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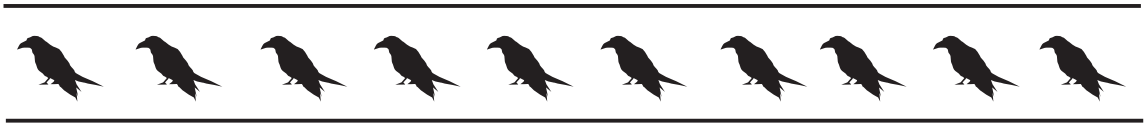

FORT SELKIRK: EARLY CONTACT PERIOD INTERACTION BETWEEN THE NORTHERN TUTCHONE AND THE HUDSON'S BAY COMPANY IN YUKON

Victoria Elena Castillo

Yukon Archaeology Programme

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Victoria Elena Castillo

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Fort Selkirk: Early Contact Period Interaction Between the Northern Tutchone and the Hudson's Bay Company in Yukon

by

Victoria Elena Castillo

A thesis submitted to the Faculty of Graduate Studies and Research
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For

Selkirk First Nation Citizens

and

Grant and Roman Zazula

Abstract

Historical archaeology has often struggled to reveal the roles that Indigenous people played as socio-economic agents during the initial contact period in North America. Previous research in the discipline largely focused either on reconstructing everyday life in early European settlements while ignoring Indigenous agency or on European material culture and dominance over Indigenous groups. The absence of Indigenous agency in historical archaeology unfortunately presents Aboriginal people as lacking the reflexivity to create their own space within their social conditions.

Research presented in the dissertation employs a holistic, multi-scalar approach, combining archaeological, archival, and ethnographic data to examine how Hudson's Bay Company (HBC) fur traders and Northern Tutchone Athapaskans negotiated their socio-economic roles at Fort Selkirk, Yukon (A.D. 1848-1852) and to expose the underlying social processes of early European-Indigenous interaction. Results of this study demonstrate that the Northern Tutchone were active agents in their trade relations with the Hudson's Bay Company and Coastal Tlingit Chilkat trade partners. The archaeological and archival records reveal that the Northern Tutchone traded with the HBC but were never subsumed within the HBC trade sphere. The Northern Tutchone people, as reflexive agents, remained autonomous throughout the fort's existence and were able to create a dual trading strategy that was profitable for them for the duration of the forts existence.

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Chapter 1: Introduction

Historical archaeology has struggled to reveal the roles that Indigenous[1] people played as socio-economic agents during the initial contact period in North America (Silliman 2005). The discipline has focused either on reconstructing everyday life in early European settlements while ignoring Indigenous agency or on European material culture and dominance over Indigenous groups (Lightfoot et al. 1998; Rubertone 1989). The absence of Indigenous agency in historical archaeology unfortunately presents Aboriginal people as lacking the reflexivity to create their own space within their social conditions (Bourdieu 1977; for example see Spaulding 1946). Although there are many forms of primary sources in which to conduct historical studies of Indigenous-European interaction, such as journals written by European men who worked in the colonies or on trade expeditions, it is true that the main European observations of local Indigenous people were fragmentary and filtered through the empathetic attitude of the individual (Lightfoot 1993, 2005: 15). Marshall Sahlins suggests that European writings in colonial contexts are not so much biased representations of history as culturally constructed texts that present eyewitness accounts from the vantage points of elite, literate, white males (1991: 4-14).

Yet, in the recent past, new developments have emerged within the field of historical archaeology (Silliman 2001: 379) including research into interethnic domestic life and marriage (Deagan 1996; Lightfoot and Martinez 1997); identity formation, change and maintenance (Carlson 2006; Cusick 1998; Jamieson 1995); space and material culture (Jamieson 2000; Lightfoot 1995; Lightfoot et al. 1998; Marshall and Maas 1997); agency (Martindale 2009); frontiers, boundaries, and world systems theory (Lightfoot and Martinez 1995; Rice 1998); gender (Gilchrist 2004) and labour (Silliman 2000a). There are a number of good reasons to study the initial contact period through the lens of this sub-discipline of archaeology. Historical archaeology presents an opportunity for reconstructing the life ways and interactions of Europeans and Indigenous people in colonial contexts through study of material culture and other archaeological remains (Lightfoot 2005: 17). Rather than focus on the colonist, historical archaeology is significant because, through the use of historical texts, published oral histories, ethnographies and material culture analysis, it can allow for a "democratizing" of the past, allowing archaeologists to bring forward new perspectives on Indigenous groups and their interactions with the dominant colonial culture (Deagan 1991; Deetz 1991).

This research aims to examine how Hudson's Bay Company (HBC) fur traders and Northern Tutchone Athapaskans negotiated their roles in socio-economic relations at Fort Selkirk (A.D. 1848-1852) to expose the underlying social processes of early European-Indigenous interaction in Yukon Territory (Figure 1).

Using agency theory, and other associated theories and themes, the aim is to examine the documentary, oral and archaeological sources pertaining to the

[1] The term Indigenous will refer to peoples who are the original inhabitants of a particular land and is used instead of Native. The term Native Peoples is increasingly seen as outdated and is starting to lose acceptance.

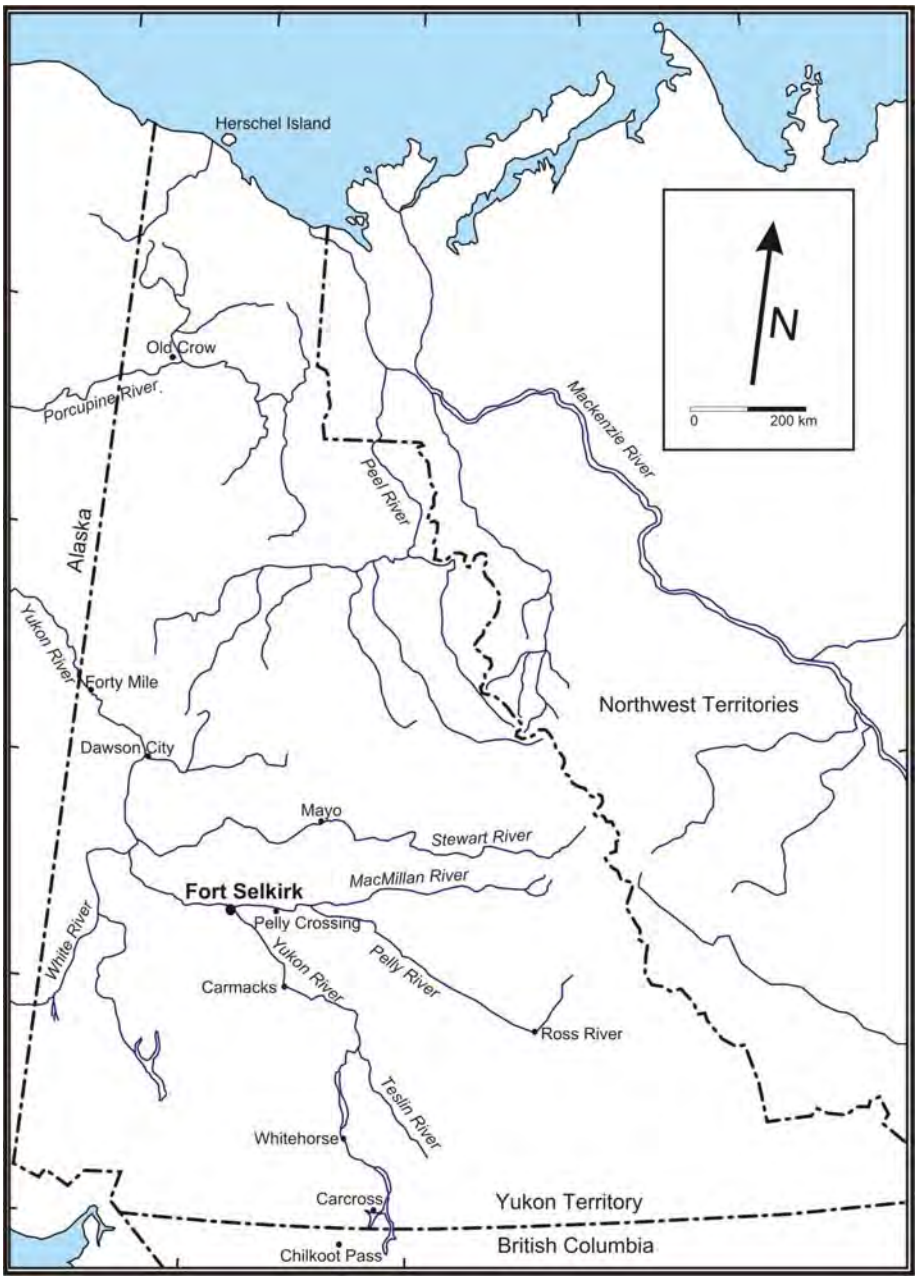

Figure 1. Map of Yukon Indicating General Location of Fort Selkirk I (adapted from Westgate et al. 2001).

Northern Tutchone, Hudson's Bay Company and Coastal Tlingit Chilkat socio-economic interactions. Although occupied for only four years, Fort Selkirk I and the interactions of the HBC and Northern Tutchone is significant for a number of reasons. Yukon Government archaeological surveys at the site (Easton and Gotthardt 1987; Gotthardt and Easton 1989; Gotthardt 1990b), the existence of fur trade journals and the existence of oral histories of the region, provide the opportunity to examine various theories and themes of cultural contact and interaction within the short time span of the fort. This work will employ a holistic

multi-layered framework (Trigger 1991), that includes archaeological methods, archival research, oral histories, ethnography and ethnohistoric research.

Research Objectives

The primary objectives of this dissertation are: (1) to investigate how the HBC adapted their economic strategies to a remote subarctic region of Northwest Canada and to established Northern Tutchone socio-economic systems; and (2) to investigate how Northern Tutchone and HBC fur traders engaged in a complex trading relationship. Specific objectives are: (1) to investigate how European material culture was integrated or recontextualized (Thomas 1991) into Indigenous socio-economic systems through excavation and artifact analysis of the Fort Selkirk I (FSI) site; (2) to explore spatial organization of remains (e.g., buildings, features and middens) at Fort Selkirk I to reveal aspects of social relations, including the role of women; and (3) to complement archaeological analysis with ethnohistoric studies to determine how European-Indigenous contact resulted in changes to mobility strategies, subsistence systems, and social relations for both groups (Sahlins 1999). Questions that guided my research include:

1) What European trade goods did Indigenous people choose to utilize; how were they integrated into Indigenous socio-economic systems; and why were these items chosen?

