worked Shell (Ceremonial)	33
Prosaic Ground Stone	28
Whetstones	28
Stone Scrapers	24
Netting Needles	23
Hammerstones	22
Projectile Points (Bone/Antler/Stemmed Chert)	12
Boiling Stones	11
Subtotal	1,893

MATERIAL FORM FUNCTION (Implied)	FREQUENCY
Ground Stone (Ornamental)	9
Unworked Stone (Ceremonial)	9
Bone/Antler Awls	8
Pendants (Ornamental)	6
Perishables	5
Miscellaneous Worked Bone	4
Stone Adzes	3
Stone Anvils	3
Worked Stone (Ornamental)	2
Number Ceremonial/Ornamental	**1,271 (65.45%)**
Number Prosaic	**671 (34.55%)**
Subtotal	**1,942 100.00%**
TOTAL	57,261

Indeed, the considerable frequency of European items recovered from Le Caron may signify a low demand for mimicking these items. However, the condition of artifacts at the time of site abandonment indicates a contradictory explanation. Very few European artifacts in the collection are in a state conducive to suit their intended European function (see Categories 1 and 2), and the majority were modified into traditional prosaic and ornamental forms (see Category 4). Therefore, negative evidence in this category substantiates the material evidence from other categories which indicates European goods were incorporated by the Huron more for use as raw materials than their intended European function.

Table 4.9: Frequency Matrix of Continuity and Change Including Traditional Ceramics and Fauna

MATERIAL	FORM	FUNCTION (Implied)	FREQUENCY	PERCENT
1) European	European	European	180	0.31%
2) European	European	Native	505	0.86%
3) European	Native	European	0	0.00%
4) European	Native	Native	465	0.80%
5) Native	Native	Native	57,261	98.03%
6) Native	Native	European	0	0.00%
7) Native	European	Native	0	0.00%
8) Native	European	European	3	0.01%
TOTAL			**58,414**	**100.01%**

Category 7

This category includes those artifacts made of Native materials, with a European form which serve a Native function. No artifacts fit these criteria (Table 4.11). While European items were incorporated and modified to suit traditional roles, there is no evidence for artifacts mimicking European forms. Again, negative evidence retrieved from this category stresses a lack of European prerogatives for incorporating goods, and supports the argument for traditional continuity in form.

Table 4.10: Artifact Frequencies For Matrix Category 6

MATERIAL FORM FUNCTION (Implied)	FREQUENCY
Native European Native	
No Artifacts	0
TOTAL	**0**

Category 8

Artifacts in this category are composed of Native materials, constructed from traditional form, yet display 'implied' European form and function. Gun flints are the only artifact class that meet these criteria (after Mandzy 1994:1416). While the materials and chipping technique reflect traditional continuity, the function and form of these items for use with guns categorizes them with a European function (Table 4.12). As argued in Category 2, the gun in 17th century Huronia likely held greater spiritual than practical value. However, a cognitive interpretation is irrelevant for gun flints since they functioned solely as prosaic artifacts for gun ignition.

Table 4.11: Artifact Frequencies For Matrix Category 7

MATERIAL FORM FUNCTION (Implied)	FREQUENCY
Native European Native	
No Artifacts	0
TOTAL	**0**

Table 4.12: Artifact Frequencies For Matrix Category 8

MATERIAL	FORM	FUNCTION (Implied)	FREQUENCY
Native	**European**	**European**	
Gun Flints			3
TOTAL			3

Conclusions

The foregoing conclusions are reached employing a method which delineates not only the intended European function of trade goods, but the Native perception, use, and modification of these goods. Therefore, Cheek's (1974) cross-tabulation display is effective not only for categorizing traditional syncretic forms, but also stresses the lack of European prerogatives for incorporating trade goods by employing fixed matrixes which highlight negative evidence. The data indicates European goods were incorporated by the Huron more for use as raw materials to supplement traditional forms and functions rather than as functional prosaic replacements, and the majority of modified items are associated with analogous elements of traditional ideology.

Currently, archaeological methods for examining intrasite artifact patterns as reflections of behaviour are not well defined since goods and ideas moving among societies had variable significance within various groups. However, general cultural patterns may be discerned where artifact symbols and social significance of un/modified objects are contingent on the context of recovered goods (see

Schortman and Urban 1992b:235-239). In Chapter 5, traditional artifacts and the incorporation of unmodified and syncretized European goods described above are correlated to midden and longhouse spatial distributions for Le Caron.

CHAPTER 5

SPATIAL DISTRIBUTIONS AND ANALYSIS

Interpretations of artifacts recovered from the Le Caron collection are summarized below in relation to their spatial and temporal distributions. The function and meaning of incorporated European items is thus understood through the dynamics of traditional trade systems where modifications to goods vary among polities - with items altered prior to acquisition or produced on site. Consequently, artifact distributions are examined in relation to their context, availability, function, and modification. This is useful not only for understanding temporal, social, and economic patterns within the Le Caron village, but also important for delineating prosaic and/or symbolic contexts for European trade goods. Huron responses to European contact are discussed based on the types, frequencies, and distributions of European trade goods obtained from these spatial analyses.

Intrasite Glass Bead Temporal Designations

The analysis of the entire glass bead assemblage from Le Caron indicates that the site dates to ca. A.D. 1615-1640. To delineate and further refine within-site temporal and cultural distinctions I analyzed glass bead subsamples from individual middens, longhouses, and palisade regions. From the results of this, I determined differential patterns for incorporating European goods during disparate time intervals (see Appendix A: Glass Beads). The results suggest there are slight variations among regions of the site, ranging from ca. A.D. 1615, through to A.D. 1640+. Problems associated with these time frames are addressed in

Appendix A, and the results outlined below (Table 5.1) are correlated to spatial distributions for the remaining artifact classes.

Table 5.1: Spatial and Temporal Designations at Le Caron

EARLY GBP3a	GBP3a	LATE GBP3a	GBP3b
Longhouse 4	Longhouse 2	Longhouse 1	Exterior Between Longhouses 2 and 3
Southwest Midden	Longhouse 3	West Midden	South Midden
Central Midden	Longhouse 5		
Northeast Midden	East Palisade		
	Southwest Palisade		

Based on the distribution of trade beads recovered among longhouses, all living structures are confined to ca. A.D. 1615-1640 (GBP3a), with a mean temporal frame dating to the 1630s. The GBP3b designation (ca. A.D. 1640+) attributed to the region between Longhouses 2 and 3 is taken lightly due to the low frequency of beads recovered in this area. However, a cursory examination of these time frames indicates the southern longhouse region dates to the late 1630s (the later portion of GBP3a), while earlier dates, ca. 1615-1630s, are associated with northern longhouse structures. This general pattern is corroborated with the later date attributed to the South Midden, ca. A.D. 1640+, which contrasts with the remaining middens dated to GBP3a. The later date for Longhouse 1 may explain the higher frequency of incorporated items within and adjacent to this structure, and spatial discrepancies are addressed below.

Distribution of Traditional and European Artifacts

Spatial distributions for all European and Native artifacts are recorded in Appendix C for the benefit of future Iroquoian intersite comparisons. For the purpose of this discussion, intrasite totals for all traditional artifact distributions (Table 5.2) are summarized below as a foundation for comparing artifacts crafted from European materials. To accommodate categories defined in Chapter 4, artifact distributions are divided into two groupings: artifacts related to prosaic economic activities and those associated with ritual activities - although neither group is considered mutually exclusive.

The frequency of traditional prosaic artifacts (98.69%) outweighs those categorized as ceremonial items (1.31%). However as explained in Chapter 4, the majority of prosaic artifacts consist of fauna and ceramic fragments which skew artifact numbers. Since the frequency of traditional prosaic artifacts overrides those crafted from European materials, the following interpretations are based on percentage distributions for comparable analyses between European and Native items.

Unfortunately, over 25% of traditional ceremonial items were recovered from miscellaneous units or lack context. As a result, those ritual items recovered from midden and longhouse areas may be underrepresented. In contrast, less than 1% of prosaic artifacts lack context. The majority of both prosaic and ceremonial

Table 5.2: Location and Frequency of Traditional Prosaic and Ceremonial Artifacts

ARTIFACT TYPE	L.H.	MIDDEN	PAL.	MISC. UNITS	NO C.	TOTAL
Prosaic	6,306 (16.90%)	27,807 (74.54%)	2,705 (7.25%)	196 (0.53%)	290 (0.78%)	**37,304 100.00%**
Ceremonial/ Ornamental	17 (3.43%)	327 (66.06%)	16 (3.23%)	22 (4.44%)	113 (22.83%)	**495 99.99%**
TOTAL	**6,323 16.73%**	**28,134 74.43%**	**2,721 7.20%**	**218 0.58%**	**403 1.07%**	**37,799 100.01%**

traditional artifacts (74.43%) recovered from middens are examined in depth below. However, the distribution of these items is first compared to artifacts constructed from European materials (Table 5.3).

The majority of prosaic and ceremonial artifacts manufactured from both European and traditional materials were also recovered from middens. However, a comparison of Tables 5.2 and 5.3 indicates that proportionally fewer prosaic artifacts crafted from European materials were distributed in middens than those made from traditional materials. The frequency of ceremonial objects crafted from Native (n = 495) and European (n = 498) materials coincide. This indicates that material preferences for constructing traditional ritual items was non-discriminatory, and is corroborated by similar distribution patterns.

Superficially, when numbers of prosaic items crafted from European materials and distributed among longhouses are correlated to the lower percentage of traditional items in the living area, a preference for incorporating and employing European goods

Table 5.3: Location and Frequency of European Materials as Prosaic and Ceremonial Artifacts

ARTIFACT TYPE	L.H.	MIDDEN	PAL.	MISC. UNITS	NO C.	TOTAL
Prosaic	159 (24.42%)	346 (53.15%)	75 (11.52%)	57 (8.76%)	14 (2.15%)	651 100.00%
Ceremonial/ Ornamental	38 (7.63%)	405 (81.33%)	24 (4.82%)	23 (4.62%)	8 (1.61%)	498 100.01%
TOTAL	197 17.15%	751 65.36%	99 8.62%	80 6.96%	22 1.91%	1,149 100.00%

over traditional items may be inferred. However, when European artifacts are viewed as syncretized traditional forms (see Chapter 4) and lithic spatial distributions are plotted among longhouses, a disparate interpretation surfaces which emphasizes continuity in traditional culture - rather than change and adaptation to a new one.

Thus ceremonial and prosaic activity areas within and between longhouses are examined below to determine distributional patterns among living structures. All artifact distributions are summarized according to three fundamental categories: context within the site; whether artifacts are constructed from European or traditional Native materials; and whether the stage of craftsmanship at the time of site abandonment reflects prosaic or ceremonial activities conducted by the Huron.

By necessity, the distribution of all artifacts recovered from the site are related strictly to Native activities. This assumption is justified in two ways: the presence of European goods need not equate with European presence on the site; and according to acculturation paradigms, if scattered numbers of European traders or missionaries did visit or stay at the site their role in the manipulation and distribution of artifacts is secondary to the objectives of the larger Huron society (see Chapter 3).

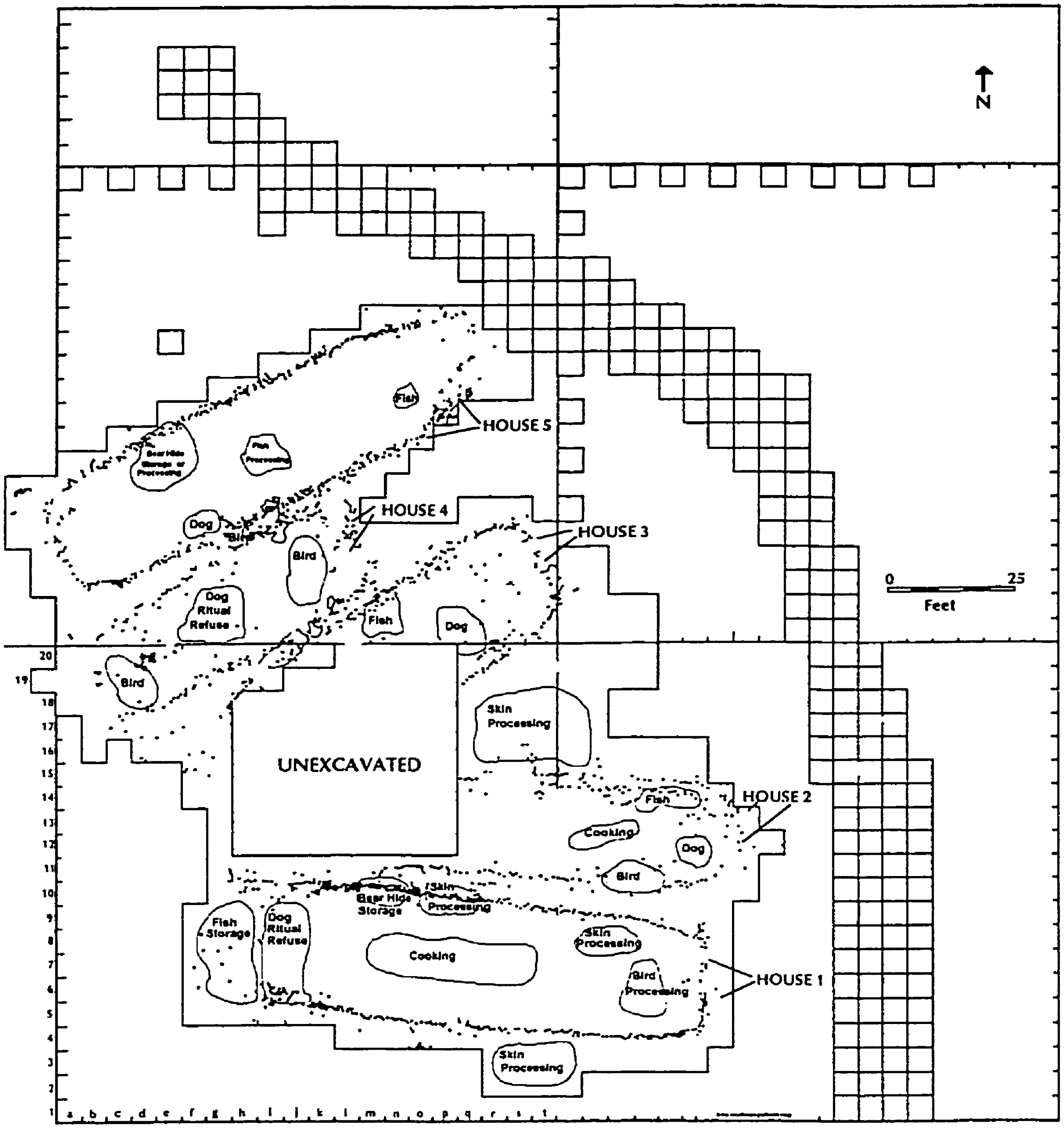
This latter assertion is corroborated by dwelling features and artifact distributions recovered from Le Caron. Based on the extent of excavations, there is no structural evidence to indicate missionaries were housed for extended periods of time in small cabins. Therefore, visitors would have resided and adapted to living with extended families in longhouses (see Kapches 1984; Latta 1985a; Trigger 1976).

Prosaic and Ceremonial Activity Areas Among Longhouses

Muir's (1990) cluster analysis of faunal remains from the Le Caron site suggested general spatial patterns within and between longhouses which could be correlated with prosaic and ceremonial culture activity areas (Figure 5.1). On the basis of this preliminary study, he designated cooking and bone processing areas as having been formed in what are herein termed prosaic activities, while dog and bear remains were affiliated with traditional ceremonial practices.

In this study, traditional and European artifact distributions are correlated to Muir's (1990) clusters. Unfortunately, the low numbers of ornamental and prosaic European artifacts are not as conducive to statistical manipulation as was

Figure 5.1: Faunal Distribution Activity Areas



(after Muir 1990:132-139)

the much larger faunal collection. Consequently, artifact distributions in this study are depicted by total frequencies which when plotted, show distribution patterns comparable to Muir's activity areas. Overall, the analysis of European items that were accepted, modified, or rejected by the Huron are interpreted in order to obtain a better understanding of social, political, and ideological practices at the site.

Both prosaic and ceremonial activities are attributed to all longhouses, but neither category necessarily represents mutually exclusive cultural functions. Furthermore, overlap of artifacts among activity areas could have occurred during the site's occupation or by subsequent post-depositional processes. It is problematic to distinguish between cultural and non-cultural deposits given the limited contextual information from Le Caron. This problem was addressed by Muir (1990:103), who suggested storage pits in proximity to cooking hearths would likely show overlap of artifacts among activity areas. One example of obscured context in this study entails a harpoon preform crafted from an European knife blade and recovered along the southeastern corner of Longhouse 3. This unfinished artifact indicates tool production occurred in this structure. However, whether this item held prosaic and/or ceremonial significance is unclear. It's location just east of dog remains also suggests the line between ceremonial and prosaic contexts is tentative.

Based on the distribution of faunal remains, Muir (1990:160, 165) concluded that curing ceremonies were a common occurrence at Le Caron, and the adoption of medicine societies represent revitalization activities. For example, sick ceremonies would last several days, and entail animal sacrifice, costumes, dancing, turtle shell rattles, and bear skins (JR 26:145-147; JR 42:67-69; Tooker 1967:76-78, 86, 102, 105, 107; Trigger 1976:80-81), while war celebrations took place in the chief's house and small scale feasts could occur in any longhouse to increase status (JR 24:25, 285; JR 29:171; Tooker 1967:29, 72-77; Trigger 1976:54-56, 84-85). Additionally, the killing of dogs represents a sacrifice associated with curing ceremonies, and were likely correlated with the widespread epidemics rather than food shortages (Tooker 1967:67, 73, 78, 90, 93, 114; Trigger 1976:41).

According to the distribution of faunal remains recovered among longhouses, domestic refuse is scattered throughout Longhouse 1, but the extreme west end is comprised of ritual refuse (Muir 1990:174). The storage cubicle in Longhouse 1 contained dry or smoked fish sometimes associated with ritual feasting (Tooker 1967:75-76, 86-87), and coupled with evidence for bear hide storage, activities in Longhouse 1 during the latest component of the site are believed related to curing ceremonies associated with epidemic disease. Additionally, ritual dog refuse recovered along the western portion of Longhouse 1, and the interior of Longhouse 4 indicates ceremonial practises occurred in these areas, while small scale curing ceremonies were likely held in Longhouses 2 and 3.

Ceremonies involving feasts, dancing, ornamental clothing, and ritual activity would occur most commonly within rather than outside longhouses (Tooker 1967:76-77), and while ornaments would not be intentionally discarded, small fragments could fall off in areas where ceremonial clothing was stored or in close proximity to ritual locations. Additionally, frequent house cleaning episodes would alter the initial depositional context (Muir 1990:111). While the majority of larger ceremonial items are recovered from middens at Le Caron, small beads and shell fragments associated with Native spirituality can be plotted predominantly within longhouses. These are correlated below to Muir's (1990) faunal-based ritual activity areas.

Of the shell fragments associated with longhouses, almost all are confined to the interior of Longhouse 1 - with two unmodified fragments recovered in the northern wall of Longhouse 2. These scattered items were likely displaced during cleaning episodes (Figure 5.2). One worked and unworked fragment are correlated to Muir's dog ritual refuse, while the remaining pieces are assumed scattered fragments in context with a cooking activity area and a processing area for the distribution of European copper alloy fragments.

A similar pattern is observed for the distribution of Native and European beads (Figure 5.3). The majority are recovered within Longhouse 1 and believed remnants of ritual activity associated with a bear skin headdress, while those recovered from the interiors of Longhouses 4 and 5 are correlated to scattered remains of dog ritual refuse, and bear hide storage or processing. Ethnographic

Figure 5.2: Frequencies and Location of Worked and Unworked Shell

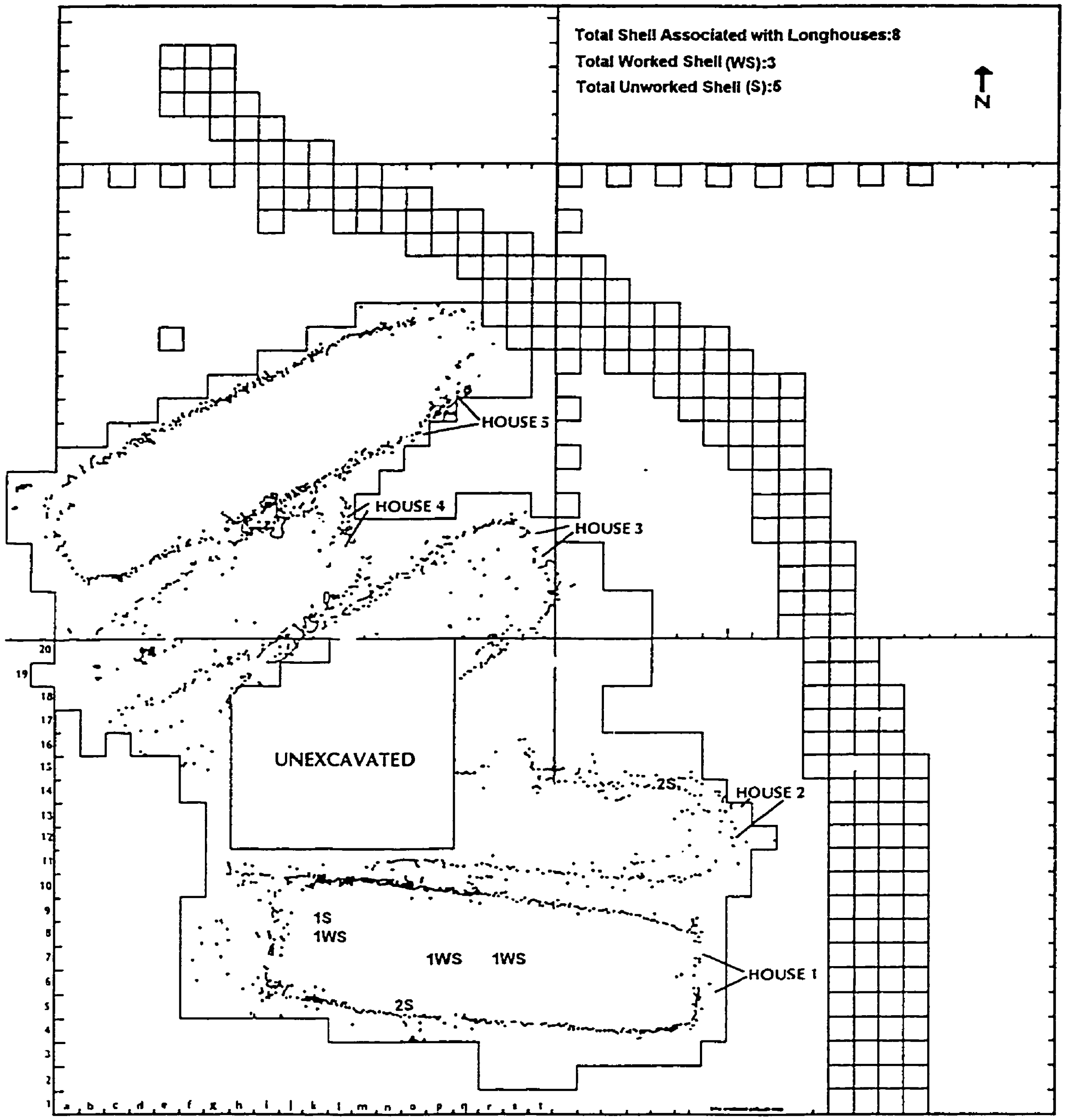
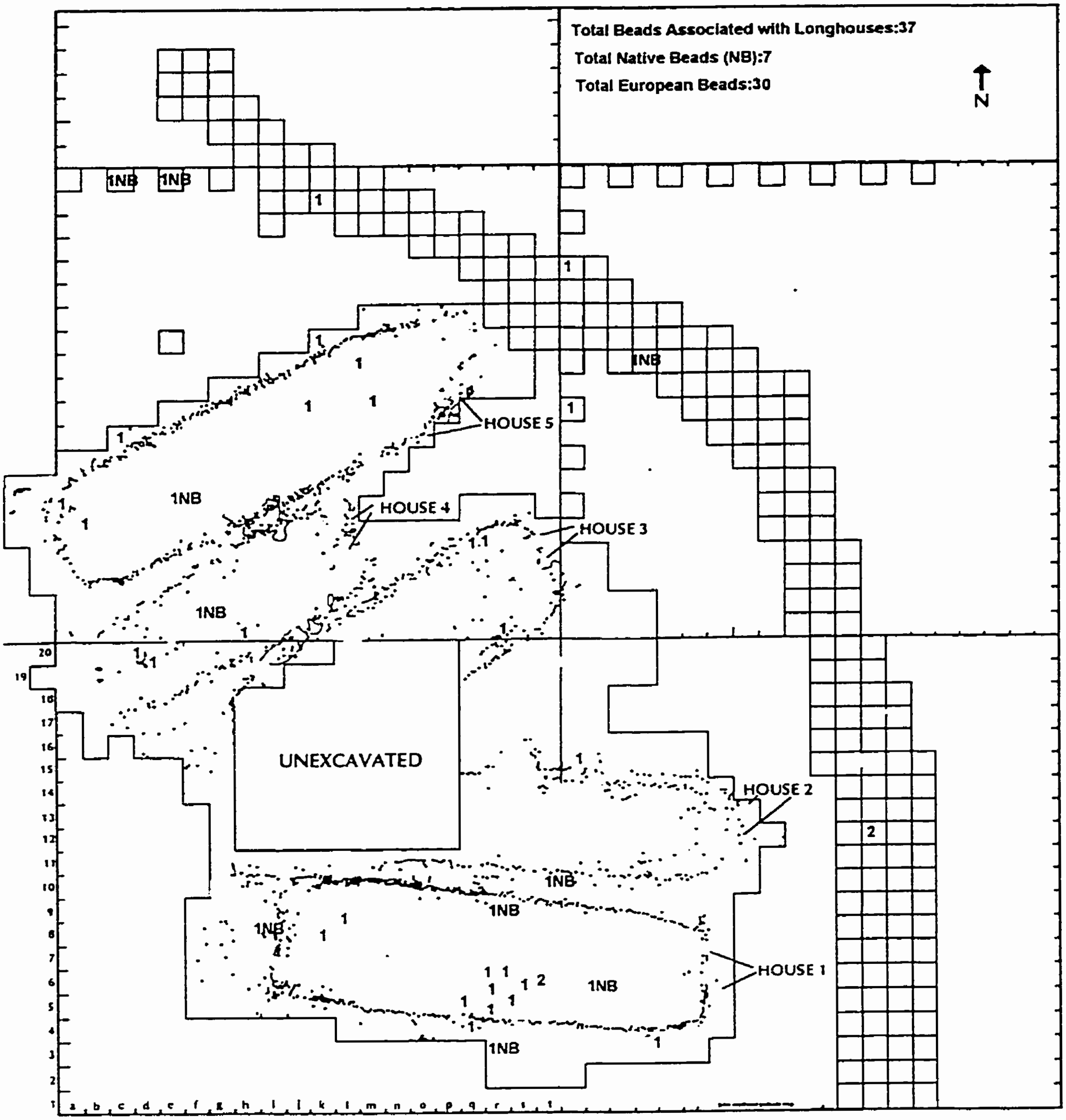


Figure 5.3: Frequencies and Location of Native and European Beads



documentation indicates the bear head was often given to the chief and worn as a headdress in ceremonies (Tooker 1967:72-73, 77, 107), and bear skin costumes were possibly linked with ceremonies at Le Caron (Muir 1990:80-82, 159).

Overview of Modified Prosaic European Artifacts

One hundred and seventy-six prosaic artifacts (13.34%) are strictly European in form, function, and material. However, this category is constituted by many artifacts with shapes not conducive to further modification, or artifacts that could serve traditional functions (e.g., nails functioning as awls) but display no physical evidence to support this premise. According to incorporation paradigms, European materials often served traditional functions. However, where physical modification of items was not required to facilitate such functions, these concepts must be considered speculative.

Just thirty-eight (2.88%) artifacts are constructed from European materials, retain their European forms, but fit directly into the traditional artifact inventory. These items include harpoons, fishhooks, and awls which have a long antiquity in the Northeast. Finally, the second highest frequency of prosaic tools are constructed from European materials (32.68%), worked into traditional forms, and retain traditional functions.

The majority of modified European artifacts recovered from Le Caron include axe, knife, and kettle fragments. Therefore, the within-site distribution of these three artifact classes are analyzed below in relation to Muir's (1990) spatial clusters to elaborate upon previously described activity areas and to determine the

Native use for European materials. Extensive descriptive overviews of syncretized and unmodified European artifacts and their prosaic and/or ornamental forms are provided in Appendix A.

European Axe, Knife, and Kettle Distributions:

Axes

Beyond artifact frequencies, descriptions, and degrees of modification, the distribution of European items in relation to activity areas helps delineate items with European, or Native functions. For example, if axes were employed strictly for their intended European purpose, their spatial distributions would likely exhibit damaged axes within middens as non-functional refuse.

The function of all axe fragments is summarized in Table 5.4. While fifty percent of axes were recovered from the longhouse region, the frequency is high compared with the distribution of other artifact classes. Nonetheless, there is little pattern to their spatial distribution. Of the eight provenienced to middens, two heated and folded fragments were from the Southwest Midden, one unattached socket was from the West Midden, and the unmodified axe (which could have served the intended European function) was recovered from the Central Midden with four additional axe blade fragments.

Two axe blade fragments which likely served as expedient tools were from the southern side of Longhouse 1, however, their location could not be correlated with previously designated activity areas (Muir 1990). Two axe fragments from

Table 5.4: Function of Axes

TRADE AXE DESCRIPTIONS	FREQUENCY
Number of Complete Axes	1
Number of Incomplete Axe Fragments	21
Number of Broken and Unworked Axes	2
Number of Modified Axe Fragments	5
Total Number of Axe Fragments	22
Axe Fragments Suiting European Function	3
Axe Fragments with Recycled Native Functions	19

Longhouse 5 were found in proximity to the walls, and their location may be the result of cleaning. Over 80% of the axes associated with longhouses were recovered from the interior of house structures and cached in pits (Table 5.5) with the exception of one socket fragment recovered from Longhouse 5 (Butcher and Johnston 1976:49). Trade axes and fragments cached mainly in Longhouses 1 and 2, and one each in Longhouses 4 and 5 are unrelated to Muir's (1990) activity areas. That axe fragments were cached in sub-floor pits suggests they held elevated economic or ideological value (Trigger 1976:61), and were stored for later use (Figure 5.4). At Le Caron, one damaged axe was recovered from the Central Midden, but two cached in Longhouses 1 and 2 were likely stored for traditional use or future modification.

Since valuable items were often stored in sub-floor pits within longhouses, the distribution of cached axes among longhouses indicates that they may have been

Table 5.5: Axe Distribution Among Longhouses

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	2	0	2	4	36.36%
Longhouse 2	4	0	0	4	36.36%
Longhouse 3	0	0	0	0	0.00%
Longhouse 4	1	0	0	1	9.09%
Longhouse 5	2	0	0	2	18.18%
TOTALS	9	0	2	11	99.99%
PERCENT	81.82%	0.00%	18.18%	100%	

regarded as raw material for the production of new implements. Presuming for the sake of argument that the complete axe was to be used for its intended European function, the physical evidence and spatial distribution of axe fragments at Le Caron indicate only three of twenty-two (13.64%) had qualities which would have permitted European function at the time of site abandonment.

Knives

The distribution of knife fragments at Le Caron is summarized in Table 5.6. Forty-two knives (51.85%) were recovered from midden areas, and twenty (24.69%) were from the area of the longhouses. None was from within-house features (e.g., Butcher and Johnston 1976:43). In an effort to determine the function of knives, the distribution of modified knives and those in a condition suitable to be employed for an intended European function are considered separately.

Figure 5.4: Frequencies and Locations of Trade Axes and Fragments

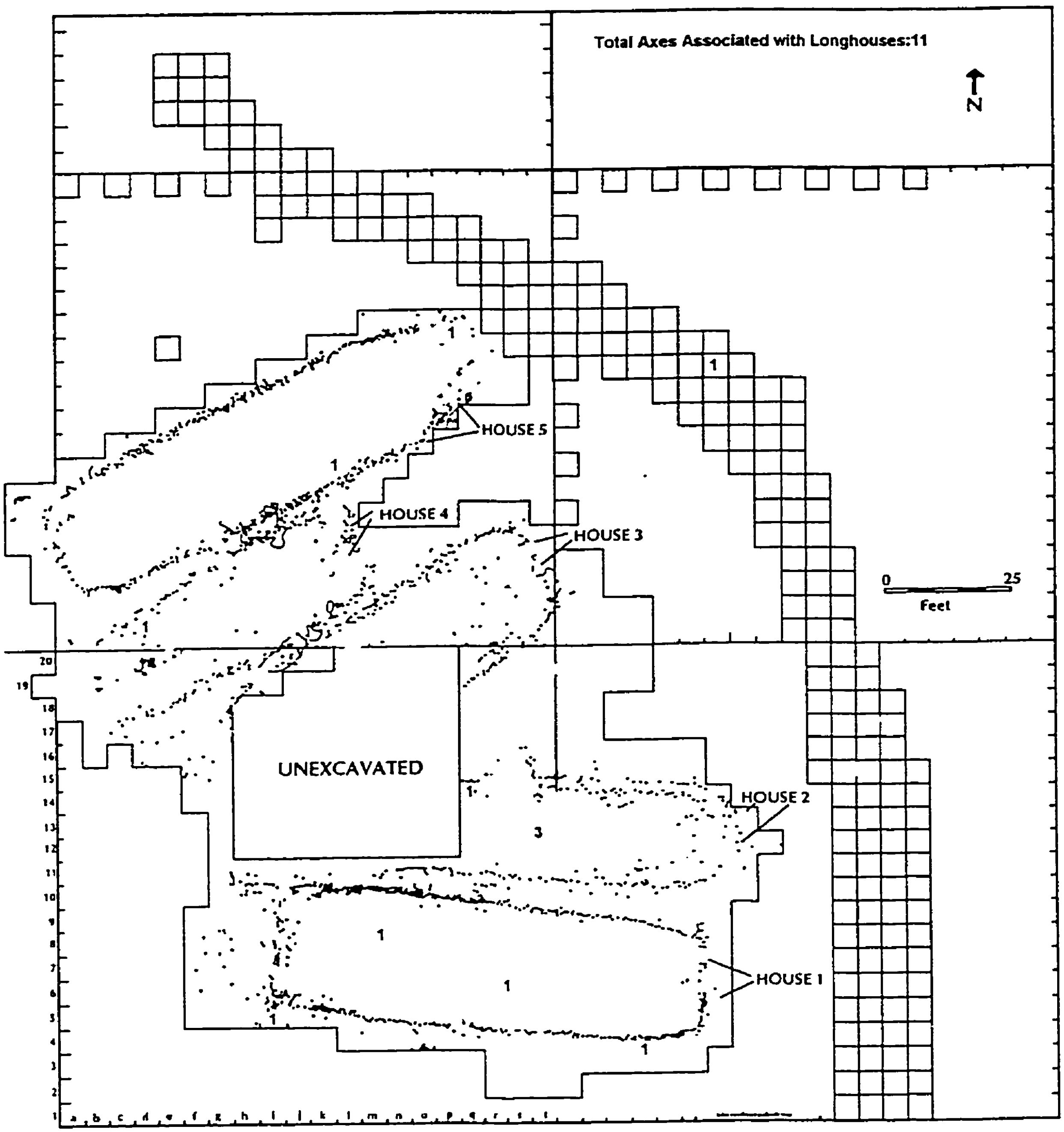


Table 5.6: Spatial Distribution of Iron Knives

LOCATIONS	TOTALS	PERCENT
Longhouses	20	24.69%
Middens	42	51.85%
E & SW Palisades	10	12.35%
Misc. Test Units/Trenches	3	3.70%
No context	6	7.41%
TOTALS	**81**	**100.00%**

Four of twenty knife fragments from among the longhouses are correlated with probable European cutting functions. Three distributed along the northern wall of Longhouse 1 plus one modified rectangular knife are in proximity to Muir's (1990) skin processing area, while the fourth is positioned inside Longhouse 4 within a bird processing region. Thus these items, while maintaining European forms, likely functioned as tools for traditional processing practices. Thirteen (43.33%) of the twenty knives recovered in the longhouse area (Table 5.7) were modified into traditional forms, as were three near-complete knives. The latter artifacts were collected from faunal activity areas located within longhouses (Muir 1990). Two blades recovered from Longhouse 1 indicate knives were employed in skin processing areas, and a third from the end cubicle of Longhouse 4, appears to have been used in bird processing (Figure 5.5). Of the remaining four knives, two were recovered from undetermined contexts in the Southwest Palisade/Longhouse area. Although they are assumed to have been

Table 5.7: Knife Distribution Among Longhouses

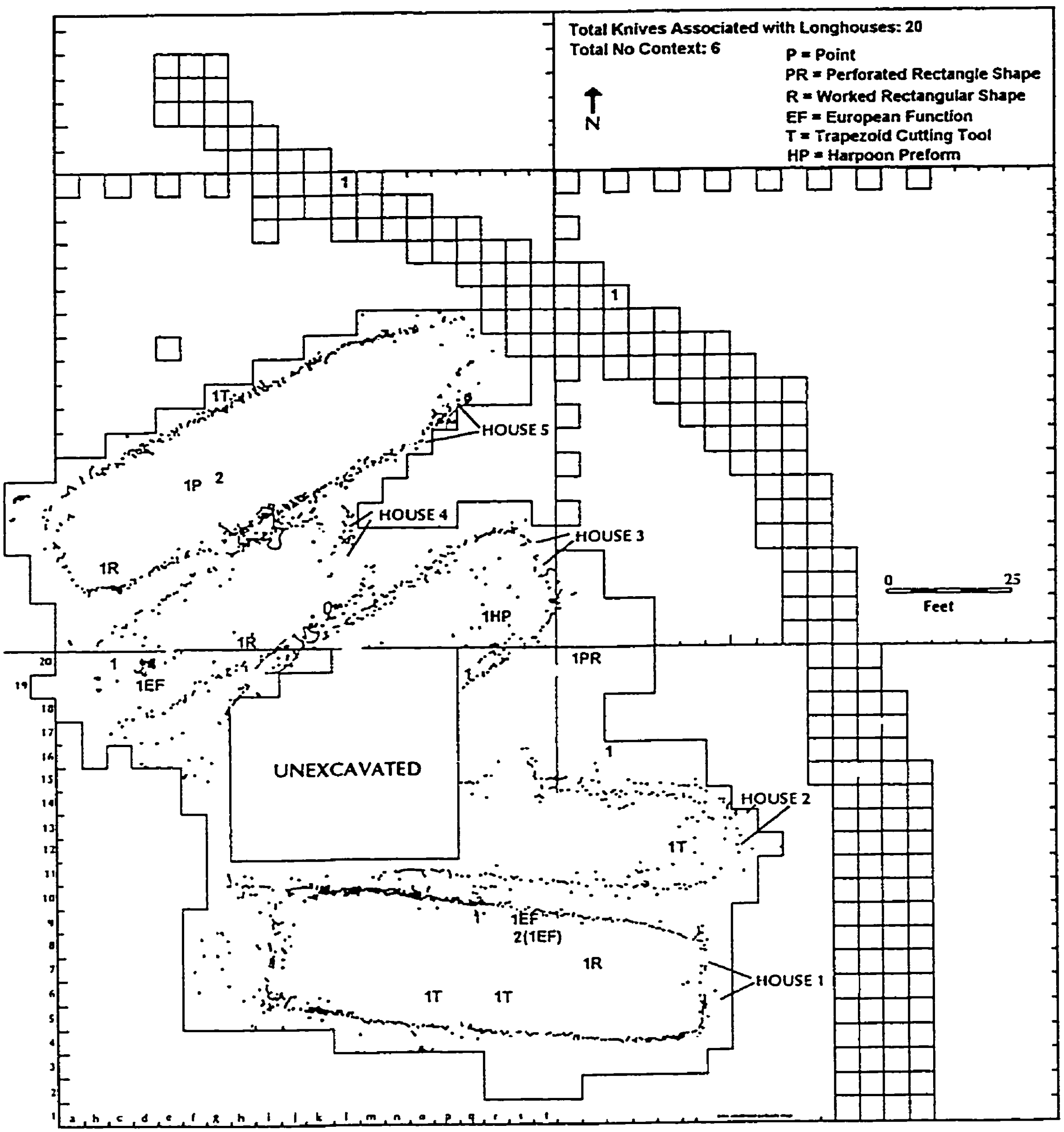
LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	7	0	0	7	35.00%
Longhouse 2	1	0	1	2	10.00%
Longhouse 3	1	1	1	3	15.00%
Longhouse 4	3	0	0	3	15.00%
Longhouse 5	4	0	1	5	25.00%
TOTALS	16	1	3	20	100.00%
PERCENT	80.00%	5.00%	15.00%	100.00%	

associated with a living area. The remaining two were recovered from middens which suggests that they were dispensable.

