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# Trading to Drink and Drinking to Trade: Assessing Alcohol Trade and Consumption in Seventeenth and Eighteenth Century New France

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TRADING TO DRINK AND DRINKING TO TRADE: ASSESSING ALCOHOL  
TRADE AND CONSUMPTION IN SEVENTEENTH AND  
EIGHTEENTH CENTURY NEW FRANCE

by

Cara Mosier

A thesis submitted to the Graduate College  
in partial fulfillment of the requirements  
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Cara Mosier, M.A.

Western Michigan University, 2017

Alcohol is one of the most misunderstood commodities used by both Native Americans and Europeans during the seventeenth and eighteenth centuries in North America. Although documentary sources are available, they can often provide conflicting information on the frequency of alcohol trade and its context of consumption. The archaeological record must be examined in conjunction with the primary and secondary sources to better understand alcohol consumption during this time. My research is conducted to answer the question: what patterns emerge when comparing the archaeological record to the documentary record concerning Native alcohol consumption in the seventeenth and eighteenth century fur trade of New France? In this study, I examine the artifact collections from twelve archaeological sites, specifically the light blue-green and olive green container glass. These sites range in age from the early seventeenth century to the mid-eighteenth century and are located in four areas across New France. They are ideal sites to examine patterns of alcohol trade across time due to their context, age, and the presence of alcohol-related materials. Primary and secondary sources will be used to collect information on contact relationships, trade interactions, and alcohol consumption. By analyzing these contexts, I assess patterns of alcohol consumption in the seventeenth and eighteenth centuries to determine if these patterns are supported or contradicted by the literature. I expect that the archaeological record will present patterns of alcohol consumption that differ from those in the documents from the seventeenth to the eighteenth century.

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Cara Mosier

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# CHAPTER I

## INTRODUCTION

During the seventeenth and eighteenth centuries, alcohol was used by Europeans to promote trade (Mancall 1995). Liquor trade became a means for expansion, both geographically and economically (Gilman 1982; Unrau 1996). The consumption of alcohol, as a result of this trade, has long been documented in primary sources and is evident in the archaeological record (Long 1791; Peyser 1978; Peyser and Brandão 2008; Ray 1974; Sullivan 1922; Thwaites 1959).

The goal of this research is to compare information on alcohol consumption presented in primary sources and discussed in the secondary sources, against the archaeological evidence at a variety of sites to gain a better understanding of alcohol consumption during the seventeenth and eighteenth century in New France. The impetus for this project comes from the uncertainty regarding Native alcohol consumption during the seventeenth and eighteenth centuries in New France. Although there are multiple documented accounts that discuss Native alcohol consumption, a comparison has not been made between these documents and the archaeological record. At this time, multiple lines of evidence have not been examined in conjunction with each other regarding this subject.

My research is conducted to answer the question: What patterns emerge when comparing the archaeological record to the documentary record concerning Native alcohol consumption in the seventeenth and eighteenth century fur trade of New France?

In this research project, these combined sources are used to address changes in alcohol consumption among Native communities in the seventeenth and eighteenth centuries. Documentary sources suggest that alcohol consumption increased from the seventeenth to the eighteenth centuries despite the restrictions placed on such trade due to increased alcohol trade noted in primary sources and the increased demand resulting from alcohol dependence (Mancall 1995). Based on the literature, I hypothesized that, due to a greater demand from alcohol dependence, alcohol trade increased from the seventeenth to the eighteenth centuries, despite the restrictions placed on such trade (Mancall 1995). This rise in trade would have resulted in increased evidence of alcohol bottles at these sites. I also compared Native sites to European sites. I hypothesized that there would be higher percentages of alcohol-related bottle glass at Native sites, possibly more so than their European counterparts, due to the amount of liquor consumed by Natives as recorded in the literature. In addition, this analysis compared historical documents to archaeological data. I hypothesized that the archaeological record may contradict these sources, as the primary and secondary sources provide conflicting and biased accounts.

I examined the artifact collections of twelve archaeological sites, both Native and European, for alcohol-related items, most notably light blue-green and olive green container glass. These sites were selected because of the availability of data, their cultural contexts, and site date and the presence of material remains associated with alcohol. I used ratios of bottle glass count to total artifact count to standardize the data to control for differences in sites with longer occupation periods or data collected with different field methods. Primary and secondary sources were used to provide historical background on alcohol consumption to be compared with the archaeological data.

This research project fills a gap in the colonial fur trade narrative regarding alcohol trade and consumption by Europeans and Natives. This topic is under-explored archaeologically, though examined thoroughly through the primary and secondary sources. However, it is necessary to combine these sources, both archaeological and documentary, to explore a more complete narrative of alcohol trade during the seventeenth and eighteenth century fur trade in New France. By understanding what the archaeological record contributes to the current knowledge on alcohol in Native communities during this time, we can better interpret the documentary resources on it, creating a dynamic and full picture of this topic.

## CHAPTER II

### HISTORICAL CONTEXT

The North American fur trade began in the St. Lawrence River Valley during the sixteenth century and stretched to the Pacific Northwest by the nineteenth century (Nassaney 2015:36). Although Natives were not originally considered in the Europeans' plans for colonization, they soon began to use the Natives' expertise to further their own expansion through the fur trade (Nassaney 2015:37). Europeans became eager to trade with their Native counterparts to ensure their cooperation and to create a capitalist market in their new home. For the Natives, trade was already a significant part of their social, economic, and political lifestyle (Nassaney 2015:38). Due to the relationships formed between these groups, a lucrative trade began for a variety of goods, including furs, cloth, beads, weapons, ceramics, food, and alcohol (Nassaney 2015). As such, in the seventeenth century, alcohol became a significant trade item between the Native Americans and the French (Mancall 1995). However, there is some confusion regarding the volume of alcohol in the trade, due to the attempts at regulation of such trade and a varying level of interest in alcohol by Natives (Gonzalez 1977). As regulations were not always observed in trade transactions, and as such were not always recorded, nor was record keeping reliable, the amount of alcohol traded is up for debate (Gonzalez 1977). First-hand accounts provide contradicting amounts based on the authors' experiences and biases, as well as contradicting records of Native behaviors (Gonzalez 1977; Mancall 1995).

Much of the literature surrounding the topic of alcohol trade during the seventeenth and eighteenth centuries discusses the behaviors of those who indulged in alcohol and the regulations placed on those trades (Axtell 2001; Dailey 1968; Healey 1958; Kehoe 2000; Mancall 1995; Quintero 2001; Ray 1974; Ronda 1972; Unrau 1996). Very few explore the volume or frequency and context of alcohol consumption (Anderson 1992; Jordan 2008). This chapter presents an overview of research conducted on alcohol consumption during the North American fur trade, exploring information provided by the primary and secondary sources.

### **Primary and Secondary Sources**

Over the early to mid-seventeenth century, alcohol began to play a more significant role in the relationships between Europeans and Natives (Mancall 1995). The increase of European goods at Native sites is well-reflected in the written record. Primary and secondary sources on contact relationships and trade interactions often discuss alcohol as a factor in those relationships. Primary sources are a significant resource and are invaluable when discussing Native and European interactions. These records provide a variety of experiences with Natives and alcohol consumption during the seventeenth to eighteenth centuries in New France. Secondary sources provide insightful discussions of these primary sources, ethnographic research, and archaeological data to compose a picture of Native alcohol consumption in the mid-seventeenth through mid-eighteenth centuries fur trade. These sources focus on two main topics, alcohol-related behavior and regulations placed on alcohol trade.

### *Alcohol-Related Behavior*

One of the most common themes regarding alcohol consumption during this time is behavior resulting from drinking. Alcohol was highly sought in the fur trade and was used as a bargaining chip to persuade Natives to enter into trade alliances (Mancall 1995). As the regular trade of alcohol became a means of maintaining relationships between the French and Native communities, Natives were forced to deal with an unfamiliar substance. According to Axtell (2001), liquor began to grow in popularity among the Native peoples of America beginning in the early seventeenth century, leading them to create their own rules for dealing with alcohol. Opinions regarding alcohol's introduction into Native society were often conflicting. Axtell (2001) emphasizes that Natives became accustomed to its effects, and the demand for alcohol increased as a result of its addictive nature (Axtell 2001). However, many Natives acknowledged its often negative effects on their communities and made efforts to restrict the alcohol trade (Mancall 1995; Nassaney 2015:59). Still, alcohol was traded or gifted in many locations, wherever Natives and Europeans met, with almost every major settlement in possession of a liquor seller (Mancall 1995). Gifts were used to foster successful trade relations and encourage trust between Natives and Europeans (Nassaney 2015; White 1984). The French often included alcohol in gift-giving ceremonies, at trade fairs, and in peace negotiations, as a way to control and guide the trade in favorable ways (Axtell 2001; Mancall 1995; Ray 1974). Spirits were sometimes provided in lieu of payment for labor, although it was often a watered-down version that allowed the alcohol to 'go further' as well as decrease drunkenness (Mancall 1995). Liquor was used as one of the most significant forms of persuasion in trade between Natives and Europeans (Anderson 1992:144; Kehoe 2000:174).

Due to its addictive properties, Natives came to rely on liquor as a necessary part of trade agreements. Makela (1983) argues that the Europeans controlled the fur trade due to their use of liquor as a means of monitoring and directing the Natives, although gift giving was still encouraged to facilitate positive relationships between the groups. Alcohol as a trade good allowed Europeans to gain a stronger hold over Native communities. Native alcohol dependency is often blamed on colonialism and was a destructive force on many communities (Beauvais 1998; Belmessous 2005; Quintero 2001). In the eighteenth century, Cadwallader Colden, an Iroquois expert from New York, explained his belief that “drunkenness among the American tribes has destroyed greater Numbers, than all their Wars and Diseases put together.” (Axtell 2001:113). Alcohol was a source of violence that led to an extreme number of alcohol-related deaths (Axtell 2001).

Natives’ behavior under the influence of alcohol was often beyond this control however. The “drunken savage” was a popular depiction applied to intoxicated Natives. The “drunken savage” motif is the stereotypical European portrayal of Natives unable to control their drinking (Quintero 2001). Excessive Native drinking was more heavily frowned upon than European drinking. Natives took to alcohol with a “frightening passion” and drunken frolics would last for days upon end (Axtell 2001:113). Their behavior when drunk often became violent and would produce victims of stabbings, burning, shootings, brawls, and biting (Axtell 2001). While this was not seriously different from French behavior when drunk, Native actions were more heavily scrutinized and criticized due to the European belief that Natives were inherently different from themselves and often believed to be subhuman (Axtell 2001; Mancall 1995).