2) Did this European-Indigenous contact result in changes to mobility strategies, subsistence systems, and social relations?

3) How was trade conducted at Fort Selkirk?

4) Who were the individuals involved in trade and can they be identified in the historic and archaeological record?

5) Was trade profitable for either group?

6) What was the role of women at Fort Selkirk?

7) Did the Fort Selkirk fur trade have a lasting impact on the Northern Tutchone?

8) Did European disease impact the Northern Tutchone during the fort's existence?

9) Are there traceable differences in the public and private spheres of the fort and Northern Tutchone habitation sites?

The intention behind these questions is to reveal, in as much detail as possible, Northern Tutchone and Hudson's Bay Company socio-economic interaction and

agentic practice within the initial contact period in Yukon through both the archaeology and historical record. The ensuing section provides a synopsis of FSI and the inhabitants of the territory in which the fort was erected, the Northern Tutchone people.

Fort Selkirk Historical Vignette

Fort Selkirk I, located at the confluence of the Pelly River and Yukon River, functioned as a fort at this location between 1848 and 1851. It is the original Fort Selkirk that was constructed on what Robert Campbell (head HBC clerk of the fort) originally believed was an island, but which today is the eastern side of the Pelly River where it meets the Yukon (Figure 2) (Campbell and Stewart 2000). Campbell chose this particular location because he was "doubtful of the disposition of the Indians (who were numerous) we built the first fort in thick woods on the very point of confluence of the 2 rivers" (B/200/b/28: 102, 1852-1853 [Jun. 15th, 1852]). Unfortunately, Campbell built the fort on an ancient river channel flood plain where repeated yearly ice break-up flooding occurred. Consequently, in 1851, after a more severe than normal flood, Campbell chose to move Fort Selkirk to the left or southern bank of the Yukon River, "Just 2 miles below the old, on a beautiful level plain on the left side the River is too" ((B/200/b/28: 102, 1852-1853 [Jun. 15th, 1852]); this site is now known as Fort Selkirk II. Fort Selkirk I is located in the western Canadian subarctic zone in Yukon Territory, which is dominated by white and black spruce, alpine fir, birch, quaking aspen, and balsam poplar. Fauna found near and around Fort Selkirk includes, moose, caribou, fox, lynx, marten, beaver, mink, otter, rabbit, muskrat and sheep as well as migratory birds and fish such as king salmon and chum (Environment Canada 2005; Smith et al. 2004).

Northern Tutchone at Fort Selkirk

Fort Selkirk is an important location in the history of the Northern Tutchone Selkirk First Nation people (Dobrowolsky 1987). The locale was a significant Pre-contact Period camp for the Northern Tutchone and has a history that reaches into deep time. Oral tradition indicates Fort Selkirk's importance as a traditional trade rendezvous location long before the Hudson's Bay Company arrived to establish a post (Hare and Gotthardt 1996). Following the establishment, and later abandonment of the HBC fort, the Northern Tutchone people continued to use the area surrounding Fort Selkirk as a meeting place, a camp, and, beginning in 1889, as a permanent residence until the 1950s. During this period, Selkirk people were employed on the Yukon River sternwheelers and at wood camps while also making their living in traditional ways. After 1950, sternwheelers ceased to run on the Yukon River and the Northern Tutchone (today the Selkirk First Nation) people established their homes at the current village of Pelly Crossing on the Klondike Highway (Easton and Gotthardt 1987; Gotthardt and Easton 1987). Construction of the Alaska Highway beginning in 1942 and an all-weather road

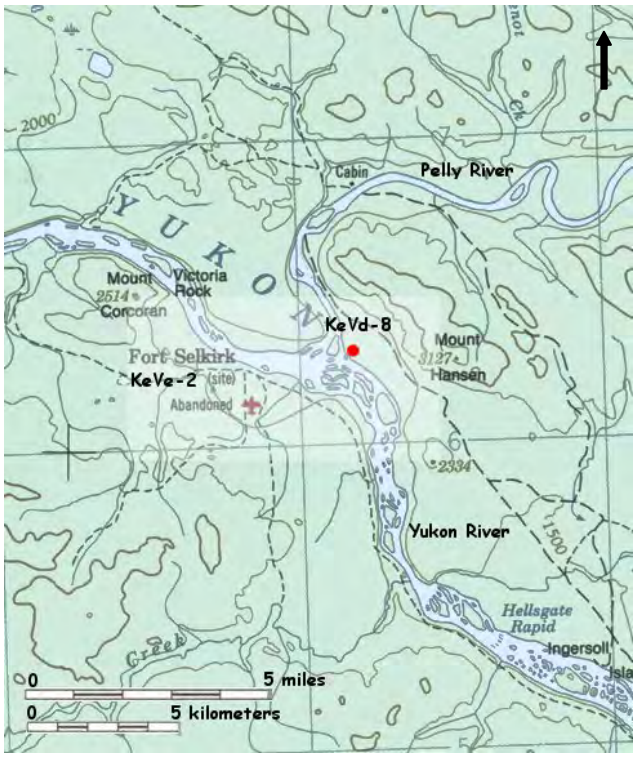

Figure 2. Topographic Map of Fort Selkirk Locality (Fort Selkirk I [KeVd-8] and Fort Selkirk II [KeVe-2]); Scale: 1 - 250,000; UTM Zone 8 (Modified from Natural Resources Canada 1990).

from Mayo to Dawson City in the early 1950s made it advantageous to move out of Fort Selkirk in order to work on road construction.

Chapter Progression

Chapter 2 provides a critical theoretical and methodological overview of agency, material culture, culture contact, gender, and spatial organization studies. A discussion on how these approaches inform my research into the socio-economic interactions between the Northern Tutchone and HBC Fort Selkirk fur traders is then examined. It is argued that by using a holistic model, one that incorporates many forms of evidence or "cables of inference", a better understanding of people's lives in the past can be achieved (Wylie 1989).

Chapter 3 presents an overview of the flora and fauna found in and around Fort Selkirk, an area situated in the Yukon Plateau-Central region. Chapter 4 situates the Northern Tutchone people and the Fort Selkirk area within the broad prehistory of the region. This review is followed by a discussion of Late Pre-contact trade relations between the Northern Tutchone and their trading partners, the Coastal Tlingit Chilkat. Much of this information is obtained through oral history and ethnographic data recorded in the last half of the 20th century.

In Chapter 5 an account of socio-economic trade interactions between the Northern Tutchone and HBC traders at Fort Selkirk is presented. Using secondary sources, the chapter begins with a description of the reasons for and movement of,

the HBC northwestward. This analysis is followed by quantitatively analysing the occurrence of specific events, people, season and species discussed within the HBC Fort Selkirk journals authored by Robert Campbell and James Stewart as well as an analysis of account records from Fort Selkirk. The purpose of analysing primary documents is to fill in the gaps in information that secondary sources provide.

Chapter 6 presents archaeological field investigations. It describes previous archaeological research, field narrative, natural and cultural stratigraphy, archaeological research design, methods and fields results. The purpose is to provide all relevant details on the methods used to investigate socio-economic interactions between the Northern Tutchone and the HBC on the basis of archaeological evidence. In addition to excavation details, the chapter also presents field results such as features and their location and artifact patterns.

Chapter 7 focuses on material culture descriptions and analysis; including both Native and Euro-Canadian contact period artifacts. Included here is analysis of lithic, bone, antler, ceramic, glass, textile and metal materials.

Chapter 8 provides an analysis of faunal remains found at Fort Selkirk I. Interpretation of remains was conducted under contract to the Yukon Heritage Unit by Tatiana Nomokonova, using the reference collections from the Zooarchaeological Laboratory and Museum of Zoology, University of Alberta.

Conclusions in chapter 9 provide a synthesis of data gathered from historical documents and archaeological material. The objective is to demonstrate how the Northern Tutchone and Hudson's Bay Company traders negotiated their roles in socio-economic interactions at Fort Selkirk I by answering the research objectives presented in Chapter 1. The concluding chapter also reaffirms the importance of research focused on agency practice within historical archaeology.

Chapter 2: Theoretical Framework

To merge a study of early culture contact with themes of agency, material culture, culture contact, gender and spatial organization studies at Fort Selkirk it is necessary to review the theoretical and/or thematic schema within each approach. A description of the theoretical perspectives taken in the production of this research will allow readers to analyze critically the specific examples given within this case study; the intention is that these may then be situated in broader anthropological discussions around culture contact and other relevant themes.

Agency Theory

Use of agency in Western Canadian fur trade archaeology is limited, yet analysis of agentic choice at fur trade sites provides a valuable approach with which to understand socio-economic relations in an early cultural contact setting. This section discusses theoretical notions of agency and how they apply to research at Fort Selkirk. The first section will look specifically at the origin and use of agency anthropologically through the work of: Bourdieu's notion of "practice theory" involving habitus and field (1977); Sahlin's notion of the "structure of the conjuncture" (1985); and Moore's concept of "events of articulation" (1994). The second section will describe the use of agency in the context of historical archaeology research and how it applies to this research. Before continuing, it must be emphasized that agency theory provides hypotheses, only some of which can be tested given the data constraints of archaeology and the historical record.

Notions of agency began with the work of theorist Pierre Bourdieu who is credited with being, "the foundational architect of agency theory" (Dornan 2002: 304). Pierre Bourdieu's "practice theory" looks at human domination by or resistance to accepted social patterns. He does this by utilizing what Richard Jenkins terms "thinking tools", which include habitus and field (Jenkins 1992: 67). Habitus is, "acquired by individuals through experience and explicit socialization in early life" (Jenkins 1992: 79). In a collective setting:

> Habitus as a shared body of dispositions, classificatory categories and generative schemes is, the outcome of collective history: 'The habitus, a product of history, produces individual and collective practices – more history – in accordance with the schemes generated by history. (Bourdieu 1990: 54)

Bourdieu believes that peoples' practice comes from the history of past generations, and that, "…habitus…is the ongoing culmination of history" (Jenkins 1992: 80). Since history tends to repeat itself, we do the same things over and over again in the course of our day, in our particular culture, "the status quo is perpetuated", making social structure seem unchanging (Jenkins 1992: 81); in essence people become habituated through their daily living within a culture.

Habitus, then, refers to the taken-for-granted assumptions that are not questioned by people, or agents, because people often do not see a reason to do so.