Four trapezoid knife fragments were recovered from the area of the longhouses: one outside and just north of Longhouse 5, with no discernable activity area association; two from the inside of Longhouse 1 in the area of smaller hearths along the southern floor; and one from the inside of Longhouse 2 in association with bird bone. Additionally, one trapezoid cutting tool crafted from an European knife and positioned on the eastern wall of Longhouse 2 was associated with dog remains. These artifacts were likely multi-functional, with 80% distributed within the living areas.

Four rectangular shaped knife fragments were recovered inside each of Longhouses 1, 4, and 5. One, retrieved from Longhouse 1, was associated with skin processing while the remaining two have no apparent associations.

Figure 5.5: Frequencies and Locations of Iron Knives and Fragments



Additionally, one perforated rectangular knife fragment likely functioned as a cutting or scraping tool and was associated in the area between Longhouses 2 and 3 with several copper alloy fragments, fifty-one pieces of debitage, one hammerstone, and one ground stone fragment. Positioned slightly north of Muir's skin processing area, this newly defined activity region is believed to have extended farther north to the exterior wall of Longhouse 3.

One worked iron point was located in the region of bear hide storage or processing in the living area of Longhouse 5, and one unfinished barbed harpoon from a hearth in Longhouse 3 was likely in the process of being manufactured. Overall, seven of the twenty knife fragments from longhouses were associated with skin processing area. Additionally, Longhouse 3 may have been a place were tools were made.

Copper Alloy Scrap

While evidence for ritual activity is extensive for Longhouse 1, a variety of domestic activities including tool production are indicated by the distribution of prosaic artifacts. Among these are worked and heated expedient copper alloy fragments, and one trapezoid cutting tool crafted from a European knife found within and outside the southern wall of Longhouse 1 (Figure 5.6). These indicate a tool production area unrelated to Muir's activity areas.

While 46.76% of copper alloy scrap came from midden areas, a high frequency (n = 95, 26.76%) was recovered from the area of the longhouses. Of interest are the 73 fragments from Longhouse 1 (Table 5.8), and the scattered

Figure 5.6: Frequencies and Locations of Copper Alloy Fragments

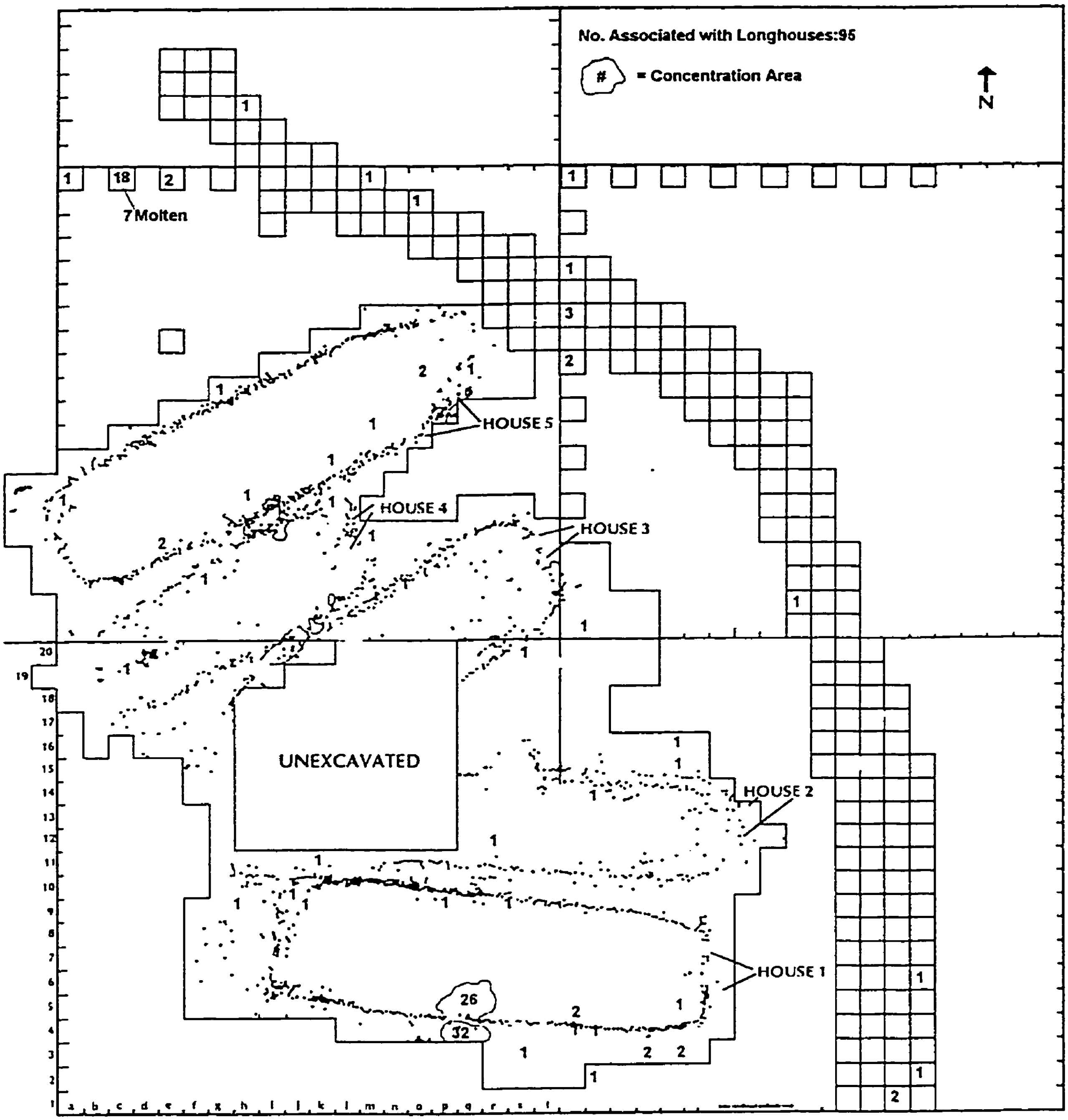


Table 5.8: Copper Alloy Scrap Distribution Among Longhouses

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	33	3	37	73	76.84%
Longhouse 2	3	0	2	5	5.26%
Longhouse 3	0	1	2	3	3.16%
Longhouse 4	2	1	1	4	4.21%
Longhouse 5	7	2	1	10	10.53%
TOTALS	45	7	43	95	100.00%
PERCENT	47.37%	7.37%	45.26%	100.00%	

presence of several copper alloy fragments in proximity to Muir's skin processing areas outside the southern wall of that same structure. A similar scatter between Longhouses 2 and 3 suggests probable use of these items for prosaic purposes.

High frequencies of copper alloy fragments clustered inside and outside the southern wall are considered activity areas unrelated to Muir's (1990) faunal clusters. Twenty-four (32.88%) of these fragments had been heated, with molten fragments dominating outside the house (n =10), and heated and worked fragments characterizing the interior (n =7). Several fragments were folded, one worked on two sides, and the remaining pieces were unworked, suggesting the small hearth on the southern interior of Longhouse 1 may have been associated with the working of brass. Of thirteen molten fragments which were heated to the point of forming irregular globular shapes, five were recovered from the interior of Longhouse 1 and eight from the exterior. Additionally, pieces that were heated and cut with straight edges were from activity areas on the outside and inside of Longhouse 1.

Numerous copper alloy fragments were scattered within Longhouses 2, 3, and 4, and along the southern wall of Longhouse 5. There is no discernable pattern to the distribution of these artifacts, and they do not conform to Muir's activity areas. Since bear hide storage, and dog and fish remains are designated as activity areas for Longhouse 5, this structure likely constituted an area designated mainly for ritual curing ceremonies.

Evidence for a copper alloy manufacturing area is exhibited along the southern corner of the Eastern Palisade. Here, six molten, two rolled, and one folded copper alloy fragment were associated with a hearth. The scattered distribution of the remaining one hundred and five heated copper alloy fragments do not suggest activity areas (Table 5.9).

The high frequency of reworked copper alloy and iron artifacts should not be misconstrued as evidence that 'superior' European metals had replaced lithic counterparts. As demonstrated below, lithic production and imported finished tools are far more numerous than are traditional forms constructed from European materials. This implies that European metals were viewed only as one imported raw material from which traditional tool forms could be made. Consistent with this interpretation is the fact that many copper alloy fragments - like their lithic counterparts - were created as expedient tools.

Table 5.9: Heated and Worked Copper Alloy Fragments

LOCATION	MODIFIED COPPER ALLOY TYPES AND FREQUENCIES		
	Heated	Heated with Straight Edge Cut	Irregular/Molten
Palisade	4	5	9
Miscellaneous Units	5	3	3
No Context	1	0	0
West Midden	0	0	3
Southwest Midden	1	1	2
South Midden	1	0	0
Central Midden	5	7	23
Northeast Midden	0	4	2
TOTAL	17	20	42

Traditional Prosaic Artifacts

Of 1,319 prosaic artifacts recovered from Le Caron, approximately one half (50.87%) are constructed from Native materials, with traditional forms and functions. Five hundred and four of these tools (75.11%) are constructed from lithic materials (Table 5.10). These demonstrate a continued use of traditional tools despite the incorporation of European metals to create similar forms. For example, twelve copper alloy and iron flattened projectile points morphologically mirror eighty-six traditional triangular and stemmed lithic points. Both the frequency

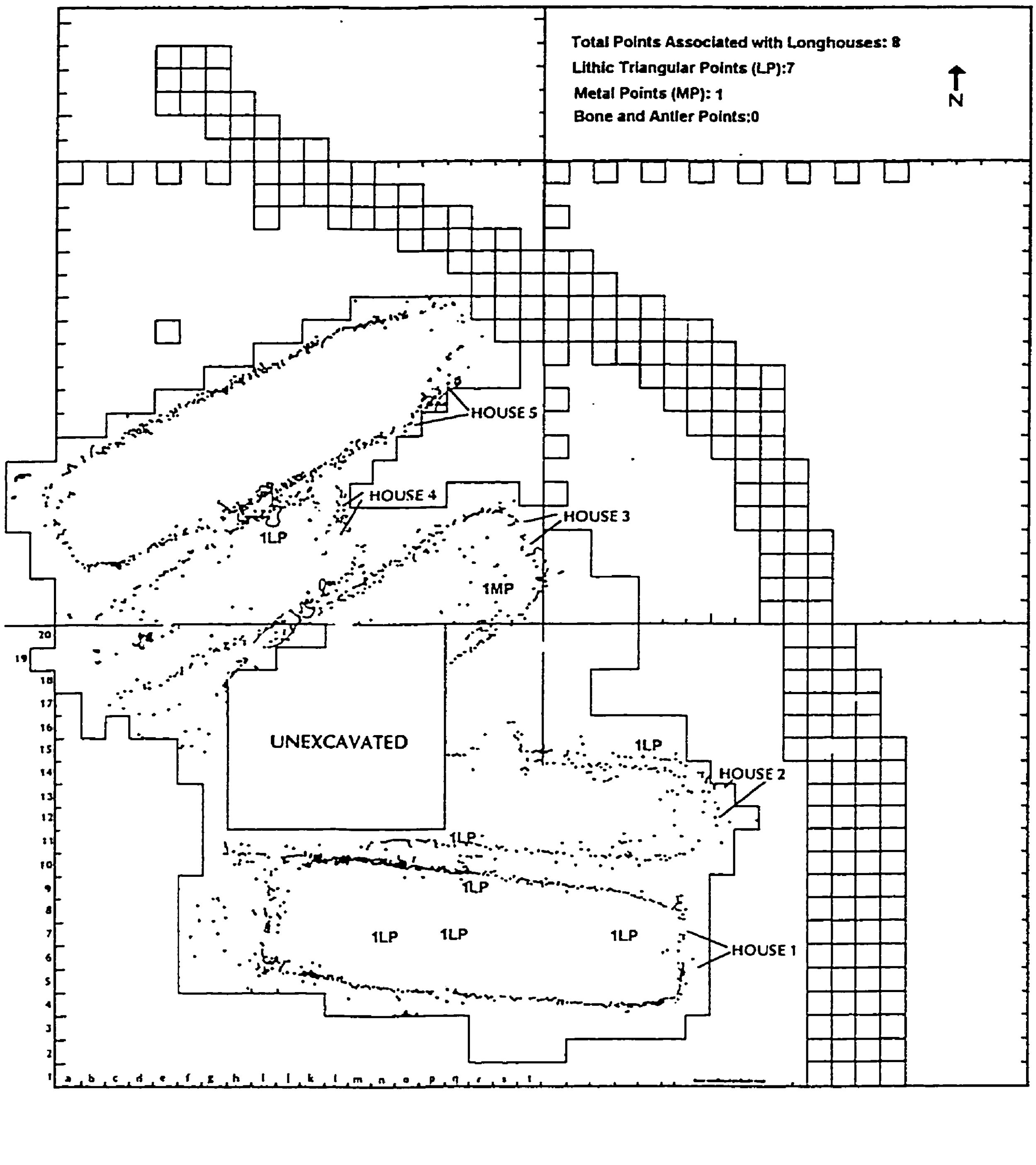
Table 5.10: Traditional Lithics

Traditional Lithics	Longhouses	Middens	E & SW Palisade	Misc. Units	No Context	Totals
Adze	1	2	0	0	0	3
Anvil	2	1	0	0	0	3
Boiling Stones	0	7	2	2	0	11
Cores	7	23	4	5	0	39
Debitage	54	0	6	1	0	61
Flakes	8	32	14	4	0	58
Ground Stone	3	22	2	0	1	28
Hammerstones	7	9	4	2	0	22
Lithic Points	7	71	2	3	1	84
Stone Scrapers	3	16	4	1	0	24
Unfinished Flaked Stone	12	102	22	7	0	143
Whetstones	3	16	8	1	0	28
TOTAL	107	301	68	26	2	504
PERCENT	21.23%	59.72%	13.49%	5.16%	0.40%	100%

and within-site distribution of traditional lithic forms indicate their dominance over those constructed and employed from European materials (Figure 5.7).

Additionally, the number of other lithic and bone tool types exceed all reworked iron forms of traditional artifacts. This further indicates traditional materials dominate the 17th century artifact inventory. Secondary to these items are innovative replicas derived from European materials. It therefore seems that

Figure 5.7 Frequencies and Location of Traditional and Metal Projectile Points



accessibility rather than preference account for the presence of these items at Le Caron at the time of site abandonment.

Finally, the distribution of cores, flakes, debitage, hammerstones, anvils, and expedient chipped stone tools are plotted among the longhouses to determine areas of traditional stone tool production (Figure 5.8). Fifty-one fragments of debitage positioned outside of Longhouse 3 either indicate a tool reduction area or expedient tool use in association with Muir's (1990) skin processing area. Stone tool production is prevalent both inside and outside Longhouse 1. These activity areas coincide with the activity area designated for making copper alloy expedient tools. The distribution of completed formal lithic tools is less informative than is the distribution of expedient forms (Figure 5.9). However, adzes, scrapers, whetstones, and ground stone are associated with living areas and unfinished worked ground stone is associated mainly with Longhouse 3.

Distribution Within Middens

The distribution of all artifacts recovered from the Le Caron middens are delineated in Appendix C, and summarized below for interpretative purposes. There are extreme differences in the frequencies of all artifact classes, including the faunal remains between middens and longhouses (Muir 1990:145). Glass bead associations indicate that the Southwest, Central, and Northeast Middens date to ca. A.D. 1615-1630s; the West Midden dates to the later part of the 1630s; while the South Midden dates after A.D. 1640. Therefore, distributions of artifact classes can be compared between these temporally distinct deposits.

Figure 5.8: Frequencies and Location of Stone Tool Production

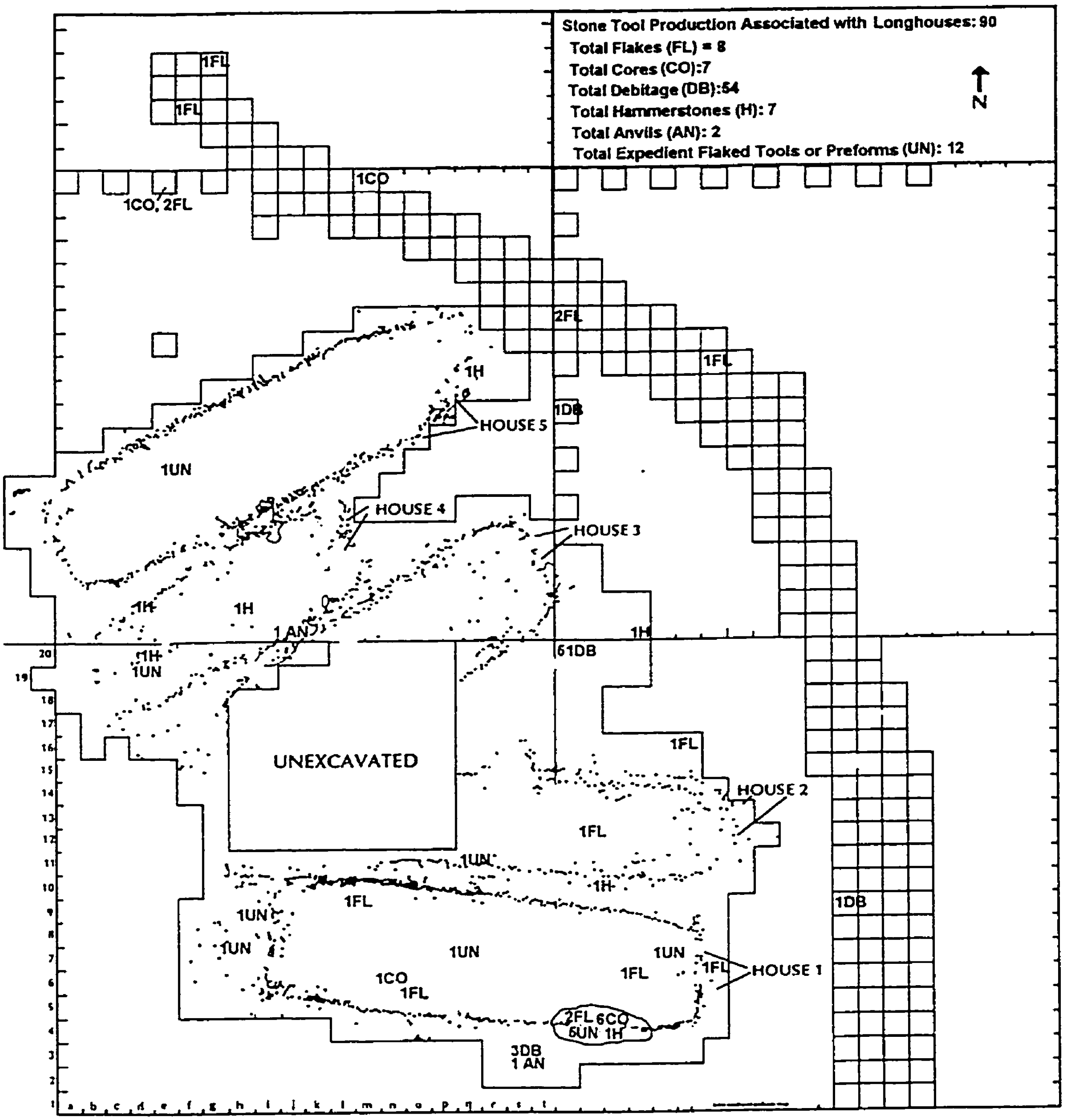
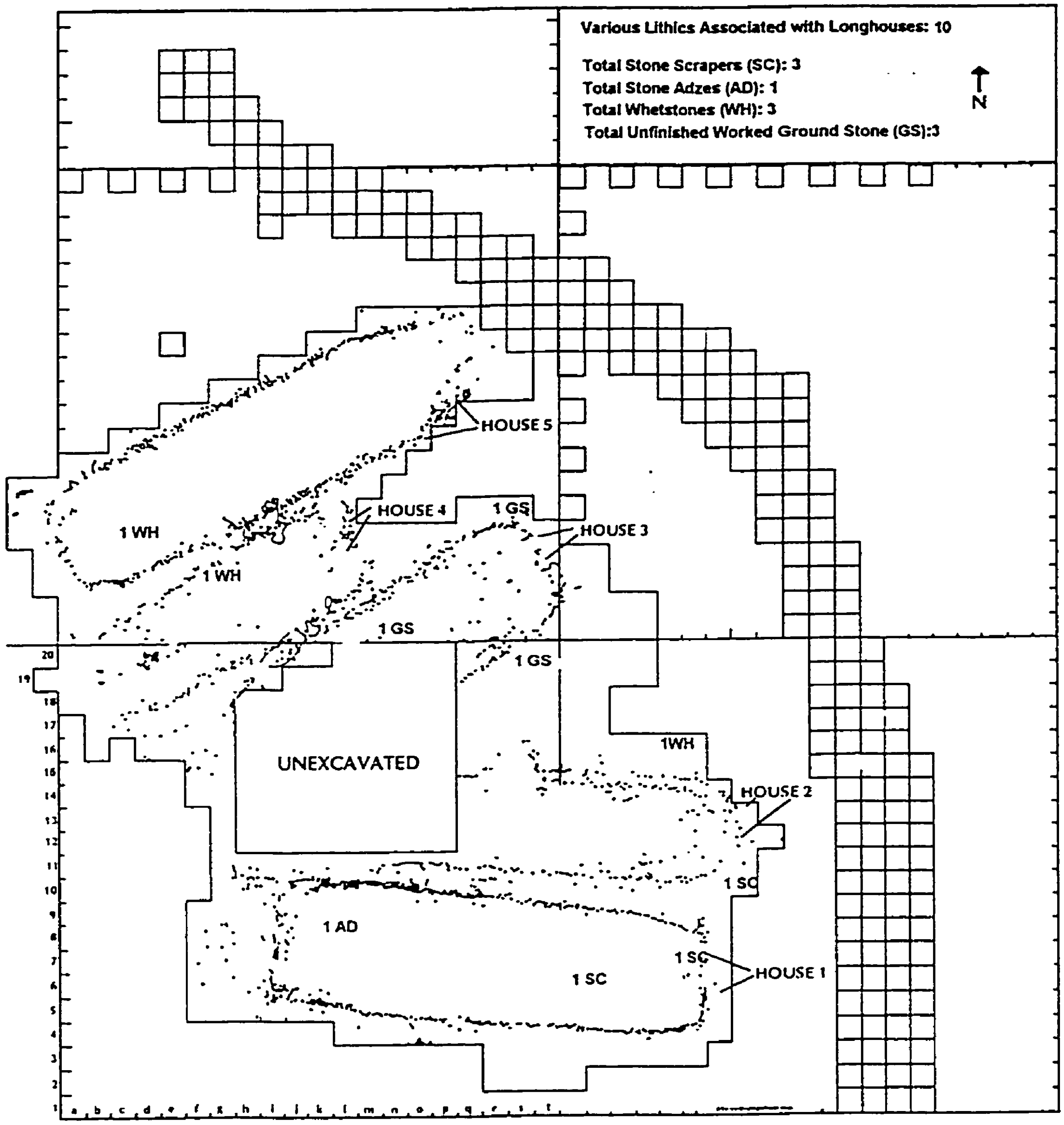


Figure 5.9: Frequencies and Locations of Various Formal Lithic Tools



Beginning with the distribution of traditional prosaic and ceremonial artifacts (Table 5.11), the Central Midden contains the majority of both prosaic and ceremonial artifact classes (58.21%), and is likely a reflection of the large excavated surface area defining this region rather than a cultural inclination to selective disposal. The lowest frequency of prosaic and ceremonial items were recovered from the South Midden (3.69%).

Table 5.11: Midden Distribution of Traditional Prosaic and Ornamental Artifacts

ARTIFACT	MIDDEN DISTRIBUTION							
	West	South	S-W	Central	N-E	**Total Midden Number**	**Total Artifact Number**	**Midden Percent**
Prosaic No.	3,786	1,018	2,966	16,247	3,790	27,807	37,304	74.54%
%	13.62	3.66	10.67	58.43	13.63	100.01%		
Ceremonial/ Ornamental No.	83	19	20	131	74	327	495	66.06%
%	25.38	5.81	6.12	40.06	22.63	100.00%		
TOTAL	3,869	1,037	2,986	16,378	3,864	28,134	37,799	74.43%
PERCENT	13.75	3.69	10.61	58.21	13.73	99.99%		

The high frequency of traditional artifacts recovered from the Central Midden corresponds with a higher number of European items (60.83%) in this area (Table 5.12). The proportional size of the Central Midden in relation to remaining middens likely accounts for this pattern. Additionally, the lowest frequency of prosaic (3.66%) and ceremonial (6.81%) European artifacts were

Table 5.12: Midden Distribution of European Materials Employed as Prosaic and Ornamental Artifacts

ARTIFACT	MIDDEN DISTRIBUTION							
	West	South	S-W	Central	N-E	**Total Midden Number**	**Total Artifact Number**	**Midden Percent**
Prosaic No.	40	17	40	176	65	338	637	53.06%
%	11.83	5.03	11.83	52.07	19.23	99.99%		
Ceremonial/ Ornamental No.	29	10	18	276	72	405	495	81.82%
%	7.16	2.47	4.44	68.15	17.78	100.00%		
TOTAL	69	27	58	452	137	743	1,132	65.64%
PERCENT	9.29	3.63	7.81	60.83	18.44	100.00%		

recovered from the later dated South Midden (ca. A.D. 1640+). This pattern is likely a result of the late inauguration of this midden's use, coupled with the dispersal of the Huron from the village shortly thereafter. In the West Midden there was a high frequency of traditional ceremonial artifacts relative to items constructed from European materials. Otherwise, the distribution between European and Native materials are relatively consistent among middens.

Overall, the spatial distributions of all artifact classes corroborate Muir's (1990) conclusions that ritual activities associated with curing ceremonies and revitalization are frequent throughout the site. In the following chapter, I argue that the cultural components of 17th century Huronia reflect a syncretic convergence of Native and European networks, but one in which Native ethnic elements are habitually prominent. This suggests traditional practices and beliefs continued to govern ideation, despite physical changes to artifact forms.

CHAPTER 6

INTERSITE ANALYSIS AND REVITALIZATION

Introduction

Comparative archaeological intrasite and intersite studies of artifact frequencies and their distributions are needed to identify differing cultural preferences for the adoption of European goods in the Northeast. Such studies must examine interactive complexity in order to interpret the reactions of Natives to Europeans, and to draw conclusions regarding the extent, nature, and impact of interactions (see Fitzhugh 1985a:7-8). As a preliminary step to these studies, the Le Caron data is correlated to published data for other contemporaneous sites throughout the Northeast. I conclude that site assemblages are the products of differential revitalization processes.

Overview of Syncretized Artifacts

There are several limitations associated with the analysis of the Le Caron artifact collection. First, the collection consists of items discarded by the Huron at the time of site abandonment, rather than items that reflect daily activities associated with site occupation. Regardless, the following discussion is based on the premise that the artifact collection represents, to a reasonable degree, the types of material culture available to the Huron who occupied Le Caron. Second, artifacts that were recovered from excavated regions of the site are assumed to be representative of artifact types and frequencies from unexcavated areas.

Beyond these problems associated with the artifact inventory, I maintain that important ideological and economic conclusions may be drawn from the frequencies, types, and degrees of modification to artifacts. Unlike political and social interpretations which may be drawn from the size, number, and distribution of structural features within village sites, ideational practices and the extent of Huron and European interactions at Le Caron are discernable solely through the analysis of artifacts.

Archaeologically, ideational practices and beliefs are deduced from ethnohistorical documentation and grave offerings recovered from mortuary sites. Since mortuary data was not present at Le Caron, evidence for ideation is obtained strictly through the analysis of artifacts. Accordingly, traditional ideology is correlated with analogous items from mortuary contexts, while missionary success is measured by the presence of European religious artifacts. This approach assumes that ideation and beliefs were manifested physically upon artifacts, and the frequency of these items reflect the power and types of religious practices which occurred at Le Caron.

Similarly, since European structures are absent at the Le Caron site, the extent of Huron and European interaction is discernable only through the artifact assemblage. While trade relations between the Huron and Europeans is equated strictly to the types and frequencies of European artifacts, the impact of European influence is measured by the degree of traditional syncretic modification to European forms. Accordingly, the underlying assumption here is that the frequency of artifacts and their corresponding syncretic attributes are equated with power relations between traditional and European polities. Again, biased artifact frequencies make this approach problematic. However, based on the limitations of archaeological data, artifact analyses are required to measure European interactions at Le Caron.

Syncretized Artifacts

The cell matrix indices described in Chapter 4 are abstractions of physical traits for identifying traditional continuity and change. As summarized under Category 5 of Cheek's (1974) cross-tabulation matrix, over 55,000 artifacts (96.61%) recovered from the Le Caron site consist of fauna and Native ceramics. Since the frequency of modified and worked bone tools directly related to this study are included as independent categories, the remaining faunal frequencies (n = 18,678) are eliminated from the following analysis to balance the ratio of European to Native artifact forms. Similarly, the frequency of traditional ceramic fragments (n = 36,641) far outweighs those of European manufacture (n = 25). Therefore, Native ceramics are eliminated below to acquire a workable and comparable view of each artifact cell (Table 6.1).

Of 3,095 artifacts represented in this table, over sixty percent are exclusively traditional in form, function, and material. Traditional artifacts, and by extension the practices attributed to these items, dominate the assemblage. In contrast, the frequency of European goods with European functions reflect a minimal degree of influence on the traditional culture (5.82%). Finally, a

Table 6.1: Frequency Matrix of Continuity and Change Excluding Traditional Ceramics and Fauna

MATERIAL	FORM	FUNCTION (Implied)	FREQUENCY	PERCENT
1) European	European	European	180	5.82%
2) European	European	Native	505	16.32%
3) European	Native	European	0	0.00%
4) European	Native	Native	465	15.02%
5) Native	Native	Native	1,942	62.75%
6) Native	Native	European	0	0.00%
7) Native	European	Native	0	0.00%
8) Native	European	European	3	0.10%
TOTAL			3,095	100.01%

substantial percentage of artifacts (31.34%) that exhibit a combination of both Native and European elements, or syncretic blending, are discussed in further detail below.

Over half of the syncretized items (16.32%) derive from Category 2, where many artifacts fit directly into the traditional culture and serve the same 'implied function' in both European and Native cultures. While material and form are classified as European, many European artifacts (e.g, beads, awls, fishhooks, harpoons) parallel traditional Native forms almost identically, and such analogies are prominent themes in the revitalization process (Wallace 1956:33). Relating this data to syncretic paradigms, the greater the symmetry among interacting groups (and by extension their goods), the smoother and quicker the syncretic process. Therefore, the high frequency of these incorporated goods is best appreciated in terms of cultural continuity and accessibility to European goods within the region.

The artifacts in Category 4 constitute the remainder of syncretized goods (15.02%). Here, the only European component is material of manufacture, and all four hundred and sixty-five fragments display traditional function and form. Thus, all artifacts are directly related to Native tool and ornament manufacture - where European form and function is moot. This category highlights copper alloy and iron strictly as desirable sources of raw material for manufacturing traditional items. The intended European function and form of knives, kettles, and axes is irrelevant beyond the workable nature of the procurable material. This is examined extensively in Appendix A.

While artifact frequencies in each cell matrix provide important conclusions related to continuity and change of traditional artifact materials and forms, interpretations related to economic function and ideology are addressed separately (Table 6.2). Of 3,095 artifacts crafted from European materials, over one half (57.38%) are modified into traditional ideational and ornamental forms (n = 1,776), while the remainder (n = 1,319) are prosaic forms (42.62%). European artifacts modified into traditional prosaic forms are appraised as a product of cultural continuity in Chapter 5, and ceremonial items are examined below in terms of availability, completeness, and/or degrees of modification to the original European forms.

Table 6.2: Frequency of Prosaic and Ceremonial Artifacts Within Matrix Categories

MATERIAL	FORM	FUNCTION (Implied)	PROSAIC	CEREMONIAL/ ORNAMENTAL
1) European	European	European	176	4
2) European	European	Native	38	467
3) European	Native	European	0	0
4) European	Native	Native	431	34
5) Native	Native	Native	671	1,271
6) Native	Native	European	0	0
7) Native	European	Native	0	0
8) Native	European	European	3	0
TOTAL			1,319	1,776

European and Traditional Ideational Artifacts

In this study, the distribution and frequency of ideational artifacts are assumed to model spiritual practices. Accordingly, the success or failure of traditional spirituality or Jesuit attempts to convert Natives to Christianity may be tested empirically with the Le Caron collection. Evidence to support missionary success would include a lack of traditional ideational items, combined with numerous Euro-religious artifacts which were recorded historically as symbols of conversion. In contrast, the opposite artifact pattern is expected where traditional spirituality continued to flourish.

Récollect and Jesuit priests visited and stayed at various Huron settlements during the 17th century in an effort to spread Christianity. Since all French missionaries entering Huronia had to pass through the Bear Nation, and Le Caron is positioned in the geographic centre of Attignawantan country and at the cross roads of walking trails, missionaries were likely present at the site during the 17th century (Butcher and Johnston 1973:2; Rexe 1971:B2).