In the early seventeenth century, the number of Jesuits began to increase in New France, as did their interactions with Native groups and individuals (Thwaites 1959). Alcohol consumption was a significant topic they recorded in their observations. In the *Jesuit Relations and Allied Documents: Travels and Explorations of the Jesuit Missionaries in New France, 1610-1791*, wine, brandy, and drunkenness are discussed frequently. According to the Jesuits, in the mid to late seventeenth century the dangers of life in North America were “greatly increased by the drunkenness in which the barbarians indulge” (Thwaites 1959f:14).

According to the *Jesuit Relations*, in the early seventeenth century, “there formerly flourished the most successful Mission of the Algonquins; but it has been much weakened through the drunkenness induced by brandy, brought in by European merchants who thus wickedly derive an easy profit” (Thwaites 1959a:219). Despite the increasing restrictions placed on the trade of liquor by the government, during the mid-seventeenth century Europeans managed to continue this trade with Natives, which interfered with the Jesuits’ plans:

The Savages have always been gluttons, but since the coming of the Europeans they have become such drunkards, that, -- although they see clearly that these new drinks, the wine and brandy, which are brought to them, are depopulating their country, of which they themselves complain, -- they cannot abstain from drinking, taking pride in getting drunk and in making others drunk. (Thwaites 1959d:251)

According to the Jesuits, this pride in drunkenness made it nearly impossible to convince Native communities to abstain from brandy or wine. The Jesuits viewed this behavior as a result of the Natives’ addiction to liquor (Thwaites 1959; White 1984).



From 1611 to 1616, when the ships carrying trade goods arrived, the Natives were said to have behaved inexcusably; “they never stop gorging themselves excessively... they get drunk, not only on wine, but on brandy” (Thwaites 1959b:107). While the French were also known to partake of spirited beverages, Thwaites avoided comparing their drunkenness to that of the Natives. French alcohol use is mentioned during times of celebration and holiday, and after a hard day’s work (Thwaites 1959). This is in stark contrast to Native drinking habits discussed by the Jesuits. It is a distinct possibility that, due to cultural differences, the Jesuits misunderstood the Natives’ use of alcohol.

Although Natives behaved peacefully and avoided quarrels for the most part, when they drank, they often became violent and destructive according to the Jesuits whom often used this behavior as a way to “other” these Natives. The Jesuits warned others saying “it is not safe to go to them without arms, if they have any wine” (Thwaites 1959c:51). Often, in these records, extreme violence while under the influence of liquor is attributed to Natives even though it is just as likely that Europeans became equally violent when intoxicated (Rorabaugh 1979). However, these instances are not as frequently recorded as Native drunkenness due to the rampant ethnocentrism inherent in primary sources written by Europeans. One example of murder was recorded by the Jesuits that involved alcohol consumption. In 1632 a Native individual who had witnessed this murder remarked “if thou hadst not given us brandy or wine, we would not have done it” (Thwaites 1959c:49). Also in 1632 another Native American commented “put thy wine and thy brandy in prison...it is thy drinks that do all the evil, and not we” (Thwaites 1959c:231). In the mid-seventeenth century, due to the pervasive violence that accompanies Native alcohol consumption, according to the Jesuits, some Native groups

began to plead with the Europeans and missionaries to halt the alcohol trade, because it would “be the death of their people” (Thwaites 1959c:51).

When witnessing these events in the mid-seventeenth century, the Jesuits declared the alcohol trade to be “that pernicious traffic which ruins everything” (Thwaites 1959e:9). The Jesuits viewed the alcohol trade as an evil that was affecting their mission and harming the communities around them (Dailey 1968; Healey 1958; Ronda 172; Unrau 1996). The effects of alcohol upon Native societies were incredibly destructive (Axtell 2001). Although there is little physical evidence that can support this claim, there is overwhelming documentary support; therefore, there might be some truth to the matter, although it is likely exaggerated.

Sir William Johnson wrote frequently about Natives and their use of alcohol and his discussions are almost entirely negative. His narratives are pieced together from letters, bills, and other accounts (Sullivan 1922). In his role as Indian Agent in New York from 1738 to 1774, Johnson was often given bribes by Natives for more liquor. However, he saw the results of Native alcohol consumption, such as murder, imprudent behavior, immoderate use, and generally troublesome behavior (Sullivan 1922). He states that “Selling Liquor to the Indians, which is the only thing that Spoils the Indians” (Sullivan 1922:172). This sentiment easily sums up Johnson’s view on alcohol trade with Native communities; it should not happen. His opinion was not always shared by other agents or traders.

Alexander Henry, a European traveler in the Great Lakes Region, often placed a greater emphasis on alcohol-related behavior than other travelers during the late eighteenth century. He describes the habits of Natives visiting trade posts in Canada and

Michigan from the mid to late 1700s. For example, Henry describes instances where Natives would bribe merchants or traders for liquor (Henry 1901). If they could not be bribed, extortion and threats were also employed (Henry 1901). Other times, liquor was given to chiefs and young tribal men as welcoming gifts (Henry 1901:311).

John Long was an Englishman who arrived in Canada in 1768 to apprentice as a clerk in Montreal. However, in the mid-1770s, Long decided to indulge his adventurous nature and take up the lucrative position as trader (Long 1791). As a trader with Native communities, Long was able to write more easily about Native cultures and their relationships with the Europeans. Alcohol consumption was a normal part of life for Long and his Native customers. He notes that while drinking has some adverse effects on their behavior, for the most part intoxication made them proud and he emphasized that liquor could encourage any number of emotions or actions, such as jealousy, liveliness, fatigue, and mischievousness (Long 1791). He distributed alcohol evenly and in large quantities, while encouraging them to drink at their villages. Liquor had become a familiar trade good to the Natives and a “drunken frolic [was] looked upon as an indispensable requisite in a barter” (Long 1791:14). Long emphatically states that liquor was essential to every transaction, since drinking with the Natives encouraged a stronger trade relationship (Long 1791).

In these accounts, liquor is a source of many complaints between Natives and Europeans. Both Natives and Europeans drank liquor to excess, but it is Native drunkenness that gets discussed most frequently. It is likely that the authors do not perceive European drunkenness to be as destructive as Native drunkenness due to their belief that Natives are fundamentally different from Europeans. Although alcohol was

used to encourage good trade relationships between these groups, it often brought trouble to the individual traders and agents. As a result of this harmful behavior, colonial officials and Jesuit missionaries attempted to bring a halt to Native alcohol use (Dailey 1968; Ronda 1972).

### *Regulations*

In light of the violence discussed above, Europeans and Natives alike encouraged strict regulations placed on alcohol trade. Encouraged by the missionaries and with the support of some Native communities, Europeans set out to place restrictions on alcohol trade with Native individuals and groups. However, the alcohol trade was popular, and someone was always willing to ignore restrictions and trade or sell liquor with the Native peoples.

The Jesuits spent much of their time trying to stop these behaviors for two main reasons: alcohol use affected their efforts to Christianize the Natives and it threatened the safety of everybody in the vicinity (Dailey 1968; Thwaites 1959). Axtell describes a scene from the *History of Montreal* where missionaries began to complain of such occurrences:

In 1671 Dollier de Casson, the Sulpician superior in Montreal, lamented that if brandy were kept away from all the Indians, we should have thousands of conversions to report.... I do not doubt that the majority of the Indians who visit the French would all embrace the Christian religion, but for the fact that this liquor has so diabolical an attraction for them that it ensnares all the natives in proximity to the French, save for a certain number.... (Axtell 1985:65).

Although regular alcohol trade was a means of maintaining relationships between the European and Native communities, the Jesuits viewed excessive alcohol consumption as a debilitating practice that hindered their mission (Dailey 1968). The Jesuits had a vested interest in keeping alcohol out of the Natives' hands.

By calling for a halt to the alcohol trade and actively preaching against the consumption of liquor, the Jesuits attempted to stop the wanton and destructive behavior of the intoxicated Natives. Steps were taken to wean the Native populations from their thirst for these spirits (Ray 1974). Sellers and traders of brandy and rum saw this as a challenge to their business (Axtell 1985). Liquor trade grew during the fur trade and restrictions placed on it were ineffective at best.

Due to the persistent complaints by Natives, colonists, and Jesuits alike, state officials enacted prohibitions against Native alcohol consumption in the seventeenth century (Mancall 1995). In 1709 New York legislators passed a law preventing the selling of any alcohol to the Natives (Mancall 1995:106). It was renewed periodically until 1713 (Mancall 1995:106). A replacement law was not put into place until 1755 and only last two years (Mancall 1995:107). From 1750 to 1755, more Natives and colonial authorities were calling for a greater temperance of the alcohol trade (Mancall 1995:101). According to Dailey (1968:53), "the Indians themselves began to exercise a measure of discipline and in some cases with the help of whites, formed councils to decide on penalties for drunkenness." These punishments included exile from the village or the forfeit of their land (Dailey 1968). In addition, French colonial officials demanded the cessation of all alcohol trade at this time (Mancall 1995). Despite these new restrictions, traders and sellers still managed to supply alcohol to the Natives. The popularity and

demand for liquor among Natives meant that the active alcohol trade could not be easily stopped (Mancall 1995).

Besides the Jesuits, traders and merchants were also concerned with the increasing damage that the alcohol trade was causing. In an excerpt from documents from Frontenac and Champigny to Pontchartrain in November of 1694, the authors attempt to determine the best way to regulate the brandy trade in the area (Peyser 1978:8.1-8.3). The authors outlined a plan:

Following the intent and ordinance of His Majesty to prevent this abuse and the consequences that it could have through the drunkenness which as often caused the deprivation of the Indians by the deceit of several Frenchmen taking the opportunity to obtain all of their peltries for a little to drink. We have found nothing better than regulating the amount of brandy for each man on the basis of a half-gallon per month with the prohibition against using it for anything but his own consumption, which will take away from them the means of abusing it and of contributing to the drunkenness of the Indians. (Peyser 1978:8.3)

This was one of the first attempts in New France to control the alcohol trade and laid the foundation for many court cases regarding the abuse of alcohol and the willful disregard of these edicts.