Associated with habitus is Bourdieu's use of the "field" metaphor (Bourdieu interviewed by Wacquant 1989: 50), which Hanks describes as a form of social organization, "… a configuration of social roles, agent positions, and the structures they fit into and… the historical process in which those positions are actually taken up, occupied by actors (individual or collective)" (Hanks 2005: 72). These positions, or fields, are defined by opposition; for example, HBC trader vs. Northern Tutchone trader. "If the positions in a field are related to one another by opposition, the agents who take up positions are related by struggle and competition…", subsequently, "any field is a space of strategic possibilities in which actors have potential moves and discourse of action" (Hanks 2005: 73; see also Bourdieu 1993: 314). In other words, although the Northern Tutchone and Campbell had met prior to Fort Selkirk's establishment, the fort was the junction at which both groups created an arena, or hub of interaction. Each group took up their own field or fields of opposition, both collectively, as separate cultural groups meeting for the first time, and individually, as particular members of the larger communities attempting to gain power and control of the situation. Interaction at Fort Selkirk was the crucial nexus. The latter is evident in the writings of Robert Campbell and James Stewart who document their attempts at gaining control of trade in the area. The meeting and ensuing trade interactions that occurred between these two groups may demonstrate agentic practices by both the Northern Tutchone and HBC fur traders. Within a collective perspective, it is possible that the interactions between Northern Tutchone and the HBC traders created tensions, which transformed habitus, changing the collective practices of each group in order to continually negotiate and renegotiate their positions.

Sahlins believes that the actions of individuals in any given social interaction can be understood as an attempt to enact traditional categories (Sahlins 1985); he terms this the "structure of the conjuncture" (Sahlins 1985: xiv). When two social groups that occupy separate worlds come into contact, such as the Northern Tutchone and HBC fur traders, there is a conjuncture; both groups must decipher how to deal with a situation that neither group had dealt with before.

Understanding this conjuncture helps to determine why and how these cultures were, or were not, transformed. In other words, how did each group make sense of the other, and how was their world-view transformed as they tried to make sense of one another? In a colonial or contact period setting, such as Fort Selkirk, "any given interaction, though based on individually conceived traditional categories, can force those traditional categories to be applied to different domains, possibly leading to transformation of shared structures" (Dornan 2002: 323). When the Northern Tutchone first came into contact with the HBC fur traders they attempted to deal with their presence by exercising their traditional mode of trading (Reedy-Maschner and Maschner 1999: 730). As time went on Tutchone trade practices and HBC trade practices may have been transformed. The intention then is to find evidence of this transformation. When the Northern Tutchone and the HBC traders, each of whom were working within

their own framework of cultural assumptions, met and entered transactions, whether it was for fur trade or meat provisions, how did they do this? Did they misunderstand each other, or did they come to some kind of agreement, each party manipulating and/or cooperating to get what they wanted? I believe answers to these question are attainable, if only fragmentarily, through the written record.

Moore also speaks to this notion of structures colliding; in this case she terms it "events of articulation" (Moore 1994: 365). These events can be seen as meetings at a crossroads "where many different interests and visions of things intersect" (Moore 1994: 365). These events are considered important because they are diagnostic moments: "an event becomes diagnostic in relation to a question" (Moore 1994: 365). In other words, situations of conflict are also instances in which one can observe values and agency finding expression and being negotiated (Moore 1994: 365). This interaction is pertinent to my study as the culture contact process at Fort Selkirk was meaningful on many levels (e.g., social relations and obtaining furs and food) for the fur traders and Northern Tutchone, as well as other Indigenous groups that participated in the trade sphere. Understanding just how meaningful the culture contact was is an important aspect of my research. Did this interaction cause cultural upheaval or did the Tutchone and HBC negotiate their respective positions? Were the Northern Tutchone and HBC employees able to mediate the effects of the contact experience and could they amplify negotiations to their own advantage?

This research aims to reveal both Northern Tutchone and HBC group goals and how these were negotiated. It also attempts to demonstrate that the Northern Tutchone manipulated Pre-contact Period power and social relations for new ends, seizing new opportunities that may have been denied before; for example, no longer having to rely solely on Pre-contact trade relations that they could not always manipulate to their advantage. The Tutchone were able to use what they already knew about power and social relations in a new context. They may have found new limitations, or opportunities, in things such as "diet, technology, material culture, symbolism, social status, marriage and sexual relations" (Silliman 2001: 196). An individual's ability to obtain new materials such as firearms and tobacco, objects which were often considered high status items during the Early Contact Period[2] (Reedy-Maschner and Maschner 1999: 729), may have provided some Northern Tutchone with prestige or enhanced prestige that was not obtainable before European traders arrived. The introduction of colonial material culture could have "provided a novel suite of items for use in social strategies and relations" (Silliman 2001: 196; see also Lightfoot et al. 1998: 202; Thomas 1991). Indigenous social agents could appropriate these materials in different ways and combinations as a way to negotiate social positions. The account records are an ideal place to determine which objects had the most popularity, while the journals may indicate who was visiting Fort Selkirk most often, prestigious individuals or common members of the Northern Tutchone.

[2] Following Silliman, I define the Early Contact Period as a time when "events are characterized by a lack of European power during first contact…" (2005: 60). In the case of the Northern Tutchone the Early Contact Period dates to the mid-19th century.

Agency Use in Historical Archaeology

According to Jennifer Dornan, "the birth of agency theory has reflected a desire to counter deterministic models of human action by acknowledging that people purposefully act and alter the external world through those actions" (Dornan 2002: 304). When agency is omitted from historical archaeological studies, its absence leaves researchers "denying the existence of creative and unique practices outside or against structuring structures" (Dornan 2002: 315). Analysis of fur trade relations creates an opportunity to look at agency within the trade sphere at Fort Selkirk. Rather than depicting the Northern Tutchone and HBC personnel as having no free will, the aim is to demonstrate that they both strategized to obtain what they wanted. Yet, there is the acknowledgement that finding evidence of agency in this research will be challenging. The difficulty is determining how to interpret the material culture. How do items such as buttons, lead shot, trade beads and pipe stems help to understand agentic practices, particularly with limited documentary records and the fort's short time span? Keeping in mind that there may be multi-causal explanations for the distribution of artifacts within FSI, one way to determine agency through artifact analysis is by identifying processes of resistance.

Within archaeology, many scholars associate agency with resistance on some level, whereby disenfranchised individuals try to resist the status quo (Dornan 2002: 304; see also: McGuire and Wurst 2002). Following Lightfoot (2005), it is argued that these forms of resistance can be seen through practices including strategic accommodation, calculated submission, and violence (Lightfoot 2005: 89). At Fort Selkirk, resistance took the form of strategization in the daily practice of fur trade interactions, both through the lens of Indigenous groups and the HBC fur traders. For example, evidence for resistance in the historical record may appear in a lack of tradable furs being brought into the fort by the Northern Tutchone, which can be demonstrated by calculating the amount of furs entering the HBC system and those that exited the system. Other evidence that may demonstrate resistance may be the number of Tutchone who visited the fort every year and whether they traded or not, which can be calculated by analyzing the fort journals. A lack of Northern Tutchone camps associated with the post or, alternatively, the lack of HBC artifacts at Northern Tutchone camps may also demonstrate resistance. Finally, a lack of Northern Tutchone artifacts in the vicinity of the palisade wall may also demonstrate resistance; Northern Tutchone people may have chosen to camp away from the fort to keep their autonomy.

Hodder writes, "Since societies are made of individuals, and since individuals can form groups to further their ends, [then] directed, intentional behaviour of individual actors or ideologies can lead to structural change" (Hodder 1987). Alternatively, McGuire and Wurst believe that "social agents are never solely free to act as they will nor do material conditions, social structures, or prior conditions of life simply determine how social agents act" (2002: 86). Evidence for individual agency is difficult to recover in the archaeological record. Historical evidence for individual agency is often limited to unnamed and elite members of Indigenous societies, and the literate HBC fur traders who managed the fort. It is

important to acknowledge that this type of analysis can create a top-down approach whereby focus is placed only on elites. Nevertheless, analysis of HBC daily records should provide information regarding individual agency in the form of what was and was not requested or purchased, as well as who purchased it and for whom (HBCA B.196/d/1: 1-44, 1851-1852; HBCA B.196/z/1: 1-4, 1847-1851). The research questions are all based on identifying people's choices and decisions in order to change and control the world around them.

Material Culture Studies

This section discusses material culture analysis in the context of Thomas' (1991) notion of recontextualized objects, and Harrison's (2003) discussion of artifacts as skeumorphs, particularly because these theoretical tools assist in understanding the meaning behind specific material culture choice and use by the Northern Tutchone and the HBC.

An examination of material culture exchanged at FSI and how these objects became recontextualized within the Northern Tutchone sphere will be conducted. In effect, recontextualization means that once the object is exchanged it becomes something new, and the object becomes meaningful in a different and often new way to the culture that adopts it (Thomas 1991: 5). Nicholas Thomas argues that we should not assume Indigenous people were greedy and/or innocent, nor that, "the advantages of new items are immediately manifest to natives" (1991: 87). The intention then is to find evidence detailing fort trade practices and Northern Tutchone selectivity with respect to material culture. This approach is particularly fitting since archival information detailing fort trade practices often depict the Northern Tutchone as being both selective in some and uninterested in other European trade goods (Campbell and Stewart 2000).

Skeumorph is defined as an object manufactured in "one material intended to invoke the appearance of vessels (pots) regularly made in another" (Vickers and Gill 1994: 106). Such items may include reworked ceramic, glass and metal vessels, such as copper kettles transformed into Indigenous technologies using Indigenous material culture (Legros 1981). Items could also be transformed using Euro-Canadian technology. For example, steel knives could be used to produce antler bird blunts or arrowheads; or a metal axe could be used to cut the end off a moose metatarsal at an angle in order to manufacture a flesher. Again, the actions of individuals are difficult to isolate archaeologically, but the manifestation of individual acts may occur in the material culture record. Modified European artifacts found within the Fort Selkirk trade area may be skeumorphic objects, "whose manufacture employed the power inherent in the development of technology [new or European technology; my comment] to transform colonial objects into Indigenous things" (Harrison 2003: 329; for a discussion of modified glass tools see Cooper and Bowdler 1998; Harrison 2000; Lightfoot 2005; Martindale and Jurakic 2004; Paterson 2003).

