THE IMPACT OF MIGRATION ON COMMUNITY IDENTITY IN THE SEVENTEENTH CENTURY IN THE GREAT LAKES

By

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ABSTRACT

THE IMPACT OF MIGRATION ON COMMUNITY IDENTITY IN THE SEVENTEENTH CENTURY IN THE GREAT LAKES

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This dissertation uses archaeological and historical data to examine the impact that migration had on community identity among the Wendat communities that moved into the western Great Lakes during the second half of the seventeenth century. Research on contemporary displaced peoples has shown that migration and resettlement processes put severe stress on communities, which can lead to community identity transformation. One particularly unique case is that of a diaspora community, dispersed over several regions and maintaining a distinct emotional link to their homeland. In this research, an archaeological model for recognizing diaspora communities and distinguishing them from other forced migrant groups is developed. This model is rooted in theories of migration, ethnicity and identity and uses Rockman's model of colonization barriers as a basis for its creation. This model is applied to the migration of the Wendat people who collectively resettled from Southern Ontario into the western Great Lakes during the seventeenth century. Archaeological and historical data associated with five archaeological sites, two in Southern Ontario and three in the western Great Lakes, are analyzed. This data set allows for a diachronic analysis of the long-term impacts of migration, which is not often available to cultural anthropologists. Two main archaeological data sets are analyzed to understand resettlement practices and identity. First, symbolic materials are analyzed. Ceramics, pipes and carved faunal materials are all malleable objects on which individuals can create and modify semiotic systems to reflect their sense of identity. Changes in these materials diachronically and spatially are evaluated using a Brainerd Robinson coefficient

of similarity. Secondly, lithic resources at settlement sites are analyzed to determine knowledge of local resources and access to high quality materials as an indicator of social networks and local knowledge. These two datasets are then combined with the ethnohistoric data to evaluate the applicability of Safran's six characteristics of diasporic communities in the case of the western Wendat. I conclude that this community does indeed reflect a diasporic community. While data suggests that accommodation and integration into local networks in the resettlement area was practiced initially following dispersal, a reassertion of Wendat identity followed. This corresponds to a period of increased stability and reduced hostility from 1670-1701.

This work is dedicated to my family: Arlene, Jack, Devin and Brendan

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Spring Seminar on Contact Studies at the Newberry Library which I participated in, and found extremely helpful in problematizing the issue of culture contact archaeology. Finally, I must thank the CIC for facilitating the Graduate Student Conferences each year. The staff of the MSU Anthropology Department offices have been a phenomenal aid over the years. While the staff has changed, I was fortunate to have friendly helpful faces all along, which actually made me *enjoy* filling out paperwork because I got goodies and lots of laughter in those offices.

More recently I have had the pleasure of working with the students, faculty and staff of Alma College. The Department of Sociology and Anthropology there has been gracious with time, resources, and support for the completion of this research. My colleagues across the faculty have been writing partners, copy editors and cheerleaders. And Deb Smith, our administrative assistant, has been a wonderful resource for copyediting and formatting during the final portions of this process.

My dissertation committee has been outstanding and supportive throughout my graduate career. So many historical archaeologists of Native Americans fall into the research from previous training in prehistoric archaeology or the historical archaeology of non-Native peoples. My intention from the start was to focus on historical archaeology of native peoples, and to develop a committee that would make this possible. The combination of Jodie O'Gorman, John Norder, Ken Lewis and Susan Sleeper-Smith has facilitated my research in more ways than I anticipated. In addition to the complementariness of their research perspectives, their unique approaches to guidance, writing, research and synthesis have benefited me at the various bumps I hit across my graduate school process. I am grateful for all of the ways they found to help me keep going whenever I got stuck, which happened more often than I had anticipated. The union

of their special skills is a better preparation for my future research than I could have ever imagined.

Finally, I would like to acknowledge my family and so many friends who have supported me throughout graduate school. There are far too many individuals to list, but having people believe in my abilities and cheer me on from the sidelines, or offer me a respite from my brain and my research questions kept me going so often. I particularly appreciate those who never inquired about the struggles, but were willing and ready to help when I asked for their support. Thank you.

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Introduction

Wendat Homelands

In 1843 the Wyandott Nation living in the area around Upper Sandusky, Ohio was removed to Kansas, following their 1842 treaty with the United States government (Kappler 1904:534; Bowes 2011:273). Within two decades Mother Solomon Grey Eyes, distraught at leaving her childhood home, returned to Upper Sandusky where she lived out the rest of her days (Marsh 1984). Another man, Bill Moose, was a child in one of the twelve families that never removed to Kansas (Tebben 2012). Moose participated in the Sells Brothers Circus for nine years during the late nineteenth century, but returned again to Ohio, where he lived until his death in 1937 (Moore n.d). Today, members of the Wyandotte Nation of Oklahoma and the Wyandot Nation of Kansas still make trips back to Ohio (Wyandotte Nation 2009:9). Clearly this place was, and remains, critically important to some members of the displaced Wendat communities. For Mother Solomon Grey Eyes, making that trek back, breaking the 1842 treaty, and starting life anew would have been a difficult task.

In 1999 a commemoration of the 350th anniversary of the destruction of the Jesuit Mission of Sainte Marie Among the Hurons and the dispersal of the Wendat people from their villages in Southern Ontario in 1649 was commemorated on the Penetanguishine Peninsula, the site of these events. The Huron-Wendat of Lorette (Quebec), Wyandot Nation of Anderdon (Greater Detroit area), Wyandotte Nation of Oklahoma and Wyandot Nation of Kansas, along with other dispersed Wendat from around the United States and Canada reunited, sharing family

stories, meeting other members of their clans, and having an extended-family reunion (Montreal Gazette [MG], 30 August 1999). As part of this reunion, the Royal Ontario Museum returned the remains of several hundred Wendat to the Huron-Wendat for a reburial at Ossossane, a burial site in Perkinsfield, Ontario, approximately eight miles west of Sainte-Marie among the Hurons, which was excavated by Frank Ridley in 1946 (Ridley, 1952). Leaders from all four Nations "proclaimed the renewal of their confederacy, unveiled its new flag and pledged to strengthen the bonds between them" (MG, 30 August 1999). The leaders signed a Confederacy which stated:

> "The Wendat tree of brotherhood has sent out four strong roots to form four nations, each one separate and growing in different directions, yet each adding strength to the whole. These four roots feed the branches of our families and clans so that the Wendat people may endure and flourish through ten more generations. May we sit in the shade and watch the council fire as we meet together to affirm the bond of the Confederacy (Wendat Confederacy, 1999)".

Wendat individuals today still feel a strong connection to each other, and to the place their ancestors were last together. The history of dispersal and removal has a long legacy in these communities, and the tie to historical places is strong. Is this a result of recent political and cultural transformations, is there a cultural legacy of connection to homelands, or is there a combination of both of these phenomena in the pattern of connectivity seen among the Wendat?

Statement of the Problem

Contemporary Wendat are descendants of dispersed peoples of Southern Ontario, who lived around the shores of Georgian Bay during the first half of the seventeenth century. Throughout history a variety of terms have been used to name some or all of these communities

including, but not limited to Huron, Petun, Tionontate, Wyandot, Wyandotte, Tionontate-Huron, Wendat, Huron-Wendat, and Tobacco Nation (for a detailed discussion of this issue, see Tooker 1978:404-405). Depending on the historical period, the ancestry of the author, and the issue being discussed, these terms are used inconsistently to discuss different communities. Some scholars expand the term Wendat to include all Iroquoian-speaking peoples of Ontario, using terms such as the Neutral-Wendat, and Erie-Wendat (Boucher 2001). The term Wendat shall be used throughout this dissertation as the umbrella term for these groups, with more specific designations added as warranted for clarification. The spelling Wendat more closely reflects the correct pronunciation of the term (Sioui 1999:3). Many contemporary scholars including some tribal historians use the term Wendat, and this work will follow suit (Sioui 1999; Boucher 2001; LaBelle 2013). Wendat is primarily an ethnic, rather than political categorization.

Wendat communities today are, I would argue, members of a diaspora, a community that was dispersed to several places yet who maintain connections (physical or otherwise) to each other and to their homeland (Safran 1999). Frequently, Native American communities are described as 'removed' from their homelands, but the term diaspora is rarely used (e.g. Trigger 2000; Tooker 1978). Yet for many Native American communities this term *should* be used. In 2007 John Bowes examined the removal of the Shawnee, Delaware, Wendat and Potawatomi from the Great Lakes region into the southern Great Plains during the nineteenth century. He defined these communities as exiles, "a population that needed to move beyond the boundaries of the established nation until they could assume a place in American society" (Bowes 3:2007). He also argued that they were pioneers, as they were some of the first groups to settle in the regions they entered, sometimes before American removal was legislated (Bowes 2007). Bowes suggests that the act of migration needs to be considered in order to truly understand the Native

American communities of this era (2007). “At its foundation, Indian removal is a narrative about power and geographic relocation. Although the changing power relations of this historical era cannot be ignored and are difficult to dispute, an examination of movement provides a new perspective” (Bowes 10:2007).

This concept of communities in movement needs to be pushed back further still into the earliest colonial history of North America. Even in prehistory communities moved about the landscape. Sometimes by choice, sometimes by force, families, clans and villages moved (e.g. Bernardini 2005a). From the arrival of the first permanent European settlers in North America, the process of migration among Native Americans escalated. In this way, indirect impacts of colonialism were felt inland decades before any Europeans set foot in these areas. The Wendat were no exception to this. By 1651, those who had not been killed by warfare or disease were forced to flee their homelands and dispersed in several directions, some to Quebec, some to Iroquois villages and some to the western Great Lakes. How did these people respond to their dislocation? This dissertation attempts to answer this question for a portion of the Wendat that fled west during the second half of the seventeenth century.

Connections to homelands, whether those in Ontario or those in Ohio, are strong among the Wendat today and were important in the nineteenth century. But how did the Wendat of the seventeenth century feel about their homeland in Ontario after dispersal? Are these connections to place a recent development or part of a cultural tradition among the Wendat? The goal of this dissertation, in part, is to try and answer this question by grappling with the forced dispersal of the Wendat that began in 1649. We know from ethnographic data that indigenous communities tend to have very strong ties to their natural and cultural landscapes, yet archaeologists and ethnohistorians rarely think critically about this and the implications it has for how communities

might respond to moving. Due to the rapid and often forced movement of Native American communities during the early historic period, it is particularly important that we develop ways of addressing this issue as part of our analysis of this time period in the Americas. This dissertation develops a model for evaluating the impact of forced migration and resettlement through material culture and historical documents and tests the model on the western Wendat. In particular, it considers the nature of *diaspora* as a particular form of forced migration that can be distinguished from other forced migrations. Diaspora is a unique dispersal from, and longing for the homeland (Safran 1999). When migration of Native Americans is considered in the literature, the rare mention of the term 'diaspora' is often vernacular, rather than the critical analytical concept. Overall, this dissertation explores the archaeology of diaspora and how it can be evaluated and distinguished from other migrations archaeologically.

This dissertation is an attempt to show that diasporic identity can be evaluated through the archaeological record. I hypothesize that diasporic peoples behave in ways that are unique from other communities, and that these behaviors are reflected and recognizable through their material culture. I hypothesize that the Wendat communities that dispersed into the western Great Lakes in the seventeenth century had a diasporic identity, and this can be recognized through their maintenance of symbolic culture, kinship systems, language, and networks with other communities.

Wendat Case Study

The western Wendat are a useful case study for the examination of the impact of migration on a community. The western Wendat were refugee Huron and Tionontate people who migrated from southern Ontario to the western Great Lakes in 1651 (Boucher 2001). The Huron

and Tionontate, both referred to as Wendat, are Iroquoian speaking groups of peoples who lived on the shores of Lake Huron during the first half of the seventeenth century (Tooker 1978) (Figure 1).

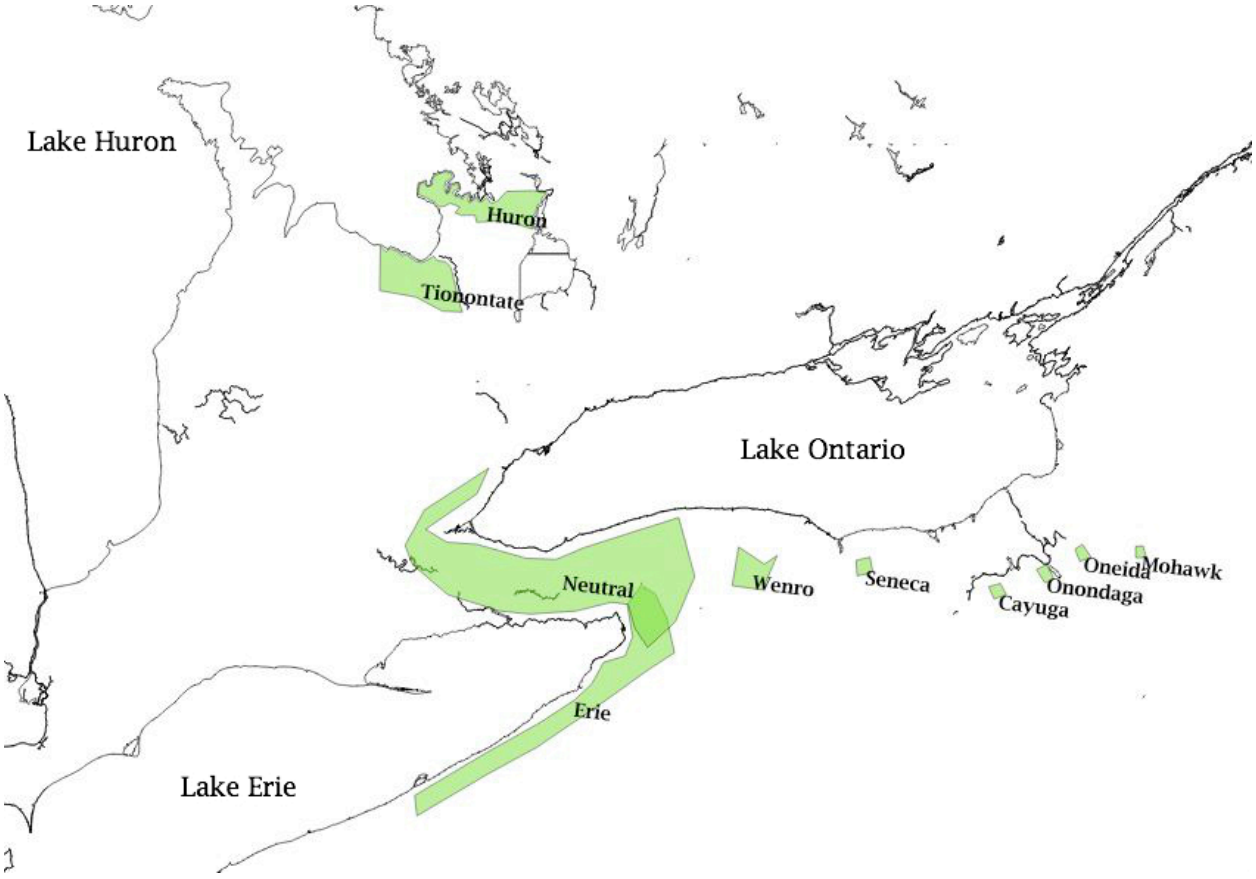

Figure 1. Map of Iroquoian speaking communities of the Great Lakes, circa 1600.

Prehistorically, the Wendat developed out of a common cultural group with the Neutral, Erie, Huron, Tionontate (Petun), and earlier the Iroquois (Tuck 1978). There are clear material-cultural links between these groups; their subsistence base and household settlement patterns are very similar, as are their design aesthetics (Tuck 1978). Linguistically these groups are also seen to be related (Lounsbury 1978). When the Huron and Tionontate migrated together into the

western Great Lakes, they found themselves surrounded by distinctly different neighbors (White 1983).

Most of the communities they came in contact with were Algonquian-speaking groups such as the Ojibwe, Iliniwek and Potawatomi, along with the Siouan speaking Ho-Chunk (Winnebago) (White 1991). Sites such as Rock Island II and the Cadotte Site have ceramics that appear to be made by members of all of these communities (Mason 1986; Birmingham & Salzer 1984). When the Iroquois attacks spread into the western Great Lakes during the middle of the seventeenth century, many of these groups converged into refugee centers – several villages built closely together, often near a French post (White 1991).

Cultural similarities, such as ideology and language facilitated syncretism between Algonquian groups in this region during upheaval, while the Wendat would have found more challenges to incorporation with these neighbors. However, alliances and kin networks developed by the Wendat would have given them some semblance of networks as well. Regardless, the distinct material culture and cultural systems of the Wendat during this interaction make them archaeologically useful for examining how this migration affected a community, more so than any of the other refugee groups.

In 1964 Elisabeth Tooker wrote the first comprehensive ethnographic analysis of some Wendat peoples based on historic documentation, *An Ethnography of the Huron Indians, 1615-1649*. Following this Bruce Trigger wrote his expansive two-volume ethnohistory of the Wendat in 1976. Both works focus on the Huron nations in their homeland on the Penetanguishine Peninsula during the first half of the seventeenth century, and do not consider other Wendat communities in much detail. Following several severe attacks by the Iroquois in the 1640s (which will be discussed in more detail in chapter three), many of these Huron fled to the

Tionontate villages on the southeastern shore of Georgian Bay, and these villages then dispersed into the western Great Lakes by 1651 (Trigger 1976). Trigger stated, “In time, the separate ethnic identity of the individuals who composed the Huron-Tionnontate was forgotten. Although, at first, they were called either Huron or Tionnontate, they eventually became known as Wyandot, thus taking the name of the more prestigeful Huron....Just as any memory of the dichotomy between the Huron and the Tionnontate was forgotten, so was any memory of Huron tribal affiliations" (Trigger 1976:824-825). Unfortunately, Trigger has no citations for this assertion. A reading of the other histories and archaeologies of the Huron shows that ethnic hybridity and amalgamation is an assumed state, rather than one that has actually been tested (Tooker 1964; Mason 1986). In point of fact, several Ontario Iroquoian communities used the term Wendat, or Wyandot, to define themselves; it was not simply a term for the Huron (Garrad 2014; Steckley 2007).

This misidentification by Trigger and others oversimplifies the community identity of this society post-dispersal, rather than critically analyzing the historical documents and archaeological remains of these people to determine if they did, in fact, recognize an intra-village plurality. Indeed, Trigger goes on to state, “for the Wyandot, who were struggling to survive after 1650, the complex social and political organization of the past no longer had any meaning; hence it was forgotten" (Trigger 1976:825). He goes on to state that in the nineteenth century the Wyandot of Kansas had eight clans and three phratries which survived because the “ritual functions remained valid in spite of the collapse of tribal and confederacy organization" (Trigger 1976:825). These two statements seem antithetical. Clans and phratries are social organizational manifestations (Keesing 1975:31). It is the assumption that ‘tribe’ or ‘confederacy’ is necessary to maintain community identity that is problematic here. I argue that we need to reevaluate the

Wendat dispersal without the assumption that *tribe* is the most salient form of identity.

One way to examine how the Wendat responded to removal is through historical documentation. Missionaries lived among the Huron for several years, and some of them traveled to other nearby nations, including the Tionontate and Neutral (Thwaites (1896-1901; Trigger 1976). While the Wendat themselves, and the majority of the traders who visited with them, did not leave written documentation, missionaries wrote extensively (Tooker 1964:4). The focus of most missionary writing was on the successes and failures of their ability to convert Native Americans, rather than on cultural practices. Discussions of Wendat culture are indirect and scattered – most often they are mentioned in a fashion that emphasized criticism of their belief practices. However, careful combing of the works can reveal a plethora of information that might otherwise go unnoticed. Elisabeth Tooker's work in 1964 was the first substantial attempt to elicit cultural information about the Wendat from historical documents. In this work, she extracted details from Jesuit Relations, Marius Barbeau's collections of Wendat folklore, and Champlain's travel narratives to reconstruct the basic facets of Wendat cultural practices during the first half of the seventeenth century (Tooker 1964). Her work has served as a starting point from which researchers have delved further into the Jesuit Relations and other early documents to learn more about the Wendat. The Jesuit Relations make up the primary source of data for Tooker, and the Jesuits spent much more time among the Huron than with any other Wendat communities, thus the focus of her text on the Huron Confederacy (Tooker 1964).

Additionally, we can use the materials left to us by the Wendat themselves to understand their resettlement (Figure 2). Artifacts made and used by these people can tell us a great deal about how they adapted to living in the western Great Lakes. Archaeological work in Ontario examining late prehistoric and early historic Wendat village sites has been extensive (such as

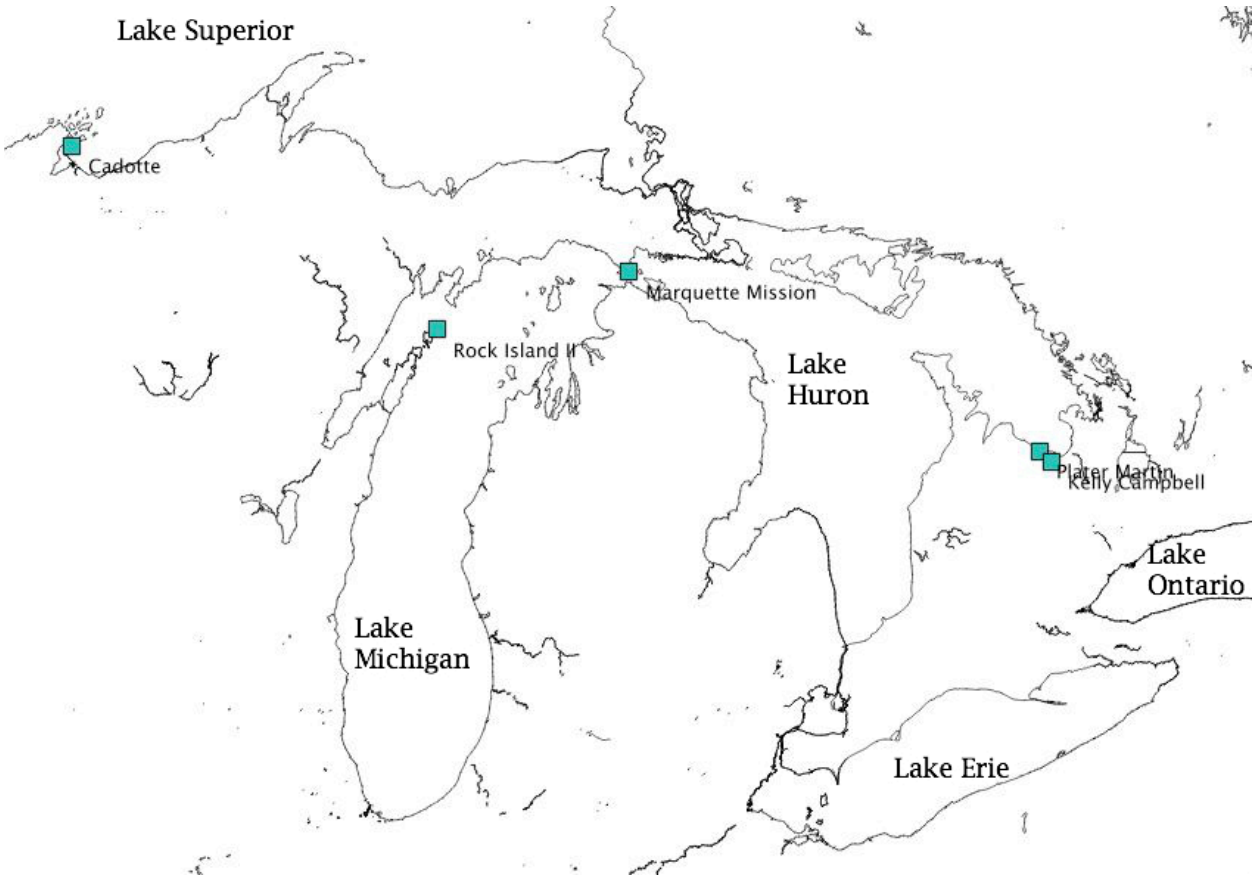

Figure 2. Archaeological sites examined in this dissertation.

Garrad 2014; Hunter 1889; Ridley 1966; McIlwraith 1947). Archaeological sites associated with western Wendat communities from 1651-1670 are rare. The sites of Rock Island II and Cadotte both contain Wendat materials from this period, though they do not appear to be Wendat village sites (Mason 1986; Birmingham & Salzer 1984). The Marquette Mission site in St. Ignace, established in 1671 and inhabited through 1701, is an intact, partially excavated Wendat village with a rich data set (Branstner 1991; O'Gorman 2007).

The western Wendat are a viable case study for the archaeology of forced migration because, in addition to having material and non-material culture that is readily distinguished from their neighbors in the resettlement area, the western Wendat have left *enough* material

culture and historical records for us to attempt an analysis. These people were in contact with the French for nearly 50 years, or two generations, before their migration occurred. During this time Jesuit and Recollet missionaries spent years documenting their time with the Wendat (Thwaites 1896-1901; Tooker 1964). Numerous archaeological sites associated with these groups have been surveyed and/or excavated in Southern Ontario (Trigger 1978; Garrad 2014). In particular, the locations of the last villages of the Wendat that moved west have been extensively surface collected and partially excavated (Garrad 1975, 1976, 2014). This material can be compared to Wendat materials from later seventeenth century sites in the western Great Lakes.

Organization of the Dissertation

The goals of this dissertation are 1) to develop a model for evaluating diasporic identity through the archaeological record and 2) to analyze the Wendat living in the western Great Lakes during the second half of the seventeenth century using this model, to determine if they were in fact diasporic. As such, the archaeological model for diaspora will first be developed, and followed by the case study. After a discussion of the culture history of the Wendat and an overview of the archaeological sites being used in this research study, archaeological data will be presented in two chapters, followed by a synthesizing chapter, which incorporates the ethnohistoric data into the diasporic analysis. This will be followed by a concluding chapter with discussions of the potential use of this model for other archaeological studies, and future research plans for Wendat archaeological research.

Chapter two provides an overview of the Wendat communities being studied in this dissertation. The chapter begins with a brief overview of northern Iroquoian peoples, followed

by a summary of the prehistoric archaeological record we have of these communities in southern Ontario. This is followed by a discussion of the communities identified in the early historical period, including their various forms of political, economic and social relationships among each other and with nearby neighbors, such as the French, the Kiskaton Odawa and the Hodenosaunee (Iroquois). Following this, the years of tragedy and dispersal are discussed. As previously stated, during the late 1640s Wendat communities in southern Ontario were scattered in wildly different directions (Trigger 1976). Previous research on the western Wendat communities is discussed. The chapter concludes by describing the cultural landscape of the western Great Lakes onto which some of these villagers eventually settled, and their path of migration through this land from 1649-1701.

The third chapter of this dissertation examines how identity can be interwoven with both ethnicity and migration, followed by the presentation of a predictive archaeological model for diaspora analysis. The chapter begins with an overview of the concept of identity, and the ways material culture can reflect and present a community's sense of itself. The notion of 'community' and the salience of different social groups to various peoples, and the complexities this poses for archaeologists are discussed. Specifically, notions of Wendat identity and their potential to be represented through symbolic material culture are discussed. Next, theoretical approaches to our understanding of migration and resettlement are discussed. The chapter then gives an overview of previous research in migration and colonization studies among archaeologists and other social scientists. The primary focus of this discussion is Marcy Rockman's model of colonization, which she proposed while considering the movement of hunter-gatherer communities (Rockman 2003). Following this, Safran's (1991) characterization of diaspora identity is presented. Diaspora identity is associated with the process of forced migration, so the two must be

considered in conjunction with one another. Based on these approaches, a predictive archaeological model for diaspora analysis is then presented. This model combines our understanding of material culture responses to migration and the particular traits of diasporic identity. A suite of artifacts to be considered for this dissertation is developed and specific predictions of how diasporic and non-diasporic collections will be distinctive are presented.

Chapter four discusses the particular archaeological sites being examined as part of this study. A total of five archaeological sites were analyzed, two from pre-migration (1630-1649) and three from post-migration (1651-1701): the Kelly-Campbell site, the Plater-Martin site, the Rock Island II site, the Cadotte site, and the Marquette Mission site (see Figure 2). The justification and selection of these particular sites for this project is addressed. Following this the excavation history and a summary of results from each site is discussed individually.

Chapter five is a presentation and evaluation of symbolic material culture from the five sites examined in this dissertation. Symbolic materials are used to reflect identity, and as will be discussed in chapter three, can be used to understand community concepts of identity, which are indicative of diaspora. Ceramics and pipes from all sites are presented and analyzed. The Marquette Mission site has a limited collection of ceramics, but a larger sample of incised and carved faunal material than the other sites. For this reason the faunal materials from Marquette Mission are also analyzed. A Brainerd-Robinson Coefficient of Similarity is used to compare the collections at each site. The overall analysis of symbolic materials shows the retention of a distinctive Wendat identity throughout the second half of the seventeenth century. While the symbols themselves become less standardized following dispersal, they retain characteristics that make them unique from the materials made by other western Great Lakes residents, suggesting maintenance of Wendat distinctiveness.

Chapter six presents lithic data as a material culture indicator of social and economic networks. The ability and desire to develop social and economic networks following migration is an indicator of the resettlement practices of a community. Lithics from the three known village sites, Kelly-Campbell, Plater-Martin and Marquette Mission are analyzed using descriptive statistics to determine what resources the Wendat were accessing at different times. Lithic data shows that access to high quality lithic materials was restricted during the last years prior to dispersal, due to the pressures of the Iroquois on Wendat villages. At the Marquette Mission site lithic materials from southern Ontario are replaced with materials from the Upper Peninsula of Michigan and Northern Michigan. The use of these various materials suggests that the Wendat successfully incorporated into local trade networks following migration, but were not trading long distances for high quality lithic materials.

Chapter seven considers the problem of diaspora, and synthesizes the data from the two preceding chapters with the historical record to determine the nature of resettlement of the Wendat in the western Great Lakes. Each of Safran's characteristics of diasporic communities is addressed. Archaeological data and historical data are compared to provide independent lines of evidence for the evaluation of the diasporic identity of the Wendat. Both lines of data suggest that while the identity of the western Wendat changed over the second half of the seventeenth century, it was maintained as a separate and distinctive identity from their Algonquin neighbors. Ties to Wendat relatives in Quebec were recognized and maintained. While there is no strong evidence that the Wendat had any intention of returning to Georgian Bay to rebuild their villages there, the evidence does suggest that their traumatic loss of this place was incorporated into their identity and they are diasporic.

Chapter eight evaluates the usefulness of the predictive archaeological model developed

in this dissertation. In particular, I discuss the potential and challenges of applying this model to prehistoric communities. Additionally, I discuss the need for further research on Wendat archaeological sites. Finally, I reiterate the importance of considering the potential cultural transformations due to Native American migration experiences as part of the colonial history of these communities, and the importance of pushing the concept of 'removal' back further than the Removal Era of the early nineteenth century. Removal is a part of the structural violence of colonialism nearly as soon as trade between Europeans and Native Americans began.

Chapter 2

Cultural Background

This chapter explores the cultural background of the western Wendat from late prehistory through the seventeenth century. It begins with a discussion of the development of Northern Iroquoian cultures during the Late Woodland in the Northeast and explores their eventual divergence into the distinct communities recognized historically. Following this, I discuss the ethnohistory of the Wendat during the first half of the seventeenth century. I then discuss the attacks of the Iroquois that led many of the Wendat to flee into the western Great Lakes at mid century, and the social setting they found themselves in following their dispersal, through 1701. The characteristics of Wendat culture discussed in this chapter will be used in chapter three to develop a predictive model for diasporic identity.

Northern Iroquoians

Anthropologists refer to a suite of (primarily) Northeastern tribes sharing a similar linguistic stock as Northern Iroquoians (see Figure 1) (Lounsbury 1978). These communities not only share a linguistic history, but many of their cultural traits are related as well. Archaeologically, we can see some correspondence through their material culture as well.

Language

The Iroquoian language family was represented historically be several languages and dialects in the region around Lake Ontario, along with Cherokee, Tuscarora and Nottaway in the

southeastern United States (Lounsbury 1978:334). Cherokee is quite distinctive from the other languages, which are collectively referred to as Northern Iroquoian (Figure 3).

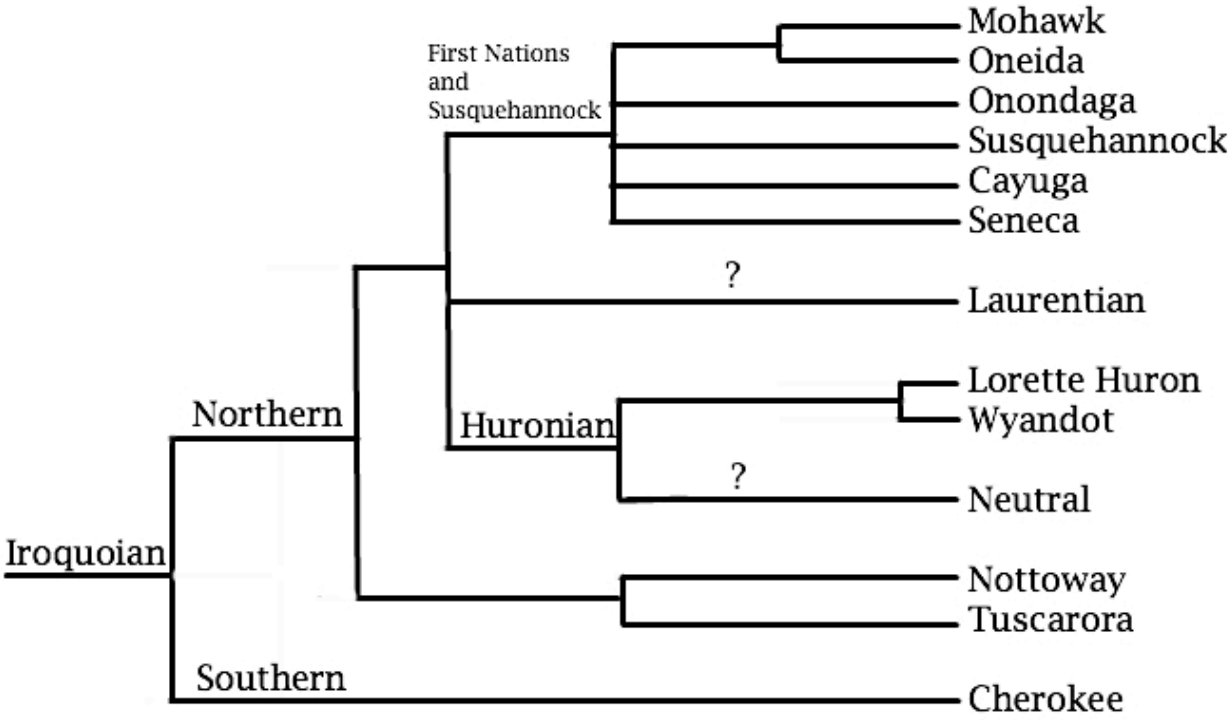

Figure 3. Relationships of the Iroquoian languages (based on Lounsbury 1978:336).

Huron and Tionontate communities spoke Huronian languages. The Neutral, Wenro and Erie are believed to have been Huronian speakers as well, but there are no early dictionaries for these communities, and they were incorporated into other communities by the eighteenth century so more recent documentation is also not available (Steckley 2007). Steckley noted that the Huron term for the Neutral, *hati8endaronk*, roughly translates to "their words (or language) are some distance away" (Steckley 2007:26-27). He hypothesized that this meant it was not the same language as the Huron, but was likely closely related (Steckley 2007:27). However the Wenro, who Steckley considers a subgroup of the Neutral, were given refuge by the Huron in 1638, because their relationship with the Neutral had broken down (Steckley 2007:50; Thwaites 1896-

1901:16:253; Tooker 14:1964). When they did this, it was noted by the missionaries that the 600 resettled Wenro "were distributed in the principal villages of Huron…given the best places in the houses and corn from the granaries" (Thwaites 1896-1901:17:25-29; Tooker 14:1964). This distribution throughout several families and villages, rather that the creation of new structures suggests that there was no concern about language barriers between the Huron and the Wenro. Thus, it may be that they spoke a distinctive dialect, but not a separate language. Regardless, it is likely that the languages were closely related.

The communities that made up the League of the Iroquois in the early historic period were the Mohawk, Oneida, Onondaga, Cayuga and Seneca (Trigger 1976). The languages of these five groups are closely related to one another, and to the less well known Susquehannock language, used by communities in central Pennsylvania through the seventeenth century, though it should be noted that Ragueneau describes the Susquehannock as "tribes of the Huron language" (Lounsbury 1978:336; JR 30:83). Linguistic and archaeological evidence also show a distinct separation between Tuscarora and Nottaway and the rest of the Northern Iroquoian languages (Lounsbury 1978:335). It is believed that these communities separated from other Northern Iroquoians over 1000 years prior to European Contact (Lounsbury 1978). In the eighteenth century the Tuscarora moved north and joined the Iroquois Confederacy (Landy 1978). Because the timing of their relationships with other Northern Iroquoians are outside the purview of this dissertation, they will not be included in further discussions of Northern Iroquoians. For the sake of consistency, I maintain the use of the term Northern Iroquoians to refer to those communities that were present in the Great Lakes region from European contact through the seventeenth century.

Archaeology & Cultural Practices

Early Ontario Iroquois

By ca. AD 1000, during the Late Woodland period, distinctive characteristics of Northern Iroquoian material culture began showing up on archaeological sites surrounding Lake Ontario (Bamann et al. 1992:435, Tuck 1978:327). All of the Iroquoian communities that lived in Ontario lived in the region today called 'Southern Ontario', to the south of Lake Huron (Heidenreich 1971). As soon as they are apparent, Ontario Iroquoian archaeological suites are distinct from New York Iroquoian materials, though relationships between the two can be seen (Wright 1966). Around 900 AD two cultural suites developed in Ontario that are considered "Early Ontario Iroquois" (Wright 1966; Snow 1994). The southernmost Ontario Iroquoians are represented archaeologically by the Glen Meyer culture suite, and in the north the Pickering branch developed; both of these are distinguished from each other by their ceramics (Wright 1966; Tuck 1978:323). During this early stage, all Ontario Iroquoians were still living fairly close to Lake Ontario – it is not until later that anyone moved into the historic homelands of the Tionontate and Huron (Warrick 1990). Based on site size, it is believed that Iroquoian villages of this time had no more than 200 inhabitants, and were socially acting as band-level societies (Warrick 1990:337). During this period, the first longhouses appeared (Warrick 1990). Longhouses, while not unique to Northern Iroquoians, became distinctive of their settlements in Ontario when compared to their Algonquian neighbors, who maintained smaller often more temporary houses. Early Iroquoian house structures were fairly small compared to later structures, with an average length of 12.4 meters (Warrick 1990:337). These communities were

egalitarian and it is unclear if matrilocal and matrilineal residence practices were formally in play or just developing during this stage (Trigger 1981:25; Warrick 1990:342).

Middle Ontario Iroquois

By about AD 1300, a slow shift led to the Uren and then the Middleport substages of the "Middle Ontario Iroquois Stage". During the Middle Ontario Iroquois Stage the material cultural distinction between the Glen Meyer and Pickering branches disappeared, though the reason for this is contested (Wright 1966;). Many of the typical practices and materials associated with the Ontario Iroquoians coalesced during this time. This is when the first large scale ossuaries were used for corporate burial (Trigger 1976:147; Warrick 1990:304). It is also during this period that we see increased development and diversification of smoking pipes, related to shifts in the role of smoking and spiritual practices within the society (Smith 1987; Trigger 1976:141; Warrick 1990:192). Not only do pipe shapes change, decorative motifs begin to be used. Horizontal pottery decoration becomes a standard symbolic system at this time as well (Warrick 1990:346).

It is during the Middle Ontario Iroquois Stage that mass consumption of maize became part of the subsistence practices in the region as well; isotopic analysis suggests that up to 50 percent of the daily calories came from corn (Hart & Meant 347:2002; Schwarcz et al. 1985; Warrick 1990:344). This shift in subsistence had a major impact on population size, and this had corresponding impacts on house structures and village size. As Iroquoians became more reliant on corn as a staple of their diet, it improved overall health, reduced weaning time, and reduced the risk of starvation (Warrick 1990). This led to a population expansion, which quite quickly expanded the size of households and villages (Warrick 1990). During the Middle Ontario Iroquois Stage the size of longhouses increased, with household populations essentially doubling

in size (Warrick 1990:309-310). At the same time the population of each village also doubled to 400-500 people (Warrick 1990:348). At this size, informal egalitarian organization would no longer function. The evidence suggests the formalization of matrilineal and matrilocal social organization, and perhaps the development of a formalized clan system (Trigger 1985; Warrick 1990:348).

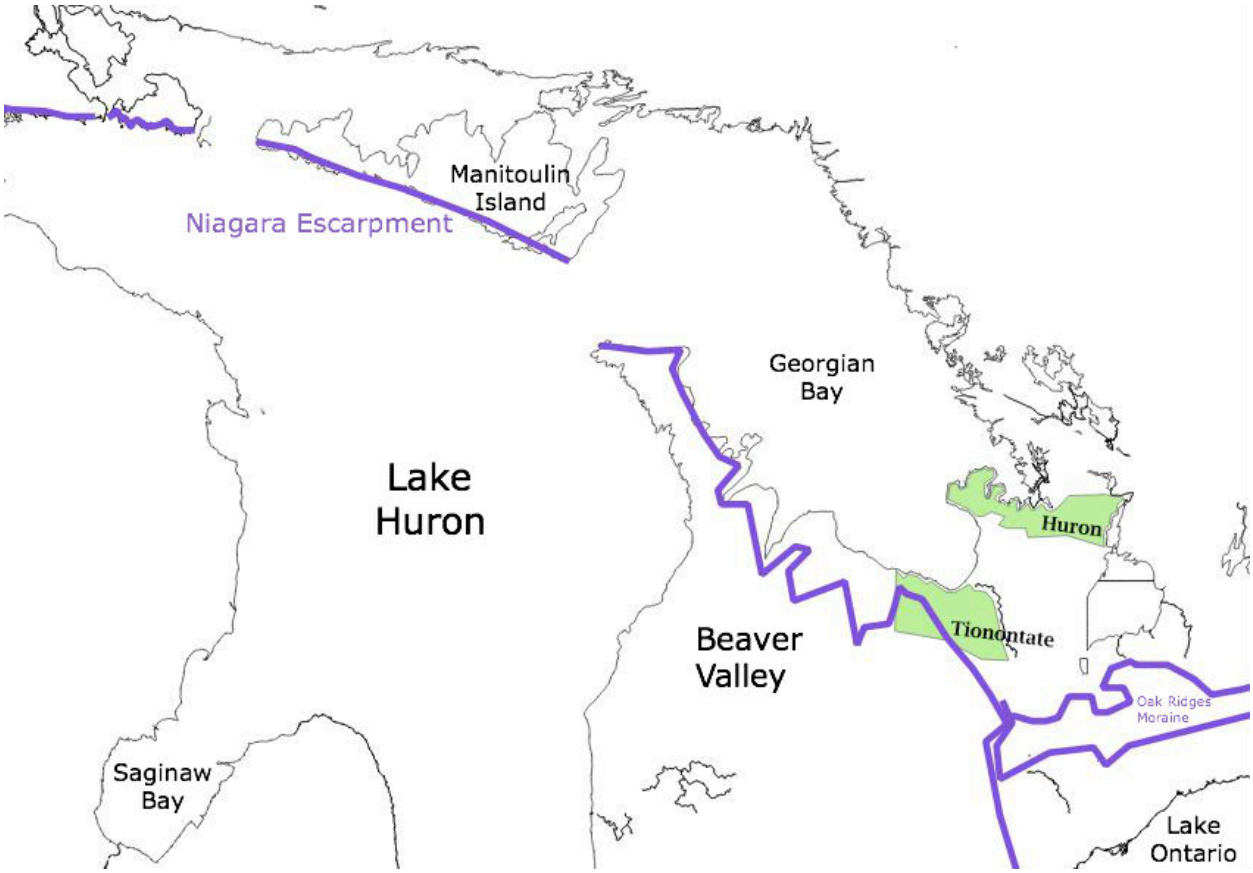

Figure 4. Landforms of southern Ontario and the Niagara Escarpment.

In addition to the increased size of households and villages, the carrying capacity of the area just north of Lake Ontario was pressed by this population growth. It is here that we saw the first Ontario Iroquoians moving north of the Oak Ridges Moraine into Simcoe County, just south of the Penetanguishine Peninsula around 1300 AD (Figure 4) (Warrick 1990:350). Over the next

century the populations expanded north following a 'Wave of Advance' pattern, where they expanded forward and outward spatially at rapid rates, because there were no people there in the way (Warrick 1990:360).

Late Ontario Iroquois

Around AD 1400 The "Late Ontario Iroquois" stage developed, and it is during this time that we begin to see clear divisions and distinctions that led to the groups recognized historically as the Huron, Tionontate, Neutral and Erie; the Wendat peoples (Trigger 1976:148; Tuck 1978:323; Warrick 1990; Wright 1966:66). As will be discussed in more detail later in the chapter, these historical groups are recognized in part by their geographic locations. Their material culture is only divided into two main suites: Neutral-Erie and Tionontate-Huron (sometimes referred to as Petun-Huron in the archaeological literature) (MacNeish 1952). Collectively these groups, with their shared cultural patterns, can be referred to as Wendat. While ceramics from these groups will be discussed in detail in chapter five, Neutral-Erie ceramics include Black Necked, which first appears in large numbers during this time (MacNeish 1952). The most characteristic Tionontate-Huron ceramics to appear at this time are Lalonde High Collared pots (MacNeish 1952; Warrick 1990:183). Pipes from the Late Ontario Iroquoian stage show the development of effigies and the acorn pipe bowl (Warrick 1990:192).

During the Late Ontario Iroquois Stage there was a shift in Wendat organization at the village level. The number of villages reduced, but the size of each village practically doubled in both physical size and population (Warrick 1990:362). The increasing size of the population stressed the available natural resources, which led to increased competition (Warrick 1990). This was counteracted in one way by migrating to the north, but as this could not accommodate

all the population stress, communities also grew in size and shifted to defensive positions with more fortification around the villages (Warrick 1990:364).

The growth of villages coincided with increased lengths of longhouses for a brief period, though these eventually reduced in size again (Warrick 1990:363). Warrick noted that much of this increase in house size was done as expansion, essentially end caps, rather than the initial construction of large houses (1990:362). It is posited that this was the result of the earlier increase in birth rate, in conjunction with the importance of matrilocal organization (Warrick 1990:363). In addition to an increase in population due to internal growth, evidence suggests that St. Lawrence Iroquoians also moved into the area north of Lake Ontario during the sixteenth century (Warrick 1990:376).

Clearly matrilines were important social structures for organizing communities. As house size reduced later in the Late Ontario Iroquois Stage, Warrick argued that this is evidence of a shift from a focus on matriline to clans as the primary unit of social organization, though data is still not strong enough to support or refute this hypothesis (Trigger 1976:153; Warrick 1990:374). The development of clan level social organization, that is, multiple matrilines recognizing a relationship to some ancient ancestor, would make it possible to organize larger villages and inter-village coordination (Sioui 1999:41).

As villages increased in size and reduced in number, a clustering effect also happened (Warrick 1990). Communities became less well distributed across the landscape. While some have hypothesized that this is the development of clusters that led to the historical tribes, there is not strong enough evidence in Ontario to clearly use the direct historical approach to affirm this. In part this has to do with the migratory patterns of people that continue into the historic period – while some of the clusters stay in the same locales into history, the majority of those in Ontario

do not (Warrick 1990). Over time the communities inhabiting the shore north of Lake Ontario moved away – some suggest they moved to the southern shore of Georgian Bay and became the Tionontate, while others believe they did not (Warrick 1990:374, 387). Some of the clusters close to the Penetanguishine Peninsula persisted for two hundred years into the contact period, but other clusters developed in this region later than others. Regardless of specific identification, these clusters are suggestive of a shared sense of identity within each cluster– a collection of communities that are interacting with one another more so than with other communities. This is beneficial for protection from attack. It may also have social benefits. While this clustering may be suggestive of a development of a shared ethnic identity, the retention of so many similarities of material culture across all Wendat communities does not strongly indicate this.

The increase in smoking paraphernalia during the Late Ontario Iroquoian Stage is also believed to be associated with cross-community sodalities, which would have helped to build and retain relationships without a need for an ethnic identity (Warrick 1990:374). Historically, medicine societies are well documented among these communities (Tooker 1964:109). Membership in a medicine society could be passed down through a matriline, but those cured by a society were also initiated into that society, encouraging cross clan and cross village connections (Trigger 1976:154).

During the historic period we have vivid documentation of the ossuary burial practices of the Huron, which are also evident in the prehistory of the region (JR 10). Among the Huron, villages from a wide area would bring their dead together and over the course of several days participate in feasting, dancing, mourning, and gift giving (Tooker 1964:134-135). These communities would hold a procession and place all of the remains in a large pit, lined with beaver skins, where they would then stir them together (Tooker 1964:136-137). This type of

gathering was an additional way to reinforce unity among several different villages, even beyond the regional cluster. It also reinforced egalitarian values by showing that all remains are treated the same. Ossuaries in the Neutral-Erie region were much smaller, rarely having more than 50 individuals in a pit, suggesting they did not use their burial practices in the same fashion.

During the late prehistoric period, distinctions between the ceramics of the Neutral-Erie ancestors and the Huron ancestors are visible. Among the Neutral-Erie, there was shell-tempered pottery, something not found anywhere else in Ontario (Michelaki 2007:146). These sites have grit-tempered pots as well, and the social explanations for this shell-tempered pottery are unclear. Because some of these pots are locally made, and are present for several centuries, but their abundance on sites does not increase over time, there is not a clear reason for their presence (Michelaki 2007:146). Some have argued for women settling in from the Fire Nation to the east, but this is not a satisfying answer (Fitzgerald 1982). Shell tempered pots are more thermally conductive than grit-tempered, and are the best for boiling food in (Michelaki 2007:149). Starchy seeds are more easily digested when cooked this way, and it is possible that this trait was picked up from neighboring Algonquians, but shell temper was only used for a limited suite of pots used for a specific function (Michelaki 2007:149).

While ceramic decoration will be discussed in more detail in chapter five, a brief discussion is necessary here. Household Iroquoian Ceramics are fairly standardized in size and function – they are globular pots used for cooking and carrying water (Warrick 1990). Exceptionally shaped ceramics are found rarely on sites and in burials (Kenyon 1982; Latta 1987). While there is often an overlap of ceramic types at Wendat archaeological sites, the abundance of particular types is more prevalent in various regions. Among the Neutral-Erie, Lawson Opposed, Lawson Incised and Niagara Collared ceramics are common during this period

(MacNeish 1952:13, 22). Meanwhile, among the Huron, Huron Incised, Sidey Notched and Warminster Crossed are more common (MacNeish 1952:31). Finally, among the Tionontate, early sites have a large quantity of Huron Incised and Lawson Incised ceramics, while on later historic sites Huron Incised, MacMurchy Scalloped and Sidey Notched Ceramics are most abundant (Garrad 2014:276-277).

Early Historic Period

During the early historic period, traders, missionaries and explorers in the southern part of Ontario wrote of several different Native American communities. Delineating the relationships of these communities, however, is problematic. Names were given in different languages, and frequently indicated different levels of social organization. Sometimes villages were named after places or leaders. Many of these communities were heavily impacted by epidemic disease before coming into longer-term contact with Europeans, so it is sometimes difficult to connect the historical records of tribes with archaeological contexts. Additionally, the terms Odawa and Huron were both used more generally in the seventeenth century than they are used today, and it must be with some caution that we connect these terms in a seventeenth century manuscript with the tribes to which this research relates.

By the historic period, Northern Iroquoian communities lived on the Penetanguishine Peninsula and the southern shore of Georgian Bay, but had abandoned the northern shore of Lake Ontario (Warrick 1990). Other Northern Iroquoians lives along Lake Erie and the south side of Lake Ontario (see Figure 1). On the western slope of the Blue Mountains lies the Beaver Valley, an area rich in natural resources which was home to many Odawa communities (Heidenreich 1971) (see Figure 4). Heading north from the Beaver Valley, one may follow the Niagara

Escarpment north along the Bruce Peninsula for approximately 60 miles. Expanding one's view, it can be seen that where the Peninsula ends, it is just a short distance to the large landmass of Manitoulin Island, which is then just a few small islands away from the Upper Peninsula of Michigan in the United States. The Odawa regularly traveled this route by canoe, and it is a very quick and convenient route across the Great Lakes, which we rarely recognize today due to current political boundaries.

The Huron

Our best understanding of cultures of southern Ontario during the seventeenth century revolves around the Huron. This collection of Northern Iroquoian peoples lived in the area between the current city of Midland, Ontario and the Penetanguishine Peninsula (see Figure 4) in a number of villages divided into four or five affiliations similar to what we would consider tribes (Heidenreich 1971:75). These people called themselves Wendat, or 'People of the Island' (Tooker 1964:9). Their neighbors, known to many as the Petun or Tionontate, also considered themselves Wendat (Boucher 2001). The Tionontate and Huron regions were roughly 30 miles apart. However, excluding the Huron there is limited mention of any of these communities in the early historical records.

French missionaries established themselves in Huronia in 1609 at Champlain's request, shortly after the Huron first had contact with the French explorer (Biggar 1922:67, Tooker 1964:5). Champlain mentioned that French goods were making their way to the Huron as early as 1603 via Algonquians so ideas and materials were likely filtering in even earlier (Heidenreich 1971:49). The missionaries who arrived in Huronia wrote extensively about their experiences trying to missionize the Huron (see Biggar 1922-1936; Thwaites 1896-1901; Wrong 1939).

While the French had interests in connecting to the other Wendat communities, and occasionally made it to their villages, the Huron made efforts to keep the French from developing relationships with these communities (Trigger 1976). Trade with the French was controlled by the Arendaronnon Huron nation (Heidenreich 1971:221). Using reciprocity structures of their own culture individuals among the Huron were able to develop trade ties to the French (Tooker 1964:24-25). By keeping the French away from the other Wendat, they were able to act as a constriction point in the trade, increasing their power and access to goods. They limited interactions between missionaries and other Iroquoian communities in Southern Ontario, in an effort to maintain their role as a bottleneck in the fur-trade (JR 21:177, 203-205). This does not mean they held exclusive control; the Jesuits do say that French traders were traveling to Neutral villages to trade (Tooker 1964:13; JR 21:203). However it was not until 1640 that direct contact was made between the Tionontate and the French (Heidenreich 1971:228).

It is estimated that in 1634, there were about 30-35,000 Huron and Tionontate (Warrick 2003:259; Eccles 1983:28). There were a total of 18-20 Huron and 7-9 Tionontate villages (Heidenreich 1971:84-86; Garrad & Heidenreich 1978; Warrick 1990:398). A variety of epidemics hit these communities hard during the 1630s, and by 1640 they had dropped to about 12,000 individuals, most of them being Huron (Warrick 2003:262). Among the Huron, all four nations were represented, but the Attignawatan made up more than two-thirds of the remaining villages (Tooker 11:1964). Due to these epidemics, many villages were abandoned and people redistributed themselves into other villages (Warrick 1990:404). This further supports the idea of considering all of these communities collectively as Wendat. Between 1647 and 1649 Iroquois attacks on the remaining villages took a further toll on their population (Warrick 1990:404).

Wendat Political and Social Organization

Confederacies

Understanding the social and political organization of the Wendat during the historical period is difficult. The French wrote of multiple confederacies, which appear to have been organizational structures made up of several nations, primarily for the purpose of warfare and protection (Tooker 1964). Both the Neutral and the Huron are considered confederacies (Tooker 1964:9, 13). Tooker additionally describes the Tionontate as a Confederacy, but there is little evidence to support this (Tooker 1964:12). The confusion comes from Father Paul Rageneau's Relation of 1647-48:

> "Those whom we call the Tobacco Nation urged us to go and instruct them; we sent two of our Fathers, who carry on two Missions there, in two different Nations which occupy the whole of that country,—one called the Nation of the Wolves, which we have named the Mission of Saint John; we name the other the Mission of Saint Mathias, which is among those who are called the Nation of the Deer (JR 33:141)."

The Tobacco Nation were the Tionontate. In this case, Tooker has inferred that the use of the term Nation was a misnomer, since it is also used for the name of the two villages (Tooker 1964:12). She then states that the Tionontate are the equivalent of the Huron or the Neutral. However both of these other confederacies have a much larger population, with many more villages. Even during its heyday the Tionontate are said to have had 7-9 villages, which is comparable to the size of other nations, not confederacies. The total population of the

Tionontate would never have been enough to consider them a confederacy. Archaeologically, the Tionontate share much of their material culture with the Neutral, but they lived far enough away that their social and political sphere in the seventeenth century would more regularly have involved the Huron. Their strongest trade partners were Odawa (Garrad 2014). It appears that the Tionontate did not have a more extensive political organization for protection against outside hostilities.