Alcohol became an increasing problem in fur trade society leading to prohibition. According to these documents, as Native access to alcohol increased, so did their thirst and violence for drinking. Although Europeans were drinking to excess as much as Natives, their actions were not considered to be overly harmful, as drunken Europeans

were not viewed as a threat to society (Mancall 1995). Still, regulations were put in place, due in large part to the dangerous actions of over-drinkers, to stop such behavior and regain control of the trade industry.

## **Discussion**

Trade was a substantial part of Natives' everyday life prior to the introduction of Europeans (Nassaney 2015). Once relationships had formed between Natives and Europeans, trade became a lucrative means of social, economic, and political interactions between the groups (Nassaney 2015). Alcohol played an important part as a trade good in these interactions (Mancall 1995). It acted as a lubricant for a variety of social and religious situations, in addition to acting as a point of dissent for the differing communities. Both groups of people chose to use and consume alcohol for many reasons.

To fully understand the differences inherent in Native and European perspectives and their choices, it is necessary to consider each culture before the introduction of the other. Prior to their introduction to Native populations, Europeans arriving in New France were mainly "explorers searching for a route to the East, or gold or silver mines, and were not particularly interested in obtaining furs" (Dolin 2010:8). Although, when the opportunity arose, they gladly participated and eventually became major players in the fur trade. Natives lived and worked with their immediate social groups, either confederacy, chiefdom, tribe, or band, and had a wide range of interactions, including trade and warfare, with other Native social groups and had only the slightest notion of Europeans' existence (Axtell 2001). It was not until the arrival of the Europeans that the Natives became acquainted with liquor and its effects, and the Europeans were presented with first-hand knowledge of the different behaviors and practices of the Natives. As

discussed in these sources, alcohol was rapidly consumed in moderate to heavy quantities by the Natives in both social and ritual settings. Most sources indicate that the primary use was social, and alcohol was mainly consumed at the Natives' villages rather than at the European forts or in towns (Henry 1901; Long 1791, Ray 1974, Sullivan 1922, Thwaites 1959).

Alcohol consumption was often the result of the uncertain and changing circumstances (Smith 2008:47). Natives encountered Europeans with more frequency, which caused an increasing anxiety for this new situation (Mancall 1995; Smith 2008). As the Europeans began to rely more heavily on alcohol as a means of bargaining, the Natives began to incorporate alcohol into other aspects of their lives. It is necessary to consider these actions and sources from a Native point of view. Very few written records by Natives are available to truly ascertain their feelings towards this. Still, attempts have been made to construct the Native perspective. Mancall explains that Natives most likely consumed alcohol for a variety of reasons, including for religious, political, or social purposes (Mancall 1995:67). Alcohol was often present during marriages, hospitality rituals, ceremonial dances, and mourning rituals (Mancall 1995:67). Natives and Europeans also used alcohol to ease awkward social exchanges as a part of their gift-giving traditions (Mancall 1995; White 1984). Mancall suggests that drunkenness was viewed differently by Natives than Europeans, equating drunkenness with power rather than destruction (Mancall 1995:67). Drinking excessively was a conscious choice made by Natives (Mancall 1995). It allowed them to have power over their daily lives and their world, which was changing rapidly. As such, Native communities developed their own rules for dealing with alcohol. According to Axtell, Natives often drank to complete



drunkenness, however, if not every member could be completely inebriated, a select few would abstain to allow more for the rest of the group (Axtell 2001:136). Natives were courteous concerning alcohol consumption, but once under its influence, they would commit rather discourteous acts, even against fellow community members (Axtell 2001:136). As a result, Native groups instituted a “blameless” rule, putting the onus for their inebriation on the alcohol itself or the seller, rather than the drinker (Axtell 2001:136).

Natives and Europeans viewed each other’s relationships with alcohol in inherently different ways. Europeans perceived alcohol consumption by Natives to be wicked and disruptive as it caused Natives to act in ways antithetical to how Europeans believed they should behave. Europeans began discussing Natives in terms meant to indicate superiority and control over them. This includes the “drunken savage” motif used as a tool to de-humanize Natives (Axtell 2001; Quintero 2001). If the Natives were no longer human, then they became “other” and inferior to Europeans and no longer held any significant power. Alcohol and Native drunken behavior was weaponized by Europeans to wrest power and influence away from Natives through manipulation.

It is very likely that the accounts of Natives’ behavior while drunk was exaggerated, but these reports were what encouraged alcohol regulations (Axtell 1985; Thwaites 1859). Regulations were promoted by both Natives and Europeans to mitigate the damages done by drunken community members (Unrau 1996). They were also another way in which Europeans attempted to exert control over the Natives, as most regulations stipulated how much, when, and where alcohol could be traded, none of which favored Native trade practices (Dailey 1968; Thwaites 1959). These regulations

were enacted at the behest of Jesuits, Native community leaders, and European leaders, however very few traders, Native and European alike, followed these regulations (Axtell 1985; Mancall 1995). Alcohol was a lucrative trade good and these new sanctions were hard to police once traders were away from heavily populated areas like forts and trade posts (Axtell 1985; Gonzalez 1977). Those who opposed alcohol regulations outnumbered those who supported regulations. Ultimately, regulations on alcohol failed during this time and remained in name only.

Regulations on alcohol were all but useless in controlling the drunken actions of Natives. As such, alcohol was believed to be devastating to such communities. Primary accounts often recount such destruction (Axtell 2001; Beauvais 1998; Belmessous 2005; Mancall 1995; Thwaites 1959). However, there is little archaeological evidence to support this claim, although attempts have been made to find it (Jordan 2008). For example, Jordan tests the claim that destruction due to alcohol consumption, in part, led to the Seneca's settlement dispersal (2008). He concludes that, based on bottle evidence, an increase in alcohol consumption came after the dispersal and likely did not lead to it (Jordan 2008:316). Although the ruination of a Native community from alcohol is possible to see in the archaeological record, it is often very difficult to prove.

Alcohol consumption was a significant part of daily life for both Natives and Europeans. Primary sources reflect that importance. The variety of sources, such as journals, personal correspondence, inventory records, interviews, and reports, led to a diversity of views on alcohol consumption during this time. These European sources have portrayed Native alcohol consumption negatively for political and religious reasons. Native drunkenness was viewed as a worse offense than that of European drunkenness.

On the other hand, Native alcohol consumption was perceived positively by Europeans for economic and social reasons. Natives and Europeans had mostly opposing views on alcohol consumption that were expressed through various methods.

## **Summary**

Primary and secondary sources on contact relationships and trade interactions often discuss alcohol consumption as a significant factor in the formation and preservation of relationships between Europeans and Native Americans. This chapter explored primary and secondary sources for instances of alcohol consumption. By examining this literature, I attempted to tease out the impact and importance of alcohol in the early seventeenth through late-eighteenth century fur trade.

These documents illustrate the significant role of liquor in the fur trade of New France. By examining these sources, researchers can better understand alcohol consumption by Natives during this time. However, primary documents were almost entirely written by European men since most Native peoples were unable to write or read European languages. These records were written for a variety of reasons, including describing life in the New World, to record the Christianizing efforts of the missionaries, and to request troops or goods for the forts. Although they all discuss the alcohol-related behavior of the Native communities, they rarely present information on this topic from any perspective other than European. Native alcohol consumption is almost always demonized in these documents.

Primary and secondary sources can only provide limited information on alcohol consumption by Natives during the seventeenth through eighteenth centuries. Primary

sources are often biased to the point of misinformation. These source documents can present “distorted or false information based on mistakes, misunderstanding, confusion, ignorance, or deceit” (Barber and Berdan 1998:148). These limitations are part of the European narrative that sought to discredit Native communities and empower their own through such denigration. To gain a much-needed Native perspective, researchers can utilize other lines of evidence such as the archaeological record.

By exploring the archaeological record, researchers can compare what was being said about Native alcohol consumption with what was actually occurring at these sites. Documents suggest that alcohol consumption became an increasing problem as it grew more readily available to Natives. Based on these sources, I expect that the archaeological record will present patterns of alcohol consumption that differ from those in the documents from the seventeenth to the eighteenth century, providing a necessary counterpart. Archaeological data can provide additional support, as well as a means of evaluating arguments derived from documentary sources, in examining alcohol consumption during this time in New France.

## CHAPTER III

### METHODOLOGY

To form a more dynamic picture of alcohol consumption, researchers must use the archaeological record in conjunction with the documentary sources. Kurt Jordan (2008:310-312) has presented one of the more useful methodologies for analyzing bottle glass as an indicator of alcohol in the archaeological record. Jordan's method involves analyzing the amount of light blue-green and olive green container glass at a series of archaeological sites to discuss alcohol prevalence and consumption. He compares ratios of light blue-green and olive green bottle glass in relation to the full assemblage of total artifacts between sites. His reasoning for choosing this method included four main points: 1) bottle glass is representative of alcohol consumption as a whole because smaller glass bottles were easier and cheaper to transport than larger containers, 2) olive green and light blue-green glass bottles were almost exclusively used in the storage and transportation of alcohol, 3) bottle glass fragments are more durable and better preserved than the wood and iron fragments from kegs, and 4) ceramic bottles are extremely rare on late seventeenth and eighteenth century sites as they were not included in his assessment (Jordan 2008: 311). This methodology provided the foundation for examining bottle glass as it relates to alcohol in the archaeological record.

To explore patterns of alcohol trade and consumption, I will follow Jordan's methodology. I examined the artifact collections of light blue-green and olive green container glass from twelve sites that date to the seventeenth and eighteenth centuries (Table 1). Quantity was measured by comparing the amount of light blue-green and olive

green bottle glass between sites. I have presented these data using percentages of bottle glass to European materials assemblage and percentages of bottle glass to total artifact assemblage, alongside artifact counts, to standardize for sample size, site size, and collection strategies. These sites are ideal for exploring a number of possible patterns during the fur trade of New France due to their context, age, and the presence of alcohol-related materials. I examined the data to see if any specific patterns emerged across time or between sites of different cultural affiliations.