Of 1,776 ideational or ornamental artifacts, 71.57% are strictly traditional in form, function and material. In contrast, less than 0.25% of items constitute European form, function, and material (Table 6.2). Seven artifacts which may be correlated directly to the presence of Jesuits include three rings, one bell, two clothing attachments, and the remnants of one gun (see Appendix A). This suggests the level of Christian influence at Le Caron was likely minimal.

Of these seven religious artifacts, just four are ornamental in form. Of interest is the low frequency of religious items recovered from the site when compared with the variety of medals and crucifixes available in Iroquoia during the 17th century (e.g., Bradley 1987a:137, 177; Cleland 1971:23, 28-34; Jaenen 1974:268-269; Houghton 1922:63-64; Maxwell and Binford 1961:125; Petersen 1964:52-53; Stone 1972:16-17). Since these items were given to converts as testimony of their new faith (Bradley 1987a:136; Armour 1977:14), the scant presence of Jesuit artifacts from this site provides little evidence for Christian conversion at the time of site abandonment - short of assuming Christian items were carried off site.

Therefore, tangible symbols of Christian influence in the collection are minimal, and the evidence corresponds with Nutini's (1988) conviction that direct contact between asymmetrical belief systems constitutes a slower syncretic process, and contrasts with the adoption of European goods through indirect contact. The clearest example of these divergent processes is exhibited by Jesuit rings (see Appendix A). In Huronia, the frequency of European religious items is limited among all sites, and few Christian emblems are modified (Fitzgerald, Knight, and Lennox 1994). This position is in direct contrast to the high frequency of syncretized traditional designs on items recovered from early 17th century Onondaga sites where there was no direct missionary contact (Bradley 1987a).

Additionally, European materials at Le Caron (such as glass beads and the noise making musket balls and powder) were often interpreted as traditional ideological forms as they fit directly into traditional spirituality. Furthermore, several finished artifacts were crafted from European materials to mirror traditional ideological forms (e.g., one brass spiral and several tinkling cones), and acted as alternate materials to sustain a separate religious identity (Feest 1986:30).

In contrast to the low frequency of European religious items, a myriad of exotic artifacts recovered from Le Caron indicate trade systems carried traditional spiritual goods through extensive trading systems. Marine shell, red siltstone beads and pendants, several catlinite beads, effigy pipes, Seneca carvings, quartz fragments, and red ochre recovered from Le Caron indicate that spiritual items, or materials to manufacture these items, dominate imports. As well, bone beads, deer phalanx bangles, and unfinished ornamental forms indicate spiritual items were also created locally (Appendix B).

Traditional ideological materials and syncretized physical forms are recovered throughout Huronia. For example, analogous bear, wolf, and human effigies are rooted in traditional ideology, while pipes with a human and animal head on opposite sides are associated with shamanistic practices (Mathews 1978). Additionally, one antler female figurine recovered from Le Caron suggests Seneca or Susquehanna spiritual influences entered Huronia, and one probable weeping eye motif may be correlated to the Lizard Cult of eastern Ohio and Western Virginia. Snake and lizard motifs recovered among sites in Neutralia and Huronia indicate syncretised values were prominent and exhibited as numerous physical forms (See Appendix B: Effigies). Therefore, symmetry in Native ideological structures and beliefs throughout the Northeast provided the stage for the distribution of exotic items, while the meaning of these artifacts was likely reinterpreted locally.

Europeans and Trade Goods Within a Native Infrastructure

Artifacts in this study are viewed not simply as items of exchange, but also as products of modification grounded in tradition (after Ericson and Baugh 1994:4). Almost all European material forms are reworked to suit traditional functions, and close examination of European artifact classes indicates strong cultural continuity through the incorporation of European subcultural elements into the traditional system. These goods were used in association with prominent traditional forms, and while innovative versions indicate a change in material, form and function are grounded in tradition.

Therefore, incorporation must be viewed as a temporal continuum within the context of syncretic theory if we are to decipher ideological continuity. For example, Native copper was valued and worked for several thousand years in Ontario. Thus, European copper kettles were likely viewed as a traditional raw material which could be acquired through Europeans or polities who traded with them. Consequently, traditional Native values provided favourable conditions for European immigrants to prosper within pre-existing trading networks - in which the European perception of kettle function and form was irrelevant. By viewing kettles from a Native perspective as a workable raw material, the conversion to 'yellow' brass kettles during the early 17th century likely held more ideological significance to the Huron than did the early European introduction of red copper kettles (see Appendix A).

Additionally, methods employed to work wrought iron and copper alloy were analogous to traditional techniques employed for crafting Native copper wherein the processes of cold working, annealing, and abrasion were supplemented by scoring, folding, rolling, cutting, grinding and polishing (see Appendix A). These techniques date to the Archaic Period in Ontario, and reflect continuity in working traditional forms (Bradley 1987a:74-77, 132-133; Quimby 1966:18; Trigger 1976:108).

Finally, Europeans, as outsiders, likely adapted their roles to survive within preexisting trade networks by providing items according to demand. For example, the increased presence of shell on Iroquoian sites after ca. 1580 is often correlated to trade with Europeans (Kenyon and Fitzgerald 1986:6). However, shell is not strictly associated with European trade and archaeological data indicates it was distributed throughout the past several thousand years (ca. 6000 B.P.) in unremitting yet varying volumes (Ceci 1989:63, 74; Pendergast 1989:97).

Exchange networks inaugurated during the Archaic Period developed in complexity during the Early and Middle Woodland periods, and evidence of cultural complexity, extensive trade networks, and dynamic external interaction and adoption of goods through rapid change were certainly prominent prior to European contact (Bourque 1994:40-41; Ericson and Baugh 1994:5; Jamieson 1989:308; Pendergast 1994:13-14; Sempowski 1994:1). Goods exchanged through these extensive Native trade networks typically included ritual items of shell, copper, and exotic cherts. Few of these items are recovered from Late Woodland sites, but increase in volume during ca. A.D. 1500-1580, and particularly after ca. A.D. 1580-1650. These later trading networks were adjusted to suit specific trading centers that distributed large volumes of goods (Bradley 1987a:89-90), and have their immediate ancestry in the focused networks operating throughout Iroquoia prior to ca. A.D. 1580 (see Chapter 2).

The response to 17th century stressors involved the revival of analogous eclectic traditions, where newly incorporated items held symmetrical elements to traditional forms. According to Hamell (1983:5-7), when appropriated to ritual application, shell, crystal, and Native copper are cultural material expressions of 'light' and metaphorically correlated with 'life', 'mind', 'knowledge', and 'great beings'. These coloured substances are overlapped by the allegorical dimensions of direction: life is 'social direction' and associated with eastness, rightness, and counterclockwiseness. These traditional understandings of material properties provided the opportunity for analogous European materials to be incorporated within the larger ideological structure.

Diachronic Approaches and Archaeological Explanation

Fitzgerald (1990:54-55, 92) argues the presumed influx of European goods in Ontario subsequent to A.D. 1580 is simply a result of refined dating techniques associated with glass beads as specific temporal markers. He argues that without the benefit of specific datable artifacts from earlier 16th century Iroquoian sites the sequence and quantity of trade goods available at this time are difficult to assess. Accordingly, a steady increase in European artifacts could have developed throughout the 16th century, but such an observation would not necessarily be archaeologically visible.

Similarly, the confines of archaeological explanation could also restrict the reverse cultural interpretation. Consider, for example, the interpretation that the discrepancy in traditional and European spiritual artifacts demonstrate that traditional ideological revitalization overpowered the meagre influence of European morals and items at Le Caron. This position is supported by historical accounts which explain that despite the selective adoption of European alliances, technology, and materials by Native populations, Europeans were often appraised in an inferior light and their value systems were prone to criticism or rejection (Jaenen 1974:289-290). And although direct contact between French traders and the Huron made European materials accessible, asymmetrical components segregating the two cultures resulted (theoretically) in a slower incorporative syncretic process (Nutini 1988).

In light of this information, we must anticipate a low frequency of European items from all 17th century Huron sites. According to historical and theoretical approaches for understanding syncretism, increased access to French goods during the 17th century need not equate with an increased accumulation of European items on Huron sites. Instead, other factors could influence the incorporation of goods. They include: differential access to European items, the extent to which redistributional kin obligations were being met, and a population's desire to maintain traditional practices. These factors are correlated to types and frequencies artifacts recovered from 17th century Iroquoian sites.

Archaeological Data

Artifact types and frequencies from Huron habitation sites are seldomly listed in published accounts. However, I correlated artifact data from several sources to draw general temporal comparisons among sites. Several publications include Huron village sites which date to ca. A.D. 1500-1600. They are: The Wet Site, Black Creek, Charlebois, Coulter, Draper, Benson, McKenzie, and the Matthew Campbell Sites (Emerson 1954; Finlayson and Pihl 1980; Johnson 1978; Latta 1973, 1976, 1978; Ramsden 1977). The results indicate that during this time frame, only scattered numbers of European artifacts were present on Huron habitation sites.

Artifact data from the Auger, Cedar Point, Robitaille, and Warminster sites indicate European artifacts are more frequent on 17th century Huron village sites. However, European artifacts comprise only a small percentage of each assemblage (Drewitt 1987; Emerson 1954; Latta 1973, 1976, 1978; Sykes 1983). The results obtained from the Le Caron collection are consistent with these findings as European items account for less than two percent of the entire assemblage.

The low frequency of European items in the Le Caron collection appears unrelated to restricted access to European trade. Based on the site's size, location, and triple palisade barrier, Le Caron is believed an important site for trade or middle man activity during the 17th century (Rexe 1972:J6-J7). Regardless, if direct contact with European missionaries and traders did not transpire on this site there would have been high potential for the inhabitants at Le Caron to access European goods through traditional trading networks.

Le Caron was probably a principle village involved in trade. Accordingly, the population's prosperity likely depended on preserving traditions - or remaining conservative. The recovery of exotics at the Le Caron collection strengthen this supposition. In particular, syncretized European exotics were incorporated to suit conventional forms. Nevertheless, the low incidence of European commodities among Huronian village sites requires explication.

Explanations from ethnohistorical accounts indicate the dispersal of European items would occur frequently in a variety of ways. Accumulated trade goods among the Huron functioned as a societal cache, to honour treaties, compensate for infractions of Native legislation, liberate prisoners, and conduct trade. The redistribution of items provided elevated socio-political positions for individuals, and also attracted followers which would enhance status in a segmented and often fractionalized society. Additionally, social meetings, burial rituals, marriages, feasts, festivals, curing rituals, feud settlements, and gambling functions were processes for disseminating trade goods (Heidenreich 1971:224-226; 1972:76-81; Ramsden 1981). These specific cultural ideals of status and status items were delineated prior to the arrival of Europeans and were perpetuated after this event.

First, the dispersal of items in Huron burials is explored. When exotic items recovered from the Huron Sopher, Maurice, and McClellahan Ossuaries are compared to those items at the Ossossané Huron ossuary, the data suggests that the number of exotic artifacts recovered from Huron mortuary sites increases after the mid-16th century (Jamieson 1981:23-26; Latta 1973, 1976; Noble 1971; Reid and Conway 1976:32-33). Moreover, since European and Native grave offerings recovered from the Ossossané ossuary were distributed in equal amounts, non-segregated material preferences for mortuary items occurred sometime after ca. A.D. 1650 (Kidd 1953:364). Therefore, the high frequency of European items from mortuary sites indicates these items held similar ideological correlations to traditional exotics.

In contrast, the low frequency of European goods from Huron habitation sites indicates that European artifacts were redistributed equitably, but in limited quantities. However, the intersite artifact analysis at Le Caron also suggests exotics may have been redistributed among local kin in order to acquire status and prestige. For example, exotic materials recovered throughout the site indicate small feasts and curing rituals occurred among longhouses, but remnants of these activities were most prevalent in Longhouse 1. Additionally, the incorporation of European items were not confined to ceremonial practices. Several work activity areas indicate European materials were also modified into prosaic forms.

As stated previously, the margin between prosaic and ceremonial artifact purpose is indeterminate. Nonetheless, I argue that syncretized European artifacts modified into utilitarian forms indicate that occasionally, traditional secular purposes were also attributed to these items (see Appendix A). That prosaic items were crafted from exotic materials indicates that by the mid-17th century secular values were occasionally associated with European materials. However, traditional values for the use, form, and function of these items continued into the mid-17th century. Regardless, secularized perceptions of materials by the mid-17th century may have enhanced circumstances responsible for the subsequent rise of European power.

Archaeological Paradigms and Revitalization

Archaeological interpretation is impeded by misguided understandings of sociocultural acculturation, simplistic linear archaeological paradigms, and Eurocentric historical interpretations. However, it is difficult to define methods appropriate to address these limitations. Herein, the Le Caron data is correlated to intersite comparisons throughout the Northeast, and cultural interpretations are explained as products of differential syncretic and revitalization processes.

Overall, the distribution of European items recovered in Huronia indicates the accumulation of goods were mainly for ideological purposes, as high frequencies of these artifacts are recovered predominantly from burial contexts. Therefore, European items were successfully adapted as subcultural ideological and prosaic units within the larger conventional Native culture (O'Brien 1982).

Since the majority of European items were associated with ideological meanings, these items flourished within trade networks which traditionally moved exotic items - but perceptions of these items varied among polities. Since the weight of European power is based on disparate perceptions of ideological power among contiguous Native populations (Chapter 3), the Huron perceptions of Europeans and their goods likely differed than those for the surrounding Iroquoian populations.

For example, varying social, political, and ideational practises and trade networks between Neutral and Huron polities suggest responses to European encounters were distinct in these regions (see Jamieson 1992a, 1996). Materials recovered from the Carton and Shaver Hill ossuaries, and the Grimsby multiple burials indicate an increase in exotics is observed on Neutral sites after the mid-16th century. This evidence indicates the increase in exotics is similar to artifact assemblages recovered from Huronia. The Neutral's demand for exotics and their distribution in graves guaranteed their status as prestige and spiritual items (Jamieson 1981:23-26). Regardless, the Neutral distanced themselves from direct contact with Europeans and incorporated southern traditional influences and European items more lavishly than the Huron.

Based on the recovery of distinct trade materials, archaeological evidence suggests that the foci of trade networks between Ontario and New York Iroquoian peoples also differed, especially during the 16th and 17th centuries (Sempowski 1994). For example, archaeological data indicates a high frequency of European goods are recovered from Five Nation Iroquois sites (e.g., Bradley 1987a).

During the 17th century, the League Confederacy was the external agent whose actions were geared toward accessing trade routes, exotics, and gaining power. This conclusion is based on empirical evidence obtained from Onondaga sites, where during the early part of the 17th century the volume of European material comprised 10 to 15% of assemblages, but increased to 75% or more by the mid-seventeenth century to form the initial stages of cargo cultism (Bradley 1987a:108, 110, 130).

Bradley (1987a:107) defines cargo cults as a combination of revitalization and acculturation processes. The revitalization movement entails the desire to reform the culture internally through spiritual regeneration and a prophetic vision of an improved future. In contrast, cargo cults emphasize the accumulation of European items for their spiritual wealth and power, which either supplement or replace traditional forms.

Unlike the Onondaga collections with high frequencies of European items that indicate successful revitalization movements placed an emphasis on cargo cultism, the Le Caron data exhibits strong evidence for accentuating traditional spirituality through the accumulation of exotic items and modifying European goods into traditional forms. However, since European goods comprise only 1.71% of the entire Le Caron artifact inventory, cargo cultism is not pronounced on this site, nor elsewhere in southern Ontario (e.g., Lennox 1981; Sempowski 1994; Wright 1981). Therefore, the response to the incorporation of European goods was different for the Huron than for the Five Nations Iroquois. This inference is based on problems associated with direct contact between asymmetrical value systems and disparate revitalization processes throughout the Northeast.

The dislocation displacement of Huron society during the 17th century in part was the product of power struggles associated with disparate cultural revival processes in the Northeast. When stress exceeds limits sustainable by a society, adequate internal changes or adaptation must occur to deal with these stressors otherwise the society will not survive (Kehoe 1983:123-124; McGarry 1998; Plog 1974:48). Therefore, one aspect of the Huron revitalization process entailed how adequately the population responded to stressors.

Archaeological data indicates the Huron response to stressors entailed an increase in burial ceremonialism after ca. A.D. 1580 (McGarry 1998). Accordingly, decimation by European disease was likely counteracted with traditional belief systems and behavioral practices (Mandzy 1994:142). While the majority of the Huron population embraced this revival in traditional customs, ethnohistorical accounts indicate some Huron peoples also embraced Christianity and European material culture (Trigger 1976). Thus, in addition to external power struggles with the Five Nations Iroquois, the fractionalization of kin-groups weakened internal political affiliations.

Inevitably, problems arise when a cargo cult's access to materials are restricted (Bradley 1987a:107). While the Iroquois wanted access to the Upper Great Lakes trade routes, the Huron were intent on protecting their trade rights and maintaining access to exotics. The Huron Confederacy was unable to provide adequate resistance to address the external power conflicts with the Five Nations Iroquois. These are the circumstances which led to an abortive revitalization process in Huronia (see McGarry 1998; Wallace 1956:49-50), and the demise of the Huron culture during the mid-17th century.

CHAPTER 7

CONCLUSIONS AND FUTURE RESEARCH

Interpretations of the Le Caron site (BeGx-15) are based on a diachronic framework which emphasizes continuity and change in order to understand short term circumstances affecting Huron populations during the 17th century. The analysis of the collection involves several research objectives which include: recording and quantifying both Native and European artifacts in the collection; acquiring a method suitable to identify syncretic elements exhibited among modified European artifacts; assessing acculturative and syncretic paradigms for their practical application to archaeology; and amalgamating intrasite spatial analyses of material culture with archaeological acculturative paradigms to attain a framework for understanding European influences within the context of syncretic theory.

Intrasite Analyses and the Le Caron Collection

The main objective of this research was to understand the incorporation of European goods at the Le Caron site within the framework of Native, rather than European, objectives and perspectives. A method specifically suited for an intrasite analysis was required to quantify artifact attributes as reflections of Native and/or European design. With the exception of flora, fauna, and traditional ceramics, all artifacts in the Le Caron collection were quantified. A brief overview of each artifact class is presented in Appendices A and B.

Cheek's (1974) twenty-four celled cross-tabulation display proved to be effective not only to categorize traditional syncretic attributes on European forms, but also to highlight both negative and positive evidence of European and Native characteristics. European artifacts were categorized by material, form, and function in order to evaluate attributes of continuity or change from the original European construction, and to deduce cultural interpretations for these modifications. This method delineated not only the intended European function of trade goods, but the Native perception of, use of, and modification to these goods. It also emphasized the lack of European influence on the incorporation of trade goods at Le Caron.

Overall, European axe, knife, and kettle fragments were altered most extensively. Descriptions of reworked fragments are detailed in Appendix A to supplement cell matrix categories. The data indicates European goods were incorporated predominantly by the Huron as raw materials to supplement traditional forms and functions rather than as functional prosaic replacements, and the majority of modified items were associated with analogous elements of traditional ideology. Comparable frequencies of traditional ceremonial items, and European materials made into traditional ceremonial items indicate there was little discretion between material types when ideological items were crafted at Le Caron.

Of 37,953 prosaic artifacts recovered from Le Caron, 98.28% were categorized as traditional in material, form, and function, while only 1.72% of the collection is constructed from European materials. Thus, the frequency of Native to European artifacts supports the interpretation that traditional activities dominated the assemblage.

Furthermore, a break down of the percentage of European artifacts into modified and unmodified syncretic attributes indicates that the majority of incorporated items correspond to traditional Native forms. Only 180 (15.67%) of 1,149 artifacts recovered from Le Caron display characteristics of having been used for their intended European function. In contrast, 505 (43.95%) items fit directly into Native culture as analogs which required no modification to the original form, while 465 (40.47%) modified European artifacts display syncretic elements related to traditional culture. Consequently, frequencies of traditional and European artifacts illustrate that the former dominate the assemblage and that the majority of the latter were directly suited, or moulded to suit, traditional forms.

This study also highlights the importance of intrasite analyses for discerning social, economic, and ideational activity areas within village sites. All artifacts were subdivided into prosaic, and ornamental/ceremonial categories based on their distribution and implied functions, and then correlated to Muir's (1990) ritual and prosaic faunal activity areas. Here, the context, availability, function, and modification of European artifacts was important not only for delineating prosaic and ritual contexts, but also for elucidating patterns of behaviour beyond standard artifact descriptions and frequencies which inadvertently objectify Native roles in archaeological research.

Throughout the Northeast, high frequencies of European artifacts are recovered mainly from mortuary contexts in association with traditional grave goods. Spiritual value attributed to these items indicates ideological parallels were made between analogous materials. Accordingly, burial goods and practices reflect traditional customs, syncretized artifact forms, and long standing continuity in ideological practices. The increased presence of exotics on Northeastern sites after ca. A.D. 1580 is correlated to the revitalization of traditional beliefs and practices (McGarry 1998; Stewart 1994).

While I determined that ceremonial and ornamental traditional artifacts (including syncretized European forms) generally correlate to Muir's (1990) ritual activity areas, I have been unable to provide additional evidence for rituals at Le Caron. This is more a reflection of the low frequency (11.23%) of ceremonial items recovered from longhouses (Tables C.1 and C.3), than to a low incidence of ritual activity at the site. Regardless, with the benefit of the larger faunal collection, Muir (1990) concluded ritual activity was abundant throughout the site.

While prosaic artifacts supplement Muir's (1990) hypotheses for the location of skin processing areas, I have identified additional activity areas including small tool production areas in association with longhouses. Furthermore, two large tool production areas are defined along the exterior and interior southern boundary of Longhouse 1, and in the area between Longhouses 2 and 3. Artifacts there indicate very few European items could have served their intended European function, and the majority have been modified into traditional prosaic and ornamental forms. According to glass bead distributions (Appendix A), these two regions date immediately prior to site abandonment.

Intersite Analysis

The incorporation of French goods at Le Caron is examined within the broader context of Iroquoian village and burial sites in the Northeast. First, 17th century Native and European trading systems and encounters, and the extent of Native interaction spheres both prior to and initiating European contact are discerned. In order to study syncretism one must first have an understanding of local polities both prior and subsequent to cultural coalition.

Local sequences of development and interaction are concurrently addressed within broader Iroquoian regional socio-political patterns where archaeological interpretations of Iroquoian polities unfold through a complex combination of in situ development, diffusion, migrations, and various stages of inter and intra-polity assimilation and/or syncretism. By focusing on both microcosmic and macrocosmic interregional interactions in this study, dynamic archaeological cultures are understood to adapt and change through time and play a primary role in the outcome of choices.

In the Northeast, broad based trading networks moved exotic items throughout the past although specific details were temporally variable. For example, exotic items were transported over large distances prior to European contact through shifting trade networks and power positions (e.g., Appendix B:

Unmodified Stone). During the 17th century, the Huron were strategically positioned to monopolize access to French trade.

At Le Caron, ideological revitalization is argued to be directed more at reviving traditional customs than acquiring European goods as superior functional replacements or to amass ideological power. The emphasis on traditional ideation is supported empirically with the number of traditional religious items, and those crafted from European materials. Overall, the importation of exotic goods continued on a regional scale. This position is substantiated by large frequencies of European and Native exotics imported from surrounding areas and deposited in mortuary contexts. European goods, therefore, are viewed as one component within the greater system of Huron trade at Le Caron.

Acculturation and Syncretism Paradigms

The Huron Bear Tribe was one element of a vertically segmented society during the early 17th century and materials obtained through long distance trade were distributed as a reflection of prestige and status (Jamieson, pers. comm.). The Huron Confederacy was developed to protect the interests of the Nation and the newly acquired power position of trade access. By the mid-17th century, the Huron had been dispersed as a political entity, having been weakened by European-introduced diseases which, in theory, rendered them susceptible to attacks by the League Iroquois.

These circumstances led to a weakened internal political infrastructure which eventually led to the demise of the Huron culture. However, the dispersal and/or acculturation of the Huron by the mid-17th century was instigated by the Five Nations Iroquois - not Europeans. Likewise, European attempts to impose their values through coercion also were overpowered by normative Native structures and the power of the League. Thus, I argue that acculturation paradigms are not well suited for explanations of European influence at Le Caron or other sites in Huronia. Syncretism is a more appropriate model for understanding Huron and European interactions in this region (see Chapter 3). In this way, manifestations of syncretic blending exhibited on European artifacts reflect merging cultural traits during the 17th century.

Syncretism is viewed as a continual redefining of dynamic cultures premised within the context of revitalization where traditional cultural beliefs almost totally influenced the perception of materials in 17th century Huronia. Since Native actions governed interaction and trade, it is argued here that the French were able to survive within this hegemonic system by adapting to suit the material needs and objectives of Natives within pre-existing trade networks. Within this larger system, French traders and missionaries were scattered in small numbers, and it was their objective to participate successfully in the trade network to accumulate Native goods - particularly furs - and the Huron were positioned in the ideal place for the French to access that trade.

In short, Native interactive and exchange systems persisted on regional and interregional scales prior to European arrivals. This structural foundation permitted the onset of trade relations for Europeans based upon symmetrical understandings of commodity transactions (Dobyns 1984:23). However, Native socio-economic schemata governed exchange standards throughout the Northeast based upon reciprocal social obligations among fictive and real inter-ethnic groups (Heidenreich 1971:226-227; Jamieson 1992a:73). Consequently, European perceptions of trade in Western economic terms functioned and flourished as asymmetric subschemata within the broader symmetrical exchange system.

The accumulation of European goods on Huron sites is more about maintaining access to exotics than it is about a surmised desire to accumulate European goods. The presence of European items is simply a result of heterogeneous items moving through pre-existing, yet transforming, networks of trade. Thus, the priority for the Huron was not the accumulation of European goods to amass spiritual power (as was the case for the Five Nations Iroquois), but to retain their position in the larger trading network and amass economic and political power not only with those wishing to trade for exotic items, but also through internal redistribution systems. Although internal meanings of physical forms are reinterpreted, the presence of European goods on sites is a consequence of accessibility to limited status items through social exchange.

Future Research

In this study, spatial distributions of artifacts are correlated to the original five foot square excavation grids to correlate previous studies of the Le Caron collection with interpretations derived for European artifacts. However, artifact designations and frequencies should also be examined within stratigraphic levels at

Le Caron. This could refine specific occupation levels, differences in artifact distributions, and provide data to correlate specific temporal periods with differing cultural interpretations.

Finally, regional intersite studies are required to identify correlations and differences in artifact classes among burial and habitation sites in Huronia and elsewhere in the Northeast. Accordingly, variability in inter-regional responses to European contact may be addressed for the Huron specifically, and Iroquoian groups generally. Another variable to consider is that Europeans, too, were not a uniform entity. Over time, differences among 17th century European groups (e.g., French, English, Dutch, and Scandinavians) undoubtedly had variable impact on interactions with Native polities. For example, the types of trade goods would have changed as European groups changed. Therefore, a refinement of cultural interpretations may be expected as future research provides correlations between contextual patterns and artifact frequencies among sites. These distributions should then be examined as possible reflections of differing cultural preferences for the adoption of European goods throughout the Northeast.

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Appendix A: European Artifacts Recovered From Le Caron

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REWORKED AND RECYCLED ARTIFACTS

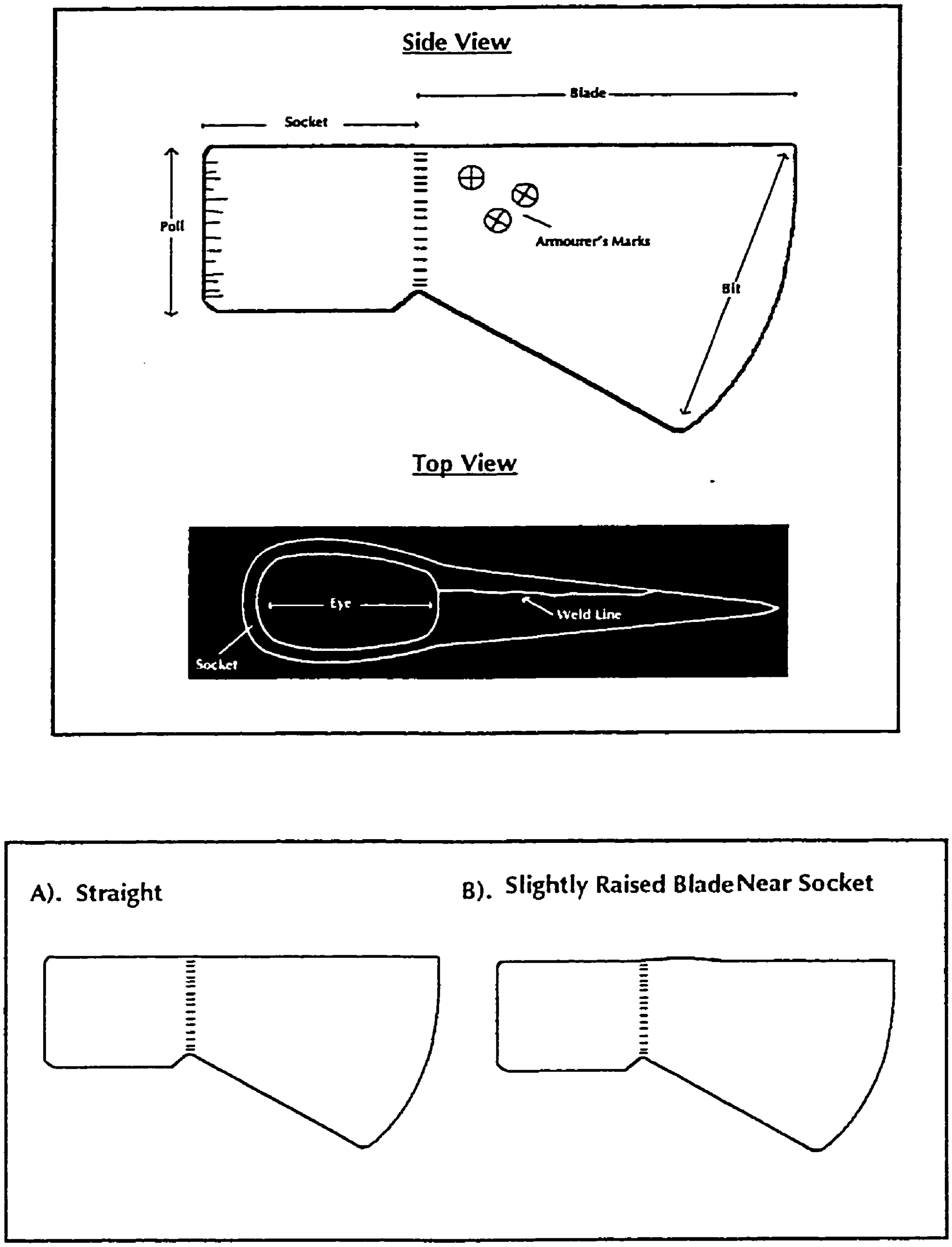
AXES

Trade Axe Descriptions

Twenty-one fragmentary, and one complete axe dating to the 17th century were recovered from the Le Caron site. Axe terminology and blade shapes employed for this study are illustrated in Figure A.1. Of twenty-two axe fragments, two are loose socket fragments, seven are individual blade segments, and thirteen are blades attached to sockets displaying varying degrees of decomposition. A minimum number of fifteen axes was calculated by segregating loose bit fragments from near-complete axes. However, disparate degrees of coloration and corrosion among axe blades and bit tips indicate all but one fragment represent individual specimens. Attempts to refit fragments were unsuccessful and could be the result of human modification to the axes, or disparate rates of post-depositional decomposition among fragments across the site despite overall good preservation (Table A.1).

Four styles of armourers' marks are stamped on the blades (Figure A.2). Positioned close to the socket and on both sides of the blade, the designs portray simple or compound crosses. Simple diagonal or vertical crosses vary only in the number of triangular wedges removed from the circular circumference (Types A, B, and D); while compound crosses were created by removing six wedges (Type C). Fitzgerald (1990:438) suggests Types A and B are the most common axe

Figure A.1: Iron Axe Terminology and Blade Shapes



(after Bradley 1987a:200)

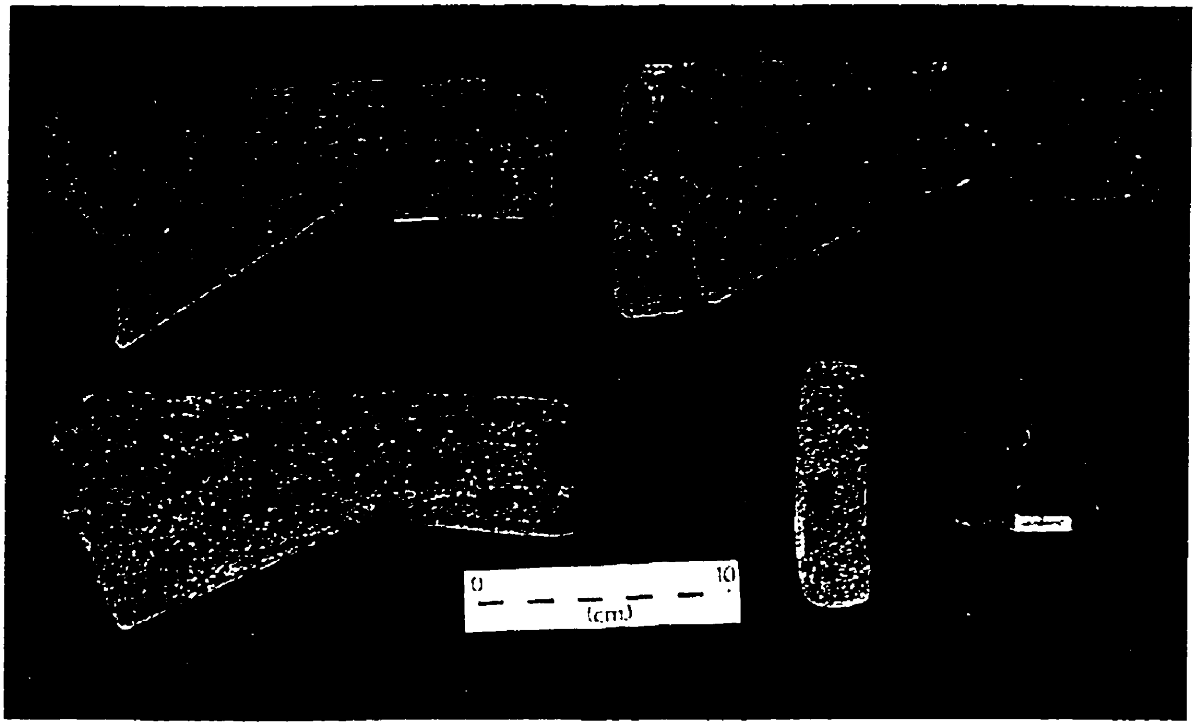
Table A.1: Spatial Distribution of Trade Axes

LOCATIONS	TOTALS	PERCENT
Longhouses	11	50.00%
Middens	8	36.36%
E & SW Palisades	2	9.09%
Misc. Test Units/Trenches	0	0.00%
No context	1	4.55%
TOTALS	22	**100.00%**

stamps and vary only in alignment since both are commonly found on opposite sides of the same axe blade across the Northeast. This is true of the forty-three marks observed on the ten marked specimens at Le Caron. Between one to six marks were recorded for each axe blade, with no pattern to the types of marks, numbers, or the side(s) on which they appear. Only one compound cross was identified among the Le Caron axes, with 42 simple crosses dominating the collection.

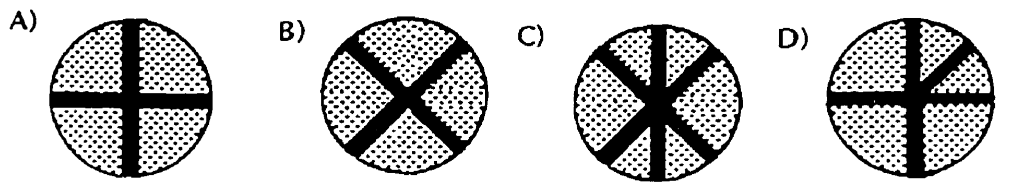
According to Fitzgerald (1990:438-440), Type A and B marks are abundant across all Glass Bead Periods, but increase during GBP3. Only one other axe with a Type C mark has been recovered in Ontario from a site dated to GBP3. Additionally, Type D marks are rare, but can be dated to GBP2 and GBP3. While the significance or meaning of armourers' marks is unknown (Bradley 1987a:199), temporal trends proposed for the Northeast support the GBP3 temporal designation derived from the glass trade bead analysis at Le Caron Site (see Glass Beads).

Figure A.2: Iron Axes and Armourer's Marks From Le Caron



Axes From Le Caron (Top Left to Bottom Right): Semi-Circular Axe Blade Tear, possibly modified; Ragged Axe bit from breakage; Modified straight-edged axe bit shaped by heating and folding; Axe Bit modified into rectangular chisel or scraper; axe socket with straight edge cuts.