Alternatively, the production and use of modified European tools may represent the practical use of available materials. This form of syncretism would indicate that the Northern Tutchone were fusing technologies that worked best for

a particular activity. For instance, Le Blanc comments that in Northern Yukon there are items that show a mix of technologies and adaptations. One example is the use of brass cartridge cases that were used as ends on arrows (1984: 400). These are what are known as “bird blunts”; they were used to hunt small game such as rabbit and bird. The ammunition shells were useless for reloading without powder or lead shot and firing caps so people utilized the ineffective shells for a different kind of weaponry (personal communication). This example informs us about the reliability, or lack, of supply, even with the posts nearby.

Culture Contact Studies

Research into culture contact and change began with early acculturation researchers in the 1930s and 1940s (Redfield et al. 1936). These researchers “traced the adoption, acceptance, and spread of innovations among Native peoples through different stages of the acculturation process” (Lightfoot 2005: 28; for examples see Fagan 1984; Herskovits 1958; Linton 1963: 470; Smith 1940: 34). In the 1960s an interest in acculturation studies flourished, particularly with frontier studies in anthropology (Bohannan and Plog 1967; Spicer 1962). Acculturation studies were also seen as interpretive tools by researchers to interpret Pre-contact sites, by transposing events at points of contact (proto-historic), when rapid change was deemed to occur in Indigenous communities due to colonial influence, into the Pre-contact record.

Stemming from acculturation research, culture contact “is a general term used by archaeologists to refer to groups of people coming into or staying in contact for days, years, decades, centuries, or even millennia” (Silliman 2005: 58). For instance, Helm describes contact as, “a condition in historical time when Indians, as populations and as culture bearers, were reacting, adapting, borrowing, and innovating in the face of exposure to elements of European (white) culture and/or its human agents”, she goes on to say that direct contact is, “whites and Natives in the physical presence of one another” (2000: 104-123). Yet, are Indigenous people not still reacting, adapting, borrowing and innovating in the face of exposure to Europeans? Culture contact is a process that undergoes negotiations and re-negotiations; it should not be seen as a singular event, but rather a process under constant adjustments with amplification at times, followed by echoes. For example, European trade goods were coming from the coast to interior people before groups like the Northern Tutchone actually met Euro-Canadians. It is reasonable to assume trade goods were penetrating to the interior decades before actual Contact by way of Pre-contact trade networks.

In the last five years a debate has emerged regarding the use of the term culture contact to explain long-term colonial interaction. For example, Silliman believes that there is an important distinction between culture contact studies and studies of colonialism (Silliman 2005: 68). One of the main problems with a culture contact approach is that it can be as though “two completely bound cultures collided for a brief moment rather than allowing for an exploration of colonial relations of power, labor, economy, and identity” (Silliman 2005: 69). Silliman believes that in many cases, studies in North America, which are frequently

termed contact, are actually colonial in nature, and by colonial he means: (1) attempted domination by colonial settlers; and (2) resistance, acquiescence and living through these by Indigenous people (Silliman 2005: 59). Yet, Silliman does agree that culture contact scenarios exist: these events are characterized by a lack of European power during first contact, particularly the inability to enforce demands on labour (Silliman 2005: 60; for example see Thomas 1991: 83-84).

Lightfoot believes that Indigenous responses to European contact and colonialism need to be outlined in order to understand cultural development in a post-colonial world, over a long period of time (1995: 199). Thus, although my research focuses on the Early Contact Period at Fort Selkirk this interaction is the predecessor to colonial transformation that took place after initial contact. In his discussion of the Russian colony of Fort Ross and Indigenous adoption of material items, Lightfoot indicates that Indigenous groups gave little indication that they were becoming acculturated through the use of European trade goods (Lightfoot et al. 1998; for further discussion see Lightfoot 2005; Silliman 2001). For example, he found that the Russian-American Company world view was not observed in the homes of the Kashaya Pomo who continued their traditional practices of cooking meat dishes in earth ovens, tossing refuse into specially prepared dumps, and primarily using Indigenous Californian material culture such as milling stones, pestles, and chipped stone tools in their homes (Lightfoot et al. 1998: 215). Cleland's discussion of Lake Superior Chippewa in the nineteenth century indicates that Indigenous people participated in the fur trade but also used Indigenous economic strategies, such as reciprocity, to stop from being incorporated into a capitalist economy into the twentieth century (Cleland 1993). He states that the "circulation of goods in Chippewa society during the fur trade era was governed by the reciprocal relations of kinsmen" and that a lack of desire to accumulate demonstrates that "traditional principles of reciprocal kin-based exchange were in force even in the face of extreme mercantile pressure" (1993: 116). Thus, it would be remiss to assume that the Northern Tutchone were subsumed by the Fort Selkirk fur trade sphere[3], not only because of the short period in which the fort operated, but also because of agentic resistance to colonial assimilation. The material culture that was being adopted by the Northern Tutchone may have been used to avoid incorporation into a capitalist system, or the Northern Tutchone may have used these new goods in a traditional manner, maintaining their worldview (Rubertone 1989; 2000). Moreover, The Northern Tutchone may have thought that their material culture was superior. Although direct interaction between all of these groups occurred in a relatively short time period (1848-1852), interaction was significant and can provide us with a better understanding of the Northern Tutchone and their relationship with the HBC fur traders as well as agentic choices they made after the fort's closure and into the twentieth century.

[3] The terms "fur trade sphere", "trade post sphere", "Indigenous sphere" and "Indigenous frame of trade" refer to the typical socio-economic practices of that group (i.e., the HBC or local Indigenous groups).

Gender and Archaeology

Over the past twenty-five years gender studies in archaeology have moved to the forefront of research programs as archaeologists began to identify women's roles as significant in understanding social relations in past lifeways (Gero and Conkey 1991; for annotated bibliography of gender and archaeology prior to 1993 see: Bacus et al. 1993; Gilchrist 1999). Yet, historical archaeology of gender at fur trade sites has not been studied in detail. Gullason's research at Fort George-Buckingham house describes evidence of Indigenous wives in employee quarters, particularly in the form of jewellery and other specialty items recovered in excavation. She concludes that these "country wives" were able to participate in "true acculturation" (1990: 141) as their contact with the fur traders was sustained for a long period of time. Scott's work at the fur trading community of Michilimackinac, in what is now Northern Michigan, is also useful to my study. Here, she looks at socio-economic interaction through analysis of the daily life of different households in the community (1991). She concluded that determining gendered socio-economic activity patterns was difficult but could be done "by identifying men's and women's presence in a household archaeologically… through the material evidence of men's and women's clothing and items of personal adornment" (1991: 50).

Historians have also heeded the call to study both Indigenous and Euro-Canadian women in the fur trade (Brown 1980; 2001; Burley 1997; Driscoll 2001; Morantz 1983; Perry 1979; Van Kirk 1983; Vibert 1997). These studies have looked at marriage, particularly in the form of "country wives", family, and status during Indigenous and Métis fur trade interaction with European fur traders. Specifically, these studies have looked at Indigenous and Euro-Canadian interactions through the lens of the women who took part in these interactions. Although these data are fragmentary, I hope that pieced together, I will able to determine some aspects of women's participation at Fort Selkirk.

Spatial Organization of Remains

A subsidiary component of this research is to investigate spatial relationships within and outside of the Fort Selkirk complex utilizing what Michael Forsman terms the social/hierarchical model, which is used to "explain perceived architectural distinctions in the archaeological record. [It] is organizational and structural in conception" (Forsman 1999: 26; for use of social/hierarchical model at other fur trade sites see Adams and Lunn 1985; Forsman 1985; Hamilton 1990a, 1990b; Pyszczyk 1987; 1992). Specifically, the intent is to analyze building design and layout and how these represent the power hierarchy within the fort and to external visitors such as the Northern Tutchone and other Native trading groups. Does architectural variability denote variation in social and economic organization for members of Fort Selkirk and Northern Tutchone people living in and outside of the fort complex? Also, if there was variability in social hierarchy, was it significant or minimal, and if the latter is correct, was this situation due to a small fort population (Pyszczyk 1987)? Is size of dwelling a

direct indicator of the commonly enforced HBC fort layouts? Finally, is gendered space within and outside of domestic areas visible archaeologically? For example, in Gullason's research at Fort Buckingham House, the presence of Indigenous women was found in the material culture record (e.g., traditional bone tools used for hide processing, clothing construction and ornamentation) within the employee's quarters (Gullason 1990: 140).

Summary

The role of Indigenous people in Western Canadian fur trade studies has largely been ignored in historical archaeological studies. When Indigenous people were included they were seen through the lens of European elites such as HBC traders. This research of Northern Tutchone/Hudson's Bay Company interaction at Fort Selkirk provides an opportunity to explore agentic practices of both the Tutchone and HBC fur traders as they interacted in the fur trade sphere. Fort Selkirk I and II were occupied for a short period (1848-1852), but in that short time a great deal occurred at the post, including, trade, marriage, hunting, building, and violence. Yet, for the Northern Tutchone, the area surrounding the fort has a history that goes back to deep time thousands of years ago and its importance to the Tutchone continues to this day. Historically, this is an important place for the Northern Tutchone (Hare and Gotthardt 1996).

Through the methodology and intellectual tools described here, the aim is to understand and illustrate the very important social relations that occurred between two distinct cultural groups during a very important time in western Canada's history, a time when Indigenous people, like the Northern Tutchone, were first coming into contact with European colonial powers.

Chapter 3: Environmental Background

Physical Setting

Fort Selkirk I (KeVd-8) is located in what is known today as the Yukon Plateau-Central region (Smith et al. 2004: 188). This area extends northward from Lake Laberge to the lower Stewart River in the central Yukon. The Yukon Plateau-Central is an area of formerly glaciated, rounded, and rolling hills, plateaus and broad valleys surrounded by higher mountain ranges. Elevations are 1000 m above sea level (a.s.l.), except for major river valleys, which lie below 600 m a.s.l. in the northwestern portion. Several mountains reach 1500 m a.s.l. (ibid.). Ridged to hummocky, loamy morainal and sandy fluvioglacial materials dominate. Much of the ecoregion is covered by a layer of recent volcanic ash 10 - 30 cm thick. This ash is not found at Fort Selkirk I. Permafrost is discontinuous to sporadic with high ice content associated with fine-textured valley deposits. The Yukon River crosses this ecoregion from southeast to northwest from Lake Laberge and the mouth of the Teslin River to the confluence of the Pelly and Yukon rivers (ibid.).

Climate

The climate of the Yukon Territory is subarctic continental and is relatively dry with major temperature variability both daily and seasonally (Environment Canada 2005; Smith et al. 2004: 190). Generally, the Yukon has long, cold winters and short, warm summers. On average, precipitation is low due to Pacific maritime influence (Environment Canada 2005; Smith et al. 2004: 190).