*Table 1. Archaeological sites arranged chronologically.*

| Site Name                 | Occupation | Geographic Location        | Cultural Affiliation |
|---------------------------|------------|----------------------------|----------------------|
| <b>Rock Island</b>        | 1641-1770  | Western Great Lakes Region | Native               |
| <b>Indian Castle</b>      | 1655-1663  | Western New York           | Native               |
| <b>Fatherland</b>         | 1682-1729  | Lower Mississippi Valley   | French               |
| <b>White Springs</b>      | 1688-1715  | Western New York           | Native               |
| <b>Fort St. Joseph</b>    | 1691-1781  | Western Great Lakes Region | French               |
| <b>Bayou Goula</b>        | 1699-1739  | Lower Mississippi Valley   | Native               |
| <b>Townley-Reed</b>       | 1715-1754  | Western New York           | Native               |
| <b>F. Michilimackinac</b> | 1715-1783  | Western Great Lakes Region | French               |
| <b>Wea Village</b>        | 1715-1791  | Wabash Valley              | Native               |
| <b>F. Ouiatenon</b>       | 1717-1791  | Wabash Valley              | French               |
| <b>Guebert</b>            | 1719-1765  | Central Mississippi Valley | Native               |
| <b>Kethtippecanunk</b>    | 1730-1791  | Wabash Valley              | Native               |

The first step in this methodology was to check for the presence of any light blue-green or olive green bottle glass that are commonly assumed to be alcohol-related (Harris 2000; Jordan 2008). There are other sites located in these regions and dating to this time period that could have been chosen for this study. It is possible that any of these sites might not have alcohol-related bottle glass in their assemblages. This is another reason for which my research must be viewed conservatively, as I chose to limit my study to

twelve sites that had accessible collections with known quantities of alcohol-related bottle glass. Of these twelve sites, only two sites, Fort St. Joseph and Fort Michilimackinac had collections I physically examined. The remaining collections' data were collected from articles, books, and site reports.

To further analyze the light blue-green and olive green bottle glass, as it relates to alcohol, I refer to Jane Harris' (2000) chapter "Eighteenth-Century French Blue-Green Bottles from the Fortress of Louisburg, Nova Scotia." Harris looks at the blue-green bottle glass collection from Louisburg and has created a typology for other such collections. She presents two bottle types that are explicitly associated with alcohol, *flacons* and *bouteilles*. While *flacons* are more commonly associated with a variety of spirits, *bouteilles* are most often associated with wine and are often represented by the darker olive green glass (Figures 1 through 4) (Harris 2000). In addition to quantity, color and bottle type were also recorded when applicable. All contextual information was included in my database.

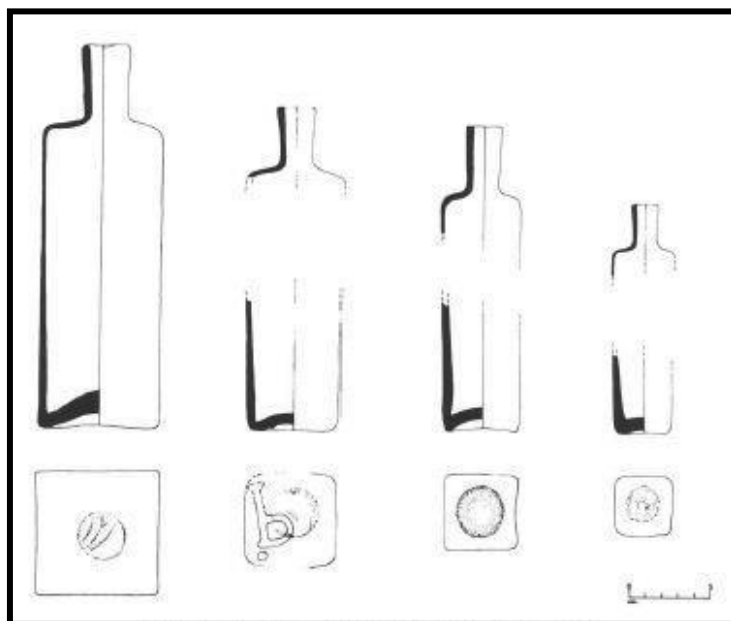


Figure 1. Small to medium sized flacons (Harris 2000:241).



Figure 2. Medium sized bouteille shown at left (Harris 2000:253).



Figure 3. Light blue-green flacon 'case' bottle from Fort Michilimackinac, shown on the left. Photo taken by author.



Figure 4. Olive green bouteille from Fort Michilimackinac, shown on the right. Photo taken by author.



To quantify alcohol consumption, the number of glass sherds were recorded at each site. I used the total artifact count at each site to control for site size, duration of occupation, disparities in excavation methods, and assemblage size. The ratio of total artifact count to light blue-green and olive green glass allowed for a controlled comparison between these sites and was translated into percentages to manage and account for any disparities.

### **Factors That Could Not Be Accounted For**

This research has a limited scope. I chose to focus on light blue-green and olive green bottle glass as a means to identify alcohol consumption as it is the most common indicator in the archaeological record. However, there are other artifacts that could indicate alcohol consumption that I did not look for in my data collection. Although there are many descriptions of transporting liquor in kegs, a small wooden barrel, for much of the colonial period (Anderson 1992, Mancall 1995, Rorabaugh 1979), those kegs are rarely found in the archaeological record. The lack of identifiable keg hardware and the fragile nature of wood in the archaeological record have made it difficult to find such evidence, although barrel hoops occasionally have been recovered (Mancall 1995, Rorabaugh 1979). However, with the increase in alcohol trade in the seventeenth century, glass bottles began to emerge as the main form of alcohol storage and transport (Smith 2008:47-57).

A possible shortcoming when using bottle glass is the issue of bottle reuse. Glass bottles were a hot commodity and empty bottles saved time and money (Busch 1987). As kegs were a common transport system for alcohol at this time, reusing empty bottles to

distribute alcohol from these larger containers was an easy decision (Busch 1987; Anderson 1992; Mancall 1995; Rorabaugh 1979). However, using bottle glass as a tool for site analysis is still possible when considered in addition to other artifact types or the historical record (Busch 1987).

When quantifying alcohol consumption through artifacts such as bottle glass, it is preferable to use vessel count as a more accurate statistic. The use of vessel count in preference over sherd count is to minimize statistical errors when comparing the different site assemblages (Sussman 2000: 100). The choice to use vessel count reflects the understanding of bottle use and therefore alcohol consumption and trade; people use vessels, they don't use sherds (Voss and Allen 2010: 2). Vessel count could suggest different results than sherd count, as it could reflect a smaller quantity of alcohol consumption. While I recognize the problems with a comparison based on sherd counts, information on minimum vessels counts are not available for many of the sites in this sample. Therefore, to aid in standardizing the data, to allow analysis of the same factors for each site, I chose to use sherd count.

There are limitations with my study, given the large variation in site occupation ranges, excavation and collection methods, site size, and assemblage size. The large differences in site occupation ranges can skew data when examining it for temporal patterns. As I looked at these sites using their beginning occupation date, that data may be conflated. To resolve this issue, I also compared them using their mean occupation date to provide a more balanced comparison. Excavation and collection methods, as well as site and assemblage size differences can also distort data when comparing quantities. I initially compared the percentages of light blue-green and olive green bottle glass counts

to total artifact assemblage count between sites. This is effective but not the most accurate representation of alcohol consumption at these sites. To resolve this, I also compared the percentage of alcohol-related bottle glass counts to European artifact counts, at the sites where I was able to do so, as it more accurately reflects the importance of alcohol as it compares to other trade goods. Due to these limitations, my research should be viewed conservatively.

This research relies on the comparison of these sources to gain a clearer picture of alcohol consumption during the seventeenth and eighteenth centuries of New France. By using quantities of light blue green and olive green bottle glass as a quantitative representative of alcohol consumption at these sites, the archaeological record adds a possible alternative perspective to alcohol consumption from the primary and secondary sources. Although there are shortcomings with my methodology, the goal of this research is to see, even so, which patterns emerge from the data to create a more nuanced understanding of alcohol consumption during this time.

## CHAPTER IV

### ARCHAEOLOGICAL SITE DESCRIPTIONS

This chapter is a summary and description of each archaeological site used in my study. For the purpose of this discussion, the sites are listed in chronological order. A short history of the site, a summary of the archaeological investigations performed at the site, and the results of my archaeological data collection are provided.



Figure 5. Map of archaeological sites included in this study.

## **Rock Island**

### *Site History*

Rock Island is one of several islands that separate Lake Michigan from Green Bay located in Door County, Wisconsin (Mason 1986: 21). It is situated directly northeast of its larger neighbor, Washington Island, and southwest of its remaining neighbor, St. Martin Island (Mason 1986: 21). Three sites were uncovered on Rock Island, Sites I through III, however only Site II dates to the historic period (Mason 1986:23). Site II is located in the southwest corner of the island (Mason 1986:21). This site is divided into four distinct cultural occupations (Mason 1986). The first occupation, Period 1, was a small Potawatomi camp, occupied from 1641 to 1650. Period 2 is another short-term camp of Petun, Ottawa, and Huron, occupied from 1650/51 to 1653. The third occupation, Period 3, is a long-term Potawatomi camp reused continuously from 1670 to 1730. Period 4, the final occupation, is the terminal historic native component that lasted from 1760 to 1770 (Mason 1986:212-220).

### *Archaeological Investigations*

Archaeological investigations began on this site with a series of test pits, followed by fourteen excavation units and a few exploratory trenches (Mason 1986:23). Each unit was initially placed where the test pits revealed heavy occupational materials, architectural features, the presence of two or more cultural contexts, or physical stratification of natural and cultural deposits (Mason 1986:23). A handful of units were placed to intercept the estimated location of a palisade (Mason 1986:23).

### *Analysis Results*

Both Native-made and imported European materials were recovered totaling approximately 80,000 artifacts. The majority of these were European goods, totaling 42,000 artifacts (Mason 1986:23). Three hundred and eighty-eight bottle fragments were recovered from Rock Island Site II across all periods, representing fewer than six bottles (Mason 1986:203). These sherds are olive green in color, include bottle necks with applied string rims and bases, and are almost certainly from French wine bottles (Mason 1986:203). These artifacts make up 0.5 percent of the total artifact assemblage at this site (Mason 1986). The bottle glass fragments make up 0.9 percent of the European materials (Mason 1986).

## **Indian Castle**

### *Site History*

Indian Castle is a small site located in western New York, on the edge of a steep ravine next to Limestone Creek (Tuck 1971:186). This site was occupied by the Onondaga from approximately 1655 to 1663 while the French were settled at St. Marie de Gannentaha (Bradley 1987:213). It is possible that this site may have also been the first location of the St. Jean Baptist mission, established by Fathers Dablon and Chaumont (Bradley 1987:213). This site was a small village made up of around 24 houses (Tuck 1971:186).