Armourer Marks From Le Caron



Iron Axe Marks: A) Simple Cross in Circle; B) Diagonally Positioned Cross in Circle; C). Vertical line Intersected by Two Crossed Lines; D) Simple Cross with Two Pie Wedges Along one Edge

(after Bradley 1987a:201; Fitzgerald 1990:440)

Trade Axe Functions

Iron axes distributed among Northeastern groups have a range of conceivable functions. Typically, axes are interpreted as superior counterparts to the traditional stone adzes, allowing the felling of trees in a reduced rate of time (Trigger 1976:412). Iron axes predominate Seneca mortuary and village sites, and are stated to be functional replacements to stone axes as early as the 16th century (Ritchie 1954:22-24, 37). In contrast, axes also functioned as ornaments for the Delaware who ran cords through the holes of hoes and axes and suspended them from their necks, while the Andasté employed these accessories as status items (Barbeau 1915:269; Hamell 1983:19; S. Jamieson, pers. comm.).

Additionally, Bradley (1987a) concludes the Onondaga employed axes mainly as a source of raw material for manufacturing traditional celts, adzes, and (un)formalized blades through various degrees of scoring and hammering. Adze-like tools were employed for scraping skins or woodworking. Since complete axes on Onondaga sites are recovered only at the turn of the 17th century with reused axe pieces recovered prior to this date, he postulates axes were acquired for reuse rather than the expected European function (Bradley 1987a:139-140, 146-149). The modification of European scrap material into traditional implements demonstrates a short one-hundred- year continuum of modifying newly acquired material into traditional culture, rather than a short term cultural replacement of tool function.

How do these interpretations correlate with the trade axes acquired by the Huron population at Le Caron? A high frequency of near-complete axes dominate the collection which suggests complete rather than scrap materials were obtained. However, the function or intended purpose(s) of trade axes is unknown. Various functions may have ensued over the life span of any one axe, and interpretations derived from this study are, by necessity, based on the functions of axes at the point of site abandonment. It is assumed that axes were not used as ornamentation since no ethnohistorical accounts describe this behaviour among the Huron. Additionally, with the exception of one axe, all others are incomplete. Development projects in Simcoe County at the turn of the 20th century entailed activities that disturbed archaeological sites. For example, metal collectors pulled up axes from Simcoe County sites and melted them down for raw material (Hunter 1948; S. Jamieson, pers. comm.). This may account for a biased axe sample from Le Caron. Regardless, since iron is well preserved throughout the site, breakage by use or by deliberate modification best explain the remains of axes from the site, and evidence to support each position is explored below.

European Intended Function of Trade Axes

The Le Caron axes are not as extensively worked as those described in the Onondaga collections and discriminating intensionally modified axes from those unintentionally broken is subjective. One complete axe was recovered, but nine axes with complete sockets and blades with broken bits also were recovered. These sorts of breaks would characterize use-breakage with the European-intended function. Of the nine axes, only three display physical signs of use for the European intended function. A haphazard tear to the socket of one axe would prohibit further use, as would the jagged broken blade tip on the second specimen, and one blade is broken with a semi-circular curved shape (Figure A.2). There is no physical evidence to support further modification to these breaks or tears. Mandzy (1994:141) suggests the lower bit is deliberately removed from axes to imitate smaller forms of traditional stone axes and celts. Thus, these artifacts are not 'damaged' European forms, but reworked Native artifacts fashioned to suit traditional motor skills.

Evidence of Recycling

Physical evidence to support a classification of reworked axes and their probable functions for the remaining fragments is presented below. This differs from Bradley's (1987a:140) distribution table of complete versus damaged axes which implies all incomplete axes are recycled. In this study, a conservative system for identifying reworked axe fragments is employed to avoid over-emphasizing deliberate modification of axes. Physical evidence to support recycling include one or more of the following characteristics: straight-line cuts, heating, and/or folding.

Cast iron, which is associated with mass production and low production costs, contains impurities and is less malleable than wrought iron. However, wrought iron is produced by repeated heating which burns out carbon, and hammering which hardens the material. Heated iron is easily worked and is ideal for craftsmanship with hammered fragments easily welded together (Gardner 1972:xxxiv-xxxv; Gay 1985:7-9; Kauffman 1966:31). Methods similar to those employed for reworking kettle fragments were also utilized on iron. Since wrought iron could be cold-worked, reworking methods followed the traditional means of cold working, annealing and abrasion. Additionally, reworking technology consisted of scoring and folding to manufacture iron celts, and many reworked axe fragments are classified as having one straightened edge (Bradley 1987a:76-77, 132-133).

Three axe blades display straight-edge breaks as a result of deliberate modification; however, whether these axes were broken and then modified, or simply modified is unknown. At the point of site abandonment, these deliberately cut axes were employed for recycling of iron into implements, although the spatial distributions do not indicate any one activity area for modification. One straight edged cut blade is cached within Longhouse 4, the second came from the Southwest Midden, while the third is one of two other axes, one complete and one damaged, cached within Longhouse 2. The remaining axes include the complete axe described above, and one damaged axe described below.

Two axes with broken bits are classified as unmodified, but the breaks deserve description since they do not typify a natural break, nor may they be defined as intentionally modified utilizing the criteria of heating, folding, or straight-edge cuts. One blade displays preliminary signs of a worked straight edge, and the second blade is shaped centrally by a straight-edged rectangular outline that was either formed through damage, or intentional modification.

Two axe fragments have complete blades attached to broken sockets. One deliberately cut socket is characterized by intersecting perpendicular straight-edge cuts unassociated with the seam line. The second axe displays a tear on one edge of the socket. While not a haphazard tear, it is difficult to determine if this break is indicative of use, deliberate modification, or both.

Two sockets with unattached blades also were recovered. One socket displays straight-line cuts at the eye's edge on the opposite side of the poll. While almost certainly intensionally modified, the second socket has jagged tears and is flattened slightly. The spatial distributions of the two fragments are unexpected, with the worked socket recovered from the West Midden, while the jagged socket was recovered from Longhouse 5. All five modified axe fragments and their spatial distributions are summarized in Table A.2.

Only two axes display evidence of heating and folding, and both were recovered from the Southwest Midden. Muir's (1990:141-142) scepticism of the ill-defined boundaries of the Southwest Midden and its proximity to the palisade and possible longhouse area, led him to question the feasibility of this area as a place of refuse. Both axes recovered from this area display charring, a fold of heated iron turned back onto the blades, and one axe also exhibits a straight edge cut. These modifications are indicative of an activity area involving a hearth, despite the possibility that the specimens were thrown away. Unfortunately, the

Table A.2: Modified Axes at Le Caron

TYPES OF MODIFIED AXES	LOCATION
2 Heated and Folded	Both in SW Midden
1 Straight Edge Socket Cut	Longhouse 5
2 Straight Edge Blade Cuts	1 in Each of Longhouses 1 and 2

Note: One heated and folded axe has a reworked straight edge blade

supposition that this area of the site reflects a midden rather than a living area will stand until future excavations are conducted.

While the remaining fragments cannot be positively designated as reworked, it is likely iron axe fragments were employed as expedient tools. Of the seven broken bit fragments excluded from minimal counts, two are roughly triangular with two of three sides secured from the original axe blade edges. Of five rectangular shaped blade fragments, all display three straightened sides formed at the time of initial blade manufacturing. In all cases, just one side required additional modification. One rectangular fragment is intentionally ripped in a jagged tear and may have functioned as an expedient saw similar to the finished recycled iron example recovered from the Onondaga collection (see Bradley 1987a:150). A second is reworked on the torn side to make a straight edge and possibly functioned as a chisel or scraping tool. The remaining five doubtlessly acted as expedient tools for scraping. Four were recovered from the Central Midden, two outside Longhouse 1, and one from the Eastern palisade.

IRON KNIVES

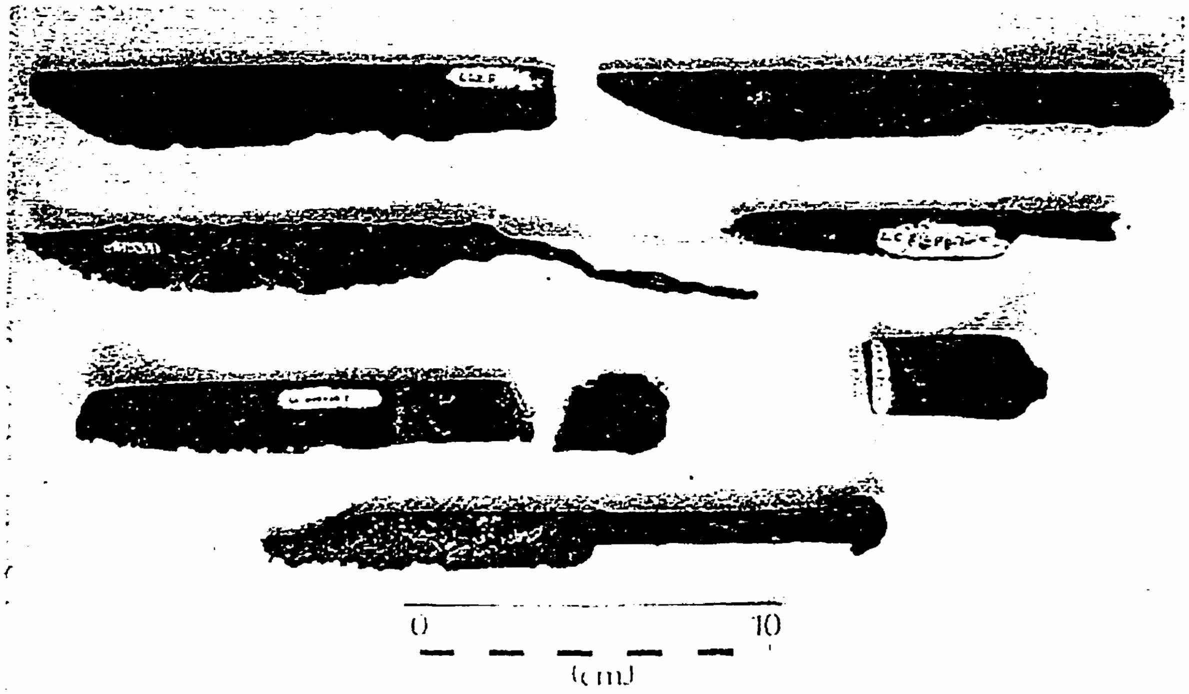
Iron Knives From Le Caron

Eighty-one complete and fragmentary knives indicate a minimum of twenty-six were obtained by the Huron who occupied Le Caron. The majority are fragmentary blades in fairly good condition, while thirteen pieces are very corroded and designated as knife blades based on their material, thickness, and similarity to other corroded blades. Only fourteen knives are in a condition conducive to the typological classifications outlined by Garrad (1969:4-5) and Bradley (1987a:202-203). These include the rat-tail and one piece knives, and three versions of flat tanged knives that vary near the collar and heel. One half-tang knife described by Kidd (1972:200) is incorporated as one of the six flat tanged knives with tapered heels (Figure A.3).

The frequency of classified knives from Le Caron are summarized in Table A.3, with temporal sequences obtained from Fitzgerald's (1990:455-465) division of Northeastern knives within Glass Bead Periods. Of the fourteen categorized knives, 42.86% date to GBP2. Coupled with the absence of clasp knives that are restricted to GBP3 sites in Ontario (Fitzgerald 1990:467, 471), the Le Caron knives exhibit a temporal designation of GBP2 which differs with the majority of the site's glass bead dates.

Tapered tang knives (rat-tails) are associated with Dutch trade and are frequently recovered from 17th century Onondaga sites, while flat tangs and folding clasp blades are more prevalent in Ontario and associated with French

Figure A.3: Iron Knife Types From Le Caron



A). Flat Tanged Knife, No Collar and No Heel
B). Flat Tanged Knife, No Collar and Tapered Heel
C). Rat-Tail Knife with Tapered Rectangular Tang
D). Half Tanged Knife
E). Flat Tanged Knife, Thin Collar with Reddish
 Brown Wooden Handle due to iron oxide
 (Butcher and Johnston 1977:47)
F). Crooked Knife, Worked From Bent Iron
 File Fragment
G). One-Piece Knife: Reworked Blade Tip,
 Original Blade Shape Unknown.

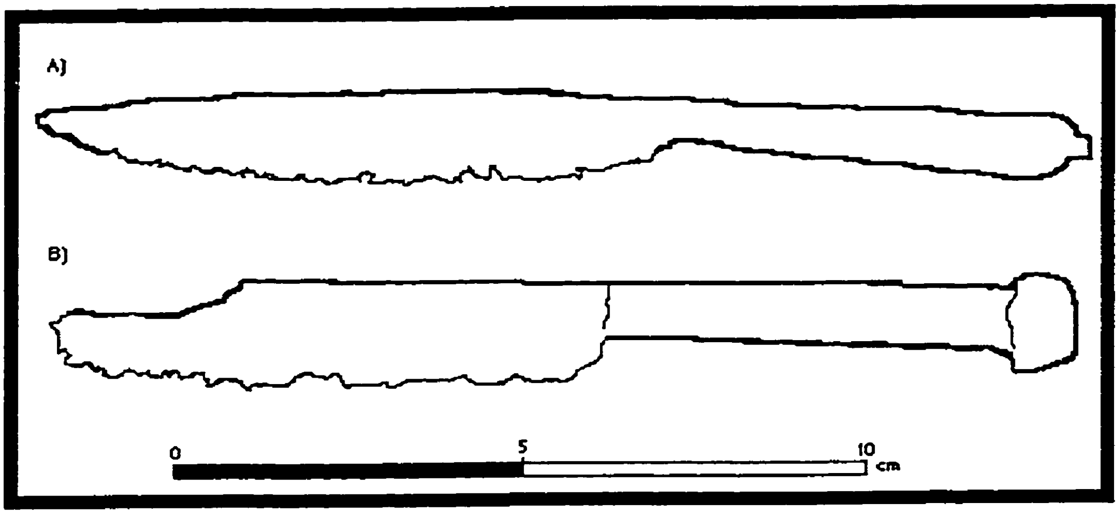
Table A.3: Temporal Designations and Knife Types

KNIFE TYPE	Flat Tang No Collar No Heel	Flat Tang No Collar Tapered Heel	Flat Tang Thin Collar	Rat-Tail	One-Piece Knife	TOTAL
No.	4	6	1	1	2	14
TIME PERIOD	Restricted to GBP2	GPB1, 2, and 3	GPB1	1 from GBP1, Mainly from GPB2 & GBP3	Restricted to GPB2	GPB1: 1 7.14% GPB2: 6 42.86% GPB1, 2, & 3: 7 50.00%
%	28.57%	42.86%	7.14%	7.14%	14.29%	100%

trade (Bradley 1987a:141, 226; Garrad 1969:11). Just one collared rat-tail knife which terminates in a tang for insertion into a hollow centred handle was recovered from the site. These knives are rare on GBP1 and GBP2 sites, but common on GBP3 sites (Fitzgerald 1990:471; Garrard 1969:11), indicating not only that Dutch goods were acquired by the Huron at Le Caron, but that the initial component of the site likely dates to the latter period of GBP2.

Two one-piece knives were also recovered from Le Caron (Figure A.4). The blade and handle of the first is made from one metal piece with a knob on the end of the handle. While the English version of this knife dates as early as A.D. 1530 (Singleton 1970:1, 5, Plate 1), characteristic sharp pointed blades continued to be produced from A.D. 1550-1650, with the metal knobbed end tightening the date to A.D. 1550-1600 (Kidd 1972:201-204). Fitzgerald (1990:464) states these

Figure A.4: One Piece Knives From Le Caron



knife handles are restricted to GBP2 sites, although Garrad (1969:6, 10, 12) recovered one from Nottawasaga Township which dates subsequent to 1639, or within GBP3.

The second knife displays a rounded handle, but the original shape of the blade is unknown. This knife type does not have a published counterpart, however, comparable pointed blades with rounded wooden handles date between A.D. 1600-1650 (Kidd 1972:201-202). The top portion of the blade nearest the tip is reworked into a sloped curve unassociated with the original manufacturing process. The intended purpose of this modification is unknown. It is unlike the modified barbs cut into the handles or blades of one-piece knives by the Petun and Neutral for harpoons (see Garrad 1969:6, 10).

Fitzgerald (1990:468, 471) attests knives are not recovered on Ontario sites prior to A.D 1580, but introduced only with the onset of the fur trade. However, the Basque were a major supplier of iron knives, hatchets, and other iron implements during the 16th century, and since extensive trade systems carried artifacts inland (see Chapter 2), it is likely a few knives and/or fragments reached the Huron before direct contact (Garrad 1969:3; Turgeon 1990:85).

Archaeological evidence confirms this conclusion with one tanged knife recovered from the MacLeod (ca. 15th century) and Draper (ca. A.D. 1500) village sites, and at least one riveted knife blade (possibly three) was recovered from the early 16th century Dawson site in Montreal. In addition to the simple presence of knives, worked iron fragments from the Dawson site suggest items were obtained and modified into traditional forms (Fox, Hancock, and Pavlish 1995:273, 282; Kidd 1972:328; Pendergast 1972:264-265, 1972b:150-152; Trigger 1972:38). Modification and/or use of these materials indicates a continued short-term tradition of iron-use as raw material stemming from the Contact period.

Since little is mentioned of knife function in the Jesuit Relations, their use for the intended European function is credible since only non-cutting functions would likely be recorded historically. However, knives likely functioned as cutting tools in both Native and European cultures. Between the years 1637 and 1643, knives were employed by Iroquoian groups as war weapons for hand to hand combat (JR 12:201, 24:291). However, stone knives were still employed in battle as late as 1674 (JR 58:257). This indicates that knives were an addition to Iroquoian traditional weapons, and not simple replacements. Therefore, change is best understood in terms of availability, completeness, and/or degrees of modification to traditional knife forms.

Modified Knives

At least thirty knife fragments are reworked into new forms, but their function in some cases is uncertain. One crooked knife from Le Caron is modified from an iron file. This artifact is included with the knives because like the European knife fragments described below, this artifact is modified into a traditional form from a source of European iron, yet displays functional continuity. This tool would be hafted into a wooden or bone handle and employed for wood working (Speck 1945:37). While the origin of crooked knives is unknown, they are likely traditional Iroquoian tools similar in form and function to hafted beaver incisors (Bradley 1987a:229).

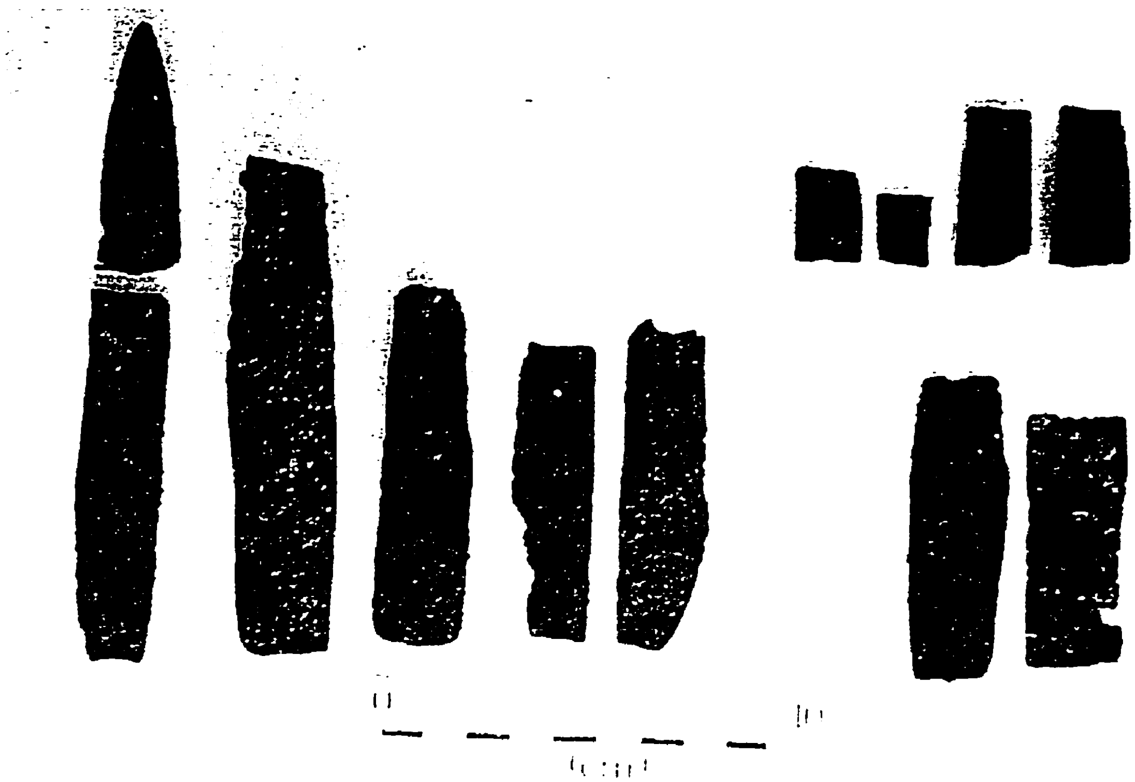
Similar unmodified files were recovered from Ste. Marie I and classified according to their traditional European function - as building tools (Kidd 1949:103, and Plate XXXIX). Bent European knives could also be employed as crooked knives (Bradley 1987a:149), and while two were recovered from Le Caron, the shape could also be attributed to depositional factors and are excluded from total counts of modified forms (Table A.4).

By making use of the two long sides produced in the European manufacture of blades, twenty-two knife blades are worked into varying sized rectangular shapes by straightening either one or two of the remaining sides (Figure A.5). Only those blades straightened on two sides are counted as modified knife forms (total = 13), although the remaining nine are likely expedient or unfinished versions. These

Table A.4: Modified Knives and Their Distributions

Types of Modified Knives	No.	Location
Crooked Knife (reworked file fragment)	1	West Midden
Rectangular Shape with one Perforated Rivet Hole (Ornamentation/Tools) 3 cut on two sides (top and bottom) 2 cut one side	3	1 between Longhouses 2 & 3, 1 Along Eastern palisade, 1 in test trench near SW midden, 1 from each of Central and South Middens
Straight Edge Blade Cuts Forming a Rectangular Shape: Total 17 10 with Two straight edge cuts (top and bottom), 7 with one worked edge (expedient tools)	10	1 inside Longhouses 1, 4, and 5; 1 in walls of Longhouse 3, 1 outside Longhouse 2; Middens: 2 west, 2 Central, 2 S-W; 2 miscellaneous test units.
Trapezoidal Pieces with Worked Traingular Point on one edge (Cutting blades)	5	2 inside Longhouse 1, 1 inside Longhouse 2, 1 outside (north) of Longhouse 5, 1 no context
Knives reworked into points	5	1 inside Longhouses 5, 1 miscellaneous test pit, 3 from Central Midden
Detached Knife Blade Tips - Total : 5 3 Straight edge cuts, 2 Possible Broken Tips (Recycled expedient points?)	3	1 from Southwest Palisade, 1 miscellaneous test unit. Middens: 2 West, 1 Central, 1 N-E,
Knife blade shaped into traditional Chisel or Ovate Knife	1	No Context
Knife blade modified into Unilateral Barbed Harpoon (one barb, unfinished)	1	Inside Longhouse 3
One-piece knife with curved segment removed on top of blade near tip (Harpoon? Tool?)	1	Inside Longhouse 1
TOTAL	30	13 (43.33%) from Longhouses

Figure A.5: Worked Knife Blades From Le Caron



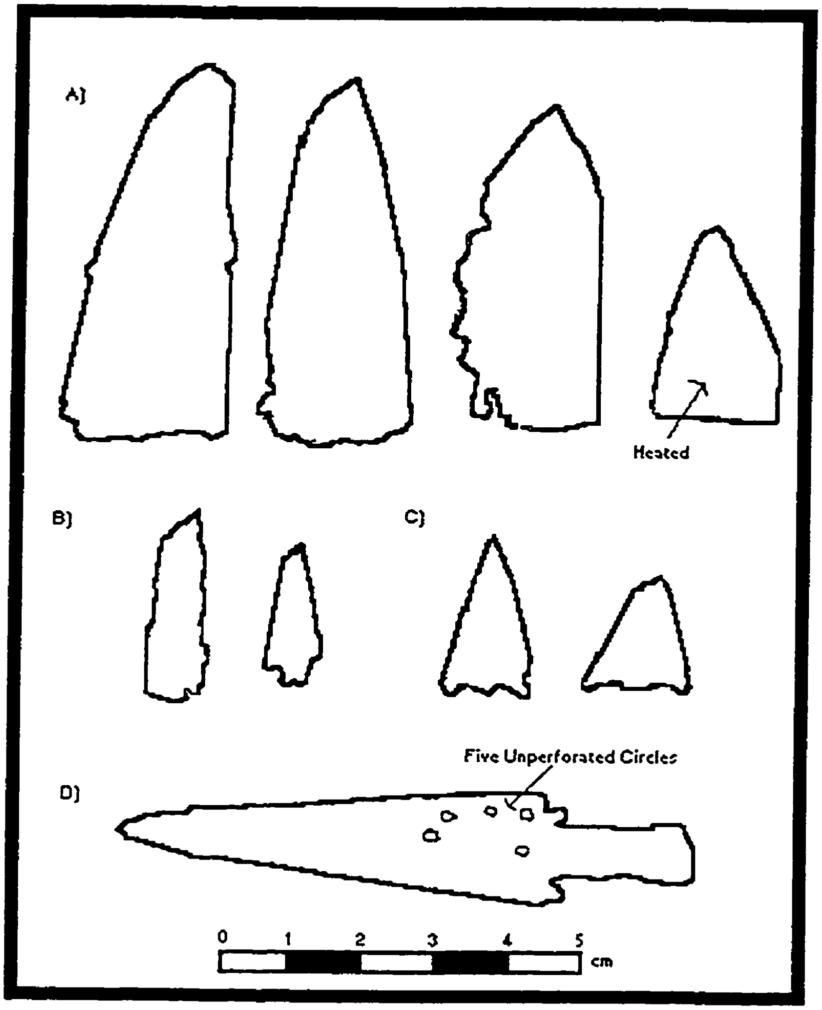
A): Separated Knife Blade Tip - possible expedient point
B): Five Rectangular Blade fragments with one perforated rivet hole along one edge, possible ornament or tool.
C and D): Various sized, unperforated, rectangular knife blade fragments - expedient scrapers or tools.

modified rectangular shapes probably acted as thin rectangular knives or scrapers, or thin adze-like tools for scraping skins or woodworking (see Bradley 1987a:147, 149). From his analysis of ten Ontario sites, Fitzgerald (1990:471-472) concludes that knives are often reworked into scrapers, however, descriptions of these tools are not provided.

Several of these rectangular pieces are cut with one rivet hole positioned close to one edge (total = 3), and are consistent in shape and size. These artifacts may have served the same function as those described above, or may have been worn as ornaments. Only one was recovered near longhouses, in a skin processing activity area between Longhouses 2 and 3, suggesting that this form is similar to rectangular tools which were perforated to be placed in a handle, and act as a scraper or knife (Bradley 1987a:72, 75).

Five knife tips from Le Caron were removed from the blades to form a triangular shape. Tip fragments are not unusual occurrences on village sites and were likely employed as projectile points (Fitzgerald 1990:454; e.g., Lennox 1981:331). Of the five recovered from Le Caron, three were deliberately cut in a straight edge along the base, while the remaining two likely functioned as expedient points, perhaps only after breaking off (Bradley 1987a:149). Five iron knife blade fragments were reworked into traditional triangular lithic forms. These tools display either notched, stemmed, or concave bases for hafting purposes (Figure A.6).

Figure A.6: Le Caron Knifes Modified into Points



A) Four Iron Knife Blade Tips - Likely Functioned as Expedient Points B) Two Iron Knife Blade Fragments Worked into Points with Beginning Stages of Notched Bases C) Two Iron Knife Blade Fragments Worked into Traditional Concave-Base Projectile Points D) Iron Knife Blade Reworked into Larger Stemmed and Notched Point

Additionally, five knife blades are worked into a trapezoidal shape, with one side shaped to a triangular point. The function of these tools is unknown, however, they were likely hafted into a handle and used as a sharpened cutting tool. One of these tools is displayed in Figure A.8c, along with a similar form shaped from brass scrap. The remaining four are less refined and larger, but likely served the same function. These tools are seldom described in published accounts, but one was recovered from the Deer Creek site, a French contact site in Oklahoma (Sudbury 1976, Plate 10).

Finally, one knife blade has been modified near its tip with a worked barb. It is an unfinished unilateral barbed harpoon similar to one bone example recovered from this site. These sorts of harpoons are typically made from one-piece iron knives by the Petun and Neutral (Garrad 1969:6, 10). Additionally, one knife blade is reshaped to an ovate form with no one sharpened side (see Bradley 1987a:147), and likely functioned as a chisel.

Two one-piece knives were recovered from the site. Although only one is modified, both are included in the seven recovered knife blades that are characterized in a condition suitable to serve an intended European function. Frequently interpreted as "superior to Native counterparts" (e.g., Fitzgerald 1990:453; Mandzy 1994:141), iron knives are often presumed functional replacements to lithics, and underscored as a potential source of raw material for modifying traditional tools. Lithic and copper knives used for cutting share the same function of iron knives introduced by Europeans. Therefore, while seven complete knives may indicate use for the intended European function, they also represent the traditional Native function - with a change in raw material. Overall, the frequency of knives modified into traditional forms and those in a condition suitable for recycling, override those knives which could be employed for the European function at the time of site abandonment (Table A.5).

Pocket Knives

One small pocket-knife with a wrought iron blade and brass handle was recovered from the site but eliminated from this study due to its small size, excellent condition, modern style, and lack of specific stratigraphic context. Recovered from a test trench positioned between the Northeast Midden and Eastern Palisade, this knife was in the vicinity of a modern refuse dump and is believed intrusive. However, historical descriptions suggest this knife may date to the 17th century, and future excavations may confirm the earlier date.

Two historical anecdotes from the Jesuit Relations indicate pocket knives were distributed in the Northeast during the first half of the 17th century, with Father Brebeuf mentioning the need for two or three dozen Jambettes (small pocket knives), and Father Peron writes of distributing small pocket knives in 1639 (JR 12:119, 15:159). However, descriptions of pocket knives dating prior to the 19th century are rare, with only two examples known to date between 1650 and 1675, and no examples date between A.D. 1500-1650. Originally produced in the 16th century, several thousand pocket knives of various shapes and sizes were

Table A.5: Function of Iron Knives

IRON KNIFE DESCRIPTIONS	FREQUENCY
Number of Complete Knives or Blades	7
Number of Fragmentary Knives	74
Number Broken and Unworked Knives	13
Number Recycled Knife Fragments (1 Worked Edge)	65
Number of Knives and Fragments	**81**
Knife Fragments Suiting European Function	7
Knife Fragments with Modified Native Functions (2 Worked Edges)	30

manufactured in Britain between the 17th and 19th centuries. Cheap pocket knives were made of wrought iron, rather than steel, and French cases were often made from brass or copper and held together by rivets or nails (Kidd 1972:27-31). This description typifies the pocket knife recovered from Le Caron.

COPPER ALLOY KETTLES AND SHEET BRASS

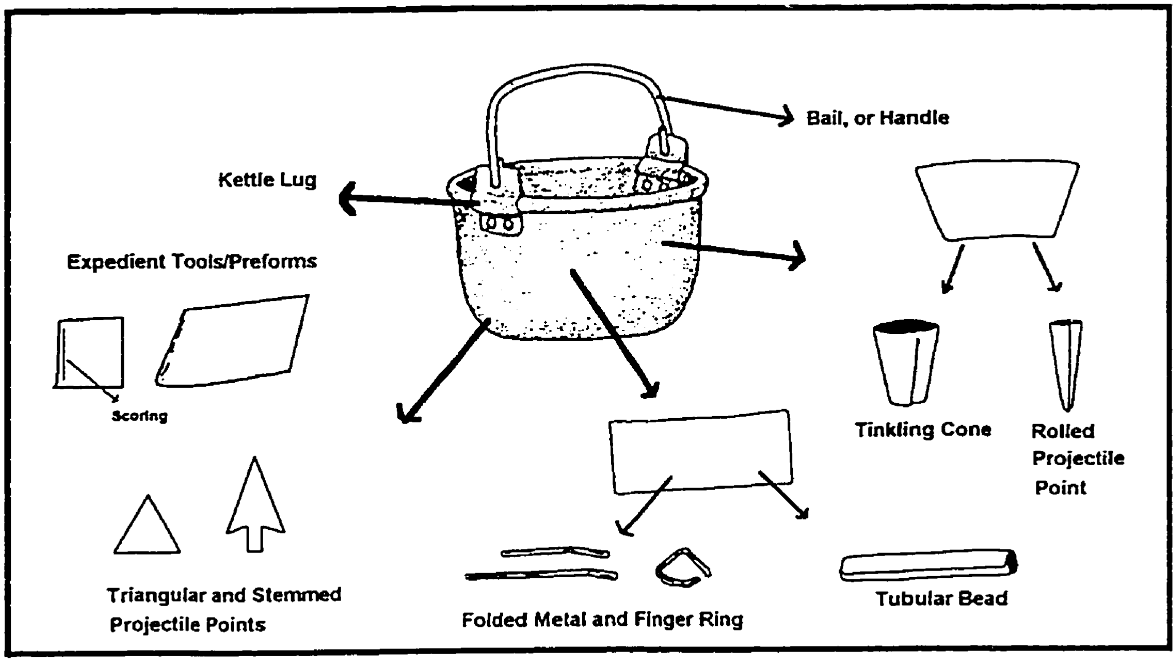
Kettles

Of the 397 kettle fragments recovered from Le Caron, only 42 (10.58%) are worked into completed tools and ornaments, while 355 (89.42%) pieces are characterized as worked, recycled, or unworked scrap material. As with Onondaga materials (Bradley 1987a:74-75), kettle fragments recovered from Le Caron were cut in large pieces as preparation for further modification and working. Large unfinished fragments, small modified, and sometimes finished brass tools were manufactured on the site. This conclusion is supported by the presence of tools shaped into traditional forms, partially worked scrap pieces with cut edges, and evidence of scoring, cutting, and folding to shape objects to the desired size (Figure A.7).

All fragments recovered from Le Caron were scored with a razor blade to determine the colour and, by extension, material of each copper alloy fragment. Pieces which scratched a reddish-orange colour have few impurities and are classified as copper, while those that scratched gold and yellow are designated as brass (see Fitzgerald and Ramsden 1988; Fitzgerald 1990:408-411). Unfortunately, extensive analyses to determine minimum and maximum counts of copper alloy vessels (e.g., Hancock et al. 1995) could not be conducted within the parameters of this study. Instead, rim fragments were correlated with body scrap, and a minimum number of nine vessels is proposed based upon similarities in copper alloy attributes of thickness, colour, and agility. Of the 355 fragments recovered, the majority of pieces are made of brass, followed by white metal, copper, and iron respectively (Table A.6).

With the exception of the iron and white metal fragments described below, all copper alloy scrap from Le Caron was obtained from European sheet brass imported for trade (Kidd 1972:329), or cut from kettles. Of two iron fragments recovered, one curved fragment with a cut rim may derive from an iron pot (Vastokas 1970:51) that could date to the later 17th or early 18th centuries

Figure A.7: Kettle Terminology and Reworking



(after Bradley 1987a:131)

(see Quimby 1966:71-72; Maxwell and Binford 1961:130). The second fragment is made of folded iron characteristic of a vessel support band. However, this fragment cannot be firmly correlated to a Basque copper kettle (see Fitzgerald et al. 1993:47-48; Turgeon 1990:85).

Of the twenty (5.63%) white metal fragments recovered, three square pieces attach and are likely remnants of one vessel (Figure A.14). Several tin brass fragments are worked into expedient rectangular prosaic tools, and are likely

Table A.6: Copper Alloy Material Sources

METAL FRAGMENTS	TOTAL	PERCENT	MINIMUM VESSELS OR MATERIALS
Brass Fragments	317	89.30%	7 vessels
White Metal	20	5.63%	4 non-vessels
Copper Fragments	16	4.51%	1 vessel
Iron	2	0.56%	1 vessel
TOTAL	355	100.00%	13

a result of the improved ability to cut and cold-work tin (see Fitzgerald and Ramsden 1988; Fitzgerald 1990:408-411). The remaining fragments are small, heated or folded white metal scrap with no defined function.

Since techniques for working assorted European metals vary according to their alloy contents, a brief overview of kettle availability, metal properties, and methods employed for working materials is discussed below in light of interpretations for maintaining or changing traditional manufacturing techniques.

Copper and Copper Alloy Kettles

Red copper kettles were traded as a prominent item by the Basque along the St. Lawrence between A.D. 1580-1600 (Turgeon 1990:85). Reddish-orange copper kettle scrap, and ball-peening created by the battery method of construction are almost exclusively confined to GBP1 sites. While scrap bits are recovered from middens in Southern Ontario during GBP2, there is no evidence of copper kettle scrap or use in Southern Ontario subsequent to 1630 (Fitzgerald 1990:413, 416; Fitzgerald et al. 1993:47-48, 53, 55). Simple rolled-over sheet brass kettles replace copper kettles after A.D. 1600 (Fitzgerald et al 1993:49-51, 54). All kettle rims and lugs recovered from Le Caron are characteristic of the simple French rolled rim design, while notched rim shelves occasionally recovered from GBP1 and GBP2 Huron and Neutral sites (Fitzgerald 1990:421), and vertical sided Dutch kettle styles typically recovered from Onondaga sites (Bradley 1987a:197-199) are absent.