The orientation of the landscape is primarily south-southeast to north northwest and lies just northeast of the main rain shadow of the St. Elias Coast Mountains. Precipitation is light, ranging from 250 to 400 mm, two-thirds of which falls during the summer. Snow cover occurs between mid-October and mid-April in the valley floors and a month longer over the higher terrain. The mean annual temperature for the area is approximately -3.5º C with a summer mean of 12º C and a winter mean of -19º C. Mean annual precipitation varies from 250 mm in the southern areas near Carmacks to 400 mm at higher elevations in the north and east (Environment Canada 2005).

A significant climatological feature affecting human travel is the yearly freezing and thawing of the Pelly and Yukon Rivers. The rivers freeze between late October and early November while breakup of the Yukon River occurs in early May (Tompkins 2007: 90). Thus, for approximately seven months out of the year the river is an ice highway by which trade and interaction occurred between the different Indigenous groups who traveled the rivers. People could travel between river systems carrying thousands of pounds on sleds.

Vegetation

The vegetation of the Plateau-Central is composed of many plant communities because of the diverse habitats provided by mixed glacial landforms and fire (Environment Canada 2005; Oswald et al. 1983: 209). Fires are frequent and large due to thunderstorms. Most forests are less than 100 years old. Vegetation which characterizes the area includes white spruce (*Picea glauca*), willow (*Salix*), fir (*Abies lasiocarpa*,) black spruce (*Picea mariana*), lodgepole pine (*Pinus contorta*), poplar (*Populus fastigiata*), trembling aspen (*Populus tremuloides*), alder (*Alnus*), shrub birch (*Betula nana*), Labrador tea (*Ledum groenlandicum*), shrubby cinquefoil (*Dasiphora floribunda*), moss, sedge and lichen groundcover. Berries found in the region include mountain blueberry (*Vaccinium*), crowberry (*Empetrum*), lingonberry (*Vaccinium viris-idaea*) and soapberry (*Sapindus*) (Narrative Descriptions of Terrestrial Ecozones and Ecoregions of Canada 2005; Smith et al. 2004: 194). Many of these can be used for human dietary needs.

Fauna

Tables 1-3 are summaries of modern fauna found in the Yukon Plateau-Central Ecoregion. Ethnographically, the most important species of mammals included moose, bear, lynx, beaver, hare, grouse, ptarmigan, muskrat, porcupine, ground squirrel, sheep, and caribou. Fur species may have included marten, wolverine, weasel, ermine and fox. Avifauna included grouse, ptarmigan, swans, ducks, bluebills, geese, loons, eagles, ravens, jays and bunting. Fish included pike, grayling, sucker, salmon, whitefish, trout and inconnu (Legros 2007).

Taxon	**Common Names**
Oncorhynchus tshawytscha	Chinook salmon
Oncorhynchus keta	Chum salmon
Salvelinus namaycush	Lake trout
Lota lota	Burbot
Stenodus leucichthys	Inconnu
Coregonus clupeaformis	Lake whitefish
Coregonus nasus	Broad whitefish
Prosopium cylindraceum	Round whitefish
Catostomus catostomus	Longnose sucker
Thymallus thymallus	Grayling
Esox lucius	Northern pike

Table 1. Fish Species of the Yukon Plateau-Central Ecoregion (Environment Canada 2005; Smith et al. 2004: 195-196).

Taxon	Common Names
Ursus arctos	Grizzly bear
Ursus americanus	Black bear
Alces alces	Moose
Rangifer tarandus caribou	Woodland caribou
Gulo gulo	Wolverine
Vulpes vulpes	Red Fox
Felis canadensis	Lynx
Martes americana	Marten
Castor canadensis	Beaver
Mustela vison	Mink
Lontra canadensis	Otter
Lepus americanus	Snowshoe hare
Ondatra zibethicus	Muskrat
Ovis canadensis	Sheep
Canis lupus	Wolf
Canis latrans	Coyote
Spermophilus parryii	Ground squirrel
Tamiasciurus hudsonicus preblei	Red squirrel
Erithizon dorsatum	Porcupine
Marmota monax achracea	Marmot
Ochotona princeps collaris	Pika

Table 2. Terrestrial Mammal Species of the Yukon Plateau-Central Ecoregion (Environment Canada 2005; Smith et al. 2004: 195-196).

Taxon	Common Names
Grus canadensis	Sandhill crane
Branta canadensis	Canada goose
Falco peregrinus	Peregrine falcon
Haliaeetus leucocephalus	Bald eagle
Aquila chrysaetos	Golden eagle
Mergus merganser	Common merganser
Ceryle alcyon	Belted kingfisher
Riparia riparia	Bank swallow
Lagopus	Grouse
Strix nebulosa	Great grey owl
Picoides tridactylus	Three-toed woodpecker
Perisoreus canadensis	Gray jay
Pica husonia	Black-billed magpie
Corvus corax	Common raven
Plectrophenax nivalis	Snow bunting
Poecile hudsonica	Boreal chickadee

Table 3. Avifauna Species of the Yukon Plateau-Central Ecoregion (Environment Canada 2005; Smith et al. 2004: 195-196).

Chapter 4: Late Pre-contact Northern Tutchone and Tlingit Trade Relations

In the following two chapters an analysis of oral, ethnographic and documentary sources is presented. The intention is to determine whether the Northern Tutchone demonstrated agentic choice in terms of their trade interactions with the Hudson's Bay Company traders at Fort Selkirk, and if so, to demonstrate the changes that ensued as a result of this interaction. Particular focus is centered on whether the trade sphere altered Northern Tutchone mobility, material culture and/or social relationships.

Brief Synopsis of Pre-contact Sequence in South-Central Yukon

Human occupation of south-central Yukon probably began about 10,000 – 14,000 B.P., soon after the retreat of the Cordilleran Ice Sheet (Easton et al. 2011: 303; Gotthardt and Easton 1989; Gotthardt 1990a, 1990b). Technology utilized by Southern Yukon people included a "mix of both the Asian microblade technologies and a less well understood component resembling stone technologies south of the ice sheet", including burins (Clark 1981: 115). This technology is otherwise known as the Denali Complex.

Contemporary with and possibly predating the Denali Complex in parts of the interior Northwest is the Northern Plano tradition, also known as the Northern Cordilleran tradition (Clark and Morlan 1982; Clark 1983; Gotthardt 1990a). These tools include lanceolate points, blade tools and transverse burins. Elements of both the Northern Cordilleran/Northern Plano and sub-Arctic traditions co-occur in some southern Yukon assemblages. The establishment of a full boreal forest in interior Northwest at approximately 5,000 B.P. brought with it the appearance of the Northern Archaic tradition, characterized by the production of large side-notched spear and arrow points, a large variety of end and side scrapers and what are possibly stone net sinkers (Gotthardt and Easton 1989; Workman 1978). The appearance of this tradition indicates the "adaptation by people to the more rigorous conditions of the northern forests" (Gotthardt and Easton 1989: 14). People hunted more scattered game such as moose and caribou and they also relied on lake and river fishing, and trapping of smaller game such as beaver and rabbit. Sites tend to be smaller for this period suggesting smaller local groups and/or short-term occupations. This pattern persisted up to the historic period.

At approximately 1,250 B.P. the southern Yukon became covered by deposits of volcanic ash from the White River area (White River ash). In the traditional territories of the Selkirk people, ash deposits were on the average of "one to six inches in thickness" (Clague et al. 1995: 1177; Lerbekmo et al. 1975: 203-209). Sites that post-date the White River ash fall under the Late Prehistoric Athapaskan tradition (Gotthardt and Easton 1989: 15). Yet, there is continuity between archaeological complexes dated to pre-White River ash fall (Northern Archaic tradition), and dated post-White River ash fall (Prehistoric Athapaskan tradition) (Lerbekmo et al. 1975: 203-209). Post White River ash traits include native copper tools, multi-barbed bone points and Kavik or Klo-kut points (Workman

1978: 367). There is also an emphasis on bone and antler tools during the Late Pre-contact Period. These tools continued to be produced up to Contact.

Northern Tutchone Social Practices

In the mid-nineteenth century, the Tutchone lived in the southern sector of a plateau that is situated between the Rocky Mountains and the Pacific Cordillera. They are Northern Athapaskan speakers whose linguistic phylum is known as Athapaskan-Eyak (Krauss and Golla 1981: 67). In the 1800s each Tutchone band was subdivided into four, five or six local groups, each one of which was composed of between two to ten nuclear families. For the most part, local groups lived many kilometres apart. Families would gather one to three times a year to trade, particularly with the Coastal Tlingit Chilkat and, on rarer occasions, for funerals. During the winter, people would travel by snowshoes, toboggans or dog teams, while in the summer they would travel by foot or boat (Legros 1981; 2007) (Figure 3).

During the mid-nineteenth century Tutchone social structure was characterized by two exogamous matrilineal moieties: the Crow people and the Wolf people (Legros 1981; 2007). Every man and every woman belonged to his or her mother's moiety and could not marry within their own moiety. The entire population was divided into two exogamous groups, and each nuclear family was comprised of members of both groups. A person's membership in the Crow (*Ts'ek'i or Handyáát*) or Wolf (*Egay, Méhk'én or Hagunde*) moiety determined most aspects of their role in traditional society including marriage, duties and obligations to other members of their local group, and their relationships outside of the band, with strangers or distant relatives. There is no equivalent Northern Tutchone term for the word "family". The closest term used is *uyéláán* meaning "his people" or "people living with…". People were commonly grouped by clan membership and camps typically included brothers and sisters, their spouses, parents of the adult women, and children (Legros 1981: 798).

Tutchone society (composed of individual families and local groups) was stratified. A typical local group often consisted of a rich man (*dän nozhi*), poor people (*dän chekadyé*) and slaves and war captives (*hande*) who were bound to families of the rich, "an important *dän nozhi* could have up to twenty wives and up to six slaves" (Legros 1985: 12). The *dän nozhi* lived in clusters of three or four interrelated nuclear families. Each group headed a large, nomadic local group, which included up to fifty people. Each *dän nozhi* cluster had power over enslaved individuals and some dependent poor families (Legros 1985: 50). This social class system was similar to the northwest coast Tlingit Chilkat (who populate the Pacific coastal area of south eastern Alaska), in that there was unequal access to goods and resources, thus providing wealth and prestige to certain high-ranking families (Legros 1981; 2007). Importantly, the class system was not fixed in that one could gain and lose wealth and respect during one's lifetime.