According to Tooker, the four original Nations of the Huron Confederacy were the Attignawatan, Attigneenongnahac, Arendahronon and Tahontaenrat (Tooker 9:1964). Later, the Ataronchronons joined the Huron as well (Tooker 10:1964). Based on their discussions with tribal members, early visitors to the Huron believed that the Attignawatan and Attigneenongnahac were the oldest (and largest) nations in the confederacy (Tooker 1964:10). As such, these two referred to each other as brother and sister nations (Tooker 10:1964). It was estimated that the Arendahronon joined the confederacy in 1590, and the Tahontaenrat in 1610 (Tooker 10:1964).

Social Organization

As the most detailed historical documents regarding the Wendat are those documenting members of the Huron Confederacy, the richest record on social organization comes from these nations. Historians have attempted to construct an understanding of Huron social organization, but it has been difficult, particularly because different organizational structures (nations and clans) were often named after the same animals, and early writers were not clear about their use of terms like clan and nation (Tooker 1965, 1966; Trigger 1966). Both Trigger (1976) and Tooker (1964) made concerted efforts to tease apart the descriptions of nations, clans and

villages in the historical records to determine how these groups sorted themselves. Trigger and Tooker both took the stand that the Huron were a confederacy of four nations, with each nation made up of a various number of villages (Tooker 1965). While this was the overarching political organization for defense, village and nation level organization was often based on clan membership. In their analysis, they cited Wilson's (1884) account of the description of the tribes and clans upon a visit to the Wendat reservation at Lorette, Quebec (Trigger 1965; Tooker 1965). Wilson was told that there were four nations, each with five clans. As only five clans are then listed, it implied that clans crosscut nations. In returning to her own notes, Tooker pointed out that at least one Jesuit Relation described eight Huron nations, which she interpreted as the clans (Tooker 1965). She believed that there were, in the past, eight clans and four nations. Tooker also noted that the three clans which were no longer surviving in Lorette are the clans that the Huron did *not* share with the Iroquois. This issue is complicated because, as Trigger pointed out, many Ontario archaeologists have not carefully examined the data and incorrectly refer to the Huron nations as clans in their research (Trigger 1965). Additionally, the translations of Champlain into English also transpose the term clan for tribe (Trigger 1965).

Social Fusion

During both prehistory and history bringing new people into villages was not atypical, whether this was marriage partners or a refugee village. For this reason, it is worthwhile to explore Wendat perspectives on adoption. In trying to understand how villages adopted in outsider groups, Tooker suggested that ethnographic analogy to the Iroquois is appropriate (Tooker 1966). When new members joined an Iroquois village, those who had clans of the same name (such as Wolf) were adopted into the clan within the village; when that clan did not exist in

the village, the members were not; they retained their own separate clan within the village (Tooker 1966). Tooker suggested that division of a clan into two villages was also possible, and that the presence of a clan in a village should not suggest that members of that clan were not synchronically present in other villages as well (Tooker 1966).

According to Tooker, the two largest nations of the Huron, the Attignawatan and Attigneenongnahac, adopted in many families, which is part of why they were so large. "These adopted families remained distinct little nations, retaining the names and memories of their founders, a general name [for themselves], and a war chief and a council chief (JR 16:227-229)" (Tooker 1964:11). It appears that, by nation, Tooker actually meant clan. This shows that the Huron could absorb new community members that did not have a clear way to create ties within the community. They were allowed to retain their own ranked organization, while being part of a larger nation.

Another alternate method of absorption of large quantities of people occurred following the dispersal of the Wendat after 1649. At that time, a large number of Wendat ended up moving to the lands of the Seneca, one of the tribes that had attacked them. There, they set up a village of their own next to a Seneca village. This separation lasted for decades – eventually the Jesuits set up a mission there and annually mentioned that the Huron were still living in their own village, and that all Christian Hurons and Seneca heard the mass in the Huron language (JR 63:147). This concept of satellite villages has deep history in Iroquoia (Jordan 2013:33). Archaeological evidence from the Seneca territory shows ossuary burials and Wendat ceramics at these satellite villages for three decades following resettlement; additional evidence of the retention of a strong Wendat identity (Jordan 2013:36).

In 1638, the Wenro (a likely member of the Neutral Confederacy, or a related nation)

moved to Huron country and settled among them, because their alliance with the Neutral had broken down (JR 16:253; Tooker 1964:14). Tooker referred to the Wenro as an 'Associate Nation' of the Neutral confederacy, though this term is undefined, so it is not clear what was meant by it (Tooker 1964:14). After being approached by some of the Wenro seeking refuge, the Huron agreed, and several of them travelled several days back to Wenro country to aid them in moving. About six hundred Wenro moved. Many died along the way and those who did not were sick upon arrival. The Wenro "were distributed in the principal villages of Huron...given the best places in the houses and corn from the granaries" (Tooker 14:1964; JR 17, 25-29). This suggests that either national identity was unimportant to this group or, more likely, they shared enough culturally with the Huron that absorption into the village was not seen as an affront to their social organization or culture.

Dispersal

Throughout the 1630s villages were frequently reorganizing themselves due to the loss of life from epidemics. Beginning in the 1640s, relations with the Iroquois worsened, and attacks by the Iroquois upon the Huron Confederacy and other Southern Ontario Iroquoian communities increased (Trigger 1976). From 1647-1649 there were numerous attacks on Huron villages by the Iroquois (Trigger 1976). The Jesuits chose to burn the mission down, to prevent its desecration, and fled with the Huron. Many Huron were captured or found themselves stranded and went to live among the Seneca (JR 35:77; Jordan 2013:36). Still others went to live among the Neutral and the Tionontate respectively (JR 35:77; Trigger 1976:767). Several other Huron fled to Christian Island for protection from the Iroquois. The Jesuits had encouraged the communities to move to Manitoulin Island, where many Odawa lived, but the Huron did not

believe this region would support agriculture (Trigger 1976:767). However, the access to food on Christian Island was also restricted, leading the Jesuits to hand out "copper tokens" to community members, which were in turn exchanged for food (Trigger 1976:780).

Ultimately, the Christian Island project failed, and in 1650 some of the surviving Huron fled north to French protection in Quebec, while some others fled to Manitoulin Island, northwest of Georgian Bay (JR 36:185). This community remained there, and is known today as the Huron-Wendat of Lorette. In 1650 The Iroquois attacked both the Neutral and the Tionontate. The Tionontate and Huron fled west into the western Great lakes to become the western Wendat. Some of those in Neutral villages fled to live with the Susquehannock, while some evidently fled west, possibly to Saginaw Bay (JR 36:177; Trigger 1976:791). The movement of the many and varied groups into the western Great Lakes is difficult to delineate. Archaeological texts cite historical descriptions, and historical texts cite archaeological reports, reinforcing specific village locations without clear evidence.

Early in the 1650s some of the Tionontate and Huron settled into the Green Bay area of Wisconsin (Trigger 1976:820). They are generally described as settling on Rock Island (Mason 1986), but the archaeological evidence, I argue, is not strong enough to support this assertion (see Figure 2). Demeter (n.d.) has analyzed the toponyms given in Jesuit Relations from this time period, and compared them with linguistic data and toponyms found in Father Potier's late eighteenth century dictionaries from the Wendat villages near Detroit, and argued that the Wendat stayed on Mackinac Island until the fall of 1653, whereupon they moved to Huron (possibly Rock) Island for a year or two, before moving to the mainland of Green Bay to live with the Potawatomi (Demeter n.d.:12).

Throughout their westward travels, the Wendat maintained strong ties to the regional fur

trade. In 1653, amid their dispersal into the western Great Lakes, several men traveled to Trois Rivieres to announce their intention to participate in the fur trade in the future (Trigger 1976:820). The following year they returned to Trois Rivières to trade, as promised, and brought some Odawa with them (Trigger 1976:820).

Following four years in the Green Bay area the western Wendat community was documented as living on the Black River. Archaeologists and historians have asserted that this is the modern day Black River in Wisconsin, but as Bob Birmingham has pointed out (personal communication), there is a Black River in the Upper Peninsula of Michigan as well, which corresponds better to the environment that the Wendat were adapted to. As no villages have yet been found near either river this remains speculation. Following the settlement on the Black River, the Wendat settled near Chequamegon Bay in the northern portion of Wisconsin, along the south shore of Lake Superior around 1660 (Trigger 1976:820; JR 49:163; 50:249-303). Missionaries in the area said that there were 500 baptized 'Tionontate Huron' in a village there (JR 54:165). Additionally, there were three Odawa villages, one of which was Christianized. Other communities were regularly coming to the mission to trade, including the Illinois, the Sioux, and unnamed tribes from the north and from the Green Bay area (JR 54:165-167). While a Wendat village has not been found archaeologically, an historic site on neighboring Madeline Island (the Cadotte Site) does have a large quantity of Wendat ceramics (see Figure 2).

In 1671, following conflicts with the Sioux to the west, the Wendat moved to the Straits of Mackinac, building their village on the north shore of the Straits near the Mission of St. Ignace (Trigger 1976:820) (see Figure 2). At the same time the Ottawa fled to Manitoulin Island, where the Jesuits established the Mission of St. Simon (JR 55:131).

The settlement at St. Ignace was fairly stable, and the Wendat lived there for

several decades. It is probable that there were other smaller populations of Wendat peoples that were living in the Great Lakes but not documented by the Jesuits. For example, during a 1676 excursion along the west coast of Lake Huron, heading south from the Straits, a Jesuit documented a trip down a river 12 days from the Straits where he encountered some 'Christian Hurons' (JR 60:217). While at St. Ignace there is ample evidence of continued relations with other Wendat peoples. Letters and wampum were sent between Quebec and St. Ignace (LaBelle 2011). Additionally the Seneca came to visit the Wendat at St. Ignace in an effort to get them to join forces against the Sioux. Likely it was Wendat who lived in Seneca Territory who made this visit. Cadillac described longhouse structures at St. Ignace, suggesting the retention of architectural styles (Magnaghi ca. 1989). More of this will be discussed in chapter four, when the archaeological sites are described in more detail.

In 1701, after getting approval from the French government to build Fort Pontchartrain at Detroit, Cadillac moved his traders to this post near the brief series of rivers that unite Lake Huron and Lake Erie (Kent 2004). Even though the Wendat had little interest in moving to Detroit in 1696, by 1701 the Wendat had developed a symbiotic relationship with the French, and felt compelled to join them in their move (Kent 2004). There were few reasons not to move – the fur trade was important to the Huron and a close connection to the French would maintain their roles in this prospect. Additionally, food resources would still be available in Detroit. The Wendat had been traveling to the lower peninsula of Michigan to hunt deer, gather apples and other wild foods, and collect lithic resources.

Chapter 3

Modeling Forced Migration and Resettlement Processes Archaeologically

Archaeologists look at static remains in specific site locations, yet the individuals who created and used these materials moved about the landscape. While we have considered the mobility of hunter gatherer communities (see Kelly 1991; Rockman 2003), we rarely problematize the implications of long-distance migration on communities. In particular, forced migrations can have traumatic impacts on the individuals involved, which can drastically alter the groups they are members of. In turn, this can cause changes in their material culture which are evident to archaeologists. Recognizing that forced migration could be an explanation for shifts in material culture and site settlement pattern is important for archaeologists as it has implications for other interpretations made from this data. In this chapter, I discuss the nature of forced migration and the act of resettlement within this scenario. Specifically, I will discuss communal migrations as opposed to individual and chain migrations. I then apply Rockman's (2003) model of settlement challenges to the specific case of forced resettlement. I show how choices made in the resettlement act are reflective of a community's identity.

The way in which a community defines itself and wishes to be recognized impacts the choices the community makes during resettlement. By examining resettlement practices we can extrapolate back to understanding communal identity. Specifically, I consider the identity of diasporic communities. As mentioned before, diasporic communities see their forced migration as part of their identity and retain a distinct link to their homelands (Safran 1991). I discuss the specific aspects of diasporic identity and consider how this affects resettlement choices and then

discuss the alternative choices made by communities that use non-diasporic strategies. Based upon this discussion and Rockman's model, I develop a model in this chapter for recognizing and evaluating diaspora and other forced migrations in the archaeological record.

Theorizing Migration

I define migration as movement of individuals or communities from one settlement to another, exclusive of movements that are part of an anticipated, regular cycle of mobility. In his seminal work on mobility and settlement Robert Kelly (45:1992) included permanent migration as one of the four types of human mobility (the other three being residential, logistical and long term mobility). I argue that migration is not a type of mobility but rather a distinctly different type of human movement (Figure 5). Mobility implies a range of movement practices that are part of the typical cultural practices of a community. It suggests a certain amount of standardization and anticipation, which is not to be expected of migrants. Migration is relatively unanticipated; that is, it is not something one plans to do at regular intervals throughout life, and it is not a practice that is passed on between generations. Kelly notes that migration is the least studied aspect of human movement (45:1992), only spending one paragraph discussing it in his whole work. Yet considering migration as an under-studied aspect of mobility diminishes its importance and consequence for communities. Even mobile communities can migrate independent of their regular mobility practices (Anthony 1990:897).

Migration is currently an issue of concern for social scientists across disciplines. Increase in global population in conjunction with warfare and social inequities has led to greater relocation around the world (Cohen & Deng 1998:1). In 2013 there were 232 million international migrants, compared to 154 million in 1990 (UN DESA 2013:1). 15.4 million of

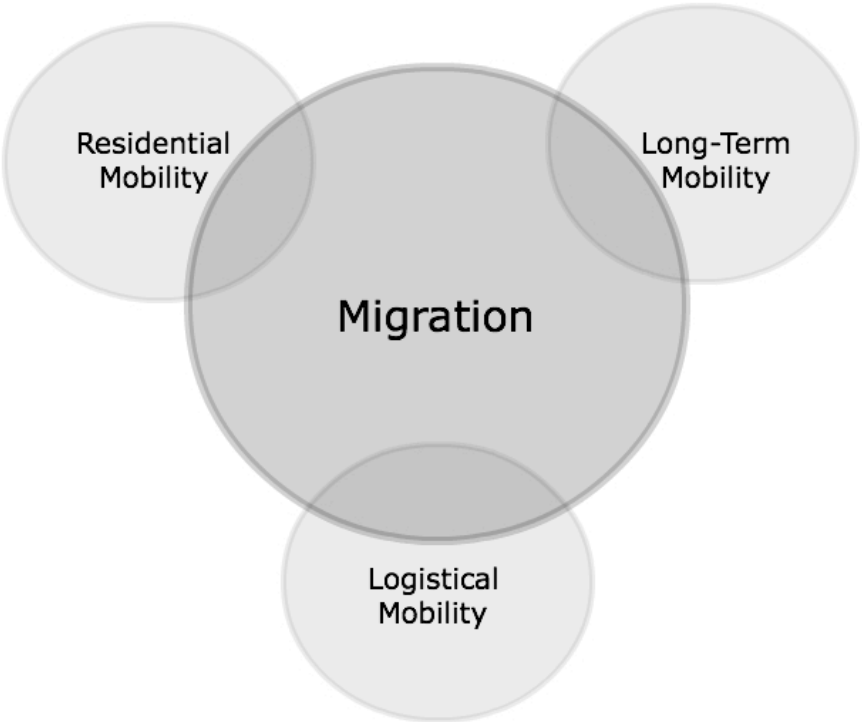

Figure 5. Migration is distinct, but potentially overlaps other kinds of mobility.

these migrants were refugees (UN DESA 2013:3). An additional 33.3 million people were recognized as Internal Displaced Persons (IDPs) that were forced from their homes but did not cross national boundaries; these people are not included in the international numbers (UN HCR 2013:71). Understanding where and how people migrate, how they impact their host communities and homelands, and how they respond to settling among new populations are all contemporary avenues of research (Brettell 2003; Cernea & Guggenheim 1993). Additionally, the displacement of refugee populations due to warfare and development, as well as the human rights violations associated with these issues, have become serious issues of concern (Colson 2003; Verdirame & Harrell-Bond 2005). Governments around the world recognize that migration has major impacts on their nations, and are exploring the physical, spiritual and mental

needs of migrants, along with accommodating the impact that emigration has on the communities that are left behind (Cohen & Deng 1998; UN HCR: 2013:15-21).

Clearly migration is not a new human practice, and it is also worthy of deeper consideration by archaeologists. By *not* considering migration as a possible cause of the cultural manifestations found in the archaeological record, archaeologists may be creating invalid explanations for what they are finding. For example, knowledge about a community's natural resources and landscape is invariably related to the length of time they have resided in the area (Crumley 1992). In her evaluation of social memory, Crumley wrote, "The volume and sophistication of captured information - for example, the observed range of variation in a region's climate - is directly proportional to the length of time a group has inhabited the region (Gunn 1994:84; see also Crumley 1992)" (Crumley 2002:40-41). However, when a community migrates, it can also develop social networks with new neighbors, which can vastly reduce the amount of time required to master the local environmental knowledge (Rockman 2003). The evidence for landscape learning, un/successful subsistence practices and other aspects of climate knowledge can be misinterpreted if migration practices are not considered in the same way that mobility is. Further, migration can drastically shift nearly every aspect of a culture's social, political and functional organization (Kiste 1974). A lack of consideration for the possibility that migration has impacted a community in any way shows a major weakness in the interpretive potential of a given archaeological project. When archaeologists so carefully consider different types of mobility and their implications for social organization, subsistence practices and settlement patterns, why would they overlook migration as another ultimate cause of variation within human populations?

Forced Migration

When migration is forced, the ramifications upon a community and its identity are different than in free-choice scenarios. In contemporary situations, the state frequently uses its power to remove people from lands it desires for other uses (Colson 2003). A longer standing aspect of forced migration that occurred even in pre-state societies is the forced migration of communities due to warfare or other threats of violence. The control over the decision of when, where and how to move affects virtually every aspect of a migration and ultimate resettlement (Kunz 1973, Petersen 1958). Those forced to migrate have an uphill battle in their ability to resettle. The ability to develop or modify subsistence strategies, find the necessary resources for survival, adapt to new climates, develop new relationships with neighboring communities, and process the stress and mental health strain are all complicated when agency is constrained for both individuals and the community itself (Berry & Rinehart 2003; Calloway 1990; Reed 1998; Ventevogel 2012:11).

Like other cultural processes, there are patterns of human response among migrants who are forced to resettle. While each community has different challenges, resources, and cultures, recurring themes of response are visible. The examination of forced migration and resettlement is a relatively new field of research, and one that has focused primarily on contemporary, urgent scenarios of forced migration (Cernea & Guggenheim 1993; Cernea 2000; Cohen & Deng 1998; Colson 2003; Kunz 1981). The theories applied to these communities can also be applied to historically disenfranchised communities that were removed from their homelands during colonial periods, and even further into prehistory. By contextualizing these past removals as forced migration, we signify the importance of these migrations as part of the history of these communities, and help to elucidate how descendant communities have developed in part due to

these processes. By examining forced migration among different cultures today, we can develop predictable models that allow us to understand past forced migrations through material culture.

Currently, the migration of indigenous communities is seen as somehow separate and different from migration involving other communities. It is often discussed in a past tense and not connected to the current issues of migration around the world. By incorporating indigenous communities into the migration dialogue, we recognize their connection to the modern world, and the fact that the living indigenous communities today are a result of these practices in the past. Additionally, by examining past migrations and recognizing the deep time depth in which forced migration has occurred, this research will expand the techniques available to researchers studying migration for understanding the impacts of migration on communities, and will highlight the benefits of long-term analysis of migration.

Community-level Analysis

Forced migration can involve individuals or large communities. While there are occasions in which just a few individuals are sent into exile, forced migration frequently involves large groups of people, such as we have seen in recent years in Iraq, Sudan, and Botswana, to name a few examples. Migrants moving for economic, religious, or other reasons that involve free choice, however, are more likely to move in smaller groups, or as individuals (Sowell, 1996). Frequently among contemporary transnationals, for example, we see individuals following one another in a chain-migration, where one person makes the first migration, and others follow to the same location where infrastructure and community is being established (Portes & Rumbaut, 1996). Due to the generally communal nature of forced migration, however, I will consider the impact of migration on communities, rather than individuals. I

define community as a group of people, limited in space, that are "the cumulative outcome of a set of choices and strategies employed by individual agents (Amit & Rapport 2002, p16)". Anthropologically, I am interested in the transformation of culture, which includes the practices and attributes of a social group, rather than the habitus, the manifestations of that culture within a particular individual (Bourdieu 1977).

Community is not an uncontested term. In their essay on this challenging topic, Yaeger and Canuto argue that there are four different approaches to the notion of community (2000:2). First, there are structural-functional approaches which examine "the functions that a community serves within a social structure" (Yaeger & Canuto 2000:2). Next are the historical-developmental approaches, which try to understand how a community came to be (Yaeger & Canuto 2000:2). Ideational scholars explore "how people perceive themselves and their place in a community...Social identity represents the coalescence of mutually agreed upon and self-ascribed cultural categories." (Yaeger & Canuto 2000:3). Finally, there are interactional approaches, which explore how people create community through relationships. This approach recognizes that social institutions are socially constructed, non-static, and not viewed the same by all participants (Yaeger & Canuto 2000:3). "Following George Murdock (1949), they [archaeologists] often envision communities as relatively static, conservative, closed, and homogenous social units maintained by residential proximity, a shared normative culture, and the daily experiences common to its members." (Yaeger & Canuto 2000:3). In general archaeologists have recently approached studies from scales of analysis that are more spatial, and tend to be either larger or smaller than the fluid notion of community (Yaeger & Canuto 2000:1). However, it is likely that the community, however it was defined, was more salient to the past people we study than the spatially defined spaces we focus on due to the nature of our research.

In his study of Hopi villages, Wes Bernardini used multiple lines of archaeological evidence to show that, among the Hopi, the most salient notion of 'community' was the clan (Bernardini 2005a, 2005b). Indeed, on multiple and fairly regular occasions, clans would move from one village to another, taking their distinctive symbols and their trade relationships with them. Occasionally clans fissioned and a portion of a clan would move as well (Bernardini 2005a:34).

While several clans would live together in a village, the most important social group in terms of self-identification was the clan rather than the village (Bernardini 2005a:33). Bernardini notes that contemporary Hopi also make this distinction, valuing clan identity first, and tribal identity second (Bernardini 2005a:33). This impacts not only identity, but also social and economic networks, reflected in material culture. However, following Barth (1969) he points out that larger social organizational categories could become relevant and important if social circumstances changed in a way that made this larger group identity important (Bernardini 2005:33). Among the Hopi the village makeup changed regularly over time, so when possible, archaeologists should not evaluate the village as the primary community, but try to examine internal clan segments individually.

Communities are fluid, and may involve people of different ethnic groups, ages and genders, who likely did not agree on all their beliefs. Migration complicates community identity by including the formation of new networks and separation from previously established landscapes and relationships. Communal migration includes a ready-made social network, and many individuals with various skill sets. Following migration, this community has to connect itself into a larger network to gain access to resources and knowledge (Figure 6) (Amit & Rapport 2002; Anderson 1983; Barth 1969; Clifford 1994; Lekson 2001; Lekson & Cameron

1995; McGuire 1982).

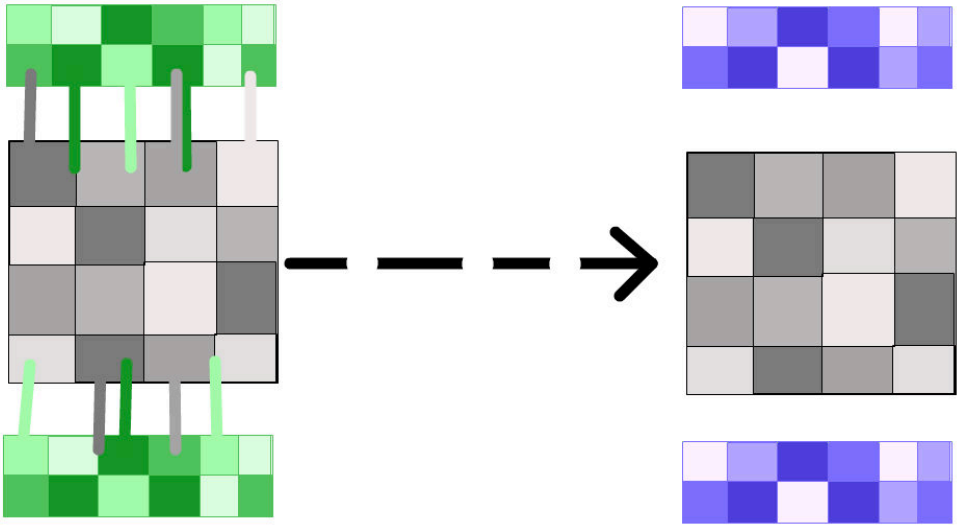

Figure 6. Communities are made up of individuals with a variety of skills, relationships, and access to resources which must be replaced or reestablished following migration.

Diaspora

By examining the responses that a community chooses to make to resettlement barriers, we can determine some aspects of its identity. The most distinctive identity marker to consider for a migrant group is diasporic identity. Diasporic communities are dispersed, and forced to leave their homelands, yet never feel fully settled elsewhere (Safran 1991). "…Diaspora cultures thus mediate, in a living tension, the experiences of separation and entanglement, of living here and remembers/desiring another place (Clifford 1999:311)". This concept is most traditionally associated with Jews, Greeks and Armenians, but has been further expanded today to include the African diaspora due to the slave trade and many other removals including contemporary Native American reservation communities (Clifford 1999). Not all forced migrant communities are

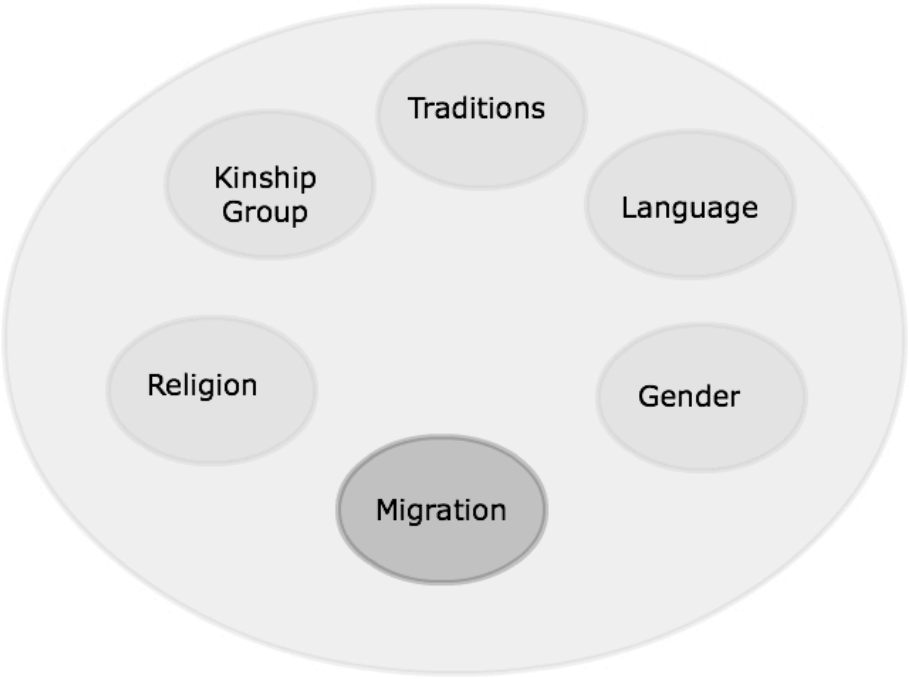

Figure 7. Diaspora identity includes a belief that your migration experience defines your identity.

characterized by this attachment to homeland but due to their connection with their homeland, and the distinction they make of not being in their proper place, diasporic communities will make specific choices about adapting to a new area that will distinguish them from non-diasporic communities. Diaspora communities incorporate their removal into their identity (Figure 7).

The diaspora framework that I use for my analysis is based on the work of Safran (1991). When problematizing diasporic communities, Safran defined six major characteristics of a diaspora:

(1) People moved from an original homeland to at least two other areas

(2) People do not believe they can ever be fully accepted by their hosts

(3) People retain a "memory, vision, or myth about their homeland"

(4) People expect to return to their homeland

(5) People believe in maintaining or restoring their homeland

(6) People whose concept of themselves is associated with their relationship with the idea of the homeland

When examining a forced migrant community, archaeologically or otherwise, the trait list developed by Safran is helpful for distinguishing diaspora communities from other forced migrants. These characteristics give us a framework from which to develop a model for recognizing diaspora in the archaeological record. For many of these traits, material culture characteristics can be recognized which collectively distinguish diasporic communities from other migrants. One of the first archaeologists to establish a model for understanding migration and resettlement was Marcy Rockman (2003). Her model can be expanded and modified using Safran's trait list to develop an archaeological model for understanding forced migration and specifically to recognize diaspora in the archaeological record.

Landscape and Identity

While migration theorists discuss the longing for homeland, they do not discuss the actual importance that landscape can play in the historical and social memory of a community. Scholars of indigenous cultures have placed particular emphasis on the role of landscape to these communities. In communities that do not have written texts, other mnemonics, including

locations on the landscape, are important markers for historical memories. As clearly shown by Basso (1996), landscapes are used by communities to tell stories, record histories, and teach lessons. Essentially, a landscape can contain much of the culture of a community. Knapp and Ashmore recognize four cultural functions of a landscape: it acts as community memory, identity, maintains social order, and is used for cultural transformation. The landscape, as recognized by the people who live and work upon it, is part of their *habitus* (Knapp and Ashmore 2000:20; Bourdieu 1977). Thus the uprooting of communities and movement into a new, as yet undefined and culturally formulated landscape can have profound impacts on individual and communal identity and memory.

Knapp and Ashmore (2000:10) argue that mobile and sedentary peoples map onto their landscapes in very different ways. Mobile communities are believed to place importance and identity onto the landscape as it is lain before them, while sedentary communities build their landscape to reflect important natural occurrences in them (Knapp and Ashmore 2000). They argue that "gardens, houses and villages" are often built in a fashion to reflect important natural landmarks (Knapp and Ashmore 2000). However, this oversimplification by Knapp and Ashmore does not explain the lack of perceivable constructed landscapes in semi-sedentary Native American communities. While numerous communities in the Eastern Woodlands, were semi-sedentary, it has not been argued that the majority of them were constructing their villages, houses or gardens in a way that reflected important locations on the landscape. Thus, this binary conjecture of two forms of landscape mapping is oversimplified, and may have more to do with political complexity than with mobility patterns.

Rockman's Model of Colonization

In her 2003 work, Rockman developed a model for understanding the challenges a community faces when settling in a new area and how these challenges may impact successful long-term settlement. It is important to note here that Rockman's work focused on initial human colonization, and not the historical manifestation of *colonialism* that surrounds this particular research project. Rockman primarily focused on the movement of prehistoric peoples, and when she referred to colonization, she meant the movement of communities into areas that are new to them. She was not discussing the imperialism of European colonialism during the Renaissance and more recent eras.

While Rockman's focus was not on forced migrants, her model was broad enough to incorporate them and can be modified to apply to forced migrants in particular. In her model, she defined three major hurdles a community must overcome when colonizing a new area: knowledge, social and population barriers (Figure 8) (Rockman 2003:15). The knowledge barrier was based on the amount of information a community has about the region they are moving into before they arrive (Rockman 2003:16). Social barriers included cultural parameters which limited the ability to interact with local communities or gain information from them (Rockman 2003:16). They included language differences, kinship patterns, networks and the ability for communities to interact on a cultural level. The final barrier was one of population. This involved the ability of a community to subsist and incorporate themselves into the economic system of an area (Rockman 2003:15).

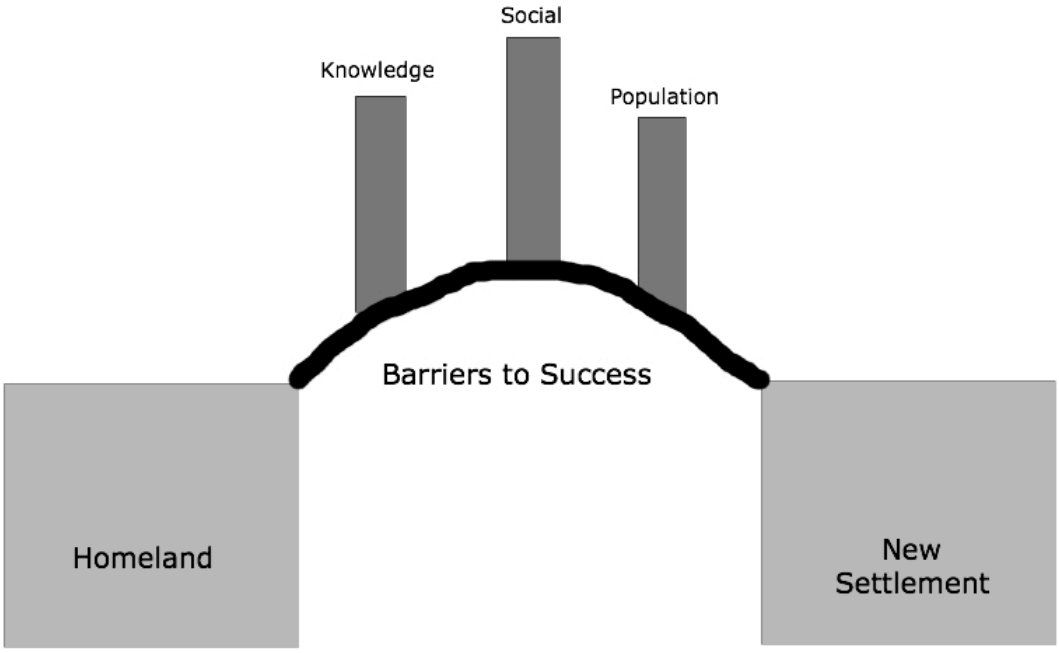

Figure 8. Rockman's 2003 Model of Barriers to Re/Settlement.

Depending on where forced migrants are being relocated to and their level of social organization, their barriers will be different. While some may have severe population barriers, others may find knowledge a more pressing obstacle. Rockman developed her model with prehistoric hunter-gatherers in mind. Contemporary and recent refugees have other barriers to face as part of the world system, which will not be discussed here.

Following migration, communities will try to overcome these barriers as they attempt successful resettlement. However, there are different ways that communities can choose to respond to these challenges. Ultimately, the culture of the community and their perception of their own identity and abilities will help them formulate their decisions about how to respond to these barriers.

Diasporic Responses to Resettlement

Based on the list of traits found in diasporic communities, we can extrapolate how these groups would respond to resettlement barriers in ways that might be different from other forced migrants. It is difficult to see a distinction in how diasporic communities might respond to knowledge barriers compared to other migrants. Rather, it is likely that forced migrants, in general, will have greater knowledge barriers prior to migration than migrants who have time to prepare and choose where they are relocating to.

Diasporic communities, compared to other forced migrants, will deal with the other two barriers differently (Figure 9). The second barrier discussed by Rockman (2003) was the social

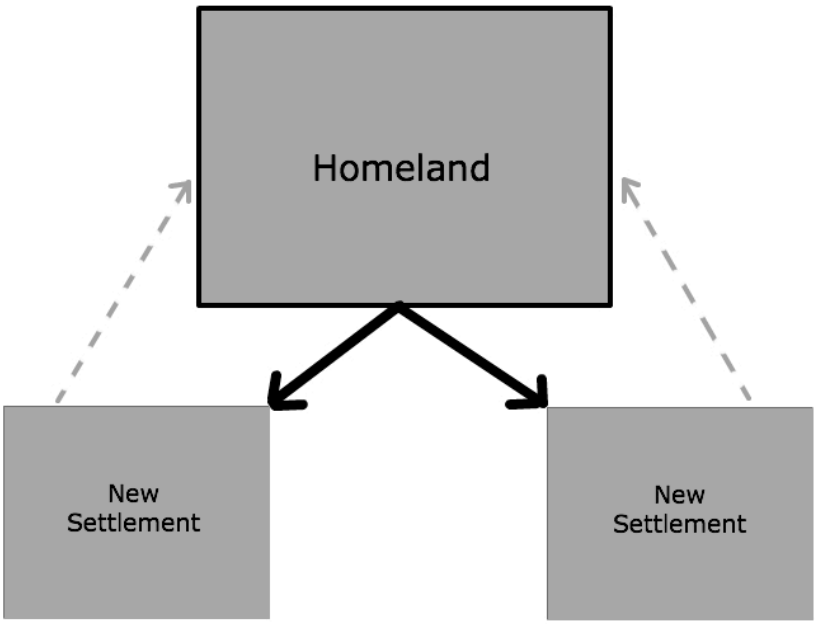

Figure 9. In diasporic communities anticipation of return to the homeland plays into decision-making.

barrier, which includes cultural differences between migrants and host communities. Social barriers may include language, religious beliefs, kinship patterns, traditional cultural practices, settlement patterns and symbolism, among other aspects of social identity. Social networks have the potential to reduce social, population and knowledge barriers for a migrant community, making a more successful resettlement likely (Rockman 2003). Diasporic communities that have a tie to their homeland and a longing to remember it and return to it are more likely to retain cultural traits that distinguish them from their host communities in an effort to assert their disconnection from the resettlement area and establish ethnic boundaries between themselves and their new neighbors (Clifford 1994; Safran 1999). They are less likely to build strong social networks within their region of resettlement, in part because they do not expect to be welcomed (Safran 2005:41).

Use of symbols to signal cohesion between or among groups and in the formation of ethnic boundaries is well documented (Bernardini 2005; Cowan 1996; Kohler et al. 2003; Stark 1998). Diasporic communities will retain symbols that distinguish them from their new neighbors, specifically those that will help them to draw clear boundaries of difference. Additionally, they may try to replicate aspects of their homeland in their new settlement. This may be done by naming places on the landscape after places in the homeland, or organizing their community in a similar fashion to the settlement at home. Diasporic communities are more likely to retain and/or invent visual and aural traditions that will help to keep the idea of the homeland present in the minds of community members and are passed on to future generations.

Limiting social interactions also has a negative impact on participation in local economic networks. Diasporic communities will therefore have limited knowledge of local natural

resources, such as sources of water, stone, useful wood and food resources (Kelly 2003; Rockman 2003). In this regard, diasporic communities will find it necessary to reuse more of the materials they have brought with them, or to use poor but easily accessible resources in their new settlements, rather than the best materials available in the area. Additionally, they may even take the risk of traveling back to known resources in the homeland, rather than using locally available materials.

The final barrier discussed by Rockman is the population barrier (Rockman 2003:15). The population barrier focuses on economic success and the ability to maintain a population by subsistence and/or trade. When migrants and host communities perceive power differentials between themselves, particularly in association with access to resources, they will develop ethnic boundaries to distinguish themselves and their rights to resources (Bonacich 1973; Frankel 2001; McGuire 1982). Diasporic communities are less likely than other migrants to adapt to local subsistence practices. Traditional foods will continue to be made, and local foods will be prepared using traditional practices. Diasporic communities will be less likely to incorporate themselves into local economic networks if it will cause them to lose their link to homeland and their identity as non-locals. Additionally, if a diasporic community anticipates a temporary departure from the homeland, rather than a long-term migration, they may not feel it necessary to take the time to incorporate into this economic network.

Non-diasporic Responses to Resettlement

Alternatively, forced migrants may choose other strategies to successful resettlement if they are not diasporic. To overcome social barriers, migrants may choose to adopt local customs and practices in an effort to become part of the local regional network. Historians have shown

that communities have sometimes "modified their appearance" to incorporate themselves into social networks and gain access to resources (O'Brien 1997; Sleeper Smith 2001). While retaining some aspects of their culture, these communities change their outward appearance to establish networks which will benefit them. Archaeological work in the Southwest has also shown that rituals may be transformed to incorporate new migrants into a social network (Stark et al. 1995).

Incorporation into social networks will also reduce population barriers for migrants, giving them access to important economic resources. Migrants who are not diasporic will have greater access to higher quality resources, and more exotic materials available through trade networks (Table 1).

Diasporic Communities	*Non-Diasporic Communities*
Retention of distinctive symbolic elements, including physical symbols, language, religious practices	Adoption of host customs, language, clothing, festivals, rituals
Reuse of materials brought with them	Use of local, high quality natural resources
Return to homeland for known resources	Greater access to exotic trade goods
Less access to high quality local material	
Less access to exotic trade goods	

Table 1. Comparison of behaviors and traits of diasporic and non-diasporic forced migrants.

It is important to note that migrants do not have to fit into either one of these categories exclusively, and that migrant identity can change over time if the connection to the homeland weakens. Migrants may choose to retain a 'migrant' identity, but in a cohesive fashion with

other refugee groups. This sort of pluralistic community retains a distinction from the host community but is not diasporic either. It is useful to consider communities on a sliding scale of migrative identity. By evaluating community responses to resettlement barriers, we can then evaluate the extent to which they reflect diasporic identity formation.

Previous Archaeological Research on Migration

The archaeological examination of the consequences of migration and resettlement has been expanding in recent years. Prior to that, most work on migration was limited, and often focused on documenting the pathways of migrants, rather than changes in communities due to the migration and resettlement processes (see Rouse 1986). Beginning in the early 1990s, a discussion on the importance of migration resurfaced in the literature (Anthony 1990; 1992; Burmeister 2000). David Anthony argued that archaeologists had simply been trying to use migration as an explanation, and the results were often found wanting (Anthony 1990:896). He stated that instead, archaeologists should begin by understanding the reality of the socially and spatially complex processes of migration, and then examine the archaeological evidence to determine how and why particular migrations occurred in the way they did (Anthony 1990:907). Anthony argued that contemporary migration was a useful correlate for examining past migrations, because there are patterns to the ways humans respond to different barriers (1990:898). By studying these patterns, we can develop archaeological models to document migrations (Anthony 1992:174).

Following Anthony's call for an archaeological study of migration, Burmeister attempted to develop a model of migration based on contemporary processes (2000). Burmeister outlined the patterns of contemporary migration, including the typical gender and age of migrants, and

their impact on the emigration settlement area and the homeland left behind, and then applied his ideas to an Anglo Saxton archaeological case study (2000).

Shortly after Burmeister's piece, a more expansive edited volume on the archaeology of migration was published. *Colonization of Unfamiliar Landscapes: the Archaeology of Adaptation* (Rockman & Steele, 2003) defined its focus as colonization; however, in its prehistoric archaeological context it appears the authors were using the term interchangeably with migration. The book is divided into two halves: a series of essays that examine contemporary hunter gatherer communities in an effort to develop theoretical models of how people think about movement and landscape and a series of archaeological case studies.

Another book examining the archaeological manifestations of identity and migration is Wes Bernardini's *Hopi Oral Tradition and the Archaeology of Identity* (2005a). Bernardini examined prehistoric Hopi communities, where clan groups moved into and out of villages independently of one another (see also Bernardini 2005b). He showed that the most important scale of identity among the Hopi was the clan, cautioning archaeologists against their assumption of village-level identity (Bernardini 2005a). Other southwestern archaeologists have also been focusing on migration, varying in the extent to which they consider it as a process for social change (see Lekson 2001; Lekson & Cameron 1995; Ahlstrom et al 1995; Schachner 2001). Beyond this, discussion of migration as a process for cultural transformation within the archaeological literature has been fairly limited. More often than not, it is discussed indirectly, such as in Fennell's research on BaKongo diaspora (Fennell 2003). While Fennell discussed the consequences of both slavery and forced migration, he did not directly incorporate migration theory into his discussion of material transformation and cultural retention.

Indeed, it is difficult to link social actions to the archaeological record. Shifts in

community identity related to migration and resettlement are particularly challenging changes to recognize through material culture. There is not a clear correlation between these processes and specific objects, such as when we see clear shifts in material culture associated with the domestication of plants (Bar Yosef et al. 1991). Additionally, the act of migration may lead to numerous shifts in material culture that are unrelated to identity and are simply due to a shift in the availability of certain resources. Yet it is possible to link the identity of a community with its material culture and to further examine changes in this identity through changes in material culture. Due to the indirectness of the evidence, a variety of data types should be used to help corroborate the evidence.

Modeling Identity of Forced Migrants through Material Culture

Diaspora

To examine the correlation between material culture and changes in community identity, I consider the social dynamics of diasporic communities as compared to other migrant communities. I examine the material culture associated with each type of community. In particular, I discuss the types of data that can be of use in the particular case of the Wendat migration into the western Great Lakes during the seventeenth century.

Diasporic communities distinguish themselves from other migrants through their connection to their homeland. This link to the homeland becomes a central part of their identity. Thus, diasporic community members, regardless of the accommodations they may make to incorporate themselves with new neighbors, never fully consider themselves part of the new settlement (Safran 1991). This identity is strong enough to be passed on to generations that have

never been to the homeland themselves – the concept of the homeland and its centrality to identity is important enough to these individuals that they will use it to distinguish themselves from their neighbors long after they have been relocated (Cernea 1993; Safran 1991).

There are a variety of social indicators of a tie to homeland that anthropologists and historians can examine when trying to determine its importance to a community. Physical attempts to return to the homeland, either for permanent relocation, resource extraction, or spiritual or ceremonial purposes are the most obvious. Stories about the homeland or places in the homeland are another possible indicator. The naming of places on the landscape with names that were used in the homeland can also be indicative of a link.

Part of being a diasporic community is not only having this tie to the homeland, but an expectation that the community will eventually return to the homeland and restore it (Safran 1999). There are also social indicators that will suggest that communities have these intentions, even if they never get to fulfill them. Communities that anticipate a return to their homeland are going to be less willing to incorporate fully into the economic and social systems of their new place of residence. Thus, examining materials that work as indicators of external relationships are essential to understanding diaspora.

Pluralistic Communities

In the case of the Wendat, an additional avenue of research needs to be considered before analyzing these external relationships. The Tionontate, Huron and perhaps even the Neutral and Erie, were separate sets of communities that formed a pluralistic Wendat community that eventually resettled in the western Great Lakes (Boucher 2001). While these groups interacted and shared many cultural practices, during the early historic period they also saw themselves as

separate and competed for resources, as discussed in chapter two. Before dispersing to the western Great Lakes, a group of Huron moved into the paired Tionontate Villages that are represented by the Plater-Martin and Plater-Fleming sites (Garrad 2014; Trigger 1976:767). This fused community is the one that migrated into the western Great Lakes and eventually became the Wyandot of Anderdon, Kansas Wyandot and Oklahoma Wyandotte. The majority of community members were Tionontate and a small group were Huron, yet the Huron had been the dominant participants in the French fur trade prior to dispersal. Additionally, it is possible that other Wendat, such as some of the dispersed Neutral and Erie, may have been adopted into this community during their time in the west. Multiple strategies for organizing the community could have been adopted. It is important not to assume a cohesive unit at all times within this community. Rather, the community must be analyzed through historical documents and material culture to examine this relationship. Only then can we consider how this refugee community interacted with others. As mentioned in chapter two, Iroquoian peoples showed a variety of ways of incorporating members of multiple villages together in a way that made them effective units. In some cases we see the incorporation of individuals and families into pre-existing longhouses (Tooker 1964). In other cases new longhouses are built for large clans that are not represented in the village (Tooker 1964:11). And in still other cases where communities are seen as truly distinctive from each other, separate villages are maintained next to each other, rather than creating one community (Jordan 2013:36).

Internal Organization of Refugee Communities

Increasingly, archaeologists have become aware of the fact that a community is not a homogenous entity, but the collection of several individuals who are manifesting culture in their

own ways (Bernardini 2005a, 2005b; Bourdieu 1977). During migration, the internal organization of a community has the potential to shift. Additionally, migration often includes the splitting or coming together of different groups, who must now forge a new type of social organization within the community (Kiste 1974). Just as archaeologists need to consider the implications of migration on communities at a village-scale, they must also use smaller scale analysis to examine the internal organization of these villages to truly understand the process of resettlement.

Examining the internal organization of communities is something that archaeologists are fairly good at. Using household archaeology, we can understand the organization within the community by the suite of artifacts that are found within each household and the spatial layout of the households within the community (Malpass 1993; O'Gorman 2010). Status markers and distinct types of material culture can be spatially compared. This can include materials that are only found in certain sections of the community, or the abundance or style of different materials. For example, the spatial pattern of ceramics can be indicative of ethnic background if they are isolated to certain households (Ehrhardt, Grantham & Speakman 2001). Additionally, communal structures or evidence of feasting can be indicative of events encouraging social cohesion within the community (Mills 2004).

Testing Huron Resettlement Practices

One goal of this dissertation is to evaluate the western Wendat community through a lens that evaluates diasporic identity. Were the western Wendat a classic diasporic community? To do this, archaeological and historical data will be evaluated to elucidate information to answer this question. Two types of archaeological data will be used as part of this analysis: materials

with symbolic content and lithics.

Materials with Symbolic Content

Symbols can be manifestations of identity distinction, and as such have been examined extensively by archaeologists. The focus of archaeological research on symbols has transformed over time (Robb 1998). While originally considered to be a simple reflection of identity, the complex role of symbolism in creating identity in itself has expanded following the ethnographic research of anthropologists including Turner (1969), Barth (1969), Geertz (1973) and others.

Symbolic materials become more distinctive at geographic boundary areas between groups that recognize some sort of ethnic or social distinction from one another (Hodder 1982; Wiessner 1983). McGuire (1982) argues in particular that group identity, including ethnic identity, is often formed or reified in this manner when resources are being competed over (McGuire 1982; Pikirayi 2007:291).

Symbols do not only pass on information to the individuals that perceive them (Wobst 1977), but they are also constructed within a distinct cultural setting, and reflect innovation and modification of cultural systems (Robb 1998). Using a Peircian analogy, an individual producer is consuming the culture around them, interpreting it through his or her individual lens, and producing symbols that he or she feels reflect the information desired. These symbols are then consumed and interpreted by the receivers/users of the objects through their own individual lenses (Thomas 1996). Thus the symbols are an essential part of the structure of the culture and not only representative of information.

Bourdieu (1977) argued that vernacular objects are key materials for understanding social organization and culture as they are daily encountered, transformed and refined by individuals

within their cultural milieu. At the same time, Bourdieu emphasized the individual and their *habitus*, their interpretation and manifestation of the larger culture (1977). While it is important to recognize this, as archaeologists our ability to see the physical remains of the *habitus* in the material record are difficult without a fine level of in-situ preservation of domestic spaces. However, we can still examine these domestic objects, as Bourdieu encourages, recognizing that the archaeological record is a manifestation of these collective *habitus*es, which is the communal representation of culture (Robb 1998:342).

I evaluate Wendat materials with symbolic content from five archaeological sites in Ontario and the western Great Lakes. While most human-made and modified objects have some sort of style imbued in them (Wiessner 1983), symbols are most prevalent on particular types of objects. This study includes an examination of ceramics, including pots and pipes, along with other materials with symbolic content including incised bone and shell objects and carved catlinite materials.

Expectations

Diasporic communities assert their cultural difference from host communities, while non-diasporic communities adopt more local cultural practices and ideas as they incorporate themselves into social networks. If the western Wendat were acting in a diasporic fashion, their symbolic materials in the western Great Lakes should have maintained a similarity to those found on pre-dispersal sites in southern Ontario. As the western Wendat were a mixture of several Wendat communities, this material may reflect the hybridity of those communities as they reified their shared Wendat identity, rather than emphasizing their previous village level differences. If, instead, the western Wendat were non-diasporic, distinctive symbols should have

reduced in abundance over time, and locally familiar symbols of western Great Lakes communities like the Ojibwe and Odawa should have become more prevalent.

Lithics as Economic and Social Indicators

As mentioned previously, diasporic communities will have weaker external social networks and less knowledge of the landscape, since they do not intend to become permanent residents (Rockman 2003). External social networks would reduce barriers to knowledge about local resources such as high quality lithic outcrops (Kelly 2003; Rockman 2003). Lithic materials are used for making a variety of tools, from expedient knives to more formal scrapers and projectile points. Knowledge of quality resources within a region indicates that a community has a good understanding of that space. One way to acquire this knowledge is through social networks, which would indicate a good working relationship with neighbors (Rockman 2003). Another indicator of strong social networks would be quality materials that have come to the community from further afield, through trade (Kelly 2003 Interestingly, it has been shown that in some cases of *scarce* resources, refugee populations and the indigenous peoples of their resettlement area will come into conflict, thus not integrating into the same social network because it is mutually disadvantageous (Mahapatra & Mahapatra 442:2000).

Expectations

There are three different possibilities for lithic materials used by the western Wendat If the Wendat were diasporic, the data will show higher evidence of re-use of lithic materials, and the use of local, easily accessible materials, regardless of quality. This is because the community would be focusing primarily on survival with intention to return to the homeland, rather than

acclimating to the new area and accessing high quality materials. If they were not diasporic, and resources were not particularly scarce, the Wendat will have had stronger networks, greater knowledge of high quality materials, and greater access to long-distance, high-quality lithic materials. Finally, if they were non-diasporic and resources *were* scarce, then a pattern similar to a diasporic community would be present, however other evidence of scarcity and conflict would also be evident.

Evaluating Diasporic Identity

As stated earlier in the chapter, there are specific characteristics that distinguish diasporic communities from non-diasporic migrants. I argue that these characteristics can be evaluated using material culture, including materials with symbolic content and lithics. To test this model, historical documents will also be incorporated into my analysis of the western Wendat. While historical documents can add richness to the study, they also work as a secondary and independent data set from the archaeological materials, so that the value of these materials for understanding diaspora can actually be evaluated. Paralleling the material culture analyses, documents will be examined for evidence of cultural practices that are being retained or reinforced following dispersal, along with an examination of the relationships that the western Wendat had with other communities in the western Great Lakes. It is also necessary to consider how the Wendat related to their landscape and their homeland. Diasporic communities long to return home. In addition to their resettlement practices this can also be reflected in their re-creation of the homeland, their discussions of it, and even short-term trips back to it. As mentioned previously, landscape is part of the *habitus* of many communities, particularly indigenous communities. Landscape not only acts as identity and maintains social order, it is

cultural memory and is used for cultural transformation (Knapp & Ashmore 2000; Bourdieu 1977; Basso 1996). If landscape is so salient to a community, then removal from that landscape can have profound implications for cultural identity and history. When history is tied to the landscape and people are removed from it, they must do one of three things to respond to this dislocation:

a) recreate and rebuild their history on their new landscape
b) recall the history of the past landscape
c) remove the connection of history to landscape

Diasporic communities could respond in either of the first two ways, depending on how soon they anticipate a return to the homeland. Communities responding in the third fashion, by removing history from specific places on the landscape, would not be considered diasporic.

To gain insight into how the Huron felt about their homeland, seventeenth century documents are examined for discussions of longing to return home and evidence of return travels. By combining the archaeological and historical data together in a diaspora model, I will evaluate the relationship of the seventeenth century western Wendat to their homeland following dispersal. Archaeologically, this will involve the examination of materials from five sites – two in the homeland and three in the western Great Lakes. The following chapter will give a brief overview of these archaeological sites.

Chapter 4

Archaeological Sites in this Research Project

To assess the ways in which migration affected the community identity of the western Wendat five archaeological sites were selected for this dissertation research. These sites are variable in the amount of data collected from them, the length of excavation, and the extent to which cultural identification could be clearly determined. The chapter will begin with a brief overview of site selection, followed by a more detailed discussion of each site individually. As part of this, I will discuss the site selection strategies and the quality of available data for each site. As will be discussed, limitations of cultural affiliation led to limitations of artifacts worthy of inclusion for analysis at some sites.

Southern Ontario (Pre-Migration Sites)

Extensive archaeological excavation and survey has been performed in Huronia, and much work has been done in the homeland of the Tionontate as well (see Garrad 1978; Trigger 1978). Additionally, archaeologists have performed extensive historical research in attempts to locate and identify specific Huron and Tionontate villages (Garrad 1997a, 1997b, 1997c, Trigger 1961). Identifying specific villages is problematic but is generally done by comparing location information and village descriptions from the Jesuit Relations or other early French documents with the material culture remains found at a site (Heidenreich 1971). If a site is in a location near the one interpreted from the historical documents and has material culture from the correct time period it is identified as the site referenced in the historical documents. At this point, all further

descriptions of the site based on the documents are applied to the site and assumed to be accurate as a starting point for research.

One of the complications to the interpretation of sites is how villages were named, and recorded by the French (Heidenreich 1971:29; Jones 1908). There were a variety of ways to identify a village:

1) By the tribe that lived there
2) By the village leader
3) By a locational marker
4) Saint's names given by the Jesuits or Recollects

Additionally, villages could take names with them when they moved, leading to two villages with the same name in different times and places (Heidenreich 1971:30). To compound issues, one village could be referred to by all of the above names, and therefore by misidentified as four distinct villages via the historical record. Another problem with the historical record is the interpretation by various archaeologists and historians of the measures of distance and recognition of topographical landscapes. The misidentification of a bay or river, and the mismeasurement of a distance (by using an inappropriate length for 'league' for example) could lead to misidentification over a small, tightly settled area. Additionally, the possibility of mistakes of direction, distance and location should also be expected of the French documentarians of the seventeenth century as well. In addition to making mistakes themselves they frequently based their descriptions on the information passed on to them by other people, rather than first hand experience (Heidenreich 1971:29).