### *Archaeological Investigations*

Most of the excavations conducted at the Indian Castle site were burials, supplemented by surface collection (Tuck 1971:186). In the 1950s Robert Hill excavated several burials located on a low rise on the outer limits of the village (Tuck 1971:187).

Most of these burials had been looted in the mid to late 1800s, however many artifacts were still collected (Tuck 1971:187). Although this is primarily a mortuary site, the artifacts used in this analysis were recovered from the surface collection (Bradley 1987).

### *Analysis Results*

At Indian Castle, approximately 200 artifacts were recovered (Bradley 1987). Although there was a high density of imported European goods recovered from this site only two glass bottle fragments were identified (Bradley 1987:213). These two fragments were both body shards located during the surface collection (Bradley 1987:213). No color or size descriptions were given. This is the first time glass bottle fragments have appeared in the archaeological record of Onondaga sites in this area (Bradley 1987:213). These fragments make up only one percent of the artifacts recovered (Bradley 1987:213; Tuck 1971:187). Although I was able to find the total number of artifacts at this site, I could not find a concrete break down for the amount of Native goods and European goods within the total assemblage. Therefore, I do not have a percentage of alcohol-related bottle glass to European material assemblage for this site.

## **Fatherland**

### *Site History*

The Fatherland site is located near Natchez, Mississippi on the Fatherland plantation (Neitzel 1965:7). It is situated on the east bank of the Mississippi River in Adams County, Mississippi (Neitzel 1965:9). This marks the site of the Grand Village of the Natchez Indians where it thrived from 1682 until 1729 as the center of activities for French and Natives alike (Neitzel 1965:7). An estimated 3,500 Natchez and 500 French

lived here at this time (Neitzel 1965:7). As of 1962, the only remaining aspects of this site, were three mounds, A, B, and C (Neitzel 1965: 12-13).

#### *Archaeological Investigations*

These mounds were the focus of two periods of excavation (Neitzel 1965:9). The first period of excavation consisted of two phases of limited investigation, one in 1924 by Warren K. Moorehead and one in 1930 by Moreau B. Chambers (Neitzel 1965:9). While Moorehead conducted minimal excavations, Chambers excavated an area of approximately 50 ft. in diameter into Mound C and trenches into the sides of both Mounds A and B (Neitzel 1965:9). In 1962, major excavations of all three mounds were conducted by Robert C. Neitzel (1965).

#### *Analysis Results*

Approximately 15,000 artifacts were collected at this site (Neitzel 1965). Although imported European materials are present in this assemblage, they only make up 1.5 percent of the total assemblage (Neitzel 1965). European materials total 233 (Neitzel 1965:50-51). Fifteen glass bottle fragments and one intact wine bottle were recovered from Mound C (Neitzel 1965:51). Glass bottle shards comprise 0.1 percent of the total artifact assemblage and 6.4 percent of the European material assemblage (Neitzel 1965).

### **White Springs**

#### *Site History*

White Springs is a large nucleated village site dating from 1688 to 1715 located in the Finger Lakes region near Geneva, New York (Jordan 2008: 97, 176). This five-acre site is situated on a long north-south running hilltop ridge that overlooks Seneca Lake,



with the land gradually sloping to the west and a high defensible position to the east (Jordan 2008:175). In 1687, four Seneca village sites were destroyed (Jordan 2008:172). White Springs and Snyder-McClure were then built in 1688 to replace those sites (Jordan 2008:172). White Springs was occupied by approximately 1000 to 2000 Seneca over the duration of its life as a nucleated settlement, until its abandonment in 1715 (Aloi 2007; Jordan 2008:93).

### *Archaeological Investigations*

Very little professional archaeological work has been completed at White Springs. Prior to 2007, only burial excavations and archaeological surveys had been done (Jordan 2008:175). These surveys included a systematic surface collection and a shovel test survey (Jordan 2008:175). The shovel test survey consisted of twenty-six shovel tests dug next to the site along a road and found very little to no seventeenth or eighteenth century artifacts (Jordan 2008:175). In 2007, field school students, led by Dr. Kurt Jordan of Cornell University, excavated a number of units across the village site, away from the known burial remains (Aloi 2007).

### *Analysis Results*

Artifacts from White Springs include both Native-made and imported European materials (Jordan 2008). The White Springs assemblage totals 429 artifacts (Jordan 2008). Of these 429 objects, there was only one fragment of alcohol-related bottle glass (Jordan 2008:312). Jordan explains that the low amount of bottle glass here actually reflects a lack of alcohol use at this site (2008:314). The thoroughness of the White Springs surface collection practices ensure that had there been any seventeenth or eighteenth century bottle glass present, it would have been collected (Jordan 2008:314).

As it is, alcohol bottle glass amounts 0.2 percent of the total assemblage. Although I was able to find the total number of artifacts at this site, I could not find a concrete breakdown for the amount of Native goods and European goods within the total assemblage. Therefore, I do not have a percentage of alcohol-related bottle glass to European material assemblage for this site.

## **Fort St. Joseph**

### *Site History*

Fort St. Joseph is a mission, garrison, and trading post located on the lower St. Joseph River in present-day Niles, Michigan (Brandão and Nassaney 2006: 61). This fort is one of the most important French outposts in the Great Lakes region and allowed the French to have significant control of the southern Lake Michigan region (Brandão and Nassaney 2006:61; Nassaney et al 2003:107). In 1691, the French established the military post at the St. Joseph-Kankakee portage (Nassaney et al. 2003:107, 109). After 1761, the British gained control of the fort (Nassaney et al 2003:110). In 1781, the Spanish successfully raided the fort and gained control for one day. Soon after it was abandoned (Nassaney et al. 2003:110).

### *Archaeological Investigations*

Archaeological investigations at Fort St. Joseph began in the 1940s and continued in the 1970s with several unsuccessful attempts to locate the fort (Nassaney et al. 2007:6). In October 1998, Michael Nassaney of Western Michigan University conducted a systematic shovel test pit survey to identify the location of the fort (Nassaney et al 2003:117). The Fort St. Joseph Archaeological Project was initiated to identify and

evaluate the material evidence of the fort (Nassaney et al. 2003:107). A reconnaissance survey located European and Native artifacts; subsequent testing in 2002 identified undisturbed artifact deposits and features associated with the fort (Nassaney et al 2007:7). Excavations are still ongoing through the Fort St. Joseph Archaeological Project, a collaboration between Western Michigan University and the City of Niles.

### *Analysis Results*

Over 372,000 artifacts have been catalogued from Fort St. Joseph. Imported European artifacts comprise the majority of the artifact assemblage at this site. A total of 372 bottle glass fragments were identified in the Fort St. Joseph artifact collection. Olive green glass (n= 218) comprise 59 percent of the bottle glass assemblage, while light blue-green glass (n= 154) make up the remaining 41 percent of the bottle glass assemblage. Bottle glass fragments comprise 0.1 percent of the total artifact assemblage at this site. Although I was able to find the total number of artifacts at this site, I could not find a concrete break down for the amount of Native goods and European goods within the total assemblage. Therefore, I do not have a percentage of alcohol-related bottle glass to European material assemblage for this site.

## **Bayou Goula**

### *Site History*

Bayou Goula is a Native village site dating from 1699 until 1739 located in the lower Mississippi Valley in the Iberville Parish, Louisiana and consists of two low mounds separated by a 600-foot-long plaza (Quimby 1957:98). This site is situated on the west bank of the Mississippi River, approximately 25 miles downstream of Baton Rouge,

Louisiana, and sits on the level crest of a natural levee and flood plain that rises 10 to 15 feet above the Mississippi (Quimby 1957:98, 100). Over the course of its occupation, Bayou Goula was populated by the Bayogoula, Mugulasha, Acolapissa, Tiou, Taensa, and Houma at varying times (Quimby 1957:100). This site was constructed when the Bayogoula and the Mugulasha came together to form one village (Quimby 1957:101). It was finally abandoned in 1739 when the groups living at Bayou Goula departed to form their own separate villages (Quimby 1957:102).

#### *Archaeological Investigations*

Excavations began at Bayou Goula in April 1940 under the supervision of Dr. Edwin B. Doran (Quimby 1957:103). Due to numerous hardships to both staff and site, the excavations were shut down shortly after they began (Quimby 1957:103).

Archaeological investigations resumed in February 1941 under the direction of Dr. Carlyle S. Smith and lasted until July 1941 when work concluded due to a lack of funds (Quimby 1957:103). Over the course of these five months, Mound 1 was fully excavated, a profile was drawn of Mound 2, a number of pit features were fully dug, and approximately 1500 running feet of exploratory and stratigraphic trenches were completed (Quimby 1957:103).

#### *Analysis Results*

Approximately 20,000 artifacts were excavated at Bayou Goula (Quimby 1957). Imported European artifacts comprise only 10 percent of this assemblage, totaling approximately 2,000 artifacts (Quimby 1957). Olive green bottle glass fragments were recovered and identified as fragments of two types of alcohol bottles (Quimby 1957:134-

136). There is a total of 8 container glass fragments, equaling 0.04 percent of the total assemblage and 0.4 percent of the European materials (Quimby 1957:134-136).

## **Townley-Reed**

### *Site History*

Townley-Reed is a Seneca Iroquois village site located five kilometers southwest of Geneva, New York and is situated within the Finger Lakes Hills near the Lake Ontario Lowland province (Jordan 2008:95). Burrell Creek surrounds the site on three sides and was likely a year-round water source for the village (Jordan 2008:96). This village has been classified as a fully dispersed community with several houses spaced 60 to 80 meters apart (Jordan 2008:178). Townley-Reed was occupied from 1715 to 1754 when the village was moved to a new location in the Geneva area, known as Kanadesaga (Jordan 2008:99).

### *Archaeological Investigations*

Three distinct periods of archaeological investigation occurred at Townley-Reed. The first phase was completed in 1882 by George S. Conover who presented a model of community structure that hypothesized that Townley-Reed had a structure similar to earlier Iroquois villages (Jordan 2008:123). The second phase was completed in 1979 and 1982 by Charles F. Wray (Beaupre 2011:116). Wray identified an area measuring approximately 48 ha that potentially contained eighteenth-century deposits (Jordan 2008:121). Wray proposed a model that suggested that community structure at Townley-Reed differed drastically from traditional Iroquois villages (Jordan 2008:123). He posited

that house structures and middens were located close to their burial grounds in low-lying areas, which is quite different from earlier Seneca villages (Jordan 2008:123).