The Northern Tutchone Selkirk band was the *dän nozhi* who dominated the 18th and 19th century trade with Coastal Tlingit Chilkat. Through their wealth,

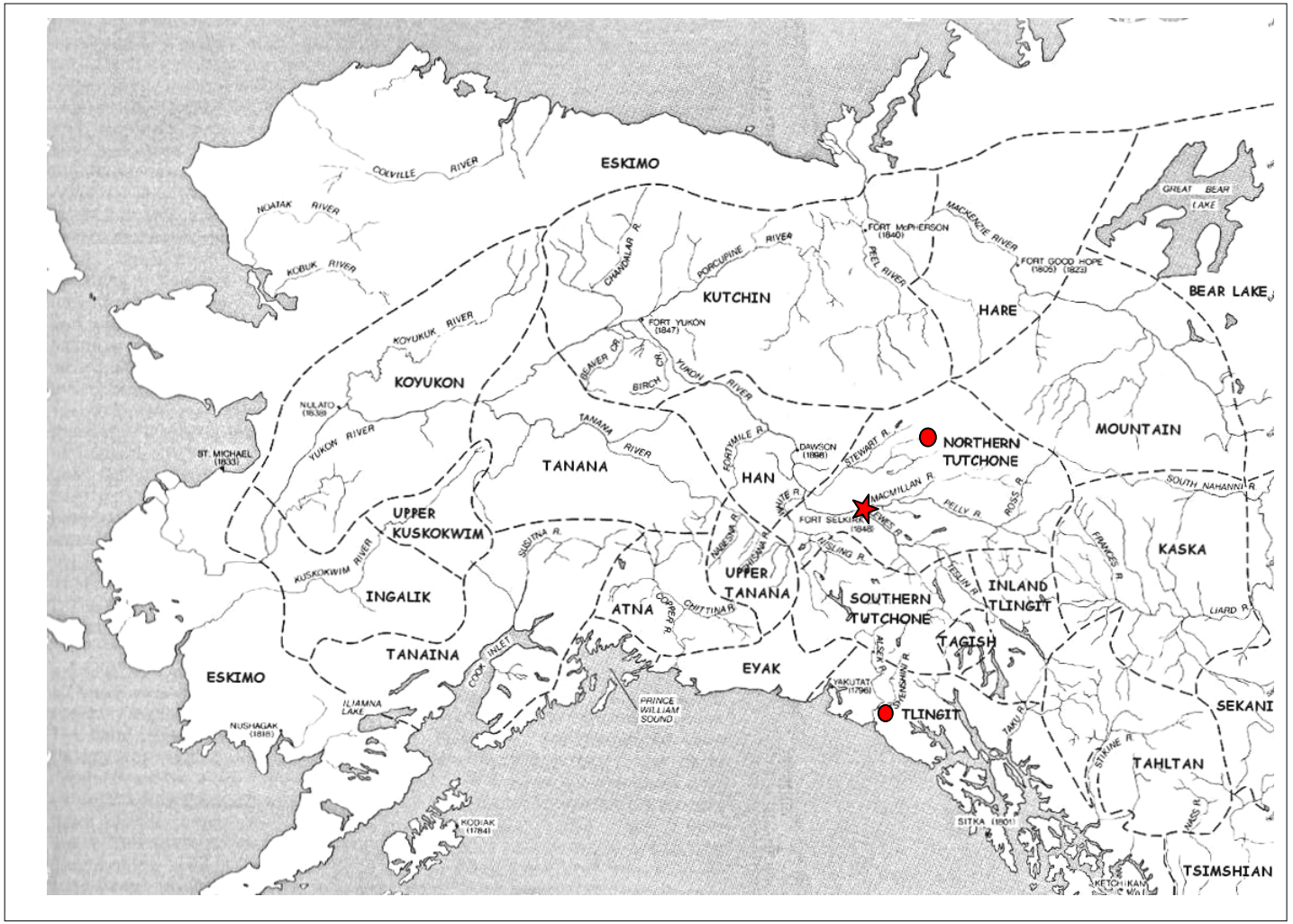

Figure 3. Indigenous Groups of Northwestern North America (modified from McClellan 1975: Map 1).

power, and unified kin network (which consisted of opposite clan cousin marriage) the dän nozhi controlled important resources such as good whitefish fishing lakes, raw material sources such as native copper quarries and the best hunting and trapping areas (Legros 1985: 51). They also owned almost all of the dentalium shells[4] used for decoration and currency (Legros 1985: 15). Importantly, they also controlled people's ability to trade. As Legros describes it:

> …the lesser access of slaves and poor Tutchone to highly productive sites and their exclusion from all direct inter-regional and inter-ethnic trade were based on the dän nozhi capacity to maintain monopolies through the use of force. For example, foreign traders, and especially Tlingit traders, would have dealt directly with any Tutchone and any poor Tutchone would have exchanged with anyone, if the dän nozhi had not, by force, prevented both sides from doing so. (1985: 54; author's emphasis in original)

This social structure is important since when the HBC arrived to trade with the Northern Tutchone, a hierarchical society already existed, and one which contained complex trading relationships. The HBC did not understand the intricacies of Northern Tutchone social rank.

Northern Tutchone Seasonal Round

Land use by the Northern Tutchone was extensive in order to exploit widely distributed game in the subarctic. Legros has reconstructed the traditional seasonal round during the mid-19th century (Legros 1981: 630-674; 2007). During the winter, which lasted from early November to mid-April, Selkirk Tutchone moved across the land in small groups consisting of one to two families to trap, hunt moose and fish. A segment of the Tutchone gathered in large groups of about 40 people, and camped at the important fish lakes such as Tatlmain Lake (Figure 7). These lakes had an abundance of fish; therefore larger groups could remain at a lake like Tatlmain for most of the winter (Legros 2007: 325-326). Groups that were not located at the larger fishing lakes were mobile throughout the winter as people had to obtain resources in various locales (Legros 1985: 44-45). Since food stored in the summer and fall would not last throughout the winter, those without access to good fish lakes could potentially go through periods of starvation (Legros 1981; 2007). Families could rely on kin networks and alliances that provided access to resources during times of shortage, although this aid was not always possible. According to Legros, the main animals hunted during the winter included moose, lynx, beaver, hare, grouse, ptarmigan, porcupine and squirrel. Marten, wolverine, weasel, ermine and fox were trapped and or hunted for their fur. Moose and beaver were the major focus of hunting in late winter. Dried berries and mushrooms from squirrel caches were also

[4] Dentalium shells (*Dentalium hexagonum)* are a scaphopod mollusc. These shells were strung on thread and used by Indigenous Peoples of the Pacific Northwest as currency.

collected. Winter caches of meat and fish were regularly visited during the winter until the supplies were finished (Legros 2007: 323-332).

During the spring, between mid-April and the end of June, people stayed in the valleys and lowlands to hunt and trap. Moose, hare and grouse hunting continued but beaver, muskrat and ground squirrel hunting and trapping became especially important (Legros 2007: 333). Netting spawning pike, grayling, sucker and jackfish occurred between April and June. Some of the larger groups who had spent the winter together at the good fishing sites split up at this time and went off to hunt beaver and muskrat or to build traps for spawning grayling. This activity was typically done after June when food shortages were no longer a threat (Legros 2007: 333). Migrating geese and ducks were also hunted and their eggs were gathered for food (Legros 2007: 332).

During the summer months of July and August people gathered at rivers in order to fish for salmon. The main fish camp of the Selkirk Tutchone was approximately two miles downriver from Fort Selkirk, at the location where chinook salmon were caught (Schwatka 1885: 81-82). People also set up smaller fish camps in less productive locales along rivers. Small groups also split off to trap, hunt moose, gather plants or quarry lithic and copper for tool production (Legros 2007: 321).

In the fall, between September and October, game was plentiful but widely spread out (Legros 2007: 343). People divided themselves into small groups in order to obtain as many provisions as possible (Legros 1985: 45, 2007: 346-347). The Selkirk Tutchone hunted sheep, moose, bear and caribou. People camped near rivers to fish chum salmon and at the mouth of streams and lakes to net and trap spawning whitefish, lake trout, and inconnu. This was also the time when geese and ducks were hunted (Legros 1985: 46). During this time, people also sewed clothes and tanned moose hides and furs.

Tlingit Social Practices

As the Tlingit were the Northern Tutchone's primary trading partner, Coastal Tlingit social practices are important for understanding the trade relationship between the two groups. The Coastal Tlingit live on the other side of the Pacific Cordillera along the Pacific Coast. The Tlingit are geographically divided into seventeen tribes. The Chilkat are one of these groups. They speak a combination of Athapaskan-Eyak and Amerindian (Krauss and Golla 1981: 67). Socially, they are separated into two exogamous phraties, the Raven and the Wolf; these are matrilineal in descent (Emmons 1991: 21-22). Tribes consisted of an indeterminate number of consanguineal families or clans, composed of households. Each clan is an independent body with its own chief and there is no centralized governing body. Households could consist of up to 50 people, and were ruled over by a house chief. Each Tlingit tribe had one or more permanent winter villages and well defined territorial limits (Emmons 1991: 23-27). Houses were ranked from elite to commoner as were nuclear families in the house. The *yitsati* or "house chief" was ranked highest, followed by blood relatives of the *yitsati*. Common people were called *xetazua*. Finally, slaves were called *gux,* and

were typically non-Tlingit who had been captured in raids or purchased. The elite held absolute power, did no manual labour, and could kill commoners and slaves (Krause 1956: 62-105; Oberg 1973: 23-54; Rosman and Rubel 1971: 34-68).

Important for this research, members of each regional group had control of not only their own territory but also a network of trade routes. Routes were closely guarded; if another Tlingit tried to use them they could be killed. The only trade routes into the interior were up the Stikine and Taku rivers, and over the Chilkoot and Chilkat passes[5] (Emmons 1991: 55). In 1870, Frank Mahoney who had traded on the coast for seventeen years wrote about the Chilkat's dominance of the Chilkat pass, "They will not allow no whites to pass up the river" (Mahoney 1970: 20).