When selecting Wendat archaeological sites for study from pre-migration Ontario, I was looking for the latest inhabited villages of the Huron and the Tionontate prior to dispersal in

1649. By the time of dispersal, the Huron had been in contact with the French for 40 years, and had become accustomed to having French materials available for use. The resultant sites included in this examination are the Kelly-Campbell and Plater-Martin sites. Both are contemporaneous with the better known Huron village site at Ossossane, which was relocated to its final location in 1635 and inhabited through 1649 (Garrad 2014:464; Trigger 1976:519, 767). Charles Garrad has shown that the Tionontate had two sets of paired villages, which they moved north along the eastern ridge of the Blue Mountains every time they relocated (Garrad 1978; 2014). Each of the paired village sets represents a community of Tionontate and a corresponding Odawa village (Garrad 2014). Kelly-Campbell represents the second to last of these paired sites and has European made artifacts that place it in Glass Bead period III, between 1625 and 1649 (Garrad 2014:385). Garrad argues that this village was inhabited by the Wolf Phratry of the Tionontate (Garrad 2014:464). Plater-Martin is further north along the Blue Mountains and also has artifacts from Glass Bead period III. (Figure 10). The Plater-Martin and Plater-Fleming sites were a set of paired villages located very close to Nottawasaga Bay, the southernmost portion of Georgian Bay (Garrad & Heidenreich 1978). From these villages, you can see Christian Island and the shoreline of Huronia on the other side of the bay. Plater-Martin was home to members of the Deer phratry of the Tionontate when the Huron came and settled with them in the late 1640s. It is from this village, which is littered with projectile points, that the Huron and Tionontate fled west from the Iroquois attacks (Garrad 2014). As the bulk of western moving Wendat were Tionontate, and not Huron, it is useful to begin analysis with the Kelly-Campbell site, which can then be compared to Plater-Martin to see how Huron peoples were incorporated into the community, the earliest accommodation of refugees considered in this study. These sites will be discussed in greater detail below.

Figure 10. Map of Late Historic sites in the Tionontate area, based on Warrick 1990.

Western Great Lakes (Post-Migration Sites)

Site selection for post-migration sites had less to do with chronology and more to do with availability. There are three known sites that archaeologists have associated with the Wendat in the western Great Lakes: Rock Island II, the Cadotte Site, and the Marquette Mission site. Rock

Island II is located on an island on the eastern shore of Wisconsin, on Green Bay (see Figure 2). The Cadotte site is located on Madeline Island, the largest of the Apostle Islands on the northern shore of Wisconsin near Chequamegon Point (see Figure 2). The Mission of St. Esprit is known to have been in the area, and based on the archaeological remains, Cadotte is believe to be a fishing site associated with the Wendat who settled in the area during the 1660s (Birmingham 1992). The final site, Marquette Mission, is located near the Straits of Mackinac, which connect Lakes Michigan and Huron. It is located in St. Ignace, the modern town named after the Jesuit mission that was located at the village from 1670 through 1701. Historical maps and descriptions for this region are plentiful and help to confirm the location of the archaeological site as the Wendat village. St. Ignace is also the largest of the post-migration sites and has evidence of longhouse structures in addition to Wendat artifacts. These sites will be discussed in greater detail below.

The Archaeological Sites

Kelly-Campbell (BcHb-10)

The Kelly-Campbell site has been both surface collected and partially excavated. Initially, J. Allan Blair performed excavations at the site in 1954 and 1955 (Garrad 2001a). Additions materials were surface collected from 1974-76 by Garrad and are housed by the Petun Research Institute (Garrad 1975, 1976). Ceramics were analyzed by Charles Garrad, based on a modified MacNeish Pottery System (Garrad 2001b). Chipped stone tools were analyzed by William Fox, and I analyzed a sample of the flakes and debitage. A limited but diverse collection of European trade goods are present at the site, including a Jesuit medallion, iron axes and

knives, and several glass beads, all supporting a settlement date in the early-mid portion of the seventeenth century (Garrad 2014: 385). I presume that many seed beads were missed as they were throughout so many early excavations on historical sites due to the use of large mesh screening, which would not have captured these small artifacts. Using Kenneth Kidd's glass bead dating system, Garrad dated the site to Glass Bead Period 3 (1625-1650) (Garrad 2001:16). Of the faunal remains excavated at Kelly-Campbell, 35% of them by count are beaver (*Castor canadensis)*, followed by dog (*Canis lupis)*, bear (*Ursus)* and deer (*Odocoileus virginianus)* (Garrad 2003:2).

Correlating the material culture and site location with historical descriptions, Kelly-Campbell is believed to be the site of the Wendat village of *Etharita*, known as St. Jean by the French (Garrad 2014). This village site was attacked by the Iroquois in 1649. Based on soil coloration following plowing, Garrad designated five different zones at the Kelly-Campbell site and surface collected each of these sections separately (Garrad 1975). Kelly-Campbell has a variety of Tionontate materials associated with it. No muskets or related materials were found at the site, while stone projectile points, ceramic and stone pipes are present (Garrad 1975, 1976). The vast majority of materials at the site are indigenous, rather than European, including 489 rim sherds, 196 clay pipe bowls, and abundant marine shell (Garrad 2014). European materials include 66 glass beads, copper kettle lug and rim parts, two iron knives, and seven iron axes (Garrad 2014). A Jesuit ring was documented at the site, but has since been lost (Garrad 2014). The presence of trade goods shows that, although the Huron were limiting direct interaction between the Tionontate and the French, trade goods were nonetheless making their way to these villages. Further, the presence of marine shell supports the prehistoric pattern of trade with communities to the south, such as the Susquehannock. As the Tionontate were likely migrants

from Neutral territory in prehistory, they would have had ties with those communities. Additionally, one of the earlier historic Tionontate villages, abandoned after an altercation with an outside group in 1640, was documented to have large quantities of Neutral refugees in it when the Jesuits visited in 1639 (JR 20:47). Jesuits document continued relationships between the Neutral and Tionontate and the Susquehannock during the historic period including the dispersal of some Neutral and Tionontate to the Susquehannock after they are attacked by the Iroquois (JR 45:241). While the French, and since them, historians have argued for the importance of the Huron in controlling trade and exchange in early historic Ontario, they appear to have controlled only the trade to the northeast, while communities maintained their own north-south trade networks.

Plater-Martin (BdHp-1)

The final community inhabited by the Wendat in Ontario was Plater-Martin, a site that was paired with the Odawa village at Plater-Fleming (Garrad 2014). Many of the Wendat sites on the south short of Georgian Bay appear to have been paired in these ways. Jesuits regularly mention that Odawa communities overwintered with Wendat communities. Based on the smaller site size, limited quantity of materials, and higher number of lithics from northern and western sources, Plater-Fleming is believed to be one of these Odawa villages (Garrad 2014).

The Plater-Martin site is located on a terrace overlooking Georgian Bay, in the town of Craigleith, Ontario. Original surveys of the Craigleith area from 1886-1905 by Andrew Hunter did not document the Plater-Martin site, but shortly thereafter locals began collecting at the site (Garrad 1976:45; Hunter 1886). Over several years avocational archaeologists collected materials from the site, and for ten years between 1965 and 1975, Charles Garrad and other local

archaeologists regularly observed soil color patterns at the site and the prevalence of materials on the surface.(Garrad 1976). Observation, along with discussions with the landowners, led to the belief that there are five distinct midden areas at the site (Garrad 1976:47). Artifact densities on two of these were quite low, leading to the hypothesis that these areas had in fact washed out. In 1975, archaeologists tested two midden areas at the site for subsurface features. A grid was laid out across the site, and 5x5 foot excavation units were excavated in two areas believed to have the greatest likelihood of subsurface features, designated as Area 1 and Area 2 (Garrad 1976:49) (Figure 11).

Area 1 and Area 2 were in different regions than the middens, as it was anticipated that surface collecting of the plowed middens (1-4) would have left little behind, and Midden 5 was avoided because it was under a large poison ivy patch (Garrad 1976:50). Excavations revealed very few subsurface features. The prominent explanation for this dearth of materials below the plow zone is soil erosion due to plowing throughout the twentieth century (Garrad 1976:50). Garrad speculates that the Jesuits lived at the west end of the site, while the Tionontate lived on the east, due to the minimal amount of trade goods near the east end of the site (Garrad personal communication 2009). However, this could also be a chronological variable. In 1976 excavations at Plater-Martin continued. The focus of excavation that season was Midden 2 and Midden 5 (Garrad 1977:47).

Materials collected from the Plater-Martin site are housed at the Petun Research Institute. Lithics were analyzed by William Fox and ceramics were analyzed by Charles Garrad (Garrad personal communication 2009). Collections from the site include stone (limestone) and clay pipes, in addition to 196 ceramic rim sherd, 106 clay pipe bowls, and 94 pieces of marine shell (Garrad 2014). Several of the clay pipes are extremely well made and burnished to a shining

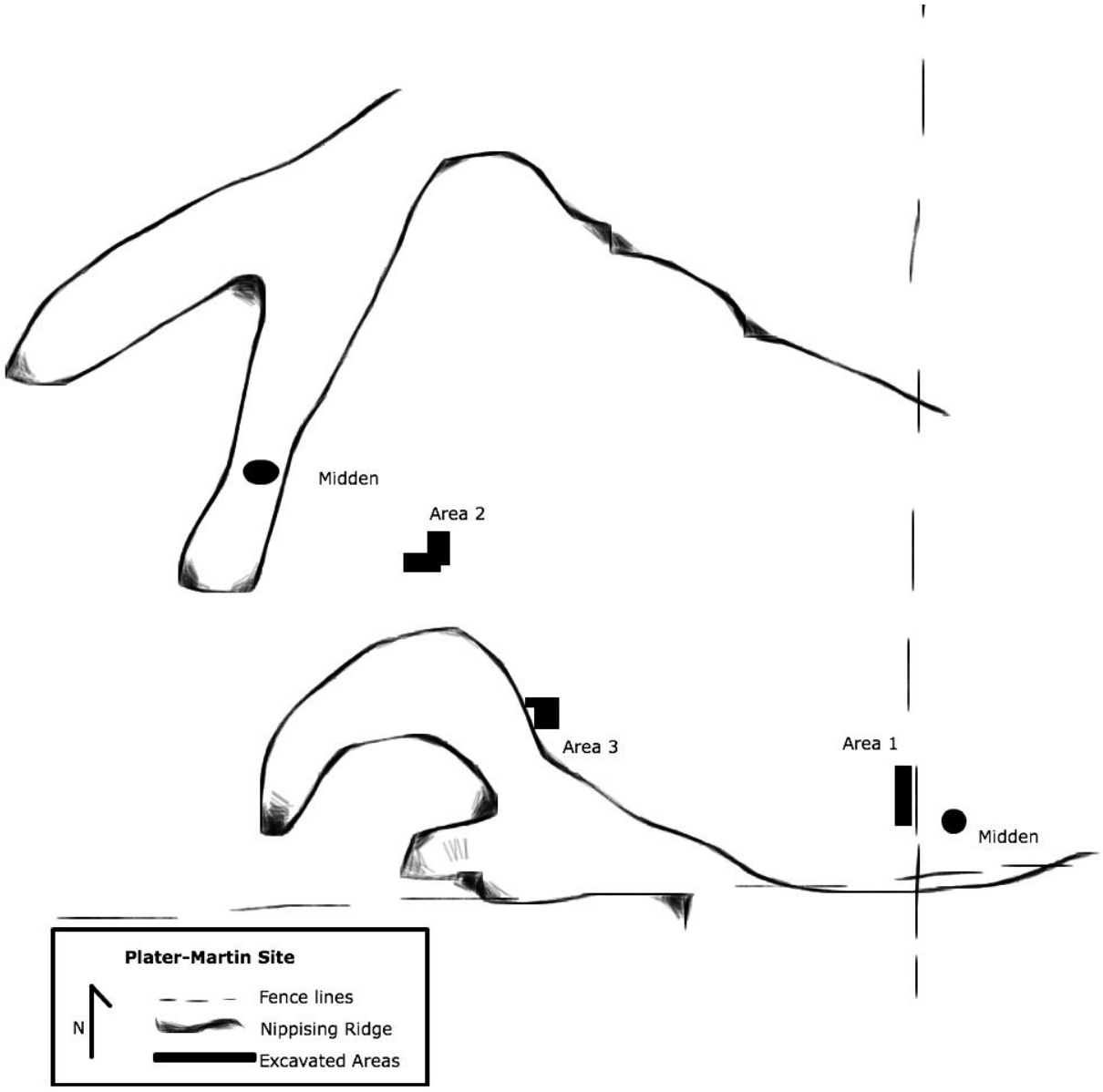

Figure 11. Map of Plater-Martin site, based on Garrad 1976.

black color. There are a very limited number of trade goods in the collections. There are 35 large glass beads that support the dating of the site to Glass Bead Period 3, 1625-1649 (Garrad 2001:46). Additionally there are kettle rims and lugs, twelve iron knives, fifteen iron axes and one European gunflint, though no other gun parts have been found (Garrad 2014). Two Jesuit

rings that were of the same design as the one from the Kelly-Campbell site were found at the Plater-Martin site (Garrad 2014:379). Faunal remains are similar in abundance to Kelly-Campbell, except that deer is less common, and the presence of woodchuck is over 10 percent (Garrad 2003:2).

Rock Island II

The Rock Island II Site, near Green Bay Wisconsin, excavated and analyzed by Ronald Mason, was originally classified as a Wendat migration site (Mason 1986). Rock Island is a fairly small island, and with their preference for horticulture and hunting, it is unlikely the Wendat would have settled here for a long period. However, based on limited material and structural remains, Mason concluded that a portion of the stratigraphy represents what he called "Period 2: The Huron-Petun [Tionontate]-Ottawa, or Proto-Wyandot [Wendat], Occupation of 1650/51-1653" (Mason 1986:213). Mason found evidence for a palisade, multiple pit features, and scattered material remains (Mason 1986).

Rock Island is part of a string of eight islands, called the Grand Traverse Islands, on the northern tip of the Door Peninsula on the eastern edge of Wisconsin, protruding into the Green Bay of Lake Michigan (see Figure 2). Rock Island is formed on the same Niagara Escarpment soil as the Blue Mountains where the Tionontate lived in Ontario (Luczaj, 2013). The island was covered in northern mesic forest, including birch, beech and sugar maple trees (Mason 1986:22). Large sand dunes cover the southern shore of the island, while large cliffs make up most of the other edges of the island. Mason led excavations on the island from 1969-1973. These excavations uncovered several occupations from prehistory into the eighteenth century (Mason 1986). Historical documentation also suggests a nineteenth century Ojibwe settlement on the

site, however no archaeological materials were found from this period (Mason 1986). In his report of excavations Mason focused on the four historic occupations evidenced at the site (Table 2).These four periods were recognized in different stratigraphic layers throughout the site. Mixing occurred between materials throughout the site, but different stratigraphic layers clearly had predominant components (Mason 1986:212). As the sites are all fairly recent, radiocarbon dating was not employed.

In evaluating the report of the features that Mason associated with Level II, the Huron-Wyandot [Wendat] layer, I feel I must question identifying this level conclusively with a Wendat village site, based on our current knowledge of seventeenth century Native American material culture. Ceramics within these features are quite variable, including Bell Type II, Allamakee Trailed, Carcajou Plain, Huron Incised, MacMurchy Scalloped and Danner Ware, which represent a variety of cultural affiliations (Mason 1986). Additionally, Mason attempted to use the fact that a bear-mandible tool was found in Level II as evidence of Wendat occupation (Mason 1986:215). This was based on the assertion by Charles Garrad that these tools are distinctly Wendat (Garrad 1969). In doing so, Mason ignored the fact that more of these tools are found in upper layers of the site which he associates with the Potawatomi. Or rather, he explained this away by stating that the Potawatomi learned to use these tools from the Wendat after their arrival (Mason 1986:184).

Terry Martin and others have since asserted that the bear-mandible tool is indeed an object of the fur-trade, but not one that can be associated with any tribe in particular, as it is ubiquitous across early historic sites (Martin & Graham 1995). More recently, Garrad has argued that the tools are still ethnic identifiers, but for the Odawa (Garrad 2006).

Mason's Time Period	*Occupation Date*	*Cultural Affiliation*	*Archaeological Units/Stratum*
Period I	>1641 <1650	Potawatomi	• X-Unit J-K, S-B3 • X-Unit A, S-D • X-Unit I, Trench 3, S-B3
Period II	1650-1653	Huron-Petun-Ottawa (Western Wyandot)	• X-Unit A, S-D, upper portion • X-Unit C, S-C1, a portion • X-Unit G, S-B • X-Unit J, Trench 3-4 • X-Unit K, Pit 39-1 • X-Unit H, probably all premidden pits (at least pits 20, 42 55)
Period III	1670-1730	Potawatomi	• X-Unit-A, S-B3 & B4 • X-Unit B • X-Unit E incl bldg 1 • X-Unit H incl bldg 2 and 2nd and 3rd palisade lines • X-Unit I, excluding the numbered trenches and 1st palisade • X-Unit J, trenches east and south of 1st palisade line and nearest to X-unit H • X-Unit J-K, S-B2 • Subperiod 3A is best seen in X-Units B, E, and H, S-B2 and X-Unit H, Trench 2, S-B3
Period IV	1760-1770	Probable Ottawa	• Cemetery • X-Unit-A, S-B1 and B2 • X-Unit-C, S-B • X-Unit-G, S-A • X-Unit-K, Buildings 3 and 4, most of level 1 • X-Unit-J/K, S-B1 • X-Unit-L

Table 2. Historical components at Rock Island II Site (based on Mason 1986).

The final source of data that Mason cites for explaining the site to be Wendat is a palisade wall with a broken Wendat pot in the trench (Mason 1986:214-215). While this certainly indicates that the trench diggers had a Wendat pot with them, the abundance of other

ceramics, and the lack of historical evidence supporting the presence of a Wendat village on Rock Island make this a very tentative assessment. For this reason, while the ceramics will be analyzed for this project, other materials from the site will not be included, as the cultural affiliation of the site is too questionable. The date of circa 1653 for this site is supported, and as such, an examination of the Iroquoian pottery from this time period is worthwhile.

It is worth noting that there is virtually no historic data for the Rock Island site. At the time the Wendat were in this area they were not travelling with a missionary. Occasionally a missionary would write that another tribe has mentioned interactions with the Wendat, but no specific cultural data is available. One point of note, however, may be the 'Journal of the Jesuits Fathers, in the year 1653'. Here the Jesuits make note of a canoe that gives word about the Huron:

> "These seven savages have brought news that all the Algonquin Nations are assembling, with what remains of the Tobacco Nation and of the Neutral Nation, at A¸otonatendïe, three days' journey above the sault Skia¸é, toward the south. Those of the Tobacco Nation have wintered at Tea¸onto´rai; the Neutrals, to the number of 800, at sken´chio¸e, toward Te¸o´chanontian; these two Nations are to betake themselves next autumn to A¸otonatendïa, where even now they number a thousand men,—to wit, 400 Ondatonateni [Potawatomi]; 200 Outawak [Odawa], or cheveux relevez; 100 Awe¸atsiwaen´ronnons [Ho Chunk], and people from the Nation of A´chawi [possibly the Erie]; 200 Enskia¸e´ronnons [Salteaux]; 100 Awechisae´ronnons [Mississauga] and Achirwachronnon [Ojibwe]." (JR 38:179)

This appears to be a description of the area around Green Bay, thought not specifically Rock Island. It does show that a large number of Neutral and Tionontate were settled near each other, but separately. It further shows what became a common pattern in the western Great Lakes, of communities settling down near each other, likely in an effort to protect themselves from the Iroquois.

Cadotte Site

In 1665 Jesuit Missionaries established a mission at Chequamegon Bay, on the south shore of Lake Superior in present-day northern Wisconsin (JR 50:257-310). This region was a gathering place for numerous tribes . As Father Allouez described it:

> "It is a beautiful bay at the head of which is situated the large village of the Indians, who there cultivate fields of Indian corn and do not lead a wandering life. There are at this place men bearing arms who number about eight hundred, but these are gathered together from seven different tribes, and live in peaceable community...The section of the lake shore where we [the Jesuits] have settled down is between two large villages and is, as it were, the center of all the tribes of these countries; because the fishing here is very good, which forms the principal source of support to these people. We have erected a small chapel of bark, where my sole occupation is to receive the Algonquian and Huron Christians, instruct them, baptize and catechise the children" (Allouez in Thwaites Collections of the SHS of WI Vol XII p 435-436)

Father Marquette, who travelled with the Wendat from Chequamegon Bay to St. Ignace when they moved, also described who was living on the bay a few years prior:

> "I went to visit the Indians, who were living in clearings divided, as it were, into five villages. The Hurons, to the number of four hundred or five hundred souls, are nearly all baptized, and still always preserve a little Christianity. Those of the Keinouche tribe declare loudly that the time has not yet come. The Outaouacs seem to harden themselves against the instructions imparted to them. The Kiskakonk nation, which for three years has refused to receive the gospel announced to them by Father Allouez, finally resolved, in the autumn of the year 1668 to obey God." (Marquette in Thwaites Documents of the SHS of WI, Vol XII p 436)

The Wendat and Kiskaton Odawa settled in the area, along with other Ojibwa groups, and were occasionally visited by groups like the Illinois. In 1671 The Huron and Kiskaton moved further east, heading back to the areas around St. Ignace and Sault Ste. Marie respectively (JR 57:14).

After the departure of some of the tribes and the Jesuits, the area around Chequamegon Bay did not go silent. This is important for understanding and interpreting the materials found archaeologically. By 1691 a trading post was established on the south edge of Madeline Island, known as Grant's Point (Birmingham 1992). Trading posts remained in this area through the

nineteenth century (Birmingham 1992). Although large Ojibwe communities were living in the region, and others were visiting for long periods in the summers, there is scant archaeological data known from the region. Archaeologists have been seeking these village and mission sites for decades, but they have remained elusive. Speculation rises that the village sites may be located in the same area as the Bad River Ojibwe reservation, located just east of the bay. It is likely that the Ojibwe settled here because of the good quality of the land, and its microclimatological preference over the surrounding region. The Red Cliff Ojibwe, who have a reservation just west of the region, were removed there from Madeline Island, so it is not likely that this land was considered preferential in the past. Alternatively, much of the land on Madeline Island is private property, and sites may simply not have been discovered yet due to limited access. However, it is probable that the primary villages and mission were on the mainland.

Some archaeological work has been done in the Apostle Islands, particularly on Madeline Island, yielding some early trade era artifacts. Local avocational archaeologist Al Galazen collected across much of Grant's Point, and other regions of the Apostle Islands (Birmingham 1992; Birmingham & Salzer 1984). Eventually, he helped to establish the Madeline Island Museum and his collections are on display there. Galazen made himself accessible to professional archaeologists and showed them where he found materials. This led to a formal excavation at Grant's Point by Leland Cooper in 1961 and 1962 of what is now called the Cadotte site, or the Winston Cadotte site. Although he died before publishing a report, Cooper's notes are thorough, and on file at the Wisconsin Historical Society in Madison, Wisconsin.

Cooper found a stratified site. The upper level was interpreted to be an historic Ojibwe sacred site. This was evidenced by the created clay surface, and several catlinite and lead-

inlayed catlinite pipes found there (Cooper n.d.). Beneath the clay surface, a layer with an array of early historic trade goods and indigenous pottery was excavated.

Like those at Rock Island II, the ceramics from level one of the Cadotte Site are quite diverse, including (but not limited to) Oneota, Iroquoian, and Iliniwek pottery. Birmingham & Salzer (1984) have speculated that during this time Grant's Point was being used as a fishing outpost or some similar gathering place. There are not enough artifacts to suggest long term, or large party use of the area. As with the materials from Rock Island II, it is not assumed that the site was being used solely by the Wendat, though they were in the area at that time.

Interestingly, no stone projectile points were found by Leland Cooper, though there were several flakes and fragments. This is part of the reason that the site is considered a possible fishing spot. As with the Rock Island site, the variability of the materials at the site do not make it possible to determine a cultural affiliation. While Wendat materials were used at this site, there is no evidence the site was in fact a Wendat locale.

St. Ignace (20MK82)

In 1671, due to escalating conflicts with the Sioux, and a reduction in threat from the Iroquois, the Wendat at Chequamegon moved their village east to the Straits of Mackinac (see Figure 2) (JR 55). The Straits were an advantageous location for a settlement; fish were plentiful at the Straits, and the narrowing of the waters there makes crossing the lake less difficult. While historical records are in disagreement, some suggest the Wendat had spent time in the region of the Straits immediately following their dispersal from Ontario as well (JR 56:113). Writing in 1673, the Father Marquette described the settlement in this way:

> "The Hurons called Tionnontateronnons, or The tobacco nation, who compose The mission of saint Ignace at Michilimakinang, Began last summer a fort near The Chapel,

> in Which all Their Cabins were enclosed… This year, the Tionnontateronnons were here to the number of three hundred and eighty souls, and they were joined by over sixty souls of the Outaouasinagaux. (JR 57:247)"

In addition, the visit of some Hurons from Montreal and Quebec during the same year was also mentioned, which shows that relations between these communities were being continued following dispersal (JR 57:251). This is not surprising, as we know the Hurons of St. Ignace were also sending traders to Quebec and Montreal to trade furs whenever it was safe to do so. Additionally, a group identified as Seneca came to the Straits to make peace with the Wendat and ask them to join forces against the Sioux, though the Wendat were suspicious of their true motives. As so many Wendat were living among the Seneca at this time, it is possible that the visitors were in fact Wendat living among the Seneca, but the Jesuits did not distinguish this.

Excavations at St. Ignace have occurred over ten seasons between 1971 and 2001, under several different researchers (Table 3).

Year	*Archaeologist*
1971	Lyle Stone
1972	Lyle Stone/James Fitting
1973	James Fitting
1983-86	Charles Cleland/Sue Branstner
1997	Charles Cleland/Laura Kennedy
1998	Charles Cleland/Heather Van Wormer
2001	Jodie A. O'Gorman

Table 3. Lead archaeologists at Marquette Mission/St. Ignace site by season.

A GIS compiling much of the excavation data was completed by Dr. Jodie O'Gorman (O'Gorman 2007). Structural data shows both French and native construction styles at the site, appearing to overlay each other in portions of the site, though indigenous architecture appears to dominate the site (O'Gorman 2007).

In the 1970s both James Fitting and Lyle Stone led excavations at St. Ignace over the

course of 3 years. They excavated large trenches without screening soil, primarily looking for features (Fitting 1974). Fitting believed that he found a longhouse at this point, based on a tentative series of post molds, which some later researchers have questioned.

In the 1980s and 1990s Charles Cleland led excavations with Michigan State University field schools. Portions of the site were excavated in 5x5 foot units. Due to the plethora of material in the plow zone (including 19th & 20th century materials), only ¼ of each unit had material collected from the plow zone (Branstner 1984). During this time, portions of a probable longhouse wall were excavated on the eastern portion of the site.

In 2001 Jodie O'Gorman led a field school with the primary purpose of locating the other wall of the longhouse. While the second wall of the longhouse was not uncovered, follow-up analysis of the spatial data using the GIS suggests that excavations may not have occurred as far east as necessary, and an interior portion of the longhouse may have been excavated instead.

Two possible longhouses and a portion of two French structures are clearly documented at the site, with many other post molds that may be portions of as yet undefined buildings (O'Gorman 2007). Meanwhile, we know from the documents that there was a Wendat village, an Odawa Village, a French mission, a French garrison, and a small town of *coureurs du bois* in the area (Branstner 1991). The possibility of the 1650s site, which was inhabited only for 1 year, being located under the current town, or across the Straits and under Fort Michilimackinac, blurring into their archaeological collections, is also highly probable.

Some researchers have questioned the ethnic affiliation of the Native Americans who lived in the portion of the site that has been excavated, hypothesizing that they were in fact Odawa. This is refuted not only by the abundance of Wendat material and longhouses, but also by the historical maps and descriptions of the villages (Figure 12).

Figure 12. A portion of an early 18th century map of the Straits of Mackinac Area, showing the location of the villages on the north shore of the Straits. Two villages are present, the Hurons [Wendat] and the Outaquiats [Odawa] to their north. (From Newberry Library, Ayer Collection).

During the earliest portion of settlement at St. Ignace, there was an Odawa village just north of the Huron [Wendat] village. In the late 1680s, however, the Odawa moved their village even further away, onto a hill, to separate themselves from the Wendat after problems between the two communities began brewing. Based on the locations on the map it is clear, even before the Odawa moved, that their village was too far north to be located on the small bay where the archaeological site is located. The village on the bay is very clearly the Wendat village.

The archaeological data from St. Ignace is rich – there are abundant trade goods and lithic materials at the site. Faunal preservation is particularly high. Ceramics, however, are poorly preserved. Trade goods from the west, such as catlinite, and from the east, such as brass, Jesuit rings, and iron are quite abundant. Due to the large French presence at the Straits during this time there are also a large quantity of materials associated with the French military, including

grapeshot, musket balls, gunflints, sword and gun parts.

Chapter 5

Wendat Symbolic Material Culture and Identity

This chapter examines Wendat symbolic material culture in order to evaluate how they changed following dispersal and what this can tell us about identity changes within the community as well. Data from the five archaeological sites discussed in chapter four will be considered here. Symbolism reflected in ceramics, pipes and carved faunal materials will be analyzed.

Symbolism

As stated in chapter three, materials with symbolic content can be used to signify aspects of identity. Wiessner defines two different types of style that may be found in artifacts, emblemic and attribute style (1983). Basing her work on Wobst (1977), she defines emblemic style as, "formal variation in material culture that has a distinct referent and transmits a clear message to a defined target population about conscious affiliation or identity (Wiessner 1983:257). These emblemic styles are often associated with particular groups of people, and thus reflect their identity and belief systems to others who perceive these styles. Emblemic styles are fairly static, and only undergo major transformation when the referent, such as a group, changes and this must be reflected in the material symbols themselves (Wiessner 1983). While the emblemic style is the ultimate goal of the creator, their assertive style may also be incorporated into the symbols as they are interpreting their own culture.

A more extensive summary of the role of symbols in archaeology was discussed in

chapter three. A variety of material are used and transformed for symbolic purposes. For the current research project I focuses on Wendat-created symbols, specifically. Imported goods such as Jesuit Rings may have been used to symbolize aspects of one's identity, but will not be considered in this project. Particularly during the seventeenth century, these trade items were not being created with native communities in mind. Instead, in the Transitional Phase of the trade (1650-1715) trade items that were already being produced in France were the primary products being exchanged (Anderson 1992:29). Likewise, some of the materials examined are made by Wendat people, but are not found in Wendat contexts. The goal of the research is to understand the intention of the makers rather than the consumers of these symbols.

Ceramics

When seeking out vernacular symbolic materials that preserve in the archaeological record, one of the most prominent is ceramic vessels. Ceramics are particularly malleable for symbolic creation. While certain vessel sizes and shapes may be preferable for different contexts, such as storage, boiling, simmering and smoking, these objects also have a plasticity on or from which symbols may be inscribed or formed. In particular, the fact that the material is soft when being formed, and later hardens, makes it forgiving of mistakes and allows for a variety of transformative activities, including applique, incising, painting, and many other transformative techniques.

Ceramic traditions are a fascinating point of study because of both their fluidity and stability. The creation of a pot has a series of stages: collection of the raw clay and tempering material; preparation of the paste, formation of the pot (including the shape and size), decoration of the pot, drying; additional decoration (such as glazing); firing, and finally use and disposal

(Martelle 2002). An understanding of the potter's process can help us determine how migration may affect pottery making, and how pottery can change to reflect perspectives on identity.

In societies where pot making is not a full-time craft production activity, potters tend to collect clay from areas known to them through other work they are doing (Michelaki 2007:154). Herbich (1987) found that women living in mixed villages would collect clay together, but stick to the recipes for mixing temper and clay that they had learned from their families, so their pots will source the same, but can be distinguished by doing petrographic analysis (Chivis 2003). Additionally, it has been shown that muscle memory is very strong, so even when design techniques are changed, women make pots in the same shape and size as they have done since they learned to make pots, regardless of where they live (Gosselain 1998, van der Leeuw 1993).

Archaeologists have shown correlations between ceramic styles and recognized, shared, group identities (Carroll 2012; Pikirayi 2007:288). These styles are seen as indicators of a shared, learned, semiotic system (Pikirayi 2007:288). Ceramic objects can reflect both emblemic and assertive styles. Like other materials with symbolic content, scholars have noted that, "Ceramic style is key to social communication, rather than a mere reflection of group identity, or a basis for explaining cultural change (Pikirayi 2007: 293)." Community members use the styles they create on ceramics to reflect information about themselves and their groups to individuals from other communities as well as to each other. Grantham & Ehrhardt (2000) found that one household at the Iliniwek Village Site in Clark County Missouri was using Oneota styled pots, though the primary group identity of the village as a whole was Iliniwek, people who created Dannerware (Grantham & Ehrhardt 2000). This suggests that the potters in that family were asserting an affiliation with their Oneota ancestry, despite their current settlement in an Iliniwek community. Analysis of the clay and temper in these Oneota styled pots revealed that they had

been made with materials from the region of earlier Iliniwek sites in the Central Illinois River Valley (Grantham and Ehrhardt 2000). This indicates that these potters had been living with the community for some time, and were not new or visiting, yet still felt compelled to use objects that symbolically reflected their Oneota identity (Grantham and Ehrhardt 2000).

Ceramic styles are not exclusive to their particular medium. In Iron Age South Africa, symbols used on ceramic materials are also used in a variety of other material contexts, including on agricultural structures, drums and headrests, in addition to being used as body decoration (Pikirayi 2007:292). If the symbol used on a ceramic object also has relevance in other contexts, it will be used in them as well. For example, symbols that reflect ethnicity may be transferable. Likewise, symbols that reflect fertility or agriculture may be found not only on the vessels used to contain these objects during storage, but also on the storage buildings, and on other materials associated with agricultural or human re/production. Other symbols may be less transferable. In particular, assertive style, defined as "formal variation in material culture which is personally based and which carries information supporting individual identity (Wiessner 1983:258)" associated with individuals may be more present on objects that are maintaining within their households, but not in those objects that are being used for emblemic symbolism to larger populations. Symbols that are used in multiple settings may be the most informative to us in understanding past cultures, rather than focusing on a particular type of object (Robb 1998:342). Thus, while this research begins with ceramic analysis, it will continue on to examine parallel use of symbols on other materials.

Style can be adaptive when it confers advantage to the producers of that style (Wiessner 1983:256). Ceramic styles also have an emotional impact on the viewer (Medley 1976). Medley argues that the whole suite of decorations, in conjunction with the shape and size of the vessel,

have an impact on the viewer that should be analyzed as a collective whole, rather than as individual attributes (1976). Rarely do we as archaeologists get the chance to examine objects in this fashion. As the large bulk of pottery found in the archaeological record is in broken fragmentary bits, scholars faced with this less-than-ideal data set have chosen to collect and interpret data in a multitude of fashions. Some have, in fact, examined attributes, while others have used typologies (Wright 1968). Still others have had the great fortune to have large and fairly complete data sets, allowing them to examine the ceramics as suggested by Medley (1976).

Previous Wendat Ceramic Research

Over the years, Iroquoianists have developed two different methods for analyzing ceramics. The primary technique was typological, based on the original typology developed by Richard S. MacNeish (1952). J. V. Wright later proposed that an attribute analysis would be more fruitful than a typological analysis. Rather than examining a suite of attributes that were classified collectively as a type, Wright examined each attribute and its shift over time, individually (Wright 1968). Many Iroquoianists have adopted this method, however, several archaeologists have also chosen to stick with typological analysis (Garrad 2014:271). In fact, this change in analytical methods is often problematic for ceramics researchers, regardless of region (Pikirayi 2007:288). In the regions of focus for this study, archaeologists have remained divided in their opinions and practice in regards to ceramics. Ceramics from most of the historic Iroquoian sites in the region of study have been analyzed in a typological fashion, and the published data available is given here in that format.

Marti Latta and other scholars of Huron pottery have developed functional classifications that consider not only symbolic representations on ceramics, but the shape, form and use of the

pots in defining their categories (Curtis & Latta 2000; Latta 1971; 1987; Martelle 2002). However, the analysis of ceramics to this extent is not possible, nor is it the purpose, of the present research. Due to the dearth of ceramics recovered from the sites being considered, and their inability to be reconstructed into clearly identifiable forms, any assessment of the form and function of an individual pot is simply not reliable (Garrad 2014:268). Ceramics are being used in this project as one type of material with symbolic content, to be compared with other artifacts that have symbolic markers on them, in order to consider community identity representation and changes in aesthetics over time among the Wendat.

The current research project uses a combination of published data and materials personally examined in museum collections. As the published material for the Tionontate region of Ontario is typological, it was the intention in this project to do a purely typological analysis. However, it became clear upon analysis of materials in the western Great Lakes that, for multiple reasons, a typological analysis of those materials would not be possible. The details of these sites and their collections will be discussed individually. While this variation in data collection limits some of the statistical analyses possible at the current time, the materials nonetheless project a clear picture of transformative symbolic stylings over time and across space.

Iroquoian Pottery

While there are a large quantity of types of Iroquoian Ceramics, there are some general styles to the manufacture and design that make them generally distinguishable from other non-Iroquoian ceramic traditions. Iroquoian ceramics are primarily tempered with grit (see Michelaki 2007 for the exceptions at pre-Neutral villages) (MacNeish 1952). Generally speaking, they have incised decorations on the neck, and occasionally on other portions of the

pot (MacNeish 1952:7). This incising is generally in sets of parallel lines or in geometric designs, particularly triangles and chevrons (MacNeish 1952:8). Frequently the pots are collared, that is, they are thicker just at and below the rim, then constricting at the neck (MacNeish 1952:8). Another distinguishing feature of many Iroquoian pots is the presence of castellations, while handles and effigies are rare (MacNeish 1952:8). This is not to say that each of these traits alone is identifiable only among Iroquoian pots, but as a suite of traits, they are generally found together on Iroquoian pots and not elsewhere.

Iroquoian Ceramic Types

The primary work for Iroquoian pottery analysis is Richard S. MacNeish's work *Iroquois Pottery Types: A Technique for the Study of Iroquois Prehistory* (1952). Using the direct historical approach, MacNeish examined pottery from archaeological sites with known historical affiliations, and used these collections to develop ceramic types. While MacNeish noted vessel form and structure, his primary analysis was on decorative motifs, "correlated designs, technique of designs, and rim shape" were used to develop types (MacNeish 1952:5). After typing materials from historic sites, MacNeish examined prehistoric sites and developed new types as appropriate. Suites of types were found to be present on sites affiliated with different historically recognized tribes. Following the creation of types a seriation was done, giving chronological and cultural linkages to the sites in prehistory (MacNeish 1952:7). Based on the ceramic seriation MacNeish developed a chart of analyzed sites deriving from a common Point Peninsula heritage, leading to eight historically known groups (Figure 13). MacNeish saw three major trajectories of Iroquoian ceramic creation: the Ontario Iroquoians, the Seneca-Cayuga and the Onondaga-Oneida and Mohawk (MacNeish 1952). While he did not examine Susquehannock materials

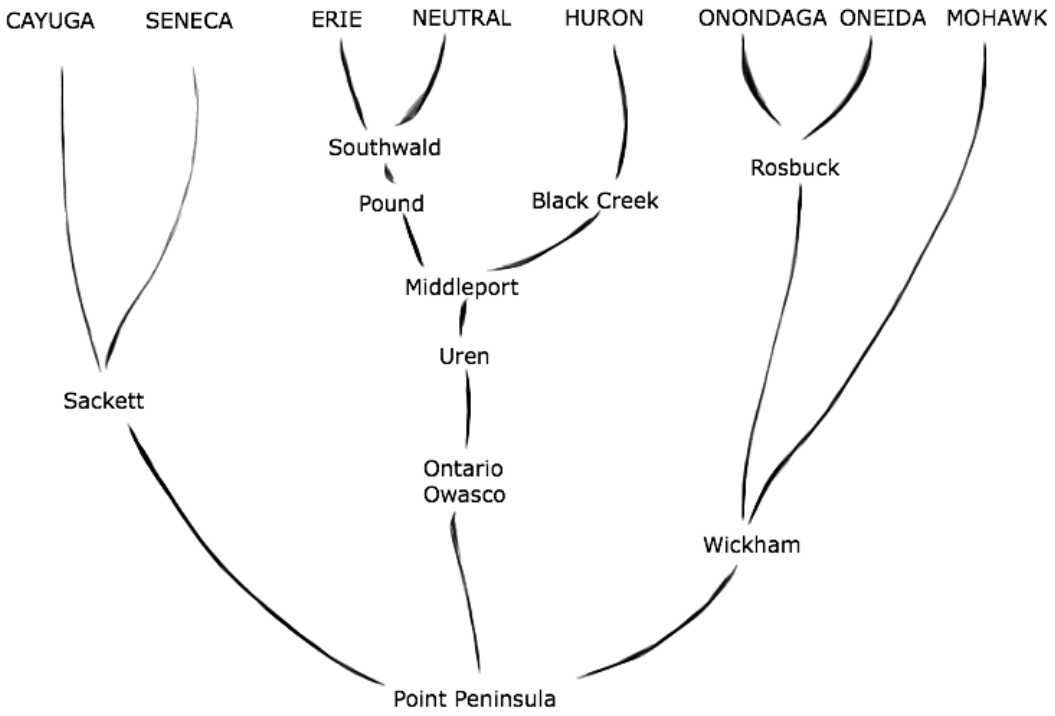

Figure 13. Key trajectories in ceramic typologies among Northern Iroquoians, based on MacNeish 1952.

himself, MacNeish suggested that they appeared to be very similar to Cayuga material (MacNeish 1952).

MacNeish developed a total of 57 types, several of which are affiliated with multiple tribal traditions, particularly earlier types (Table 4). MacNeish's types have generally withstood the test of time. In regards to Southern Ontario Iroquoians (Erie-Neutral-Huron), Charles Garrad believes that Genoa Frilled should also be recognized as a Wenro type (Garrad 2014). MacNeish identified this as a Cayuga type, though he noted it was one of the more abundant aberrant types on the Huron site of Orr Lake (MacNeish 1952:37). At the time of MacNeish's research, Huron

Erie	*Neutral-Wenro*	*Huron*	*Seneca*	*Cayuga*
Ripley Corded **Ripley Plain**[1] Ripley Triangular Ripley Collared Niagara Collared	**Lawson Opposed** **Lawson Incised** **Pound Necked** Pound Blank **Ontario Horizontal** **Middleport Oblique** Middleport Criss-Cross Ontario Oblique Uren Noded Uren Corded Uren Dentate Iroquois Linear	**Lawson Opposed** **Lawson Incised** **Pound Necked** **Ontario Horizontal** **Middleport Oblique** **Ripley Plain** Warminster Crossed Warminster Horizontal Sidey Notched Sidey Crossed Huron Incised Seed Incised Seed Corded Black Necked	Seneca Barbed Collar Seneca Notched Dutch Hollow Notched Long Point Nocked Long Point Horizontal Dansville Corded Iroquois Linear Sparta Dentate Owasco Corded Collar (Sackett Site Variant)	Myer's Barbed Collar Ithaca Linear Genoa Frilled Richmond Incised Cayuga Horizontal Bristol Linear Hummel Corded
Onondaga		*Oneida*	*Mohawk*	
Otstungo Incised Cayadutta Incised Chance Incised Otsungo Notched Fonda Incised Thurston Horizontal Syracuse Incised Onondaga Triangular Durfee Underlined	Roebuck Low Collar Swarthout Dentate Lanorie Corded Lanorie Mixed Lanorie Crossed Iroquois Linear	Thurston Horizontal[2]	Rice Diagonal Wagoner Incised Otstungo Notched Fonda Incised Otstungo Incised Cayadutta Incised Chance Incised Oak Hill Corded Goodyear Corded Iroquois Linear	

Table 4. Ceramic types associated with each historical tribal group in MacNeish 1952.

[1] Items in bold are present among the Huron AND other ceramic traditions.
[2] All other Oneida types are shared with Onondaga.

archaeological sites with a large quantity of ceramics available for analysis were quite rare, and Tionontate sites were not available. In the 50+ years since then an abundance of data has become available. Genoa Frilled material is not common on Huron or Tionontate sites until the very late historic period, when it appears at some Tionontate sites (Garrad 2014). Garrad speculates that this represents an influx of Wenro individuals following the dispersal of some of the Erie, Wenro and Neutral in the 1630s (Garrad 2014).

Southern Ontario Iroquoian Pottery

MacNeish recognized three distinct suites of ceramic types among Southern Ontario tribes historically. The first, the Erie, were not directly contacted by any French missionaries, so the location of their villages is not well known/mapped (MacNeish 1952:22). MacNeish classified sites as Erie based on their general location and the abundance of shell material located on these sites (MacNeish 1952:22).

The second ceramic suite identified by MacNeish is the Neutral-Wenro. There was limited contact between the French and the Neutral, though their spatial proximity to the Huron made information on the location of some of their villages more precise. Prehistoric Neutral sites had been well excavated by the time of MacNeish's analysis (MacNeish 1952:10).

The final Southern Ontario ceramic suite that MacNeish identified was Huron (MacNeish 1952:29). Huron ceramics were examined from several sites, including Orr Lake, Warminster, Seed, Woodbridge and Black Creek (MacNeish 1952:30). At the time of MacNeish's research, Tionontate archaeology was still in its infancy, and the only site from that region examined for his ceramic analysis was Sidey-Mackey (MacNeish 1952:29). While this is now known to be a Tionontate village, at the time it was only speculation based on site location. Ceramics at Sidey-

Mackey were found to be identical to the suites of ceramics located at some of the Huron sites (MacNeish 1952:31).

While there are different types of ceramics found on Neutral and Huron sites, it should be noted that there is an abundance of overlap as well, suggesting shared stylistic history and possible trade between these areas. Historically, trade is known to have occurred to some extent between the Neutral and the Huron.

Huron-Petun Ceramics

Examining Huron-Petun Ceramics, there are two distinctive aspects of decoration that should be examined to distinguish both culture group and chronology, castellation shape and neck/body decoration of sherds. There are three distinct shapes of castellations found on Iroquoian pottery: squared, bifurcated and pointed (MacNeish 1952:29-31) (Figure 14). Squared castellations are dominant on historic Huron-Petun ceramics, while late prehistoric archaeological sites show an equal distribution of all three shapes of castellations (MacNeish 1952:31).

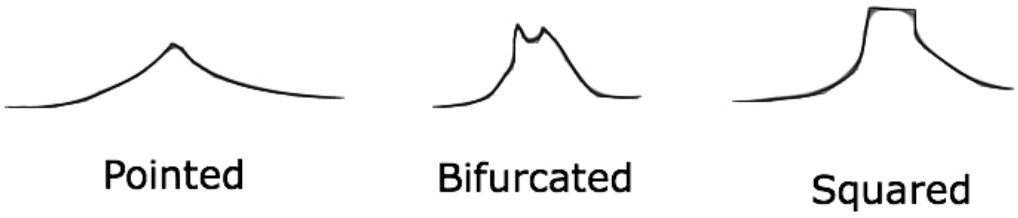

Figure 14. Three shapes of castellations found on Wendat ceramics.

There are several different types of Huron-Petun ceramics. Historically, the most abundant ceramic types are Huron Oblique, Sidey Notched and Warminster Crossed (MacNeish 1952:31). Full descriptions of these types, along with other types of particular interest to this study, may be found in Appendix C. Other Iroquoian types may be examined in detail in MacNeish's (1952) work.

More recent ceramic research has revealed several ceramic types not identified during MacNeish's original analysis (see Ridley 1952; Bell 1953; Wright 1966; Garrad 2001). Additionally, researchers have lumped some of the variants recognized by MacNeish and Bell into simplified categories (Garrad 2014). Tionontate village sites studied by Garrad have revealed that while patterns are generally consistent with MacNeish's early analysis, Genoa Frilled pots also appear on some historic Tionontate sites (Garrad 2014). MacNeish found Genoa Frilled pottery on the Genoa Fort, Myer's Station, Great Gully and Richmond Mills sites (MacNeish 1952: 49, 51). He described it as a historic Cayuga pottery type (MacNeish 1952:51). More recent research has suggested that this type may also be affiliated with the Wenro (Garrad 2014).

Non-Iroquoian Ceramics

Ceramic types typical of the western Great Lakes where the Wendat resettled were also included in the comparative collection for this research. In particular, Juntunen, Peninsular Woodland and Oneota ceramics were considered. Juntunen ceramics are found in the Upper Peninsula of Michigan in late prehistory frequently in mixed context with Iroquoian Ceramics (Milner 1998). Peninsular Woodland Ceramics, also late prehistoric, are from the northern Lower Peninsula of Michigan, and occasionally are found in the Upper Peninsula (Milner 1998).

Oneota Ceramics are found across much of the midwest, including Wisconsin and portions of the Upper Peninsula of Michigan (Mason 1986, Milner 1998). Historically, Oneota ceramics frequently show up in small quantities outside of their normal range (Milner 1998). Oneota ceramics are quite variable across the midwest, and only those types typical of the upper midwest are included here. Full descriptions of the relevant types of non-Iroquoian ceramics are found in Appendix C.

Results of Ceramic Analysis

Kelly-Campbell

As discussed in chapter four Kelly-Campbell was a Tionontate village inhabited during the 1630s and 1640s. Data from Kelly-Campbell are based on published data from Garrad (2014:276-277), along with original site reports (Garrad 1975, 1976). A total of 489 sherds were identified to type from the Kelly-Campbell site (Table 5). Over half of these (N=272) were Sidey Notched, and 16% (N=80) and 14% (N=69) were MacMurchy Scalloped and Huron Incised, respectively. A small but noticeable quantity of sherds reflect ceramic types from non-Huron-Petun communities, particularly materials from the south and west. Blue Mountain Punctate (N=11), Dutch Hollow Notched (N=1), Middleport Criss-Cross (N=3) and Niagara Collared (N=4) are all associated with communities to the south and west of the Tionontate. One sherd of Rice Diagonal, often associated with eastern Iroquoian peoples, was also found at the site. Sidey Notched is ubiquitous across Tionontate sites. Huron Incised is also ubiquitous as a large, but smaller, quantity of pottery at Tionontate sites.

Ceramic Type	*Number of Sherds*	*Percentage of Total*
Blue Mountain Punctate	11	2.25
Black Necked	5	1.02
Copeland Incised	3	0.61
Dutch Hollow Notched	1	0.20
Graham Rogers Plain	3	0.61
Huron Incised	69	14.11
Innisfil Collarless	3	0.61
Lalonde High Collar	2	0.41
Lawson Incised	8	1.64
Lawson Opposed	1	0.20
MacMurchy Scalloped	80	16.36
Middleport Criss-Cross	3	0.61
Niagara Collard	4	0.82
Ontario Horizontal	2	0.41
Pound Necked	2	0.41
Rice Diagonal	1	0.20
Ripley Plain	7	1.43
Sidey Notched	272	55.62
Sidey Crossed	1	0.20
Warminster Horizontal	3	0.61
Warminster Crossed	8	1.64
Total	**489**	**100.00**

Table 5. Ceramic rim sherds from the Kelly-Campbell site.

MacMurchy Scalloped ceramics start appearing in larger percentages at sites that have crossover dates from GBP 2b (1616-1630) to GBP 3a (1630-1642), and increase in percentage of the total ceramic assemblage in sites dated GBP 3a – 3b (1642-1650), which includes Kelly-Campbell (Garrad 2014). The origin of MacMurchy Scalloped and the reason for its increase during this period are unclear. Originally, it was designated as a variant of Huron Incised, but

scholars eventually recognized that the fundamental formation of the scalloped edges is a distinct technique from the rim manufacture of Huron Incised pots (Martelle 2002). However, this later recognition leaves open the possibility that misidentified sherds exist in collections which need to be reexamined. Garrad suggested that MacMurchy Scalloped may be an Odawa ceramic type though scholars examining Odawa villages in the Bruce Peninsula and the North shore of Lake Superior dispute this (Garrad 2014:281). I argue, instead that MacMurchy Scalloped is a reflection of immigration from southwestern communities, perhaps the Neutral or Wenro. Some of the ceramics from the Grimsby Site, a contemporary Neutral burial locale, appear to be similar in design to both MacMurchy Scalloped and Blue Mountain Punctate (Jackes 2008; Kenyon 1982).

By 1638 the Wenro had fled to Huronia. Jordan (2013) has examined integration of individuals following war in Iroquoia. While warfare is necessarily a different scenario, the methods of incorporation he considers are worth noting. First, he distinguishes between *assimilative adoption* and *associative adoption*. In assimilative adoption, an individual is given a new identity by the community into which he or she is adopted (Jordan 2013). In associative adoption larger groups of individuals were adopted collectively, and were more likely to retain original roles and identity (Jordan 2013). Large quantities of non-local and hybrid ceramics reflect that outsiders were incorporated into villages, but that they were retaining their ties to outside communities (Jordan 2013). The archaeology of the Neutral and neighboring protohistoric communities is a complicated collection of materials in frequent dispute (see Stothers 1981). These materials should be reexamined to seek out MacMurchy Scalloped material.

I argue that at Kelly-Campbell the presence of both typical Tionontate ceramics and the

MacMurchy Scalloped ceramics suggest the maintenance of traditional identity and ties, while at the same time suggesting an interest in developing and retaining a connection to Iroquoian communities further south and west. At this point in time the Huron were still in control of much of the western fur trade, but pressures from the Iroquois were impacting both them and the Tionontate, and it would have been mutually advantageous for the Tionontate and their southwestern neighbors to strengthen ties.

Plater-Martin

Plater-Martin is also a Tionontate village site (see chapter four), and is believed to be the locale where the Kelly-Campbell community moved to (Garrad & Heidenreich 1978). Data for Plater-Martin were collected from two sources. Some materials were examined by the author

Ceramic Type	*Number of Sherds*	*Percentage of Total*
Applique Strip	1	0.52
Dutch Hollow Notched	1	0.52
Genoa Frilled	8	4.15
Huron Incised	14	7.25
Innisfil Collarless	1	0.52
Lawson Incised	3	1.55
Lawson Opposed	1	0.52
MacMurchy Scalloped	46	23.83
Niagara Collard	2	1.04
Rice Diagonal	1	0.52
Ripley Plain	3	1.55
Seed Corded	2	1.04
Sidey Notched	93	48.19
Warminster Horizontal	17	8.81
Total	**193**	**100.00**

Table 6. Ceramic rim sherds from the Plater-Martin site.

directly, others were described in Plater-Martin site reports and notes given to the author by Charles Garrad, and recently published (Garrad 2014:276-277).

A total of 193 rim sherds were identified to type at the Plater-Martin site (Table 6). Nearly half of these (N=93) were Sidey Notched, while nearly 25% (N=46) were MacMurchy Scalloped. A much smaller percentage of sherds are Huron Incised, compared to earlier sites. Non-Huron-Petun materials include one Applique Strip sherd, one Dutch Hollow Notched, eight Genoa Frilled, two Niagara collared, and one Rice Diagonal sherd. Again, the majority of these are associated with southwestern neighbors, while the Rice Diagonal sherd is an eastern Iroquoian item, and the Applique Strip sherd is not-yet-associated with any communities (see Garrad 2014:275 for more discussion on this type).

The increase in the presence of Warminster Horizontal ceramics should also be noted. This type is a Huron-Petun type, but made up only one percent of the collection at Kelly-Campbell, compared to the nine percent it makes up at Plater-Martin. Plater-Martin took in refugees from Huronia following an Iroquois attack, and these materials likely reflect the incorporation of this village community. Likewise, the Genoa Frilled material is associated with southwestern neighbors. Garrad (2014) argues that this material is specifically and uniquely Wenro, though I believe more evidence is warranted for such a specific identification. We do know through historical documents that some Wenro villagers were taken in to the village in Huronia that eventually fled to the community at the Plater-Martin site. Historical documents indicate, however, that these Wenro were incorporated into individual households based on their clans, suggesting a form of assimilative adoption (Tooker 1964). Perhaps due to their shared clan systems and the fact that this adoption was not due to a capture by the Huron but rather a welcoming, the maintenance of Neutral/Wenro ceramic styles was maintained rather than

assimilated, explaining its presence at the Plater-Martin site as well.

Rock Island II

Rock Island II is a multicomponent historic site on the east side of Wisconsin (see chapter four). For the purposes of this project only the components associated with the 1650-53 occupation, as defined by Mason (1986) are included. This includes 111 ceramic sherds (Mason 1986). Immediately upon examination of Mason's results and descriptions it becomes apparent that typologies become difficult following the movement of the Wendat into the western Great Lakes. While some materials are classified to type, many are described as 'like' certain types.