Archaeological excavations began at this site in 1996 in an attempt to determine community structure and to test Conover and Wray's models (Jordan 2008:121-123). Eight areas were identified across the site and were each first examined using non-intrusive methods, such as field walking, surface collection, and geophysical surveys (Jordan 2008:124). Following this first investigation, archaeologists then completed a shovel test survey, soil core sampling, and a systematic metal detector survey (Jordan 2008:125). This was then followed by mechanical stripping of the plowzone, test units, and full scale hand excavations of all areas (Jordan 2008:125).

#### *Analysis Results*

Approximately 835 artifacts make up the assemblage (Jordan 2008:312). Prehistoric or Native-made goods make up the majority of the assemblage from Townley-Reed (Jordan 2008). Approximately 43 olive green and light blue-green bottle glass fragments were recovered from this site (Jordan 2008:312). Bottle glass fragments make up 5.2% of the total assemblage (Jordan 2008:312). Although I was able to find the total number of artifacts at this site, I could not find a concrete break down for the amount of Native goods and European goods within the total assemblage. Therefore, I do not have a percentage of alcohol-related bottle glass to European material assemblage for this site.

## **Fort Michilimackinac**

### *Site History*

Fort Michilimackinac was a fortified trading post that was built on the south shore of the Straights of Mackinac in 1715 and was one of multiple forts that controlled this location during this time (Evans 2013:216). Fort Michilimackinac was occupied from 1715 to 1781 by both the French and British at different times during that span (Evans 2013).

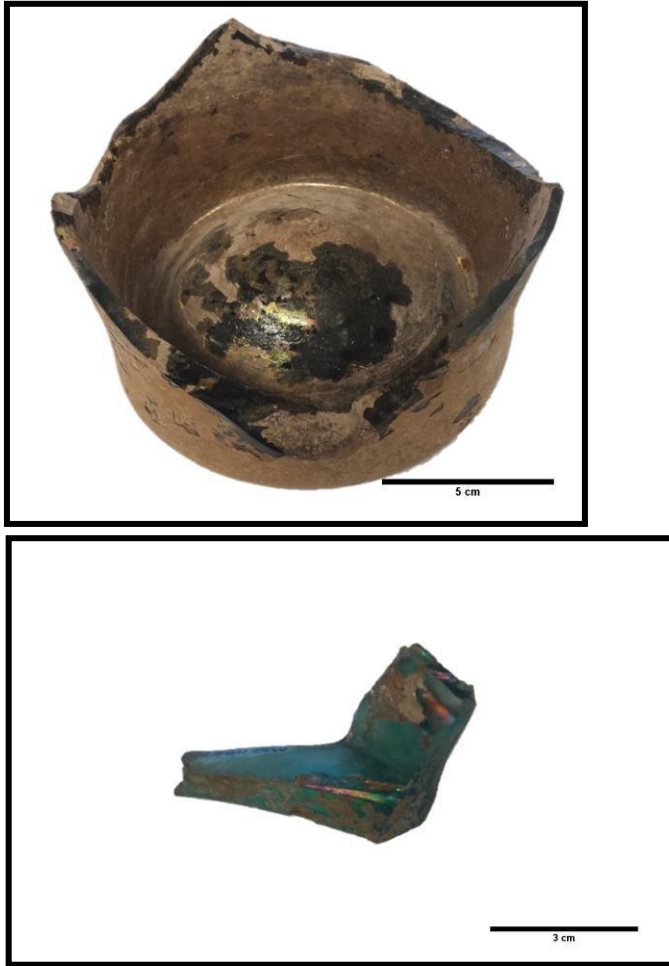
### *Archaeological Investigations*

Archaeological excavations have occurred at Fort Michilimackinac every summer since 1959 (Evans 2013:216). Over two-thirds of the fort has been excavated during this time (Evans 2013:216). However, the majority of excavations were completed in the summer of 1959 (Evans 2003:3). Excavations consist of 10 by 10 foot units, with arbitrary levels of 1.25 inches; this methodology has not changed since the first excavations at this site in 1959 (Evans 2003:3).

### *Analysis Results*

Over one million artifacts have been catalogued from Fort Michilimackinac, including both Native made and imported European artifacts (Lynn Evans, 2014, personal communication). European materials make up the overwhelming majority of artifacts from the fort. Approximately 10,549 olive green and light blue-green bottle glass fragments were identified (Figure 5). While cataloguing, lab technicians with the Michilimackinac State Historic Parks separated the container glass by cultural contexts, identifying French and British artifacts. As such, both French and British bottle glass counts were included in this total, with British materials making up over 95 percent of the bottle glass assemblage. Olive green glass fragments are 37 percent of the bottle glass assemblage, while light blue-green glass fragments are 63 percent of the bottle glass

assemblage. Bottle glass fragments comprise 1 percent of the total artifact assemblage at this site. Although I was able to find the total number of artifacts at this site, I could not find a concrete break down for the amount of Native goods and European goods within the total assemblage. Therefore, I do not have a percentage of alcohol-related bottle glass to European material assemblage for this site.



*Figure 6. Olive green (top) and light-blue green (bottom) bottle glass fragments from the French contexts at Fort Michilimackinac. Photos taken by author.*

### **Wea Village** *Site History*

The Wea Village site is located on the Wabash River in northern Indiana (Trubowitz 1992:248). In 1715 the Wea branch of the Miami people moved from their



original location to the Ouiatenon area, across the river from the fort (Trubowitz 1992:248). This site is situated on a high elevation with more than two leagues of fields for crops, such as pumpkins, maize, and melons (Trubowitz 1992:248). The Wea Village population ranged from 400 people at its lowest point to 1200 at its peak (Trubowitz 1992:248). In 1791, Brigadier General Charles Scott burned the village and its crops (Trubowitz 1992:249). Later that year, Brigadier General James Wilkinson destroyed the crops that the Wea had replanted (Trubowitz 1992:249). The village was abandoned after this last attack (Trubowitz 1992:249).

### *Archaeological Investigations*

Archaeological work began in 1986 and continued until 1988 (Trubowitz 1992:249). These initial surveys focused on the floodplain, where large amounts of eighteenth century materials were recovered, and covered an area of fifty acres (Trubowitz 1992:249). Surface collection found heavy concentrations on the two rises closest to the river (Trubowitz 1992:249). Proton magnetometry transects revealed four subareas with high readings, and coincided with high density surface collections (Trubowitz 1992:249). Further excavations were completed in the woods close to the fields and near the river. Units were placed near the field where high magnetometry readings and dense surface collections were found (Trubowitz 1992:249). Two units placed near the river found evidence of occupation buried beneath 80 cm of flood deposits, including two features, a large post mold and a smudge pit (Trubowitz 1992:249). Units in the woods had a heavier density of trade goods and faunal remains than those placed on the rises (Trubowitz 1992:249).

### *Analysis Results*

Approximately 2681 artifacts were recovered from the Wea Village, of which 2125 were European goods (Trubowitz 1992). Glass bottle fragments were the most abundant artifacts recovered (Trubowitz 1992:249). These fragments were either olive green or light blue-green in color, with both French and British lip finishes identified (Trubowitz 1992:249-250). Bottle glass totaled 230 fragments, 8.6 percent of the total assemblage and 10.8 percent of the European materials assemblage (Jones 1989:377; Trubowitz 1992:249-253).

### **Fort Ouiatenon**

#### *Site History*

Fort Ouiatenon is located near Lafayette in northwestern Indiana on the Wabash River. This fort was established in 1717 by the French as a temporary installment (Noble 1991:66). Originally, the French hoped to persuade the local native residents to relocate to their previous village? establishment along Lake Michigan, however, they refused and subsequently became essential to daily trade practices at the fort (Noble 1991:66). Fort Ouiatenon became a regular stop along the highly significant Maumee-Wabash route (Noble 1991:67). In 1761, the British took control of the fort (Noble 1991:67). The late 1780s saw the fort serving as a staging ground for native raids on American settlements (Noble 1991:68). Due to these actions, Americans burned the fort, neighboring villages, and their crops to the ground in 1791 (Noble 1991:68).

#### *Archaeological Investigations*

There was considerable interest in the location of Fort Ouiatenon prior to any archaeological investigations (Noble 1991:69). Local amateur archaeologists found large

numbers of eighteenth century artifacts through surface collection in 1967 (Noble 1991:69). Formal testing began in 1968 and 69 by Indiana University and the Indiana Historical Society which confirmed the location of the fort (Noble 1991:69). Fort Ouiatenon was placed on the National Register of Historic Places in 1970 (Noble 1991:69). Large block excavations were completed at the assumed center of the site by James Kellar of Indiana University in the early 1970s (Noble 1991:70). This was followed by two years of focused excavation on the plow zone by Larry Chowning and Claude White (Noble 1991:70). In 1973, Chowning returned to complete small scale excavations below the plow zone and discovered several wall trenches (Noble 1991:70). From 1974 to 1976, Charles E. Cleland and Judith Tordoff of Michigan State University completed extensive block excavations and uncovered wall trenches, a forging area, a well, and a subterranean storehouse (Noble 1991:71). Also at this time, a systematic magnetometer survey was completed (Noble 1991:74). In 1977 to 1979 Vergil Noble created and implemented a systematic site sampling plan (Noble 1991:72).

### *Analysis Results*

Approximately 21,262 artifacts were collected at Fort Ouiatenon, of which 20,609 artifacts are European materials (Noble 1983). Approximately 1,418 bottle glass fragments were identified (Noble 1983:184-186). Both French and British bottle glass counts were included in this total. Olive green glass fragments number 972, and are 69 percent of the bottle glass assemblage, while light blue-green glass fragments number 446, and are 31 percent of the bottle glass assemblage (Noble 1983:184-186). Bottle glass fragments comprise 6.7 percent of the total artifact assemblage at this site and 6.9 percent of the European materials assemblage.

## **Guebert**

### *Site History*

The Guebert site is located in Randolph County, Illinois just two leagues north of the confluence of the Kaskaskia River and the Mississippi River (Good 1972:ix). It is situated on a narrow strip of land two miles east of the Mississippi River (Good 1972:ix). This site is the final location of the Kaskaskia Indian Mission village (Good 1972:28). The Kaskaskia and their few French allies moved here to escape attacks from the Sioux (Good 1972:21). They occupied this site from 1719 until 1765 (Good 1972).