Northern Tutchone-Tlingit Trade Practices

During the 19th century the Northern Tutchone primarily traded with the Tlingit Chilkat. Trade expeditions were organized by a high-ranking Tlingit man who set off with members of his family and slaves on an expedition through the mountains (Davidson 1901; Krause 1956: 133-157; Laguna 1972: 346-359; McClellan 1975: 505; Olson 1936). The group then split up into smaller parties of about 30 people and moved to different areas of Tutchone country to trade (Olson 1936). As George Emmons states:

> While the Chilkat, like other Tlingit, looked to the water for their staple food supply, their wealth was derived from the land in their trade with the interior peoples, the products of which they both used and exchanged with more southern coast tribes…The chief industry of the Chilkat was trading. They made from two to three trips annually over their mountain trails to the interior, each of which consumed from ten to thirty-odd days. (Emmons 1991: 56)

Between 1848 and 1864 the Chilkat were able to purchase European goods either from the HBC ship S.S. Beaver[6] which stopped at their village or from the Russian-American Company trading posts. The Tlingit were very savvy traders who profited from being middlemen between European and inland Indigenous groups.

The Tlingit provided the Northern Tutchone with goods such as mother of pearl, dentalium shell, abalone shell (*Haliotis*), clothing, and handmade wool blankets (McClellan 1975: 502), vermillion, small Chinese boxes used as urns (Schwatka 1885: 82), obsidian, baskets, knives, iron adzes, iron bars, musket guns, copper kettles, European wool blankets, traditional chewing tobacco (Krause 1956: 108), exotic foods such as seal fat, dried clams, seaweed,

[5] There was also a route via the Alsek River which empties into Dry Bay on the Gulf Coast of Alaska (Emmons 1991: 55).

[6] The HBC steamboat *Beaver* was the first steamboat on the Pacific and operated out of the Columbia Department trading furs along the entire Northwest Coast (Karamanski 1983: 243).

traditional medicines (Olson 1936: 211; McClellan 1975: 502) and kelp leaves pressed into patties (Krause 1956: 127; Legros 1984: 17-18, 1985: 47).

The Northern Tutchone provided the Coastal Chilkat with furs such as lynx, fox, beaver, bear, wolf and marten. They also provided fur clothing such as sheepskin jackets decorated with porcupine quill embroidery, coats made of squirrel and marmot, moosehide and moosehide clothing and sinew, fur pelts from bear and wolf, cloaks made of marmot and gopher, moccasins, sheep and goat wool used for making Tlingit blankets, native copper nuggets, lichen for dyes, and spruce gum. Exchanged goods also included other raw materials and finished goods and tools (Legros 1984: 17-18, 2007: 48-49).

Although the following is a summary of all Tlingit groups it is still valuable to understanding the diversity of items exchanged between the Northern Tutchone and the Tlingit:

> The trade which the coast Indians take into the interior consists of dry goods, blankets, tobacco, powder, shot, and light flint-lock muskets if they can get them. Although the ammunition and muskets are a prohibited trade in the Territory, still the Indians get them from the Hudson's Bay Company of Fort Simpson. Steel traps, knives, hatchets, needles, and thread, and a little cheap jewlry, form their principal trade for which they get in exchange, marten mink, silver, cross and red fox, black, brown, and grizzly bear, lynx, wolverine, ermine, beaver, land otter, and some inferior skins. [in addition to yard goods and blankets, powder and shot, tobacco and molasses (for making hootch), the traders sell Steel traps, knives, vermillion, flour, hard bread, beans, rice, and some few articles in the way of clothing, pants, shirts, (cotton and woollen), blue cloth caps with glazed covers, shoes and some minor articles[7]. (Mahoney 1870: 20)

The time and place of trade rendezvous between the Chilkat and the Selkirk Northern Tutchone was arranged two years in advance (Legros 1984: 18). The Chilkat would signal their arrival by lighting a tree on fire (Emmons 1991: 55). The Tutchone would then light a fire signalling their various camps. According to Legros, trade with the Tlingit was the exclusive right of the *dän nozhi* (rich man) families at Selkirk (Legros 1985: 50). The senior *dän nozhi* men took the senior Tlingit trader who was of the same clan, either Wolf or Crow, as a partner. Trade relations between a *dän nozhi* and his Tlingit partner was exclusive, meaning that the two parties always traded only with each other. If another person (a *dän chekadyé* or poor person), not a *dän nozhi*, attempted to trade with a Tlingit they would be killed. If a *dän chekadyé* wanted to obtain trade goods they could only trade with a *dän nozhi* of their own group (Legros 1982: 74).

The Chilkat chief traded only with his partner. Coast people called their partners *i-ya'tha*, which means "my friend" or "my son". Tutchone people used the term *i'yatläkh*, which means "my partner". If the Tutchone partner died, his

[7]In all quotations spelling and grammar are from the original text and have not been modified.

trade partnership was taken up by one of his close relatives such as his son or sister's son or possibly his wife (Legros 1984: 21).

A late 19th century description of trade between the Coastal Tlingit and the Tutchone was documented by Ronald Olson (1936: 212-214). The following is an account told to Olson by a Tlingit:

> […] each leader or house-chief in the Tlingit party had a "trading partner" (akyak ! a'wuh, lit, meaning "my own man") among the Athapaskans.
>
> Partners were always of the same clan (or at any rate of the same moiety). The Tlingit, upon arrival, arranged themselves in a line at the edge of the village. The men of the village formed a line facing them a few paces distant so that each elder stood opposite his trading partner. The villagers then did a dance accompanied by a song, music being furnished by a drum. The local chief then made a speech, given to me as "I am glad you have come. My people have been getting ready [etc.]." The Tlingit ranking chief (his partner) answered. "Yes, we are here. I remember that we promised to come this month." The Tlingit chief then asked for the drum and his party sang a song and danced.
>
> Each householder of the village then escorted his partner and his partner's men to his house. As soon as they were inside, the Tlingit took all the packs except his own and the food pack and gave them to his partner, saying, "Here, my partner, these are for you." The head of the house took them and, without examining them, placed them in a small storage room in a corner of the log house.
>
> The two chiefs then took two seats of honour at the rear of the house, with the host's wife at his right. The others arranged themselves on either side. The Tlingit chief than went to his own pack, took out a bundle of leaf tobacco and, after carefully closing the bag, gave the tobacco to his host. The host and his wife smoked while the others of the household prepared food for the guests. After they had eaten, the guest chief ordered one of his men to open the food pack. This usually contained such exotic items as rice, sugar, tea and coffee. The Tlingit men then cooked a meal for their hosts.
>
> After a time the entire village and the guests assembled for such games as blanket-tossing in a moose skin and broad-jump contests in which both men and women joined. (The chiefs, however, never participated.) During and after these games the Tlingit men paired off with the females of the village and "took them into the woods". It was said that neither husbands nor parents ever objected to this.

Perhaps it may be regarded as a variant of the “Arctic hospitality” of the Eskimo and some of the more northerly Athapaskan tribes.

Two or three days usually elapsed before actual trading was begun. During this time the travellers rested, renewed acquaintances, and so on. The host and wife secretly inspected the contents of the gift packs during this interval. The host’s son or nephew was then told, “Tomorrow you go”. This was an order to go to the hidden cache of furs (usually in an elevated storehouse) some miles distant and bring in the catch for the year. Most of the furs were piled in a corner of the house but some of the finer ones were hidden away in the storeroom. The chiefs again took the seats of honor and a son or nephew of the host started piling furs in front of the guest chief. “It used to make us glad,” said my informant, “when we saw that half the pile of furs was worth ten times the value of what we had brought.” When the host thought enough furs had been given, he said, “What do you say, partner?” if there was no answer he piled on more furs.

This was the crucial phase of trading. On the one hand the host did not wish to offend his partner by appearing stingy and on the other the guest was careful not to seem greedy. When the reluctance to give more furs became evident the guest chief went to his pack and took out such gifts as cloth shirts and dresses, bundles of leaf tobacco, vermilion, and so on, but carefully left other things in the pack. These gifts he distributed to various members of the household. The host thereupon ordered that more furs be added to the trade pile, and at last gave word to throw all the remaining skins on the heap. He then asked, “What is that which you have left in your pack, partner?” When shown the remaining gifts he said, “Put it on my side”. He then went to the corner storeroom, where he had concealed some exceptionally fine furs. These he gave to his guest. His wife would produce moccasin boots and a caribou-skin shirt, which she gave to the guest to put on. Finally she usually gave him a robe of ermine skins for his wife. It is noteworthy that the final exchanges involved a pseudo giving back and forth, each party knowing full well that he would receive more.

During the time that trading was in progress the younger men of both parties were careful to take no part in the proceedings. At best the young Tlingit were permitted to take along only a few articles of their own. These they might trade with the young men of the village, but this was done semi-secretly at meetings out-of-doors. Such unofficial exchanges often led to the formation of “partnerships’ in later life.

> When the trading which had been going on in each house was completed, everyone feasted. After the feasting, as many as could get in assembled in the largest house in the village – that of the chief. There the Tlingit arranged themselves on one side of the room, the villagers on the other. Speeches were made and the hosts were requested by the guests to teach them several songs. These the Tlingit later sang at festivals in their own villages, it being considered a great thing among them to be able to sing a "new" song or perform a "new" dance. After a day or two spent mastering the new songs the Tlingit party made ready for the return. Each host was expected to supply his house guests with food for the trip, and his wife often presented him with a quantity of spruce gum for chewing. Arrangements for a subsequent trading expedition were completed and the party set out for home. (Olson 1936: 212-214)

Alternatively, a similar account was told to Dominique Legros by a Tutchone informant in the 1970s (Legros 1984: 21):

> […] Those who went to the Stewart Basin were Chilcoots, and went there to trade as a group. Only the chiefs could barter with the Tutchone. But the chiefs never carried anything themselves. They just talked. Each chief had his own people to carry what they were bringing on the expedition. A great chief would have had a dozen or so or maybe even 15 or 20 porters.
>
> The various local Tutchone groups from a given region knew what day the Tlingit would be arriving in their locality, and they gathered ahead of time at a convenient meeting place and waited for them there. There were many more Tutchone in those days. That was before [the epidemics] killed so many. Each Tlingit chief had one trading partner – and only one – who would wait for him at each of these assemblies. It is his "local friend." The Tlingit group would then travel from one Tutchone group to another.
>
> Whenever a Tlingit arrive in Tutchone country, he traded only with his "friend" and that Tutchone traded exclusively with his "friend" and they never betrayed one another. Each Tlingit and each Tutchone had his own name. That way, people could never confuse one person for another. If a Tlingit's Tutchone partner died, the son or wife of the deceased would take his place.
>
> When the Tlingit would meet up with an assembly of Tutchone, the chiefs would follow their respective Tutchone partners to their "house". The Tlingit would settle into one the two shelters, and the Tutchone in the other one on the other side of the fire.