While Mason argued that the 1650-53 component of the Rock Island II site was a Wendat village, the data, interpreted through a more recent lens, do not support this assertion (see discussion in chapter four). As such, the collection of ceramics at the site cannot be considered a representative sample of materials found in Wendat villages at this time. Rather, the Wendat materials included in the collection are evidence of the type of materials that were being produced by the Wendat at this period in time, and potentially exchanged with other cultures in the Green Bay area. The rest of the collection reinforces the evidence from historical records that the western Great Lakes were a very diverse place during this period, with varied groups interacting and trading with one another in a manner that was unprecedented in the area.

Only six sherds at Rock Island II were identified as Wendat – three are Sidey Notched, two are Huron Incised, and one is MacMurchy Scalloped (Table 7). An additional three were described as being 'like' Huron Incised and MacMurchy Scalloped, but distinct enough to not be designated as these types. Already at this early stage following migration, stylistic variation began to develop among Wendat potters. At the same time, a variety of Oneota materials, a piece

of Iliniwek material, and materials associated with other Wisconsin tribes were found in the same collection.

Ceramic Type	*Number of Sherds*	*Percentage of Total*
Allamakee Trailed	3	2.68
Banked stamped vessel with Laurel-North Bay affinities	2	1.79
Bell Type II	9	8.04
Blackduck	1	0.89
Carcajou Plain	6	5.36
Danner	1	0.89
Grand River Plain	1	0.89
Heins Creek/Madison Plain like	1	0.89
Heins Creek Cordwrapped Stick	8	7.14
Heins Creek Ware	4	3.57
Huron Incised	2	1.79
Huron Incised/MacMurchy Scalloped-like	3	2.68
Lake Winnebago Trailed	1	0.89
Laurel Oblique	2	1.79
Laurel Oblique/North Bay Like	2	1.79
MacMurchy Scalloped	1	0.89
MI/NBP like	1	0.89
Madison ware	3	2.68
Madison Cord Impressed	4	3.57
Madison Plain	8	7.14
North Bay Linear Stamped	1	0.89
North Bay Plain	6	5.36
North Bay Scalloped	1	0.89
Oneota	1	0.89
Oneota-grit	1	0.89
Sidey Notched	3	2.68
Spring Creek Collared	1	0.89
Unidentified	35	31.25
Total	**112**	**100.00**

Table 7. Diagnostic ceramic sherds from the Rock Island II site.

Cadotte Site

Materials from the Cadotte site were examined at both the Madeline Island Museum and the Wisconsin Historical Society. Both rim sherds and decorated body sherds were analyzed. A total of 52 rims were examined, along with 136 body sherds, castellations and handles. Like Rock Island II, Cadotte is not recognized as a village site (see chapter four). It was identified by Galazen as a special use site (Birmingham & Salzer 1984). Also like at Rock Island II, there are ceramics associated with a variety of historical groups found in the collection, including Oneota and Danner materials, though a higher percentage of the sherds are Iroquoian. Another variation of note at Cadotte is the quality of craftsmanship – it is much more variable than the collections in Ontario from pre-migration sites. There are two aspects of craftsmanship variation worth noting. First is the quality of the ceramic material itself – some of the items at Cadotte are poorly made, including thick pots, along with friable and flaking ceramics. This is likely a reflection of the refugee status of the Wendat at this time. The community was struggling merely to survive for some of its early years in the western Great Lakes. Crop failures were recorded by the Jesuits, and many basic activities for survival were of high importance, including the construction of homes, the clearing of land, and obtaining materials needed to be prepared for trade so that the community could acquire food. This was all compounded by the trauma following a massive period of war, the threat of continued attacks and the loss of homeland and family members.

In addition to the low quality of some of the ceramics structurally, there is also variability in the quality of design placed on ceramics. While the Iroquoian ceramics still clearly carry design elements that are recognizably Iroquoian, many appear to have been placed on quickly

and without the skill of someone who has been creating these objects for much of their adult life. While the body design elements are reflective of Iroquoian patterns, the ceramic types from the historic period have variable body designs and are classified by their rim, collar and neck decoration. While some materials at Cadotte are recognizable, many do not fit clear Iroquoian types. One reason for this lack of recognizable types may be a dearth of ceramic materials being brought west from Ontario to be used as templates for future replication. As people moved around, bulky fragile ceramics would be left behind, while baskets and leather containers could be used. Thus, while some design elements are still present on other forms of baskets, woven items, tattoos etc...specific pottery 'types' are no longer present in such a way as to encourage replication. This does not simply suggest expediency, but a shift in who is making some of the pottery. As population was decimated through the Iroquoian attacks, it is possible that some individuals were thrust into the role of potters before they had acquired the skill set.

For the most part ceramics from Cadotte do not match the MacNeish typology well, and I find these identifications to be tentative. The quality of design is poor. A few Huron Incised rims are present, along with one Ontario Horizontal rim sherd. Due to the limited ability to classify Cadotte data into types, an attribute analysis table was created. However, this same type of data was not collected for the other collections. This limits the usefulness of the data for comparative purposes.

St. Ignace

Ceramics are only present in low quantities and quality at St. Ignace although there has been extensive excavation at the site (see chapter four). The abundance of very small ceramic fragments suggests that the material is in fact present but has poor preservation. This is likely

due to a combination of factors. While the preservation of ceramic material in the Upper Peninsula is often problematic, the extent of disintegration at St. Ignace is also suggestive of poorly fired materials. This is an indicator of the shifting practices of the refugee community. An abundance of trade goods at the site suggests that other materials, such as copper, may have been much more accessible and may have been selected for use in lieu of the required effort for ceramic production. It is also likely that, following several years of migration and reliance on others (including Jesuits and other populations), and the increased need for individuals to transform materials for the trade, the expert ceramic production skills demonstrated in Martelle's analysis of late prehistoric Wendat potters were lost (2002). While individuals could still make pots the amount of effort being put into mastering the skill at a high level was lost in the subsequent generation.

Including prehistoric materials, a total of 22 rim sherds and eight decorated body sherds were recovered at St. Ignace. The body sherds, though not identifiable to type, do show some Iroquoian design elements. It is worth noting that a large quantity of undecorated shell tempered sherds were found at the site. While I was not initially making note of these materials, as their abundance became apparent I started to keep track of these sherds as well. A total of 66 sherds of shell tempered material corresponding with Oneota production styles were documented, and it is likely that more was present and simply not recorded by me as it was not the focus of the analysis. These materials indicate a continuing relationship with Oneota peoples – either through their immersion into the community, or through trade. Shell tempered material does not appear to be concentrated in a particular section of the site, like it was at Iliniwek (Grantham & Ehrhardt 2000), suggesting this is more likely due to trade than to the integration of Oneota people into village life.

The rim sherds at St. Ignace are in poor condition, many are exfoliated or very small, making identification difficult. A tentative identification of up to three Sidey Notched sherds, along with one Genoa Frilled and one Applique Strip sherd has been made. This is an interesting selection of materials. Genoa Frilled are associated with the Neutral, and as previously mentioned appeared at the Plater-Martin site as well. There is a type identified as Applique Strip by Garrad, which appears suddenly and slowly declines in prevalence (Garrad 2014). The Applique Strip piece at St. Ignace matches this type description, but does not clear up the identity of where these materials came from or who they might be affiliated with.

Interpretations of Ceramic Variability Over Time

A comparison of similarity between sites was done using the Brainerd-Robinson coefficient analysis. This analysis was done using the computer program R. Following Carroll (2013), a script developed by Matt Peeples was used to calculate the coefficients using R (Peebles 2011). Often called only a coefficient of similarity, this test is frequently used among Iroquoianists for evaluating the relatedness of archaeological collections to one another in an effort to understand the cultural relatedness of the people who lived there (Emerson 1967; Garrad 2014; Wright 1966).

The Brainerd-Robinson coefficient of analysis results in a number between 0 and 200, allowing scholars to rank sites as more or less similar to one another. For any number of variables, the percentage of each variable found in two sites is compared, and the total similarity is calculated using the following formula (Peebles 2011):

$$S = 200 - \sum_{k=1}^{p} | P_{ik} - P_{jk} |$$

Sites with a score of 200 would have identical percentages for each variable, while sites with a zero would have no materials in common at all.

Wendat ceramics found in the western Great Lakes are clearly recognizable as Iroquoian, but are not classifiable into MacNeish's typology system. This leads us to two questions regarding these materials, which are related: 1) Are these ceramics being made by Wendat people and 2) If so, why are they different than before? Using the Brainerd-Robinson coefficient of similarity allows me to explore these relationships.

Creators of Iroquoian Ceramics in the Western Great Lakes

Due to the fact that ceramic collections come from mixed non-settlement sites, determining the creators of the Wendat ceramics in the western Great Lakes can only be done by inference at this point, however the indirect evidence for Iroquoian producers is strong. First, we know from the archaeological evidence at Kelly-Campbell and Plater-Martin that ceramic production was still strong prior to migration. The only large quantity Iroquoian ceramics collections found in the western Great Lakes during the second half of the seventeenth century are from the sites analyzed in this dissertation. It is highly improbable that the Wendat would have wholesale stopped their production of ceramics following migration, especially since a large portion of migrants were Wendat women, who were the producers of ceramics for their families (Martelle 2002). Likewise, it is highly unlikely that no sites with true Wendat ceramics would have been found by this point, considering the interest researchers have in the

protohistoric period.

There are occasions where societies do create ceramics that reflect styles from other communities. If a style gives its producers some sort of advantage, then it can be considered adaptive (Wiessner 1983:256). Howey (2011) has argued that some early protohistoric ceramics which are shaped like Basque copper pots are mimetic pieces that were created to confer the power associated with the colonial trade to the community in which the pots were located. These communities did not have access to trade goods directly, but desired them and the potential power associated with them. In that case, an argument could be made for mimesis.

The corollary to this argument, however, is that stylistic mimesis must in fact confer some sort of advantage to the makers or users of the pottery. Some authors (Adams 1979; Mazrim 2012) have argued that Iroquoian pottery in the western Great Lakes may be mimetic copies of Iroquoian pottery. The challenge to this argument is that one must show that these styles are valuable to their creators. As discussed by Milner, this presumes that Iroquoian is seen as a more advantageous identity than other cultural identities (1998). In fact, following the migration and dispersal of the Wendat around 1650, their position and identity was decidedly non-advantageous in the western Great Lakes. The Odawa had instead become the primary facilitators of the fur trade, with access to European trade goods. The Wendat had been severely crippled by Iroquois attacks and were struggling to rebuild their communities, particularly during the first 30 years following dispersal. Considering the primary contexts in which ceramics are used – storage, trade of dried goods, and cooking, there is no clear advantage to replicating Iroquoian designs on these objects for non-Iroquoian peoples of the western Great Lakes.

What, then, explains the changes in ceramic style over time among the Wendat, following migration? Wendat identity was changing due to two major cultural processes, and these cultural

processes were being reflected in the ceramic materials. The first is that several Wendat communities were merging together in the west to become a unified entity; the second is that this vulnerable community was no longer living in a region where their cultural group had clear networks, power and authority.

During the period prior to the migration of the Wendat to the western Great Lakes, there was already migration occurring in Southern Ontario, as discussed in chapter two. Historical accounts indicate that refugees were moving north from the regions of the Neutral into Huron and Tionontate villages (Tooker 1964; Trigger 1976). Additionally, following attacks from the Iroquois, many Huron fled to the Tionontate villages (Garrad 2014). This migratory shift is reflected in the ceramics at Plater-Martin and Kelly-Campbell. When compared to Huron villages and earlier Tionontate villages, we see an increase in the presence of Neutral ceramic sherds at Plater-Martin and Kelly-Campbell. Additionally, at Kelly-Campbell we see an increase in Huron Incised ceramics. These materials are present at earlier Tionontate Villages, but their spike in abundance is reflective of the incorporation of Huron villagers at this site.

In 1638, approximately 600 Wenro moved north to settle among the Huron. The Wenro, "were distributed in the principal villages of Huron...given the best places in the houses and corn from the granaries" (Tooker 14:1964; JR 17, 25-29). This suggests that tribal identity was less important at this moment than other forms of social organization. It is possible that clan relationships were used to distribute families throughout the villages, though this is not explicitly mentioned. At this time, and likewise with the migration of the Huron to the Tionontate villages later, it was possible to absorb members of these communities through assimilative adoption. As they were already culturally similar, this did not likely transform their material culture, which is why we see an increase in the diversity of ceramic types at these sites. If they did not already

have a shared sense of identity with the other members of the longhouse, however, it is likely they would have been encouraged to adopt physical symbols of shared identity, such as ceramic style, to develop a shared identity. If that had been the case then we would not see the distinctive pottery because creation of these objects would have been discouraged.

When the Wendat migrated to the west in the early 1650s, their social and physical organization fundamentally changed. We do not have good historical records for this early period – due to their dispersal the Wendat were travelling in multiple small populations as discussed in chapter two – and the Jesuits did not reconnect with them for several years. However, it is worth considering the fundamental issues this community was dealing with, and how the ceramic materials may reflect this process. Upon migration to the west, Wendat communities had to establish whole villages – they were not absorbed into other communities as had happened in Ontario. Likely this was due to their lack of kin networks in the region, compounded by the great number of other refugee communities in the region during this time who could not make space for newcomers themselves. These new settlements required the clearing of land for both the village and the farms, and the collection and preparation of building materials. Normally when establishing a new village, the Huron could work on land clearing and construction of one village while living in another one (Heidenreich 1971). New farm fields could be cleared each year as required (Heidenreich 1971). Trying to do all of this at once was straining on the community and left them struggling for survival:

> "They informed us that a fresh war had broken out against them, and thrown them all into a state of alarm; that the Ehriehronnons were arming against them (these we call the Cat Nation, because of the prodigious number of Wildcats in their country, two or three times as large as our domestic Cats, but of a handsome and valuable fur). They informed us that a village of Sonnontoehronnon Iroquois had been already taken and set on fire at their first approach; that that same nation had pursued one of their own armies which was

> returning victorious from the direction of the great lake of the Hurons, and that an entire Company of eighty picked men, which formed the rear-guard, had been completely cut to pieces; that one of their greatest Captains, Annenraes by name, had been captured and led away captive by some skirmishers of that Nation,—who, in order to deal this blow, had come almost to the gates of their village. They declared, in a word, that all the four Nations of the upper Iroquois were on fire; that they were leaguing together, and arming to repulse this enemy; and that all this compelled them earnestly to seek for Peace with us, even though they might not have had any such thoughts before. (JR 41:79-81)"

At the same time, however, the creation of a new village allows a community the ability to establish new social and physical organization. Rather than trying to incorporate refugees into individual longhouses, people could plan how to organize the village as they desired it (Kiste 1974). As part of this establishment of a new, intentionally-formed community, there was a shift to a shared western Wendat identity. As the community tried to establish itself and expand its ties to neighboring communities, this unification would work to establish their presence in the western Great Lakes. While clan identity was clearly still important, as is made clear by the continued maintenance of clans among the Wendat today, village and tribal level identities were shifted to reflect the new community.

In addition to the internal reorganization and unification, shifting from a region where your language and your cultural patterns are very similar to a large portion of your neighbors, to one where you are the minority, transforms the semiotic space of the community. Symbols that were once meaningful to neighbors are now transformed from detailed grammars to simplified symbols, in the way that English speakers may recognize Chinese characters as 'Chinese' but the meaning behind the words is not evident to them. So too did Iroquoian symbols transform in the western Great Lakes. Without neighbors to interpret the symbols, the power of these symbols was reduced. Iroquoian ceramics are distinctly different from the ceramics of other people who

were living in the western Great Lakes at this time – the body and rim shape, style and temper are all distinct. Thus the symbols of this Wendat community became simplified. No longer were specific messages salient to Iroquoian communities encoded on the ceramics. Instead, the shape, temper, and general Iroquoian design elements became symbolic of 'Wendat' to outside groups. Unique assertive style may have increased as emblemic style decreased, allowing individual potters to reflect their own feelings about their transformed identities to come through. Thus at dispersal sites we no longer see recognizable 'types', but the attributes on the ceramics are clearly Wendat attributes, the same that are found on types, but in different patterns.

At the same time that the meaning of these symbols were shifting, the basic constraints of resettlement were impacting the community, and these undoubtedly played a part in the decisions that were made about stylistic elements on pots. Women were particularly burdened during the migration, and the production of functional pots took primacy over stylistic detail. Additionally, it is possible that the manufacture of pottery shifted to women and girls who had less experience in pot making, simply due to the increased amount of work that had to be done to establish households and fields, prepare materials for trade, and build up a stock of stored foods. For this reason, quality of ceramic manufacture also declined, as reflected in the increased abundance of poor quality remains moving from Rock Island to Cadotte to St. Ignace.

Pipe Decoration as Symbols

As mentioned earlier in this chapter, styles used on pots are often used on other materials as well, presuming it has relevance in these other contexts (Pikirayi 2007:291). Among Iroquoian peoples, many symbols are found both on ceramic pots and pipes. Distinctive human effigies are found in both contexts, as are particular punctate and linear design elements

(Emerson 1967). At the same time, there are certain styles that are uniquely found on pipes, such as flared coronet pipe shapes, trumpet pipes and some animal effigies (Emerson 1967). Because the pipes have a smaller decorative face, designs are necessarily simplified compared to those on pots, but the shared patterns of design are nonetheless evident. For this reason, pipes are also considered in this analysis.

The function and social space of pipes is unique from ceramic pots. Wendat pipes are used by individuals, not families, and may show more evidence of assertive style than pots do, since they are intimately tied to the smoker that uses them. Since the pipe is smoked through the mouth and held with the hand, it is necessarily associated with a specific individual in a way that pots are not. It is suspected that different types of pipes served different purposes, from social smoking to medicine society use and perhaps even association with particular ancestors and spirits (Noble 1979). Evidence suggest that unlike pots, pipes were made by men, and like women, they picked up their design pattern from their matrilines (Woolfrey et al. 1974). Pipes are made from a variety of materials. Most commonly, Wendat pipes were made of clay, though stone pipes are also present. These stone pipes are made from a variety of materials, including limestone, soapstone and catlinite. These may be carved in a fashion similar to clay.

Pipes were classified using Emerson's Iroquoian pipe typology (1954, 1967). Pipes were identified and documented at each site. For a full description of the pipe classification system, please see Emerson's original work and his updated variations.

Kelly-Campbell

A total of 196 clay pipe fragments were recorded from the Kelly-Campbell Site (Garrad 2014:313). Of these, 97 were decorated, with 13 of these having animal effigies and 39 having

human effigies. Of the decorated pipes, 72 were various forms of ring pipes, most commonly the apple bowl shape. Of the other 15, one was barrel shaped, one was bulbous, two were collared, three were conical, three were disc topped, and five were trumpet pipes. An additional 17 pipes were trumpet shaped, and 28 were coronets.

Plater-Martin

A total of 106 clay pipe bowl fragments were recovered from Plater-Martin (Garrad 2014). 40 of these were effigy pipes, with 22 of them being human effigies, though only one of these was an effigy bowl. Effigies represented birds primarily, along with three snakes and two other unidentified animals. Thirteen bowls have ring decorations, and 39 are decorated in other designs. A total of 18 coronet pipes are present, while only two trumpet pipes were identified. Additional, two miniature pipes were included in this collection.

Rock Island II

Pipe remains from Rock Island are minimal – only three clay pipe fragments were found in the layers relating to the 1650-53 use of the site (Mason 1986). Of these, one is an Iroquoian conical ring pipe bowl decorated with seven horizontal incisions around the bowl. The others are plain stem sherds. No stone pipe fragments were documented in the 1650-53 occupation of the site.

Cadotte Site

A total of 18 clay pipe fragments were excavated in the seventeenth century layer of Cadotte site, only six of which were bowls or bowl fragments, four of which were identifiable to

Emerson types. All of the excavated clay pipe stems were plain. One pipe bowl is a plain Iroquoian coronet pipe. Additionally there is one collared ring pipe, one bulbous ring pipe, and one conical plain pipe. No trumpet or effigy pipes were identified. There is a large, lead inlay effigy pipe at the site, but it appears to be associated with the later Anishinaabeg occupation of the site.

St. Ignace

A total of 113 clay pipe fragments were documented at the Tionontate Huron Village site of St. Ignace. Of these, 36 had some sort of decorative elements or distinctive shape, such as a trumpet bowl.

While some pipes are clearly effigy pipe bowls, there are other stem fragments that suggest they may have had effigy figures on the bowl which did not survive. Three of the pipes at St. Ignace are human effigy pipes. The first is a capped effigy bowl pipe that shows decoration on the back side of the bowl as well. The second is an effigy bowl pipe. The last is a highly burnished human effigy, though it is unclear from the fracture pattern of the fragment if it is an effigy bowl or if the effigy sat above or in front of the pipe bowl. All three effigies only represent the head of a human, without the torso. An additional fragment had some decoration on it, and includes two flat sides that lead up to a vertical line of decoration, so it is suspected this is the base of an effigy pipe as well. Because the materials from St. Ignace have not been discussed previously, detailed descriptions of the different pipes are located in the Appendix.

Interpretation of Pipe Styles Over Time

Due to the dearth of pipes available from the post dispersal sites, statistical analysis will

be performed on the largest salient categories of analysis: Human Effigies, Animal Effigies, Ring Decorated, Other Decorated, Trumpet Shaped, Coronet Shaped, and miniature pipes (Table 8). Data from pre-dispersal does not distinguish the various forms of decoration besides ringed, as Garrad did not believe these difference have any sort of salience (Garrad 2014). For this reason all pipes with non-ring decoration are being categorized together for this analysis.

	Human	*Animal*	*Trumpet*	*Coronet*	*Ringed*	*Decorated*	*Mini*
Kelly-Campbell	39	13	22	28	72	14	0
Plater-Martin	22	18	2	18	13	39	2
Rock Island II	0	0	0	0	1	0	0
Cadotte	0	0	0	1	2	0	0
St Ignace	3	0	3	1	18	10	1

Table 8. Raw counts for pipe styles at sites in this analysis.

	Kelly-Campbell	Plater-Martin	Rock Island II	Cadotte	St Ignace
Kelly-Campbell	200	123.422919	76.59574468	106.3829787	130.3782506
Plater-Martin	123.422919	200	22.80701754	54.38596491	107.6023392
Rock Island II	76.59574468	22.80701754	200	133.3333333	100
Cadotte	106.3829787	54.38596491	133.3333333	200	105.5555556
St Ignace	130.3782506	107.6023392	100	105.5555556	200

Table 9. Brainerd Robinson Coefficient of Similarity for pipe styles across sites.

A Brainerd-Robinson Coefficient of Similarity test was performed on the pipes from the

sites in this study (Table 9). Interestingly, the Kelly-Campbell site was found to be more similar to St. Ignace than to Plater-Martin. This is likely due to the unusually high percentage of decorated and coronet shaped pipes located at Plater-Martin. While both of the other sites have these items, they make up a much smaller percentage of the overall collection at the site. There are three plausible explanations for the anomalous data at Plater-Martin. The first, as suggested by Garrad (2014) is that small items such as pipes were left behind when villagers fled from Iroquois attacks. Items that normally would not be thrown out were abandoned and thus appear when they do not normally show up in the archaeological record. Another possibility requires us to consider the number of men who were killed during Iroquois attacks and warfare.

The bulk of individuals that fled to the west from Plater-Martin were women and children. The anomalously large number of decorated and coronet pipes at Plater-Martin may represent an influx of style preference from Huron men that fled to Plater-Martin. If these men were later killed, their wives and children would have fled west, but the bulk of smoking materials are associated with men, and so these stylistic preferences may not have gone with them. Finally it is worth noting that not only is there a reduction in the number of non-ring decorated pipes at St. Ignace, but there are also no animal effigy pipes. Effigy pipes are associated with shamanic and spiritual practices among the Wendat, and Garrad has argued that the abundance of bird effigies in particular at Plater-Martin, reflect high levels of shamanic activity there (Noble 1979; Garrad 2014). It is possible that the reduction in this style of pipe may reflect changes in spiritual practice. While archaeologists and historians have been skeptical of the extent to which the Christian Wendat of St. Ignace were in fact practicing the Catholic faith (see Branstner 1991), the simplified designs and lack of effigy pipes at St. Ignace may in fact be a reflection of shifting spiritual practices following dispersal and such a heavy

loss of life through diseases and warfare.

Carved and Incised Adornment Objects

While the village site at St. Ignace has a dearth of diagnostic ceramics, it has a surprising quantity of incised and carved faunal material, much of which would have been used for personal adornment. While smoking pipes and personal adornments are clearly different in function, they nonetheless are associated with individuals, so faunal materials were added to the analysis of symbols for this project.

Like ceramic pipes, carved objects of personal adornment cannot be considered a clear corollary for pottery. The function of symbols on such objects may not always be the same as those on pottery. These materials carried on the body can clearly be representative of assertive style. Yet it is worth considering that this is an assumption based in our own cultural traditions rather than what is seen among the Wendat and other tribes during the early historic period. During ceremonies of importance between communities, leaders were known to put on their best clothing and adornments, style their hair and decorate their bodies (Sleeper-Smith 2009). As representatives of their families, clans or communities they would wear objects reflecting their membership in these groups, not only objects that reflected their personal status. Status was often identified through relationships, and, as such, these objects would reflect those relationships. Thus it is reasonable to compare decorative faunal materials to ceramics, as both are reflecting meaning to outside observers. The caveat to this interpretation is that the group identity that is being communicated through personal adornment may not be the same scale group that is being represented through ceramic materials. In addition to personal adornment objects, other materials made of faunal material were occasionally incised with decorations, and

these will also be discussed.

While faunal remains were modified at Plater-Martin and Kelly-Campbell, they do not show evidence of carving or incising – modification was for functional purposes only, such as creating sucking tubes and beads and so are not useful for this analysis. While carved faunal remains are present at Rock Island II, they are all from the later historic period that is not associated with the Wendat occupation (Mason 1986). The materials are of a comparable quality to those from St. Ignace, and are from the same time period (1670-1701). This suggests that as the trade increased in the western Great Lakes these types of items became more abundant throughout the region – a 25 year difference in occupation should not impact preservation quality at these sites.

St. Ignace

Faunal preservation at St. Ignace was very good. In addition to the plethora of food remains such as fish bones, modified faunal remains such as bone harpoons, awls and sucking tubes are ubiquitous across the site (Branstner 1991). A total of 43 faunal items showed evidence of carving or incising. Five of these items are carved animal effigies. The remaining 38 items include six gaming discs, 4 hair comb fragments, six bracelet fragments, six pendants, one sucking tube, and a variety of unidentifiable objects with incised decoration. Following the effigies, which are unique, items will be described based on decorative style, rather than object type. A full table of objects and their incising patterns can be found in the Appendix .

Carved Effigies

Five faunal items were carved into the shapes of animals. Two of these effigies are

canids. One of the canids is particularly intricate. It has an additional canid incised onto its belly, and there is an incised heart line traveling down from the mouth to the incised canid. Additionally there are punctates around the edge of the canid. Below the canid's feet the bone is broken, and it is possible this was an awl or tattooing tool. In addition to the canids there is an animal that appears to be a beaver or muskrat. This identification is based on the shape of the head and tail, though the incised sections on either side of the main body also make the object reminiscent of a loon or duck diving under water with its wings pulled in. The tail is decorated with rows of punctates and horizontal lines in a similar fashion to the Iroquoian pipes. The fourth effigy appears to be a possible fish, though it is too fragmentary to identify. The final effigy is an unidentified animal as well.

Game Discs

Gaming discs are small circular objects that are used in various games in a manner similar to dice. They may be plain, decorated on one side, or decorated on both sides. A total of six decorated game discs were found at St. Ignace. Three of the gaming discs had the same design: The decorated side of each disc has 2 concentric circles. The inner circle is then divided in half. One half has a chevron, and the other half is cross hatched. Another disc has the same concentric circles, but appears to have faint oblique incising across it. The other three discs are lacking the concentric circles. Two have parallel incising similar to the ring pipes. The last gaming disc is unusual, having a carved out area in the center that is shaped a bit like a star.

Bracelets

Thin, curvilinear faunal pieces are identified as bracelets. Each end of the bracelet would have

had a hole through it where leather or string could be tied through it to fit it around the arm. A total of seven bracelet fragments were recovered from St. Ignace. The first bracelet looks unfinished. It was first incised with crossing oblique lines that form large X shapes. Following this, the carver began to scallop one edge of the bracelet, but this was never finished. The scalloping is similar to the lip of MacMurchy Scalloped ceramics, but the X design element is not recognizable as Iroquoian. Three other fragments are again similar to the ring pipes, having one or more horizontal lines incised across them. Other fragments are more complex. One fragment has this same long incised line, but with cross-hatching above it. Another bracelet has two horizontal lines, with faint curvilinear incising beneath them. On the bottom of this bracelet are incised triangular sections.

The sixth fragment is unusual in design, and may in fact reflect the reuse of a broken bracelet for sketching out designs. The decoration is divided in half. One half has chevron designs that are broken and incomplete. The top of the other half has triangles which are filled with lines radiating out from the point of the triangle, while the bottom has a portion of an oval on it. It almost appears as if someone was attempting incising of a variety of patterns, to see how to use a fine incising tool on bone effectively. However the seventh fragment appears to be more refined, yet also has a variety of elements. It has a row of punctates with an incised line above it, reminiscent of Iroquoian decorated pipes. There are also two very faint right triangles filled with incising here – this may be evidence of reuse. On the other end of the bracelet are curvilinear sections full of incising, suggestive of scalloping but on the face of the item rather than the lip/edge. There is a thong hole in the unbroken end of the item clearly showing it to be a bracelet.

Combs

Five decorated comb fragments were recovered at St. Ignace. The first comb is in several long thin fragments and is incomplete. There are squares incised with cross hatching down the length of each tine. There is a larger section of cross hatching as well, but the comb has broken in this area, so the full design cannot be interpreted. The second comb has two parallel lines of punctates, with a row of triangular incisions between them. The third comb has a row of punctates above an incised line, which is above a row of triangular incised sections. The fourth comb has cross hatching near the top and just above the tines, as if it were replicating rim and neck decoration on a pot. The area in between appears like it was originally plain, but was later lightly incised with some triangles of radiating lines, along with what appears to be an incomplete etching of a figure. The fourth comb is a 14 tined comb with chevrons on one side, and crosshatched divisions on the other side.

Sucking Tube

One decorated sucking tube was found at St. Ignace. Sucking tubes are documented historically as objects used to suck illness out of an individual (Gates St-Pierre 2010:80). The sucking tube has some curvilinear incisions on it, but they do not match any recognized patterns. It is likely these carvings have more to do with specific healing practices than any reflection of identity.

Pendants

Several bone and shell pendants were found at St. Ignace. Some are identified as pendants purely because of their small size and the presence of a hole for stringing the item up.

This pendant collection includes portions of two runtees. Runtees are distinctive flat shell beads that have holes drilled through them lengthwise so they may be strung similar to a bolo tie (Parker 1920:434). This type of bead is particularly difficult to make without breaking. The runtee fragments from St. Ignace do not appear to be from the same object, but their design patterns are very similar. Both of the runtees are circular, and both sides are decorated with smaller circles around the edges.

In addition to the runtees there is a Y-shaped shell bead. Y-shaped beads are found on other Wendat sites and made of various materials. Two of the pendants appear to reflect the design patterns of Wendat pottery. One side is scalloped, with punctates and horizontal incising running below this scalloping. At the bottom of the pendant is another horizontal line or a row of triangular symbols, again reflecting a rim and neck decoration. Another pendant has similar design elements, though it actually looks like it was an unfinished object that was meant to be split into two pendants, based on the holes and the location of the punctates and incising.

Unidentifiable Decorated Faunal Materials

The rest of the faunal remains that show incising cannot be identified as particular types of objects. The most common design element, like on the pipes, is horizontal incising. Four fragments have only this incising, one has this overlain with oblique incising, and one has incising with a scalloped edge carved into one side of the object. Another fragment has oblique incising, while yet another has alternating oblique incising. Two fragments have punctate rows on them. Lastly, one fragment has triangular incised elements and rows of punctates.

Interpretation of Faunal Materials

Faunal materials are categorized here in the same ways as pipes (Table 10). As before, a Brainerd Robinson Coefficient of Similarity was performed (Table 11). The faunal remains show the greatest similarity to the Plater-Martin site, which was not very similar to the collection of pipes from St. Ignace.

	Human	*Animal*	*Trumpet*	*Coronet*	*Ringed*	*Decorated*	*Mini*
Kelly-Campbell	39	13	22	28	72	14	0
Plater-Martin	22	18	2	18	13	39	2
Rock Island II	0	0	0	0	1	0	0
Cadotte	0	0	0	1	2	0	0
St. Ignace	3	0	3	1	18	10	1
St. Ignace Faunal	0	5	0	0	3	13	0

Table 10. Raw counts for pipe and faunal materials at sites used in this analysis.

	Kelly-Campbell	Plater-Martin	Rock Island II	Cadotte	St. Ignace	St Ignace Faunal
Kelly-Campbell	200	123.422919	76.59574468	106.3829787	130.3782506	57.29483283
Plater-Martin	123.422919	200	22.80701754	54.38596491	107.6023392	122.8070175
Rock Island II	76.59574468	22.80701754	200	133.3333333	100	28.57142857
Cadotte	106.3829787	54.38596491	133.3333333	200	105.5555556	28.57142857
St. Ignace	130.3782506	107.6023392	100	105.5555556	200	84.12698413
St. Ignace Faunal	57.29483283	122.8070175	28.57142857	28.57142857	84.12698413	200

Table 11. Brainerd Robinson Coefficient of Similarity for pipe and faunal materials.

Perhaps faunal and pipe materials should be considered as one suite of personal objects. While the material they are made from is different, both can be modified fairly simply using similar techniques. Data from the St. Ignace faunal and pipe remains were combined into one data set, and a Brainerd Robinson coefficient was created again using this new merged data set (Table 12). When data from faunal and pipe material is combined, the coefficient of similarity between St. Ignace and both of the pre-dispersal sites is virtually the same, and is comparable to the coefficient of similarity between the two .

	Kelly-Campbell	Plater-Martin	Rock Island II	Cadotte	St Ignace
Kelly-Campbell	200	123.422919	76.59574468	106.3829787	126.9690183
Plater-Martin	123.422919	200	22.80701754	54.38596491	129.8245614
Rock Island II	76.59574468	22.80701754	200	133.3333333	73.68421053
Cadotte	106.3829787	54.38596491	133.3333333	200	77.19298246
St Ignace	126.9690183	129.8245614	73.68421053	77.19298246	200

Table 12. Brainerd Robinson Coefficient of Similarity with combined St. Ignace pipe and faunal remains.

Interpretation of Symbolic Materials Over Time Among the Seventeenth Century Wendat

There is great variability in symbolic material over time among the Wendat. It is nearly impossible to make statistical comparisons of materials from 1640 and 1700 because they are so distinct in material type and stylistic typology. However, we can see a continuation of attributes that are recognizably Iroquoian. As Wendat society transformed, merged and emerged in the west, the role of symbols transformed. No longer was the purpose of the symbols on ceramics

solely to reflect identity and information within Wendat communities, but these symbols became meaningful as a marker of Wendat identity to outside entities defined as distinctly non-Wendat. As the political and social power of the Wendat transformed, so did the meaning and purpose of symbols to this society. The use of symbols as a representation of Wendat identity was a means to reacquiring and affirming the economic and political power these communities had previously had.

During the first half of the seventeenth century, the power of the Wendat was displayed through their symbols of trade goods and relationships with the Odawa and the French. As these symbols of power were destroyed or weakened, new symbols had to be developed. No longer were public symbols, such as ceramics, being used to distinguish one family or individual from another, now they were being used to reflect a distinction from non-Wendat peoples. Thus, the styles created through the combination of internal elements became less important as non-Wendat people did not have the cultural tools to comprehend the meaning of these elements *en suite*. Rather, the elements were a simpler symbol representing 'Wendat'. Iroquoian ceramic design elements were distinctive from those of neighboring communities in the west. As the number of Wendat communities and individuals was reduced, and notions of difference within Wendat society declined, symbols reflecting these distinctions were no longer necessary. As individuals were more likely to come in contact with one another, the need for symbols to inform others about you declined, and ceramics were no longer important as symbolic vessels within the community. Thus, the meaning-making of styles that we define as Wendat 'types' declined, yet the use of Wendat attributes remained as these attributes were still making meaning for outside individuals.

While her research on style is focused on a hunting and gathering society in a climate

unique from the current project, Polly Wiessner's ethnoarchaeological study of the !Kung is nonetheless insightful in our understanding of style creation in material culture (Wiessner 1983). Wiessner noted that in her population there were five levels of social organization: nuclear family, band, band cluster, dialect group and language group (Wiessner 1983:255). Among the !Kung the band was the primary settlement group, though the size of settlement varied as the group dispersed during certain seasons for resource extraction. However, the same individuals were regularly returning to their bands over a ten year cycle, indicating this group had a clear social meaning within the !Kung. The concept of the band cluster, however, was much more variable across space. Some band clusters showed clear territoriality and kinship and exchange systems, while other clusters were less formalized and showed less unification (Wiessner 1983:255). Wiessner (1983) and Heinz (1979) argue that the reason for this variability had to do with the access to reliable, predictable resources. For communities in areas with less reliable resources, out-group networks were more important for survival – a form of social storage. Groups with different languages saw themselves as distinct social entities, though they rarely had conflict with other language groups (Wiessner 1983:255).

As the Wendat fled from Ontario, their resource reliability and predictability dropped out from under them. It was not until 1670 and their establishment of the village at St. Ignace that they had stability again. By this point they had reintegrated themselves into the trade networks of the *Pays d'en Haut*. At St. Ignace we see large quantities of scrap copper and catlinite, suggesting they are collecting these materials from their networks and transforming these object for their own use or to pass on in the trade. In between settling at Plater-Martin and St. Ignace, however, symbols shifted as the need for developing new and stronger networks with the west increased. While linguistically and culturally the Wendat still saw themselves as distinct, they

no longer asserted the types of strong symbolic differences within their own communities as they once had. For this reason we end up with distinctly Iroquoian, but non-typological materials at St. Ignace. In chapter seven this material will be reconsidered as a means of examining the diasporic identity of the western Wendat as they asserted their Iroquoian identity through these materials.

Chapter 6

Lithics as Indicators of Economic and Social Networks

While the symbolic materials discussed in the previous chapter can give archaeologists insight into how the Wendat wanted to display their identity to themselves and their neighbors, an analysis of lithic resource use can allow us to examine the actual networks of the Wendat, rather than their intentions. We can evaluate the Wendat for notions of diasporic identity through their lithic resources as well. Lithics have been used by many archaeologists to explore trade networks and landscape knowledge of communities. This chapter will begin with an overview of the theoretical underpinnings of this analysis followed by a brief history of the trade relationships of the Wendat, an analysis of lithics from the three village sites included in this study (Plater-Martin, Kelly-Campbell and St. Ignace), and an interpretation of these results.

Migration, Identity, and Social and Economic Networks

As discussed in chapter three, migratory communities may identify as diasporic or not, and this will impact their relationships with others and the land around them. If a community is diasporic, its members intend to return to their homeland, and actively avoid establishing ties of permanence to their settlement areas and neighbors (Rockman 2003). Non-diasporic communities are more likely to establish relationships, increasing their chance for survival. A knowledge of quality resources within a region indicates that a community has a good understanding of that space. One way to acquire this knowledge is through social networks, which would indicate a good working relationship with neighbors (Rockman 2003). Another

indicator of strong social networks would be quality materials that have come to the community from further afield, through trade (Kelly 2003). Social networks would reduce barriers to knowledge about local resources such as high quality lithic outcrops (Kelly 2003; Rockman 2003). Interestingly, it has been shown that in some cases of *scarce* resources, refugee populations and the indigenous peoples of their resettlement area will come into conflict, thus not integrating into the same social network because it is mutually disadvantageous (Mahapatra & Mahapatra 2000:442). If the Wendat were diasporic, the data will show higher evidence of re-use of lithic materials, and the use of local, easily accessible materials, regardless of quality. This is because the community was focusing primarily on survival with intention to return to the homeland, rather than acclimating to the new area and accessing high quality materials. If they were not diasporic, and resources were not particularly scarce, they will have had stronger networks, greater knowledge of high quality materials, and greater access to long-distance, high-quality lithic materials. If they were non-diasporic and resources *were* scarce, then a pattern similar to a diasporic community would be present; however other evidence of scarcity and conflict would also be evident.

Wendat Networks and the Fur Trade

During the first half of the seventeenth century, the Huron became the primary arbiters of the fur trade between indigenous fur trappers and the French. Shortly after the founding of Quebec in 1608 the French developed a strong connection to the Huron (Heidenreich 1971:234). The Huron were savvy traders, and the value of the furs and trade goods were regularly marked up by 100 percent (Eccles 1983:24). Trade was done through kin networks including sanguinal relationships, marriages and adoptive relationships (Tooker 1964). To accomplish this, the

Huron had to maintain strong ties to several villages of non-Huron people, along with the French. Relationships were maintained through feasts and exchange. Relationships were not village-to-village. Rather, individuals established their own personal networks (Trigger 1976:64). Thus, individual trading families would have relationships with fur trappers and Frenchmen, and could be more or less successful than other members of their village in the trade. For the sake of village organization, however, they would have to hold feasts and maintain strong ties to their neighbors as well, lest problems arise within the village (Tooker 1964:72-76; Trigger 1976:64).

In 1612, Etienne Brule became the first Frenchman to winter with the Huron with the express purpose of maintaining strong ties with them for the fur trade (Eccles 1983:25). Shortly after, in 1615, the Iroquois began regular attacks upon the Huron and others (Eccles 1983:31). In 1620/21 the *Royale & Generale Compagnie du Commerce* was chartered (Maggs 1936:3). This was the first formal French company to be formed as part of the fur trade. Within two years, the Huron were recorded as actively trying to prevent more western tribes from trading directly with the French (Eccles 1983:31; Tooker 1964:25-26).

The Tionontate and Neutral were less involved in the fur trade during the first half of the seventeenth century. The Huron were very careful to limit other communities from having direct access to the French (Tooker 1964:25-26). The Huron discouraged French missionaries from visiting the Tionontate, and did not take Tionontate traders to Montreal or Quebec with them (Trigger 1976:62-63).

Early French descriptions of trade relationships among the Huron suggest they traded most regularly with Algonquin communities to their north, rather than the Tionontate and Neutral to the west and south (Heidenreich 1971:228). Algonquin communities in this region tended to

be hunter-gatherers, so this would have allowed the Huron access to a greater variety of subsistence goods and animal skins, along with an increased quantity of furs. As Wendat populations grew in prehistory, they also depleted the population of deer and other large mammals in their homelands (Heidenreich 1971). During the fur trade the Huron would travel into the interior to gather furs, which they would then bring to Lower New France to exchange (Heidenreich 1971). In later years *voyageurs* would travel to the Upper Country more regularly and trade with indigenous people in their own territories. However, in the early years of the fur trade, the travel was often done by the indigenous traders, rather than the French. This gave the Huron a certain amount of power and control which was not available to other communities (Trigger 1976:65). This power gave them the ability to mark up the value of the items they exchanged. After the dispersal of the Huron, some groups of Odawa took over the role of middlemen for communities further afield; however their ability to mark up prices was never what it once was for the Huron (Trigger 1976).

As discussed in chapter two, by 1634 the Huron and Tionontate had an estimated population of 30 to 35 thousand individuals (Warrick 2003:259). Within the next decade the population of Huron and Tionontate had been reduced to about 12,000 people due to epidemics that continued to pass between the villages (Warrick 2003:262). Disease was also impacting other indigenous groups as well. Reduced population led to a variety of complications for communities. Knowledge and wisdom were drastically lost, and those that survived found themselves responsible for many more activities than they had been before. At the same time, the European desire for furs was increasing (Trigger 1976). The fur trade increased in importance for indigenous communities. With reduced numbers and less highly-skilled individuals, it was more sensible to procure and prepare furs and trade them for weapons, tools

and other materials, than to focus on trying to maintain a village that did fur trapping in addition to creating their own weapons and tools. At the same time, the Iroquois were unhappy with their trade with the Dutch, and were seeking out alliances with the French (Heidenreich 1971:260-261). After their attempts failed, the Iroquois instead struck out against the Wendat and began a series of attacks on these communities.

While the Huron had once been at the center of trade and exchange in a land where they had lived for several generations, the attacks upon them by the Iroquois in the 1640s, in conjunction with epidemics had devastating consequences. Many individuals died, including, presumably, men who had been directly involved with the fur trade. Other individuals that processed copper kettles into tools, and crafted the fine ceramics of the Huron also were likely killed. Individuals with deep knowledge of the land and the history of the community were wiped out. Some of the remaining Huron settled with the Tionontate, and likely some Neutral as well. These groups dispersed into the western Great Lakes in the 1650s, a land that many had heard of, but few had actually traveled to.

Sioui notes that the Wendat are frequently referred to in the historical documents as leaders in trade and diplomacy (Sioui 1999:10). Wendat had a meaning beyond the community – *leaders* came from the Wendat communities. Prior to migration the Wendat were known as the middlemen of the economy between the French and the tribes of the western Great Lakes. Following their dispersal, they were still recognized as leaders by the French. This could be because the French already had established relationships with these individuals, however it is unlikely that other tribes would have endorsed the leadership roles given to the Wendat had they not too recognized their authority in these matters. In 1721, following resettlement in the Detroit area, Charlevoix noted that the Wendat, though a small population, were still the leading

influence at intertribal councils (Sioui 1999:10).

As central participants in the fur trade, the Huron used similar trading practices to those used elsewhere in the Great Lakes. Trade was done from one family to another – extended and fictive kin relationships were used to maintain trading alliances. Early trade with the French was controlled by the Arendaronnon community (Heidenreich 1971:221). All families were allowed to trade with the French but had to make payment to this community first, because they were the ones who first developed trade relations with the French in 1611 (Heidenreich 1971:49). Because trade relationships were built between families, different households could have different qualities and quantities of trade goods and related items.

As the above data indicates, the Wendat were savvy networkers when these networks had benefits for them. Their strength of networks prior to migration would suggest that they could have had access to these same networks for social reasons following dispersal, if they so desired. However, the deaths of so many individuals due to epidemics and warfare may also have broken down some of these networks. Additionally, as the economic power of the Wendat waxed and waned, the interest in maintaining ties with them could have shifted for other communities.

Overview of Lithic Resources in the Region

For the Wendat, local material quality varied considerably depending on where they lived (Figure 15). Around Georgian Bay, the most abundant local material was Fossil Hill (Collingwood) Chert. This material is quite variable, and not particularly high quality. In Wisconsin, there are abundant quartzite outcrops. Again, while functional, there are more preferable materials available if one knows where to find them, or has networks of trade. Along the northern side of the Straits of Mackinac, beach cobbles of glacial chert are available, but

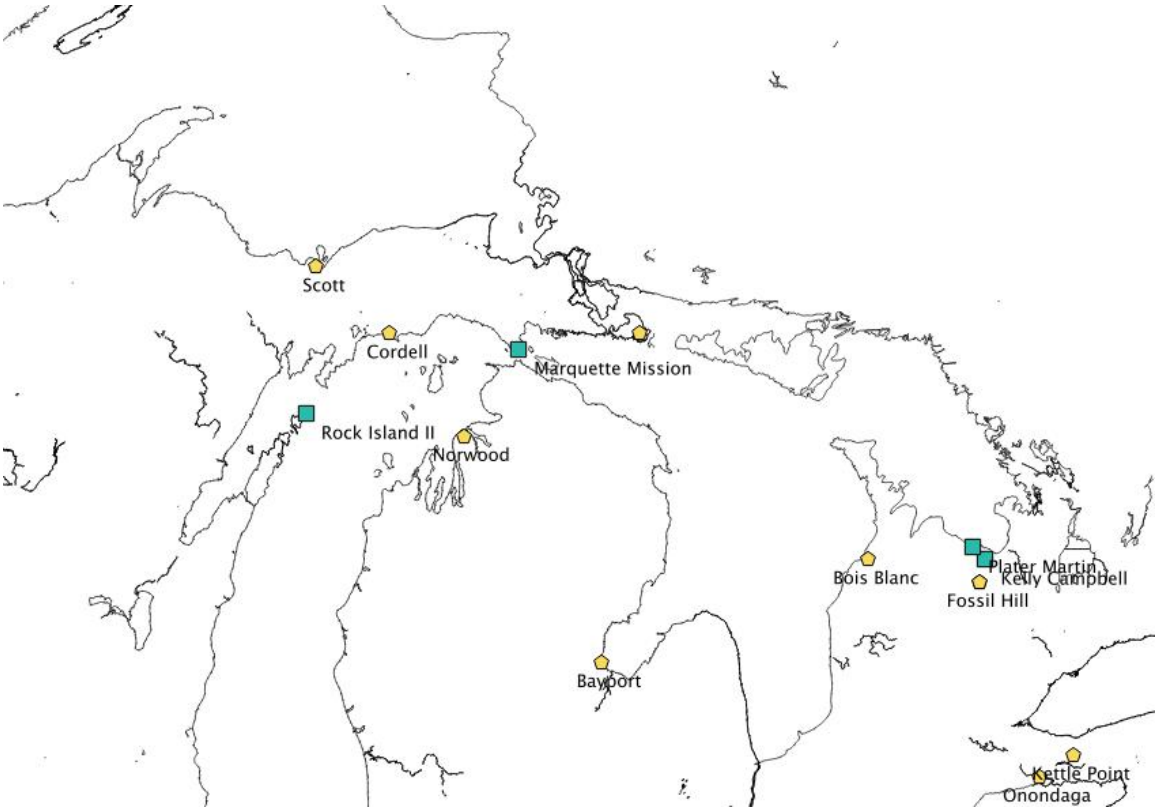

Figure 15. Lithic outcrop sources and archaeological sites.

these are often small, and can have irregularities within them, making it time consuming to find quality pieces. Scott chert is fairly high quality, though friable, and found somewhat close to St. Ignace, but it is only available in small bands. In each of these cases, there are lower quality materials available locally, along with higher quality materials which must be traded for or collected while on long-distance excursions.

To understand the external relationships of the Wendat in each settlement, the lithic materials will be examined. If the Tionontate Huron had strong relationships with their neighbors, high quality materials and a knowledge of good local resources should be evident in the chipped stone assemblage. Each site being analyzed in this section will be analyzed individually, followed by a summary of how these networking relationships appeared to change

over time.

The Wendat would have known their local resources quite well, prior to migration. According to Champlain, new villages were always built within three leagues of older villages (Heidenreich 1971:30). By remaining within such close distance of their previous village, community members avoided shifting their landscape greatly, and could still access most resources within the same amount of time as they previously had. Over generations these villages would have become distant from some resources, but for individuals, the distances to acquire a particular resource changed minimally over a lifetime.

Using Barbara Luedtke's classification scheme, 'local' chert resources are defined as either those that make up 50 percent or more of an assemblage, or those extracted from quarries within 60 kilometers of the archaeological site (Luedtke 1976:330). Exotic raw materials are defined as those that came from further than 60 km away, and are recognized as coming from a known source (Luedtke 1976:330). Because of their availability for reuse, imported European materials used to make gunflints and fire starters will also be included in the present analysis. A table of lithic sources and their distance from the sites in this analysis is presented here (Table 13). For a full description of the materials, please see Appendix A.

Methods

Chipped stone from St. Ignace, Kelly-Campbell and Plater-Martin were examined or previously collected lithic data were made available to the author. These lithics are being used as a proximate indicator of the external networks and relationships of the western Wendat during the course of their migration in the western Great Lakes. To this end, each piece of material examined was classified as one of the following: debitage/flake, fragment (cultural shatter),

	St. Ignace	*Midland*	*Craigleith*	*Madeline Island*
European Materials	> 60 km	> 60 km	> 60 km	> 60 km
Glacial Cherts	< 60 km	< 60 km	<6 0 km	< 60 km
Fossil Hill	415 km	79 km	48 km	891 km
Bayport	233 km	306 km	276 km	646 km
Norwood	102 km	428 km	409 km	469 km
Onondaga	572 km	224 km	216 km	1031 km
Kettle Point	545 km	197 km	189 km	1004 km
Jasper Taconite	444 km	823 km	808 km	208 km
Scott	259 km	617 km	595 km	253 km
Hixton	543 km	917 km	885 km	231 km
Bois Blanc	306 km	125 km	89 km	770 km
Cordell	92 km	489 km	465 km	380 km

Table 13. Distance from lithic outcrops to known Wendat locales.

formal tool, core or natural material. Flakes were further identified as utilized or retouched when applicable. Those flakes found to be utilized or retouched have been classified as informal tools. Informal tools are an important indicator of tool use *at* the site, whereas formal tools may be traded or curated. Informal tools are expedient and indicate use near the location where they are excavated. Formal tools were identified by type (end scraper, projectile point, etc…). All materials were examined using a 10x hand lens. Raw material samples were on hand for comparative analysis, along with written descriptions. Some materials were brought to outside experts for identification. When identification was too difficult, particularly with debitage, no identification was made. Likewise, burned materials that were beyond the point of identification

were noted as such. All lithic data can be found in Appendix B.

Results of Lithic Analysis

Individuals who have lived in a region for generations should have a strong sense of their environment and access to the highest quality local resources. If they have good social networks, they will also have access to high quality resources from further afield, while those without strong social networks will not. After migration, if people are diasporic and not learning their landscape, there are several ways this could be reflected through their lithic resources. First, they could make return trips to known resources from pre-migration sites. Secondly, they may reuse the materials they have available at a high rate, if they do not have access to any other lithic resources. Third, they may use local, lower quality resources, rather than learning where to find slightly higher quality, but more distant resources. If the community is not diasporic, then they should integrate into the local environment and social networks and find high quality materials in their new region to use for their tools.

In order to understand post-migration lithic resource use, we must first examine the use of lithics in homeland sites as well, to understand what the pattern of use was prior to dispersal.

Kelly-Campbell Site

Lithics at Kelly-Campbell were analyzed by William Fox but have not yet been published (Fox, personal communication). I also examined an available sample of the lithics from the site while at the Petun Research Institute (Table 14). Of the materials I examined, 39.3% were Onondaga and 28% were Kettle Point, making up the bulk of materials. Additionally 10.7% of the material was Bois Blanc, and 7.3% was Fossil Hill Chert, with small samples of slate and

Material	*Count*	*Percentage*
Bois Blanc	19	10.7%
Fossil Hill	13	7.3%
Kettle Point	50	28.1%
Lockport	2	1.1%
Onondaga	70	39.3%
SK	9	5.1%
Slate	3	1.7%
Unknown	12	6.7%
Total	178	100.0%

Table 14. Lithics from the Kelly-Campbell site.

some unidentified pieces. These ratios are virtually identical among both tools and flakes. Lithics at Kelly-Campbell reflect the use of higher quality, more distant materials from Kettle Point and Onondaga outcrops (Fox 1980). These materials also came from the same direction as the Wenro and Neutral villages, suggesting again that ties to this region were present throughout this habitation. The presence of tools and flakes in similar quantities for each material type suggests that access to high quality material through trade networks was strong throughout the habitation at Kelly-Campbell.

Plater-Martin Site

Lithic materials from Plater-Martin site were analyzed by William Fox. Data available to the author included general source information, but did not break down material types with different tool types (Fox & Garrad 2004).

A total of 946 lithics were analyzed in the course of two separate projects (Table 15). The largest portion of the material was local Fossil Hill chert, making up over half of the

collection (55.71%). The other major material in the collection was Kettle Point chert (24.21%). An additional 111 pieces of material were unidentifiable. This was followed by a handful of Onondaga (30), Bayport (28), Bois Blanc (2) and Detour (19) cherts.

Material	*Count*	*Percentage*
Fossil Hill	527	55.7%
Kettle Point	229	24.2%
Onondaga	30	3.2%
Bayport	28	3.0%
Bois Blanc	2	0.2%
Detour	19	2.0%
Unidentified	111	11.7%
Total	946	100.0%

Table 15. Lithics from the Plater-Martin site.

Plater-Martin shows a high reliance on local, poor-quality lithic resources. It also shows presence of some materials from across Lake Huron. These suggest that trade networks with the Neutral and Wenro were not being used during this time, while connections with western peoples, likely through the Odawa, are present. Indeed, Plater-Martin is a paired village site associated with the neighboring Plater-Fleming site, which is believed to be an Odawa village (Garrad 2014). By 1630 the Odawa were regularly using Bayport and Norwood chert from present-day Michigan (Fox 1996). The presence of Bayport in conjunction with the dearth of southern materials and the abundance of Fossil Hill material suggests that access to southern trade networks had collapsed, and attempts to access any other resources, through the Odawa, were being attempted. The lack of Norwood chert in conjunction with the Bayport, however, does not correspond to Fox's predictions that a shift in trade to the Odawa to the north would

lead to the presence of both of these material types. It is possible that, since Norwood was higher quality, the Odawa were less willing to exchange it to others.