Native copper cannot be distinguished from European copper without involved procedures (e.g., Hancock 1991) which go beyond the parameters of this research. Native copper is rare on Huron and Neutral sites by the turn of the 17th century (Fox, Hancock, and Pavlish 1995:282-283, 285), and based on the shape and thickness of the sixteen copper fragments recovered from Le Caron, the unworked scraps are believed to derive from European materials, rather than natural deposits.

Since copper was a desirable commodity the initial distribution of copper kettles likely held metaphorical power-related properties (Bradley 1987a:130-132), and had more than one meaning among polities. They functioned not only as cooking vessels, but as exchange items, symbolic components in rituals and grave offerings, and raw material for constructing tools or ornaments (Martin 1975:113-117). From a Native perspective, distinctions between metal types involved colour rather than alloy content, and the function or use of these metals include differences in black, white, and red colours associated with iron, white metal, and copper, respectively (Bradley 1987a:76; Hamell 1983:6-7).

Traditional technology necessary to work copper includes two techniques: cold working to harden the piece and get the initial shape; and annealing (heating) to soften the metal if cold-working makes the material too brittle to shape. Once the rough shape is established, the piece is then scored and rolled, or cut. Finally, grinding and polishing is employed to finish objects (Bradley 1987a:74-75; Quimby 1966:18; Trigger 1976:108). Worked copper tools date to the Archaic Period in Southern Ontario, and include prestigious functional items such as gouges, adzes, points, knives, axes, pikes and awls (Quimby 1966:18; Trigger 1976:108).

The dramatic trend towards brasses after GBP1 is related to the cost-effectiveness associated with the European market (Fitzgerald 1990:408, 411), rather than a Native preference for brass kettles. Since true coppers contain 99.3% copper content and are easily cold-worked, they are unlike brasses that contain added alloys which make the raw material more brittle and less malleable (Fitzgerald and Ramsden 1988; Fitzgerald 1990:408-410; Fitzgerald et al. 1993:50).

Since copper kettles were introduced during the initial stages of contact, incorporation and modification of these implements is often viewed as an analogous counterpart to traditional Native copper. However, with the introduction of brass kettles change was likely viewed not only in material, but also to traditional manufacturing techniques and symbolic understandings of the worked material. Yellow or gold brass was doubtlessly associated with white, rather than red metal and likely held a different symbolic value than both Native and European copper antecedents.

Kettle Use and Availability

The frequency of European kettles exported to Huronia during the 17th century is unclear. However, if they were stored and exported from Europe in decreasing sizes nested within each other like the stacked kettles of the 18th century (see Wheeler 1975:7; Woolworth and Birk 1975:57-58), their availability is expected to be high where there was direct interaction with Europeans. The high level of trade between the Huron and Europeans recorded for the 17th century, and the village size and strategic location of Le Caron suggests that if kettles were desired at this site, a high frequency of those exported from Europe should have been accessible.

How then, do we explain the low frequency of kettles recovered from Le Caron? Several explanations are proposed: the demand for kettles was low at this particular site, suggesting they were not desired to the same degree indicated in historical documentation; kettles were prized more as commodities for trade with other Iroquoian and/or Algonkian groups to obtain a variety of traditional trade goods; kettles were valued so extensively that when the site was abandoned every complete kettle was carried off site; or finally, complete kettles were not available in Huronia, and only scrap pieces were acquired through extensive trade systems believed to characterize the 16th century. In each case, the extent of goods, trade, and European influence on the Huron during the early 17th century requires reassessment, and is explored further below.

Kettles Employed for Cooking?

The physical evidence indicates kettles were employed for raw materials rather than cooking at Le Caron. This trend is apparent among other Huron sites (Axtell 1988:168; Hancock et al. 1995:339-340), and the high percentage of scored and cut fragments during first half of 17th century suggests they functioned as a reusable material rather than the Eurocentric notion they acted as functional replacements (Bradley 1987a:131-132).

If kettles were employed strictly for cooking purposes and acted as functional replacements for traditional pottery, it should be manifested empirically on site. First, several complete or near complete kettles would be expected in association with cooking areas. At Le Caron, only scrap material was recovered. However, working with the available data, if kettles were employed for cooking a high percentage of scrap would be expected in charred and unworked forms, and likely situated in midden areas. While a large percentage of kettle scrap is associated with the middens (Table A.7), a variety of traits is attributed to these fragments. These are discussed further below.

Additionally, a low incidence of Native ceramics would also be anticipated. At Le Caron, the frequency of traditional ceramic fragments (36,641) overrides all other artifact classes. This is not surprising since the cooking

Table A.7: Copper Alloy Scrap Distribution

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	33	3	37	73	76.84%
Longhouse 2	3	0	2	5	5.26%
Longhouse 3	0	1	2	3	3.16%
Longhouse 4	2	1	1	4	4.21%
Longhouse 5	7	2	1	10	10.53%
TOTALS	45	7	43	95	100.00%
PERCENT	47.37%	7.37%	45.26%	100%	

properties of earthenware vessels are considered superior to brass kettles, and continued to be made even after the dispersal of the Huron (Hancock et al. 1995:340, 349).

Working brass into prosaic or ornamental forms necessitates a change in craftsmanship to suit the properties of the new material. The higher brass content in GBP2 and GBP3 kettles makes cold-working more difficult (Fitzgerald 1988:9-10), and may explain the high frequency of expedient, rather than finished tools recovered from Le Caron (Table A.8). An experimental phase to acquire skills for new techniques could account for the low frequency of completed traditional tools made from brass. However, the high frequency of expedient forms more likely represents expedient techniques for manufacturing lithics - a trait characteristic of 17th century sites in Huronia.

Copper alloy pieces are considered worked if two or more sides are modified. The majority of pieces are rectangular, square, and trapezoidal and

Table A.8: Types of Kettle Recycling

TYPES OF KETTLE RECYCLING	NUMBER	PERCENT
Reworked (at least 2 worked sides)	109	30.70%
Recycled (one worked Edge)	70	19.72%
Folded sizes for shaping	100	28.17%
Scored Bodies for Cutting	34	9.58%
European Function: Unworked and Molten	42	11.83%
Total Fragments	**355**	**100.00%**
Total Worked Fragments	**243**	**68.45%**
Total Worked and Recycled Fragments	**313**	**88.17%**

Note: 67 (21.41%) Worked and recycled fragments are annealed
13 are both scored and folded

likely functioned as formalized scraping and cutting tools. Brass fragments with one worked side are classified as recycled since the original intention is unknown. These pieces may be reduction fragments associated with the production of formalized tools. However, their slightly irregular but generally similar shapes, suggests they likely functioned as unformalized tools (after Bradley 1987a:72). The number of reduction fragments recovered from the site include charred unworked fragments (n= 42), and those with one worked side (n=70) for a total of 112. Since 31.55% of kettle scrap is considered reduction debitage, large fragments of sheet brass, or once near-complete kettles account for the materials recovered from Le Caron (Figure A.8).

FINISHED COPPER ALLOY ARTIFACTS

Of forty-two completed artifacts, thirteen (30.95%) are prosaic tools, while twenty-nine (69.05%) are ornamental in form (Table A.9). These finished artifacts are described in detail below.

Prosaic Artifacts

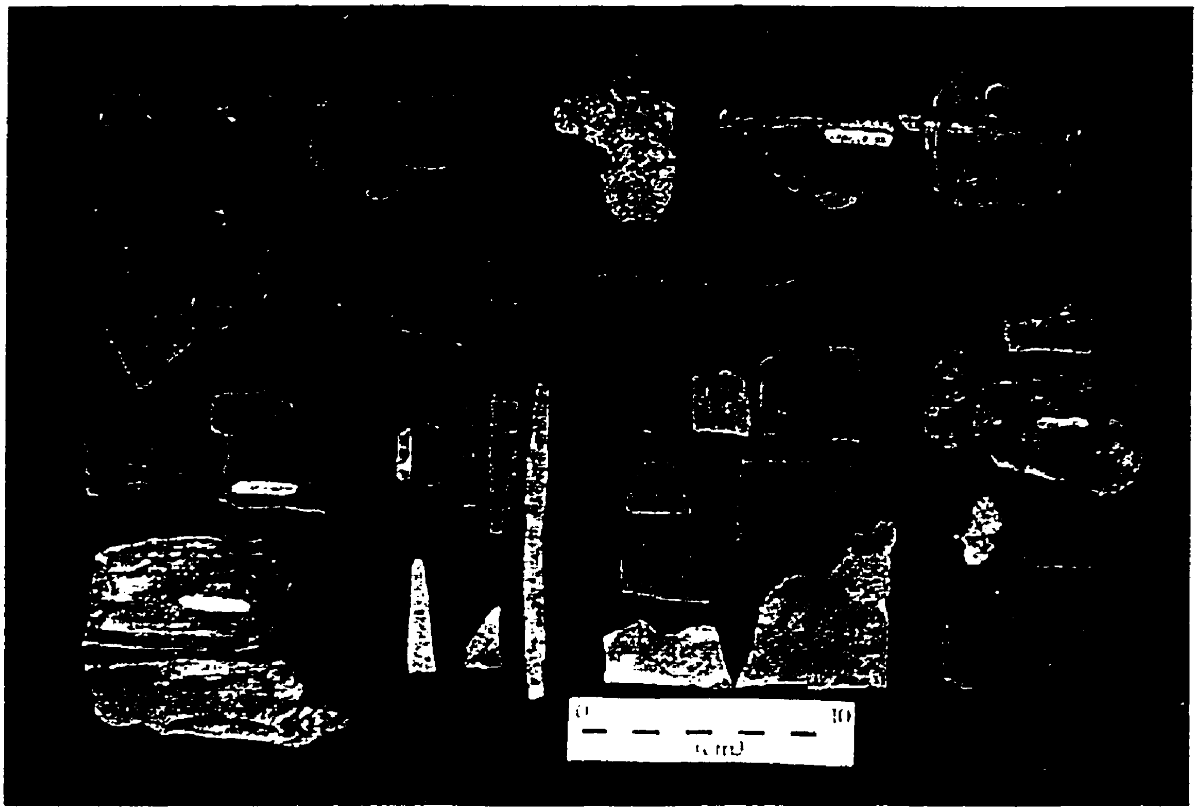
Projectile Points

Twelve brass points of various sizes and shapes were manufactured with different production techniques. Six are rolled to a pointed tip, with the conical shape analogous to five traditional antler points (Houghton 1922: Plate VIIA) recovered from Le Caron. The remaining six are flattened brass fragments - two stemmed, one triangular, and four with worked bases similar to triangular lithic forms. While the stemmed points were likely crafted by Europeans and incorporated at Le Caron through trade (Trigger 1976:411), the remaining points were cut to the desired shape, and four display evidence of straight line scoring. Five are ground along the edges to provide sharp edges, while two retain dull edges. Only one fragment displays evidence of annealing (Figure A.9).

Trapezoidal Fragment

One finished brass tool in a trapezoidal shape with a triangular edge also has one iron counterpart (Figure A.9), and was recovered from the Central

Figure A.8: Kettle Fragments from Le Caron



A) Kettle Rims: Brass with straight edge rim, and one rivet in place; rolled brass rim; straight edge iron rim; molten kettle rim and lug; folded kettle rim; folded kettle rim with kettle lug. B) scored and folded kettle fragments C) Worked Kettle fragments: small micro-blades; several stepped fragments, scored, then cut - unknown function; two triangular pieces D) Expedient tools: triangular, square, trapezoid shapes. All with two worked sides. E) Heated molten fragments: Irregular shaped and/or with worked edges.

Table A.9: Finished Copper Alloy Artifacts

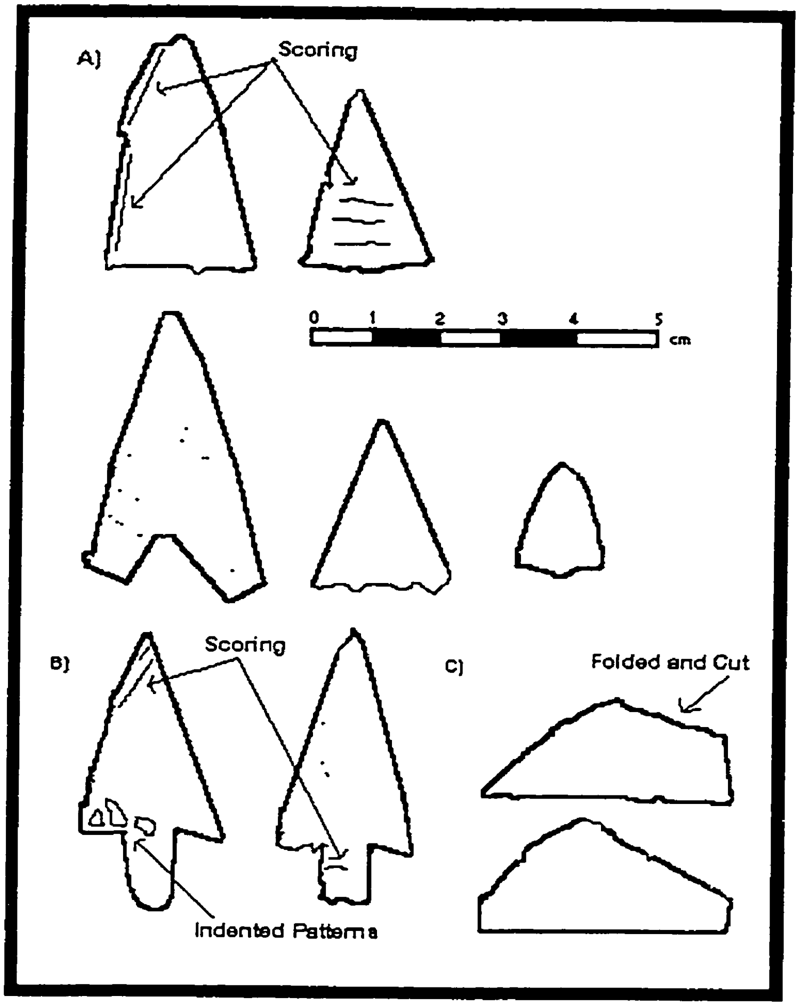
Finished Copper Alloy Fragments	Number	Percent
(Functional: 30.95%)		
Flattened Triangular Points	6	14.29%
Rolled Conical Points	6	14.29%
Trapezoid Cutting Tool	1	2.38%
(Ornamental/Ritual: 69.05%)		
Worked Disks	4	9.52%
Rolled Tubular Beads	11	26.19%
Large Hair Tube	1	2.38%
Tinkling Cones	7	16.67%
Rolled Brass Rings	2	4.76%
Corregated Bracelets	2	4.76%
Brass Spiral	1	2.38%
Rolled and Twisted Ornamentation	1	2.38%
TOTAL	42	100%

Midden. While the function is unknown, it is presumed a cutting tool to be hafted into a handle.

Ornamental Artifacts

Ornaments crafted from European materials are shaped into traditional forms. For example, tubular beads have bone antecedents and disc pendants are similar to shell and stone forms (Bradley 1987a:75).

Figure A.9: Copper Alloy Points and Cutting Tools



Spiral

One brass spiral, with a diameter of 10.5mm, was formed by rolling a thin strip of brass into three wound and interlocked circles. These brass ornaments, once believed Basque spiral earrings (Axtell 1988:153), were actually crafted by Natives but their exact interpretation is unknown (Snow 1994:3). The spiral is often connected with the underwater panther who was both feared and respected, associated with medicinal knowledge of plants, and respected for power over people and animals (Bradley and Childs 1991:6; Armour 1977:13).

Spirals are found in Western Virginia, the Monongahela and Upper Ohio Valleys, and are recovered mainly from Susquehannock and the occasional Seneca, and Onondaga sites (Bradley 1987a:133; Mayer-Oakes 1955:158-174; McMichael 1968:51-52; Sempowski 1994:57-58). Sometimes recovered from 17th century Ontario sites (Fox, Handcock, and Pavlish 1995:288), finished ornaments were likely fashioned by the Susquehannock and distributed via trade networks in the Allegheny and Ohio Valleys into Ontario (Sempowski 1994:59-61).

Rings

Two finger rings made of brass strips are rolled into circular forms. Such rings are sometimes found in context with Jesuit rings (e.g., Cleland 1971:22-24), and are correlated with the 17th century. Additionally, seven strips of sheet brass were recovered which likely acted as unfinished ornamental forms.

Bracelet

One small brass bracelet, rolled into three tubes and compressed side by side with tapered ends, is similar to corregated brass bracelets recovered from Susquehannock sites (see Sempowski 1994:57-58). However, the machine-pressed quality of the latter materials is absent, and a less refined folded version is likely an attempt to replicate the form.

Earring/Ornamentation

One brass strip fragment is bent and curved to create a three rowed semi-circular body. Certainly ornamental in form, it is likely a clip-on ear or nose ring (Carter 1971:26), or clothing and/or hair accessory (Fitzgerald 1990:516; Ritchie 1954:32).

Rolled Beads, Hair Pipes, and Tinkling Cones

Sheet brass was rolled into tinkling cones, hair pipes, and tubular beads. Cut square scraps were rolled into beads, and trapezoidal shapes were rolled to make tinkling cones (Quimby 1966:72).

Discs

Of four recovered worked discs, two are round, one is shaped in a half circle, and the fourth is octagonal. These items likely functioned as ornamentation (Bradley 1987a:70), and similar worked shell pendants indicate continuity in traditional forms.

GLASS TRADE BEADS

Glass Beads as Temporal Markers

The ca. A.D. 1580-1650 period is characterized by the increased presence of Europeans participating in the fur trade, and is subdivided into three temporal frames based upon sequences of manufactured European glass beads (Table A.10). Only temporal frames associated with the Historic Period (GBP1, GBP2, and GBP3) are required for this study - particularly GBP3 which is subdivided into

Table A.10: Chronological Frameworks for the Huron

PERIOD DESIGNATION	TIME FRAME
Prehistoric Period	ca. A.D. 1400 - 1500
Contact (Pre-Fur Trade)	ca. A.D. 1500 - 1580
Historic (Fur Trade):	
Glass Bead Period 1	ca. A.D. 1580 - 1600
Glass Bead Period 2	ca. A.D. 1600 - 1630
Glass Bead Period 3	ca. A.D. 1630 - 1650

(after Lennox and Fitzgerald 1990)

early and late periods and defined as GBP3a and GBP3b by Kenyon and Kenyon (1983), and ONT 1 and ONT 2 by Kenyon and Fitzgerald (1986). Minor differences in dates and typologies for each of these periods are discussed below and related to the Le Caron bead collection.

The dates listed in this table are commonly employed for sites in Ontario. However, these commonly referenced dates derive from the conclusions of Fitzgerald's dissertation (1990) and his affiliated publications (Kenyon and Fitzgerald 1986; Lennox and Fitzgerald 1990). The dates are not absolute, and temporal frames which define the onset of GBP2 and GBP3 time periods vary among studies. However, all studies designate the temporal frame of A.D. 1580-1600 to the GBP1 period (Kenyon and Fitzgerald 1986:10-12; Kenyon and Kenyon 1983:60).

Kenyon and Kenyon's (1983:68) dates for GBP2 (ca. A.D. 1600-1615) are slightly different than those described above, with the onset of GBP3 subdivided into early (GBP3a ca. A.D. 1615-1625) and late stages (GBP3b ca. A.D. 1640-

1650). There is a discrepancy of fifteen years assigned to dates defining the termination of GBP2, and onset of GBP3.

This discrepancy is unresolved and emphasized in Kenyon and Fitzgerald's (1986) study. Here, the onset of GBP3 is defined as early as A.D. 1616-1624, or as late as A.D. 1628-1632 (Kenyon and Fitzgerald 1986:12-15). To resolve the issue, Kenyon and Fitzgerald (1986:15) examine only Period III beads and conclude with a loose definition for the start of GBP3. They divide GBP3 into two periods based on site clusters which differ slightly from Kenyon and Kenyon's (1983) GBP3a and GBP3b periods. ONT 1 sites date prior to A.D 1640 (sites are typically dated to the 1630s with a scattering of GBP2 beads), and ONT 2 sites date later than 1640 (Kenyon and Fitzgerald 1986:16-19).

Method

All beads are catalogued according to Kidd and Kidd's (1970) classification system. To make the analysis more manageable bead attributes are clumped into the following categories: bead shapes are classified as 'striped' despite the number of lines observed on the bead surface; the shape of cross-sections and presence of cores are temporarily disregarded; no distinction is made between round and circular beads; and beads are grouped as primary colours to alleviate bias when delineating tints (after Kenyon and Fitzgerald 1986:15-16; Kenyon and Kenyon 1983:62). This approach reduces bead frequencies and makes the sample datable by excluding extraneous attributes (see Table A.11).

Table A.11: Glass Bead Types and Frequencies in the Le Caron Collection

BEAD TYPES	FREQUENCY	PERCENT
Red Round	256	57.27%
Turquoise Round	36	8.05%
Star Beads	21	4.70%
Blue Round	19	4.25%
Turquoise Tube	18	4.03%
Red Tube	14	3.13%
Red Round (Stripes)	11	2.46%
Red Tube (Stripes)	8	1.79%
Blue Tube	8	1.79%
Wire Wound	8	1.79%
Green Tube	8	1.79%
White Round	8	1.79%
Black Tube	6	1.34%
White Tube	5	1.12%
White Oval	5	1.12%
Red Oval	4	0.89%
Blue Oval	4	0.89%
Black Round	4	0.89%
Black Oval	2	0.45%
Blue Oval (Stripes)	1	0.22%
Green Oval	1	0.22%
TOTAL	447	99.98%

GBP1

Since only four sites are definitely known to date to GBP1 in Ontario (ca. A.D. 1580-1600), a classification for beads during this time period is only partially delineated. While minimal numbers of several of these bead types were recovered at Le Caron, particular bead types are absent and the remaining types overlap with later time periods. The GBP1 temporal frame is dismissed for the Le Caron site since the high frequency of round and turquoise beads (n = 36) is more suited to the GBP3 period. These beads also lack the crumbly or fragmented surfaces characteristic of material employed for manufacturing GBP1 turquoise beads (Kenyon and Kenyon 1983:59-60; Kenyon and Fitzgerald 1986:10-12). Additionally, dark blue and white ovals and tubulars which become popular during GBP2 and are virtually absent on GBP1 sites (Kenyon and Kenyon 1983:61) are present in the Le Caron collection.

GBP2

GBP2 in the Northeast (ca. A.D. 1600-1615/30) is defined by predominantly dark blue and white beads in tubular and oval shapes. These four bead types generally constitute over 50% of the beads from sites of this time period (Kenyon and Kenyon 1983:61), but less than five percent were recovered from the Le Caron site (n = 22).

In Ontario, oval varieties are associated with early GBP2 sites, while tubular beads increase during the later interval of this time period. Since tubular beads (n = 13) outnumber oval beads (n= 9) at Le Caron, the latter part of GBP2 characterizes the portion of the collection dated to this time period. Other beads recovered from Le Caron which date to GBP2 include black round, oval, and tubular beads, and blue and white round beads. Less popular beads include facetted star; red round and oval striped; and red, dark blue and white striped tubulars (Kenyon and Kenyon 1983:60-61).

GBP3

GBP3 is characterized predominantly by red round, tubular, and turquoise round beads, which are rare on GBP1 and GBP2 sites. These types include simple and compound beads, with square, round, and ground polygonal cross-sections

(Kenyon and Kenyon 1983:62). Three hundred and six (68.46%) of these bead varieties recovered from Le Caron indicate the site dates to GBP3 (ca. A.D. 1615-1650). A high frequency of red beads in the collection is offset by the absence of ground beads standardly recovered from GBP2 sites. While GBP3 sites are often comprised of more than 20% turquoise round beads (Kenyon and Kenyon 1983:62), only eight percent of this type was recovered from Le Caron. However, they constitute the second highest frequency of glass bead types from the site.

Turquoise tubes become increasingly popular during GBP3 (Kenyon and Kenyon 1983:62) and one blue tubular compound striped bead (IIIc1) recovered from Le Caron coincides with other Ontario sites dated to GBP3 (Kenyon and Kenyon 1983:67). Additionally, red tubular catlinite beads are recovered strictly from GBP3 sites in Ontario (Kenyon and Kenyon 1983:62). Two catlinite beads recovered from Le Caron and numerous red siltstone tubular beads which are often misidentified as catlinite beads in Ontario (see Fox 1980) place the site within the second quarter of the 17th century.

Glass Bead Period 3 is further divided into early (GBP3a) and late (GBP3b) periods based on the presence of red tubular beads. The frequency of these beads at Le Caron (n = 14) constitutes 3.13% of the glass bead inventory. The 'less than 10%' model places the date of Le Caron within the early part of GBP3, and tightens the time frame to a pre-1640s date with a median date of 1620s to 1630s (Kenyon and Kenyon 1983:63-64). This date corroborates Kenyon and Kenyon's (1983:74) preliminary date attributed to the Le Caron site based exclusively from glass beads recovered during the 1972 field season.

By clustering bead types rather than sites, Kenyon and Fitzgerald (1986:19) define seven site clusters (A through G) with two (A and B) specifically correlated to Ontario sites. Cluster A bead types include a variety of bead types including cored red round, star beads, and several tubular forms. These are confined mainly to Ontario sites with 50% or more recovered from ONT 1 sites, and fewer (15-30%) recovered from ONT 2 sites. In contrast, ONT 2 sites are characterized mainly by solid red round and tube beads, with high frequencies (35%-70%) recovered from Ontario sites of later periods, especially after 1640 (Kenyon and Fitzgerald 1986:22).

Kenyon and Fitzgerald (1986:18) classify beads recovered from the 1972 field season at Le Caron as ONT 1 beads. All beads recovered from eight field seasons are examined in this study, and core attributes and particular bead designations defined by Kidd and Kidd (1970) are identified to refine early and late stages of GBP3 beads. Cluster A and B bead types calculated for the Le Caron collection are summarized below (Table A.12).

The results corroborate the initial findings of Kenyon and Fitzgerald (1986) who date the site to ONT 1 (pre-1640). Just eighteen (7.03%) of two hundred and fifty six red round beads recovered from the site are solid with no core. Since fewer than 10% of these bead types are characteristic of ONT 1 sites in Ontario, Le Caron is categorized within this temporal frame. Together with

Table A.12: Cluster A (ONT 1) and Cluster B (ONT 2) Bead Types Recovered From Le Caron

BEAD DESCRIPTIONS	KIDD CLASSIFICATION	FREQUENCY
Cluster A (ONT 1):		
Red round circular with a core	IVa2	238
Facetted star beads	IIIk3	21
Square blue compound tubes	IIIc1	1
Compound tube, twisted, red core	IIIc'3	7
Turquoise blue tubes	Ia12	3
Red round, blue on white stripes	IIbb1	7
TOTAL		**277**
Percentage of Bead Collection		**61.97%**
Cluster B (ONT 2)		
Solid red tubes	Ia1	10
Solid red round beads	IIa1	18
TOTAL		**28**
Percentage of Bead Collection		**6.26%**

(after Kenyon and Fitzgerald 1986:22)

solid red tube beads, they constitute only twenty-four beads, or 6.26% of the entire collection. More importantly, specific evidence to classify Le Caron within the ONT 1 temporal frame includes two hundred and seventy-seven red cored beads (61.97%) which surpasses the 50% requisite for confirming this temporal designation (Kenyon and Fitzgerald 1986:22).

Spatial Distributions of Glass Beads

While a time period of GBP3a (ca. A.D. 1615-1640) is calculated for the entire site, spatial variations among glass beads are also examined among middens and longhouses to identify temporal changes within the site (Table A.13) and tighten the site's occupation period (after Kenyon and Kenyon 1983:64). This approach to dating is particularly limited in regions of the site where a low incidence of beads were recovered. Therefore, the following dates are not absolute, but simply a synopsis of the limited number of beads and dating techniques available to analyze the Le Caron collection.

Table A.13: Distribution and Frequency of European Beads

LOCATIONS	TOTALS	PERCENT
Longhouses	30	6.71%
Middens	368	82.33%
E & SW Palisades	23	5.15%
Misc. Test Units/Trenches	20	4.47%
No Context	6	1.34%
TOTALS	**447**	**100.01%**

Kenyon and Fitzgerald's (1986) classification of beads which distinguish ONT 1 and ONT 2 periods includes the high frequency (35-70%) of solid red round and tube beads during ONT 2 (post-1640). Distributions of eighteen solid round red and ten solid red tube beads recovered from Le Caron are listed below (Table A.14), and summarized in successive tables to refine early and late stages of GBP3.

Table A.14: Distribution of Solid Red Round and Red Tube Beads Correlated to ONT 2

LOCATION	RED SOLID ROUND	RED SOLID TUBE	TOTAL
West Midden	4	1	5
Central Midden	9	3	12
Northeast Midden	2	0	2
South Midden	0	2	2
Southwest Midden	0	1	1
Longhouse 1	2	1	3
Between Longhouses 2 and 3	1	0	1
East Palisade	0	1	1
Miscellaneous Units	0	1	1
TOTAL	18	10	28

Middens

The Southwest, West, Central, and Northeast Middens consist primarily of beads dating to GBP3a, with a small percentage of beads (< 20%) ascribed to GBP2 (after Kenyon and Kenyon 1983). The West Midden displays a high frequency of solid red tubes (18.52%) which indicates it dates to the later part of ONT 1 (Table A.15), while the beads recovered from the remaining three middens (see Tables A.16 - A.18) have a higher percentage of beads attributed to the early, rather than later period of ONT 1 (after Kenyon and Fitzgerald 1986).

In contrast, the percentage of red tubular beads recovered from the South Midden (> 10%) indicates this region dates to GBP3b (after Kenyon and Kenyon 1983:63-64). Additionally, all red tubular beads (40%) are solid round which indicates this midden dates to ONT 2, or later period (post-1640) of GBP3 (after Kenyon and Fitzgerald 1986:22). While this conclusion is based on the recovery

Table A.15: Bead Distributions and Temporal Frames
West Midden

BEAD TYPE	FREQUENCY	PERCENT
Red Round	9	33.33%
Red Round (Stripes)	5	18.52%
Star Beads	4	14.81%
Turquoise Round	3	11.11%
Blue Round	2	7.40%
Turquoise Tube	1	3.70%
White Tube	1	3.70%
White Round	1	3.70%
Black Tube	1	3.70%
TOTAL	**27**	**99.97%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. **1615-1625** (Kenyon and Kenyon 1983) **ONT 1** ca. A.D. **1616-1640** (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 14.81%
Percent Red Solid Round and Tubular Beads (ONT 2): 18.52% of five

beads and should be weighed lightly (Table A.19), the lack of evidence to date this midden to the earlier GBP2 period corroborates the later date.

East Palisade and Southwest Longhouse/Palisade Regions

The distribution of beads recovered from the Eastern Palisade and Southwest Longhouse/Palisade areas are examined individually to determine if the

**Table A.16: Bead Distributions and Temporal Frames
Southwest Midden**

BEAD TYPE	FREQUENCY	PERCENT
Red Round	7	43.75%
Blue Round	2	12.50%
Star Beads	2	12.50%
Red Tube	1	6.25%
Turquoise Round	1	6.25%
Turquoise Tube	1	6.25%
Black Oval	1	6.25%
Green Tube	1	6.25%
TOTAL	**16**	**100.00%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1 ca. A.D. 1616-1640** (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 18.75%
Percent Red Solid Round and Tubular Beads (ONT 2): 6.25%

western portion of the site is contemporaneous with the Eastern Palisade and Longhouse areas. Since the bead distribution among middens indicates temporal distinctions for the South and West Middens, and a large unexcavated area separates the east and west sections of the site, this data was considered critical to understanding the distribution patterns of artifacts recovered from the site.

Similar to the bead distribution associated with four middens, the Eastern Palisade dates to GBP3a, with the same percentage of beads (5.26%) dated to

Table A.17: Bead Distributions and Temporal Frames
Northeast Midden

BEAD TYPE	FREQUENCY	PERCENT
Red Round	41	59.42%
Turquoise Round	5	7.25%
Turquoise Tube	5	7.25%
Wire Wound	5	7.25%
Blue Round	4	5.80%
Blue Tube	2	2.90%
Black Round	2	2.90%
Star Bead	2	2.90%
Red Round (Stripes)	1	1.45%
White Tube	1	1.45%
Green Tube	1	1.45%
TOTAL	69	100.02%
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) ONT 1 ca. A.D. 1616-1640 (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 13.04%
Percent Red Solid Round and Tubular Beads (ONT 2): 2.90%

GBP2 and ONT 2 periods (Table A.20). The Southwest Palisade/Longhouse area also dates to GBP3a, with no beads dated to the earlier GBP2 or later ONT 2 periods. In short, there is no evidence to distinguish temporal frames between the eastern and western portions of the site.

Table A.18: Bead Distributions and Temporal Frames
Central Midden

BEAD TYPE	FREQUENCY	PERCENT
Red Round	158	62.95%
Turquoise Round	18	7.17%
Blue Round	14	5.58%
White Round	10	3.98%
Star Beads	8	3.19%
Red Tube	7	2.79%
Turquoise Tube	6	2.39%
Blue Tube	5	1.99%
Red Tube (Stripes)	5	1.99%
Red Round (Stripes)	4	1.59%
Black Tube	4	1.59%
Green Tube	3	1.20%
White Tube	3	1.20%
Wire Wound	3	1.20%
Black Round	2	0.80%
Blue Oval (Stripes)	1	0.40%
TOTAL	251	**100.01%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1** ca. A.D. 1616-1640 (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 15.54%
Percent red solid round and tubular beads (ONT 2): 4.78%

Table A.19: Bead Distributions and Temporal Frames
South Midden

BEAD TYPE	FREQUENCY	PERCENT
Red Round	3	60.00%
Red Tube	2	40.00%
TOTAL	5	**100.00%**
TEMPORAL DESIGNATION		
GBP3b ca. A.D. 1640+ (Kenyon and Kenyon 1983) **ONT 2** ca. A.D. 1640-1651 (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 0.00%
Percent red solid round and tubular beads (ONT 2): 40.00%

However, the Southwest Midden with its high frequency of GBP2 beads (18.75%) indicates the surrounding palisade and living area date to the earlier part of GBP3a. Therefore, the Southwest Palisade/Longhouse area is temporally distinct from the South Midden with its later time frame of GBP3b and ONT 2. Consequently, the living area associated with the South Midden likely lies below the unexcavated portion of the site just east of the Central Midden.

Longhouses

Unfortunately, the low glass bead frequency among and between longhouses leads to date inferences rather than solid conclusions. Less than five beads were recovered from the interior of Longhouses 2, 3, 4, and the outer sector immediately

Table A.20: Bead Distributions and Temporal Frames of Eastern Palisade and Southwest Palisade/Longhouse

East Palisade

BEAD TYPE	FREQUENCY	PERCENT
Red Round	12	63.16%
Turquoise Round	5	26.32%
Red Tube	1	5.26%
Blue Tube	1	5.26%
TOTAL	**19**	**100.00%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1 ca. A.D. 1616-1640** (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 5.26%
Percent Red Solid Round and Tubular Beads (ONT 2): 5.26%

Southwest Palisade/Longhouse

BEAD TYPE	FREQUENCY	PERCENT
Star Beads	3	75.00%
Red Round	1	25.00%
TOTAL	**4**	**100.00%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1 ca. A.D. 1616-1640** (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 0.00%
Percent Red Solid Round and Tubular Beads (ONT 2): 0.00%

between Longhouses 2 and 3. Twenty beads were recovered within Longhouse 5 and from the exterior and interior of Longhouse 1 (Table A.21).

Table A.21: Distribution of Native Beads Among Longhouses

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	11	2	0	13	43.33%
Longhouse 2	0	0	1	1	3.33%
Longhouse 3	3	3	0	6	20.00%
Longhouse 4	3	0	0	3	10.00%
Longhouse 5	5	2	0	7	23.33%
TOTAL	22	7	1	30	99.99%
PERCENT	73.33%	23.33%	3.33%	99.99%	

Based on Kenyon and Kenyon's (1983) classification of beads, their distributions among longhouse indicate all structures date to GBP3a. However, owing to low bead counts among longhouses, time periods are designated by glass bead popularity rather than exclusive traits within specific time periods. For example, the one bead recovered from Longhouses 2 was most popular during GBP3a, and is designated to that time period. Beads recovered from Longhouses 3 and 5 consist of green tube beads exclusively confined to GBP3 time periods with no examples dated to GBP2 or ONT 2 periods. It therefore seems that Longhouses 2, 3 and 5 date to GBP3a, with no beads marking later or earlier periods (Tables A.22, A.23, A.24).