### *Archaeological Investigations*

Very little professional archaeological investigations were conducted at Guebert (Good 1972:ix). Artifacts were collected via surface collections by J. Dan Will who carefully saved these materials until 1935 (Good 1972:ix). These artifacts now reside at the Thomas Gilcrease Institute of American History and Art in Tulsa (Good 1972:ix).

### *Analysis Results*

Approximately 4000 artifacts were recovered from Guebert (Good 1972). Native-made artifacts make up less than thirteen percent of the total assemblage, with imported European artifacts comprising the overwhelming majority, totaling 3,480 (Good 1972). Four hundred and eight bottle glass fragments were identified, with over three hundred classified as French and approximately one hundred classified as British (Good 1972:180). Both wine and case bottles, olive green and light blue-green in color, were collected (Good 1972:180). Bottle glass artifacts make up 10.2 percent of the total assemblage, and 11.7 percent of the European artifact assemblage (Good 1972).

## **Kethtippecanunk**

### *Site History*

Kethtippecanunk is a large Wea village located in Tippecanoe County, Indiana, at the confluence of the Wabash and Tippecanoe Rivers, on the first and second terraces (Strezewski et al. 2007:1, 2, 10). The Wabash River lies approximately 680m to the South, while the Tippecanoe River lies immediately to the East (Strezewski et al. 2007:10). This town was a major hub for native trade and consisted one of the largest native towns with approximately 120 houses (Strezewski et al. 2007:2). Although, primarily a native village from the 1730s through 1770s, by the late 1770's a large contingent of French traders had moved into the village (Strezewski et al. 2007:2). This is likely due to the disrepair that Fort Ouiatenon had fallen into by 1778 (Strezewski et al. 2007:2). Kethtippecanunk remained a major center of activity until 1791 when it was destroyed by Kentucky militia as an act of retaliation against native hostilities (Strezewski et al. 2007:1). It does not appear to have been reoccupied after this destruction (Strezewski et al. 2007:3).

### *Archaeological Investigations*

Although there was professional interest in this site in the 1970s, archaeological investigations did not begin until 2005 with the Indiana University – Purdue University Fort Wayne Archaeological Survey (Strezewski et al. 2007:3). The 2005-2006 field seasons were funded by the National Park Service Historic Preservation Grant program, administered by the Indiana Department of Natural Resources, Division of Historical Preservation and Archaeology (Strezewski et al. 2007:3). Field work was completed as a

part of the IPFW – AS field school (Strezewski et al. 2007:4). The 2005 investigations focused on three areas, one of which was Kethtippecanunk, and included extensive geophysical survey with limited test excavations (Strezewski et al. 2007:4). These surveys consisted of a wide interval magnetometer survey, and a smaller 2-acre resistivity survey (Strezewski et al. 2007:4). Dozens of likely cultural anomalies were identified, and a few were tested (Strezewski et al. 2007:4). A total of 20.75m<sup>2</sup> were excavated, revealing three features (Strezewski et al. 2007:4). In 2006, investigations included systematic screened shovel tests at 20m intervals with additional tests done at 10m intervals in areas with eighteenth century materials (Strezewski et al. 2007:8). An extended magnetometer survey was completed to the west of the original 2005 magnetometer survey (Strezewski et al. 2007:8). Excavations included three block excavations. Block 1 was placed to expose a possible structure located in 2005 and measures 61m<sup>2</sup> (Strezewski et al. 2007:64). Block 2 formed a trench to recover previously recorded eighteenth century artifacts (Strezewski et al. 2007:64). Block 3 was placed over two large dipolar anomalies (Strezewski et al. 2007:64).

### *Analysis Results*

A total of 15,481 artifacts was collected from Kethtippecanunk, on which 2,572 are European materials (Strezewski et al. 2007). Of the artifacts collected, alcohol-related bottle glass is the third most prevalent artifact type at this site (Strezewski et al. 2007:146). All but one fragment of glass was identified as wine and liquor bottle fragments (Strezewski et al. 2007:146). Many fragments were too iridized to identify color and were not included in my totals. From this site, 227 fragments of light blue-green and olive green bottle glass were identified, totaling 1.5 percent of the entire

assemblage and 8.8 percent of the European materials assemblage (Strezewski et al. 2007:146).

### **Summary**

These twelve sites were selected due to their age, cultural affiliation, location, and artifact assemblages. They range in beginning date from 1641 to 1730. Nine sites are Native settlements, while the remaining three are European forts or outposts. These sites are located in four different areas of the United States, including Western New York, Western Great Lakes, Wabash Valley, and Central/Lower Mississippi Valley. The percentage of glass across the sites ranges from 0.4 to 11.7 percent of European materials and 0.04 to 10.2 percent of total artifact assemblage. This chapter was a discussion of each site's information, as well as a presentation of the results of my data collection. The following chapter presents an in-depth analysis and discussion of this data.

## CHAPTER V

### ANALYSIS AND DISCUSSION

#### **Introduction**

Despite the burgeoning forays into the archaeology of alcohol and extensive in-depth analyses of documents, little has been done to integrate these two sources which would allow for a more complete picture of alcohol consumption during this time. My research is conducted to answer the question: What patterns emerge when comparing the archaeological record to the documentary record concerning Native alcohol consumption in the seventeenth and eighteenth century fur trade of New France? To do this, I examined the percentages of alcohol-related bottle glass at twelve archaeological sites that ranged from the seventeenth to eighteenth century and included both European and Native contexts. Based on the literature, I hypothesized that alcohol trade increased from the seventeenth to the eighteenth century, that Native sites would have higher percentages of alcohol-related bottle glass than European sites, and that the archaeological record would contradict the primary and secondary sources.

#### **Archaeological Data Analysis**

To explore the hypothesis that alcohol consumption increases over time, I compared the percentages of bottle glass to European artifacts and the percentage of bottle glass to the total assemblage between these sites and their beginning occupation dates. These two forms of comparison are to aid in more accurately reflecting the importance of alcohol as it relates to other trade goods. The twelve archaeological sites in



my sample exhibit a wide range in initial occupation dates, from mid-seventeenth century to mid-eighteenth century. The six seventeenth century sites have a range of 0.4 percent to 6.4 percent bottle glass to European materials and 0.04 percent to 1 percent bottle glass to total assemblage (Table 2). The six eighteenth century sites have higher percentages of bottle glass than their earlier counterparts, ranging from 6.9 percent to 11.7 percent bottle glass to European materials and 1 percent to 10.2 percent bottle glass to total assemblage (Table 2). In both sets of percentage ranges, percentages of bottle glass to European artifact count and percentages of bottle glass to total artifact count, there is a visible increase in the amount of bottle glass when comparing the seventeenth to the eighteenth century sites.

However, there is a limitation with analyzing this data by initial occupation date. As these sites exhibit a large range in occupation time it is difficult to accurately compare them and to get a meaningful result. To provide a more balanced comparison, I also analyzed these sites by their mean occupation date and percentage of bottle glass to European artifact totals, as well as their percentage of bottle glass to total assemblage to look for temporal patterns (Table 3). The mean occupation dates range from 1659 to 1760. When analyzing the data by mean occupation date, only two seventeenth century sites remain, Indian Castle and Fatherland. Only Fatherland has a percentage of bottle glass to European materials assemblage, which is 6.4 percent. This percentage was unable to be calculated for Indian Castle. Their percentages of bottle glass to total assemblage range from 0.1 to 1 percent. The ten eighteenth century sites have percentages that range from 0.4 to 11.7 percent of bottle glass to European materials assemblage and 0.04 to 10.2 percent of bottle glass to total artifact assemblage. These

percentages are not so different as to suggest a clear or drastic increase from the seventeenth to the eighteenth century. But, there is enough of a variation to say that the amount of alcohol-related bottle glass is slightly increasing when comparing the seventeenth to the eighteenth century sites.

*Table 2. Archaeological sites organized by their initial occupation dates and percentages of bottle glass to total assemblage*

| Site Name                 | Occupation | % of Bottle Glass to European Materials Assemblage | % of Bottle Glass to Total Assemblage |
|---------------------------|------------|--|---------------------------------------|
| <b>Rock Island</b>        | 1641-1770  | 0.9  | 0.5                                   |
| <b>Indian Castle</b>      | 1655-1663  | -  | 1.0                                   |
| <b>Fatherland</b>         | 1682-1729  | 6.4  | 0.1                                   |
| <b>White Springs</b>      | 1688-1715  | -  | 0.2                                   |
| <b>Fort St. Joseph</b>    | 1691-1781  | -  | 0.1                                   |
| <b>Bayou Goula</b>        | 1699-1739  | 0.4  | 0.04                                  |
| <b>Townley-Reed</b>       | 1715-1754  | -  | 5.2                                   |
| <b>F. Michilimackinac</b> | 1715-1783  | -  | 1.0                                   |
| <b>Wea Village</b>        | 1715-1791  | 10.8   | 8.6                                   |
| <b>F. Ouatennon</b>       | 1717-1791  | 6.9  | 6.7                                   |
| <b>Guebert</b>            | 1719-1765  | 11.7   | 10.2                                  |
| <b>Kethtippecanunk</b>    | 1730-1791  | 8.8  | 1.5                                   |

*Table 3. Archaeological sites organized by mean occupation dates and percentages of bottle glass to total assemblage*

| Site Name            | Mean Occupation Date | % of Bottle Glass to European Materials Assemblage | % of Bottle Glass to Total Assemblage |
|----------------------|----------------------|--|---------------------------------------|
| <b>Indian Castle</b> | 1659                 | -  | 1                                     |
| <b>Fatherland</b>    | 1698                 | 6.4  | 0.1                                   |
| <b>White Springs</b> | 1701                 | -  | 0.2                                   |
| <b>Rock Island</b>   | 1705                 | 0.9  | 0.5                                   |
| <b>Bayou Goula</b>   | 1719                 | 0.4  | 0.04                                  |
| <b>Townley-Reed</b>  | 1734                 | -  | 5.2                                   |

|                           |      |      |      |
|---------------------------|------|------|------|
| <b>Fort St. Joseph</b>    | 1736 | -    | 0.1  |
| <b>Guebert</b>            | 1742 | 11.7 | 10.2 |
| <b>F. Michilimackinac</b> | 1749 | -    | 1    |
| <b>Wea Village</b>        | 1753 | 10.8 | 8.6  |
| <b>F. Ouiatenon</b>       | 1754 | 6.9  | 6.7  |
| <b>Kethtippecanunk</b>    | 1760 | 8.8  | 1.5  |

Although I hypothesized that higher percentages of alcohol-related bottle glass would be present at primarily Native sites compared to primarily European sites, the data collected from these sites provided little evidence to support that hypothesis. The amount of bottle glass varied across all sites when examined culturally (Table 4). The percentages at Native sites ranged from 0.4 to 11.7 percent of bottle glass to European materials assemblage and 0.04 to 10.2 percent of bottle glass to total assemblage, while those at European sites were 6.9 percent of bottle glass to European materials assemblage and ranged from 0.1 to 6.7 percent of bottle glass to total assemblage. These percentage ranges are similar enough to suggest that any differences are negligible. According to this data, Europeans and Natives were drinking comparable amounts of alcohol, and that both groups increased their use of alcohol over time.