St. Ignace Site

A total of 3,375 pieces of chipped stone were examined from the Wendat village at St. Ignace. Collections housed at both the Michigan State University Museum (MSUM) and the Michigan Office of the State Archaeologist (MOSA) were examined. All materials in these collections were examined by the author. On occasion my interpretation of tool type differed from the initial identifications of materials in the 1970s and 1980s, so interpretations may not always correspond with site reports and previously published materials. Please refer to Appendix B for detailed information on where each object was located at the site and where it is currently stored. It is worth noting, in particular, that James Fitting was particularly careful about collecting and curating every object found at the site during his excavations. As such, there were numerous pieces of stone in the MOSA collections that appear to be non-chipped stone. Additionally, there were a large quantity of primary cortical flakes in this collection, which were difficult to identify as to specific lithic source.

Of the 3375 pieces of lithic material at St. Ignace, 555 (16.44 %) were identified as tools and tool fragments, including retouched and utilized flakes (Figure 16). Of the tools, 63.42%, or a total of 352 were identified as formal tools, including gunflints, which totaled 178, or over half of the formal tools in the whole collection. This is important to consider because the majority of the gunflints are made of European material acquired through trade with the French, and skew the data pertaining to trade and relationships with other communities. Figure 17 shows the distribution of tool types at the Wendat village. When gunflints are excluded, nearly 54% of the

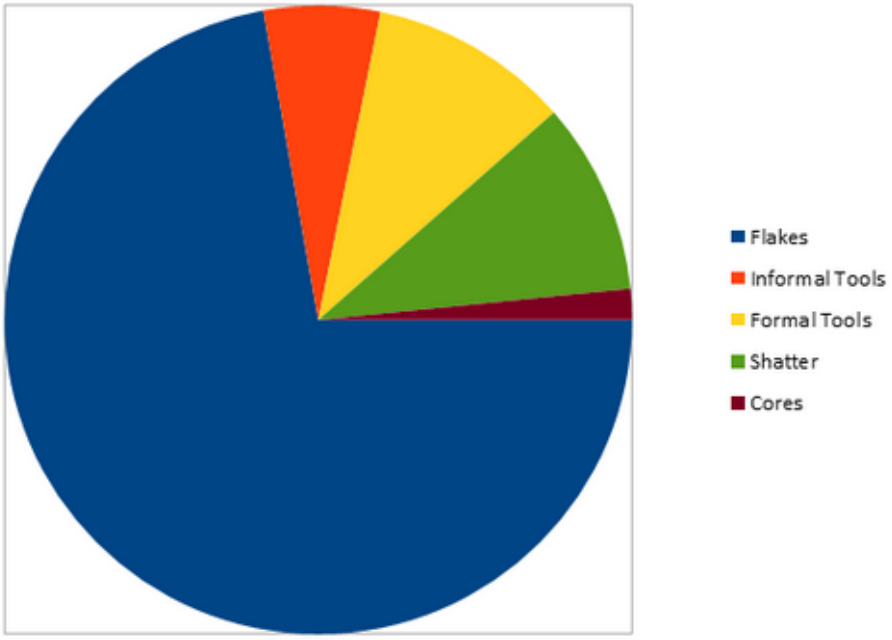

Figure 16. Percentages of chipped stone in the St. Ignace collection.

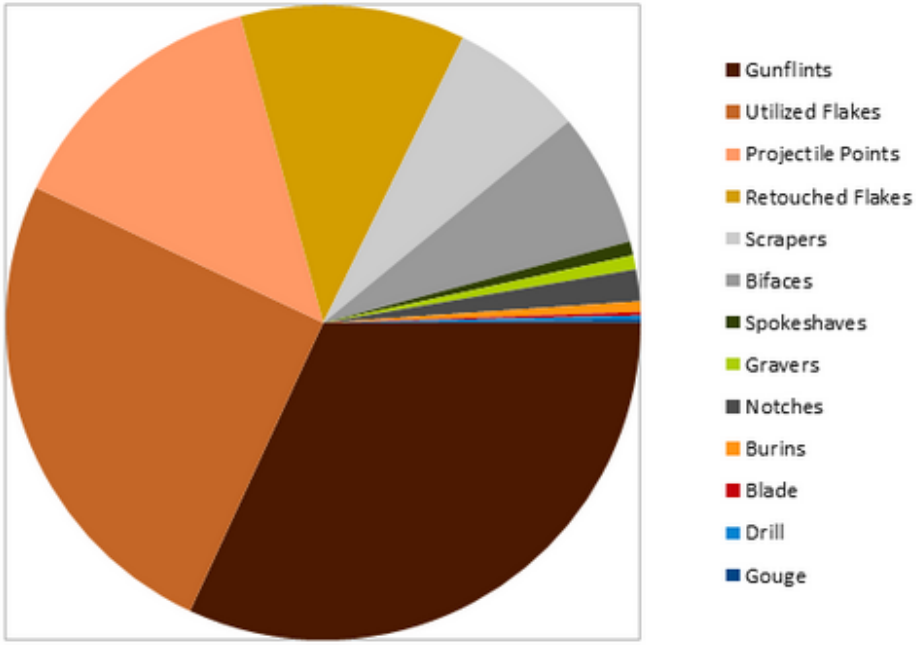

Figure 17. Percentages of stone tool types at St. Ignace.

remaining tools at St. Ignace are informal tools.

Formal Tools

A complete breakdown of raw material types among formal tools can be found in Figure 18. As previously stated, the majority of formal tools at St. Ignace were gunflints and gunflint fragments. The vast majority of these were made of European flints, although there were some locally made flints in the collection. Fifteen gunflints were made of local beach gravels (glacial chert), two were of Bayport chert, and one was of Norwood chert. An additional nine gunflints and fragments were unidentifiable, due to size, patina or burning.

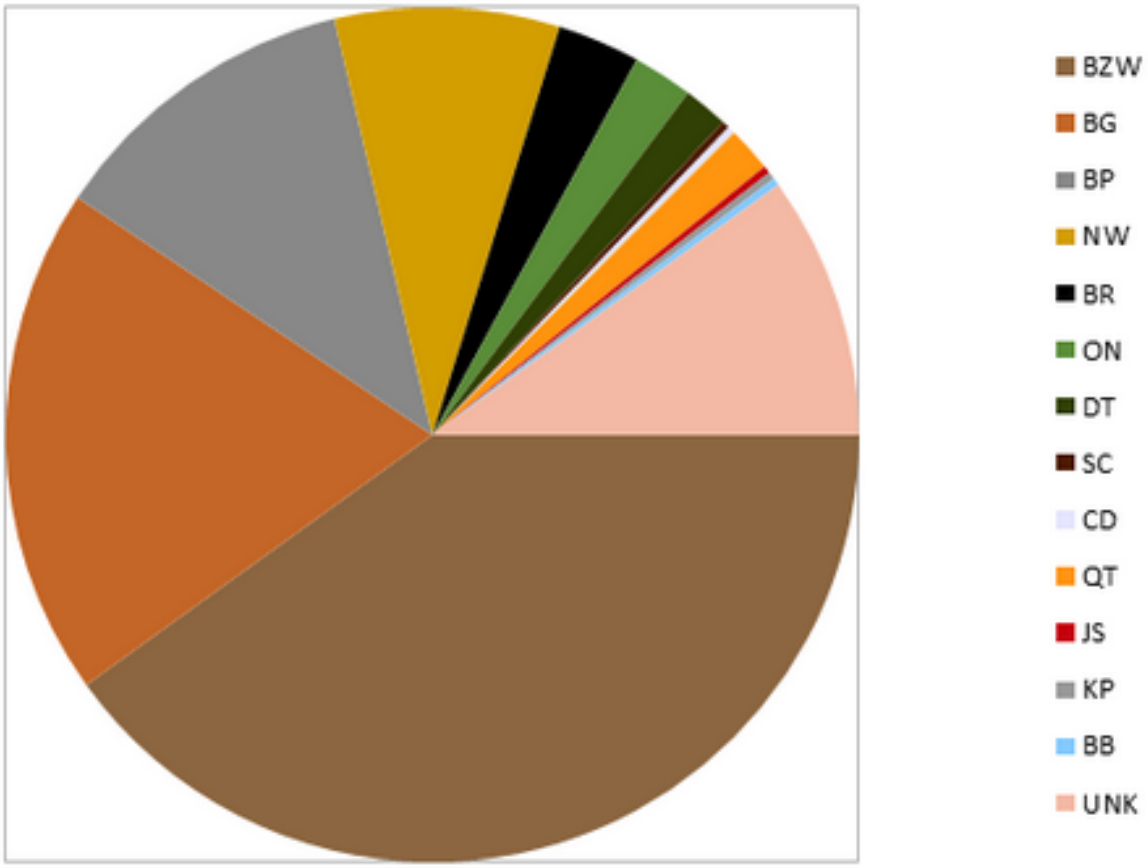

Figure 18. Raw material distribution among formal tools at St. Ignace by percentage.

Additionally, European flint was transformed into other tools besides gunflints. One spall gunflint was modified into a gouge, another appeared to have been used as a core. One projectile point was clearly made of European material, while another was the point-end of a gunflint retooled into a projectile point. Four pieces were identified as retouched flakes. Another piece was bifacially flaked, and while it may have been a gunflint originally, the extensive flaking on both sides suggested a different function at disposal. Another bifacially flaked piece showed use wear on one side; however the abnormal chipping patterns suggested the piece had shattered before disposal. Two gunflints were transformed into notches.

Other formal tools were made predominately of locally available glacial chert cobbles, and more distantly available Bayport Chert and Norwood Chert. Only two formal tools were made of the locally available Cordell and Scott Quarry Cherts. Surprisingly, more formal tools were made of Bayport than Norwood, a closer and higher quality material. Later in this chapter I will discuss the greater abundance of Norwood Chert among informal tools and chipping debris.

Informal Tools

The majority (48.04%) of informal tools were made of locally available Beach Gravels, followed by Norwood Chert (19.61%) and Bayport Chert (15.69%) (Tables 16 & 17). 4.90 % of these tools, a total of 10, were made of Cordell Chert. While this is not a particularly large number, it clearly stands out beyond the one formal tool made of Cordell Chert, a projectile point.

Tool Type	*Beach Gravel*	*Bayport*	*Beeswax*	*Cordell*	*Unknown*
Retouched Flake	33	8	3	1	7
Utilized Flake	65	24	1	9	6
TOTALS	98	32	4	10	13

Table 16. Informal tools made of local cherts at St. Ignace.

Tool Type	*Kettle Point*	*Norwood*	*Onondaga*	*Quartz*	*Slate*	*Glass*
Retouched Flake	1	8	1	0	1	1
Utilized Flake	1	32	0	1	1	0
TOTALS	2	40	1	1	2	1

Table 17. Informal tools made of non-local cherts at St. Ignace.

Non-Utilized/Retouched Flakes

Figure 19 identifies the raw material for flakes that were not identified as tools. For flakes and debitage the most common material is the local Beach Gravel (32.67%), followed by Norwood Chert (23.74 %) and Bayport Chert (17.12%). It is interesting to note that, while there are more formal tools made of Bayport Chert than Norwood Chert, the reverse is true for informal tools and flakes. This shows that material being flaked by individuals *within* the Tionontate Huron Village was dominated by local Beach Gravel and Norwood Chert, while more of the Bayport Chert was being flaked offsite. This could be suggestive of exchange, however it may also suggest that individuals leaving the village for hunting or trapping were collecting Bayport Chert while on their journeys, and only bringing the completed tools back to the village with them.

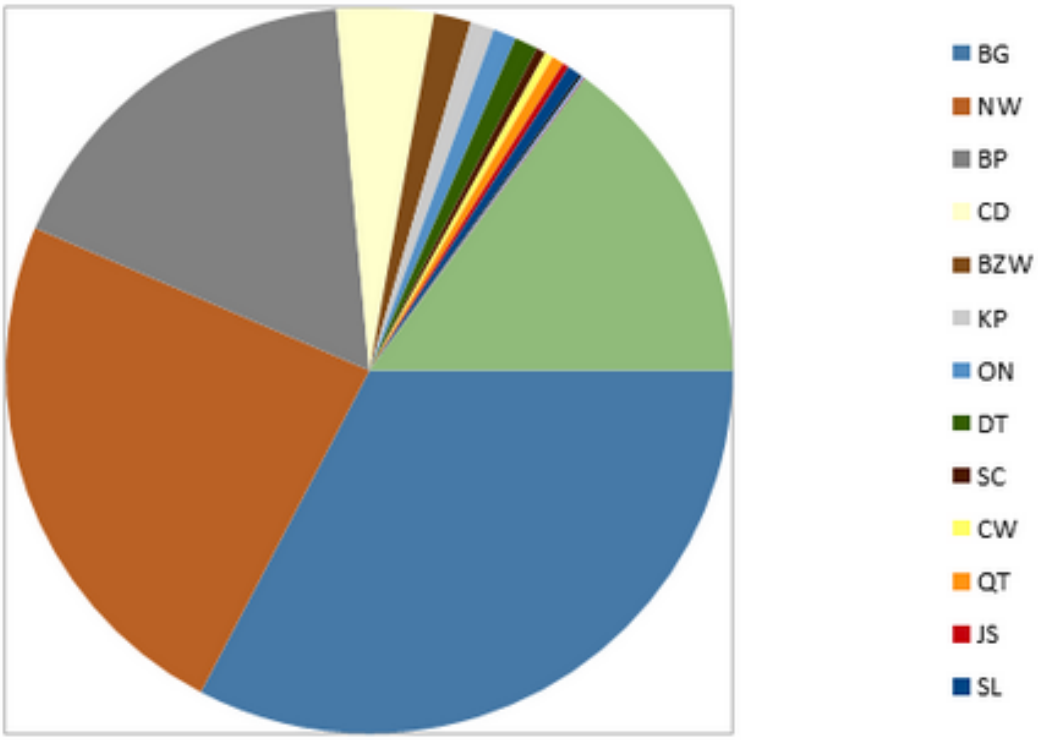

Figure 19. Raw material for non-utilized flakes and debitage at St. Ignace.

Interpretation of Lithics from St. Ignace

Figure 20 shows the relationship between material type and the categories of lithic objects. It is clear that flakes and debitage are predominately made of local beach gravel and nearby Norwood chert. For informal and formal tools, however, the amount of tools made out of Bayport and Norwood cherts are comparable, while Beach Gravel stands out well beyond them. This suggests that both Bayport and Norwood cherts are considered good for making tools; however only Norwood chert is being transformed into tools at the village itself on a regular basis. Norwood is a higher quality chert, and is much closer to St. Ignace than Bayport (102 km compared to 233 km). Historical records document trips to the Saginaw Valley, where Bayport Chert outcrops, on a regular basis by the Odawa, and less regular, but nonetheless often, by the

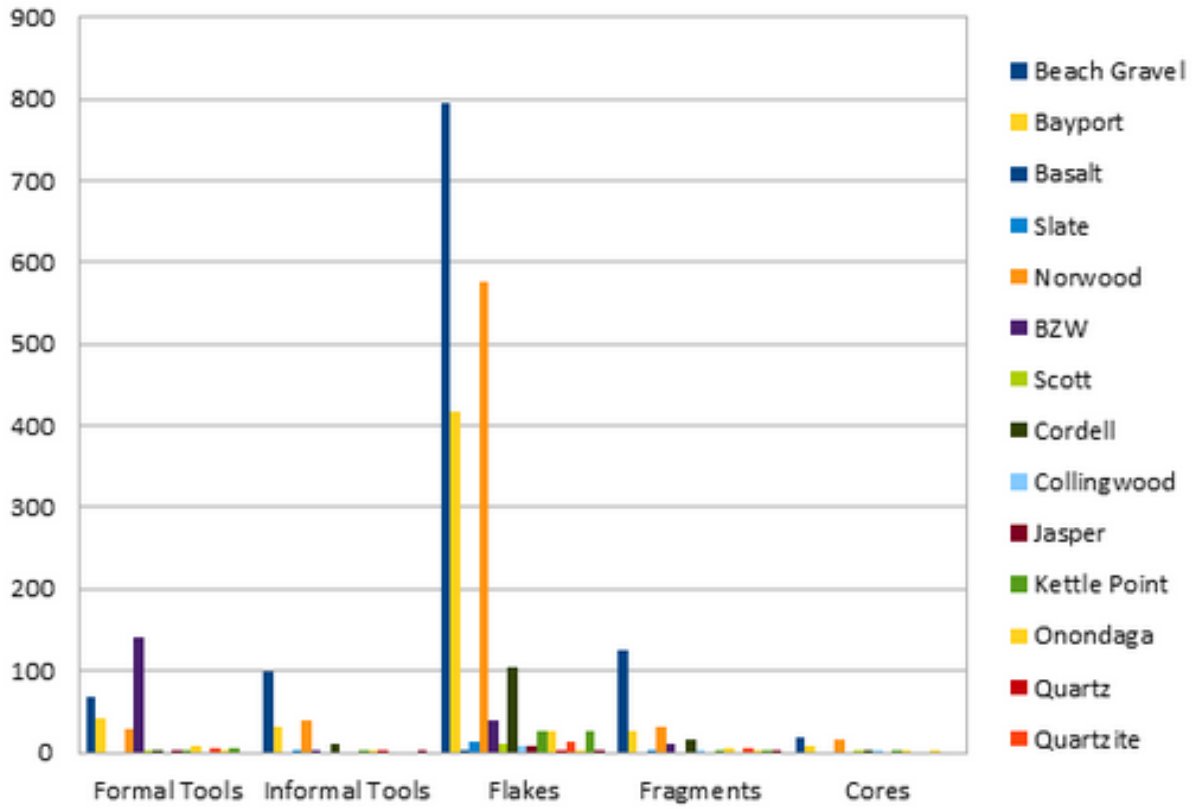

Figure 20. Breakdown of material types by object classification at St. Ignace.

Wendat. This evidence seems to suggest that Bayport chert was readily available to the Wendat through their hunting trips and trade with the Odawa, so it was used but not re-used. Norwood chert, however, appears to have been more carefully reused, in an effort to conserve the material. This suggests that the Wendat had less access to this material, even though it was much closer to their village than Bayport chert. The Saginaw Valley is located on Lake Huron, and it is probable that both the Wendat and their Odawa neighbors traveled this area fairly regularly, and were familiar with the resources available there. Norwood chert outcrops on Lake Michigan, and it appears that this material was more difficult for the Wendat to access while living at St. Ignace. This suggests that the Tionontate Huron did not maintain strong ties with anyone living in the western Lower Peninsula or along Lake Michigan. While the abundance of catlinite at the site

suggests ties to the west, the lack of southern chert resources suggests these ties must have been made via traders that traveled along Lake Superior, rather than Lake Michigan. Thus, the lithics suggest that, while the Tionontate Huron maintained their ties to the Odawa who traveled west with them, they did not expand their networks significantly beyond this while at St. Ignace.

Change in Lithic Resource Use Over Time at St. Ignace

Because the western Wendat lived at St. Ignace for about 30 years their use of and knowledge of the landscape and networks would have changed over the course of their settlement there. Indeed, during the early years of their stay they may have seen St. Ignace as a stopping point on a journey home. However, by the 1690s, the young adults of the village were those that had been born and raised *in* the village, and may have had different conceptions of their surroundings.

Intrusive Features

We are fortunate to have several sets of intrusive seventeenth century features at the site which are helpful for examining change in lithic procurement and use over time at St. Ignace. When a feature intrudes into another feature, it must be more recent than the original feature. While it is not clear how far apart in time these features were used from one another, as isolated sets they can be compared to one another. Further, some features have clear evidence of reuse, with bark layers separating the lower refuse from more recent storage or refuse. Again, these can be used to evaluate changes in lithic use at the site.

Features 108/124

Feature 108 intrudes into Feature 124, both dated to the seventeenth century based on the presence of trade goods. However, the number and type of trade goods is vastly different – Feature 108 has a greater variety of trade items, including catlinite, musket balls, olive glass and trade brass, while feature 124 has only a few beads, a piece of olive glass and one nail (Table 18).

Feature	*European Pipe*	*Aboriginal Ceramics*	*Glass Bead*	*Catlinite*	*Grinding Stone*	*Core*	*Adze*
108	1	37	2	2	3	1	1
124	-	6	4	-	1	-	-
Feature	*Chipped Stone*	*Beeswax Flake*	*Copper Frag*	*Copper Mail/Bead*	*Shell*	*Musket Ball*	*Total Artifacts*
108	5	1	4	1	1	1	60
124	1	-	-	-	-	-	12

Table 18. Comparison of artifacts from features 108 and 124.

Based on an examination of the paucity of trade goods in the lower level feature, it can be presumed that this feature is from an earlier period of habitation at the site. The lack of catlinite could even suggest this feature is either a) non-Wendat or b) Wendat from the 1650s, rather than the long-term settlement of the site. In comparing the chert, however, both features have Bayport and Norwood chert in them. Feature 108 also has two pieces of beach gravel in it which refit together, whereas this local material is not found in the small sample from Feature 124.

Features 205/185

Feature 205, a pit, intrudes on the trench that is Feature 185, showing that Feature 205 is

more recent, though both contain seventeenth century materials. In comparing the lithic materials, there is a clear difference, though some of this may be attributed to the function of these features as well. Feature 185 contains seven lithic artifacts, including one gunflint, four flakes and two pieces of debitage. The spall gunflint is European flint, two flakes are local beach gravel, one is Bayport and one is Norwood, and none have evidence of use or modification. One piece of debitage is Bayport, the other is unidentifiable.

In contrast, the more recent Feature 205 contains 16 lithics: four gunflints, six flakes, three fragments (shatter), two pieces of debitage and a potlid. Two of the gunflints are spalls and two are blades, which supports the later dating of this feature, as blade gunflints really only became availably after 1690 (Witthoft. All four gunflints are made of European flints, as is one of the flakes. Two of the other flakes are beach gravel, two are Norwood, and one is too burned to identify. The three fragments are identified as Bayport, probable Onondaga, and one is too burned for identification. One piece of debitage was identified as Norwood, one was unidentified due to burning, as was the potlid.

Features 210/202

Feature 210, a pit, intrudes into Feature 202, which means that Feature 202 is older. Feature 202 contained 32 lithics, primarily flakes, debitage and fragments, with two utilized flakes, both of which are made of Norwood chert. 40% of the lithics in Feature 202 are local beach gravels, while 25% are Norwood. There are also three pieces of Onondaga chert, two Bayport and two Cordell, along with four unidentified pieces (three of which are burned), making this a fairly diverse array of materials. Feature 210 only had five lithics: a fragment of

beach gravel, two pieces of Norwood debitage, a flake of Onondaga and an unidentified flake of burned material. It is possible that these lithics were originally in Feature 202 and were shifted during the creation of Feature 210, but this is unknown.

Features 228/226

Another set of overlapping features are 226 and 228. Feature 228 intrudes into 226, and is more recent. Branstner (1986:68) suggests that Feature 226 was a deep storage pit that was open so long that slumpage occurred. Based on the bark lining found at the base, it was probably intended as a storage pit (Branstner (1986:68). Feature 226 had an abundance of lithic material, 138 pieces. Feature 228, a later pit that may also have been used for storage originally, had many less lithics, only 9 pieces. This may be indicative of changing use of chipped stone over time. Of these 9 pieces, all were Norwood or beach gravel, save one flake of European flint. Only one flake was utilized, it was made of Norwood chert. It is unlikely that these materials are intrusions from Feature 226, because Feature 228 shows evidence of being lined.

In the earlier collection from Feature 226, the vast majority of material is Beach Gravel or Norwood Chert. Three unidentified pieces (two burned), one piece of Onondaga debitage, two flakes of Cordell chert, one piece of European flint shatter and one European flint spall gunflint, and nine pieces of Bayport chert (two utilized flakes, six flakes and one piece of debitage) make up the rest of the collection. 38% of the material was Beach Gravel, and 52% was Norwood Chert.

Features 233/234

Feature 233 intrudes into Feature 234, so it is more recent. Both of these features have

just a few lithics, though they are unique deposits. Feature 233 has three flakes of Norwood chert, one of which is retouched. Feature 234 on the other hand has only one flake of Norwood chert. It also has three flakes and a fragment of Cordell Chert, along with two flakes of beach gravel and a European spall gunflint. Both pieces of beach gravel are from the lower subfeature of Feature 234, suggesting the oldest lithic use in this area is beach gravel, followed by Cordell, and then finally Norwood chert. It should also be noted that Subfeature one has many more trade items – it is possible that these items were being stored rather than discarded, while the beach gravel had been deposited as trash.

Interpretation of Intrusive Features

The collection of intrusive features at St. Ignace is sparse, so analysis of the data is highly tentative. However, an interesting pattern appears to be emerging. Earlier features seem to have a greater array of lithic sources, while later features appear to be limited primarily, though not exclusively, to Beach Gravels and Norwood chert. This supports the idea that, as time went on, the western Wendat became more familiar with the region and/or shifted their trading relationships to involve communities that had access to Norwood chert from the western Lower Peninsula. In the late 1680s tensions grew between the western Wendat and the Odawa settled at St. Ignace. Historical documents suggest that the Odawa felt the Huron were trying to build relationships with the Iroquois and leave the Odawa to fend for themselves (though it is possible that this is also the story that the Odawa told the French, so that they could in fact leave the Huron to fend for themselves, with no ties to the French). The Odawa moved their village away from the Huron, at this time. This would have reduced the trade networks of the Tionontate Huron and required them to look elsewhere for trading partners. In 1697, Alphonse de Tonty

became the commandant at Fort de Buade, the garrison/fur trade post located at St. Ignace (Magnaghi n.d.:42). Tonty's brother, Henri Tonty was a key player in the trade in the Illinois Country. While pelts from the north were of higher quality, and therefore more desired by the traders, by the late seventeenth century, these were becoming exceedingly hard to come by. Between the reduction in available furs to the north and west, and Tonty's ties to the Illinois country, a shift in the location for fur trade resources occurred. This would have brought more travelers along the coast of Lake Michigan initally, and potentially past the Norwood chert outcrops en route to St. Ignace.

Interpretation of Lithic Data Across the Sites

Lithics at Kelly-Campbell reflect the use of higher quality, more distant, materials from Kettle Point and Onondaga outcrops. These materials are also coming from the same direction as the Wenro and Neutral, suggesting again that ties to this region were present throughout this habitation.

The collection of lithic materials at the Plater-Martin site reflects the incorporation of some Huron into the community from the west, and the threat of the Iroquois which distinctly limited travel. The increase in use of poor quality local material, when a slightly earlier site indicated access to Kettle Point and Onondaga materials, reflects the abandonment of travel to the south due to the threat of the Iroquois. Further, it indicates an overall drop in trade, as this is not replaced by other high quality materials, but instead shows the use of local low quality materials. The presence of Bayport chert shows the development of relationships with the Odawa, but the lack of Norwood chert is perplexing. Perhaps this is due to sampling issues, or it may indicate that while the Odawa were acquiring Norwood for themselves, they were restricting

access of this material to others in their trade network.

Lithics at St. Ignace reflect a relationship, again, with the south. While Kettle Point and Onondaga materials are not abundant, there is a large quantity of both Norwood and Bayport chert at the site. Trade to the south would not have been for the benefit of the fur trade, but rather for hunting and familial relationships. The bulk of material was still local cobbles available in the area around St. Ignace, but more formal tools were often made of Norwood chert. According to Fox (1996), by 1630 the Norwood and Bayport material was being controlled by the Odawa, and this would suggest that its presence on a site is an indication of relationships with (or presence of) Odawa people. However, by 1670 intergroup dynamics in and around Michigan had altered quite a bit. While the Odawa were certainly living in Michigan and using these resources, the notion that they were limiting access to the chert sources is not based on any sort of historical documentation. Historical records show that the Wendat of St. Ignace were regularly hunting in the Lower Peninsula. Further, large cobbles of Bayport material found at the site suggest it was being brought in not as preforms or tools, but in bulk. This would correspond with Huron travels to the south for deer hunting – material could be collected while on a journey, and brought back for later manufacture. Norwood material is not present in such large cobbles at St. Ignace. It is possible this material was in fact being traded from the Odawa near Arbor Cloche, however there is not enough data to either support or refute this idea.

It is clear from the data that the Wendat adapted to each locale that they settled in. We do not see much evidence for excessive reuse of lithic material from previous locales, as one would expect if a community had no access to new sources of stone. Plater-Martin shows strong evidence of reduction in trade and travel prior to the massive westward migration. At both Plater-Martin and St. Ignace the most abundant materials were fairly local, and not of high

quality. While higher quality materials were available at a bit of a distance, such as Kettle Point, Onondaga and Norwood cherts, these only appear in any abundance at Kelly-Campbell. One possible reason for the lack of high quality cherts at Plater-Martin and St. Ignace is that extensive trade networks were not available to the Wendat following Iroquoian attacks and then dispersal. An additional issue that must be considered is that the use and value of knapped tools was declining during this time period, and the lower quality, more easily accessed materials were sufficient enough for the tasks on hand. The tool that perhaps needed the highest quality material, the gunflint, was almost always made of high quality European material that was traded in, prefabricated. Evidence suggests that most of the other tools being used were informal, and thus local materials are sufficient enough for these functional projects. At. St. Ignace a high percentage of the formal tools (excluding gunflints) were produced on Norwood Chert. Informal tools are common and made most often on local, lower quality materials. At the same time, the presence of trade goods, including scrap copper which could also be used for tools, increased greatly at St. Ignace. Thus at St. Ignace, the presence of Norwood and Bayport cherts is indicative of trade and access to the south, while the abundance of scrap copper is indicative of reinvigorated trade with the French to the Northeast.

The abundance and consistent presence of knappable materials from the local area suggests the Wendat developed a knowledge of the local resources wherever they settled, and incorporated themselves into the local trade networks. They do not appear to be traveling back to previous locales to collect lithic resources; rather, they appear to be collecting lithics in the regions where they are traveling for hunting, gathering and trading. At St. Ignace we see the greatest diversity of materials that are coming longer distances, however we also have a larger sample than from the Ontario sites. The minimal quantity of Fossil Hill chert at St. Ignace

suggests that the Wendat were not returning to Georgian Bay very often during their stay in the Upper Peninsula, or if they were, they were not using the opportunity to collect this material.

Based on the historical evidence, I would argue that due to their extensive involvement in the fur trade, the Wendat were able to maintain strong social and economic ties to other communities which allowed them access to necessary and desirable lithic materials following migration. Indeed, for the Wendat, their role as traders and people connected to the French was an integral part of their identity. They clearly linked their identity as 'those who were forced from the east' and their role as traders together, following migration. By having the connection to the French, by having the experience of travelling to Montreal and Quebec, and by knowing the routes and the dangers, and by having greater skill at acquiring and modifying exotic goods, they showed that they were from another place and that their position in the trade was deserved and integral.

While the lithic resource use of the Wendat does not clearly match the expectations I had for a diasporic community initially, I would argue that this has to do more with how they were reflecting this diasporic identity. Lithic materials are a practical material beneficial for getting tasks done. It is not someone one uses as a reflection of identity – it is simply an indirect indicator for archaeologists about landscape learning. The Wendat appear to be maintaining relationships with other communities south of them, and acquiring resources along the way to those communities. Thus, the strong ties that they are maintaining to other Wendat people are an indication of their identity and their interest in maintaining those connections, rather than integrating fully into a more westward link with the communities they met along Lake Superior. This, then, *is* an indication of a diasporic identity.

Chapter 7

Analysis of the Wendat Diaspora

This chapter will synthesize the available data to evaluate the western Wendat dispersal using Safran's (1991) model of diaspora, as discussed in chapter two. While the primary data sets analyzed for this research are archaeological, historical data are complementary, and sometimes more fruitful, and will be incorporated into this discussion as well. First, Safran's model will be briefly summarized again. Following this, an overview of the ethnohistorical sources and their analysis will be given. Following this, the western Wendat data, including the symbolic materials (chapter five) and lithics (chapter six) already discussed, will be considered as they relate to each of the six aspects of diasporic identity identified by Safran. This will then be synthesized to consider if the Wendat correspond to the patterns expected of a diasporic community, or if their migration patterns should be considered in a different light. While migration can sometimes be easily documented, the nature of that migration and the impact that the migration process has on community members is less clear. Understanding the relationship of the Wendat to their land, each other, and the process of migration will help scholars understand their decision making processes and material responses to migration. In particular, this chapter will explore the notion of diaspora as presented by Safran, and evaluate the extent to which the Wendat can be considered a diasporic population.

Safran's Model of Diaspora Restated

Communities that are forced to relocate, yet maintain a strong connection to their homeland, so much so that this connection to space is a significant part of their identity, are

considered *diasporic*. While this term has been used on rare occasion in connection to Native American communities, it has yet to be used in a critical fashion. For example, Richard White states in his introductory chapter of *The Middle Ground,* "Whatever distinct homelands these villagers had once possessed, the diaspora provoked by the Iroquois had made irrelevant (White 1991:17)." Vernacular uses of the term diaspora, such as this, are insufficient, and indeed suggest a lack of understanding of the nuance of a diaspora community; the loss of homeland is *distinctly* a part of a diasporic identity. Diaspora and dispersal are two very different things. A more analytical approach to the notion of diaspora in Native American studies is necessary. This project is an attempt to do just that.

Safran's (1991) model of diaspora is useful for this analysis. It is a clear model with testable traits that are clearly delineated. A richer discussion of this model and diaspora more generally was given in chapter three, and the reader is directed there for further detail. Safran's six characteristics of diasporic communities are as follows:

(1) People moved from an original homeland to at least two other areas

(2) People do not believe they can ever be fully accepted by their hosts

(3) People retain a "memory, vision, or myth about their homeland"

(4) People expect to return to their homeland

(5) People believe in maintaining or restoring their homeland

(6) People whose concept of themselves is associated with their relationship with the idea of the homeland

Using Rockman's (2003) archaeological model of resettlement, as discussed in chapter three, I was able to develop specific material components that I could examine as part of the

migratory process, which might be indicative of some of Safran's characteristics of diaspora communities. The symbolic materials and lithic resources analyzed in chapters five and six will in this chapter be considered as part of this diasporic analysis. Historical documents are also useful for understanding diasporic identity, and will be included as well.

Constructing the Documentary Record

Documents such as that matter to this kind of research are rarely written with the future historian in mind. Indeed, the material we desire is often missing or muddled within the lines of documents meant for other purposes. These documents are written by authors with faults, goals, misinformation, hatred, and their own cultural biases that are separate from those of the reader. Thus, documents must be read contextually and with a critical eye. As I am not an historian by training, the majority of sources examined for this project are published versions of primary sources, or secondary sources, and generally those translated into English, with a few exceptions. For a fuller reading of the documents relating to the western Wendat migration, including more of the French material and material relating to Quebec during the same period, the reader is directed to Kathryn Magee LaBelle's book *Dispersed but Not Destroyed: A History of the Seventeenth Century Wendat People* (2013).

Pre-Migration Documents

The earliest descriptions of the Wendat come from Samuel de Champlain, who met some of the Huron in the St. Lawrence River Valley and proceeded to their homeland in 1615 (Trigger 1969:3). Champlain was a fur trader, and his primary interests in the Huron were financial. The earliest missionaries to travel among the Huron were the Recollets, arriving in 1623 (Trigger

1969:4). One of them, Gabriel Sagard, wrote extensively on the daily lives of the Huron (Sagard 1939). However, the majority of our documents come from Jesuit missionaries, several of who spent many years living among the Huron. The Jesuits wrote frequently to one another and to their superiors. In addition to letters, each missionary usually wrote an annual summary of the past year's events. After editing, these documents were published in France, for the public to read, in hopes of both recruiting more missionaries and increasing donations to fund the mission work (Heidenreich 1971). Discussions of Huron culture were indirect and scattered – most often they were mentioned in a fashion that emphasized criticism of their traditional belief practices, or highlighted Christian practices. However, careful combing of the works with an eye for specific topics can reveal a plethora of information salient to anthropological inquiry that might otherwise go unnoticed.

Through the mid-century, missionaries had much more contact with the Huron than the Tionontate, so the pre-migration historical documents focus on the Huron. One particularly useful collection of writings are those of Father Brebeuf. Brebeuf was interested in learning the Huron language so that religious materials could be translated. He also wrote extensively on the belief systems of the Huron.

Post-Migration Documents

Immediately after dispersal, the Wendat were only in indirect contact with missionaries in the western Great Lakes, while the Wendat that moved north to Quebec still had strong ties with the Jesuits. In the western Great Lakes during the 1650s, the Jesuits occasionally mention the Wendat coming to visit the missions, or else they describe what they have heard about their locations from other tribes. In the mid 1660s, the Jesuits established the permanent mission of

St. Esprit on Chequamegon Bay on the south shore of Lake Superior. The Wendat established a village in the area as well, as did many other indigenous communities (White 1991:17). This increased the amount of documentation being produced about the Wendat by the Jesuits. In 1670 the Wendat, the Kiskaton Odawa and some missionaries moved east to the region around the Straits of Mackinac, where they ended up settling for over three decades. During this time, the missionaries continued their annual reports. Those working with the Wendat continually referred to it as their "Huron mission to the Tionontate" (e.g. JR 60: 207; 61:103), implying they viewed this community of Tionontate to be a Huron village, just as they had worked with several different villages in Huronia, each a "Huron mission".

Publication of Documents

The documents written by the Jesuit missionaries in the *Pays d'en Haut* and their superiors in Quebec were collected and selectively transcribed, translated and published by Rueben Gold Thwaites as the *Jesuit Relations and Allied Documents 1610 to 1791* (1896-1901). Additional Jesuit sources are coming to light now, primarily those being transcribed and published by Lucien Campeau, S. J., along with some other contemporary Jesuits (Campeau 2004). Many of Campeau's works have only been published in English during the past decade, and it is expected that further materials will become available following the publication of this dissertation. While some of Campeau's materials are transcriptions and translations of the same materials as Rueben Gold Thwaites, Campeau felt that much of the essence of meaning of the original missionaries was missing from Thwaites work. Campeau's materials are highly annotated. While this is sometimes helpful, it is worth noting that his interpretations are subjective and have a Jesuit leaning. Indeed, other scholars have frequently critiqued Campeau's

interpretations of indigenous practices and social systems (e.g. Branstner 1991:292).

Non-Missionary Documents

The final documents to be used in this project come from the military and traders who interacted with the Wendat. In particular, the works of Antoine Laumet de la Mothe, Sieur de Cadillac, and Samuel de Champlain are relevant. In 1694 Cadillac was made commandant of the *Pays d'en Haut*. He helped to establish Fort de Buade near the western Wendat village on the Straits of Mackinac, where the French military were already informally established, in an effort to control the fur trade. In 1696, the fort was officially closed, as the government tried to limit the glut of furs headed towards France (Havard 2001). In 1697 Cadillac returned to France briefly (Kent 2004:147). After working for some years to convince the French of its advantage in proximity to the southern fur trapping areas (and to prevent the English from encroaching), Cadillac established Fort Pontchartrain at present day Detroit, Michigan (Kent 2004:160-163). Just a few months after he left Montreal for Detroit, the Great Peace was established between the French, their indigenous comrades and the Iroquois (Havard 2001; Kent 2004:164), allowing the fur trade to reopen legally (though illegal trade had continued to some extent throughout). Cadillac enticed some of the Wendat and Odawa to move to Detroit immediately, while claiming a major share of the new 'Company of the Country', giving him a huge foothold in the French fur trade in the early eighteenth century (Magnaghi ca. 1989). Over the course of the next several years, more and more Wendat travelled south to set up house near Ft. Pontchartrain.

Champlain was the first trader to spend extensive time in the villages of the Huron on the shores of Georgian Bay (Heidenreich 1971:34). Following travels across other parts of New France, Champlain visited the Huron in 1615 (Heidenreich 1971:24). Due to his interest in trade,

Champlain paid particular attention to geography and populations, focusing on different issues than the missionaries (Heidenreich 1971:24-25).

Analysis of Safran's Model in the Case of the Western Wendat

In the following section, material and historical data will be used to evaluate the diasporic identity of the Wendat, as each of Safran's initial traits of diaspora is analyzed through the archaeological lens.

Trait 1. People moved from an original homeland to at least two other areas

While this trait initially sounds easy to evaluate, it is in fact quite complex. The concept of homeland in a pre-state era is in fact quite confusing. The initial challenge is defining the boundaries of the homeland that a group belongs to – at what point does one draw the boundary line distinguishing communities from one another as living in separate homelands? To determine who the shared people are, we must consider how the Wendat recognized their own identity while in their homeland(s).

Wendat Identity

As discussed in chapter one, Trigger stated that the western Wendat had a *new* identity as a unified group of Tionontate and Huron following their dispersal, which he saw as separate from past, separate, ethnic identities (Trigger 1976:824-825). This appears to be a reification of Trigger's notion of national and ethnic boundaries, rather that the practicality and fluidity of communities and identity seen in the ethnohistorical record. Indeed, the term Wendat was used commonly among a variety of Ontario Iroquoian communities, and we know that many

indigenous communities of this time used several different terms to define social and political groups, depending on the purpose at hand (Garrad 2014; Steckley 2007). Notions of shared identity are fluid and variable depending on the situation.

At the time of French contact, the Huron and the Tionontate were living approximately 30 miles apart from one another on the eastern and southern shores of Georgian Bay (Heidenreich 1971). In Champlain's writings and maps, we see the Tionontate mentioned, as well as the Neutrals and the Huron, though minimal distinctions are made between them (Biggar 1933:170-174). The Tionontate are particularly remarked to be very similar in habit to the Huron, save their distance from one another. Champlain, however, describes both the Tionontate and the Neutral as being tobacco growing nations (ibid). In Jesuit Missionary Paul Le Jeune's 1634 journal, wherein he describes the departure of Fathers Brebeuf and Daniel and Le Baron for the Huron country, he distinguishes the Neutral from the Huron, but makes no mention of the Tionontate (JR 7:223). Father Brebeuf's 1635 Relation states that the Huron speak the same language as twelve other nations, and include both the Hodenosaunee tribes and the Tionontate among this group; this is the first distinction we see between the Huron and the Tionontate (JR 8:164). Brebeuf briefly mentioned his first excursion to the 'Tobacco Nation' in his description of the year's baptisms, but made no descriptions of the community, suggesting there was nothing about the trip that was particularly distinctive from what he had already seen at his Huron village (JR 8:184).

While Brebeuf included a discussion of political decision making, he referred to the leaders of villages and 'nations', without giving a good understanding of what a nation was (JR 10:179-181). Thus it is unclear if he only means those considered Huron 'nations' or other Wendat people as well. As Brebeuf also mentioned, many of the nations were called by the name

of their leaders, rather than a name for the specific nation, further compounding the issue (JR 10:255).

According to the Jesuits, there were five 'nations' among the Huron: Attignawantan, Attigneenongnahac, Arendahronon, Tahontaenrat and the Ataronchronon, who are sometimes considered a subgroup of the Attignawantan (Sioui 1999:89). Heidenreich argues that these categories were likely very important to the members of these communities. "...because they reflected his social ties, his political thinking and his community history. In other words, the tribe was a socio-political unit which found geographical expression in the tribal territory, which in turn had come into being through tribal migration into Huronia (Heidenreich 1971:75)."

The Huron appear to have recognized themselves as politically distinctive from the Tionontate and other Iroquoian peoples to their southwest. I argue, however, this is a fairly loose distinction that has more to do with the geography and the economic system in place during the first half of the sixteenth century, more so than a *cultural* difference between the groups. Repeatedly it is shown that the Tionontate and Huron share customs, language and belief systems and are regular trading partners, and both called themselves Wendat (Steckley 2007). Archaeologically we see very strong similarity in the material culture. The primary differences appear to be that the Tionontate have slightly better soils for farming, and the Huron were actively trying to maintain control of the fur trade. While they inhabited different portions of Georgian Bay's shores, those shores were a unified homeland compared to the very different settings they found themselves in later.

Wendat Dispersal

Throughout the 1640s attacks by the Iroquois against various Wendat groups became

more frequent and severe (Trigger 1976; Warrick 1990). In the summer of 1648 two Huron villages were ransacked by the Iroquois, and Father Lalemant claim 700 people were killed or captured (JR 34:97). Descriptions of that attack are distinct from those that followed in 1649 in that they specifically and repeatedly mention attacks with bows and arrows (JR 34:89). In 1649 the prevalence of large numbers of firearms from the Dutch are mentioned among the Iroquois, which may be part of the reason for the uptick of destruction (JR 34). The Jesuits reported that 15 villages were abandoned by the Huron in 1649. While there are various reports in the Jesuit Relations of 1649 and 1650 that state slightly different numbers and directions, the Huron were clearly dispersed in a variety of directions (JR 34:91-92;102-105; 35:6). Some members of the villages were captured and taken back to Iroquois villages (JR 35). Others escaped to either the Tionontate or the Neutral, depending on the report. Hundreds of families settled on Christian (St. Joseph) Island in Georgian Bay, with many of the Jesuits. Still others had scattered, and were reunited with Jesuits later. In December of 1649 the Iroquois attacked a Tionontate Village, known to the Jesuits as St. Jean, and destroyed it while the warriors were out seeking to attack the Iroquois. Again, the use of muskets is mentioned. Some small handful of people were taken captive, while the rest fled to another Tionontate village (JR 35:32).

In March of 1650, the individuals from Christian Island dispersed to seek food. “They split up into bands, so that, if some fell into the hands of the enemy, others might escape (JR 35:81-82).” Some went to regions near the Tionontate to seek acorns, while others sought out areas for good fishing (JR 35:181). In fact the warming season led the ice to break, and many people fell through and died in Lake Huron (JR 35:183). Those who made it to the fishing grounds were subsequently attacked by the Iroquois (JR 35:185). Following attacks on several other bands, remaining members of the community decided to leave the island.

> "The greater number intend to take refuge within the forest, and live alone; and as no one in the world will know where they are, the enemy cannot have knowledge of them. Some reckon on withdrawing six long days' journey hence; others take their route toward the people of Andastoe, allies of new Sweden; others speak boldly of taking their wives and children, and throwing themselves into the arms of the enemy, - among whom they have a great number of relatives who wish for them, and counsel them to make their escape as soon as possible from a desolated country, if they do not wish to perish beneath its ruins." (JR 35:87).

According to the Jesuits, they were asked by the leaders of the community to come up with a location where they could reunite. "Cast thine eyes toward Quebec, and transport thither the remnants of this ruined nation...More than ten thousand have been snatched away by death...If thou listen to our wishes, we will build a Church under shelter of the fort at Kebec." (JR 35:88-89). They took 300 families are returned to establish a settlement at Quebec (JR 35:209). Previously, handfuls of Wendat had moved to Quebec for a variety of reasons, including seminary and trade. Reports came that hundreds of Neutral planned to come to Quebec to seek arms and assistance as well (JR 35:213).

Following the flight of the Jesuits from the Huron villages, information about those communities that were not living in Quebec became scattered for several years. In 1653 there were reports of Tionontate and Neutral tribes living with Algonquin speaking communities "beyond Sault Ste. Marie." (JR 38:11). These two tribes are said to have wintered at different locations. In 1665 all of the western Wendat reestablished a community near the Mission of St. Esprit on the south shore of Lake Superior. Following nearly a decade at this location, this community traveled east to the Straits of Mackinac and maintained a village there until 1701 (Magnaghi ca 1989).

Throughout this half-century time span, we see clear evidence that the Wendat were dispersed to a variety of locales, northeast, southeast and west of their original homelands. While these peoples came from multiple villages and political units, they nonetheless recognized

a shared Wendat identity, which they used to establish their community boundaries in the dispersal.

Material Culture

Archaeologically, we can also see evidence of the Wendat dispersal during this fifty year time span. As discussed in chapter five, Wendat ceramics are distinct from other Iroquoian ceramic types, and Iroquoian ceramics are distinctive from other ceramics found in the Great Lakes during the historic period. Wendat ceramics do not appear in the western Great Lakes until the second half of the seventeenth century, where they are found in conjunction with European trade goods. While these ceramics could simply be evidence of trade and exchange into the west, it seems unlikely, as the most desirous trade goods of this period were copper and cloth, not ceramic pots or the foodstuff they may have carried (Anderson 1992). Seeds and food could be more easily transported long distances in less fragile containers such as baskets and bags, and there is no evidence that autochthonous peoples of the western Great Lakes needed to trade for food, as they were producing their own goods. The presence of domestic artifacts affiliated with Wendat culture is a strong indicator of the presence of these people in the western Great Lakes.

At the site of St. Ignace there is ample evidence of a Wendat village (Branstner 1991). Multiple longhouse structures are evident on the site (O'Gorman 2007). Additionally, the remains of an infant buried outside of one of the longhouses correspond to Wendat burial practices (McCullen & O'Gorman 2004). Infants were buried underneath pathways so that their spirits could enter the womb of a woman who walked over them (Tooker 1964:132). Additionally, other materials such as bone harpoons and the carved bone decorations discussed

in chapter five match the manufacture and design patterns of the Wendat, rather than the Odawa, Ojibwe, or other communities found in this region during the early historic period.

The material culture parallels the dispersal of the Wendat that is seen in the historical documents. As discussed in chapter five, the symbolic material culture found in the western Great Lakes has attributes that are clearly northern Iroquoian, though they do not match the pre-dispersal types that would allow archaeologists to distinguish different Wendat populations from each other.

Trait 2. People do not believe they can ever be fully accepted by their hosts.

Evidence for perceptions about relationships are difficult to examine through the archaeological record. To evaluate this aspect of diaspora, we must make inferences based on the behaviors of the western Wendat and their resultant material correlates. What we can say for certain is that there is some evidence that the Wendat did not attempt to assimilate as much as we would predict for a community that felt they would be accepted by their hosts. In the United States today, we see that the bulk of immigrants, by the third generation, use English as their first language (Chavez 2008). Additionally, marriage outside of the community, adoption of religion, and other characteristics of assimilation are quite high by the third generation (Chavez 2008). Yet among the Wendat, we see evidence of retention of their language all the way into the middle of the nineteenth century, when American missionaries in Ohio converted the population and they seem to lose their language almost instantaneously (Buss 2011). This lack of language assimilation can not be emphasized enough – this is an extremely anomalous behavior for a migrant community as small as the western Wendat. Huron was the *lingua franca* of the fur trade up until the time of the dispersal (Steckley 2007). In the case of the Wendat, we had a

community that was matrilineal and matrilocal, so it would be more likely for men to move between communities, while women would stay in their natal community. This would reinforce language retention as children are raised around Wendat women. The fact that language was retained for such a long period suggests that matrilocal social organization was retained, rather than transitioning to a patrilineal system like the French, the Odawa and their other neighbors had.

Other evidence for the distrust of their neighbors to accept them come from the numerous conflicts the Wendat get into throughout their dispersal. The Wendat were frequently suspicious of other communities around them, and also created gossip about these communities, in an attempt to protect themselves and their access to the fur trade.

Material Culture

Archaeologically, it is difficult to assess how the Wendat felt about acceptance by their hosts. The fact that they consistently created their own villages that were distinct from their neighbors reinforces the idea that they did not plan to socially merge with their new neighbors, but this does not give us insight into their perceptions. The lack of incorporation of materials with symbolic content that reflect their neighbors designs and beliefs shows that the Wendat were not trying to create replica objects or use materials with symbolic content created by their neighbors. If they did believe they could be accepted by their neighbors we would predict more exchange of ideas and symbols in both directions.

Trait 3. People retain a "memory, vision, or myth about their homeland"

In her analysis of the dispersed Wendat of the seventeenth century, Kathryn LaBelle did

an excellent analysis on the importance of leaderships and heritable names among the Wendat (2011). The names of community leaders were passed down between generations, along with the histories of those leaders and their feats. In the homeland, these names were also often attached to villages – one way that villages would sometimes be identified was by the name of the leader of that community. Following dispersal, there is evidence that many of these names continued to be passed on, and with those names, the legacies and memories of the homeland (LaBelle 2011:303-304). Even in the late nineteenth century, the Wendat of Anderdon were able to tell stories of leaders involved with the westward dispersal, showing this identity with homeland and removal from it was long lasting (LaBelle 2011:305).

Material Culture

Again, this is an attribute of diaspora that is particularly difficult to examine through the archaeological record. While some cultures would leave visible evidence of a myth of the homeland, through the building of certain structures or organization on the landscape that parallels a practice from the homeland, the Wendat did not have these types of material practices. While we do see that the Wendat continued to construct longhouse villages in the west, and palisaded them as they did in the past, this is a cultural trait that has more to do with kinship and social structures than with any particular homeland.

Trait 4. People expect to return to their homeland

The maintenance of their role as major actors in the fur trade, a task that required travel to Montreal and a knowledge of the waterways of the eastern Great Lakes and St. Lawrence river, suggests that during the time period of 1650-1701 the Wendat did indeed intend to return to their

homeland.

The migratory patterns and choices made by the western Wendat also suggest an expectation of returning to their homeland. While following the attacks of the Iroquois the Wendat traveled very far into the west, they returned to St. Ignace when they felt it was safe to do so, around 1670. While they were also fleeing from the Sioux, they could have travelled to live among the Susquehannock or among the Wendat that were living with the Seneca, but they did not; they chose to direct themselves back to the Niagara Escarpment, within relatively easy canoe distance of Georgian Bay and their homeland.

Further insight to Wendat interests in the homeland come from their discussions and concerns following the opening of Fort Ponchartrain in Detroit, where they eventually moved.

> "In speaking of the detroit Establishment, I forgot to tell you that, during the whole time while the war lasted, the savages desired That Establishment at detroit; because They always supposed that the destruction of the Iroquois was desired, and that by his Destruction They would peaceably enjoy all the lands in his Country. But since they have found that, far from wishing to destroy him, we thought only of sparing and Preserving him; of befriending him, by giving him land in what they considered As their own country; and by Restoring the fort of Cataracouy for his benefit, — They have completely Changed their minds, and no longer look upon Detroit in any other light than That of an Enemy's country, where they can have no Wish to dwell, and where there can be no security for them. And assuredly they cannot think or judge otherwise; so that Those of the huron nation who remain Here, and who do not wish to go to detroit, mistrust Those who have gone to Settle there, and Think that they intend to go there in order to Surrender to the Iroquois, so as to join in the Trade with the English (JR 65:249-252)."

Material Culture

The suggestions that the area around Detroit would be considered 'their own country' suggests that the Wendat had previously occupied this area, likely as a region for hunting. There are multiple reasons we would expect this based on the material culture and pre-dispersal records we have. In the first place we see evidence of Wendat use of Kettle Point and Onondaga chert pre-dispersal at the Kelly-Campbell site, suggesting they had strong trade networks to the south.

Additionally we see ceramic materials at Kelly-Campbell that also reflect relationships to the south and west, including Blue Mountain Punctate, Niagara Collared and Middleport Criss-Cross sherds. These objects suggest a regular relationship between the Tionontate and their neighbors to the south, in the direction of Detroit and Toledo. Additionally, when we look into prehistory, we see that the Tionontate appear to have moved to Georgian Bay from a southern locale closer to the Neutral. Throughout the Jesuit Relations mentions are made of refugees moving between Neutral, Erie, Tionontate, Huron and Susquehannock communities. It is likely that the western Wendat were an amalgamation of many of these refugees, including families that were originally from further south. Early maps of the region do not show the Neutral living as far west as the Detroit area, however hunting parties would frequently travel long distances to hunt game, so it is possible that they would have travelled this way for both trade and hunting.

Trait 5. People believe in maintaining or restoring their homeland

It does not appear that any effort to maintain or restore the homeland was made between 1650-1701, though we do have documentation of Wendat peoples traveling near or through that area as they go back and forth to Montreal and Quebec. Unfortunately, these types of beliefs are not possible to explore through material culture, and the historical documentation does not explore this issue.

During the second half of the seventeenth century, the western Wendat willingly created organized war parties when possible, to attempt to push the Iroquois back further west. At the same time, we saw continued relationships between the different Wendat communities, through trade, letters, and wampum, suggesting a strong tie to their ancestral community (LaBelle 2013). Thus they are maintaining relationships with the other members of that homeland. The

homeland of the Wendat was in such upheaval from 1650-1701 that it would not really have been possible to consider reclaiming it during that period. Researchers should examine documentation post-1701 to explore this aspect of diasporic identity.

Material Culture

If the Wendat were attempting to maintain their homeland, we would have expected to see some resources from the homeland in the post-dispersal archaeological collections, and we do not. Likewise, if they were returning to the homeland, it is possible that archaeological sites from the second half of the seventeenth century would be present in the homeland. Thus far no sites have been documented. Examining the material culture at St. Ignace we do not see lithics from the homeland that would suggest they were being sought out. While this is not unexpected for the poor quality Fossil Hill chert, the fact that some of the western Wendat were likely Neutral, and they were not going back to outcrops of Kettle Point and Onondaga to access this higher quality material is somewhat unexpected. A small percentage of the material at St. Ignace comes from these sources, but they are virtually all flakes. One would expect some formal tools made of this material if it was being actively sought out. There are two possible reasons for this dearth of Kettle Point and Onondaga material. The first is that the homeland was not being valued. The alternate possibility is that as metals and other trade goods increased in availability at St. Ignace, high quality exotic cherts became less valuable to the Wendat. It is not possible to distinguish these reasons through our current data set.