Table A.22: GBP3a and ONT 1 Glass Bead Distributions for Longhouse 2

BEAD TYPE	FREQUENCY	PERCENT
Red Round	1	100.00%
TOTAL	**1**	**100.00%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1 ca. A.D. 1616-1640** (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 0.00%
Percent Red Solid Round and Tubular Beads (ONT 2): 0.00%

Table A.23: GBP3a and ONT 1 Glass Bead Distributions for Longhouse 3

BEAD TYPE	FREQUENCY	PERCENT
Green Tube	1	33.33%
Green Oval	1	33.33%
Turquoise Tube	1	33.33%
TOTAL	**3**	**99.99%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1 ca. A.D. 1616-1640** (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 0.00%
Percent Red Solid Round and Tubular Beads (ONT 2): 0.00%

Table A.24: GBP3a and ONT 1 Glass Bead Distributions for Longhouse 5

BEAD TYPE	FREQUENCY	PERCENT
Red Round	5	71.43%
Green Tube	2	28.57%
TOTAL	**7**	**100.00%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1** ca. A.D. 1616-1640 (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 0.00%
Percent Red Solid Round and Tubular Beads (ONT 2): 0.00%

Most Longhouse 1 beads date to GBP3a, but numerous examples date to the earlier GBP2 (15.38%), and later ONT 2 periods (23.08%). Overall, a late GBP3a temporal designation is indicated. In contrast, Longhouse 4 includes beads (33.33%) commonly recovered from GBP2 sites, and lacks specimens dating to the later ONT 2 period. This indicates a temporal frame close to the beginning of GBP3a. Therefore, Longhouse 1 dates late in GBP3a, while Longhouse 4 dates to the early GBP3a period (Table A.25).

Finally, according to Kenyon and Fitzgerald's (1986) model, one third of the glass beads recovered from the exterior area between Longhouses 2 and 3 are correlated to GBP3b and ONT 2 periods (post-1640). However, based on the low

Table A.25: Early and Late Stages of GBP3a and ONT 1: Glass Bead Distributions for Longhouses 1 and 4

BEAD TYPE	FREQUENCY	PERCENT
Red Round	6	46.15%
Red Tube (Stripes)	2	15.38%
Red Tube	1	7.69%
Turquoise Tube	1	7.69%
Blue Round	1	7.69%
Star Bead	1	7.69%
White Oval	1	7.69%
TOTAL	**13**	**99.98%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1 ca. A.D. 1616-1640** (Kenyon and Fitzgerald 1986)		

Note: Two Red Round Beads are located outside Longhouse 1
Percentage of GBP2 Glass Beads: 15.38%
Percent Red Solid Round and Tubular Beads (ONT 2): 23.08%

Longhouse 4

BEAD TYPE	FREQUENCY	PERCENT
Turquoise Tube	2	66.66%
Red Tube (Stripe)	1	33.33%
TOTAL	**3**	**99.99%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 1 ca. A.D. 1616-1640** (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 33.33%
Percent Red Solid Round and Tubular Beads (ONT 2): 0.00%

frequency of beads recovered from each area these conclusions are likely more ostensible than real (Table A.26).

Glass Beads with No Context

Finally, beads recovered from miscellaneous units or with no context also date to GBP3a (Table A.27). The extent to which these beads might have altered dates attributed to the spatial distributions described above is unknown. However, because these specimens have similar types and percentages to those described above, it is surmised overall dates would alter only slightly.

Glass Beads and Trade

The differences in bead varieties between Ontario and New York sites is attributed to the focus on disparate European and Native trading partners. The Dutch traded primarily in the south, while French commerce dominated Ontario during the 17th century (Kenyon and Kenyon 1983:68). However, widespread Susquehannock trade networks during this time period could have moved glass beads into Ontario via the Allegheny and Ohio Valleys (Sempowski 1994:59-60).

Facetted star beads retain popularity throughout GBP2 and GBP3 periods. The majority of star beads in the collection are facetted tubular forms (n = 12) characteristic of Ontario sites (57.14%). However, the frequency of round star beads (n = 9, 42.86%) recovered from this site is unusually high for Ontario which indicates Kenyon and Kenyon (1983:62-63) were correct in suggesting the low sample for Huron sites may lead to non-representative conclusions. Alternatively, the high frequency of round star beads could indicate connections

Table A.26: GBP3a and ONT 1 Glass Bead Distributions Exterior Between Longhouses 2 and 3

BEAD TYPE	FREQUENCY	PERCENT
Red Round	2	66.66%
Black Tube	1	33.33%
TOTAL	**3**	**99.99%**
TEMPORAL DESIGNATION		
GBP3a ca. A.D. 1615-1625 (Kenyon and Kenyon 1983) **ONT 2** ca. A.D. 1640-1651 (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 33.33%
Percent red solid round and tubular beads (ONT 2):33.33%

with Southern trading partners, or that access to their goods was unusually high at this site. For example, this type typically constitutes more than 90% of New York star bead collections.

Additionally, one very large star bead with a diameter greater than 10mm (after Kidd and Kidd 1970:66) derives from either Spanish or French origins. According to Kenyon and Kenyon (1983:67), large star beads with diameters greater than 6mm are tentatively categorized as Spanish in origin. However, no other beads recovered from this site or any other site in Ontario can be correlated to Spanish manufacture, and future research with star beads recovered from other sites should clarify this issue.

Finally, six beads recovered from Le Caron are characteristic of New York types and include four solid round black beads (IIa6) and two multi-layered blue

Table A.27: Temporal Designations of Glass Beads with No Context and from Miscellaneous Units

BEAD TYPE	FREQUENCY	PERCENT
Red Round	15	57.69%
Turquoise Round	4	15.38%
Red Tube	2	7.69%
Red Round (Stripes)	1	3.85%
Turquoise Tube	1	3.85%
Star Bead	1	3.85%
Black Round	1	3.85%
White Oval	1	3.85%
TOTAL	**26**	**100.01%**
TEMPORAL DESIGNATION		
GBP3a ca. **A.D. 1615-1625** (Kenyon and Kenyon 1983) **ONT 1** ca. **A.D. 1616-1640** (Kenyon and Fitzgerald 1986)		

Percentage of GBP2 Glass Beads: 11.54%
Percent Red Solid Round and Tubular Beads (ONT 2): 3.85%

round striped beads (IVb36). A scattered presence of these beads are found on other Ontario sites (Kenyon and Kenyon 1983:63). The beads were likely carried through Andasté trade networks by way of the Allegheny and Ohio Valleys into Ontario (Sempowski 1994:59-60).

Glass Beads and Colour Symbolism

Colour symbolism was important among Iroquois groups during the 17th century. Early interpretations of colour were equated with general societal and political expressions, where white was equated with peace, red with war, and black with death (Woodward 1965:17). Hamell (1983, 1986, 1987) correlates colour with metaphorical properties of traditional culture derived from Native narratives and myths.

The emphasis on dark blue and white oval and tubular beads during GBP2 is believed analogous to colour attributes of marine shell which are symbolically charged substance in Native societies (Axtell 1988:173-174; Kenyon and Kenyon 1983:69-70). Additionally, during GBP2 numerous beads in the Northeast were ground to expose the red colour due to the low frequency of red beads available during this time period (Kenyon and Kenyon 1983:69-70).

By GBP3, many collections consist of over 50% red round beads. The change in colour emphasis from GBP2 to GBP3 is correlated to the symbolic importance of red in Iroquoian culture. The demand for certain colours likely led to a focus on the European trade network to provide selected colour preferences once they began to understand and recognize Native symbolism (Kenyon and Kenyon 1983:69-70).

Red beads constitute the majority of glass beads in the Le Caron collection (65.56%), and while analogous in colour to siltstone and catlinite beads, the high frequency of red round beads (Table A.28) is more appropriately associated to red berries and their related spiritual properties in traditional mythology.

Hamell (1983:7-11) proposes berries and fat are symbols of spiritual well-being, and the medium through which these states are positively resolved.

Table A.28: Glass Bead Colours Recovered from Le Caron

COLOUR	BEAD TYPES	FREQUENCY	PERCENT
Red	Red Round	260	58.17%
	Red Tube	14	3.13%
	Red Round (Stripes)	11	2.46%
	Red Tube (Stripes)	8	1.80%
	Subtotal	**293**	**65.56%**
Turquoise	Turquoise Round	36	8.05%
	Turquoise Tube	18	4.03%
	Subtotal	**54**	**12.08%**
Blue	Blue Round	23	5.15%
	Blue Tube	8	1.80%
	Blue Oval (Stripes)	1	0.22%
	Subtotal	**32**	**7.17%**
Star Beads (Multi-coloured)	Star Bead	21	4.70%
	Subtotal	**21**	**4.70%**
White	White Round	13	2.91%
	White Tube	5	1.12%
	Subtotal	**18**	**4.03%**
Black	Black Round	6	1.34%
	Black Tube	6	1.34%
	Subtotal	**12**	**2.68%**
Green	Green Round	1	0.22%
	Green Tube	8	1.79%
	Subtotal	**9**	**2.01%**
Various Colours	Wire Wound	8	1.79%
	Subtotal	**8**	**1.79%**
TOTAL		447	100.02%

Through the analogy of their colour and form, berries are typically used as beads. Among Northern Iroquoians, berries have inherent medicine virtues for spiritual and physical renewal and possess prominent attributes of the spirit world or afterworld including red berries placed in the eyes of amulets to act as metaphors for the soul. Accordingly, large frequencies of red round glass beads were incorporated during GBP3 because of their metaphorical qualities related to berries and spiritual well-being.

Since traditional cultures do not segregate green and blue colours, the second highest frequency of beads recovered from Le Caron includes those with the colour properties of green, turquoise, and blue (n = 95). Combined, these beads constitute 21.25% of the collection (Table A.28), and are cultural material expressions of 'light' and metaphorically correlated with 'life,' 'mind,' 'knowledge,' and 'great beings.' These coloured substances are overlapped by the allegorical dimensions of direction: life is 'social direction' and associated with eastness, rightness, and counterclockwiseness (Hamell 1983:5-7).

Of interest is the low frequency of black beads (n = 12) in the collection. 'Darkness,' blackness, or any dark colour are inherent properties of charcoal, particular stones and shells, night, certain berries and fruits, and specific animal species. These colours signify inferior and asocial states, and absence of purposiveness of mind, knowledge, and Greatest Being, as in death and mourning; with death and 'antisocial direction' affiliated with westness, leftness, and clockwiseness (Hamell 1983:7).

Since epidemics, population loss, and increased warfare with the Five Nations Iroquois increase in Huronia during the 1630s, coloured symbols associated with death and asocial states would be expected to dominate the collection. Instead, black beads constitute only 2.68% of the European glass bead collection.

In contrast, red, white, and blue/green beads which are metaphors for life, light, and social states constitute 90.84% of European beads. The high incidence of these colours is attributed to medicinal and ideological properties related to the spirit and after worlds, and physical renewal properties appropriated to healing the sick. Thus, colours are physical symbols for the Huron's response to 17th century stressors - manifested in colours to revitalize traditional spirituality.

UNMODIFIED EUROPEAN GOODS

Awls

Of seven iron awl fragments, five are complete or near complete with three offset in the middle, and two with straightened shanks. Remnants of a wooden handle adheres to one.

European metal awls are often believed to have made the manufacture of wampum, and other materials easier (e.g., Armour 1977:16). However, traditional awls are just as effective and are never completely replaced by European counterparts (Fitzgerald 1990:487; Maxwell and Binford 1961:88, 119; Ritchie 1954:24-26, 37). Two bone awls, and two hafted beaver incisors were also recovered from Le Caron, suggesting that both continuity and change characterize awl materials, but continuity characterizes form and function.

In addition to completed European and traditional awls, one wrought iron rod or possible bail fragment (Figure A.10), is worked into an elongated bi-pointed awl with one finished, and one unfinished end. This worked fragment has traditional bone antecedents at the Dawson and Hunter's site No. 41 in Oro Township (Pendergast 1972:258-259; Ridley 1966), and one complete iron counterpart from Robitaille (Fitzgerald 1990:489, 493-494).

European Ceramic

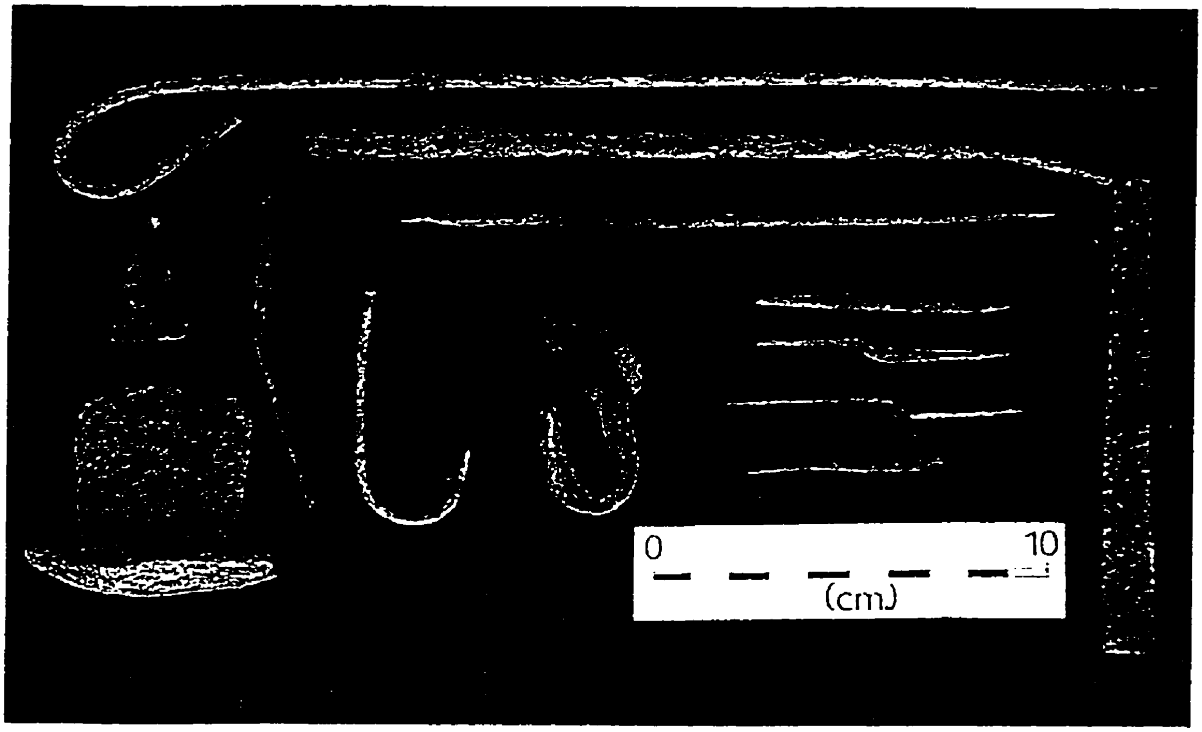
Twenty-five fragments of European ceramic recovered from the Le Caron site represent a minimum of three vessels dating to the 17th century. These vessels are classified as stoneware and earthenware (after Cotter 1958:203; Maxwell and Binford 1961:92-95).

Green Lead Glazed Stoneware

One green-glazed stoneware jar with a lipped rim and grey/white fabric is characterized by twenty-three ceramic fragments. The absence of body pieces made it difficult to determine vessel dimensions, and the reconstructed base and rim could not be correlated with published examples (Figure A.11).

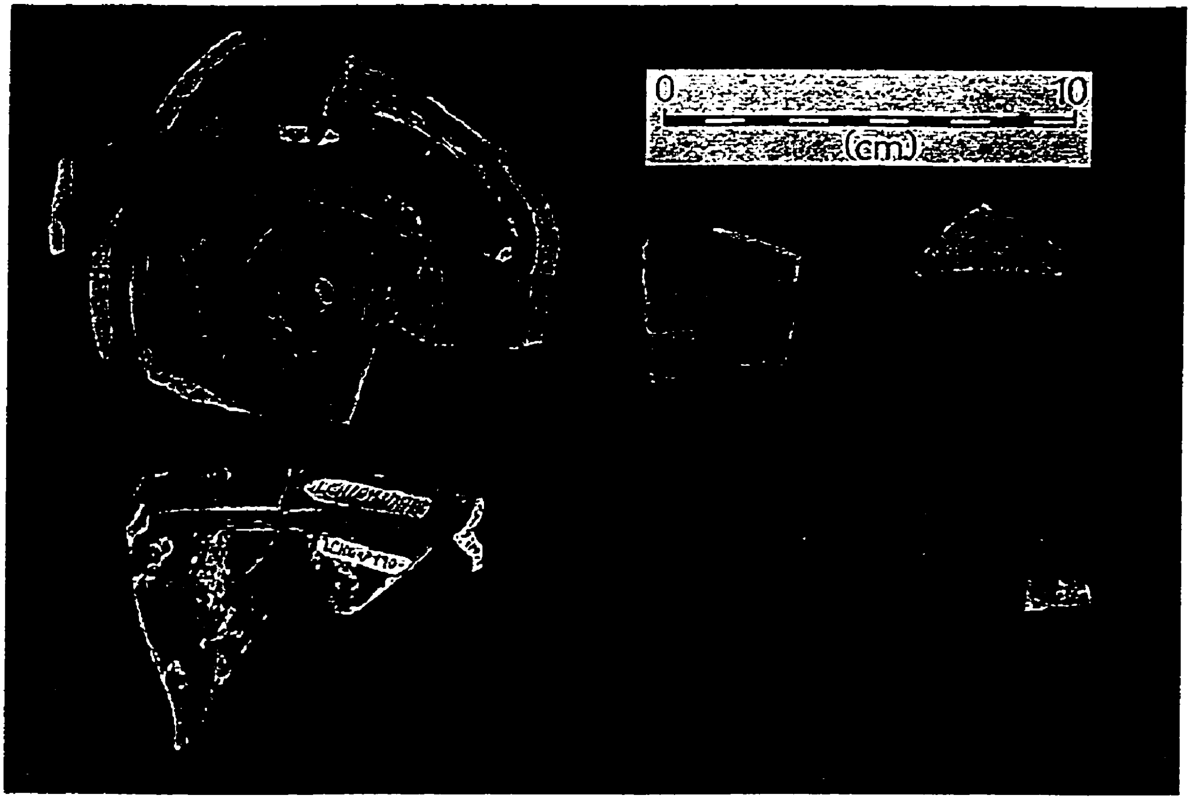
This vessel was recovered from the Central Midden, but was not confined to one area. Although eighteen fragments were from the plough zone, five pieces were recovered in an undisturbed context (Rexe 1972:D1-D2). Since mottled green ceramic fragments with white-grey paste were recovered from the GBP3

Figure A.10: Miscellaneous Treated Wrought Iron Artifacts



Top to Bottom, Left to Right: A) Probable Looped Bail Fragment with Worked Pointed Tip; Cut Triangular Knife Blade Tip; Unidentified Hardware Fragment; Bent Square-Sectioned Stake; Bent Nail; Elongated Awl - Same Material as Possible Bail Fragment; Fish Hook; Miscellaneous Hook; European Awls.

Figure A.11: European Ceramic and Glass



A) Grey Paste and Green Glazed Ceramic Base and Rim Fragments; B) Tan Glazed Earthenware; C) Patterned Blue and White Glazed Stoneware; D) Worked Glass Fragments.

Period Neutral Hood and Ste Marie I sites (Kidd 1949:134; Lennox 1984a:122), these fragments may represent 17th century activity, rather than deposition by burrowing animals. The varying green-yellow hues are remarkably similar to one vessel recovered from Ste Marie I (Kidd 1949:134). However, like the Le Caron example, context to firmly date the vessel to the 17th century is dubious.

Nevertheless, green-glazed white fabric vessels, with a cream buff and glazed colour stained by impurities, originate from La Chapelle des Pots in southwestern France. These vessels date to A.D. 100, and continued to be produced into the 18th and 19th centuries. Like the Le Caron example, these vessels were dip glazed with the majority unglazed on the bottom, but always glazed internally (Barton 1977:48-49, 66).

Stoneware with Blue and White Motif

One stoneware body sherd with a grey paste and blue and white floral designs is characteristic of 17th and 18th century Holland Delft ware (see Camp 1975:79).

Earthenware

One soft-paste red-brown earthenware piece with remnants of a dull beige glaze along the edges was recovered. Crude friable red paste and unglazed European ceramics are attributed to 17th century from Ste Marie I and ca. 1650 Jamestown (Cotter 1958:32; Kidd 1949:134). While the majority of red-fabric ware with or without glazing dates to the 18th and 19th centuries (Barton

1977:66-67), glazed examples are known to date to the 17th century (S. Jamieson, pers. comm.).

European Glass

Fourteen glass fragments recovered from Le Caron derive from questionable context, and a minimum of three vessels may date to the 17th century. Interpretations recorded during excavations indicate small undiagnostic fragments recovered from ploughed areas are assumed recent (Butcher and Johnston 1975:72; Rexe 1971:G8), while diagnostic fragments are recorded with unknown time origins (Butcher and Johnston 1973:34). Several glass fragments which derive from the same bottle were recovered below the plough zone, and are the only fragments initially attributed to the 17th century during excavations (Butcher and Johnston 1975:72).

Of the fourteen fragments, two heated, and one folded and heated white glass fragments derive from the same vessel, display signs of workmanship, and were recovered below the plough zone. The remaining fragments constitute two individual containers and include two black glass fragments with gold coloured deterioration, and worked cut sides; two unworked pale green pieces of bottle glass; and eight heated pale green glass fragments with no additional evidence of workmanship. Heated and unheated pale green glass fragments may constitute individual vessels, and all these glass fragments recovered from Le Caron may be connected to the Huron since black, heated deep gold, heavy white glass, and various shades of light green glass were available during the 17th century (Kidd 1949:136-138; Quimby 1966:74).

European Circular Coins, Baling Seals, and Buttons

Four plain circular disc fragments were recovered, and while believed to be of European manufacture, their original function as coins, baling seals, or buttons is ambivalent due to corrosion. While specific motifs are sometimes identified and dateable like the Louis XIII coin motif (ca. A.D. 1610-43) recovered from Ste Marie I (Kidd 1949:130), specific designations are not possible for the examples recovered from the Le Caron site. However, based on size, shape, and material, the best suited interpretations for these discs are presented below.

One circular piece made of thick copper was likely a coin employed as a trade item, or casting counter used for exchange for goods at a later date (Cotter 1958:191; JR 35:99). One plain brass disc with a central protrusion is likely a button or cuff link, or a baling seal with a small hook on top (see Camp 1975:48; Maxwell and Binford 1961:89). Plain brass buttons were popular for ornamentation on clothing, strung with beads, and sometimes recovered from burial contexts (Bradley 1987a:135-136; Cleland 1971:23, 25-26; Quimby 1966:77-79; Woodward 1965:24-26, 31-33).

Finally, one heavy circular lead fragment, and one flat brass piece annexed with one broken band are characteristic of baling seals used to attach bundles of cloth or blankets. These items were usually ripped off and thrown away by

Europeans, but may have held a different meaning for Natives (Cotter 1958:191; Maxwell and Binford 1961:89; Petersen 1964:42-43, 62-65; Quimby 1942:549, 1966:75-76).

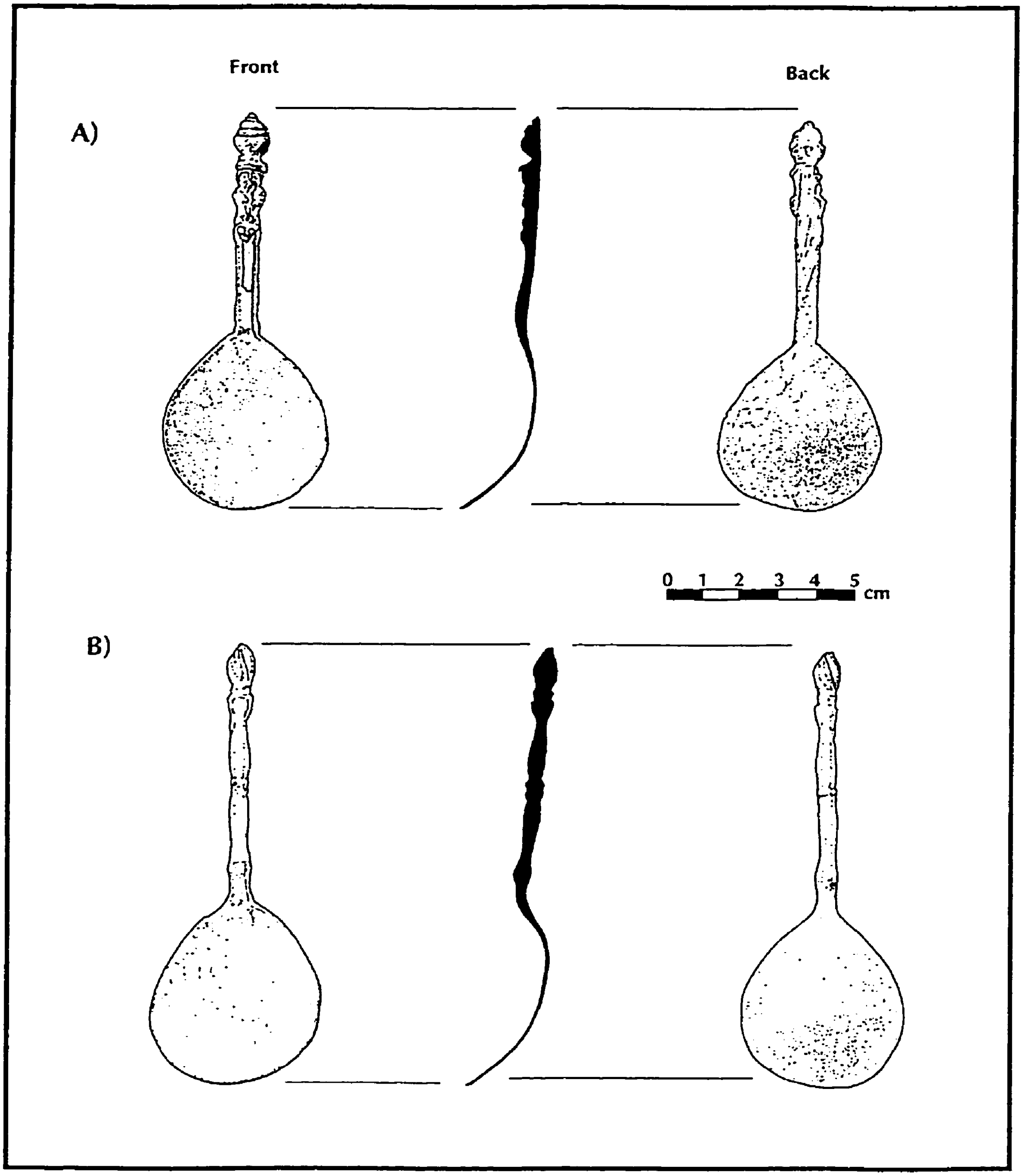
Latten Spoons

Two latten spoons recovered from Le Caron were initially recorded by Kidd (1972:34, 53-54, 231-232). Latten is the term for sheet brass imported to England from Germany and the Netherlands prior to 1650. With a material composition of over 70% copper, over 20% zinc, and less than 3% iron, specialists manufactured spoons with the hammering technique (Price 1908:11, 16; Raymond 1952:242). Scratch tests of the spoons indicate they are made of brass, and small bowl depressions indicate they were also hammered (Figure A.12).

The stems and bowls of these spoons suggests an early manufacturing date. Virtually all English spoons from the 14th to late 17th centuries were comprised of hexagonal stems and finished with an end knop, with a broad curved fig-shaped bowl narrowing toward the stem. Spoon handles were flattened during the 17th century to a rectangular or oval shape, rather than having an hexagonal shape (Price 1908:7-9; Raymond 1952:243-244; Rupert 1929:4).

One spoon recovered from Le Caron displays a human figurine on the stem. The male figure bears no resemblance to Maiden Head spoons, and in the absence of an apostolic emblem, the figure is not classified as an apostle spoon (Price 1908:32; Rupert 1929:3-4, 11-20, 26-33). Since human figurines are

Figure A.12: Latten Spoons



A) Male Figure with Acorn Knop,
Hammered Bowl and Stem Back
B) Elongated Writhen Knopped Spoon, Hammered Bowl

always perched as knops on the end of spoons, the Le Caron example is unique in that the male carving is crowned with an acorn knop, providing two identifiable traits. Acorn knops are characteristic of the early 16th century, but may date as early as the 14th century (Price 1908:21-22). The second spoon has a writhen knop. Dated to the 16th century, the twisted knop is usually circular in form, but is sometimes elongated like this example (Price 1908:29-30).

Although rarely found on Northeastern sites, these spoons were produced in abundance during the 17th century and used as European domestic implements to be discarded when no longer functional (Price 1908:3, 13). This interpretation may explain the recovery of latten spoons from Jamestown, a 17th century English settlement (Cotter 1958:189). However, that seventeen latten spoons excavated from a 17th century Narragansett Native cemetery on Rhode Island (Robinson, Kelley, and Rubertone 1985:120-122) suggests spiritual importance was sometimes attributed to the spoons. They could have served as functional equivalents to wooden spoons for ceremonial feasts, or employed to serve the deceased on their journeys (Tooker 1967:73-74; Trigger 1976:85).

Fish Hooks

Of three wrought iron fish hooks from Le Caron at least one was found below the plough zone (Rexe 1972:H3). All resemble 17th century examples (see Kidd 1949:125-126).

Iron Harpoons

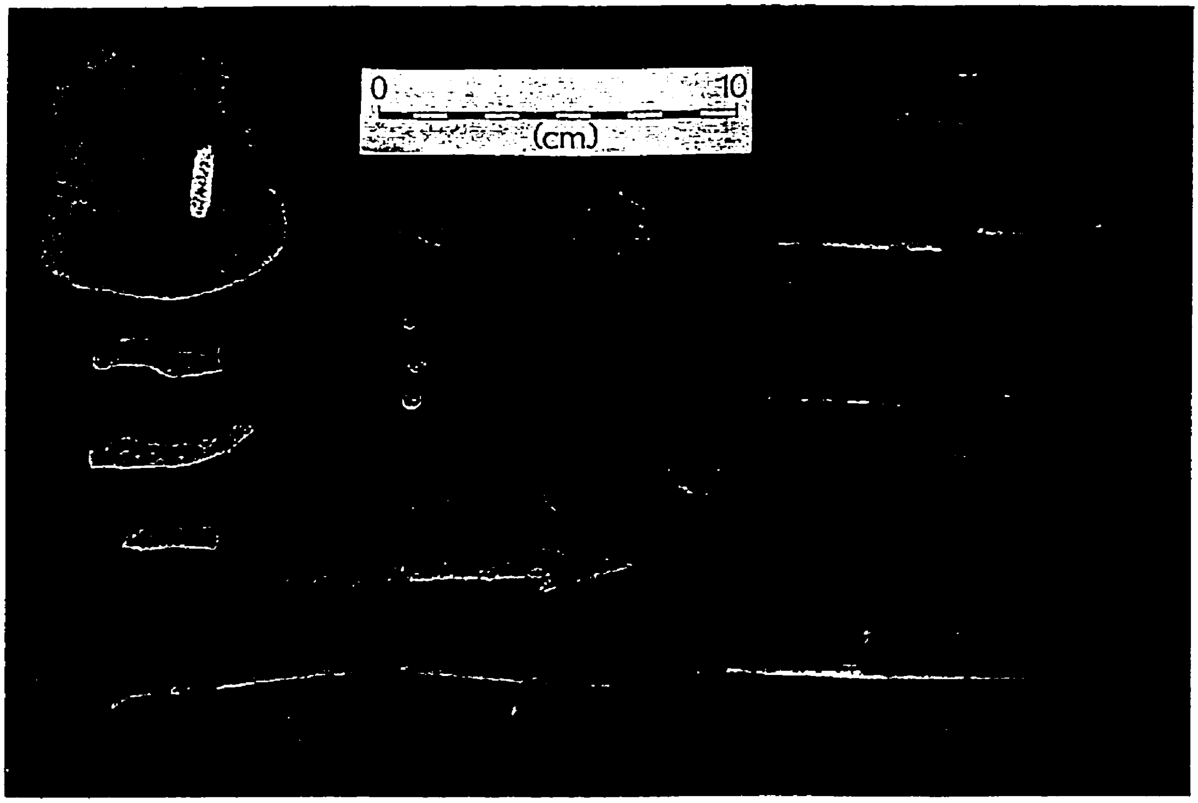
Two iron isosceles harpoons were recovered from Le Caron. Historical documentation indicates these barbed harpoons, and the lanceolate variant, were employed by both Natives and Europeans, and manufactured by Europeans for distribution in the fur trade. These barbed harpoons have been found on numerous sites throughout the Northeast including the Huron Warminster and Neutral Sealey, David Butter, and Lake Medad sites in Ontario; the 17th century Pemaquid camp in Maine; and the Ste Marie I Jesuit mission (Camp 1975:43; Fitzgerald 1990:428-431; Kidd 1949:126). One elongated variant excavated from Le Caron has no European equivalent and was likely manufactured locally (Figure A.13). Additionally, one barbed harpoon with a broken stem is folded close to the base for use as a point.

Two unilateral barbed bone harpoons were also recovered from the site. Together with a large perforated wooden net float (Rexe 1972:F15), netting needles, fishhooks, and a high frequency of fish bone (Muir 1990:94), they suggest that fishing was an important economic activity at Le Caron.

Nails

Thirty-three nail fragments are correlated to the 17th century based on classifications derived from Kidd (1949) and Nelson (1968), and include a variety of hand wrought nails, spikes, and tacks (see Kidd 1949:Plates XXX and XXXI). These items include eight building tacks with square bases and round heads; one

Figure A.13: Miscellaneous Lead and Iron Artifacts



Top to Bottom, Left to Right: Large Heated and Folded Lead Adze/Raw Material; Gun Pellet Lead Mould Strips; Three Unseparated and Separated Lead Gun Pellets; Iron Harpoon Head Folded at Stem; Stemmed Triangular Harpoon; Miscellaneous Iron Harpoon Fragment of Pioneer Origin; Square Head Nails; Iron Awls; One Worked Iron Rod, Folded and Bent Centrally to Function as Awl; Triangular Iron Fragment; Broken Iron Sword Blade.

T-shaped nail; and two complete and twenty-two fragmentary nails with square bases and/or heads. However, the correlation of these items to the 17th century is not absolute given that hand wrought specimens of virtually identical design continued to be made well into the nineteenth century.

Iron Spikes

Large and heavy wrought nails, or spikes of at least 20 centimetres in length date as early as the 16th century. Iron spikes are sometimes tapered for perforating tasks (Bradley 1987a:78; Kidd 1949:93). However, there are no signs of modification to the four specimens in the Le Caron collection.

European Ammunition

Evidence for the use of firearms at Le Caron includes one gun frizzen spring, four lead shot, two musket mould strips with pellets removed, three pellets connected in a triangular fashion with two intersecting spigot arms, two fused balls connected by a ridge that encircles the circumference of the balls as a result of the moulding process, and two fragments of irregular molten lead sprue (see Figure A.13). Additionally, one large piece of lead which was heated and folded on one side may have acted as a ladle for pouring lead shot since lead melts at temperatures too high for use of wooden moulds (Butcher and Johnston 1974:52; Rexe 1972:H1-H2).

The only gun part recovered from Le Caron is a frizzen, or French style flintlock gun part. This gun was designed in A.D. 1610, became popular in 1630 Paris, and would not have been available in the New World until the 1640s at the earliest (Given 1994:29, 38, 49-56). By the mid-17th century flintlocks were the most desirable weapon since the matchlock was so slow. However, the matchlock was available in Huronia prior to this period (Given 1994:35, 46, 63).

Subsequent to 1629, guns were available in limited quantities to the Huron and Algonkians from the brief English occupation, however subsequent to the French regaining control, limited quantities were available to Christian converts, while the Dutch continued to ban their distribution to Native groups. The increased reliance of guns by Natives took off after the mid-17th century, and into the 18th and early 19th centuries (Given 1994:56-61; Trigger 1976:629-630; Worcester and Schilz 1984:105-113).

Guns as Superior Weapons

Of all European artifacts available in the 17th century Northeast, the gun was a novel item with no traditional counterpart. However, the perception of guns as thunder tubes which created thunder and lightening effects transcends the European notion that they became functional replacements for arrowheads. By 1633, the Huron still requested the shooting of the Thunderbird from the skies, indicating little association of guns as functional weapons (Axtell 1988:131; Given 1994:52, 62; Trigger 1976:629).

Given (1994) argues convincingly that Native dependence on firearms prior to the mid-17th century is a myth. Since the number of guns was minimal, it is unlikely they replaced the traditional bow and arrow during the 17th century. Rather, it is thought that they acted as a celestial item, or as an addition to armour. Furthermore, the traditional bow may be viewed as a superior weapon to the gun, which explains the predominance of lithic points throughout the 17th century. More lithic arrow points could be shot in the time required to shoot a second round from a gun; they sometimes pierced armour and could be aimed at unprotected areas; they were more accurate, easy to repair, and were available in numbers (Given 1994:34-36, 107-112).