*Table 4. Archaeological sites arranged according to their cultural affiliation*

| Site Name                 | Occupation | Cultural Affiliation | % of Bottle Glass to European Materials Assemblage | % of Bottle Glass to Total Assemblage |
|---------------------------|------------|----------------------|--|---------------------------------------|
| <b>Fort St. Joseph</b>    | 1691-1781  | French               | -  | 0.1                                   |
| <b>F. Michilimackinac</b> | 1715-1783  | French               | -  | 1.0                                   |
| <b>F. Ouiatenon</b>       | 1717-1791  | French               | 6.9  | 6.7                                   |
| <b>Rock Island</b>        | 1641-1770  | Native               | 0.9  | 0.5                                   |
| <b>Indian Castle</b>      | 1655-1663  | Native               | -  | 1.0                                   |
| <b>Fatherland</b>         | 1682-1729  | Native               | 6.4  | 0.1                                   |
| <b>White Springs</b>      | 1688-1715  | Native               | -  | 0.2                                   |

|                        |           |        |      |      |
|------------------------|-----------|--------|------|------|
| <b>Bayou Goula</b>     | 1699-1739 | Native | 0.4  | 0.04 |
| <b>Townley-Reed</b>    | 1715-1754 | Native | -    | 5.2  |
| <b>Wea Village</b>     | 1715-1791 | Native | 10.8 | 8.6  |
| <b>Guebort</b>         | 1719-1765 | Native | 11.7 | 10.2 |
| <b>Kethtippecanunk</b> | 1730-1791 | Native | 8.8  | 1.5  |

Due to the limitations discussed previously, including disparities in site size, collection methods, and assemblage size, as well as the limited number of sites I examined, this research should be viewed conservatively. The results of this methodology and analysis could be interpreted differently with a different sample size and strategy. However, when examining my data for patterns, I focused on two main hypotheses. The first compared the percentages of alcohol-related bottle glass to both the European materials assemblage and the total artifact assemblage from the seventeenth and eighteenth century sites, by initial occupation date and by mean occupation date. These analyses proved that alcohol-related bottle glass was likely increasing from the seventeenth to the eighteenth century, but not in great quantities. This increase was expected based on the documentary literature. The second hypothesis compared percentages of alcohol-related bottle glass between European and Native sites. Based on the literature, I expected to see an obvious difference between Native and European sites. This was not evident in the archaeological record. The percentages of bottle glass at these sites was too similar to provide credence to the theory that Natives were drinking more than Europeans. The following section discusses how the information gleaned from historical documents compares to the archaeological data.

## **Historical Documents Compared to Archaeological Data**

This project also focused on information derived from documents, both primary and secondary sources, regarding alcohol during the fur trade in New France. This section focuses on how the literature compares to the archaeological record as it concerns alcohol consumption.

These documents most commonly discussed the Natives' behavior resulting from alcohol consumption. They accorded a stunning disdain for any distasteful actions on the Natives' parts as a result of drunkenness, and considered it to be wicked and disruptive (Dailey 1968). The documents present an image of a slovenly drunk and disorderly Native. Europeans often misunderstood, deliberately or not, Natives' motives for drinking excessively, which led to a greater divide between these groups.

While European behavior when drunk was not seriously different, Native actions were more heavily scrutinized and criticized (Axtell 2001). The information presented here suggests that Natives patterns of drinking do not tend to differ much from Europeans. I expected that this amount would continue to increase across time due to the ever-growing demand for more alcohol, despite the restrictions placed on alcohol trade. This was supported by the archaeological data from these sites, but not to the extent expected from the primary sources.

Percentages of alcohol-related bottle glass ranged between 0.4 to 11.7 percent of European materials and 0.04 to 10.2 percent of total assemblages. The majority of these sites had less than 10 percent of alcohol-related bottle glass. These percentages only increased by a slight amount from the seventeenth to the eighteenth century. Although there is this increase, the amount of alcohol-related bottle glass at these sites never exceeds 11.7 percent of the European materials and 10.2 percent of the total assemblage

and is still relatively low compared to expectations based on the documents. The steady increase in percentages of bottle glass supports the hypothesis that the demand from alcohol dependence guided alcohol trade practices. However, this demand for alcohol did not seem to eclipse the need for other trade goods, such as cloth and weapons (Anderson 1992; Mancall 1995).

As such, there was no obvious abundance of alcohol-related bottle glass at most Native sites in this project. Alcohol consumption did not appear to be as prevalent among Natives sites as expressed in the documentary evidence, and is in fact, similar to that among Europeans sites. Alcohol was traded, but not in high enough frequency to conform the “drunken Indian” trope. Documents from the seventeenth and eighteenth centuries have inherent biases, and as most are written by Europeans, these biases are most often prejudiced towards Natives. It is not surprising that the documents overstated the amount of alcohol being consumed by Natives. The archaeological data confirms that, despite what was recorded, Natives and Europeans consumed comparable amounts of alcohol.

When comparing the historical documents and supporting literature to the archaeological record, it is clear that there are some obvious differences. Alcohol consumption did increase over time as suggested by the primary and secondary sources, which indicated a fairly steady increase in alcohol consumption. However, as suggested by Anderson, alcohol consumption was not nearly as popular as implied by the literature (1992). Nor were Natives drinking excessively or disproportionately to Europeans. This research combined documentary information and archaeological data to further explain and better understand alcohol consumption during the seventeenth and eighteenth centuries of the fur trade in New France.

## CHAPTER VI

### CONCLUSION AND FUTURE RESEARCH

This chapter summarizes and concludes the previous five chapters, as well as provides suggestions on future research on alcohol use in colonial North America. The goal of this project is to provide additional contributions for a more complete picture of alcohol trade and consumption during the fur trade of New France. As discussed in Chapter I, many primary and secondary sources discuss alcohol consumption, but a comparison between these records and the archaeological record has not been made. Multiple lines of evidence have not been explored in conjunction with each other. Few researchers have concentrated on Native alcohol consumption during the seventeenth and eighteenth centuries as a significant, singular research topic and little has been done to compare tangible, archaeological evidence to primary and secondary sources (Mancall 1995). Documents often present information that conflicts with the archaeological data. As documents are subject to their author's biases and the archaeological record is subject to excavation biases, it behooves us to combine these sources to form a multi-faceted picture of the alcohol trade and consumption and its role in the fur trade.

In Chapter II, I provide historical context and an overview of research done on alcohol consumption in the archaeological record pertaining to this subject and examined the primary and secondary sources on alcohol consumption. The majority of the literature surrounding the topic of alcohol trade during the seventeenth and eighteenth century discusses the behaviors of those who indulged in alcohol and regulations placed on that trade. Primary and secondary sources conclude that alcohol consumption became an

increasing problem as it became a more prevalent and popular trade good and became more readily available to Natives. Based on these sources, I hypothesized evidence of alcohol would be prevalent at Native archaeological sites and that these amounts would increase over time.

Chapter III is a description of my methodology for this project, with which I test the hypotheses that emerged from reviewing the literature in Chapter II. To effectively explore patterns of alcohol trade and consumption, I examined the artifact collections of light blue-green and olive green container glass from twelve sites that date to the seventeenth and eighteenth centuries. Quantity was measured by comparing the amount of light blue-green and olive green bottle glass between sites as percentages to both the European materials assemblage and the total artifact assemblage. The sites chosen for this analysis are located in North America and date from the mid-seventeenth to the late-eighteenth centuries.

Chapters IV and V focused on the archaeological site descriptions, analysis, and discussion. In Chapter IV, I provided site histories, descriptions, and the results of my data collection for each archaeological site. This selection of sites includes both European and Native contexts and range in location from the Western Great Lakes to the Wabash Valley to the Mississippi Valley to Western New York. Chapter V focuses on my analysis and discussion of the data from these sites, as well as a discussion comparing the archaeological data to the information from the primary and secondary sources. I hypothesized that, based on the literature, alcohol consumption would increase over time and that these amounts would be moderate to high. I concluded that these amounts do somewhat increase from the seventeenth to the eighteenth century, but that they were



fairly low amounts. Although literary evidence suggests that higher frequencies of alcohol-related bottle glass would be found at Native sites compared to European sites, I found that there was no archaeological evidence to support this from these sites. Both Native and European sites had variable but similar amounts of bottle glass. When these conclusions were compared to the historical resources, it became clear that there were persistent biases among the literature that exaggerated the amounts of alcohol being consumed and by whom.

This research was intended to shed light on the uncertainty regarding Native alcohol consumption during the seventeenth and eighteenth centuries in New France. No direct comparison between these documents and the archaeological record had been made, examining primary documents, secondary sources, and archaeological sites in a project of this magnitude. The goals of this research were to explore multiple lines of evidence and analyze the results to create a more comprehensive picture concerning alcohol consumption during the fur trade of New France. However, by no means is this research the final say on alcohol consumption in the fur trade era; more data is still needed from other sites in the region to better understand these complicated relations between Natives, Europeans, and alcohol.

This project provides an excellent starting point for future research. As I only looked at twelve sites spread out over four areas of New France, further research should be done on a larger variety of sites. Regional analyses of site data should also be completed. Other comparisons between sites could be examined, including spatial analysis. In addition, the sample size of documents I examined could also be expanded to create a more thorough and systematic literature review. Other topics related to this

research that should be explored are ways that alcohol was used in Native societies, such as ritual uses, sourcing where the traded liquor was coming from, and studying the alcohol trade during the mid to late eighteenth and nineteenth centuries following the restrictions placed on alcohol. The research conducted in this thesis paves the way for further work to contribute to the understanding of the alcohol trade and consumption in the seventeenth and eighteenth centuries of New France.

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