Trait 6. People whose concept of themselves is associated with their relationship with the idea of the homeland.

As previously stated per trait three, the Wendat actively retained memory of their histories through the heritable naming of leaders in their lineages (LaBelle 2011). This included a history of the dispersal in at least one documented account. It is likely that there were others, though we do not have evidence of this. The fact that the Wendat continued to assert their right to control the fur trade, which was in part due to their location on Georgian Bay originally, is evidence that their concept of themselves was indeed associated with their relations with the idea of the homeland.

Material Culture

The materials that the Wendat placed symbolic imagery on changed over time, from ceramics, pipes, human bodies (tattoos) and faunal objects to the incorporation of copper, brass, catlinite, and likely cloth. The symbols that they chose to use, however, only changed in ways that unified the community of dispersed Wendat, rather than in ways that showed major shifts in their identity. As discussed in chapter five, the attributes of these materials post dispersal correspond with materials from pre-dispersal objects. While the 'types' did not last into dispersal, particularly on ceramics, the design elements themselves did. This corresponds to Wiessner's notion of *emblemic* style (1983). Emblemic styles are fairly constant, and change only when their referent changes. In this case, the western Wendat were showing their unity by shifting away from the previous emblemic styles.. By retaining the attributes without the specific types, Wendat potters were able to unify their community through a shared symbolic system that still allowed for the *assertive* style of each potter that was attempt to express this unification.

The potters are consuming their own cultural change and producing materials within this reflexive *habitus*. Their resultant production, clearly Iroquoian but clearly not pre-dispersal, is a reflection of their sense of unity as Wendat people in a land surrounded by other very different cultures.

Based on the analysis of lithic materials from the post dispersal archaeological site, it does not appear that these materials show any link back to the homeland. However, they do show strong links in social networks. While this could be indicative of a non-diasporic practice, I would argue otherwise. As previously stated, it appears that part of the way the Wendat asserted their ties to their homeland was by actively reclaiming their role in the fur trade following dispersal. Since their initial connection to the fur trade was due in part to their location on the landscape, the reclamation of this identity, which required the strengthening and maintenance of social and economic networks, is evidence of their strong connection to that homeland.

Evaluation

Safran's (1991) model of diaspora is compelling for the same reason that it is challenging to apply in an archaeological context. The explicit list of six traits makes it possible to discuss the idea of a diaspora in a concrete way that allows for cross-cultural comparisons that are at the core of anthropological analysis. At the same time, however, it is apparent that this list of traits has limitations for archaeologists for two main reasons. The first is that the traits that Safran recognized, are, like many aspects of identity, tied into behaviors and practices that are not always recognizably distinctive through material culture. Additionally, the concept of a diaspora requires a shared recognizable homeland. For non-state level societies that do not have explicit

markers of membership or clearly bounded spaces, this actually becomes a much more complex category to parse out, and no doubt some scholars would contest the concept of Wendat that I have chosen to use. If another scholar were to replicate this analysis with a less-broad notion of who is Wendat, their interpretation of the data would be different than what is presented here.

Using Safran's (1991) suite of traits, we find that the western Wendat show evidence of some traits but not all. The Wendat clearly have a strong identity as a community that is distinctive from others, and their view of themselves is as middlemen in the fur trade, something that was built out of their homeland's location and their culture's history. At the same time, we do not have strong evidence that they were trying to maintain this homeland and had a vision of returning to the physical place. An important caveat to this is the fact that many diasporic communities do not return to their homelands, or if they do so, take generations to do so. If a community wishes to return to a homeland, but currently sees it as barren of resources or dangerous because of warring neighbors, their intention to return may be for an unseen very distant future. If that is the case, then material culture evidence of this anticipated return will be more difficult to recognize. Thus the dearth of material evidence of linkages to the homeland is not an outright rejection of diaspora identity, it is simply not something that can add support to the concept of a diaspora identity.

There are certainly some material culture and historical expectations that Safran's model predicted that do not appear to be present, suggesting that while the Wendat have some diasporic traits, based on this model theirs is not a strongly diasporic identity. In chapter eight I will argue, however, that this does not mean they were not in fact diasporic. Instead, I believe that the data sets available and the limitations of this model are constraining the analysis in an important but nonetheless limiting way. I will argue that alternative ways of interpreting the archaeological

data longitudinally, considering the complexities of shared identity in pluralistic societies, and collection of additional archaeological data will benefit the interpretation and analysis of the impact that migration had on the Wendat and their sense of themselves.

Chapter 8

Conclusion

This chapter will expand off of the initial diasporic traits list from Safran (1991) discussed in the previous chapter to incorporate Rockman's (2003) approach to resettlement to the archaeological model of diasporic analysis. The strengths and weaknesses of the model for the case of the Wendat will be considered, followed by an evaluation of the usefulness of the model for other archaeological scenarios. Following suggestions for improving the model, I will Finally, I will reiterate the value of considering diaspora for archaeology and Native American studies.

The Western Wendat as a Diasporic Community

Using Safran's trait list alone, the limitations for viewing diaspora in the archaeological record are apparent – in the case of the Wendat the historical documents are a major component of the data, and even they are not as satisfying as one might hope. However, in chapter three I discussed the incorporation of Rockman's notion of approaches to resettlement as another way of exploring diaspora identity. In Table one I listed the cultural differences we could expected between diasporic and non-diasporic communities.

One trait that distinguishes diasporic communities is the retention of distinctive emblemic symbolic systems, rather than the adoption of host symbols. As seen in the analysis of symbolic materials in chapter five, the Wendat maintained symbolic attributes following dispersal, with these symbols showing up on ceramics, faunal material and pipes. A Brainerd-Robinson

Coefficient of Similarity on the pipes and faunal material showed that village sites pre and post dispersal had comparable collections of symbolic elements, showing the retention of recognizable symbolic elements post-dispersal. Ceramics post-dispersal were different enough from pre-dispersal sites to no longer be recognizable as specific 'types'. However, attributes on these ceramics were clearly recognizable as Wendat. Future research needs to include a reexamination of the materials from Kelly-Campbell and Plater-Martin using an attribute analysis so that a Coefficient of Similarity test may be performed on these as well. Currently the comparison is qualitative.

Other emblemic symbols can include physical structures. At the site of St. Ignace we see the maintenance of longhouses, which are a Wendat house structure. This shows that the community was not altering its building techniques following dispersal. Some emblemic symbols are not physical, such as languages. Wendat was a second language to many other communities, and the language the missionaries tended to learn to talk with any groups (JR 68:277). Even following dispersal, the Wendat maintained their language into the mid-nineteenth century, though the majority of people around them were speaking other languages.

The final emblemic symbol of Wendat identity was control of the fur trade. To be active and successful in the fur trade the Wendat not only needed to successfully maintain connections to other groups for trade and travel through their lands, they needed to have access to a variety of desired trade goods and use them to their advantage. At St. Ignace we see evidence of a large flow of goods from both the west and the east – brass and copper are abundant as it catlinite. Further, we have evidence of the modification of these materials – the transformation of raw material into new products. This includes transforming catlinite into small beads and cutting French kettles into smaller parts to create beads, jingle cones, bracelets, and tools. As we see

declines in the quality and quantity of non-exotic materials like stone tools and ceramics, we see an increase in creation of materials for trade, suggesting that Wendat individuals are focusing their time and efforts on these newly relevant manufacturing skills. By not only trading, but becoming highly skilled at transforming these materials, the Wendat were solidifying their identities as middlemen of the fur trade. Offering high quality unique finished products in addition to other materials made them distinctive, and could shift the market to them. This identity of skilled craftsmen of the fur trade would have distinguished them from their neighbors in a way that linked them back to their pre-dispersal identity.

Other traits predicted for Diasporic Communities were not present among the western Wendat based on the evidence currently available. Typically, I had expected diasporic communities to have low access to exotic goods because they are not incorporating themselves into local social networks. In the case of the Wendat, however, their status in the fur trade was part of their diasporic identity, so they became heavily invested in these social and economic networks. I also predicted diasporic communities would reuse materials from the homeland or return to the homeland for resources, however I do not see evidence of this among the Wendat. This could be because they are not diasporic, however I believe the stronger reason in this case was their investment in creating and using modern metal trade items in lieu of an abundance of lithics.

Rockman discussed three barriers to successful resettlement: economic, social and population. The Wendat certainly struggled with all of these initially, but by the time they settled at St. Ignace in 1670 they had overcome them all. Population wise they had a greatly reduced population that was disproportionately female. Their matrilineal social structure probably helped the community to maintain its social structures and functions with this movement as sisters could

rely on each other for assistance. There were several years of starvation and disease where many people died and the economic system was in a shambles. With assistance from the French and over time as they were able to again clear land and plant and store food and reestablish their economic system. The Wendat appear to have selected habitation sites that were near abundant fishing zones and in areas that were agriculturally well suited. Finally, the Wendat were very savvy socially, and this may have been their greatest attribute that they brought west with them. Though they also found themselves in conflict with communities regularly, they nonetheless were known orators and negotiators and were skilled at developing relationships and appeasing other communities. Their ability to see the fur trade not as a straightforward exchange, but an opportunity to improve upon items and redistribute them made relationships with them desirable for other communities. At the same time they appear to have worked hard to maintain control of these relationships and retain much of their own identity.

Evidence supports the assertion that the western Wendat could be classified as a diasporic community. Materials with symbolic content show the retention of symbols from pre-dispersal and their transformation into a more unifying symbolic system as the population size declined and several disparate Wendat villages merged into one post-dispersal unit. Materials associated with Wendat culture, including smoking paraphernalia, carved effigy items, and longhouse structures all show evidence of retained and asserted identity. Non-diasporic communities would be more likely to adopt some of the structures of their new neighbors as they build their networks with them. The Wendat, instead, use their difference to establish and strengthen social and economic networks, by asserting their link to the east and their homeland. This link gave them access to and rights to the fur trade with the French in Montreal and Quebec. For this reason, the Wendat willingly accepted non-symbolic material culture from the local region, such as lithic

materials. Their access to a variety of lithic sources increased over time at St. Ignace, suggesting the strengthening of their local networks.

Historical documentation supports the material culture evidence of this diasporic identity among the western Wendat. There is evidence that they maintained economic and social ties to the Wendat of Lorette and those living among the Seneca. While they travelled with the Odawa, they never settled together in one village, and in St. Ignace the Odawa eventually moved their village away from the Wendat, clearly showing there was no particularly strong link between them beyond the economic system.

The Use of Archaeological Data for Evaluating Diasporic Identities

If there had not been historical documentation to supplement this archaeological analysis, could this claim of diaspora been made? It is particularly difficult, but may be possible. Safran's model on its own is too limited to be of use to archaeologists. However, the expansion of this to incorporate Rockman's notion of barriers to resettlement makes it more likely to get at some of the nuance of diaspora. In particular, it is important to be able to look at some of the more qualitative archaeological data – patterns that are evident across multiple sites through multiple types of data that may not be quantifiable. By evaluating how and when a community overcomes each of the three barriers to resettlement, we can get insight into the process of resettlement. This diachronic approach to migration and resettlement will allow archaeologists better insight into the beliefs and priorities of the communities being studied.

Another challenge that is not unique to, but certainly of great concern to, archaeologists is the determination of who the people are that are being forced to move. Do these people see themselves as a common social unit, or several distinct units? Does their notion of themselves

change over time during the migration process, such as following the deaths of many people, or the merging of two dispersed villages? If so, how might this change their resettlement practices? This notion of identity is difficult to grapple with archaeologically. It is possible that clans are the most important social groups, as Bernardini saw among the ancestral Hopi (2005a, 2005b). For prehistorians, determining the salient social relationships must be done first, before any interpretation of diasporic identity is undertaken, and this may not be possible in some cases, rendering a diasporic analysis moot.

In many cases there may be evidence available to archaeologists that was not available in the case of the Wendat, which could improve their understanding of the community's response to resettlement. Part of the nature of diaspora is the attempt to return home. As such, archaeologists can look for multiple sites over time, some closer to and further from the homeland. Additionally, a wider variety of data could aid archaeologists in seeking out evidence for returns to the homeland. In communities with monumental architecture, replication of locales from the homeland on the post-dispersal landscape would also reflect evidence of diaspora.

The benefit of this research and this model to archaeologists, foremost, is to give them a method in which to at least consider the possibility of diaspora as an explanation for patterns they are finding in the archaeological record. Except in the case of moving into unoccupied territories, humans rarely make straightforward one-time movements (Anthony 1990). Instead, they may move in many small groups, they may advance and retreat, etc…This is an aspect of human behavior that archaeologists have rarely considered. Instead of assuming mass village migration as one unit, pluralism, dispersal and other aspects of population shift should be taken into account when examining the archaeological record. It is hoped that this research will

encourage other archaeologists to attempt to explore these aspects of human behavior as well.

Future Research

There are many ways to expand the research begun in this dissertation. One point of clarification would be to better improve our understanding of the pre-dispersal relationships the Wendat had with the west. Archaeologically, there are a handful of objects at pre-dispersal sites that are identified as copper and catlinite. From visual inspection I believe many of the catlinite objects are misidentified, and are in fact local red siltstone from Ontario or even New York. Copper could be coming from the west or the east, and an understanding of these pathways would be beneficial (see Heather Walder's recent attempts to begin this discussion, 2015). Archaeologists have made claims about the trade networks and relationships of the Huron and the Tionontate based on the presence of these objects, and they should be sourced to determine if they are in fact from the west, and if so, what time period they being to appear. This will help us to better understand the networks that were in existence prior to dispersal.

Additionally, it would be beneficial to reevaluate the ceramics from the pre-dispersal sites using an attribute analysis that allows them to be better compared to the post-dispersal sites. Due to the wide variety of styles that are possible within a given 'type' of ceramic in Ontario, it would have been disingenuous to simply transform types into attribute lists for this research.

Another major avenue of research which I would like to see developed is a multi-regional analysis of the archaeological data from Quebec and New York Wendat settlements, to compare the resettlement practices of these other Wendat communities in the second half of the seventeenth century. Did all of these communities respond in the same way? And if not, how does one culture transform in three different dispersal scenarios? Kathryn LaBelle has explored

these patterns through the historical record. Archaeological analysis should also be done to compliment her work. Are these groups trading among themselves, or facilitating access to certain goods for each other? Having access to this data for these other regions could also allow me to have better data for Safran's model.

Another major avenue of research that needs to be pursued is the sourcing of ceramic materials (including pipes) at the western Great Lakes sites. Not only should we source the clay, to determine if the materials are made locally or imported, but following Chives (2003) petrographic analysis should be performed to examine the recipes being used by potters. At this point our understanding of the production of pottery post-dispersal is quite poor, and the material is very confusing. Recipe analysis will allow us to see if there are people of different skills making these materials, and if they are re-inventing pottery production or passing the skill down through family lines still.

Finally, excavation and survey in the western Great Lakes needs to continue so that we may increase the robusticity of the data set available. Excavation at St. Ignace has not occurred since 2001 for a variety of reasons, but it would be worthwhile to continue excavation there. Additionally, other early historic sites are continuing to be uncovered in Wisconsin and the Upper Peninsula, and we know there were many large village sites that simply have not been located. In order to better understand the dynamics of the western Great Lakes during this time period we must continue to seek out these resources.

Diaspora as Native Studies

Migration has a huge impact on communities and individuals – to deny this is to think uncritically about the consequences of resettlement. Yet due to the nature of its focus on

contemporary refugees and internally displaced peoples, scholars of migration often do not look into the deep history of migration, or if they do, they do so only for the ancestors of the people that are also moving about today. Yet we have a history of internally displaced peoples here in the Americas. Instead of using the term IDP though, we discuss 'removal'. While this reinforces the important point that there was a policy to move these people off of their land, it separates the experiences of indigenous peoples from those of other people around the world. This reinforces the notion that indigenous experiences are somehow less complex and that these communities have less agency than other people. Shifting to a vocabulary of diaspora and migration studies not only brings Native American communities into the conversation, it also transfers the agency back to the communities and away from the governments who were enacting the policies. This shift in focus from government to families and communities allows for a shift in our research questions and analysis, and potential the public's perception of these issues. Contemporary indigenous communities have gone through a variety of traumas at the hands of governments and colonists, including forced migration from their lands. In order to grapple with the resultant inequities we have today, we all need to come to terms with the past processes of colonization. While understanding the policies and the processes of the colonizers is an important part of this process, it is equally important to look at how indigenous communities and individuals responded to these challenges. By putting the focus back on the indigenous communities we can better understand the choices they have made from their first encounters with Europeans to the present, which allows us to see the many varied ways that cultures use their flexibility and innovation to change while retaining the parts of their identity that are most integral to them.

APPENDICES

APPENDIX A

Lithic Source Descriptions

Hudson's Bay Lowland Chert (Beach Gravel)

Hudson's Bay Lowland Chert was pushed into Michigan from much further north by the Pleistocene glaciers, and are found throughout Michigan (Luedtke 1976:90). These materials are quite variable in quality and description. Then are found in cobbles on the beaches of the Upper Peninsula, making them easily accessible. Because of the small size of most cobbles, however, it is unlikely to be used for the production of large formal tools. Material tends to be light grey with mottling of darker grey, tan or black. Some fossil inclusions can be present.

Cordell Chert

This chert comes out of the Cordell formation in the Upper Peninsula of Michigan (Fox 2010:360). It is a dull chert with a slight luster that is sometimes oolitic. It ranges in color from white/light grey to tan and medium grey. It is not translucent.

Scott Quarry/Detour Chert

Chert from the Scott Quarry Outcrop is very dark brown, nearing black, translucent and lustrous. It outcrops in the eastern Upper Peninsula of Michigan in nodules that have a chalky white cortex. The chert is quite friable but has a good concoidial fracture. It may have small white inclusions, or holes where this material has eroded out.

Bayport Chert

Bayport Chert is a Mississippian age material that outcrops on both sides of Saginaw Bay (Luedtke 1976:338; Door & Eschman 1970:257), and is found at archaeological sites as far as 250 km away (Luedtke 1976:338). Over time during the Late Woodland, the use of Bayport chert declines, and it is not expected that people living at St. Ignace historically would have used Bayport Chert. Bayport chert is a dull grayish tan chert that forms in large nodules. Fossils are present throughout the chert. The material is spotted with light brown/grey specks, and may have bands of lighter colored material. Bayport chert can also oxidize to a rusty brown in places. The banding is often curvilinear as it is related to the nodule formation..

Norwood Chert

Coming from the other side of the lower peninsula is Norwood Chert, from the Devonian. This material outcrops in the northwestern part of the lower peninsula, and is common on sites throughout the Northern Lower Peninsula during the Late Woodland (Luedtke 1976:350). Norwood chert is from Charlevoix county where it outcrops in bands. This chert often appears to have parallel horizontal banding and speckling, and can range in color from white to blue to tan to grey. Norwood has a fairly dull luster and is not at all translucent.

Kettle Point Chert

Kettle Point Chert is from southeastern Ontario (Luedtke 1976:382). In Michigan it is primarily found at sites in the southeast, including the Saginaw Bay area (Luedtke 1976:380). Luedtke noted that it is frequently found at sites that are similar in material culture to Ontario sites (Luedtke 1976:382). Samples of Kettle Point chert used in this analysis showed two different suites of physical characteristics. Some Kettle Point chert was dull lustered and light grey, with dark grey bands. Occasional sparkling inclusions were noted (Luedtke 1976:382). Other pieces of Kettle Point chert appeared to have swirls rather than bands of dark grey material. Iron oxidation can cause a change in color to a rustier brown. No fossil inclusions are visible..

Fossil Hill/Collingwood Chert

Collingwood Chert is a light tan to white chert that outcrops in the Beaver Valley, just west of the Tionontate homeland over the Blue Mountains. There are frequently oxidized iron stains on the material. Nodules of the chert are also found throughout the area in glacial till. Collingwood chert is a fairly poor quality chert, and while utilized, is commonly overlooked for finer quality cherts from the south and west. It is somewhat lustrous but not translucent.

Galena Chert

This chert is found in Southern and Eastern Wisconsin, along with the south shore of the Upper Peninsula of Michigan, and Illinois and Iowa (Morrow & Behm 1988:17). It is light grayish brown, and has intensive inclusions of small crushed fossils and fossil borings. It can be broadly mottled and show abundant banding, and is slightly translucent, with a dull to satiny luster.

Prairie du Chien Chert

Located in several adjacent states as well, Prairie du Chien Chert outcrops in Southwest Wisconsin, and is located under the glacial till in Western Wisconsin and the Upper Peninsula of Michigan (Morrow & Behm 1988:17). A distinguishing factor of this chert is the presence of ooliths, though they are not present in all samples. Those pieces lacking ooliths may have vugs and a particularly marbled look to their mottles. Prairie du Chien Chert is light grey, and mottles with a variety of colors from dark grey to tan and white. Occasionally the chert has streaks or bands. On a whole the chert is quite translucent.

Silurian Cherts

Two distinct but unnamed Silurian Cherts are found in Wisconsin. Type One is found in Southeastern Wisconsin and areas further south (Morrow & Behm 1988:18). This chert is white to light grey and quite dull, occasionally showing streaks, large mottles and small fossil inclusions (Morrow & Behm 1988:18). The other Silurian Chert, type 2, is found further north along the Door Peninsula (Morrow & Behm 1988:19). Unlike Type 1, Type 2 is darker, varying from a bluish grey to greener and browner shades that are generally opaque (Morrow & Behm 1988:19). Banding in green and grey is common, speckling in brown pieces is also expected (Morrow & Behm 1988:19). This chert is nodular, and has a dull to satiny luster.

Onondaga Chert

Onondaga Chert outcrops in Southern Ontario and can be quite variable in quality and color depending on the source it is collected from. Colors can range from tan to a dark grey, with lighter grey mottling. Fossils are not visible but inclusions are present. This chert is fairly dull in luster.

Selkirk Chert

This chert is highly fossiliferous, and ranges in color from grey-brown to grey (Fox 2010:362).

Bois Blanc Chert

This chert is fairly distinctive in the region in that it has an almost gray-green appearance. It is rather poor quality grey chert with a dull luster. Bois Blanc chert was laid down in the middle Devonian (Door & Eschman 1970:118).

European Flints

A handful of materials were commonly used in Europe to make gunflints, so these appear on sites in the Great Lakes as well, due to trade. Witthoft (1966) believed these could be distinguished by visual identification, however more recent studies dispute this (Durst 2009). European materials were visually identified using the characteristics defined by Witthoft, but these should now be reconsidered, and chemical analysis should be used to confirm or refute the visual identifications. The most common material found at the site matched Witthoft's description of a Dutch material that was varying shades of brown and translucent. It sometimes shows mottling in thinsection (Witthoft 1966). Next is the Beeswax material from France. This is a translucent honey yellow colored material with a sandy texture with a strong luster. It occasionally has small white boreholed (Witthoft 1966). Finally, Brandon flint is a dark lustrous chert from the area around Brandon England. This material does not generally appear on sites as early as those studied in this project..

APPENDIX B

Lithic Data Tables

	Kelly-Campbell	Plater-Martin	St. Ignace
Bois Blanc	19	2	1
Fossil Hill	13	527	13
Kettle Point	50	229	34
Lockport	2	0	0
Onondaga	70	30	41
Selkirk	9	0	0
Slate	3	0	18
Unknown	12	111	517
Bayport	0	28	522
Detour/Scott	0	19	12
Beach Gravel	0	0	1104
Beeswax	0	0	195
Cordell	0	0	137
Norwood	0	0	694
Jasper	0	0	8
Basalt	0	0	1
Quartz	0	0	2
Quartzite	0	0	24
Brandon	0	0	17
Glass	0	0	4
Dutch	0	0	32

Table 19. Summary lithic data.

ID #	Box	Tool Type	Whole/Fraction	Source
5810.2.172.01	MM0	FL	F	KP
5810.017.05.01	MM01	Chert Cobble	F	NW
5810.006.01	MM01	FL	W	BP
5810.006.01	MM01	FL	F	BG
5810.020.01	MM01	FR	F	Glass Slag
5810.020.01	MM01	Chert Cobble	F	BG
5810.020.01	MM01	N	W	BG
5810.020.01	MM01	S	F	BG
5810.006.02	MM01	Core	F	NW
5810.02.03.03.01	MM01	Chert Cobble	F	UNKB
5810.008.03.02	MM01	FL	F	UNKB
5810.012.02	MM01	FL	W	NW
5810.006.04.02	MM01	FL	W	KP
5810.012.01	MM01	FL	F	BP
5810.020.05.01	MM01	Chert Cobble	F	NW
5810.006.02	MM01	FL	W	CD
5810.2.155.01	MM02	FL	F	BP
5810.2.155.01	MM02	FL	F	BG
5810.2.155.01.01	MM02	FL	F	slate
5810.2.155.01	MM02	FL	F	BG
5810.2.155.01	MM02	FL	F	UNK
5810.2.155.01	MM02	FL	F	BG
5810.2.155.01.03	MM02	FL	F	slate
5810.2.176.01	MM02	FL	W	NW
5810.2.176.01	MM02	RF	F	NW
5810.2.176.01	MM02	FL	F	NW
5810.2.176.01	MM02	BF	W	BG
5810.2.176.01	MM02	FL	F	BG
5810.2.176.01	MM02	FR	F	BG
5810.2.176.01	MM02	RF	W	BG
5810.2.176.01	MM02	FL	W	NW
5810.2.176.01.01	MM02	FL	F	BG
5810.2.176.01	MM02	FL	F	BG
5810.2.176.01	MM02	FL	F	BG
5810.2.161.01	MM02	FL	F	BG
5810.2.161.01	MM02	FL	F	BG
5810.2.161.01	MM02	FL	F	BG
5810.2.161.01	MM02	FL	F	BG
5810.2.161.01	MM02	FL	F	BG
5810.2.161.01	MM02	FL	F	BG
5810.2.161.01	MM02	FL	W	BG
5810.2.161.01	MM02	FL	W	ON
5810.2.161.01	MM02	FL	W	BG
5810.2.161.01	MM02	FL	W	UNK
5810.2.161.01	MM02	FL	F	BG

Table 20. Raw lithic fata from St. Ignace (20MK82).

Table 20 (cont'd)

5810.2.161.02	MM02	RF	W	BG
5810.2.161.02	MM02	FR	W	ON
5810.2.161.02	MM02	FL	W	BG
5810.2.161.02	MM02	FR	W	UNK
5810.2.161.02	MM02	FL	F	BG
5810.2.172.01	MM02	FR	F	Slate
5810.2.172.01	MM02	FL	F	BG
5810.2.172.01	MM02	FL	F	ON
5810.2.172.01	MM02	FL	F	BG
5810.2.172.01	MM02	FL	F	UNK
5810.2.172.01	MM02	FL	F	UNK
5810.2.172.01	MM02	FL	W	KP
5810.2.172.01	MM02	FL	W	UNK
5810.2.172.01	MM02	FL	W	BG
5810.2.172.01	MM02	FL	W	BG
5810.2.172.01	MM02	FL	W	UNK
5810.2.172.01	MM02	FL	F	UNK
5810.2.158.02.01	MM02	FR	F	BG
5810.2.158.01.02.06	MM02	FL	F	UNK
5810.2.158.02.02	MM02	BF	F	ON
5810.2.158.02.02	MM02	FL	F	CD
5810.2.158.04.01.18	MM02	S	W	BG
5810.2.158.01.02.04	MM02	FL	F	BP
5810.2.158.01.01	MM02	FL	F	ON
5810.2.158.01.01	MM02	FL	F	ON
5810.2.158.01.01	MM02	RF	W	BG
5810.2.158.01.01	MM02	FL	W	BP
5810.2.158.04.01.19	MM02	FL	F	UNK
5810.2.165.01.01	MM02	FL	W	UNK
5810.2.165.01	MM02	FL	W	NW
5810.2.165.01	MM02	BF	F	BG
5810.2.165.01	MM02	RF	F	KP
5810.2.165.01.01	MM02	S	W	NW
5810.2.165.01.01	MM02	FL	W	NW
5810.2.165.01	MM02	RF	W	ON
5810.2.165.01	MM02	FL	W	BP
5810.2.165.01	MM02	FL	W	BP
5810.2.165.01	MM02	FL	W	BG
5810.2.165.01	MM02	FL	W	NW
5810.2.154.01.01.01	MM02	FL	W	UNK
5810.2.154.01.02.01	MM02	FL	F	SC
5810.2.154.01.02	MM02	FL	F	CD
5810.2.154.01.02	MM02	FL	F	KP
5810.2.154.01.02	MM02	FL	F	SC
5810.2.154.01.01	MM02	FL	W	UNK

Table 20 (cont'd)

5810.2.154.01.01	MM02	FL	F	UNK
5810.2.154.01.01	MM02	FL	W	UNK
5810.2.166.01	MM02	FL	W	BG
5810.2.166.01	MM02	FL	F	BP
5810.2.166.01	MM02	FR	W	BG
5810.2.166.01	MM02	BF	F	UNK
5810.2.166.01	MM02	FL	W	BP
5810.2.166.01	MM02	FL	W	NW
5810.2.166.01	MM02	FL	F	BP
5810.2.166.01	MM02	FL	F	NW
5810.2.157.01	MM02	FL	W	KP
5810.2.157.01	MM02	FL	F	BG
5810.2.170.02	MM02	FL	W	CW
5810.2.159.01	MM02	GS	F	Red Sandstone
5810.2.159.01	MM02	FL	F	UNK
5810.2.159.01	MM02	FL	F	BP
5810.2.159.01	MM02	FL	F	BG
5810.2.159.01	MM02	FL	F	UNK
5810.2.177.01	MM02	FL	W	NW
5810.2.177.01	MM02	FL	F	BG
5810.2.177.01	MM02	FL	W	BG
5810.2.174.01	MM02	FL	F	ON
5810.2.174.01	MM02	FR	F	CD
5810.2.174.01	MM02	FL	W	CD
5810.2.174.01	MM02	FL	W	UNK
5810.2.174.01	MM02	FL	W	ON
5810.2.174.01	MM02	FL	W	BG
5810.2.174.01	MM02	FL	W	BG
5810.2.174.01	MM02	FL	W	UNK
5810.2.174.01	MM02	FL	W	CD
5810.2.174.01	MM02	FL	F	NW
5810.2.174.01	MM02	FL	F	NW
5810.2.174.01	MM02	FL	F	BG
5810.2.174.01	MM02	FL	F	NW
5810.2.167.01	MM02	GS	F	Red Sandstone
5810.2.167.01	MM02	FL	W	BG
5810.2.167.01	MM02	FL	F	UNK
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	UNK
5810.2.167.01	MM02	FL	F	UNK
5810.2.167.01	MM02	GS	F	Red Sandstone
5810.2.167.01	MM02	Core	W	KP
5810.2.167.01	MM02	FR	F	KP
5810.2.167.01	MM02	FR	F	KP
5810.2.167.01	MM02	Core	W	UNK

Table 20 (cont'd)

5810.2.167.01	MM02	FL	W	NW
5810.2.167.01	MM02	FL	W	NW
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	UNKB
5810.2.167.01	MM02	FL	F	KP
5810.2.167.01	MM02	FL	F	KP
5810.2.167.01	MM02	FL	F	KP
5810.2.167.01	MM02	FL	F	BG
5810.2.167.01	MM02	FL	F	ON
5810.2.167.01.02	MM02	FL	F	NW
5810.2.167.01.02	MM02	FL	F	NW
5810.2.167.01.02	MM02	FL	F	NW
5810.2.167.01.02	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	NW
5810.2.167.01	MM02	FL	F	KP
5810.2.167.01	MM02	FL	F	BP
5810.2.167.01	MM02	FL	F	KP
5810.2.167.01	MM02	FL	W	NW
5810.2.167.01	MM02	FL	W	NW
5810.2.167.01	MM02	FL	W	NW
5810.2.167.01	MM02	FL	W	NW
5810.2.167.01	MM02	FL	W	BG
5810.2.167.01	MM02	FL	W	SS or QZ
5810.2.167.01	MM02	FL	F	BP
5810.2.167.01.01	MM02	FL	W	BG
5810.2.167.01.01	MM02	FL	W	CD
5810.2.167.01.01	MM02	FL	F	NW
5810.2.167.01.01	MM02	FL	F	NW
5810.2.167.01.01	MM02	FL	F	UNK
5810.2.167.01.01	MM02	FL	F	NW
5810.2.167.01.01	MM02	FL	F	UNKB
5810.2.167.01	MM02	FL	F	NW
5810.2.175.01	MM02	S	W	ON
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	NW

Table 20 (cont'd)

5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	Slate
5810.2.175.01	MM02	FL	F	Slate
5810.2.175.01	MM02	FL	F	Slate
5810.2.175.01	MM02	FL	F	SC
5810.2.175.01	MM02	FL	W	BG
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	W	ON
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	CD
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	BP
5810.2.175.01	MM02	FL	W	BP
5810.2.175.01	MM02	FL	W	BG
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	CD
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	BG
5810.2.175.01	MM02	FR	F	BG
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	ON
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	W	UNK
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	W	NW
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	UF	W	BG
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	W	UNK

Table 20 (cont'd)

5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	BP
5810.2.175.01	MM02	FL	W	BG
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	ON
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	BG
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FL	F	NW
5810.2.175.01	MM02	FR	W	UNK
5810.2.265.05	MM03	FL	W	BG
5810.2.242.05	MM03	FL	W	CD
5810.2.240.05	MM03	GF	W	UNK
5810.2.250.05	MM03	FL	F	BG
5810.2.250.05	MM03	FL	F	BG
5810.2.266.05	MM03	FL	F	UNK
5810.2.257.05	MM03	UF	F	BG
5810.2.242.05	MM03	FL	F	BZW
5810.2.242.05	MM03	FL	W	NW
5810.2.251.05	MM03	FL	W	CD
5810.2.242.05	MM03	FL	F	BG
5810.2.242.05	MM03	FL	F	BG
5810.2.259.05	MM03	GS	F	large crystals
5810.2.259.05	MM03	FL	F	BG
5810.2.259.05	MM03	FL	W	BG
5810.2.260.05	MM03	FL	F	BG
5810.2.260.05	MM03	FL	F	BG
5810.2.257.05	MM03	FL	W	BG
5810.2.257.05	MM03	FL	F	BG
5810.2.257.05	MM03	FL	F	UNK
5810.2.257.05	MM03	FL	F	BG
5810.2.259.05	MM03	RF	W	NW
5810.2.259.05	MM03	FR	W	CD

Table 20 (cont'd)

5810.2.264.05	MM03	UF	W	CD
5810.2.242.05	MM03	FL	W	BP
5810.2.270.05	MM03	FL	W	NW
5810.2.270.05	MM03	FL	W	NW
5810.2.259.05-5	MM03	GS	F	UNK
5810.2.259.05-4	MM03	FL	F	BG
5810.2.259.05-4	MM03	FL	F	BG
5810.2.291.02	MM04	FR	F	BG
5810.2.296.01	MM04	PP	F	BP
5810.171.02.04.36	MM04	drilled and polished stone	F	UNK
5810.165.02.04.2	MM04	RF	W	BG
5810.077.02.02	MM05	FL	W	UNK
5810.077.02.02.01	MM05	DB	F	BG
5810.079.02.03.16	MM05	DB	F	BG
5810.079.02.03.16	MM05	FL	W	CD
5810.076.05.02.80	MM05	UF	W	BG
5810.074.01.04	MM05	FL	W	BG
5810.060.02.04.06	MM05	FL	W	BP
5810.074.01.02	MM05	FL	W	UNK
5810.074.01.02	MM05	FL	W	BP
5810.074.01.02	MM05	FL	W	CD
5810.074.02.04.03	MM05	FL	W	BG
5810.074.02.04.03	MM05	DB	F	BG
5810.074.02.04.03	MM05	FL	F	BG
5810.079.02.04.29	MM05	DB	F	NW
5810.084.01.03	MM05	DB	F	BG
5810.084.01.03	MM05	FL	F	NW
5810.084.02.04.20	MM05	DB	F	BG
5810.084.01.04	MM05	FL	F	KP
5810.077.02.02.04	MM05	DB	F	CD
5810.079.02.02	MM05	FR	F	BG
5810.076.05.02.71	MM05	DB	F	BG
5810.077.01.03	MM05	FR	F	BG
5810.083.02.01.07	MM05	DB	F	BG
5810.081.01.03	MM05	DB	F	ON
5810.084.02.04.26	MM05	FL	F	UNK
5810.080.02.01.91	MM05	FL	F	BG
5810.079.01.02	MM05	FL	F	UNK
5810.079.01.02	MM05	FL	F	BG
5810.084.02.03.16	MM05	DB	F	UNKB
5810.080.01.02	MM05	FL	F	BP
5810.080.01.02	MM05	DB	F	NW
5810.079.02.02.24	MM05	FL	W	UNK
5810.075.01.03	MM05	FL	W	BG
5810.086.02.03.01	MM05	DB	F	BG

Table 20 (cont'd)

5810.086.02.03.01	MM05	FL	F	BG
5810.060.02.02.16	MM05	FL	W	NW
5810.070.01.04	MM05	FL	W	NW
5810.084.01.01	MM05	FL	W	UNKB
5810.080.01.02	MM05	FL	W	CD
5810.080.01.02	MM05	FL	W	NW
5810.086.02.03.98	MM05	FL	W	NW
5810.086.02.02.01	MM05	DB	F	UNK
5810.086.02.02.01	MM05	DB	F	UNK
5810.080.02.01.04	MM05	RF	W	BG
5810.080.02.01.04	MM05	FL	F	NW
5810.082.02.01.06	MM05	FL	F	BP
5810.077.01.03	MM05	DB	F	BP
5810.077.01.03	MM05	FL	F	BP
5810.077.01.03	MM05	FL	F	BP
5810.069.01.01	MM05	FL	F	BG
5810.069.01.01	MM05	DB	F	UNK
5810.078.01.03	MM05	FL	F	BG
5810.078.01.03	MM05	FL	F	UNKB
5810.078.01.03	MM05	GS	F	Red Sandstone
5810.065.01.03	MM05	FL	F	SC
5810.065.01.03	MM05	DB	F	BG
5810.083.02.01.01	MM05	FL	F	BP
5810.083.02.01.01	MM05	FL	F	NW
5810.083.02.01.01	MM05	FL	F	BG
5810.083.02.01.01	MM05	FL	F	NW
5810.083.02.01.01	MM05	DB	F	BP
5810.083.02.01.01	MM05	DB	F	UNK
5810.086.02.01.04	MM05	DB	F	UNKB
5810.073.02.02.20	MM05	FL	F	UNK
5810.079.02.01.06	MM05	FR	F	UNK
5810.077.01.03	MM05	FL	F	UNK
5810.080.02.01.04	MM05	DB	F	BG
5810.080.02.01.04	MM05	GS	F	black groundstone
5810.080.02.01.04	MM05	FR	F	NW
5810.080.02.01.04	MM05	FL	F	NW
5810.080.02.01.04	MM05	FL	F	NW
5810.080.02.01.04	MM05	FL	F	BP
5810.081.01.04	MM05	core	F	ON
5810.081.01.04	MM05	DB	F	BG
5810.081.01.04	MM05	FL	F	BP
5810.081.01.04	MM05	FL	F	BG
5810.081.01.04	MM05	FL	F	NW
5810.081.01.04	MM05	UF	F	NW
5810.081.01.04	MM05	DB	F	BG

Table 20 (cont'd)

5810.081.01.04	MM05	FL	F	BG
5810.081.01.04	MM05	FL	F	UNK
5810.081.01.04	MM05	FL	F	UNK
5810.074.01.01	MM05	FL	F	BG
5810.074.01.01	MM05	FR	F	BG
5810.074.01.01	MM05	FR	F	BG
5810.074.01.01	MM05	FR	F	BG
5810.074.01.01	MM05	FR	F	BG
5810.074.01.01	MM05	FR	F	BG
5810.074.01.01	MM05	FL	F	BG
5810.074.01.01	MM05	FL	F	NW
5810.074.01.01	MM05	FR	F	UNK
5810.074.01.01	MM05	FR	F	BG
5810.074.01.01	MM05	FL	F	NW
5810.074.01.01	MM05	FR	F	BG
5810.074.01.01	MM05	DB	F	BG
5810.2.125.04	MM06	UF	W	BG
5810.2.114.1.06	MM06	UF	W	CD
5810.086.02.02.01	MM06	S	W	NW
MS6-77	MM06	S	W	NW
5810.2.146.01	MM06	UF	W	CD
5810.2.136.04	MM06	UF	W	NW
5810.004.03	MM06	S	W	BG
5810.016.01	MM06	BF	W	BG
5810.006.05	MM06	S/N	W	NW
Ms6-97	MM06	UF	W	BG
5810.2.190.01	MM06	FL	W	CD
5810.2.291.05-6	MM06	not a tool	N/A	BG
5810.169.91.B-42	MM06	UF	W	BP
5810.169.91.01-13	MM06	SS	W	NW
5810.169.91.B	MM06	UF	W	BG
5810.2.189.01	MM06	UF	W	BG
5810.2.184.01.01	MM06	S	W	BG
5810.2.296.01-7	MM06	S	W	BG
5810.129.03.04-9	MM07	PP	W	BG
5810.155.02	MM07	RF	W	UNK
5810.16.02.02	MM07	PP	W	UNK
5810.148.01.01	MM07	BF	W	UNK
5810.167.01.05	MM07	BF	W	BG
5810.133.02.02	MM07	PP	W	UNK
5810.132.05.02.02	MM07	PP	W	BP
5810.145.04.04	MM07	PP	W	NW
5810.127.04.02	MM07	PP	W	CD
5810.121.04.04	MM07	PP	F	ON
5810.123.03.01	MM07	PP	F	BB

Table 20 (cont'd)

5810.142.02	MM07	PP	F	UNK
5810.132.05.03.02	MM07	PP	W	BP
5810.126.04.04	MM07	PP	W	BP
5810.145.04.01	MM07	RF	W	UNK
5810.132.03	MM07	S	W	S
5810.140.03	MM07	PP	W	BP
5810.133.00	MM07	PP	W	BP
5810.141.02?	MM07	PP	W	ON
5810.138.01	MM07	PP	W	UNK
5810.167.91.03	MM07	PP	W	BP
5810.167.91.02	MM07	PP	F	BP
5810.004.04.10	MM07	UF	F	CD
5810.008.01.01	MM07	PP	W	NW
5810.032.01.04	MM07	PP	W	UNK
5810.040.01.03	MM07	PP	W	UNK
5810.053.01.01	MM07	RF	F	NW
5810.033.01.02	MM07	PP	W	UNK
5810.032.01.04	MM07	PP	W	UNK
5810.054.02.04.01	MM07	BF	W	ON
5810.065.01.03	MM07	PP	W	ON or BG
5810.076.04.01.47	MM07	RF	W	UNK
5810.014.01	MM08	FL	F	KP
5810.014.01	MM08	FL	F	UNK
5810.014.01	MM08	FL	F	NW
5810.014.01	MM08	FL	F	UNK
5810.014.01	MM08	RF	F	BG
5810.002.03	MM08	FL	F	BP
5810.013.03	MM08	FL	F	NW
5810.015.01	MM08	FL	F	BP
5810.006.03	MM08	FL	F	BP
5810.006.03	MM08	FL	F	BG
5810.012.02	MM08	FL	F	BG
5810.012.01	MM08	FL	F	BG
5810.016.02	MM08	FL	F	BG
5810.004.02	MM08	FL	F	BP
5810.004.02	MM08	FL	F	BP
5810.020.04.04	MM08	SS	F	BG
5810.004.04.10	MM08	FL	F	UNK
5810.002.01	MM08	FR	F	CW
5810.003	MM08	FL	F	UNK
5810.019.01	MM08	FL	F	BG
5810.019.01	MM08	S	F	BG
5810.019.01	MM08	FL	F	BG
5810.020.00	MM08	FR	F	NW
5810.021.01	MM08	GF	F	BZW

Table 20 (cont'd)

5810.021.01	MM08	FL	W	BG
5810.021.01	MM08	FL	W	BG
5810.021.01	MM08	FL	W	BG
5810.021.01	MM08	RF	F	UNK
5810.019.01	MM08	cobble fragment	F	BG
5810.019.01	MM08	FR	F	UNK
5810.005.03	MM08	FL	F	BP
5810.021.04	MM08	RF	F	NW
5810.019.02.01	MM08	FL	F	NW
5810.019.02.01	MM08	FL	F	NW
5810.013.01	MM08	FR	F	ON
5810.013.01	MM08	FL	F	ON
5810.013.01	MM08	FL	F	BG
5810.013.01	MM08	FL	F	SC
5810.013.01	MM08	FL	F	BP
5810.013.01	MM08	FL	F	SC
5810.013.01	MM08	FL	F	BG
5810.013.01	MM08	FL	F	UNK
5810.013.01	MM08	FL	F	BG
5810.013.01	MM08	FR	F	BG
5810.011.02.02	MM08	FL	F	BG
5810.025.01	MM08	FL	F	BZW
5810.025.01	MM08	FL	F	BG
5810.025.01	MM08	GF	F	BZW
5810.019.03.06	MM08	FL	F	UNK
5810.019.03.03	MM08	FL	F	BG
5810.019.03.03	MM08	FR	F	BZW
5810.008.01	MM08	FL	F	BZW
5810.008.01	MM08	FL	F	BZW
5810.008.01	MM08	S	F	NW
5810.008.01	MM08	S	F	BG
5810.008.01	MM08	FR	F	BG
5810.008.01	MM08	FR	F	BG
5810.008.01	MM08	FR	F	UNK
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	NW
5810.008.01	MM08	FL	F	slate

Table 20 (cont'd)

5810.008.01	MM08	FL	F	BG
5810.008.01	MM08	FL	F	BP
5810.008.01	MM08	FL	F	BG
5810.008.01	MM08	FL	F	BP
5810.005.02	MM08	FL	F	NW
5810.016.04.03	MM08	FR	F	NW
5810.016.04.03	MM08	FR	F	BP
5810.010.01.03	MM08	FL	F	UNKB
5810.010.01.03	MM08	FL	F	UNKB
5810.016.01	MM08	FL	F	BG
5810.019.02.03	MM08	FL	F	NW
5810.004.05	MM08	FL	F	NW
5810.004.05	MM08	FL	F	NW
5810.004.05	MM08	FL	F	NW
5810.020.04.04	MM08	FR	F	BG
5810.008.02.01	MM08	FL	F	BG
5810.010.01	MM08	FL	F	BG
5810.010.01	MM08	FL	F	NW
5810.010.01	MM08	FL	F	BG
5810.005.02	MM08	DB	F	BG
5810.023.02	MM08	FR	F	UNKB
5810.023.02	MM08	FR	F	BG
5810.023.02	MM08	FL	F	BP
5810.023.02	MM08	RF	F	BG
5810.023.02	MM08	BF	F	BG
5810.023.02	MM08	GF	F	BG
5810.023.02	MM08	FR	F	NW
5810.023.02	MM08	UF	F	UNK
5810.023.02	MM08	S	F	BG
5810.012.04.02	MM08	FL	F	BG
5810.012.04.02	MM08	FL	F	BG
5810.019.04.06	MM08	FL	F	NW
5810.005.03	MM08	FL	F	BG
5810.005.03	MM08	FL	F	NW
5810.005.03	MM08	FL	F	NW
5810.005.03	MM08	FR	F	BG
5810.011.01	MM08	S	F	BG
5810.020.01	MM08	FL	F	BP
5810.020.01	MM08	FL	F	BG
5810.020.01	MM08	FL	F	UNK
5810.017.01	MM08	core	F	BG
5810.017.01	MM08	FL	F	BG
5810.017.01	MM08	FL	F	BP
5810.017.01	MM08	FL	F	BG
5810.017.01	MM08	FL	F	BG

Table 20 (cont'd)

5810.017.01	MM08	FL	F	BG
5810.017.01	MM08	FR	F	BG
5810.017.01	MM08	FR	F	glass
5810.017.01	MM08	FL	F	BG
5810.020.05.01	MM08	FR	F	BG
5810.021.04.03.01	MM08	RF	F	BG
5810.011.01	MM08	FR	F	UNK
5810.019.01	MM08	FL	F	NW
5810.019.01	MM08	RF	F	BG
5810.019.01	MM08	S	F	BG
5810.019.01	MM08	FR	F	NW
5810.024.02.05	MM08	RF	F	BG
5810.017.02	MM08	FL	F	NW
5810.017.02	MM08	BF	F	NW
5810.017.02	MM08	FL	F	BG
5810.017.02	MM08	FL	F	BG
5810.017.02	MM08	UNK	F	Quartz
5810.006.05	MM08	FL	F	BG
5810.020.03.01	MM08	FL	F	BG
5810.010.01	MM08	FL	F	UNKB
5810.005	MM08	FL	F	BG
5810.009.01	MM08	slate	F	slate
5810.007.01	MM08	FL	F	BZW
5810.005.01	MM08	RF	F	BZW
5810.025.01	MM08	FR	F	BG
5810.009.01	MM08	FL	F	BG
5810.009.01	MM08	FL	F	NW
5810.004.01	MM08	RF	F	BG
5810.009.01	MM08	FL	F	UNKB
5810.004.01	MM08	FL	F	BZW
5810.167.01-a.02-5	MM09	RF	W	UNK
5810.291.I-16	MM09	FL	F	UNK
5810.124.03	mm10	GF	W	BZW
5810.129.04	mm10	GF	W	BZW
5810.121.04.02	mm10	GF	W	BZW
5810.122.04.03	mm10	GF	W	BZW
5810.126.05.03	mm10	GF	W	BZW
5810.143.02	mm10	GF	W	BZW
5810.140.03	mm10	GF	W	BZW
5810.133.04.02	mm10	GF	W	BZW
5810.144-143	mm10	GF	W	BZW
5810.143.01	mm10	GF	W	BZW
5810.143.01	mm10	GF	W	BZW
5810.145.04.01	mm10	GF	W	BZW
5810.144.04.04	mm10	GF	W	UNK

Table 20 (cont'd)

5810.126.04.04	MM10	GF	W	BZW
5810.126.04.04	MM10	GF	W	UNK
5810.126.01	MM10	GF	W	BZW
5810.126.04.01	MM10	GF	W	BZW
5810.132.01	MM10	GF	W	BZW
5810.130.05.00.07	MM10	GF	W	BZW
5810.126.03	MM10	GF	W	BG
5810.130.04.01	MM10	GF	W	BZW
5810.124.04.01	MM10	GF	W	BZW
5810.145.02	MM10	GF	W	BG
5810.139.03	MM10	GF	W	BZW
5810.123.04.02	MM10	FR	F	BZW
5810.133.03.04	MM10	GF	W	BZW
5810.130.01	MM10	Core	W	BR
5810.130.01	MM10	GF	F	BZW
5810.122.02	MM10	GF	F	BZW
5810.123.05.01	MM10	GF	F	BZW
5810.128.03.03	MM10	GF	W	BZW
5810.123.03.04	MM10	GF	W	BZW
5810.122.03.08	MM10	Core	W	S
5810.142.04.02	MM10	GF	W	BZW
5810.132.03	MM10	GF	F	BZW
5810.139.04.04	MM10	GF	W	BZW
5810.030.01.04	MM11-A	GF	W	BG
5810.058.01.02	MM11-A	S	W	BG
5810.008.02.06	MM11-A	GF	W	BZW
5810.036.02.02	MM11-A	GF	W	BZW
5810.037.01.04	MM11-A	GF	W	BZW
5810.032.01.04	MM11-A	GF	W	BZW
5810.032.01.04	MM11-A	GF	W	BZW
5810.036.02.03	MM11-A	GF	W	BZW
5810.058.01.02	MM11-A	FR	F	BZW
5810.038.01.02	MM11-A	GF	W	BZW
5810.053.01.01	MM11-A	GF	W	BZW
5810.040.01.04	MM11-A	GF	F	BZW
5810.028.02.02	MM11-A	GF	W	BZW
5810.043.01.02	MM11-A	GF	W	BZW
5810.056.01.01	MM11-A	GF	W	BG
5810.035.01.02	MM11-A	GF	W	BR
5810.037.01.04	MM11-A	GF	W	BR
5810	MM11-A	GF	W	BG
5810.030.01.03.02	MM11-A	GF	W	BG
5810.028.03.03	MM11-A	GF	W	BR
5810.9	MM11-A	GF	W	BZW
5810.2.121.08.02	MM11-B	FL	F	BZW

Table 20 (cont'd)

5810.2.108.01	MM11-B	DB	F	BZW
5810.2.152.03	MM11-B	GF	W	BZW
5810.2.104.1.01	MM11-B	FL	W	BZW
5810.2.130.05	MM11-B	GF	F	BZW
5810.2.121.03	MM11-B	GF	W	BZW
5810.2.117.01	MM11-B	GF	F	BR
5810.2.121.06.04	MM11-B	GF	W	BZW
5810.2.154.01.02	MM11-B	GF	W	BZW
5810.2.154.01.01	MM11-B	GF	W	BZW
5810.2.157.01	MM11-B	GF	F	BZW
5810.2.158.02.02.08	MM11-B	GF	W	BZW
5810.2.158.02.01	MM11-B	GF	W	BZW
5810.2.164.01	MM11-B	GF	W	BZW
5810.2.174.01	MM11-B	GF	W	BG
5810.2.158.02.02	MM11-B	GF	W	BZW
5810.2.158.02.02	MM11-B	GF	W	BZW
5810.2.167.01	MM11-B	GF	W	BZW
5810.2.167.01	MM11-B	GF	W	BZW
5810.2.167.01	MM11-B	FR	F	BZW
5810.2.165.01	MM11-B	GF	W	BZW
5810.2.165.01	MM11-B	GF	W	BZW
5810.2.165.01	MM11-B	GF	F	BZW
5810.2.197.01.02	MM11-B	GF	W	BZW
5810.2.194.01	MM11-B	GF	W	BZW
5810.2.181.01	MM11-B	GF	W	BZW
5810.2.178.01	MM11-B	FR	F	BZW
5810.2.184.01	MM11-B	GF	W	BZW
5810.2.184.01	MM11-B	GF	W	BZW
5810.2.184.01	MM11-B	GF	W	BZW
5810.2.234.01.01	MM11-B	GF	W	BZW
5810.2.216.00	MM11-B	GF	W	BZW
5810.2.206.01	MM11-B	GF	W	BZW
5810.2.205.01	MM11-B	GF	W	BZW
5810.2.205.01.04	MM11-B	GF	W	BZW
5810.2.204.01	MM11-B	GF	F	BZW
5810.2.222.01.02	MM11-B	GF	W	BZW
5810.2.222.01.02	MM11-B	GF	W	BZW
5810.2.222.01.02	MM11-B	GF	W	BZW
5810.2.226.02	MM11-B	FR	F	BZW
5810.2.221.01.04	MM11-B	GF	W	BZW
5810.2.221.01.03	MM11-B	GF	W	BZW
5810.2.205.01	MM11-B	GF	W	BZW
5810.2.184.01	MM11-B	GF	W	BZW
5810.2.194.01	MM11-B	GF	W	BZW
5810.2.214.01.01	MM11-B	GF	W	BZW

Table 20 (cont'd)

5810.2.216.01.03	MM11-B	GF	W	BZW
5810.2.181.01	MM11-B	GF	W	BZW
5810.2.194.01	MM11-B	GF	W	BZW
5810.2.238.01.02	MM11-B	GF	W	BZW
5810.2.221.01.02	MM11-B	GF	W	BZW
5810.2.208.01	MM11-B	GF	W	BZW
5810.2.215.01.01	MM11-B	FR	F	BG
5810.2.114.1.02	MM11-B	FR	F	BG
5810.2.205.01.04	MM11-C	POTLID	F	UNKB
5810.2.125.1.02	MM11-C	GOUGE	W	BR
5810.2.174.01	MM11-C	FR	F	BG
5810.2.158.03.01.04	MM11-C	GF	W	BZW
5810.2.167.01	MM11-C	GF	W	BZW
5810.2.157.01	MM11-C	GF	W	BZW
5810.2.165.01.01	MM11-C	GF	W	BZW
5810.2.154.01.02	MM11-C	GF	W	BZW
5810.2.165.01	MM11-C	GF	W	UNK
5810.2.206.01.03	MM11-C	GF	W	BZW
5810.2.201.01	MM11-C	GF	W	UNK
5810.2.203.01.01	MM11-C	FR	F	BZW
5810.2.214.01	MM11-C	GF	W	BZW
5810.2.185.01	MM11-C	GF	W	BZW
5810.2.181.01	MM11-C	GF	W	BZW
5810.2.226.02	MM11-C	GF	W	BR
5810.2.223.01	MM11-C	FR	F	BR
5810.2.214.00	MM11-C	GF	F	BZW
5810.2.177.01	MM11-C	FL	W	BG
5810.2.229.01	MM11-C	GF	W	BZW
5810.2.190.01	MM11-C	FR	F	BR
5810.2.205.01	MM11-C	GF	W	BZW
5810.2.171.01	MM11-C	FL	W	BZW
5810.2.160.01	MM11-C	FL	W	BZW
5810-2.154.02.01	MM11-C	FL	W	BZW
5810.2.154.01.02.01	MM11-C	FL	W	BZW
5810.2.161.01	MM11-C	FL	W	BZW
5810.2.161.01	MM11-C	FL	W	BZW
5810.2.216.01.03	MM11-C	GF	F	BR
5810.2.167.01	MM11-C	FL	W	BZW
5810.2.167.01	MM11-C	FL	W	BZW
5810.2.167.01	MM11-C	FL	W	BZW
5810.2.167.01	MM11-C	FR	F	BZW
5810.2.229.01	MM11-C	GF	F	NW
5810.169.91.04-23	MM12	GF	W	BR
5810.2.303.01-1	MM12	GF	W	BZW
5810.2.292.01-8	MM12	FR	F	BG