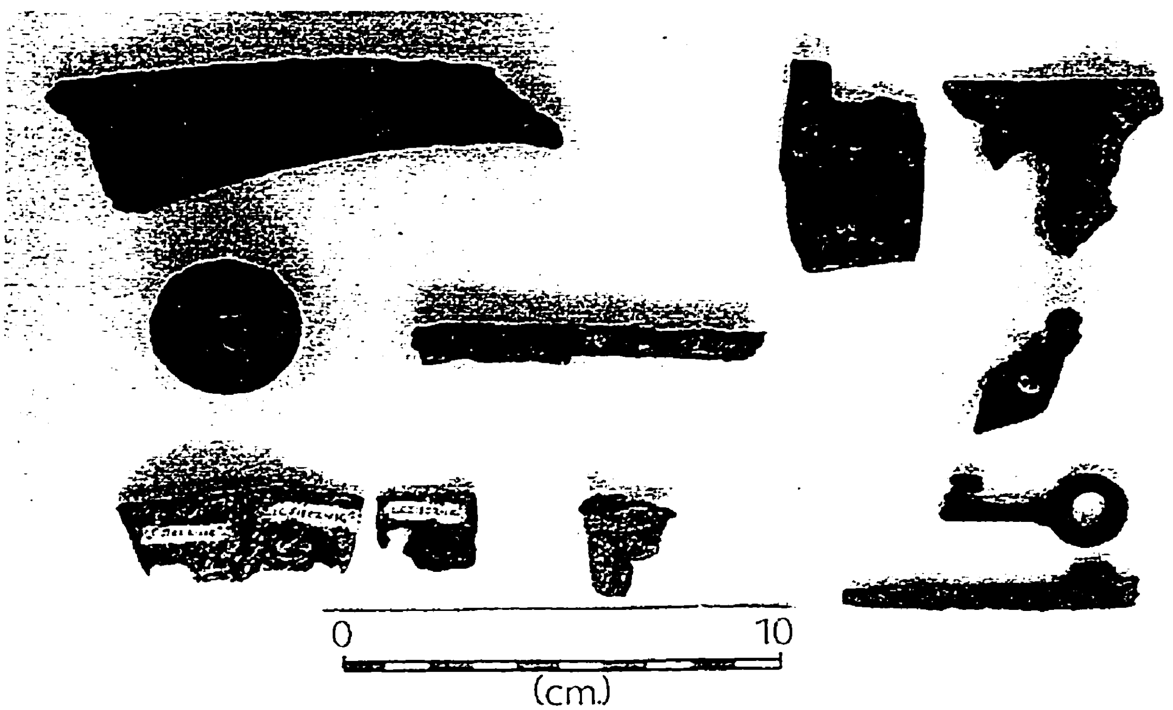
Miscellaneous Identifiable Metal

The miscellaneous artifacts category includes thirty-one iron items with identifiable functions: furniture or kettle hinge fragments, a large iron hook, metal wedge or tomahawk fragment, broken sword blade, cotter pin, large cylindrical iron weight, an iron bell, a large iron latch, two corroded keys, one hook and eye, etc. (Figure A.14). Artifacts which cannot be segregated definitely through published accounts to the 17th century are included in the study. That is, all artifacts from Le Caron known to be present in the Northeast during the 17th century are included in final counts to maximize, rather than minimize the extent of European influence at that site.

Miscellaneous Metal

The collection consists of fifty-six unidentifiable iron fragments of corroded and bent iron, thin wire fragments, and broken thin iron rods. The majority of these items are unidentifiable and unworked. However, several reworked fragments described below suggests they could have served as raw material, and therefore are included in total counts.

Figure A.14: Iron and White Metal European Manufactured Artifacts



Top to Bottom, Left to Right: Iron Wedge or Tomahawk Fragment; Two Iron Furniture Hinges; Iron Bell; Iron Rod Wrapped in Rolled Brass; Decorative Iron Furniture Latch; Three Connecting White Metal Fragments; Unidentified Rolled White Metal; Two Key Fragments.

Worked Miscellaneous Metal

Five modified metal fragments were worked into prosaic forms. Two possible bail fragments are worked: one with a pointed tip, the second into an elongated awl. One thicker iron rod is also shaped into an awl - bent centrally, and pointed on both ends, it is a larger replica of imported European awls. One thin iron rod is thinned to a flattened tip, mimicking traditional antler pressure flakers (see Houghton 1922:Plate VIIA). Finally, one pointed nail fragment is curled into the shape of hafted beaver incisors - which traditionally acted as chisels or awls.

ITEMS RELATED TO MISSIONARY PRESENCE

Missionaries and Jesuit Priests visited and stayed at various Huron settlements during the 17th century in an effort to spread Christianity. However, historical accounts can seldom be convincingly correlated with specific archaeological sites. Based on the size and location of Le Caron, it is likely Jesuit Priests made direct contact with the Huron at this site. Six artifacts which may be correlated to the presence of Jesuits include three rings, one bell, and two clothing attachments.

European Religious and Signet Rings

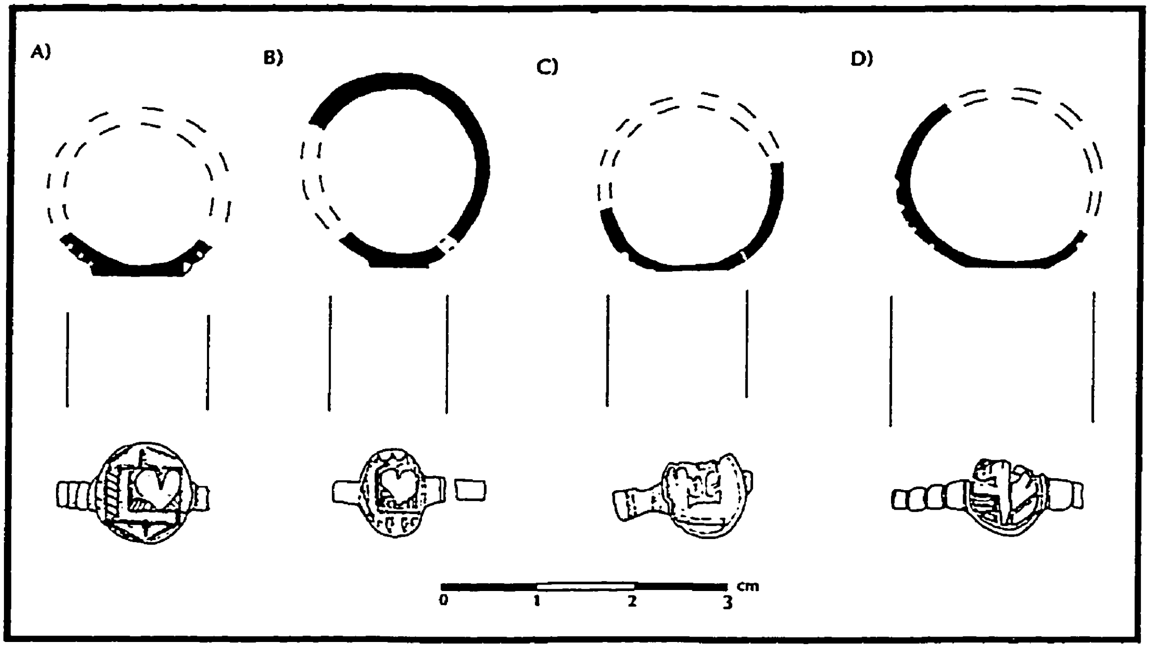
Jesuits often distributed rings to increase interest in Christianity, and the wide circulation of rings is often connected with French missions in Canada during the fur trade period (Cleland 1972:202; Thomas 1973:56; Wood 1974:83). Both L-Heart, and IHS rings were the most common varieties distributed in the

Northeast during the 17th century (Wood 1974:103), and account for three of four European manufactured ring types recovered from Le Caron (Figure A.15).

Two L-Heart ring faces with fragmented bands were recovered. While these designs are often assigned religious significance because of their distribution by Jesuit priests (Cleland 1972:203; Mason 1976:115), L-Heart designs also have secular significance with the 'L' and heart emblems understood as love for the French King Louis, rather than for the "Sacred Heart of Jesus" (Wood 1974: 93-94).

The third ring, when positioned on its side, is akin to the 'IHS' abbreviation sometimes employed to represent the Latin Isus Hominis Salvator, or "Jesus Savior of Mankind". However, like its L-Heart counterpart, secular interpretations are also credible (Cleland 1972:205; Wood 1974:86). Placed in alignment with the ring band, the inscription reads as an underlined 'I' and is more appropriately linked to style drift modifications to either an IHS or L-Heart rings (Cleland 1972:203-206), or initialled signet rings with no religious significance (Cleland 1972:202-203; Petersen 1964:60; Wood 1974:91-92). Finally, a fourth ring exhibits an unidentifiable design, and is likely an abstract ring. The indecipherable pattern was created by the original manufacturer, or through style drift modifications (Cleland 1972:209-210; Wood 1974:94-95). The four brass rings have raised cast designs, placing their date of manufacture prior to 1700 (Cleland 1972:207).

Figure A.15: Jesuit Rings and Band Fragments



A and B) Brass L-Heart Rings
C) IHS Style Drift Ring, or Signet Ring
D) Brass Ring with Unidentifiable Abstract Design

While both secular and sacred interpretations for European emblems are identified for these rings, the original intension is unclear. Furthermore, the significance of celestial emblems need not be religious, but strictly ornamental (Kunz 1945:249), and while Iroquoian interpretations undoubtedly varied from European versions, the religious significance of these emblems in Huronia is even less viable - particularly in light of context where profane interpretations ensue when removed from religious contexts, which inevitably leads to physical manifestations of style drift (Cleland 1972:202; Mason 1976:118).

The low frequency of religious items recovered from Southern Ontario Iroquoian sites where there is direct Jesuit interaction (Fitzgerald, Knight and Lennox 1994:9, 17-18), is contrasted by a higher frequency of celestial emblems modified into traditional designs (e.g., Bradley 1987a:137, 177), or style drift patterns unrelated to the original emblem (Cleland 1972:202, 209-210; Mason 1976:115-119; Thomas 1973:56) south of the Border. Since interpretations of objects vary and change as they move among polities, and Christian symbols increase in areas segregated from Christian theology, the rings were likely incorporated into societies that could attribute traditional meanings to them.

Iron Bell

One iron bell recovered along the southern interior wall of Longhouse 1 has two pieces welded together along the middle body. This artifact is atypical of the majority of copper or sheet metal sleigh and hawk bells recovered in the Northeast, and is believed to be Dutch in origin (e.g., Binford and Maxwell

1961:90; Bradley 1987a:134-135; Cleland 1971:23, 27; Fitzgerald 1990:519; Hume 1970:58-59; Petersen 1964:46; Ritchie 1954:34). Bells are never recovered in high frequencies, and occur mainly on GBP3 sites in the Northeast, although they may date as early as GBP1 (Bradley 1987a:135; Fitzgerald 1990:521; Fitzgerald et al. 1993:48).

The bell recovered from Le Caron is constructed from iron, has no protrusion for a handle, and resembles two iron bells recovered from Ste Marie I initially correlated with religious functions. These small semi-globular bells are small compared with hawk bells, have clapper attachments at the apex of the inside, and were used in mass celebrations by Europeans (Kidd 1949:127, 144). However, they were used as ornamentation by Natives (Bradley 1987a:134-135).

Hook and Eye

One hook and eye from Le Caron is similar to the cloth hooks recovered at Ste Marie I (Kidd 1949: Plate XLVII). Since the cassock was the classic apparel of 17th century French Jesuits, with inside hooks or a pin to secure the garment (Folkes and Penny 1988:25-26), this artifact may be correlated with Jesuit presence. Alternatively, it may be from secular European clothing.

Wire Fragments

Eleven small thin wire fragments were recovered within the ploughed region of the site. Six of these are described as pioneer or modern (Butcher and Johnston 1974:53, 1977:48), while the antiquity of three others was questioned, but not dismissed during excavations (Rexe 1972:H3). All wire fragments are straight or slightly bent, but display no signs of deliberate working as with ornamental bracelet forms recovered from other sites (e.g., Cleland 1971:18; Ritchie 1954:32). These wire scrap fragments are similar to four specimens recovered from Ste Marie I, and may have been drawn wire from the cloth cloaks of priests (Kidd 1949:126).

Appendix B: Traditional Artifacts Recovered From Le Caron

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TRADITIONAL ARTIFACTS

Adze

Three ground stone adzes were recovered from the Le Caron site: one from the interior of Longhouse 1, and one from each of the West and Northeast Middens. Two dark green adzes are ground from chlorite schist frequently used in Huronia (Trigger 1976:44), while one black adze, similar to those of the Lalonde Site, is ground from basalt - a traditional stone for adze production which extends into antiquity (Ridley 1971). These artifacts indicate continuity of ground stone tool use, and woodworking.

Anvil

Three large round flattened rocks in the Le Caron collection, display the same characteristics as the anvil recovered from the Dawson site (Pendergast 1972:262-263). Each of these three stones recovered from the Central Midden, outside Longhouse 1, and within the walls of Longhouse 4, indicate the anvil technique for tool manufacture (see Crabtree 1982:14) was still employed at Le Caron at the time of site abandonment.

Awls

Six bone awls, tapered and sharpened at one end, acted as sewing implements for bark and skins. Additionally, two cut beaver incisors recovered from the West Midden functioned either as awls (see Houghton 1922:Plate III), or chisels for woodworking (Muir 1990:87; Quimby 1966:39; Rexe 1972:F9).

Native Beads

Of two hundred and seven traditional beads recovered from Le Caron, the majority are made of shell, followed by bone, red siltstone, and grey slate respectively. Additionally, two catlinite, one doughnut shaped sandstone bead, one ceramic, and one drilled human tooth are classified as 'other' beads (Table B.1).

Of ninety-four shell beads, seventy-one (75.53%) are constructed from white wampum, while twenty-three (24.47%) derive from the more highly valued purple or black wampum obtained along the Atlantic Coast (Ceci 1989:63; Armour 1977:16). Shell beads and other artifacts of 'darkness,' blackness, or any dark colour are correlated with inherent properties of charcoal, particular stones and shells, night, certain berries and fruits, and specific animal species. These colours signify inferior and asocial states, and absence of purposiveness of mind, knowledge, and Greatest Being, as in death and mourning; with death and 'antisocial direction' affiliated with westness, leftness, and clockwiseness (Hamell 1983:7).

Fresh water, or mollusc shell was available locally, however, the majority of beads are constructed from imported sea shell (Vastokas 1970:33). Wampum was utilized for ceremonial purposes as a symbol of dedication or sincerity to personal and political agreements. Treaty negotiations between nations were often bound with the exchange of wampum belts of both white and dark-blue wampum beads (Speck 1955:85-86).

Table B.1: Traditional Bead Materials and Frequencies

MATERIAL	NUMBER	PERCENT
White Wampum	71	34.30%
Bone Beads	56	27.05%
Red Siltstone	45	21.74%
Black Wampum	23	11.11%
Grey Slate	7	3.38%
Other	5	2.42%
TOTAL	207	**100.00%**

Red siltstone beads become popular on Petun, Huron, and Neutral sites after 1620. The beads recovered from Le Caron were likely acquired in completed form through trade with the Petun. Two catlinite beads recovered from the site are distinguished from siltstone beads by their streaked red colour striations (Fox 1980:88, 91-93).

Like other artifact classes, the majority of Native beads (86.96%) were recovered from the midden areas (Table B.2), and just seven beads were scattered among longhouses in no discernable pattern (Table B.3).

Boiling Stones

Boiling stones are classified as large flat round cobbles with charring or colour modification as a result of heating. Of eleven boiling stones recovered from Le Caron, seven were recovered from middens, with two recovered from

Table B.2: Distribution and Frequency of Native Beads

LOCATIONS	TOTALS	PERCENT
Longhouses	7	3.38%
Middens	180	86.96%
E & SW Palisades	4	1.93%
Misc. Test Units/Trenches	9	4.35%
No Context	7	3.38%
TOTALS	207	**100.00%**

Table B.3: Distribution of Native Beads Among Longhouses

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	3	0	1	4	**57.14%**
Longhouse 2	0	1	0	1	**14.29%**
Longhouse 3	0	0	0	0	**0.00%**
Longhouse 4	1	0	0	1	**14.29%**
Longhouse 5	1	0	0	1	**14.29%**
TOTAL	5	1	1	7	**100.01%**

miscellaneous units, and the East/West Palisades. No boiling stones are related to the living areas associated with the Longhouses.

Here, the low frequency of stones is a reflection of artifact disposal during archaeological excavations. As with many archaeological excavations, limited storage space and lack of interpretive value prohibits the recovery of heated rocks beyond feature summaries and the odd collected sample. Accordingly, the original catalogue indicates six fire cracked rocks are catalogued in the collection. Undoubtedly, this low percentage is not representative of the high frequency of hearths excavated at the site (see Johnston and Jackson 1980:186-195).

Bone

Muir (1990) examined the Le Caron faunal collection and concluded that 18,678 bone fragments represent 164 mammal, fish, bird, reptile, and invertebrates (Muir 1990:58-62). Midden remains make up more than 70% of the Le Caron faunal collection (Muir 1990:54), as only 691 specimens, or 4.6% of NISP, were recovered from within longhouses (Muir 1990:112). From this study, Muir (1990) concluded hunting and fishing supplemented traditional horticultural practices, and proposed important conclusions about ceremonial animal sacrifice conducted on site.

While Muir (1990) classified worked bone as cut or polished, cuts made for food procurement were not segregated from bone tools and ornaments. Therefore, a cursory examination of the faunal collection was conducted to tabulate frequencies of modified ornamental and prosaic bone artifacts. These are addressed below as modified and worked bone classifications.

Modified Bone and Antler

The modified bone and antler category includes incomplete ornamental or prosaic tools that were ground, polished, cut, perforated, or shaped to perform an undesignated artifact functions. To ensure modification extends beyond simple cut marks produced through food procurement, only broken or near complete artifacts are included in this study. Examples include tips of awls, points, or needles - these are worked artifacts with no distinguishable artifact designation. Thirteen of thirty-eight fragments are uniform in shape and size, and classified as teeth from one comb (after Rexe 1972:F13). Also included in this category are polished, ground, and cut bone or antler with enough modification to permit designation as tool preforms.

Worked Bone

Four fragments of worked bone were recovered from the Le Caron site. This category includes completed prosaic tools. One unilateral barbed spear and one three barbed bone harpoon were excavated from the Northeast Midden.

Additionally, one antler flaker from the Central Midden, is a narrow, flat rectangular piece with a rounded tip typical of those from other sites (Murray 1971a:54, 56; Ritchie 1954:25). Finally, a completed form consisting of a set of small bone prongs/tweezers was also recovered from the Central midden. The function of this artifact is not known.

Ceramics

As a large number of Native ceramic fragments were recovered from the site, it was not feasible to extensively examine stylistic attributes or refit pieces to determine minimal vessel counts. However, Butcher and Johnston (1972-77) catalogued general pottery types based on categories devised by MacNeish (1952) and Emerson (1968). These ceramic types include: Huron Incised, Warminster Crossed, Sidey Notched, Black Neck, Dutch Hollow Notched, and seed pots.

Based on total counts derived from each of the eight field season summaries, 36,641 ceramic fragments are recorded for the Le Caron site. These frequencies include all castellations, plain and decorated body sherds, and rim, collar, neck, and shoulder sherds (Vastokas 1970:7-15; Rexe 1971:D1, 1972:D4; Butcher and Johnston 1973:35, 1974:25-30, 1975:4, 1976:8, 1977:28). The frequencies of recovered ceramic fragments from each field season are summarized in Table B.4.

Table B.4: Frequency of Native Ceramics

YEAR	NUMBER	REFERENCE
1970	4,500	Vastokas 1970:7-15
1971	14,613	Rexe 1971:D1
1972	12,254	Rexe 1972:D4
1973	876	Butcher and Johnston 1973:35
1974	1,724	Butcher and Johnston 1974:25-30
1975	744	Butcher and Johnston 1975:4
1976	929	Butcher and Johnston 1976:8
1977	1,001	Butcher and Johnston 1977:28
TOTAL	**36,641**	

A minimal count of 30 vessels is estimated for the site based on castellations and rims. The spatial distributions of Native ceramics are derived from estimations, and will undoubtedly change when the ceramics are examined more extensively. However, these general distribution patterns adequately address the needs of this study. Spatial distributions obtained from the original catalogue were established from approximations of bags of ceramics. The 5,996 ceramic records were correlated to spatial distributions. Then, each was multiplied by the closest denominator possible (n = 6.11) to correlate to actual ceramic counts (n = 36,641). This method prevented biasing ceramic counts in any one region of the site (Table B.5).

Table B.5: Estimated Native Ceramic Frequencies and Distributions

LOCATION	CATALOGUE FREQUENCIES	(x 6.11)	PERCENT
West Midden	609	3,720	10.15%
South Midden	162	989	2.70%
Southwest Midden	483	2,951	8.06%
Central Midden	2,618	15,996	43.67%
Northeast Midden	606	3,703	10.11%
Longhouses	1,013	6,189	16.89%
Palisade	431	2,633	7.19%
Misc. Test Units	27	165	0.45%
No Context	47	287	0.78%
TOTAL	5,996	36,633	100.00%

Cores

The thirty-nine Le Caron core fragments are indicators of flaked tool production. Cores in this study are identified by the presence of at least two flake scars. Of thirty-nine cores, twenty-three (58.97%) are associated with middens, and seven (17.95%) affiliated with Longhouse 1 - five in the walls, and two in the interior (Table B.6). All but five cores are of chert. Five quartz cores were recovered from the South Midden, Central Midden, Eastern Palisade, one miscellaneous unit, and the Northeast Midden.

Table B.6: Frequency and Distribution of Cores Among Longhouses

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	2	5	0	7	100.00%
Longhouse 2	0	0	0	0	0.00%
Longhouse 3	0	0	0	0	0.00%
Longhouse 4	0	0	0	0	0.00%
Longhouse 5	0	0	0	0	0.00%
TOTAL	2	5	0	7	100.00%
PERCENT	28.57%	71.43%	0.00%	100.00%	

Debitage

Sixty-one fragments of debitage were recovered from the site. Fifty-one fragments (94.44%) are clustered outside Longhouse 3 in a skin processing or work activity area, which indicates traditional stone production was still employed during the 17th century. All lithic detritus are very small chert fragments - with the exception of one quartz piece recovered with the cluster of fifty other fragments outside of Longhouse 3 (Table B.7).

Additionally, three split cobble fragments recovered outside Longhouse 1 along the southern wall indicate the bipolar technique was employed with the aid of an anvil (see Crabtree 1972:53). The remaining detritus consists of seven fragments. One was recovered from the eastern palisade, and one miscellaneous unit. Five fragments clustered on the southern portion of the eastern palisade suggests this may also be a work activity area.

Table B.7: Distribution and Frequency of Debitage

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	0	0	3	3	5.56%
Longhouse 2	0	0	0	0	0.00%
Longhouse 3	0	0	51	51	94.44%
Longhouse 4	0	0	0	0	0.00%
Longhouse 5	0	0	0	0	0.00%
TOTAL	0	0	54	54	100.00%
PERCENT	0.00%	0.00%	100.00%	100.00%	

Effigies

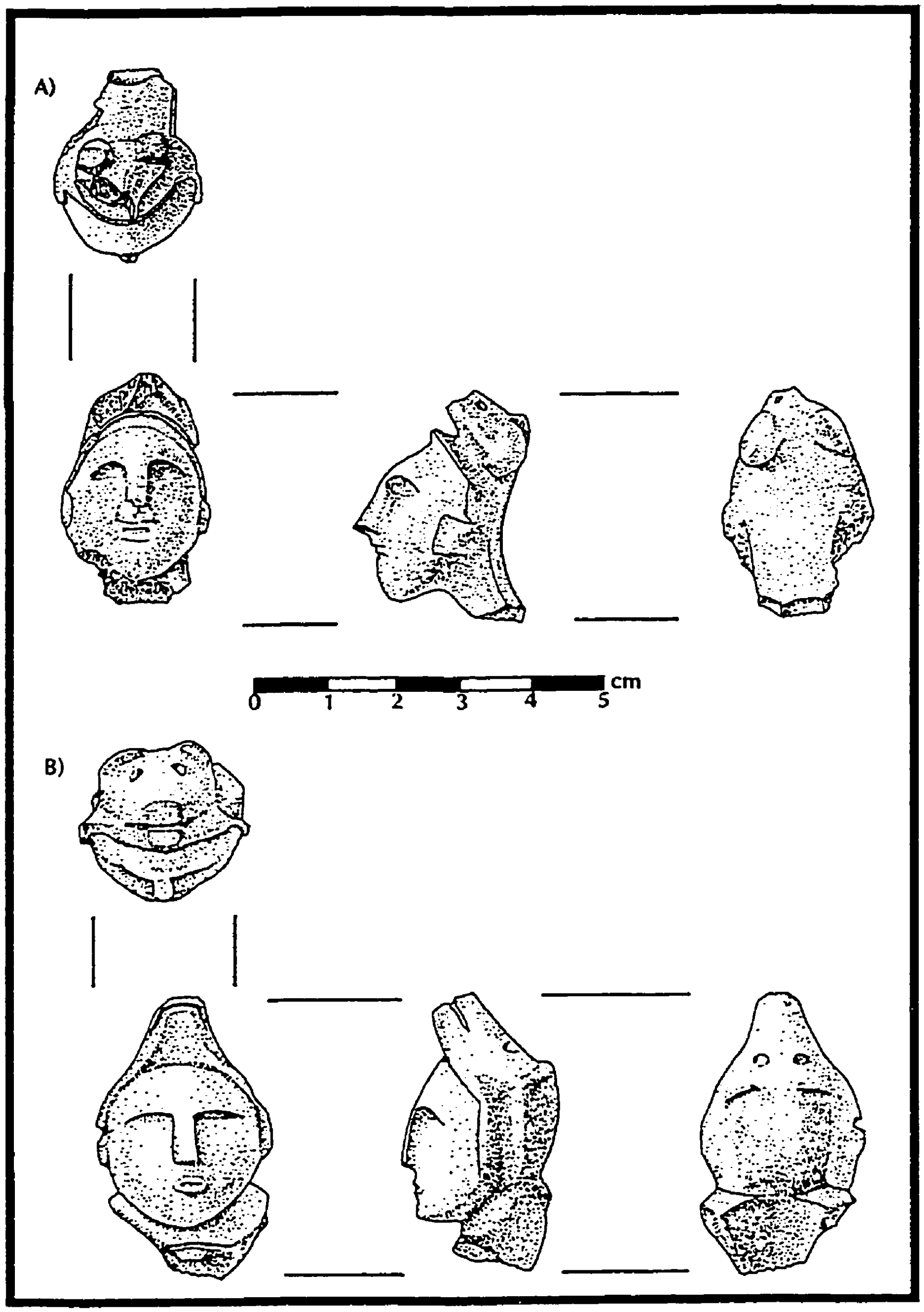
There are thirty-nine effigy fragments in the Le Caron collection. As the majority of bear, wolf, bird, human, and pinched faced figures are pipe adornments described elsewhere (see Doak 1993; Kearsley 1997), just seven effigies are described in detail here. These include: two figurines, one decorative fragment of antler, and four pipe figures not previously reported in detail. These artifacts indicate traditional spirituality from Southern Iroquoian populations are prevalent not only at the Le Caron site, but also on other Huron and Neutral sites in Southern Ontario.

One human effigy head with a bear, dog, or wolf skin cloak was recovered from Le Caron. Pipes with a human and animal head on opposite sides are associated with shamanism. Shamans often dressed in skins to achieve transformations which tie the relationship between human and spiritual transcendence (Mathews 1978:180-181).

The Le Caron artifact is similar to the head dress effigy recovered from Hunter's Tiny Township Site No. 17, or Vints settlement (Figure B.1), and the Thompson-Walker Site, or Medonte No. 46 in Huronia (Ridley 1967, 1969). While these examples provide tangible evidence for eclectic shamanistic practices in Huronia during the 17th century, numerous artifacts indicate the adoption of new motifs and practises was also widespread in this region.

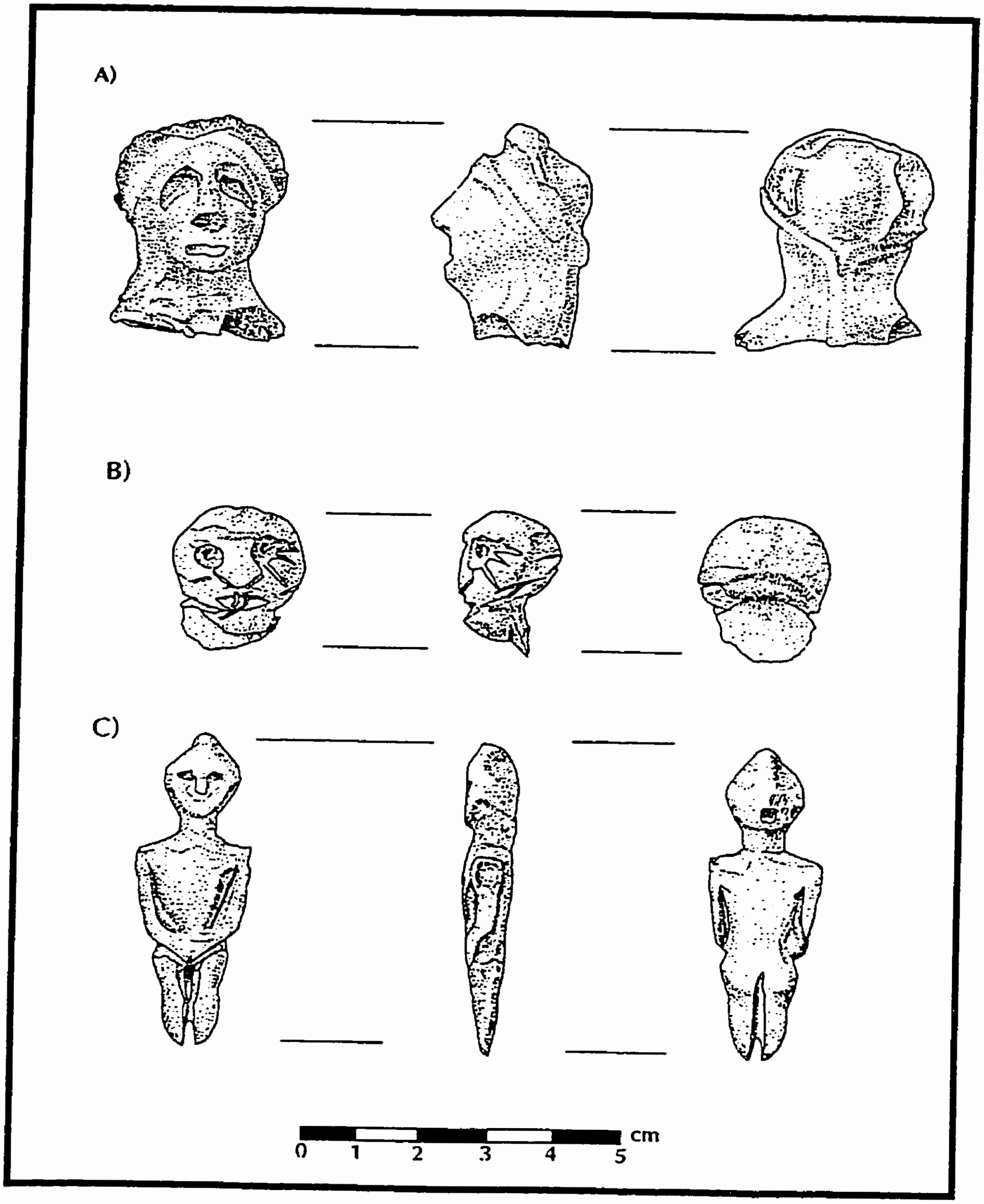
In addition to the headdress effigies, human figurines and lizard or salamander pipes date after ca. A.D. 1580 in Huronia. The 'Lizard Cult' developed in 16th century eastern Ohio and parts of Pennsylvania and West Virginia. Several of these extravagant artifacts are found on Petun sites, but the majority are recovered from Neutral sites and represent ideology and items of wealth and social status (Jamieson 1992a, 1996; Quimby 1966:107). Snake and lizard effigies recovered from the Thompson-Walker Site, Vints, Angoutenc, William Edward's Site, and Hunter's Tay Township Site No. 18 and No. 31 (Ridley 1966, 1967, 1968, 1969) suggest Lizard Cult motifs were also adopted in Huronia. One quartzite human head effigy with a probable weeping eye motif near the left eye was recovered from Le Caron (Figure B.2). This effigy indicates syncretized southern ideational beliefs were also introduced and incorporated at this particular site.

Figure B.1: Pipe Effigy Fragments



A) Human Effigy with Bear/Wolf Headdress
Recovered from Le Caron
B) Similar Pipe Effigy Recovered from Vints
settlement, Hunter's Tiny Township Site
No. 17 (Ridley 1967)

Figure B.2: Various Human Effigies



A) Stone Human Head Pipe Effigy
B) Quartzite Human Effigy with
Probable Weeping-Eye Motif
C) Antler Female Figurine with Incomplete
Perforation on Head Posterior

One open mouthed human pipe effigy with downward slanted eyes and a distended facial expression was recovered from Le Caron. While the facial attributes are unique, distressed figure heads have been found elsewhere. For example, anxiety is reflected on the effigy from Vespra Township, Hunter's Site No. 24 (see Ridley 1966). These distressed expressions reflect not only the magnitude of stressors endured by the people who occupied Huronia during 17th century, but their function as pipe adornments suggests they also held symbolic significance in traditional ceremonies similar to the pinch-faced pipes introduced as early as ca. A.D. 1500-1550. These latter pipes, associated with the trance state between human and spiritual worlds, likely represent a spiritual response to disease stressors in Huronia (Mathews 1978:189-190; Kearsley 1997).

One antler female figurine with an incomplete perforation on the posterior head was recovered from Le Caron. Antler and wood female (and sometimes male) figurines with hands clasped toward the genital area are recovered mainly from Seneca sites dating from A.D. 1575 to 1625. However, the earliest forms of these artifacts are recovered from Susquehanna sites and may originate from this group rather than the Seneca (see Houghton 1922: Plate VIIB; Mathews 1978:134-136, 317; Ritchie 1954:29).

Many figurines of this sort are typically recovered from child burials, and interpretations center mainly on their spiritual significance for use as charms or witchcraft. Human figurines may have been employed as magical charms to resist European disease, and may also represent dwarfs which according to mythical ethnographies had the power to cure certain illnesses. Such figurines are infrequently recovered on Ontario sites. However, several examples are associated with the Neutral (Mandzy 1994:142; Mathews 1978:136).

In addition to pipe effigies, several bear or wolf effigies were also recovered (Figure B.3). One broken antler fragment of an undiagnostic shape is carved with decoration. While the function and meaning of this artifact is lost, it is probable the decorations held spiritual significance like those on smoking pipes throughout Iroquoia (Mathews 1978:188).

Flakes

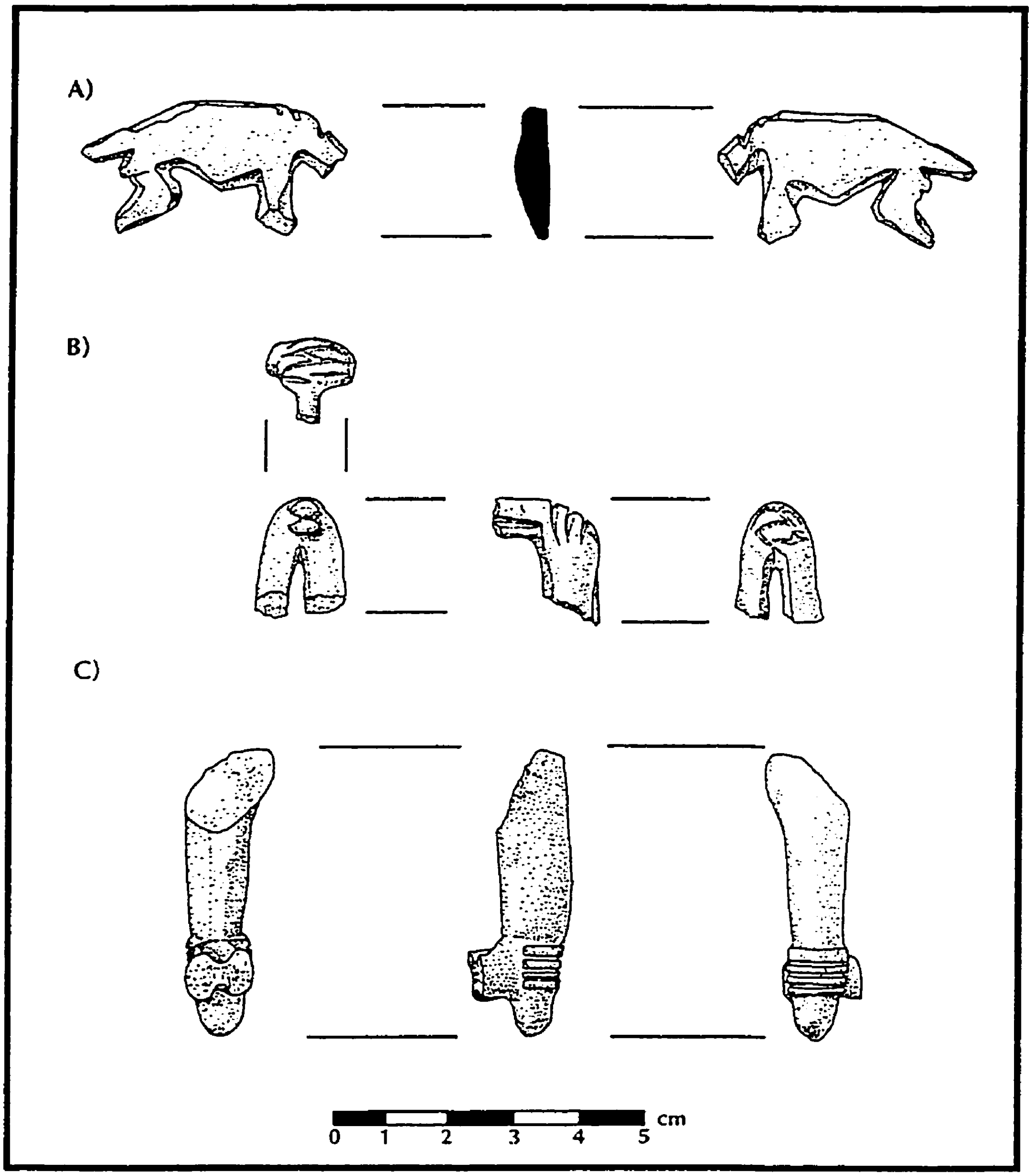
Of sixty-eight fragments, a minimum of fifty-eight flakes were recovered from Le Caron. Thirty-two (32%) are from middens and eight (13.79%) from Longhouses (Table B.8).