Table 20 (cont'd)

5810.169.91	MM12	GF	W	BZW
5810.2.289.01-4	MM12	FL	W	BZW
5810.078.01.01	MM13	BL	W	BP
5810.023.01	MM13	Core	W	NW
5810.023.01	MM13	FL	W	NW
5810.023.01	MM13	FL	W	NW
5810.023.01	MM13	FL	W	NW
5810.023.01	MM13	FL	W	BP
5810.023.01	MM13	FR	F	NW
5810.011.02.02	MM13	Core	W	BG
5810.004.05	MM13	UF	W	BG
5810.2.215.01	MM14	FR	F	BG
5810.2.215.01.02	MM14	FL	W	BG
5810.2.215.01.01	MM14	FR	F	UNK
5810.2.215.01.01	MM14	FR	F	UNK
5810.2.215.01.01	MM14	FR	F	UNK
5810.2.226.00	MM14	FL	F	NW
5810.2.226.00	MM14	FL	F	NW
5810.2.226.01.01	MM14	PP	F	NW
5810.2.226.01	MM14	FL	W	NW
5810.2.226.01	MM14	FL	W	NW
5810.2.226.01	MM14	FL	W	NW
5810.2.226.01	MM14	FL	W	NW
5810.2.226.01	MM14	FL	W	NW
5810.2.226.01	MM14	FL	W	BG
5810.2.226.01	MM14	FL	W	BG
5810.2.226.01	MM14	FL	W	BG
5810.2.226.01	MM14	FL	W	BG
5810.2.226.01	MM14	FL	W	BG
5810.2.226.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	UNKB
5810.2.226.01.01	MM14	FL	W	UNKB
5810.2.226.01.01	MM14	FL	W	BP
5810.2.226.01.01	MM14	FL	W	BP
5810.2.226.01.01	MM14	FL	W	BP
5810.2.226.01.01	MM14	FL	W	BP
5810.2.226.01.01	MM14	FL	W	BP
5810.2.226.01.01	MM14	FL	W	BP
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG

Table 20 (cont'd)

5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	W	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	FL	F	BG
5810.2.226.01.01	MM14	UF	W	NW
5810.2.226.01.01	MM14	UF	W	NW
5810.2.226.01.01	MM14	UF	W	NW
5810.2.226.01.01	MM14	UF	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	W	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW

Table 20 (cont'd)

5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.01.01	MM14	FL	F	NW
5810.2.226.02	MM14	FL	F	ON
5810.2.226.02	MM14	FL	F	UNK
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FR	F	NW
5810.2.226.02	MM14	FL	W	NW
5810.2.226.02	MM14	FL	W	NW
5810.2.226.02	MM14	FL	W	NW
5810.2.226.02	MM14	FL	W	NW
5810.2.226.02	MM14	FL	W	NW
5810.2.226.02	MM14	UF	W	NW
5810.2.226.02	MM14	UF	W	NW
5810.2.226.02	MM14	FL	F	NW
5810.2.226.02	MM14	FL	F	NW

Table 20 (cont'd)

5810.2.226.02	MM14	FL	F	NW
5810.2.226.02	MM14	FL	F	NW
5810.2.226.02	MM14	FL	F	NW
5810.2.226.02	MM14	FL	F	NW
5810.2.226.02	MM14	FL	F	NW
5810.2.226.02	MM14	FL	F	NW
5810.2.226.02	MM14	FL	F	NW
5810.2.226.02	MM14	FL	W	CD
5810.2.226.02	MM14	FL	W	CD
5810.2.226.02	MM14	FL	F	BP
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	W	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	FL	F	BG
5810.2.226.02	MM14	UF	W	BP
5810.2.226.02	MM14	UF	W	BP
5810.2.216.01.04	MM14	PP	W	BP
5810.2.216.01.04	MM14	FL	W	NW
5810.2.216.03	MM14	PP	F	UNK
5810.2.216.00	MM14	FL	W	BG
5810.2.216.00	MM14	UF	W	BG
5810.2.216.01.03	MM14	Core	W	BP
5810.2.216.01.03	MM14	FL	W	UNK
5810.2.216.01.03	MM14	FL	W	BP
5810.2.216.01.03	MM14	FL	W	DUTCH
5810.2.216.01.03	MM14	FL	F	ON
5810.2.216.01.03	MM14	FL	F	NW
5810.2.216.01.03	MM14	FL	F	NW
5810.2.216.01.03	MM14	FL	F	NW
5810.2.216.01.03	MM14	FL	F	NW
5810.2.216.01.03	MM14	FL	F	NW
5810.2.216.01.03	MM14	FL	F	NW
5810.2.216.01.03	MM14	FL	W	ON
5810.2.216.01.03	MM14	FL	W	BG
5810.2.216.01.03	MM14	FL	W	BG
5810.2.216.01.03	MM14	FL	F	BG
5810.2.216.01.03	MM14	FL	F	BG
5810.2.216.01.03	MM14	FL	F	BG
5810.2.238.01	MM14	FL	W	BP
5810.2.238.01	MM14	FL	F	BP
5810.2.238.01	MM14	FL	F	NW
5810.2.238.01.02	MM14	FL	W	NW

Table 20 (cont'd)

5810.2.238.01.02	MM14	GF	F	DUTCH
5810.2.238.01.02	MM14	UF	W	BP
5810.2.238.01.02	MM14	UF	W	BP
5810.2.238.01.02	MM14	FL	F	BG
5810.2.238.01.02	MM14	FL	W	NW
5810.2.238.01.02	MM14	FL	W	NW
5810.2.238.01.02	MM14	FL	W	NW
5810.2.238.01.02	MM14	FL	W	NW
5810.2.238.01.02	MM14	FL	W	NW
5810.2.238.01.02	MM14	FL	F	NW
5810.2.238.01.02	MM14	FL	F	NW
5810.2.238.01.02	MM14	FL	W	UNK
5810.2.210.01.01	MM14	FL	W	ON
5810.2.210.01.01	MM14	FL	F	NW
5810.2.210.01.01	MM14	FL	F	NW
5810.2.210.01.02	MM14	FR	F	BG
5810.2.210.01	MM14	FL	W	UNKB
5810.2.217.01	MM14	FL	W	BP
5810.2.217.01	MM14	FL	W	BG
5810.2.217.01	MM14	FL	F	BP
5810.2.218.01	MM14	FL	F	BP
5810.2.212.01	MM14	FL	W	UNKB
5810.2.212.01	MM14	FL	W	UNKB
5810.2.212.01	MM14	FL	W	UNKB
5810.2.212.01	MM14	FL	W	UNKB
5810.2.213.01	MM14	S	W	BP
5810.2.213.01	MM14	FL	W	NW
5810.2.213.01	MM14	FL	F	NW
5810.2.213.01	MM14	FL	F	NW
5810.2.213.01	MM14	FL	W	UNKB
5810.2.213.01	MM14	FL	W	UNKB
5810.2.213.01	MM14	FL	W	UNKB
5810.2.213.01	MM14	FL	W	UNKB
5810.2.227.01.40	MM14	FL	W	NW
5810.2.227.01.40	MM14	FL	F	NW
5810.2.228.01	MM14	FL	W	BP
5810.2.228.01	MM14	FL	W	BP
5810.2.228.01	MM14	FL	W	DUTCH
5810.2.228.01	MM14	UF	W	NW
5810.2.228.01	MM14	FL	F	NW
5810.2.228.01	MM14	FL	F	NW
5810.2.228.01	MM14	FL	W	BG
5810.2.228.01	MM14	FL	W	BG
5810.2.228.01	MM14	FL	W	BG
5810.2.228.00	MM14	FL	F	NW

Table 20 (cont'd)

5810.2.214.01	MM14	N	W	Quartzite
5810.2.214.01.01	MM14	FR	F	NW
5810.2.214.01	MM14	FL	W	CW
5810.2.214.01	MM14	FL	F	BP
5810.2.214.01	MM14	FL	W	NW
5810.2.214.01	MM14	FL	W	NW
5810.2.214.01	MM14	FL	F	NW
5810.2.214.00	MM14	FL	W	NW
5810.2.214.01.03	MM14	Core	W	BG
5810.2.214.01.03	MM14	FL	W	BG
5810.2.214.01.03	MM14	FL	F	NW
5810.2.214.01.02	MM14	S	W	NW
5810.2.214.01.02	MM14	FR	F	NW
5810.2.214.01.02	MM14	FL	W	NW
5810.2.214.01.02	MM14	UF	W	BP
5810.2.214.01.02	MM14	UF	W	NW
5810.2.214.01.02	MM14	UF	W	NW
5810.2.214.01.02	MM14	FR	F	BG
5810.2.214.01.02	MM14	FL	F	BP
5810.2.214.01.02	MM14	FL	F	NW
5810.2.214.01.02	MM14	FL	F	NW
5810.2.214.01.02	MM14	FL	F	NW
5810.2.214.01.02	MM14	FL	F	NW
5810.2.214.01.02	MM14	FL	F	NW
5810.2.214.01.02	MM14	FL	F	NW
5810.2.219.01.02	MM14	PP	W	BP
5810.2.219.00	MM14	FR	F	BG
5810.2.219.01	MM14	N	W	NW
5810.2.229.01	MM14	FL	W	NW
5810.2.229.01	MM14	FL	W	NW
5810.2.229.01	MM14	FL	W	NW
5810.2.229.01	MM14	FL	W	NW
5810.2.229.01	MM14	FL	W	NW
5810.2.229.01	MM14	FL	W	NW
5810.2.229.01	MM14	FL	W	NW
5810.2.229.01	MM14	FR	F	FCR
5810.2.229.01	MM14	FR	F	FCR
5810.2.229.01	MM14	GF SPALL	F	DUTCH
5810.2.229.01	MM14	FL	F	BG
5810.2.229.01	MM14	FL	F	UNK
5810.2.229.01	MM14	FL	W	BG
5810.2.229.01	MM14	FL	W	BP
5810.2.229.01	MM14	FL	W	BG
5810.2.229.01	MM14	FL	W	BG
5810.2.229.01	MM14	BF	W	BG

Table 20 (cont'd)

5810.2.229.01	MM14	BF	W	UNKB
5810.2.229.01	MM14	UNIFACE	W	NW
5810.2.229.01	MM14	Core	W	NW
5810.2.229.01	MM14	FL	W	BG
5810.2.229.01	MM14	FL	F	NW
5810.2.229.01	MM14	GF	F	DUTCH
5810.2.229.01	MM14	PP	W	BG
5810.2.229.01	MM14	PP	W	UNKB
5810.2.229.01	MM14	FR	F	BG
5810.2.237.01	MM14	FL	F	DUTCH
5810.2.237.01	MM14	FR	F	UNK
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	NW
5810.2.225.01	MM14	FL	F	N
5810.2.233.01	MM14	FL	F	NW
5810.2.233.01	MM14	FL	F	NW
5810.2.233.01.01	MM14	RF	F	NW
5810.2.234.01	MM14	FR	F	CD
5810.2.234.01	MM14	FL	F	CD
5810.2.234.01.01	MM14	FL	F	NW
5810.2.234.01.01	MM14	FL	F	CD
5810.2.234.01.01	MM14	FL	F	CD
5810.2.234.01.02	MM14	FL	F	BG
5810.2.234.01.02	MM14	FL	F	BG
5810.2.205.01.06	MM14	FL	F	NW
5810.2.205.01.05	MM14	FR	F	BP
5810.2.205.01.05	MM14	FR	F	ON
5810.2.205.01.05	MM14	FR	F	UNKB
5810.2.205.01.05	MM14	FL	F	NW
5810.2.205.01	MM14	FL	F	DUTCH
5810.2.205.01	MM14	FL	F	BG
5810.2.205.01	MM14	FL	F	NW
5810.2.205.01	MM14	FL	F	UNKB
5810.2.205.01	MM14	FL	F	BG
5810.2.205.01	MM14	FL	F	UNK
5810.2.206.01.03	MM14	FL	W	BP
5810.2.206.01.03	MM14	FL	W	BP

Table 20 (cont'd)

5810.2.206.01.03	MM14	FL	W	KP
5810.2.206.01.03	MM14	FL	F	BP
5810.2.206.01.01	MM14	FL	W	UNKB
5810.2.206.01.04	MM14	FL	W	BG
5810.2.206.01	MM14	FL	W	NW
5810.2.206.01	MM14	FL	W	CD
5810.2.206.01	MM14	FL	F	CD
5810.2.209.01	MM14	PP	F	BP
5810.2.209.01	MM14	FL	W	BP
5810.2.209.01	MM14	FL	F	BP
5810.2.204.01.01	MM14	FL	W	BG
5810.2.185.01	MM14	FL	W	BG
5810.2.185.01	MM14	FL	W	NW
5810.2.208.01	MM14	UF	W	UNK
5810.2.208.01	MM14	UF/SS	W	NW
5810.2.202.01.01	MM14	UF	W	NW
5810.2.202.00	MM14	FL	W	BG
5810.2.202.00	MM14	FR	F	NW
5810.2.202.01.01	MM14	FR	F	NW
5810.2.202.01.01	MM14	FL	W	UNKB
5810.2.202.01.01	MM14	FL	W	UNKB
5810.2.202.01.01	MM14	FL	W	NW
5810.2.202.01.01	MM14	FL	W	NW
5810.2.202.01.01	MM14	FL	W	NW
5810.2.202.01.01	MM14	UF	W	NW
5810.2.202.01.01	MM14	FL	F	NW
5810.2.202.01.01	MM14	FR	F	BG
5810.2.202.01.01	MM14	FL	W	BG
5810.2.202.01.01	MM14	FR	F	BG
5810.2.202.01.01	MM14	FL	F	BG
5810.2.202.01.01	MM14	FL	W	BG
5810.2.202.01.01	MM14	FL	W	BG
5810.2.202.01.01	MM14	FL	W	BG
5810.2.202.01.01	MM14	FR	F	BG
5810.2.202.01.01	MM14	FR	F	BG
5810.2.202.01.01	MM14	FL	W	BG
5810.2.202.01.01	MM14	FL	W	BG
5810.2.202.01.01	MM14	FL	W	CD
5810.2.202.01.01	MM14	FL	W	CD
5810.2.202.01.01	MM14	FR	F	ON
5810.2.202.01.01	MM14	FL	W	ON
5810.2.202.01.01	MM14	FL	W	ON
5810.2.202.01.01	MM14	FL	W	BP
5810.2.202.01.01	MM14	FL	W	BP
5810.2.202.01.01	MM14	FR	F	UNKB

Table 20 (cont'd)

5810.2.202.01.01	MM14	FR	F	Limestone
5810.2.202.01.01	MM14	FR	F	UNK
5810.2.202.01.01	MM14	FL	W	BG
5810.2.201.01	MM14	FL	F	KP
5810.2.201.01	MM14	FL	W	BP
5810.2.201.03	MM14	FL	W	BP
5810.2.201.01	MM14	FL	W	NW
5810.2.201.03	MM14	FR	F	NW
5810.2.201.03	MM14	FL	W	UNKB
5810.2.201.01	MM14	FR	F	BG
5810.2.201.02	MM14	FL	W	NW
5810.2.201.02	MM14	FL	F	BG
5810.2.201.02	MM14	FL	F	UNKB
5810.2.201.03	MM14	RF	W	BG
5810.2.201.01	MM14	FL	F	DUTCH
5810.2.201.01	MM14	FL	W	BP
5810.2.201.03	MM14	FL	W	UNKB
5810.2.201.01	MM14	S	F	BG
5810.2.201.01	MM14	N	F	BZW
5810.2.201.03	MM14	FL	W	UNKB
5810.2.201.02	MM14	RF	W	BG
5810.2.201.03	MM14	FL	W	BP
5810.2.201.01	MM14	FR	F	BZW
5810.2.201.03	MM14	FL	W	BP
5810.2.201.03	MM14	FL	W	BG
5810.2.201.03	MM14	FL	W	UNKB
5810.2.201.01	MM14	FL	W	DUTCH
5810.2.201.02	MM14	FL	W	BG
5810.2.201.02	MM14	FL	W	CD
5810.2.201.02	MM14	FL	W	UNKB
5810.2.201.02	MM14	FL	F	BP
5810.2.203.01	MM14	FL	F	BP
5810.2.203.01	MM14	FR	F	BG
5810.2.203.01.02	MM14	RF	F	BG
5810.2.203.01.02	MM14	FR	F	UNKB
5810.2.203.01.01	MM14	FR	F	BG
5810.2.203.01.01	MM14	FL	F	NW
5810.2.203.01.01	MM14	FL	W	UNK
5810.2.221.01	MM14	BF	W	BP
5810.2.222.01.02	MM14	FL	W	BP
5810.2.222.01.02	MM14	RF	W	BP
5810.2.222.01.02	MM14	UF	W	BP
5810.2.222.01.02	MM14	UF	W	BP
5810.2.222.01.02	MM14	UF	W	BP
5810.2.222.01.02	MM14	FL	W	BP

Table 20 (cont'd)

5810.2.222.01.02	MM14	UF	W	BP
5810.2.222.01.02	MM14	FR	F	BP
5810.2.222.01.02	MM14	FL	W	UNK
5810.2.222.01.02	MM14	FR	F	BG
5810.2.222.01.02	MM14	FR	F	BG
5810.2.222.01.02	MM14	FL	W	BG
5810.2.222.01.02	MM14	FL	W	NW
5810.2.222.01.02	MM14	FR	F	NW
5810.2.222.01.02	MM14	FR	F	NW
5810.2.222.01.02	MM14	FR	F	NW
5810.2.222.01.02	MM14	FL	F	NW
5810.2.222.01.02	MM14	FL	F	NW
5810.2.222.01.02	MM14	FL	F	NW
5810.2.222.01.02	MM14	FL	F	NW
5810.2.222.01.02	MM14	FL	F	BG
5810.2.222.01.01	MM14	FL	F	NW
5810.2.222.01.01	MM14	FL	F	UNK
5810.2.222.01.04	MM14	UF	F	BG
5810.2.222.01.04	MM14	FR	F	NW
5810.2.222.01.03	MM14	FR	F	BP
5810.2.222.01.02	MM14	FL	W	BP
5810.135.03.03-26	MM15	GF	W	BZW
5810.121.03.04-18	MM15	GF	F	BZW
5810.119.02-3	MM15	GF	W	BZW
5810.128.02-16	MM15	GF	W	BR
5810.128.01-13	MM15	GF	W	UNK
5810.135.03.01-25	MM15	GF	W	BZW
5810.169.91.04-22	MM16	FL	F	BG
5810.2.291.I-22	MM16	FL	W	BG
5810.165.02.03	MM16	FL	W	UNKB
5810.163.01-A.04	MM16	FL	W	BG
5810.2.291.05	MM17	PP	W	BP
5810.2.184.01	MM17	PP	W	UNK
5810.2.107.01	MM17	PP	F	Quartzite
5810.2.102.04	MM17	PP	W	SC2
5810.2.102.04	MM17	FR	F	Barron SS
5810.2.174.01	MM17	PP	W	BG
5810.2.167.01	MM17	PP	W	NW
5810.2.167.01	MM17	PP	W	BP
5810.2.242.05	MM17	PP	W	BG
5810.2.242.05	MM17	BF	F	DUTCH
5810.2.157.01	MM17	PP	F	BP
5810.2.158.02.02	MM17	PP	F	BZW
5810.2.242.05	MM17	PP	W	DUTCH
5810.2.259.05	MM17	PP	W	UNK

Table 20 (cont'd)

5810.2.191.01	MM17	S	W	BP
5810.2.191.01	MM17	BF	W	Quartzite
5810.2.238.01	MM17	PP	W	NW
5810.2.183.01.01	MM17	PP	W	UNK
5810.2.271	MM17	BF	F	JT
ms6-139	MM17	PP	F	BP
ms6-153	MM17	BF	F	NW
5810.2.259.05-6	MM17	PP	W	BP
ms6-207	MM17	RF	F	BG
ms6-81	MM17	PP	W	BP
ms6-10	MM17	FR	F	UNK
ms6-77	MM17	BF	F	UNK
ms6-157	MM17	BF	F	UNK
5810.2.192.01	MM18	FL	F	BP
5810.2.195.01	MM18	FL	F	UNK
5810.2.195.01	MM18	UF	W	BG
5810.2.189.01	MM18	FR	F	BG
5810.2.184.01.01	MM18	FL	W	BG
5810.2.184.01.01	MM18	FL	W	CD
5810.2.198.01	MM18	FR	F	NW
5810.2.195.01	MM18	FL	W	BG
5810.2.192.01	MM18	FL	F	BP
5810.2.184.01	MM18	FL	F	BG
5810.2.184.01	MM18	FL	F	BG
5810.2.184.01	MM18	FR	F	BP
5810.2.195.01	MM18	FL	W	BP
5810.2.182.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	W	UNK
5810.2.184.01	MM18	BF	W	BP
5810.2.182.01	MM18	FL	W	BG
5810.2.182.01	MM18	FL	F	BG
5810.2.184	MM18	FL	W	UNK
5810.2.182.01	MM18	FL	F	BG
5810.2.184.01	MM18	FL	F	NW
5810.2.182.01	MM18	FL	F	BG
5810.2.192.01	MM18	FL	F	BG
5810.2.182.01	MM18	FL	F	BG
5810.2.182.01	MM18	FL	F	BG
5810.2.184.01	MM18	FL	F	BP
5810.2.195.01	MM18	FL	F	NW
5810.2.184.01	MM18	FL	F	BG
5810.2.182.01	MM18	FL	F	CD
5810.2.184.01	MM18	FL	W	BG
5810.2.192.01	MM18	Core	W	BG
5810.2.184.01	MM18	FL	F	UNK

Table 20 (cont'd)

5810.2.182.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	F	NW
5810.2.195.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	F	BP
5810.2.191.01	MM18	FL	F	UNK
5810.2.187.01	MM18	FL	F	NW
5810.2.195.01	MM18	RF	F	BZW
5810.2.191.01	MM18	FR	F	BG
5810.2.189.01	MM18	FL	F	BG
5810.2.192.01	MM18	FR	F	BG
5810.2.191.01	MM18	FL	F	BG
5810.2.191.01	MM18	FL	F	BP
5810.2.191.01	MM18	FL	F	BP
5810.2.191.01	MM18	FL	F	BG
5810.2.191.01	MM18	FL	F	BG
5810.2.182.01	MM18	FR	F	BG
5810.2.182.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	F	BP
5810.2.195.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	F	BP
5810.2.193.01	MM18	FL	F	NW
5810.2.199	MM18	FL	F	BP
5810.2.199	MM18	FR	F	DUTCH
5810.2.199	MM18	FL	F	BP
5810.2.196.01	MM18	FL	F	NW
5810.2.195.01	MM18	FL	F	BG
5810.2.192.01	MM18	FL	F	BP
5810.2.195.01	MM18	FL	F	NW
5810.2.192.01	MM18	FL	F	BG
5810.2.192.01	MM18	FL	F	BZW
5810.2.195.01	MM18	FL	F	BP
5810.2.195.01	MM18	FL	F	NW
5810.2.192.01	MM18	FL	F	BG
5810.2.192.01	MM18	FL	F	BP
5810.2.192.01	MM18	FL	F	BP
5810.2.194.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	F	NW
5810.2.192.01	MM18	FL	F	NW
5810.2.192.01	MM18	FL	F	BG
5810.2.195.01	MM18	FL	F	BG
5810.2.192.01	MM18	FL	F	BG
5810.2.188.01	MM18	FL	F	NW
5810.2.182.01	MM18	FL	F	BG

Table 20 (cont'd)

5810.2.190.01	MM18	FL	F	BG
5810.2.181.01	MM18	FR	F	UNK
5810.2.190.01	MM18	FL	F	BG
5810.2.181.01	MM18	FL	F	UNK
5810.2.181.01	MM18	FL	F	BP
5810.2.181.01	MM18	FL	F	UNK
5810.2.181.01	MM18	FL	F	DUTCH
5810.2.178.01	MM18	FL	F	BG
5810.2.178.01	MM18	FR	F	BG
5810.2.178.01	MM18	FL	F	UNK
5810.2.181.01	MM18	FL	F	NW
5810.2.181.01	MM18	FL	F	NW
5810.2.181.01	MM18	FL	F	BP
5810.2.178.01	MM18	FL	F	NW
5810.2.179.01	MM18	FL	F	BG
5810.2.178.01	MM18	FL	F	UNKB
5810.2.190.01	MM18	FL	F	BP
5810.2.185.01	MM18	FL	W	BP
5810.2.189.01	MM18	Pebble	F	UNK
5810.2.185.01	MM18	FL	F	UNK
5810.2.185.01	MM18	FL	F	BP
5810.2.192.01	MM18	FL	W	CD
5810.2.186.01	MM18	FL	W	BG
5810.2.188.01	MM18	FL	W	ON
5810.2.187.01	MM18	FL	F	UNK
5810.2.195.01	MM18	FCR	F	FCR
5810.2.190.01	MM18	FL	F	BP
5810.2.190.01	MM18	FL	W	BG
5810.2.190.01	MM18	FL	W	BP
5810.2.190.01	MM18	FL	W	CW
5810.2.190.01	MM18	FL	W	BG
5810.2.177.01	MM18	FL	W	ON
5810.2.190.01	MM18	FL	F	BG
5810.2.188.01	MM18	UF	F	BG
5810.2.181.01	MM18	FL	F	Slate
5810.2.190.01	MM18	FL	W	NW
5810.2.178.01	MM18	Pebble	F	BG
5810.2.185.01	MM18	FL	W	BG
5810.2.190.01	MM18	FL	F	GLASS
5810.2.182.01	MM18	FL	F	BG
5810.2.181.01	MM18	FL	W	KP
5810.2.178.01	MM18	FL	F	DUTCH
5810.2.184.01	MM18	FR	F	UNK
5810.2.187.01	MM18	FL	W	NW
5810.2.187.01	MM18	FL	W	BP

Table 20 (cont'd)

5810.2.187.01	MM18	FR	F	UNK
5810.2.181.01	MM18	FL	W	BP
5810.2.190.01	MM18	FL	W	DUTCH
5810.2.189.01	MM18	FL	W	BP
5810.2.189.01	MM18	FL	F	UNKB
5810.2.181.01	MM18	FL	W	UNK
5810.2.190.01	MM18	FL	W	BG
5810.2.189.01	MM18	FL	F	BP
5810.2.181.01	MM18	FL	W	KP
5810.2.190.01	MM18	FL	W	NW
5810.2.190.01	MM18	FL	F	BP
5810.2.178.01	MM18	FL	F	NW
5810.2.178.01	MM18	FL	F	NW
5810.2.189.01	MM18	FL	F	OB
5810.2.184.01	MM18	FL	F	UNK
5810.2.187.01	MM18	FL	F	CD
5810.2.189.01	MM18	FL	F	BP
5810.2.189.01	MM18	FL	F	DUTCH
5810.2.190.01	MM18	FL	F	BG
5810.2.189.01	MM18	FL	F	BG
5810.2.190.01	MM18	RF	F	BP
5810.2.190.01	MM18	FL	F	NW
5810.2.190.01	MM18	FL	F	CD
5810.2.190.01	MM18	FL	F	BG
5810.2.178.01	MM18	FR	F	UNKB
5810.2.190.01	MM18	FL	F	UNK
5810.2.181.01	MM18	FL	F	KP
5810.2.181.01	MM18	FL	F	BG
5810.2.187.01	MM18	FL	F	BG
5810.2.184.01	MM18	FL	F	BP
5810.2.190.01	MM18	FL	F	BG
5810.2.190.01	MM18	FL	F	BG
5810.2.190.01	MM18	FL	F	BG
5810.2.181.01	MM18	FL	F	CD
5810.2.181.01	MM18	FL	F	CD
5810.2.178.01	MM18	FL	F	NW
5810.2.181.01	MM18	FL	F	KP
5810.2.178.01	MM18	FL	F	BP
5810.2.179.01	MM18	FL	F	BG
5810.2.178.01	MM18	FL	F	CD
5810.2.178.01	MM18	FL	F	NW
5810.2.178.01	MM18	FL	F	UNK
5810.2.181.01	MM18	FL	F	UNK
5810.2.181.01	MM18	FL	F	KP
5810.2.181.01	MM18	FL	F	BG

Table 20 (cont'd)

5810.2.181.01	MM18	FL	F	BP
5810.2.181.01	MM18	FR	F	UNK
5810.2.181.01	MM18	FL	F	BG
5810.2.178.01	MM18	FL	F	BP
5810.2.181.01	MM18	FL	F	BG
5810.2.178.01	MM18	FL	F	BP
5810.2.181.01	MM18	FL	F	KP
5810.2.178.01	MM18	FL	F	BP
5810.2.181.01	MM18	FL	F	BP
5810.2.272	MM19	FL	F	BG
5810.2.272	MM19	FL	W	NW
5810.2.286.03	MM19	FL	W	BG
5810.2.274.1	MM19	FL	W	NW
5810.2.277.03	MM19	FL	F	BG
5810.2.278.2	MM19	FL	W	UNK
5810.2.272	MM19	FL	F	NW
5810.2.272	MM19	FL	F	NW
5810.2.272	MM19	FL	F	NW
5810.2.272	MM19	FL	F	NW
5810.2.272	MM19	FL	F	BG
5810.2.278	MM19	FL	F	BG
5810.2.272	MM19	FL	F	BG
5810.2.287.2.03	MM19	FR	F	BG
5810.2.274.1	MM19	FL	W	NW
5810.2.286	MM19	FL	W	NW
5810.2.278	MM19	FL	W	CD
5810.2.274.1	MM19	FL	F	BG
5810.2.270	MM19	FL	W	UNK
5810.2.273	MM19	FL	W	UNKB
5810.2.272	MM19	FL	W	BP
5810.2.274.01	MM19	FL	W	BP
5810.2.274.1	MM19	FL	W	CD
5810.2.272	MM19	FL	W	CD
5810.2.272	MM19	FL	F	BP
5810.2.272	MM19	FL	W	UNK
5810.2.274.1	MM19	FL	W	BP
5810.2.272	MM19	FL	W	UNK
5810.2.272	MM19	FL	W	BG
5810.2.272	MM19	FL	W	BP
5810.2.277.05	MM19	FL	W	BP
5810.152.03	MM19	FL	W	BP
5810.2.286.03	MM19	Cobble frag	F	BG
5810.2.274.1	MM19	FL	W	BG
5810.028.01.03	MM20	FL	W	UNK
5810.9	MM20	BF	W	KP

Table 20 (cont'd)

ms6-7	MM21	GF	W	BZW
ms6-81	MM21	GF	W	UNK
ms6-81	MM21	GF	W	BZW
ms6-174	MM21	FR	F	BZW
ms6-207	MM21	GF	W	BZW
ms6-89	MM21	GF	W	UNK
ms6-102	MM21	FR	F	BG
5810.162.01.01	MM22	GF	W	BZW
5810.2.286	MM22	GF	W	BZW
5810.157.02.03	MM22	GF	F	UNKB
5810.162.01.01	MM22	GF	F	UNKB
5810.153.01.01	MM22	GF	W	BZW
5810.157.04.02	MM22	GF	W	BZW
5810.153.03	MM22	GF	W	UNK
5810.146.03.04	MM22	GF	W	BZW
5810.143.02	MM22	GF	W	BZW
5810.2.287.2.03	MM22	GF	W	BZW
5810.128.03.02	MM23	Groundstone	F	Groundstone
5810.019.01	MM23		line sinker stone	Groundstone
5810.017.02	MM23	Pipe stone top?	F	Groundstone
5810.006.02	MM23	Groundstone	W	Groundstone
5810.2.136	MM23	Groundstone	F	UNK
ms6-177	MM24	Core	W	BP
5810.2.299.02	MM24	Core	W	BG
ms6-191	MM24	FR	F	CD
5810.2.195.01	MM24	FR	F	BP
ms6-96	MM24	Core	F	CD
5810.2.140.01.01	MM24	FR	F	BG
5810.2.140.01.01	MM24	FL	W	NW
5810.2.130.04	MM24	UF	W	CD
5810.2.130.04	MM24	FR	F	CD
5810.2.130.04	MM24	Core	F	CD
5810.2.121.03	MM24	FL	F	NW
5810.2.238.01	MM24	FR	F	NW
5810.2.129.03	MM24	UF	F	BG
5810.2.129.03	MM24	FL	F	UNK
5810.2.152.03	MM24	Slag	F	Slag
5810.2.152.03	MM24	FL	F	BG
ms6-77	MM24	Core	F	BG
5810.2.134.03	MM24	Core	F	CD
5810.2.134.03	MM24	Core	F	CD
5810.2.134.03	MM24	UF	F	BP
5810.2.191.01	MM24	FR	F	BG
ms6-174	MM25	PP	W	NW
no provenience, found with 1997 non feature points	MM25	PP	F	BP

Table 20 (cont'd)

ms6-154	MM25	PP	W	BG
ms6-184	MM25	PP	W	BG
ms6-181	MM25	BF	W	UNK
5810.079.02.02.19	MM26	GF	W	BP
5810.080.01.02	MM26	GF	W	BG
MS6-154	MM26	GF	W	BZW
5810.076.04.01.48	MM26	FL	F	BZW
5810.2.114.1.04	MM27	FL	W	NW
5810.2.114.1.04	MM27	FL	W	NW
5810.2.147.01	MM27	RF	W	BG
5810.2.124.03.02	MM27	FL	W	BP
5810.2.114.1.04	MM27	FL	W	UNK
5810.2.116.03	MM27	FL	W	BP
5810.2.116.03	MM27	FL	W	BP
5810.2.152.05.02	MM27	FL	W	BP
5810.2.125.03.01	MM27	FL	W	NW
5810.2.125.03.01	MM27	Burin	W	BG
5810.2.140.02.01	MM27	FL	W	UNKB
5810.2.140.05.03	MM27	FL	W	NW
5810.2.145.03	MM27	FL	W	NW
5810.2.137.01	MM27	Rf	W	BP
5810.2.107.00	MM27	FL	W	NW
5810.2.136.01	MM27	FL	W	BG
5810.2.136.01	MM27	Graver	W	BG
5810.2108.02	MM27	Cobble frag	F	BG
5810.2108.02	MM27	FL	W	BG
5810.2108.02	MM27	FL	W	BP
5810.2.114.05	MM27	FL	W	BG
5810.2.127.07	MM27	FR	F	UNKB
5810.2.136.06.01	MM27	FL	F	BG
5810.2.152.06.01	MM27	FL	W	BG
5810.2.104.1.01	MM27	FL	W	NW
5810.2.104.1.01	MM27	FL	F	BG
5810.2.152.03	MM27	FL	W	BG
5810.2.152.03	MM27	Burin	F	BG
5810.2.114.06	MM27	FL	W	BG
5810.2.151.08.01	MM27	Graver	W	BG
5810.2.151.08.01	MM27	UF	W	BP
5810.2.151.01	MM27	FL	W	BG
5810.2.136.05	MM27	Graver	W	UNK
5810.2.136.05	MM27	FL	W	BG
5810.2.121.03.01	MM27	RF	W	BG
5810.2.124.02.01	MM27	FL	F	BP
5810.2.101.01	MM27	FL	W	BG
5810.2.121.06.01	MM27	FL	W	NW

Table 20 (cont'd)

5810.2.121.06.01	MM27	FR	F	BG
5810.2.108.02.01	MM27	FL	W	NW
5810.2.108.02.01	MM27	FL	W	NW
5810.2.108.02.01	MM27	FL	W	UNK
5810.2.125.06	MM27	FL	W	BP
5810.2.121.04	MM27	FL	F	Quartzite
5810.2.125.1.03	MM27	FL	F	BG
5810.2.152.04	MM27	FR	F	BP
5810.2.152.04	MM27	UF	W	BG
5810.2.152.04	MM27	FL	W	BG
5810.2.140.03.01	MM27	FR	F	NW
5810.2.140.03.01	MM27	FL	F	BG
5810.2.136.06.02	MM27	FL	W	BG
5810.2.152.09.02	MM27	FL	W	BG
5810.2.153.04	MM27	FL	W	NW
5810.2.153.04	MM27	FL	F	BG
5810.2.114.01.01	MM27	FR	F	BP
5810.2.152.03	MM27	FL	W	NW
5810.2.140.04.01	MM27	FR	F	UNK
5810.2.136.06.01	MM27	FL	F	BG
5810.2.114.04	MM27	FL	W	BG
5810.2.114.02.02	MM27	FL	W	BG
5810.2.124.03.01	MM27	FL	W	NW
5810.2.125.02.01	MM27	Burin	W	Quartzite
5810.2.152.07.01	MM27	FL	W	UNK
5810.2.152.05	MM27	FR	F	UNK
5810.2.152.05	MM27	FL	W	UNK
5810.2.152.05	MM27	FR	F	BG
5810.2.152.05	MM27	PP	F	BP
5810.2.152.05	MM27	N	W	UNK
5810.2.136.07.02	MM27	FR	F	BP
5810.2.215.01	MM27	UF	W	CD
5810.2.215.01	MM27	FL	F	UNK
5810.2.215.01	MM27	FL	F	BP
5810.007.03	MM28	GF	W	BrR
5810.015.01	MM28	GF	W	BZW
5810.008.01.01	MM28	GF	W	BZW
5810.020.01	MM28	GF	W	BG
5810.010.01	MM28	GF	W	BZW
5810.015.01	MM28	GF	W	BR
5810.007.01	MM28	GF	W	BZW
5810.008.01.01	MM28	GF	W	BG
5810.007.04	MM28	GF	W	BG
5810.011.01	MM28	GF	W	BZW
5810.006.02	MM28	GF	W	BZW

Table 20 (cont'd)

5810.006.02	MM28	GF	F	BZW
5810.015.01	MM28	GF	F	BZW
5810.025.01	MM28	GF	W	BZW
5810.016.02	MM28	GF	F	BZW
5810.013.02.01	MM28	GF	W	BZW
5810.017.02	MM28	GF	W	BZW
5810.014.01	MM28	GF	W	BZW
5810.005.02	MM28	GF	W	BG
5810.004.01	MM28	GF	F	BZW
5810.020.01	MM28	FL	F	BZW
5810.2.262.05	MM29	GF	F	BZW
5810.2.257.05	MM29	GF	W	BZW
5810.2.248.05	MM29	GF	W	BZW
5810.2.248.05	MM29	GF	W	BZW
5810.2.265.05	MM29	GF	W	BZW
5810.2.242.05	MM29	GF	W	BZW
5810.2.242.05	MM29	GF	W	BZW
5810.2.242.05	MM29	GF	W	BZW
5810.2.242.05	MM29	GF	W	BZW
5810.136.05.04-7	MM30	FL	W	DUTCH
5810.143.04.01-2	MM30	RF	F	BP
5810.143.01-3	MM30	BF	F	BP
5810.142.02-2	MM30	FL	F	BG
5810.139.03.02-7	MM30	FL	F	BP
5810.137.03.03-1	MM30	FL	W	UNK
5810.144.03.01-5	MM30	FR	F	Groundstone
5810.136.01-11	MM30	FR	F	BG
5810.136.02-9	MM30	FL	W	BP
5810.136.02-9	MM30	FL	W	BG
5810.136.02-9	MM30	FL	F	BG
5810.136.03.01-8	MM30	FL	W	BG
5810.136.03.01-8	MM30	FL	W	BG
5810.136.03.01-8	MM30	FL	W	BP
5810.136.03.01-8	MM30	FL	W	UNK
5810.136.03.02-2	MM30	FL	W	BG
5810.135.03.02-19	MM30	GF	W	BG
5810.135.03.04-15	MM30	FL	W	BP
5810.135.02-13	MM30	RF	F	BG
5810.136.03.04-13	MM30	Natural	F	CD
5810.136.03.04-13	MM30	Natural	F	CD
5810.135.02-18	MM30	UF	F	Quartz
5810.135.02-4	MM30	F	W	BG
5810.135.03.02-11	MM30	UF	F	BP
5810.144.03.01-10	MM30	FR	F	KP
5810.144.04.03-11	MM30	FL	W	BP

Table 20 (cont'd)

5810.144.01-6	MM30	FL	W	NW
5810.144.03.01-7	MM30	db	F	BG
5810.144.03.01-7	MM30	db	F	BP
5810.144.03.01-7	MM30	FL	F	BP
5810.131.03.03-1	MM30	db	F	BG
5810.135.02-20	MM30	FL	F	ON
5810.132.02-3	MM30	rf	F	BG
5810.132.03-15	MM30	Pebble	F	UNK
5810.128.01-7	MM30	db	F	NW
5810.128.01-7	MM30	db	F	BP
5810.128.01-7	MM30	db	F	BG
5810.128.01-7	MM30	db	F	UNK
5810.128.03.02-19	MM30	FL	F	NW
5810.128.03.02-19	MM30	FL	F	NW
5810.128.03.02-19	MM30	FL	F	KP
5810.127.03.02-15	MM30	GS	F	Groundstone
5810.128.03.03	MM30	FL	F	CD
5810.126.03.02-15	MM30	FL	F	BP
5810.127.05.02-6	MM30	FL	F	DUTCH
5810.126.03.03-13	MM30	db	F	UNK
5810.126.03.03-13	MM30	FL	F	UNK
5810.126.03.03-13	MM30	FL	F	UNK
5810.129.-6	MM30	FL	F	NW
5810.129.-6	MM30	FL	F	BG
5810.129-16	MM30	FL	F	BG
5810.127.03.02-7	MM30	N	W	DUTCH
5810.127.02-12	MM30	uf	W	KP
5810.127.02-12	MM30	FL	W	UNK
5810.121.03.04-1	MM30	db	F	BP
5810.121.03.04-1	MM30	db	F	BP
5810.129-21	MM30	n/a	F	Mica
5810.129.01-11	MM30	FL	W	BG
5810.124.02-7	MM30	db	F	NW
5810.121.02-24	MM30	db	F	BG
5810.121.02-24	MM30	db	F	BG
5810.124.03.03-4	MM30	FL	W	BP
5810.124.03.03-4	MM30	FL	W	BG
5810.124.03.03-4	MM30	db	F	DUTCH
5810.125.03.04-19	MM30	FL	F	BP
5810.124.03.04-12	MM30	FL	F	BG
5810.129.01-20	MM30	n/a	F	Slag
5810.129.01-20	MM30	n/a	F	Coal
5810.129.01-20	MM30	n/a	F	Coal
5810.129.02-4	MM30	rf	F	BG
5810.125.05.03-6	MM30	FL	F	BP

Table 20 (cont'd)

5810.121.03.03-20	MM30	FL	F	UNKB
5810.121.03.03-20	MM30	FL	F	BP
5810.121.03.03-20	MM30	FL	F	NW
5810.121.03.03-20	MM30	FL	F	BG
5810.121.03.03-20	MM30	FL	F	BG
5810.121.03.04-17	MM30	PP	F	Quartzite
5810.121.03-17	MM30	FR	F	BP
5810.121.03-17	MM30	FL	F	BP
5810.121.03-17	MM30	FL	F	BP
5810.121.04.04-2	MM30	FL	F	BG
5810.121.02-13	MM30	FL	F	BG
5810.121.02-13	MM30	FL	F	Slate
5810.121.02-12	MM30	FL	F	BP
5810.121.02-12	MM30	FL	F	BP
5810.121.02-12	MM30	FL	F	KP
5810.121.02-12	MM30	FL	F	BG
5810.120.02-12	MM30	FL	F	DUTCH
5810.120.02-12	MM30	FL	F	BG
5810.120.02-12	MM30	FL	F	UNK
5810.120.03.026	MM30	FL	F	BG
5810.120.03.026	MM30	FL	F	BG
5810.120.03.026	MM30	FL	F	BG
5810.120.03.026	MM30	FL	F	BG
5810.120.03.026	MM30	FL	F	NW
5810.120.03.026	MM30	FL	F	NW
5810.120.03.026	MM30	FL	F	NW
5810.121.01-18	MM30	FL	W	BG
5810.118.03.03-20	MM30	FR	F	UNK
5810.118.02-18	MM30	FR	F	UNK
5810.118.03.04-7	MM30	FL	F	BG
5810.118.03.01-17	MM30	FL	W	NW
5810.119.03.04-18	MM30	FL	W	BG
5810.119.02-7	MM30	FL	W	BG
5810.119.02-7	MM30	FL	W	Basalt
5810.119.02-7	MM30	FL	W	BP
5810.120.01	MM30	FR	F	Slag
5810.120.01	MM30	FR	F	Slag
5810.120.2-10	MM30	GS	F	Groundstone
5810.120.02-9	MM30	AXE	F	Groundstone
5810.121.04.02	MM30	FL	F	CW
5810.121.04.02	MM30	FL	F	Slate
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG

Table 20 (cont'd)

5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BG
5810.121.04.02	MM30	FL	F	BP
5810.121.04.02	MM30	FL	F	BP
5810.121.04.02	MM30	FL	F	BP
5810.121.04.02	MM30	FL	F	BP
5810.121.04.02	MM30	FL	F	NW
5810.121.04.02	MM30	FL	F	NW
5810.121.04.02	MM30	FL	F	NW
5810.121.04.02	MM30	FL	F	NW
5810.121.04.02	MM30	FL	F	UNK
5810.121.04.02	MM30	FL	F	UNK
5810.121.04.02	MM30	FL	F	UNK
5810.121.04.02	MM30	FL	F	UNK
5810.121.04.02	MM30	FR	F	Non-flake stone, natural
5810.122.01-04	MM30	FL	F	BP
5810.121.04.04	MM30	FR	F	BG
5810.121.04.04	MM30	FL	F	BG
5810.121.04.04	MM30	FL	F	BG
5810.121.04.04	MM30	FL	F	UNK
5810.121.05.03	MM30	FL	F	DUTCH
5810.121.05.03	MM30	FL	F	BP
5810.128.05.02	MM30	FL	F	BG
5810.119.01	MM30	FR	F	BG
5810.119.01	MM30	FL	F	BG
5810.123.01	MM30	FL	F	BG
5810.126.05	MM30	FL	F	UNK
5810.126.05	MM30	FL	F	UNKB
5810.126.05	MM30	FL	F	UNKB
5810.140.03	MM30	FL	F	NW
5810.144-143	MM30	FL	F	DUTCH
5810.144-143	MM30	FL	F	DUTCH
5810.143.04.02	MM30	FL	F	DUTCH
5810.143.04.02	MM30	FL	F	BG
5810.143.04.02	MM30	FL	F	BG
5810.132.05.04	MM30	FL	F	BG
5810.119.04.02	MM30	FL	F	BG
5810.121.03	MM30	FL	F	CD
5810.121.03	MM30	FL	F	BG
5810.121.04.01	MM30	FL	F	NW

Table 20 (cont'd)

5810.125.05.02	MM30	FL	F	Glass or French
5810.140.01-04	MM30	FL	F	BG
5810.124.04.04	MM30	FL	F	BG
5810.141.02	MM30	FL	F	BG
5810.141.02	MM30	FL	F	UNK
5810.122.04.02	MM30	FL	F	CD
5810.122.04.02	MM30	FL	F	NW
5810.122.04.02	MM30	FL	F	BG
5810.122.04.02	MM30	FL	F	BG
5810.122.04.02	MM30	FL	F	BG
5810.126.05.03	MM30	FL	F	NW
5810.132.05.02.02	MM30	FL	F	BG
5810.121.04.03	MM30	FL	F	UNK
5810.121.04.03	MM30	FL	F	BG
5810.145.04.04	MM30	FL	F	BP
5810.145.04.04	MM30	FL	F	BG
5810.121.05	MM30	FL	F	NW
5810.121.05	MM30	FL	F	NW
5810.121.05	MM30	FL	F	BP
5810.118.04.02	MM30	FR	F	BG
5810.118.04.02	MM30	FL	F	DUTCH
5810.133.05.00.18	MM30	FR	F	UNK
5810.144.02	MM30	FL	F	BG
5810.144.02	MM30	FL	F	NW
5810.121.04.04	MM30	FL	F	BG
5810.121.04.04	MM30	FL	F	BG
5810.121.04.04	MM30	FL	F	UNKB
5810.123.05.01	MM30	UF	F	BG
5810.126.04.03	MM30	FL	F	UNK
5810.123.05.02	MM30	FL	F	NW
5810.123.02	MM30	FL	F	DUTCH
5810.118.02-9	MM30	FL	F	BG
5810.118.02-9	MM30	FL	F	BG
5810.118.02-9	MM30	FL	F	BG
5810.118.02-9	MM30	FR	F	BG
5810.118.02-9	MM30	FR	F	BG
5810.118.02-9	MM30	FL	F	BG
5810.118.02-9	MM30	FL	F	BG
5810.118.02-9	MM30	FR	F	BP
5810.157	MM34	FR	F	UNK
5810.157.02	MM34	FL	F	FCR
5810.156.03	MM34	UF	F	BG
5810.156.01.04	MM34	FR	F	NW
5810.156.04.02	MM34	FL	F	NW
5810.156.04.02	MM34	FL	W	NW

Table 20 (cont'd)

5810.156.04.02	MM34	UF	W	BG
5810.142.03	MM34	FL	W	BP
5810.153.02.03	MM34	FR	F	BP
5810.155.02	MM34	FL	W	NW
5810.159.03	MM34	S	W	BG
5810.159.03	MM34	n/a	F	UNK
5810.158.05	MM34	FL	W	BG
5810.158.05	MM34	FR	F	NW
5810.158.03	MM34	UF	F	BG
5810.158.02	MM34	FL	F	UNK
5810.158.02	MM34	FL	W	NW
5810.158.02	MM34	FL	W	UNKB
5810.154.01.04	MM34	FL	W	CD
5810.154.02.	MM34	FR	F	BG
5810.154.02.	MM34	FL	W	UNK
5810.155.02	MM34	FL	W	NW
5810.155.02	MM34	FL	W	NW
5810.155.02	MM34	FL	W	BG
5810.155.02	MM34	FR	F	BG
5810.153.03	MM34	S	W	BG
5810.153.03	MM34	FL	W	BG
5810.153.03	MM34	FL	W	NW
5810.153.03	MM34	FL	W	NW
5810.153.03	MM34	FL	W	NW
5810.153.03	MM34	FL	W	UNK
5810.153.03	MM34	FL	W	UNK
5810.153.03	MM34	FL	W	UNKB
5810.153.03	MM34	FL	W	UNKB
5810.146.02.01	MM34	FL	W	BG
5810.146.02.01	MM34	FL	W	NW
5810.146.02.01	MM34	FL	W	NW
5810.146.05	MM34	S	W	BG
5810.146.05	MM34	FL	W	BP
5810.146.05	MM34	FL	W	BG
5810.146.03.04	MM34	FL	W	NW
5810.146.03.01	MM34	RF	W	BG
5810.146.03.01	MM34	FL	W	NW
5810.146.03.01	MM34	FR	F	BG
5810.147.01.02	MM34	FL	W	NW
5810.148.03	MM34	FR	F	BG
5810.148.03	MM34	FL	W	BG
5810.148.02	MM34	RF	W	BG
5810.148.02	MM34	FL	W	NW
5810.148.02	MM34	FL	W	BP
5810.162.03.2	MM34	FL	W	UNK

Table 20 (cont'd)

5810.162.03.2	MM34	FR	F	BG
5810.152.00	MM34	FL	W	UNK
5810.162.2	MM34	S	W	BG
5810.162.2	MM34	S	W	BG
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	NW
5810.152.02	MM34	FL	W	BG
5810.152.02	MM34	FL	W	BG
5810.152.02	MM34	FL	W	BG
5810.152.02	MM34	FL	W	BG
5810.152.02	MM34	FL	W	BP
5810.152.02	MM34	UF	W	BP
5810.152.02	MM34	FL	W	UNK
5810.152.02	MM34	FL	W	UNK
5810.152.02	MM34	FL	W	UNK
5810.152.02	MM34	FL	W	UNK
5810.152.02	MM34	FL	W	UNK
5810.152.02	MM34	FL	W	BG
5810.153.01.03	MM34	FL	W	BG
5810.153.01.03	MM34	FL	W	UNK
5810.153.01.03	MM34	FL	W	UNK
5810.153.01.03	MM34	FL	W	UNKB
5810.153.01.03	MM34	FL	W	NW
5810.153.01.03	MM34	FL	W	NW
5810.153.01.03	MM34	FL	W	NW
5810.153.01.03	MM34	FL	W	NW
5810.153.01.03	MM34	FL	W	NW
5810.153.01.03	MM34	FL	W	NW
5810.153.01.03	MM34	FL	W	NW
5810.162.02.02	MM34	FR	F	CD
5810.162.02.02	MM34	FR	F	CD
5810.147.03	MM34	FL	W	SCOTT
5810.147.03	MM34	FL	W	NW
5810.147.03	MM34	FL	W	NW
5810.147.03	MM34	FL	W	NW
5810.147.03	MM34	FL	W	NW

Table 20 (cont'd)

5810.147.03	MM34	FL	W	NW
5810.147.03	MM34	FL	W	BG
5810.147.03	MM34	FL	W	BG
5810.147.03	MM34	FL	W	BG
5810.147.03	MM34	FL	W	BG
5810.147.03	MM34	FL	W	CD
5810.147.03	MM34	FL	W	UNK
5810.147.03	MM34	FL	W	BP
5810.147.03	MM34	FL	F	BP
5810.147.03	MM34	FL	F	UNKB
5810.147.03	MM34	FL	F	UNKB
5810.147.03	MM34	FL	F	UNK
5810.147.03	MM34	FL	F	UNK
5810.149.02	MM34	RF	W	BG
5810.149.02	MM34	RF	W	BG
5810.149.02	MM34	FL	W	KP
5810.149.02	MM34	FR	F	BG
5810.152.03.4	MM34	FL	W	CD
5810.152.03.4	MM34	FL	W	UNK
5810.152.03.4	MM34	FR	F	UNK
5810.152.03.4	MM34	FL	W	UNKB
ms6-30	MM35	UF	W	BG
ms6-102	MM35	Cobble frag	F	BG
ms6-46	MM35	FL	W	BG
ms6-30	MM35	UF	W	BG
ms6-20	MM35	Cobble frag	F	BG
ms6-19	MM35	Natural	F	BG
ms6-4	MM35	FR	F	BG
ms6-13	MM35	FR	F	BP
ms6-4	MM35	FL	F	UNK
ms6-4	MM35	FL	F	UNK
ms6-4	MM35	FL	F	UNK
ms6-4	MM35	FL	F	UNK
ms6-4	MM35	FL	F	UNK
ms6-4	MM35	FL	F	UNK
ms6-81	MM35	Cobble frag	F	BG
ms6-4	MM35	Cobble frag	F	UNKB
ms6-4	MM35	Cobble frag	F	UNKB
ms6-4	MM35	Cobble frag	F	UNKB
ms6-4	MM35	FR	F	UNKB
ms6-4	MM35	FR	F	BG
ms6-4	MM35	Cobble frag	F	UNKB
ms6-4	MM35	FR	F	UNKB
ms6-4	MM35	Cobble frag	F	BG
ms6-77?	MM35	S	F	BG