Over eighty percent of flakes are made of chert, and the remainder are quartz (Table B.9). Thirty percent of all flakes display evidence of utilization, with grooved striations on at least one edge. All flakes have a bulb of force and a platform (after Crabtree 1982:36), and are relatively large. These flakes were likely manufactured on site, and utilized as expedient tools. The low frequency of smaller chert flakes recovered from the site is believed a reflection of excavation procedures (Butcher and Johnston 1976:42).

Flora

A preliminary examination of floral remains from Le Caron suggests corn cobs and kernels, beans, squash, and tobacco dominate the collection (Johnston

Figure B.3: Various Bone and Antler Carvings



A). Bone Bear Effigy
B). Stone Bear or Wolf Head Effigy
C). Worked Antler - Undiagnostic Shape

Table B.8: Distribution and Frequency of Flakes Among Longhouses

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	3	3	0	6	85.71%
Longhouse 2	1	0	0	1	14.29%
Longhouse 3	0	0	0	0	0.00%
Longhouse 4	0	0	0	0	0.00%
Longhouse 5	0	0	0	0	0.00%
TOTAL	4	3	0	7	100.00%
PERCENT	57.14%	42.86%	0.00%	100.00%	

Table B.9 : Flake Types, Materials, and Frequencies

MATERIALS	FLAKES	UTILIZED FLAKES	TOTAL	PERCENT
Chert	39	17	56	82.35%
Quartz	8	4	12	17.65%
TOTAL	47	21	68	100.00%
PERCENT	69.12%	30.88%	100.00%	

and Jackson 1980), with plums, cherry stones, nuts, and strawberries also present (Rexe 1972:12). Based on the high frequency of these remains (estimated at over 15,000), horticulture was certainly a dominant subsistence strategy. However, an extensive examination of floral remains from the site is a project for future research.

Ground Stone (Prosaic)

Of twenty-eight ground stone tool fragments, twenty-two (78.57%) are associated with middens, and three (10.71%) with longhouses. All artifacts are broken tools or preforms, and include at least one ground edge. Three ground stone tools are associated with Longhouse 3: one tool fragment inside the longhouse, one pointed artifact along the northern exterior of the house, and one broken tool fragment on the southern exterior of the Longhouse. Since many artifacts were unfinished, ground stone tools were likely produced on site until the time of abandonment.

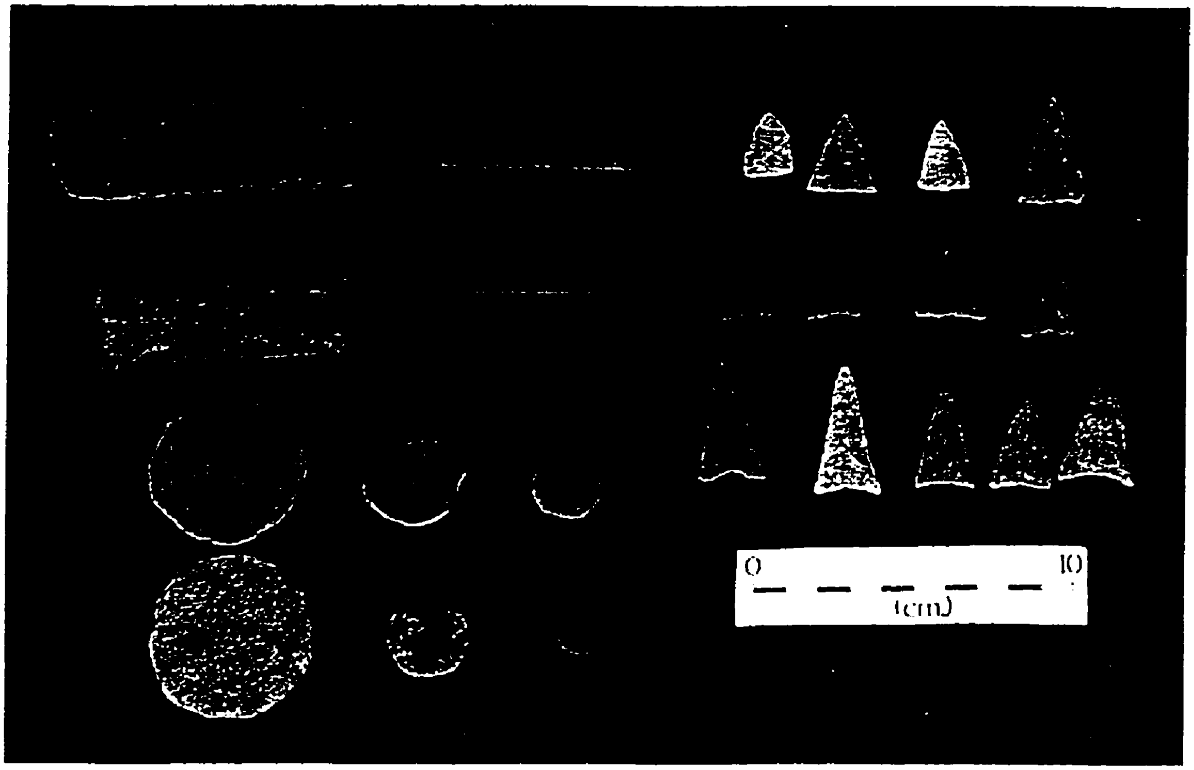
Ground Stone (Ornamental)

Nine ceremonial or ornamental artifacts constructed mainly from red siltstone were also recovered within the middens: five in the Central, two in the South, and one in each of the West and Southwest Middens. These artifacts include two ground pipe stem blanks - one with an etched design; one red siltstone triangular item is likely a ceremonial projectile point or pendant preform; and with the exception of one piece of mica with ground edges, the remaining artifacts consist of small worked siltstone or slate fragments. Due to their small size, ornamental purposes would have been the most likely outcome of production.

Gaming Discs

Sixty-seven complete stone and ceramic gaming discs of various sizes are in the collection (Figure B.4). Circular stones and ceramic fragments with no

Figure B.4: Stone and Ceramic Artifacts



A) Broken Rectangular Ground Stone Fragments; B) Ground Stone Adze; C) Ground Red Siltstone Pipe Stem Preform with Triangular Adornment D) Flaked Triangular Points; E) Ceramic and Stone Gaming Discs.

evidence of grinding or purposely worked round edges were eliminated from counts in the original catalogue. No broken and or incomplete gaming discs in the collection fit the criteria to be included in minimum number counts. Gaming stones are typically associated with recreational activities (Latta 1976).

Hammerstones

Artifacts are classified as hammerstones only if one or two ends are battered (after Latta 1976:374). Hammers are percussor tools used for striking an objective piece utilizing the bi-polar technique. Here, a cobble is placed on an anvil and hit with a hammerstone to create a bipolar core and numerous flakes. These flakes were often worked into triangular points (Crabtree 1982:16, 46; Quimby 1966:25). Prior to the arrival of Europeans, this technique was favoured over free-hand flaking, and while argued as a northern Algonquian influence (Trigger 1976:44), evidence for this technique is widespread throughout contiguous regions to the south of Ontario, even among Mississippian populations (S. Jamieson, pers. comm.).

Twenty-two hammerstones were recovered from Le Caron including nine (40.91%) from middens, and seven (31.82%) from the longhouse area. Two were from inside Longhouse 4, and one inside Longhouse 1. Additionally, one of three was associated with the walls of Longhouses 2, 4, and 5, and one outside Longhouse 3 (Table B.10).

Table B.10: Distribution and Frequency of Hammerstones Among Longhouses

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	1	0	0	1	14.29%
Longhouse 2	0	1	0	1	14.29%
Longhouse 3	0	0	1	1	14.29%
Longhouse 4	2	1	0	3	42.86%
Longhouse 5	0	1	0	1	14.29%
TOTAL	3	3	1	7	100.02%
PERCENT	42.86%	42.86%	14.29%	100.01%	

Netting Needles (Antler)

Of twenty-three netting needle fragments recovered from Le Caron, just three are complete. Based on the presence of a central perforation for each artifact, a minimum number of sixteen antler netting needles is recorded for the collection, and all were recovered from middens.

Although no bone fish hooks or net sinkers were recovered from the site, the high frequency of netting needles, fish bone, and one net float indicate fish nets were primarily employed for catching fish. Thus, the higher frequency of lithic hunting tools should not be misconstrued as evidence for an emphasis on hunting (see Ritchie 1954:26; Trigger 1976:41).

Ornamentation/Pendants

Six traditional pendants were recovered from Le Caron. Of three perforated shell pendants, two were obtained from the West midden, and one inside Longhouse 5. Two perforated animal phalanges recovered from the West Midden would have been worn around neck or carried in medicine bags. This artifact type which dates to the Early Woodland Period (Flanders 1977:3) demonstrates considerable antiquity in this region.

Finally, one four sided diamond shaped red siltstone perforated pendant was recovered from the Northeast midden. Siltstone is a banded slate-like variant of catlinite accessible to the Huron through the Petun (Fox 1980:89, 94). The colour and material likely held the same significance as catlinite, and parallels may be drawn with similar catlinite items recovered from the Lanasen burials which were shaped as triangular and trapezoidal decorative pendants (How 1971:44-46).

Pipes

A total of seven hundred and seventy-four pipe fragments were recovered from Le Caron (Doak 1993). Since the majority of effigy fragments derive from broken pipe fragments broken in ritual ceremony, a minimum number of thirty-five pipes is proposed for this site. This number derives from a total of thirty-nine effigy fragments, with only four unrelated to pipes (see Effigies). This number likely underestimates pipe frequencies as it eliminates both plain pipes and those adorned with simple decorative motifs.

Not one pipe of European manufacture was recovered from Le Caron. The lack of British pipes is likely a result of almost exclusive trade with the French. However, clay pipes of European manufacture were recovered in hundreds from forts and establishments, and several were recovered from villages, camps and burials in the Great Lakes region. These British clay pipes date to 1600, with makers marks dating from A.D. 1600-1640 and onward (Camp 1975:53-61; Quimby 1966:77-78).

If these items were in high demand, an influx of European pipes could have circulated as important trade items. However, pipes of European manufacture undoubtedly held different connotations to the Huron at Le Caron. Since the majority of traditional pipes are recovered from middens and many were broken in a ritual manner of sacrifice (see Doak 1993; Kearsley 1997), they were likely associated with traditional transcendence and ritual ceremonies.

Projectile Points (Traditional Antler, Bone, and Notched Lithic Points)

Traditional projectile points recovered from Le Caron are constructed from lithic, bone, and antler. The collection consists of eighty-four triangular lithic Madison Points described below, plus twelve points consisting of two chert side notched bifacial Lamoka points, one stemmed quartz point, five antler, and four bone points. The mixed assemblage comprised of both Madison and Lamoka points suggests that Le Caron, like most other large Ontario Iroquoian sites, was situated on top of an Archaic component.

Of twelve traditional points, there is no pattern to the spatial distributions. One bone, three antler, one quartz and lithic stemmed and notched points were recovered from the Central Midden. The second stemmed lithic point has no context. As well, two bone points were recovered from the South Midden, one bone and antler point from the Northeast midden, and one antler point was recovered from a miscellaneous test unit.

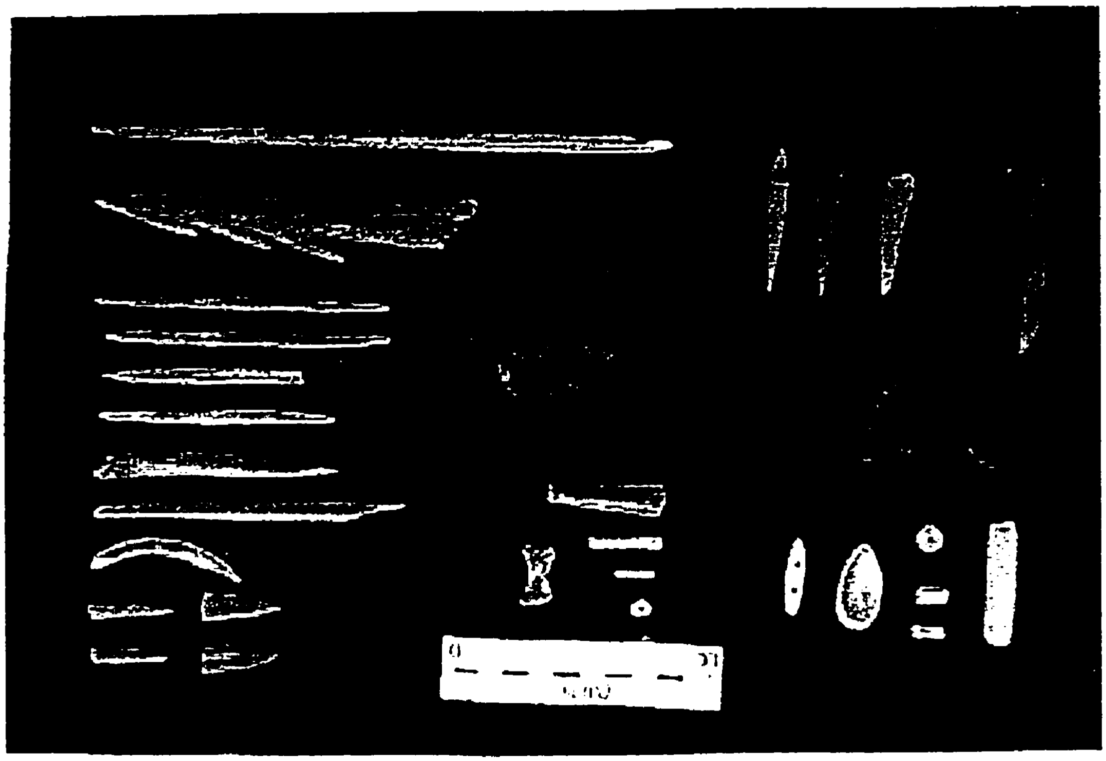
All three stemmed points are bifacially worked, and have basal thinning. Five antler conical points in the Le Caron collection are similar in shape and form to those recovered from the Factory Hollow (Houghton 1922:Plate VIIA), Lanasen (Murray 1971a:54), and Dutch Hollow sites (Ritchie 1954:22, 25). Additionally, two conical and two wide and flat pointed bone tips were recovered (Figure B.5). These artifacts are larger than netting needle points, and one pointed bone tip with a serrated edge is the remnant of a harpoon or an arrow head. All four are classified as the broken tips of bone projectile points.

Lithic Triangular Points

Of 84 lithic triangular points from Le Caron, seventy-one (84.52%) were recovered from middens, with seven (8.33%) from the longhouse area (Table B.11). Four were found inside Longhouse 1, one inside Longhouse 4, and one was associated either with the walls or area immediately outside of Longhouse 2.

Prior to European contact, lithic points and tools were flaked from Niagara Escarpment chert and local chert and quartz cobbles from glacial deposits (Trigger 1976:44). According to William Fox, who conducted a preliminary examination of lithic projectile points for the Le Caron site, the materials consist of Kettle Point, Gull River formation, Silurian, Collingwood, and local cherts. Additionally, two tool blanks and one Lamoka point were constructed from Delaware Chert (Rexe 1972:F1). Based on this information, Fox surmised the

Figure B.5: Traditional Artifacts



A) Unilaterally Worked Antler Harpoons; Polished Bone Netting Needles; Bone Awls; Hafted Beaver Incisor; Triangular Bone Points; B) Perforated and Charred Wooden Net Float; C) Ornamental Perforated Phalange and Bone Beads; D) Antler Conical Projectile Points; E) Red Siltstone Triangular Ornamental Preform and Oval Perforated Pendant; F) Worked Shell Pendants and Beads.

Table B.11: Distribution and Frequency of Lithic Triangular Points Among Longhouses

LONGHOUSE	INSIDE	WALLS	OUTSIDE	TOTAL	PERCENT
Longhouse 1	4	0	0	4	57.14%
Longhouse 2	0	1	1	2	28.57%
Longhouse 3	0	0	0	0	0.00%
Longhouse 4	1	0	0	1	14.29%
Longhouse 5	0	0	0	0	0.00%
TOTAL	5	1	1	7	100.00%
PERCENT	71.43%	14.29%	14.29%	100.01%	

majority of lithic materials were imported (Rexe 1972:B3). All points have basal thinning and are bifacial.

Lithic Scrapers

Only bifacially worked lithic fragments with classic scraper tips and bases are classified as scrapers in this study. As a result, numerous bifacially worked artifacts from the original catalogue were reclassified as flakes or worked stone.

Of twenty-four scrapers in the collection, sixteen (66.66%) were recovered from middens, and three from the longhouses: two inside Longhouse 1, and one outside Longhouse 2. Twenty-two scrapers are made from chert, and two quartz scrapers were recovered from the Central Midden. These artifacts are typically associated with the working of antler, bone, or wood, or scraping hides.

Perishable Prosaic Items

Several perishable organic artifacts recovered from the site substantiate that both wood and bark were worked and employed as prosaic items. All were recovered in the Central Midden. One burned circular wooden disc with a central perforated hole functioned as a net float, or as a pendant (see Woolworth and Birk 1975:85-86; Rexe 1972:F15). Additionally, bark baskets or bowls were also constructed. Three worked bark rims recovered from Le Caron have perforations for lashing wood to reinforce the edge. These three fragments represent a minimum of two individual containers.

Finally, one black braided textile fragment was recovered from the West Midden. At the time of excavations, it was assumed to have 17th century context (Butcher and Johnston 1974:61). Since historical documentation indicates wool blankets and small pieces of cloth were often traded (Axtell 1988:131, 171), and the 17th century Jesuit cassock was typically constructed of a black broadcloth or serge wool with a black wool cincture or cord to retain the inner wardrobe (Folkes and Penny 1988:26, 29-30), the specimen was sent to the Canadian Conservation Institute for analysis.

The sample was charred, and is unassociated with any form of European textiles. Instead, it is comprised of organic plant or root qualities (Gregory Young, pers. comm.). The woven structure exhibits coarse plaiting, and is likely a traditional twine weaved textile fragment employed to make a basket or bag. Similar specimens are rarely recovered from archaeological sites. However, several other examples in the Northeast are dated to the early 17th century (see Camp 1975:75-77; Kidd 1949:159-160; Quimby 1966:111). While the Huron were known to weave hemp, further analysis is required to determine the specific plant source for this specimen.

Worked Shell

Worked shell includes those unfinished shell fragments with two or more ground sides not classified as beads or pendants. Of thirty-three artifacts, two pieces are ground in completed isosceles triangular shapes, with six similar versions in unfinished form. Sixteen fragments have two worked edges with no definable shape, four are rectangular, three trapezoidal, one is a thin transparent round disc, and one is ground in a sharpened point off a rectangular body and resembles the brass and iron variants described previously (Appendix A, Figure A.12c). All pieces are unperforated, but their thin design and symbolic material suggests they were intended as ceremonial rather than prosaic artifacts. Of three worked shell fragments associated with Longhouses, all were recovered inside Longhouse 1 (Table B.12).

Unmodified Shell

The unmodified shell category consists of complete or fragmentary shell with one or no worked edges. Due to the fragmentary nature of unprocessed shell, which ranges in size from 3mm - 8.8cm, it was not possible to crossmend pieces for minimum counts. However, a frequency of twelve shells is estimated from near complete fragments.

Table B.12: Distribution and Frequency of Worked Shell Among Longhouses

LOCATIONS	TOTALS	PERCENT
Longhouses	3	9.10%
Middens	11	33.33%
E & SW Palisades	4	12.12%
Misc. Test Units/Trenches	6	18.18%
No Context	9	27.27%
TOTALS	**33**	**100.00%**

Of one hundred and ninety-two unworked shell fragments, seventy-nine (41.15%) were recovered from the middens and five from the area of the longhouses. Three are positioned inside Longhouse 1, and two within the walls of Longhouse 2.

Through oral narrative Hamell (1983, 1987) suggests marine shells were ecumenically associated with wealth and status, by mirroring social, physical, and spiritual well-being through life restoring properties, as exemplified in objects of white, bright, and light. Marine shell, which originated from the Atlantic coast and the Gulf of Mexico are recovered on sites throughout the Northeast, and beyond to Manitoba and Oklahoma. In southern Ontario, shell is sparse on Iroquoian sites through most of the Late Woodland, and increases only after ca. A.D. 1580 (Bradley 1987a:97-98; Kenyon and Fitzgerald 1986:6; Pendergast 1994:13-14).

On a regional scale, this mid-sixteenth century reinvigoration of exchange networks is evidenced through the large quantities of European goods and marine shell recirculating among Native groups and recovered predominately from mortuary contexts. Shell from New York and Pennsylvania Iroquoian sites is believed to have originated along the mid-Atlantic coast (especially the Chesapeake Bay area), and to have been transported inland and northward by Susquehannock, Wenro, and other intermediaries via a number of possible routes including the Potomac River to sites in the Upper Ohio Drainage, as well as the Susquehanna and Genesee Rivers (Bradley 1987:93; Kenyon and Fitzgerald 1986:6-7; Pendergast 1989:102; Sempowski 1994:1).

Worked Flaked Stone (Prosaic)

Worked stone includes those artifacts with evidence of deliberate modification but cannot be classified in specific categories due to their unfinished states. Only prosaic forms are included in this category which includes bifacially worked stone tool fragments.

The majority of artifacts in this category consist of chipped chert blanks, celts, preforms for scrapers, and bifacially thinned chert tool fragments. Additionally, there are three chipped flint fragments similar to 17th century gun flints, twelve quartz blanks, and two scraper preforms in this category.

Unworked Stone

Numerous stones recovered from Le Caron display no obvious evidence of modification, yet their spiritual value dates into antiquity. Fragments of quartz (2), red ochre (3), and graphite (4) are foreign commodities imported for their spiritual significance. All four graphite fragments were recovered from the

Northeast Midden and may represent one fragment; one quartz nodule was recovered from each of the South and Northeast Middens; and three red ochre fragments were scattered in the South and Central Middens, with the third fragment positioned on the interior east side of Longhouse 1.

Exotic stones were transported through extensive trading networks from prehistoric times to the 17th century in the Northeast (Bourque and Whitehead 1985:336; Fox 1980:94; Pendergast 1994:13-14). There is evidence for the movement of lithics between Lake Superior, Lake Michigan, Lake Huron, and Georgian Bay; Maritime cherts were transferred through Lake Michigan and Lake Huron; the occasional catlinite item entered Georgian Bay from the west through Lake Michigan; and Iroquoian points and Native copper moved north through Neutral and Odawa trade (Fox, Hancock, and Pavlish 1995:269-270; Jamieson 1984). The majority of beads and pendants recovered from Southern Ontario sites post A.D. 1620 were manufactured from Lorrain Formation red siltstone from Manitoulin Island and the northern shores of Georgian Bay (Fox 1980:94-97).

Whetstone

Whetstones are defined as abrasive stones with deep grooves across the flat surface (after Latta 1976:375). Many were made of flat sandstone cobbles and functioned as sharpeners for stone and metal tools (Ritchie 1954:21,24).

Of twenty-eight whetstones, sixteen (57.14%) were recovered from middens, with 3 (10.71%) recovered from the longhouse area: each was from the inside each of Longhouses 4 and 5, and one from outside Longhouse 2.

Appendix C: Spatial Distribution Tables of European and Traditional Artifacts

KEY TO TABLES
L.H. = Longhouses
Pal. = Palisade
Misc. = Miscellaneous Units
No C. = No Context
S-W = Southwest
N-E = Northeast

Artifact Number	
	Artifact Percent

Table C.1: Location and Frequency of Traditional Ornamental and Ceremonial Artifacts

ARTIFACT TYPE	L.H.	MIDDEN	PAL.	MISC. UNIT	NO C.	TOTAL
Native Beads	7 3.38%	180 86.96%	4 1.93%	9 4.35%	7 3.38%	207 100.00%
Unworked Shell	5 2.60%	79 41.15%	4 2.08%	7 3.65%	97 50.52%	192 100.00%
Worked Shell	3 9.10%	11 33.33%	4 12.12%	6 18.18%	9 27.27%	33 100.00%
Effigies	0 0.00%	35 89.74%	4 10.26%	0 0.00%	0 0.00%	39 100.00%
Pendants	1 16.66%	5 83.33%	0 0.00%	0 0.00%	0 0.00%	6 99.99%
Ground Stone Ornaments	0 0.00%	9 100.00%	0 0.00%	0 0.00%	0 0.00%	9 100.00%
Unworked Stone	1 11.11%	8 88.88%	0 0.00%	0 0.00%	0 0.00%	9 99.99%
TOTAL	17	327	16	22	113	495
PERCENT	3.43%	66.06%	3.23%	4.44%	22.83%	99.99%

Table C.2: Location and Frequency of Traditional Prosaic Artifacts

Traditional Prosaic Artifacts	L.H.	Midden	Pal.	Misc.	No C.	Total Artifacts
Pottery (Estimated #)	6189 16.89	27359 74.68	2633 7.19	165 0.45	287 0.79	36663 100.00%
Worked Stone (Flaked)	12 8.39	102 71.33	22 15.38	7 4.90	0 0.00	143 100.00%
Stone Points (Triangular)	7 8.33	71 84.52	2 2.38	3 3.57	1 1.19	84 99.99%
Debitage	54 88.52	0 0.00	6 9.84	1 1.64	0 0.00	61 100.00%
Flakes	7 10.29	41 60.29	14 20.59	6 8.82	0 0.00	68 99.99%
Cores	7 17.95	23 58.97	4 10.26	5 12.82	0 0.00	39 100.00%
Modified Bone	0 0.00	37 97.37	1 2.63	0 0.00	0 0.00	38 100.00%
Gaming Discs	11 16.42	51 76.12	3 4.48	2 2.99	0 0.00	67 100.01%
Ground Stone	3 10.71	22 78.57	2 7.14	0 0.00	1 3.57	28 99.99%
Whetstones	3 10.71	16 57.14	8 28.57	1 3.57	0 0.00	28 99.99%
Stone Scrapers	3 12.50	16 66.66	4 16.66	1 4.17	0 0.00	24 99.99%
Netting Needle	0 0.00	23 100.00	0 0.00	0 0.00	0 0.00	23 100.00%
Hammerstones	7 31.82	9 40.91	4 18.18	2 9.09	0 0.00	22 100.00%
Points (Antler/Bone/ Stemmed Chert	0 0.00	10 83.33	0 0.00	1 8.33	1 8.33	12 99.99%
Boiling Stone	0 0.00	7 63.64	2 18.18	2 18.18	0 0.00	11 100.00%
Bone Awls	0 0.00	8 100.00	0 0.00	0 0.00	0 0.00	8 100.00%

Traditional Prosaic Artifacts	L.H.	Midden	Pal.	Misc.	No C.	Total Artifacts
Misc. Worked Bone	0 0.00	4 100.00	0 0.00	0 0.00	0 0.00	4 100.00%
Stone Adze	1 33.33	2 66.66	0 0.00	0 0.00	0 0.00	3 99.99%
Stone Anvil	2 66.66	1 33.33	0 0.00	0 0.00	0 0.00	3 99.99%
Perishables	0 0.00	5 100.00	0 0.00	0 0.00	0 0.00	5 100.00%
TOTAL	6306	27807	2705	196	290	37304
PERCENT	16.90	74.54	7.25	0.53	0.78	100.00%

Table C.3: Location and Frequency of European Materials in Ornamental and Ceremonial Forms

Ornamental/ Ceremonial Artifacts		L.H.	Midden	Pal.	Misc.	No C.	Total Artifacts
Glass Beads	No.	30	368	23	20	6	447
	%	6.71	82.33	5.15	4.47	1.34	100.00%
Ammunition		4	8	0	0	0	12
		33.33	66.66	0.00	0.00	0.00	99.99%
Copper Alloy Tube Beads		1	9	1	0	0	11
		9.09	81.82	9.09	0.00	0.00	100.00%
Tinkling Cones		0	6	0	1	0	7
		0.00	85.71	0.00	14.29	0.00	100.00%
European Rings		0	4	0	0	0	4
		0.00	100.00	0.00	0.00	0.00	100.00%
Coins/Buttons/ Baling Seals		1	3	0	0	0	4
		25.00	75.00	0.00	0.00	0.00	100.00%
Copper Alloy Circular Discs		2	2	0	0	0	4
		50.00	50.00	0.00	0.00	0.00	100.00%
Latten Spoons		0	0	0	0	2	2
		0.00	0.00	0.00	0.00	100.00	100.00%
Copper Alloy Corregated Bracelets		0	1	0	1	0	2
		0.00	50.00	0.00	50.00	0.00	100.00%
Copper Alloy Rings		0	2	0	0	0	2
		0.00	100.00	0.00	0.00	0.00	100.00%
Copper Alloy Hair Tube		0	1	0	0	0	1
		0.00	100.00	0.00	0.00	0.00	100.00%
Brass Spiral		0	0	0	1	0	1
		0.00	0.00	0.00	100.00	0.00	100.00%
Iron Bell		1	0	0	0	0	1
		100.00	0.00	0.00	0.00	0.00	100.00%
Hook and Eye		0	1	0	0	0	1
		0.00	100.00	0.00	0.00	0.00	100.00
Copper Alloy Twisted Ornament		0	1	0	0	0	1
		0.00	100.00	0.00	0.00	0.00	100.00%
TOTAL		39	406	24	23	8	500
PERCENT		7.80	81.20	4.80	4.60	1.60	100.00%

Table C.4: Location and Frequency of European Materials Employed for Prosaic Purposes

ARTIFACT TYPE	L.H.	MIDDEN	PAL.	MISC.	NO C.	TOTAL
Kettle Scrap	95 26.76%	166 46.76%	43 12.11%	48 13.52%	3 0.85%	355 100.00%
Iron Knives	20 24.69%	42 51.85%	10 12.35%	3 3.70%	6 7.41%	81 100.00%
Misc. Metal	7 12.50%	37 66.07%	6 10.71%	4 7.14%	2 3.57%	56 99.99%
Nails	10 30.30%	19 57.58%	4 12.12%	0 0.00%	0 0.00%	33 100.00%
Misc. Metal (Identifiable)	8 27.59%	14 48.28%	4 13.79%	1 3.45%	2 6.90%	29 100.01%
European Ceramic	0 0.00%	25 100.00%	0 0.00%	0 0.00%	0 0.00%	25 100.00%
Iron Axes	11 50.00%	8 36.36%	2 9.09%	0 0.00%	1 4.55%	22 100.00%
European Glass	3 21.43%	8 57.14%	2 14.29%	1 7.14%	0 0.00%	14 100.00%
Copper Alloy Prosaic Items	1 7.69%	11 84.62%	1 7.69%	0 0.00%	0 0.00%	13 100.00%
Metal Awls	2 28.57%	5 71.43%	0 0.00%	0 0.00%	0 0.00%	7 100.00%
Misc. Worked Metal	0 0.00%	3 60.00%	2 40.00%	0 0.00%	0 0.00%	5 100.00%
Iron Spikes	0 0.00%	3 75.00%	1 25.00%	0 0.00%	0 0.00%	4 100.00%
Fish Hooks	0 0.00%	3 100.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Iron Harpoons	1 50.00%	1 50.00%	0 0.00%	0 0.00%	0 0.00%	2 100.00%
TOTAL	158	345	75	57	14	649
PERCENT	24.35%	53.16%	11.56%	8.78%	2.16%	100.01%

Table C.5: Midden Distribution of Traditional Artifacts

Prosaic Artifact Type	West	South	S-W	Central	N-E	Total Middens	Total Artifacts	Percent in Middens
Ceramic (Estimated #)	3720	989	2951	15996	3703	27359	36633	74.68%
Worked Stone (Flaked)	6	8	1	65	22	102	143	71.33%
Stone Points (Triangular)	16	2	3	31	19	71	84	84.52%
Gaming Discs	13	4	3	17	14	51	67	76.12%
Debitage	0	0	0	0	0	0	61	0.00%
Flakes	2	3	0	29	7	41	68	60.29%
Modified Bone	5	2	0	24	6	37	38	97.37%
Cores	2	2	0	15	4	23	39	58.97%
Ground Stone (Prosaic)	4	2	1	14	1	22	28	78.57%
Whetstones	3	1	1	9	2	16	28	57.14%
Stone Scraper	2	1	1	10	2	16	24	66.66%
Netting Needle	4	0	3	13	3	23	23	100.00%
Hammerstone	2	0	0	5	2	9	22	40.91%
Points (Antler/ Bone/Chert with Stem)	0	2	0	6	2	10	12	83.33%
Boiling Stone	1	2	1	3	0	7	11	63.64%
Bone/Antler Awls	4	0	1	3	0	8	8	100.00%
Perishables	1	0	0	4	0	5	5	100.00%
Miscellaneous Worked Bone	0	0	0	2	2	4	4	100.00%
Stone Adzes	1	0	0	0	1	2	3	66.66%
Stone Anvil	0	0	0	1	0	1	3	33.33%
TOTAL	3786	1018	2966	16247	3790	27807	37304	74.54%
PERCENT	13.62	3.66	10.67	58.43	13.63	100.01		

Table C.6: Midden Distribution of European Materials Employed for Ornamental/Ceremonial Purposes

	MIDDEN DISTRIBUTION					MIDDEN PERCENTAGE		
Ornamental/ Ceremonial Artifacts	**West**	**South**	**S-W**	**Central**	**N-E**	**Total Middens**	**Total Artifacts**	**Percent in Middens**
Glass Beads	27	5	16	251	69	368	447	82.33%
Ammunition	0	0	0	8	0	8	12	66.66%
Copper Alloy Tube Beads	0	2	0	6	1	9	11	81.82%
Tinkling Cones	0	2	1	3	0	6	7	85.71%
Copper Alloy Circular Discs	0	0	1	1	0	2	4	50.00%
European Coins/Buttons/ Baling Seals	1	0	0	2	0	3	4	75.00%
European Religious and Signet Rings	0	0	0	4	0	4	4	100.00%
Copper Alloy Rolled Brass Rings	1	0	0	0	1	2	2	100.00%
Copper Alloy Corregated Bracelets	0	0	0	0	1	1	2	50.00%
Copper Alloy Hair Tube	0	1	0	0	0	1	1	100.00%
Copper Alloy Twisted Ornament	0	0	0	1	0	1	1	100.00%
Hook and Eye	0	0	0	1	0	1	1	100.00%
TOTAL	29	10	18	277	72	406	496	81.85%
PERCENT	7.14	2.46	4.43	68.23	17.73	99.99%		

Table C.7: Midden Distribution of European Materials Employed for Prosaic Purposes

	MIDDEN DISTRIBUTION					MIDDEN PERCENTAGE		
Prosaic Artifact Type	**West**	**South**	**S-W**	**Central**	**N-E**	**Total Middens**	**Total Artifacts**	**Percent in Middens**
Kettle Scrap	19	5	24	72	46	166	355	46.76%
Iron Knives	8	4	2	23	5	42	81	51.85%
Miscellaneous Metal	7	3	3	21	3	37	56	66.07%
Iron Nails	0	2	0	11	6	19	33	57.58%
Miscellaneous Identifiables	1	2	4	5	2	14	29	48.28%
Ceramic	0	0	0	25	0	25	25	100.00%
Iron Axes	1	0	2	5	0	8	22	36.36%
Copper Alloy Prosaic Artifacts	0	1	0	7	3	11	13	84.62%
Iron Awls	1	0	2	2	0	5	7	71.43%
Worked Miscellaneous Metal	0	0	3	0	0	3	5	60.00%
Iron Stakes	1	0	0	2	0	3	4	75.00%
Fish Hooks	2	0	0	1	0	3	3	100.00%
Iron Harpoons	0	0	0	1	0	1	2	50.00%
TOTAL	**40**	**17**	**40**	**175**	**65**	**337**	**635**	**53.07%**
PERCENT	**11.87**	**5.04**	**11.87**	**51.93**	**19.29**	**100%**		