Table 20 (cont'd)

ms6-63	MM35	FR	F	UNK
ms6-78	MM35	UF	W	BG
ms6-4	MM35	Pebble	F	BG
ms6-4	MM35	Pebble	F	BG
ms6-4	MM35	FR	F	BG
ms6-4	MM35	FR	F	BG
ms6-41	MM35	FL	F	BG
ms6-81	MM35	Core	F	BG
ms6-81	MM35	FR	F	CD
ms6-93	MM35	Pebble	F	BG
ms6-66	MM35	RF	F	Glass or French
ms6-95	MM35	FR	F	BG
ms6-92	MM35	Cobble frag	F	BG
ms6-81	MM35	Core	F	NW
ms6-89	MM35	FR	F	UNKB
5810.145.01	MM31	UF	F	BG
5810.145.04.02	MM31	FL	F	BG
5810.145.02	MM31	FL	F	BG
5810.143.04.04	MM31	FL	F	NW
5810.143.01	MM31	GS	F	Groundstone
5810.143.04.02	MM31	Cobble frag	F	BG
5810.142.01	MM31	FL	F	BG
5810.139.01	MM31	FL	F	DUTCH
5810.139.02.02	MM31	Core	F	BG
5810.137.01	MM31	UF	F	BG
5810.137.01	MM31	FL	F	NW
5810.134.03	MM31	FL	F	UNK
5810.133.01	MM31	FL	F	Quartzite
5810.133.05.00.16	MM31	FL	F	UNK
5810.132.05.02.02	MM31	FL	F	Quartzite
5810.132.05.01	MM31	FL	F	UNK
5810.132.03	MM31	FL	F	BG
5810.132.03	MM31	FR	F	BG
5810.132.03	MM31	FL	F	BG
5810.128.04.03	MM31	Cobble frag	F	Quartzite
5810.127.01	MM31	FL	F	KP
5810.126.04.02	MM31	UF	F	BP
5810.126.02	MM31	FL	F	BG
5810.126.02	MM31	FL	F	UNK
5810.124.04.01	MM31	UF	F	CD
5810.124.03.02	MM31	FR	F	Groundstone
5810.124.03.04	MM31	FL	F	NW
5810.123.04.02	MM31	RF	F	NW
5810.123.04.02	MM31	RF	F	BG
5810.123.04.02	MM31	FL	F	NW

Table 20 (cont'd)

5810.122.02	MM31	UF	F	UNKB
5810.122.04.03	MM31	FL	F	UNKB
5810.121.05.00.27	MM31	FL	F	NW
5810.118.05.01	MM31	FL	F	BP
5810.160.01.4	MM33	FL	F	BG
5810.050.01.02	MM33	FL	F	BG
5810.056.01.01	MM33	UF	F	NW
5810.056.01.01	MM33	UF	F	CD
5810.056.01.01	MM33	FL	F	UNK
5810.056.01.01	MM33	FL	F	UNK
5810.056.01.02	MM33	UF	F	NW
5810.054.01.03	MM33	FL	W	BP
5810.054.02.04.04	MM33	FL	W	BG
5810.053.01.01	MM33	Cobble frag	F	Quartzite
5810.052.02.03	MM33	N	F	BG
5810.052.02.03.31	MM33	UF	F	BG
5810.052.01.02	MM33	FL	F	BG
5810.041.01.02	MM33	FCR	F	FCR
5810.041.01.02	MM33	FL	F	CD
5810.043.01.02	MM33	FL	F	BG
5810.043.01.02	MM33	UF	F	BG
5810.043.01.02	MM33	UF	F	BG
5810.043.01.02	MM33	UF	F	NW
5810.028.01.03	MM33	UF	F	BP
5810.028.01.03	MM33	UF	F	NW
5810.053.01.01	MM33	Core	F	KP
5810.035.01.02	MM33	BF	F	BG
5810.035.01.02	MM33	FL	W	NW
5810.035.01.02	MM33	FL	W	UNKB
5810.035.01.02	MM33	FL	W	DUTCH
5810.032.01.03	MM33	FL	F	BG
5810.032.01.04	MM33	FL	F	NW
5810.032.01.04	MM33	UF	F	BG
5810.032.01.04	MM33	FL	F	BG
5810.037.01.02	MM33	Cobble frag	F	BG
5810.037.01.02	MM33	FL	F	KP
5810.034.01.02	MM33	FL	F	NW
5810.149.02	MM33	FL	F	BG
5810.148.02	MM33	FL	F	NW
5810.152.02	MM33	FL	F	UNK
5810.152.02	MM33	FL	F	BP
5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	NW
5810.152.02	MM33	FL	F	NW
5810.152.02	MM33	FL	F	NW

Table 20 (cont'd)

5810.152.02	MM33	FL	F	NW
5810.152.02	MM33	FL	F	NW
5810.152.02	MM33	FL	F	NW
5810.153.03	MM33	FL	F	NW
5810.148.02	MM33	FL	F	NW
5810.148.02	MM33	FL	F	NW
5810.148.02	MM33	FL	F	NW
5810.148.02	MM33	FL	F	BG
5810.148.02	MM33	FL	F	UNK
5810.146.01	MM33	FL	F	BG
5810.152.03.4	MM33	FL	F	NW
5810.152.03.4	MM33	FL	F	NW
5810.152.03.4	MM33	FL	F	NW
5810.152.03.4	MM33	FL	F	NW
5810.152.03.4	MM33	FL	F	NW
5810.152.03.4	MM33	FL	F	BG
5810.157.03.01	MM33	FL	F	BG
5810.158.04	MM33	FL	F	BG
5810.160.03.4	MM33	FL	F	BG
5810.160.01.4	MM33	FL	F	BG
5810.146.03.01	MM33	FL	F	BG
5810.153.04.02	MM33	FL	F	NW
5810.153.04.02	MM33	FL	F	BP
5810.153.02.03	MM33	FL	F	NW
5810.153.02.03	MM33	FL	F	NW
5810.153.02.03	MM33	FL	F	NW
5810.153.02.03	MM33	FL	F	BP
5810.153.02.03	MM33	FL	F	BG
5810.153.02.03	MM33	FL	F	BG
5810.153.02.03	MM33	FL	F	BG
5810.153.04	MM33	FR	F	Coal
5810.153.04.02.01	MM33	FL	F	BP
5810.152.03.04	MM33	FL	F	NW
5810.152.03.04	MM33	FL	F	BG
5810.152.03.04	MM33	FL	F	BG
5810.152.03.04	MM33	FL	F	BG
5810.147.03	MM33	FL	F	NW
5810.147.03	MM33	FL	F	BG
5810.158.05	MM33	FL	F	NW
5810.154.02	MM33	FL	F	UNK
5810.157.02.03	MM33	FL	F	BG
5810.157.02.03	MM33	FL	F	UNKB
5810.160.03	MM33	FL	F	DUTCH
5810.152.02	MM33	FL	F	NW
5810.152.02	MM33	FL	F	NW

Table 20 (cont'd)

5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	BG
5810.152.02	MM33	FL	F	UNKB
5810.152.02	MM33	FL	F	UNKB
5810.152.02	MM33	FL	F	UNKB
5810.152.02	MM33	FL	F	UNKB
5810.152.02	MM33	FL	F	UNKB
5810.152.02	MM33	FL	F	UNK
5810.160.03.03	MM33	FL	F	BP
5810.160.03.03	MM33	FL	F	BP
5810.152.05.03.01	MM33	FL	F	BP
5810.152.05.03.01	MM33	FL	F	Quartzite
5810.5.152.00	MM33	FL	F	UNK
5810.5.152.00	MM33	FL	F	UNK
5810.5.152.00	MM33	FL	F	UNK
5810.5.152.00	MM33	FL	F	NW
5810.5.152.00	MM33	FL	F	NW
5810.5.152.00	MM33	FL	F	NW
5810.5.152.00	MM33	FL	F	BG
5810.5.152.00	MM33	FL	F	Quartzite
5810.5.152.00	MM33	FL	F	Quartzite
5810.153.03	MM33	FL	F	UNK
5810.153.03	MM33	FL	F	UNK
5810.150.03.03	MM33	FL	F	NW
5810.150.03.03	MM33	FL	F	BG
5810.150.03.03	MM33	FL	F	BG
5810.159.03	MM33	FL	F	BG
5810.159.03	MM33	FL	F	BG
5810.159.03	MM33	FL	F	NW
5810.146.01.01	MM33	FL	F	SCOTT
5810.147.03.01.06	MM33	FL	F	UNKB
5810.157.03.02	MM33	FL	F	UNK
ms6-159	MM32	Cobble frag	F	Quartzite
ms6-154	MM32	Cobble frag	F	UNKB
ms6-169	MM32	FL	F	NW
ms6-169	MM32	FL	F	BG
ms6-158	MM32	Cobble frag	F	BG
ms6-158	MM32	FR	F	CD
ms6-158	MM32	FR	F	CD

Table 20 (cont'd)

ms6-158	MM32	FR	F	UNK
ms6-158	MM32	FR	F	BG
ms6-172	MM32	Pebble	F	BG
ms6-172	MM32	FR	F	BG
ms6-172	MM32	FL	F	BG
ms6-172	MM32	FL	F	BG
ms6-154	MM32	FR	F	NW
ms6-139	MM32	Cobble frag	F	BG
ms6-154	MM32	FL	F	BG
ms6-154	MM32	FR	F	BG
ms6-140	MM32	Core	F	BG
ms6-181	MM32	Cobble frag	F	UNKB
ms6-181	MM32	FL	F	BG
ms6-181	MM32	FL	F	BG
ms6-181	MM32	FL	F	CD
ms6-181	MM32	FL	F	CD
ms6-142	MM32	UF	F	BG
ms6-184	MM32	Natural	F	UNK
ms6-153	MM32	FCR	F	FCR
ms6-153	MM32	Natural	F	UNK
ms6-153	MM32	FL	F	CD
ms6-153	MM32	FL	F	BG
ms6-153	MM32	FL	F	CD
ms6-153	MM32	FL	F	BG
ms6-184	MM32	FL	F	BG
ms6-184	MM32	FL	F	BG
ms6-184	MM32	FL	F	BG
ms6-184	MM32	FL	F	BG
ms6-184	MM32	Cobble frag	F	BG
ms6-184	MM32	FR	F	BG
ms6-184	MM32	FL	F	BG
ms6-184	MM32	FL	F	UNKB
ms6-184	MM32	FL	F	NW
ms6-184	MM32	FL	F	NW
ms6-184	MM32	FL	F	NW
ms6-163	MM32	FL	F	UNK
ms6-177	MM32	FL	F	BP
ms6-192	MM32	FL	F	BG
ms6-192	MM32	FL	F	CD
ms6-192	MM32	FL	F	BG
ms6-192	MM32	Pebble	F	UNK
ms6-192	MM32	FL	F	Quartzite
ms6-192	MM32	FR	F	BG
ms6-195	MM32	Cobble frag	F	BG
ms6-201	MM32	Cobble frag	F	BG

Table 20 (cont'd)

ms6-201	MM32	Cobble frag	F	BG
ms6-201	MM32	FL	F	NW
ms6-201	MM32	FL	F	NW
ms6-167 A	MM32	FL	F	BG
ms6-206	MM32	Core	F	BG
ms6-206	MM32	UF	F	UNKB
ms6-207	MM32	FL	F	BG
ms6-185?	MM32	UF	F	BG
ms6-147	MM32	UF	F	BG
ms6-146	MM32	Core	F	BG
ms6-206	MM32	Pebble	F	BG
ms6-193	MM32	FL	F	BG
ms6-164	MM32	FL	F	BG
ms6-164	MM32	Natural	F	Natural
ms6-164	MM32	Natural	F	Natural
ms6-185	MM32	FL	F	BG
ms6-185	MM32	FL	F	UNKB
ms6-139	MM32	UF	F	BG
ms6-142	MM32	UF	F	BG
ms6-184	MM32	Core	F	BP
ms6-195	MM32	cobble	F	Natural
ms6-169	MM32	FR	F	BP
ms6-189	MM32	FL	F	BG
ms6-161	MM32	FL	F	BG
ms6-161	MM32	FL	F	BG
ms6-161	MM32	FL	F	BG
ms6 unprovenienced 1970s	MM32	FR	F	BG
ms6 unprovenienced 1970s	MM32	Natural	F	Natural
ms6-187	MM32	FL	F	UNKB
ms6-154	MM32	UF	F	BP
ms6-154	MM32	GF	W	BG
ms6-111	MM32	FL	W	BG
ms6-153	MM32	FL	F	BP
ms6-153	MM32	Core	F	BG
ms6-202	MM32	Core	F	BG
ms6-189	MM32	FL	F	BG
ms6-195	MM32	RF	F	BG
ms6-175	MM32	RF	F	BZW
ms6-154	MM32	Cobble frag	F	UNKB
ms6-187	MM32	FL	F	Quartzite
ms6-203	MM32	FL	F	BG
ms6-203	MM32	FL	F	UNKB
ms6 - 203	MM32	FL	F	BG
ms6-112	MM32	FL	F	UNKB
ms6-112	MM32	FL	F	UNKB

Table 20 (cont'd)

ms6-112	MM32	FL	F	UNKB
ms6-174	MM32	FL	F	NW
ms6-174	MM32	FL	F	NW
ms6-174	MM32	FL	F	BG
ms6-174	MM32	FR	F	BG
ms6-174	MM32	FL	F	Quartzite
ms6-174	MM32	FL	F	BG
ms6-174	MM32	FL	F	BG
ms6-174	MM32	FL	F	BG
ms6-174	MM32	FL	F	BG
ms6-174	MM32	FL	F	BG
ms6-140	MM32	FL	F	BP
ms6-140	MM32	FL	F	BG
ms6-140	MM32	FR	F	BG
ms6-140	MM32	FL	F	BG
ms6-140	MM32	Cobble frag	F	UNKB
ms6-135	MM32	UF	F	NW
ms6-156	MM32	FL	F	Slate
ms6-156	MM32	FR	F	CD
ms6-156	MM32	Core	F	CD
ms6-156	MM32	FL	F	CD
ms6-156	MM32	FL	F	CD
ms6-156	MM32	FL	F	CD
ms6-156	MM32	FR	F	CD
ms6-156	MM32	FR	F	CD
ms6-156	MM32	FR	F	CD
ms6-190	MM32	FL	F	CD
ms6-154	MM32	Natural	F	Natural
ms6-159	MM32	GS	F	Groundstone
ms6-121	MM32	GF	F	DUTCH
ms6-146	MM32	Cobble frag	F	BG
ms6-120	MM32	RF	F	BP
ms6-190	MM32	BF	F	BG
ms6-146	MM32	FL	F	BG
ms6-146	MM32	Core	F	BG
ms6-147	MM32	Cobble frag	F	BG
ms6-147	MM32	Cobble frag	F	BG
ms6-147	MM32	Core	F	BG
ms6-195	MM32	FL	F	BG
ms6-166	MM32	FR	F	BG
ms6-207	MM32	FL	F	BG
ms6-207	MM32	FL	F	BG
ms6-207	MM32	FL	F	BG
ms6-190	MM32	FL	F	BG
ms6-154	MM32	FL	F	UNK

APPENDIX C

Ceramic Type Descriptions

For a full series of Iroquoian ceramic type descriptions, the reader is directed back to the primary typologies available (MacNeish 1952; Wright 1968; Garrad 2014). This appendix gives brief descriptions of some of the major ceramic types relevant to the current analysis, but is incomplete.

Sidey Notched

Sidey Notched Ceramics have a notched lip and usually have oblique or vertical incising on the short, outflaring collar (MacNeish 1952:33). A variety of decorative motifs may be found under the castellations. The neck of a Sidey Notched pot is undecorated, though the body of the pot may have decoration. This type is present in northern Ontario through late prehistory and the early historic period, with it's percentage of total sample increasing as time goes on.

Huron-Incised

Huron-Incised Pottery is very similar in design to Sidey Notched, with the exception that the lip is smooth rather than notched (MacNeish 1952:34). The same verticle and oblique incising is present on the collar, and the only other decoration is sometimes Decorations below castellations are again quite variable. on the shoulder.

Genoa Frilled

The distinctive characteristic of a Genoa Frilled Pot is the frilling of the collar (MacNeish 1952:50). At the base of the collar, the clay has been shaped to flare out into a waving frilled shape, which is not seen on any other Iroquoian ceramics. Aside from this frilling , the rest of the pot is often undecorated.

Blue Mountain Punctate

Blue Mountain Punctate is found throughout the region but is distinctly different from Iroquoian pottery, leading to much debate about who is making it. Unlike Iroquoian pots, Blue Mountain Punctate has strap handles and no castellations. The pots have a thick and distinct rim but no collar. Punctates are impressed onto the outer thickened face of the rim, with oblique incising just below it (Garrad 2014:275). One possibility for this material is that it is coming up to Wendat areas from the south, through the Neutral or Susquehannock.

Applique Strip

Applique strip ceramics, like Blue Mountain Punctate, show more similarity to materials from the area around Detroit and Toledo than they do to Southern Ontario. Again, this ceramic has no collar or castellations, however it does have an applique strip of ceramic added to the neck (Garrad 2014:275). This is similar to

the Danner Ware of the Illinois, and the materials that Stothers found in late prehistory on sites around Toledo (Stothers 1980).

MacMurchy Scalloped

MacMurchy Scalloped ceramics have an undulating lip on them (Garrad 2014:279). This is distinct from other Iroquoian ceramics, though early on MacNeish thought they were variants of Huron Incised pots, with the crenulations being unusual castellations. Like Huron Incised potter, the collar has verticle or oblique incising on it.

APPENDIX D

Ceramic Data Tables

ID_Number	Collection	Temper	Rim_Shape_Num	Rim_Des_Motif	Rim_Des_Elem
C4136.3	MADIS	G	70	PLAIN	PLAIN
C4125	MADIS	G_M	6	PLAIN	PLAIN
C4132	MADIS	S	73	0.2	0.2
C4128	MADIS	G_M	24	HOR	INCIS
C4131	MADIS	S	0.1	0.2	0.2
C4196	MADIS	G_M	55	PLAIN	PLAIN
C4129	MADIS	G	26	VERT	INCIS
C1337	MADIS	S	43	PLAIN	PLAIN
C1324	MADIS	S	0.2	PLAIN	PLAIN
C1495	MADIS	G	0.2	HOR	PUNC
C1493	MADIS	G	0.2	PLAIN	PLAIN
C1355	MADIS	G	0.2	PLAIN	PLAIN
C1215.3	MADIS	G	0.2	PLAIN	PLAIN
C1245	MADIS	G	0.1	PLAIN	PLAIN
C4289	MADIS	S	0.1	PLAIN	PLAIN
C4292	MADIS	S	70	0.1	0.1
C4796	MADIS	S	0.2	0.2	0.2
C4220	MADIS	G	0.2	PLAIN	PLAIN
C4368	MADIS	G	0.2	PLAIN	PLAIN
C4245	MADIS	G	0.2	PLAIN	PLAIN
C3437	MADIS	G	0.2	ZONE_SQ	PUSH_PULL
C4204	MADIS	G	0.2	VERT	INCIS
C4281	MADIS	G_M	0.2	HOR	PUNC
C3615	MADIS	S	0.1	HOR	INCIS
C2857	MADIS	G	0.2	PLAIN	PLAIN
C2189	MADIS	G	0.2	VERT	INCIS
C366	MADIS	G_M	0.2	PLAIN	PLAIN
C2473	MADIS	S	59	PLAIN	PLAIN
C2068	MADIS	G_M	0.1	PLAIN	PLAIN
C2xx1	MADIS	S	0.1	PLAIN	PLAIN
C2870	MADIS	0.1	0.1	VERT	INCIS
C2565	MADIS	S	0.1	OBLI	INCIS
C2871	MADIS	G	0.1	PLAIN	PLAIN
C2858	MADIS	G	44	VERT	INCIS
C2825	MADIS	G	0.1	0.1	0.1
C2031	MADIS	G	0.1	PLAIN	PLAIN
0.1	MADEL	G	0.2	PLAIN	PLAIN
0.1	MADEL	G	0.2	HOR	NOTCH
0.1	MADEL	G	0.2	PLAIN	PLAIN
0.1	MADEL	G	0.2	PLAIN	PLAIN
0.1	MADEL	G_M	0.2	OBLI	BRUSH
0.1	MADEL	G_M	0.2	HOR	INCIS
0.1	MADEL	G	0.2	OBLI	INCIS

Table 21. Cadotte Site Rim Sherd Attribute Data.

Table 21 (cont'd)

0.1	MADEL	S	0.2	HOR	INCIS
0.1	MADEL	G_M	0.2	PLAIN	PLAIN
0.1	MADEL	G	0.2	PLAIN	PLAIN
0.1	MADEL	G_M	0.2	PLAIN	PLAIN
0.1	MADEL	0.2	0.2	PLAIN	PLAIN
0.1	MADEL	0.2	0.2	PLAIN	PLAIN
0.1	MADEL	G	0.2	0.2	0.2
0.1	MADEL	G	0.2	0.2	0.2
0.1	MADEL	G	0.2	0.2	0.2
0.1	MADEL	G	0.2	0.2	0.2
0.1	MADEL	G	0.2	0.2	0.2
0.1	MADEL	G	0.2	0.2	0.2
0.1	MADEL	G	0.2	VERT	INCIS
0.1	MADEL	G	0.2	PLAIN	PLAIN
0.1	MADEL	0.1	0.2	OBLI	INCIS
0.1	MADEL	G	0.2	OBLI	INCIS
0.1	MADEL	G	0.2	OBLI	INCIS
0.1	MADEL	G	0.2	OBLI	INCIS
0.1	MADEL	G	0.2	VERT	INCIS_PLAIN

Table 21 (cont'd)

ID_Number	Handle_Present	Handle_Des_Motif	Handle_Des_Element
C4136.3	A	0.2	0.2
C4125	A	0.2	0.2
C4132	A	0.2	0.2
C4128	A	0.2	0.2
C4131	A	0.2	0.2
C4196	A	0.2	0.2
C4129	A	0.2	0.2
C1337	P	VERT	INCIS
C1324	P	HOR	PUNC
C1495	A	0.2	0.2
C1493	A	0.2	0.2
C1355	A	0.2	0.2
C1215.3	A	0.2	0.2
C1245	A	0.2	0.2
C4289	P	VERT	PUNC
C4292	0.1	0.1	0.1
C4796	A	0.2	0.2
C4220	A	0.2	0.2
C4368	A	0.2	0.2
C4245	P	PLAIN	PLAIN
C3437	A	0.2	0.2
C4204	A	0.2	0.2
C4281	A	0.2	0.2
C3615	A	0.2	0.2
C2857	A	0.2	0.2
C2189	A	0.2	0.2
C366	A	0.2	0.2
C2473	A	0.2	0.2
C2068	A	0.2	0.2
C2xx1	A	0.2	0.2
C2870	A	0.2	0.2
C2565	A	0.2	0.2
C2871	A	0.2	0.2
C2858	A	0.2	0.2
C2825	A	0.2	0.2
C2031	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2

Table 21 (cont'd)

0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	P	PLAIN	PLAIN
0.1	P	VERT	NOTCH
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2
0.1	A	0.2	0.2

Table 21 (cont'd)

ID_Number	Castel_Present	Castel_Des_Motif	Castel_Des_Element	Castel_Shape
C4136.3	A	0.2	0.2	0.2
C4125	P	0.1	0.1	0.1
C4132	P	VERT	INCIS	0.1
C4128	P	HOR	INCIS	RO
C4131	P	VERT	INCIS	RO
C4196	A	0.2	0.2	0.2
C4129	A	0.2	0.2	0.2
C1337	A	0.2	0.2	0.2
C1324	A	0.2	0.2	0.2
C1495	A	0.2	0.2	0.2
C1493	A	0.2	0.2	0.2
C1355	A	0.2	0.2	0.2
C1215.3	A	0.2	0.2	0.2
C1245	P	PLAIN	PLAIN	RO
C4289	A	0.2	0.2	0.2
C4292	A	0.2	0.2	0.2
C4796	P	PLAIN	PLAIN	0.1
C4220	A	0.2	0.2	0.2
C4368	A	0.2	0.2	0.2
C4245	A	0.2	0.2	0.2
C3437	A	0.2	0.2	0.2
C4204	A	0.2	0.2	0.2
C4281	A	0.2	0.2	0.2
C3615	A	0.2	0.2	0.2
C2857	A	0.2	0.2	0.2
C2189	A	0.2	0.2	0.2
C366	A	0.2	0.2	0.2
C2473	A	0.2	0.2	0.2
C2068	A	0.2	0.2	0.2
C2xx1	A	0.2	0.2	0.2
C2870	A	0.2	0.2	0.2
C2565	A	0.2	0.2	0.2
C2871	A	0.2	0.2	0.2
C2858	A	0.2	0.2	0.2
C2825	A	0.2	0.2	0.2
C2031	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	P	PLAIN	PLAIN	BI
0.1	A	0.2	0.2	0.2
0.1	P	0.1	0.1	0.1

Table 21 (cont'd)

0.1	A	0.2	0.2	0.2
0.1	P	VERT	INCIS	RO
0.1	A	0.2	0.2	0.2
0.1	P	VERT	INCIS	RO
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	P	HOR	INCIS	RO
0.1	P	VERT	PUNC_INCIS	RO
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2
0.1	A	0.2	0.2	0.2

Table 21 (cont'd)

ID_Number	Neck_Des_Motif	Neck_Des_Element	Body_Des_Motif	Body_Des_Element
C4136.3	HOR	DASH	HOR	PUNC_INCIS
C4125	PLAIN	PLAIN	TRI	INCIS
C4132	PLAIN	PLAIN	0.2	0.2
C4128	PLAIN	PLAIN	HOR_OBLI	INCIS
C4131	0.2	0.2	0.2	0.2
C4196	PLAIN	PLAIN	0.2	0.2
C4129	PLAIN	PLAIN	0.2	0.2
C1337	0.2	0.2	0.2	0.2
C1324	0.2	0.2	0.2	0.2
C1495	0.1	0.1	0.2	0.2
C1493	0.2	0.2	0.1	0.1
C1355	0.2	0.2	0.1	0.1
C1215.3	PLAIN	PLAIN	0.2	0.2
C1245	0.2	0.2	0.2	0.2
C4289	0.2	0.2	0.2	0.2
C4292	PLAIN	PLAIN	0.1	0.1
C4796	PLAIN	PLAIN	0.1	0.1
C4220	0.2	0.2	0.1	0.1
C4368	0.2	0.2	0.1	0.1
C4245	0.2	0.2	0.1	0.1
C3437	0.2	0.2	0.1	0.1
C4204	ZONE_SQ	PUSH_PULL	0.1	0.1
C4281	0.2	0.2	0.1	0.1
C3615	0.2	0.2	OBLI	INCIS
C2857	HOR	INCIS	0.2	0.2
C2189	0.1	0.1	0.1	0.1
C366	VERT	INCIS	0.1	0.1
C2473	0.1	0.1	0.1	0.1
C2068	PLAIN	PLAIN	0.1	0.1
C2xx1	ALL	CORD	0.1	0.1
C2870	VERT	INCIS	0.1	0.1
C2565	OBLI	INCIS	0.1	0.1
C2871	0.2	0.2	0.1	0.1
C2858	0.1	0.1	0.1	0.1
C2825	0.1	0.1	0.1	0.1
C2031	0.1	0.1	0.1	0.1
0.1	PLAIN	PLAIN	ALL	STAMP_CORD
0.1	PLAIN	PLAIN	PLAIN	PLAIN
0.1	OBLI	BRUSH	OBLI	BRUSHED
0.1	PLAIN	PLAIN	0.1	0.1
0.1	HOR	NOTCH	OBLI	INCIS
0.1	PLAIN	PLAIN	0.1	0.1

Table 21 (cont'd)

0.1	PLAIN	PLAIN	VAR	INCIS
0.1	PLAIN	PLAIN	VAR	INCIS
0.1	PLAIN	PLAIN	PLAIN	PLAIN
0.1	PLAIN	PLAIN	OBL	INCIS
0.1	OBLI	NOTCH	0.1	0.1
0.1	PLAIN	PLAIN	0.2	0.2
0.1	OBLI	NOTCH	0.2	0.2
0.1	0.1	0.1	0.2	0.2
0.1	0.1	0.1	0.2	0.2
0.1	0.1	0.1	0.2	0.2
0.1	0.1	0.1	0.2	0.2
0.1	0.1	0.1	0.2	0.2
0.1	0.1	0.1	0.2	0.2
0.1	ZONE_TRI	PUNC_INCIS	VERT	INCIS
0.1	PLAIN	PLAIN	VERT	INCIS
0.1	PLAIN	PLAIN	0.1	0.1
0.1	PLAIN	PLAIN	ALL	STAMP
0.1	PLAIN	PLAIN	0.1	0.1
0.1	PLAIN	PLAIN	0.1	0.1
0.1	PLAIN	PLAIN	0.1	0.1

Table 21 (cont'd)

ID_Number	Design_Number	Lip_Des_Motif	Lip_Des_Element
C4136.3	0.2	PLAIN	PLAIN
C4125	0.2	PLAIN	PLAIN
C4132	0.2	0.2	0.2
C4128	0.2	PLAIN	PLAIN
C4131	0.2	0.2	0.2
C4196	0.2	PLAIN	PLAIN
C4129	20	VERT	INCIS
C1337	222	OBLI	INCIS
C1324	0.2	PLAIN	PLAIN
C1495	0.2	HOR	PUNC
C1493	0.2	PLAIN	PLAIN
C1355	0.2	PLAIN	PLAIN
C1215.3	0.2	PLAIN	PLAIN
C1245	223	VERT	INCIS
C4289	0.2	VERT	PUNC
C4292	0.2	0.1	0.1
C4796	0.2	0.2	0.2
C4220	0.2	PLAIN	PLAIN
C4368	0.2	PLAIN	PLAIN
C4245	0.2	PLAIN	PLAIN
C3437	0.2	PLAIN	PLAIN
C4204	19	PLAIN	PLAIN
C4281	0.2	VERT	INCIS
C3615	0.2	PLAIN	PLAIN
C2857	0.2	PLAIN	PLAIN
C2189	20	PLAIN	PLAIN
C366	0.2	HOR	INCIS
C2473	0.2	PLAIN	PLAIN
C2068	0.2	PLAIN	PLAIN
C2xx1	0.2	0.1	STAMP
C2870	20	PLAIN	PLAIN
C2565	0.2	PLAIN	PLAIN
C2871	0.2	PLAIN	PLAIN
C2858	20	PLAIN	PLAIN
C2825	0.2	0.1	0.1
C2031	0.2	PLAIN	PLAIN
0.1	0.2	ALT_OBLI	INCIS
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	0.1	0.1

Table 21 (cont'd)

0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	0.2	0.2
0.1	0.2	0.2	0.2
0.1	0.2	0.2	0.2
0.1	0.2	0.2	0.2
0.1	0.2	0.2	0.2
0.1	0.2	0.2	0.2
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN
0.1	0.2	PLAIN	PLAIN

ID_Number	Collection	Temper	Rim__ Num	Rim_Des_ Motif	Rim_Des_ Element
MS6-108	20MK82	G	73	0.2	0.2
unlabeled	20MK82/ MS6	G	45	HOR	NOTCH
MS6-164	20MK82	G	109	plain	plain
MS6-108	20MK82	G	65	0.2	0.2
MS6-108	20mk82	G	12	0.2	0.2
5810.019.02.02	20MK82	G	12	plain	plain
5810.021.01	20MK82	G	48	HOR	NOTCH
5810.006.01	20MK82	G	10	WHOLE	CORD_IMP
5810.163.91.03-7	20mk82	G	125	0.2	0.2
5810.167.91.02-25	20MK82	G	unk	plain	plain
5810.167.91.02-18	20mk82	G	n/a	0.1	0.1
5810.2.294.02-6	20mk82	G	80	0.2	0.2
5810.2.294.02-6	20mk82	G	unk/ damaged	HOR	NOTCH
5810.2.292.01-7	20mk82	G	109	0.2	0.2
5810.2.216.01.03	20mk82	G	115	plain	plain
5810.2.203.01.01	20mk82	G	57	0.1	0.1
5810.2.201.01	20mk82	S	65	plain	plain
5810.2.158.03.01.17	20mk82	G	67	plain	plain
5810.2.185.01	20mk82	G	58	OBL	INCIS_NOTCH
5810.2.190.01	20mk82	G	72	plain	plain
5810.086.02.02.02	20mk82	G	exfoliated	0.1	0.1

Table 22. St. Ignace Rim Sherd Attribute Data.

Table 22 (cont'd)

ID_Number	Castel_Present	Castel_Des_Motif	Castel_Des_Element	Castel_Shape
MS6-108	A	0.2	0.2	0.2
unlabeled	A	0.2	0.2	0.2
MS6-164	A	0.2	0.2	0.2
MS6-108	A	0.2	0.2	0.2
MS6-108	A	0.2	0.2	0.2
5810.019.02.02	A	0.2	0.2	0.2
5810.021.01	A	0.2	0.2	0.2
5810.006.01	P	PLAIN	PLAIN	RO
5810.163.91.03-7	A	0.2	0.2	0.2
5810.167.91.02-25	A	0.2	0.2	0.2
5810.167.91.02-18	P	PLAIN	PLAIN	BI
5810.2.294.02-6	A	0.2	0.2	0.2
5810.2.294.02-6	A	0.2	0.2	0.2
5810.2.292.01-7	A	0.2	0.2	0.2
5810.2.216.01.03	A	0.2	0.2	0.2
5810.2.203.01.01	A	0.2	0.2	0.2
5810.2.201.01	A	0.2	0.2	0.2
5810.2.158.03.01.17	A	0.2	0.2	0.2
5810.2.185.01	A	0.2	0.2	0.2
5810.2.190.01	A	0.2	0.2	0.2
5810.086.02.02.02	A	0.2	0.2	0.2

Table 22 (cont'd)

ID_Number	Neck_Des_Motif	Neck_Des_Element	Lip_Des_ Motif	Lip_Des_ Element
MS6-108	plain	PLAIN	OBL	INCIS
unlabeled	0.1	0.1		
MS6-164	OBL	INCIS		
MS6-108	HOR	FING_IMP	OBL	INCIS
MS6-108	plain	PLAIN	OBL	INCIS
5810.019.02.02	plain	PLAIN		
5810.021.01	HOR	INCIS		
5810.006.01	0.1	0.1		
5810.163.91.03-7	0.1	0.1	OBL	INCIS
5810.167.91.02-25	plain	PLAIN		
5810.167.91.02-18	0.1	0.1		
5810.2.294.02-6	0.2	0.2	OBL	INCIS
5810.2.294.02-6	0.2	0.2		
5810.2.292.01-7	PLAIN	PLAIN	WHOLE	FING_PINCH
5810.2.216.01.03	HOR	INCIS		
5810.2.203.01.01	0.1	0.1		
5810.2.201.01	HOR	FING_PINCH		
5810.2.158.03.01.17	WHOLE	CORD_IMP		
5810.2.185.01	0.2	0.2		
5810.2.190.01	APPLIQUE	NOTCH		
5810.086.02.02.02	HOR	NOTCH	HOR	NOTCH

Table 22 (cont'd)

ID_Number	2ND_NECK DES_ ELEM	2ND_NECK DES_ MOTIF	3RD_NECK ELEM	3RD_NECK MOTIF	TYPE
MS6-108					LI
unlabeled					
MS6-164					
MS6-108					
MS6-108					LI
5810.019.02.02					
5810.021.01	ALT_OBL	INCIS	VERT	INCIS	
5810.006.01					
5810.163.91.03-7					RC
5810.167.91.02-25					
5810.167.91.02-18					
5810.2.294.02-6					
5810.2.294.02-6					
5810.2.292.01-7					
5810.2.216.01.03					
5810.2.203.01.01					
5810.2.201.01	VERT	INCIS			
5810.2.158.03.01.17					
5810.2.185.01					
5810.2.190.01					
5810.086.02.02.02					

APPENDIX E

St. Ignace Pipe Attribute Data

ID Numb	Material	Frag Type	Bowl Shape	Bowl_Des Motif	Bowl_Des Element	Bowl_Incis _Total
5810.169.02.	CL	B		HOR	P_I_P	
5810.2.303.01	CL	0.1		HOR	INCIS	6
5810.2.303.01-5	CL	S		0.1	0.1	
5810.2.303.01	CL	S		0.1	0.1	
5810.2.264.05	CL	S				
5810.2.040.01.04	CL	0.1				
5810.2.237.01	CL	S		0.1	0.1	
5810.2.232.01	CL	B		HOR	INCIS	14
5810.2.229.01	CL	B	SQ	PLAIN	PLAIN	
5810.2.228.01	CL	S				
5810.2.222.01.02	CL	0.1				
5810.2.222.01.02	CL	B		HOR	INCIS	5
5810.2.221.01.04	CL	S				
5810.2.217.01	CL	S				
5810.2.217.01	CL	S				
5810.2.216.01.03	CL	B		HOR	INCIS	6
5810.2.216.01.03	STONE_R	S				
5810.2.215.01.02	CL	B		HOR	INCIS	5
5810.2.213.01	CL	0.1		PLAIN	PLAIN	
5810.2.207.01	STONE_SAND	B	CAS			
5810.2.207.01	CL	B	EFF	EFF	HUMAN	
5810.2.206.01.03	CL	S				
5810.2.205.01.05	STONE_B	S				
5810.2.200.01	CL	S				
5810.2.195.01	CL	0.1		HOR	INCIS	11
5810.2.193.01	CL	S				
5810.2.192.01	CL	0.1				
5810.2.191.01	CL	B		HOR	INCIS	11
5810.2.184.01	CL	S				
5810.2.184.01	CL	S				
5810.2.184.01	STONE_B	0.1		HOR	PUNC	
5810.2.184.01.01	CL	S				
5810.2.181.01	STONE_R	S				
5810.2.176.01	CL	W	OUTFLARE	PLAIN	PLAIN	
5810.2.176.01	CL	S				
5810.2.176.01	CL	S				

Table 23. St Ignace Pipe Attribute Data.

Table 23 (cont'd)

5810.2.174.01	CL	0.1				
5810.2.174.01	CL	S				
5810.2.172.01	CL	B		HOR	INCIS	4
5810.2.168.01	STONE_SAND	0.1	MICMAC			
5810.2.166.01	CL	S				
5810.2.166.01.05	CL	S				
5810.2.166.01.05	CL	S				
5810.2.166.01.05	CL	0.1				
5810.2.161.02	CL	S				
5810.2.161.02	CL	S	OUTFLARE	TRI	INCIS	
5810.2.161.02	CL	S				
5810.2.157.01	CL	B		HOR	P_I	
5810.2.157.01	STONE_R	B		0.1	0.1	
5810.2.154.01.01	CL	0.1		0.1	0.1	
5810.2.152.02	CL	B	OUTFLARE	PLAIN	PLAIN	
5810.2.152.04	CL	0.1		HOR	I_P	4
5810.2.125.03.01	CL	S				
ms638	CL	S				
5810.2.259.05	CL	S				
ms638	CL	S				
5810.130.03.01	CL	B		HOR	INCIS	2
unk, non feature found in 1986	CL	B	EFF	EFF	HUMAN	
5810.153.01.02	CL	S				
5810.162.02.03	CL	S				
either ms6677 or ms6140, 1970s	CL	S				
5810.033.01.02	CL	S				
5810.030.01.04	CL	S				
5810.033.01.03	STONE_R	S				
5810.055.01.04	STONE_R	S				
5810.007.04	STONE_B	B				
5810.010.01	STONE_G	0.1	MICMAC			
5810.025.01	CL	S				

Table 23 (cont'd)

5810.016.01	STONE_L	0.1				
5810.013.01	CL	S				
5810.012.02	STONE_B	0.1	COLLARED			
5810.020.02.01	STONE_B	S				
5810.020.02.01	CL	S				
5810.010.02.04	CL	S				
5810.007.03	STONE_R	S				
5810.004.01	STONE_R	0.1				
5810.015.01	CL	S				
5810.015.02.02	CL	0.1				
5810.006.07	STONE_R	0.1				
5810.008.08	CL	0.1				
5810.023.01	CL	0.1				
5810.169.91.04	CL	S				
5810.169.91.02	STONE_R	S				
5810.163.91.02	CL	B		HOR	INCIS	4
5810.165.01.2.05	CL	B		HOR	INCIS	7
5810.163.91.03	CL	S				
5810.163.91.03	CL	B		PLAIN	PLAIN	
5810.163.91.03-4	CL	S				
5810.171.91.04	CL	S				
5810.171.02.04.4	CL	B		HOR	I_P	
5810.171.02.04.37	CL	S				
5810.163.91.03	CL	S				
5810.163.91.03-52	CL	S				
5810.163.91.02	CL	S				
5810.163.91.01	CL	S				
5810.169.01-c.04	CL	S				
5810.128.04.01	CL	S				
5810.122.05.03	CL	S				
5810.125.03.04-20	CL	S				
5810.132.04.02-21	CL	S				
5810.122.02	CL	S				
5810.132.04.03	CL	S				
5810.126.04.01	CL	S				
5810.126.04.01	CL	S				

Table 23 (cont'd)

5810.121.03.02-8	CL	S				
5810.122.04.02	CL	B		HOR	INCIS	3
5810.122.04.03	STONE_B	S				
5810.122.04.03	CL	S				
5810.127.04.04	CL	S				
5810.121.03	CL	B		HOR	INCIS	2
5810.121.04.02-5	CL	B		HOR	INCIS	2
5810.127.02-4	CL	0.1		PLAIN	PLAIN	
5810.28.03.01	CL	B	OUTFLARE	HOR	P_I_P	
5810.142.02	CL	B		HOR	I_P	2
5810.02.04.01	CL	B	OUTFLARE	HOR	P_I_P	
5810.124.03.04	CL	S				
5810.133.01	CL	S				
5810.143.04.03	CL	S				
5810.137.03	CL	S				
5810.139.02.02-1	CL	S				
5810.125.03.03-4	CL	S	CAS			
5810.063.01.04	CL	B		HOR	INCIS	7
5810.075.01.01	CL	S				
5810.080.01.02	CL	B		HOR	INCIS	2
5810.078.02.04-16	CL	S				
5810.070.01.04	CL	S				
5810.074.01.01	CL	S				
5810.079.01.04	CL	S				
5810.068.01.01	STONE_B	0.1				
5810.068.01.03	CL	0.1				
5810.063.01.01	CL	S				
5810.061.02.01	CL	S				
5810.225.01	CL	0.1				

Table 23 (cont'd)

ID Numb	Stem_Des Element	Stem_Des Motif	Stem Incis	Castel Des_Motif	Castel_Des Element	Castel Shape
5810.169.02.						
5810.2.303.01						
5810.2.303.01-5						
5810.2.303.01						
5810.2.264.05	HOR	INCIS	0.1			
5810.2.040.01.04	HOR	INCIS	8			
5810.2.237.01	PLAIN	PLAIN				
5810.2.232.01						
5810.2.229.01						
5810.2.228.01	PLAIN	PLAIN				
5810.2.222.01.02	PLAIN	PLAIN				
5810.2.222.01.02						
5810.2.221.01.04	PLAIN	PLAIN				
5810.2.217.01	PLAIN	PLAIN				
5810.2.217.01	PLAIN	PLAIN				
5810.2.216.01.03						
5810.2.216.01.03	PLAIN	PLAIN				
5810.2.215.01.02						
5810.2.213.01						
5810.2.207.01				PLAIN	PLAIN	0.1
5810.2.207.01						
5810.2.206.01.03	PLAIN	PLAIN				
5810.2.205.01.05	PLAIN	PLAIN				
5810.2.200.01	PLAIN	PLAIN				
5810.2.195.01						
5810.2.193.01	HOR	INCIS	5			
5810.2.192.01	HOR	INCIS				
5810.2.191.01						
5810.2.184.01	0.1	0.1				
5810.2.184.01	0.1	0.1				
5810.2.184.01						
5810.2.184.01.01	0.1	0.1				
5810.2.181.01	0.1	0.1				
5810.2.176.01						
5810.2.176.01	0.1	0.1				
5810.2.176.01	WAVE	PAINT				
5810.2.174.01	0.1	0.1				
5810.2.174.01	0.1	0.1				
5810.2.172.01						
5810.2.168.01						
5810.2.166.01	0.1	0.1				

Table 23 (cont'd)

5810.2.166.01.05	0.1	0.1				
5810.2.166.01.05	0.1	0.1				
5810.2.166.01.05	HOR	INCIS	5			
5810.2.161.02	0.1	0.1				
5810.2.161.02	0.1	0.1				
5810.2.161.02	0.1	0.1				
5810.2.157.01						
5810.2.157.01						
5810.2.154.01.01						
5810.2.152.02						
5810.2.152.04						
5810.2.125.03.01	0.1	0.1				
ms638	0.1	0.1				
5810.2.259.05	0.1	0.1				
ms638	0.1	0.1				
5810.130.03.01						
unk, non feature found in 1986						
5810.153.01.02	0.1	0.1				
5810.162.02.03	0.1	0.1				
either ms6677 or ms6140, 1970s	OBL_HOR	INCIS_INCIS				
5810.033.01.02	0.1	0.1				
5810.030.01.04	0.1	0.1				
5810.033.01.03	0.1	0.1				
5810.055.01.04	0.1	0.1				
5810.007.04	0.1	0.1				
5810.010.01						
5810.025.01	0.1	0.1				
5810.016.01	0.1	0.1				
5810.013.01	0.1	0.1				
5810.012.02						
5810.020.02.01	0.1	0.1				
5810.020.02.01	0.1	0.1				
5810.010.02.04	0.1	0.1				
5810.007.03	ALT_OBL	INCIS				
5810.004.01	0.1	0.1				
5810.015.01	0.1	0.1				
5810.015.02.02	0.1	0.1				
5810.006.07	HOR	INCIS				
5810.008.08	0.1	0.1				
5810.023.01	0.1	0.1				
5810.169.91.04	0.1	0.1				

Table 23 (cont'd)

5810.169.91.02	0.1	0.1				
5810.163.91.02						
5810.165.01.2.05						
5810.163.91.03	PLAIN	PLAIN				
5810.163.91.03						
5810.163.91.03-4	PLAIN	PLAIN				
5810.171.91.04	PLAIN	PLAIN				
5810.171.02.04.4						
5810.171.02.04.37	PLAIN	PLAIN				
5810.163.91.03	PLAIN	PLAIN				
5810.163.91.03-52	0.1	0.1				
5810.163.91.02	PLAIN	PLAIN				
5810.163.91.01	PLAIN	PLAIN				
5810.169.01-c.04	PLAIN	PLAIN				
5810.128.04.01	PLAIN	PLAIN				
5810.122.05.03	PLAIN	PLAIN				
5810.125.03.04-20	PLAIN	PLAIN				
5810.132.04.02-21	PLAIN	PLAIN				
5810.122.02	PLAIN	PLAIN				
5810.132.04.03	PLAIN	PLAIN				
5810.126.04.01	PLAIN	PLAIN				
5810.126.04.01	PLAIN	PLAIN				
5810.121.03.02-8	PLAIN	PLAIN				
5810.122.04.02						
5810.122.04.03	PLAIN	PLAIN				
5810.122.04.03	PLAIN	PLAIN				
5810.127.04.04	PLAIN	PLAIN				
5810.121.03						
5810.121.04.02-5						
5810.127.02-4						
5810.28.03.01						
5810.142.02						
5810.02.04.01						
5810.124.03.04	PLAIN	PLAIN				
5810.133.01	PLAIN	PLAIN				
5810.143.04.03	PLAIN	PLAIN				
5810.137.03	PLAIN	PLAIN				
5810.139.02.02-1	PLAIN	PLAIN				
5810.125.03.03-4	PLAIN	PLAIN				
5810.063.01.04						
5810.075.01.01	PLAIN	PLAIN				
5810.080.01.02						
5810.078.02.04-16	PLAIN	PLAIN				

Table 23 (cont'd)

5810.070.01.04	PLAIN	PLAIN				
5810.074.01.01	PLAIN	PLAIN				
5810.079.01.04	PLAIN	PLAIN				
5810.068.01.01	PLAIN	PLAIN				
5810.068.01.03	PLAIN	PLAIN				
5810.063.01.01	PLAIN	PLAIN				
5810.061.02.01	PLAIN	PLAIN				
5810.225.01	PLAIN	PLAIN				

Table 23 (cont'd)

ID Numb	Lip Des Motif	Lip_Des Element	SECONDARY DES_MOTIF	SECONDARY DES_ELEMENT
5810.169.02.			AO_H_AO	0.1
5810.2.303.01				
5810.2.303.01-5				
5810.2.303.01				
5810.2.264.05				
5810.2.040.01.04				
5810.2.237.01				
5810.2.232.01				
5810.2.229.01				
5810.2.228.01				
5810.2.222.01.02				
5810.2.222.01.02				
5810.2.221.01.04				
5810.2.217.01				
5810.2.217.01				
5810.2.216.01.03				
5810.2.216.01.03				
5810.2.215.01.02				
5810.2.213.01				
5810.2.207.01				
5810.2.207.01				
5810.2.206.01.03				
5810.2.205.01.05				
5810.2.200.01				
5810.2.195.01				
5810.2.193.01				
5810.2.192.01				
5810.2.191.01				
5810.2.184.01				
5810.2.184.01				
5810.2.184.01				
5810.2.184.01.01				
5810.2.181.01				
5810.2.176.01				
5810.2.176.01				
5810.2.176.01				
5810.2.174.01				
5810.2.174.01				
5810.2.172.01				
5810.2.168.01				

Table 23 (cont'd)

5810.2.166.01				
5810.2.166.01.05				
5810.2.166.01.05				
5810.2.166.01.05				
5810.2.161.02				
5810.2.161.02				
5810.2.161.02				
5810.2.157.01				
5810.2.157.01				
5810.2.154.01.01				
5810.2.152.02				
5810.2.152.04				
5810.2.125.03.01				
ms638				
5810.2.259.05				
ms638				
5810.130.03.01				
unk, non feature found in1986			VERT	I_P_I
5810.153.01.02				
5810.162.02.03				
either ms6677 or ms6140, 1970s				
5810.033.01.02				
5810.030.01.04				
5810.033.01.03				
5810.055.01.04				
5810.007.04				
5810.010.01				
5810.025.01				
5810.016.01				
5810.013.01				
5810.012.02	HOR	P_I		
5810.020.02.01				
5810.020.02.01				
5810.010.02.04				
5810.007.03				
5810.004.01				
5810.015.01				
5810.015.02.02				
5810.006.07				
5810.008.08				
5810.023.01				
5810.169.91.04				

Table 23 (cont'd)

5810.169.91.02				
5810.163.91.02				
5810.165.01.2.05				
5810.163.91.03				
5810.163.91.03				
5810.163.91.03-4				
5810.171.91.04				
5810.171.02.04.4			HOR	I_P
5810.171.02.04.37				
5810.163.91.03				
5810.163.91.03-52				
5810.163.91.02				
5810.163.91.01				
5810.169.01-c.04				
5810.128.04.01				
5810.122.05.03				
5810.125.03.04-20				
5810.132.04.02-21				
5810.122.02				
5810.132.04.03				
5810.126.04.01				
5810.126.04.01				
5810.121.03.02-8				
5810.122.04.02				
5810.122.04.03				
5810.122.04.03				
5810.127.04.04				
5810.121.03			VERT	PUNC
5810.121.04.02-5				
5810.127.02-4				
5810.28.03.01				
5810.142.02				
5810.02.04.01				
5810.124.03.04				
5810.133.01				
5810.143.04.03				
5810.137.03				
5810.139.02.02-1				
5810.125.03.03-4				
5810.063.01.04				
5810.075.01.01				
5810.080.01.02				
5810.078.02.04-16				

Table 23 (cont'd)

5810.070.01.04				
5810.074.01.01				
5810.079.01.04				
5810.068.01.01				
5810.068.01.03				
5810.063.01.01				
5810.061.02.01				
5810.225.01				

APPENDIX F

St. Ignace Decorated Faunal Data

Collection	ID	Artifact	W/F	Des_Motif	Des_Element
MSU	5810.132.02	GAME_DISC	W	ALT_OBL	CR_HAT
MSU	5810. 2.265.04	GAME_DISC	W	STAR	SOLID
MSU	5810.2.242.05	GAME_DISC	W	CIRCLE	CR_HAT
MSU	5810.126.03.03	GAME_DISC	W	ALT_OBL	CR_HAT
MSU	5810.121.03.01	GAME_DISC	W	ALT_OBL	CR_HAT
MSU	5810.2.298.2-8	EFF	F	EFF	FISH
MSU	5810.108.01.02	0.01	F	ALT_OBL	INCIS
MSU	5810.011.01	0.01	F	HOR	INCIS
MSU	5810.102.02.03.04	0.01	F	SOLO	PUNC
MSU	5810.102.02.03.04	PENDANT	W	HOR	PUNC_INCIS
MSU	5810.056.01.01	0.01	F	HOR	INCIS
MSU	5810.031.01.02	0.01	F	HOR	PUNC
MSU	5810.2.213.01	0.01	F	HOR	INCIS
MSU	5810.2.229.01	GAME_DISC	W	HOR	INCIS
MSU	5810.2.181.01	0.01	F	OBL	INCIS
MSU	5810.2.184.04	COMB	F	SQ	INCIS
MSU	5810.2.133.01	BRAC	F	ALT_OBL	INCIS
MSU	0.01	COMB	F	HOR	PUNC_TRI_PUNC
MSU	5810.2.176.01	COMB	F	HOR	PUNC_INCIS_TRI
MSU	5810.2.216.01.03	SU_TUBE	F	CURVE	INCIS
MSU	5810.2.216.01.04	GAME_DISC	W	HOR	INCIS
MSU	5810.2.242.05	EFF	W	HOR	PUNC_INCIS
MSU	5810.2.176.01	0.01	F	ALT_TRI	INCIS
MSU	5810.2.229.01	PENDANT	F	HOR	PUNC_INICS_TRI
MSU	5810.2.181.01	0.01	F	HOR	INCIS
MSU	5810.2.203.01.01	BRAC	F	OBL	INCIS
MSU	5810.2.154.01.02.01	PENDANT	F	EFF	FISH
MSU	5810.2.216.01.03	PENDANT	F	HOR	PUNC_INCIS
MSU	5810.2.167.01	PENDANT	F	HOR	PUNC
MSU	5810.2.108.01	PENDANT	F	HOR	PUNC
MSU	5810.2.191.01	0.01	F	ALT_SQ	INCIS
MSU	5810.2.204.01.01	EFF	F	EFF	CANID
MSU	5810.2.125.1.01	EFF	F	EFF	CANID
OSA	Ms6-163.8	0.01	F	0.1	0.1
OSA	Ms6-35	0.01	F	HOR	INCIS
OSA	ms6-F11-165.2	EFF	F	EFF	0.1
OSA	ms6-F43-157.3	COMB	W	ALT_OBL	INCIS
OSA	ms6-F88.1	0.01	F	TRI	INCIS
OSA	ms-6-54.5	BRAC	F	HOR	INCIS
OSA	Ms6-81.6	0.01	F	HOR	INCIS
OSA	ms6-f11.3	BRAC	F	HOR	INCIS_PUNC_TRI
OSA	Ms6-13.3	BRAC	F	HOR	INCIS
OSA	Ms6-81.7	BRAC	F	HOR	CR_HAT_INCIS

Table 24. St. Ignace Decorated Faunal Data.

Table 24 (cont'd)

ID	2ND_Des_Motif	2nd_Des_Element	Castel	Cas_Shape
5810.132.02	0.2	0.2	A	
5810. 2.265.04	0.2	0.2	A	
5810.2.242.05	VERT	INCIS	A	
5810.126.03.03	0.2	0.2	A	
5810.121.03.01	0.2	0.2	A	
5810.2.298.2-8			A	
5810.108.01.02			A	
5810.011.01			A	
5810.102.02.03.04			A	
5810.102.02.03.04	HOR	INCIS	P	SQ
5810.056.01.01	OVERLAY_OBL	INCIS	A	
5810.031.01.02			P	SQ
5810.2.213.01			A	
5810.2.229.01			A	
5810.2.181.01			A	
5810.2.184.04	GEN	CR_HAT	A	
5810.2.133.01	TRI	INCIS	A	
0.01			A	
5810.2.176.01			A	
5810.2.216.01.03			A	
5810.2.216.01.04			A	
5810.2.242.05			A	
5810.2.176.01			A	
5810.2.229.01			P	SQ
5810.2.181.01			A	
5810.2.203.01.01			P	0.01
5810.2.154.01.02.01			A	
5810.2.216.01.03			A	
5810.2.167.01			A	
5810.2.108.01			A	
5810.2.191.01			A	
5810.2.204.01.01			A	
5810.2.125.1.01	AB	INCIS	A	
Ms6-163.8			A	
Ms6-35			A	
ms6-F11-165.2			A	
ms6-F43-157.3	QUAD	CR_HAT	A	
ms6-F88.1	HOR	NOTCH	A	
ms-6-54.5			A	
Ms6-81.6			A	
ms6-f11.3	CURVE	INCIS_INCIS	A	
Ms6-13.3			A	
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Table 24 (cont'd)

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5810.108.01.02			
5810.011.01			
5810.102.02.03.04			
5810.102.02.03.04			
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5810.2.203.01.01			
5810.2.154.01.02.01			
5810.2.216.01.03			
5810.2.167.01			
5810.2.108.01			
5810.2.191.01			
5810.2.204.01.01			
5810.2.125.1.01			
Ms6-163.8			
Ms6-35			
ms6-F11-165.2			
ms6-F43-157.3			
ms6-F88.1			
ms-6-54.5			
Ms6-81.6			
ms6-f11.3			
Ms6-13.3			
Ms6-81.7			

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