> Goods were not exchanged straightaway. The people talked first. It was like a meeting. They talked about furs, about how many each one was going to buy, and about how much would be paid for a skin. Each item had its price. They would say, "Here, this is what I'll give you for a beaver skin: a blanket or a pair of pants, or balls for guns, or matches, or other things like that." It was different for flintlock guns. For these items, the Tlingit asked the Tutchone to pile up flattened skins to the same height as the tip of a gun held vertically. That done, the Tutchone took the gun in exchange for the pile of beaver skins. They must have been worth a fortune because they must have been piled a good 1.6 m high.
>
> The people would say: "I'll give you this for that." They would show a blanket or whatever. The Tlingit had everything: gunpowder, clothing, etc. Once prices had been discussed and agreed upon, the bartering ended and the items could then change hands. It was like a contract. The people agreed on what a skin was worth and, of course, the Tlingit "friends" would place that item next to the skin.
>
> Once everything had finished, the Tlingit spent some time with their Tutchone "friends," and then prepared to return to the Pacific coast. (Legros 1984: 21, unpublished English translation).

What is important to note in these two strikingly similar accounts is that both Olson's account and that taken by Legros occurred after 1854. Nevertheless, both accounts are useful for demonstrating the intricacies and protocols the Northern Tutchone and Tlingit Chilkat used when conducting trade with each other. According to these accounts, trade could last up to five or six days, and bartering and counter offers were expected and could go on for days. Most importantly, we see the practice clearly demonstrated that only chiefs and high-ranking young men were permitted to trade during these ceremonies. As will be demonstrated in the next chapter, according to FSI journals and account records, there were no such protocols followed by the HBC in its trade negotiations with the Northern Tutchone and neighbouring Indigenous groups who traded at Fort Selkirk.

Summary

The Northern Tutchone of the 19th century were characterized by the Crow and Wolf moieties and had a stratified society which included a "rich man" (*dan nozhi*) who controlled important resources such as fishing locales and trade rights. Most Tutchone were semi-sedentary throughout the year, the more prominent families "owning" well-stocked lakes which provided sustenance during the winter months. Hunting and trapping animals, fishing and gathering, were important subsistence activities.

The Coastal Tlingit, particularly the Chilkat, came from the Pacific Coast and, like the Northern Tutchone, also had moieties (Raven and Wolf). Up to 50 people lived in stratified households which were overseen by a “house chief”. During the 19th century the Chilkat controlled the Chilkat Pass which was an entryway into the interior. They were skilled traders and became proficient middlemen between the interior people and European traders.

According to oral history accounts, during the late 19th century trade protocols between the Northern Tutchone and the Tlingit were very elaborate and included extended visits which involved song, dance, bartering and camaraderie. Only chiefs could trade with their trade “friend” and these trading partnerships lasted a lifetime. The trade protocols followed by the Northern Tutchone and Chilkat are very different from those documented by Campbell between the HBC at Fort Selkirk and the Northern Tutchone. The trade relationship that existed between these two groups was profound and would come to dominate the HBC’s inability to create meaningful trade relations with the Northern Tutchone in the future.

Chapter 5: Indigenous-European Contact at Fort Selkirk, Yukon

Introduction

Indigenous reliance on European goods during the fur trade era has been a common theme of Contact Period studies by historians and anthropologists (Harmon 1957: 65-66; McGilliveray 1989: 64). In these studies, discourse on the interactions between Indigenous groups and the Hudson's Bay Company have often been placed in the context of how quickly Indigenous culture became reliant on European traders (see Legros 1981). This reliance is believed to have developed through the desire and adoption of European goods, and eventual dependence on trade. Anthropologists have created meta-narratives of European-Indigenous contact based on oral histories and ethnoarchaeological analysis, which have examined socio-cultural relations and trade dynamics at Fort Selkirk (Helm and Leacock 1971: 343; Krause 1956: 126-127; Legros 1981: 28-30; McClellan 1975: 501; Olson 1936: 211).

Historical studies have discussed Fort Selkirk either in terms of Hudson's Bay Company expansion of the northwest or have focused on the life of Robert Campbell, rather than day-to-day activities of the fort and its role in Northern Tutchone lifeways (Coates 1991; Karamanski 1983; Wilson 1970; Yerbury 1986). The primary objective of this chapter is to analyze the HBC journals from Fort Selkirk I and II (1848-52) and to reconstruct various aspects regarding the daily functions of the fort. Secondly, particular attention will be paid to the importance of the fort to the Northern Tutchone people to determine whether or not they relied on the fort for their basic lifeways and if so, to what degree. This chapter argues that the Northern Tutchone were never solely reliant on the HBC for their subsistence or Euro-Canadian trade good needs, rather, they were active participants in trade who exploited all available avenues of securing the goods they needed. In this sense, much of their Pre-contact culture, including subsistence, remained relatively stable through the northwestern early Euro-Canadian Contact Period. Their participation in the fur economy meant not only trading actively with Fort Selkirk but also continuing trade with their long-time trading partners, the Coastal Tlingit Chilkat with whom they also traded furs for Euro-Canadian goods. The Fort Selkirk post was a nexus for a number of Contact Period encounters, including intra-Indigenous social networks, Indigenous-European social networks, and trade post social networks between the contract hunters and the European fur traders.

Since Fort Selkirk was at the extreme range of the HBC trade network, the supply lines were lengthy and difficult making them expensive to maintain. The effects of this situation are documented in fur trade records, which indicate that the time it took for trade goods to reach the Yukon market and then to ship furs back to England was approximately six years and three months (HBCA B/200/b/23: 26 1848-1849, to the Governor in Chief from M. McPherson, Fort Simpson [November 30th, 1848]). While these accounts have been used in past research, indeed the journals have been published, no detailed analysis of these records has been conducted.

Historical analysis of the Fort Selkirk documents has several limitations. The Fort Selkirk journals and accounts span a very short time period, from 1848 to 1852, thus it is difficult to place activities at the fort in a wider temporal context. Robert Campbell and James Stewart's co-authored journals are also problematic. Three volumes of the journal exist and cover the full period that the post was in operation. Two of the three volumes are co-written by Campbell and Stewart while the third volume, which is another version of the second, contains entries that are both co-authored or written by Stewart alone. There appear to be variations within the co-authored entries. These may have resulted when Robert Campbell left the fort on trade excursions. As well, the account records are incomplete, making it difficult to reconstruct a consistent set of trade relations and population figures for the Northern Tutchone and their seasonal round. Nevertheless, the records provide a snapshot of these groups and their trade relations when the data are analysed.

The method adopted here consists of indexing categories of actions, goods, and people and then systematically examining these categories to determine patterns (Morantz 1983). This method is time consuming but effective when working with fragmentary data. This study demonstrates the efficacy of using primary documents when reconstructing the social histories of European-Indigenous contact during the fur trade. Focusing on the short Fort Selkirk era, and systematic analysis of archival and primary documents, such as Fort Selkirk accounts, Campbell's and Stewart's daily journals and correspondence between HBC Mackenzie district employees, can be effective in determining socio-cultural interaction between these two groups. Approaches used in this study included quantitatively analysing the occurrence of specific events, people, season and species.

Several themes emerge from this study. In particular, these records reveal subsistence practices of the fur traders and Northern Tutchone. For example, Campbell kept records of fur trader's daily tasks including the name of the trader, his job that day and the date. These are important for determining the HBC and Northern Tutchone seasonal subsistence practices and other activities. Another theme dealt with in the records was the ethnicity and size of Tutchone trading groups. Each time a group came to trade at the fort, the season, group number, and group affiliation was recorded. This record allows a more detailed discussion of Indigenous group participation in trade at Fort Selkirk as well as an opportunity to quantify group trade patterns. Following work by Toby Morantz on the use of archival sources to investigate Eastern James Bay Cree social organization, this study did not take part in "the accepted ethnohistorical practice of 'upstreaming' where the present is used to interpret the past" (Morantz 1983: 6). In the Fort Selkirk study, documented facts were collected and then categories of socio-cultural trade activities were determined from this evidence. Finally, this chapter does not purport to study trade relations before European-Indigenous contact except to suggest that they did exist.

Oral histories, Indigenous maps and traders' accounts demonstrate that trade networks were utilized before the arrival of Europeans (Kohklux 1995; McClellan 1964: 5; Zagoskin 1967: 100-101). However, there is limited archaeological or

historical evidence of Pre-contact trade networks between the Northern Tutchone and the Tlingit Chilkat. Gotthardt's preliminary work on Northern Tutchone Pre-contact trade networks in Yukon, based on the analysis of material culture and tool raw materials, has been promising but requires further study (Gotthardt 1990a). It is therefore important to reconstruct the socio-economic activities of people at the fort to understand Pre-contact trade networks. The implications of Pre-contact trade networks for the future of fort trade are central since it is argued that these networks would eventually led to the fort's demise. Although the analysis of Contact Period trade networks can be beneficial to the reconstruction of Pre-contact trade, there are shortcomings. Varieties and availability of trade items changed during the Euro-Indigenous Contact Period and important trade networks were transformed. For instance, Adrian Tanner asserts that "inter-tribal trade which took place before the introduction of European goods cannot be considered alongside more recent trade, because of the general lack of pre-historic data" (Tanner 1965: 17). The lack of archaeological data emphasizes this assertion when attempting to understand Pre-contact Northern Tutchone and Tlingit Chilkat trade networks. Yet, Tanner does emphasize that analyzing "trade commodities" acquired after direct European contact can sometimes indicate a trade pattern which must have existed in Pre-contact times (Tanner 1965: 18).

Contact Period Trade

Understanding the relationships between the Russian American Fur Company and the North West Company is necessary if one is to comprehend the reasons for the Hudson's Bay Company's movement northwestward. The establishment of fur trade forts in Yukon by these two fur trade companies would eventually push the HBC to build Fort Selkirk as a means of demonstrating their territorial jurisdiction in the North. In 1799, the Russian American Company decided to locate its headquarters in Sitka, Alaska, which was the traditional territory of the Coastal Tlingit Chilkat. The Russian American Company's move opened the door to the Alexander Archipelago on the northwest coast, "an area rich in furs – six hundred miles closer to British North America" (Karamanski 1983: 26). The Chilkat were not pleased with establishment of the Russian fort. Their displeasure became evident in 1802 when the Chilkat attacked the Sitka fort, destroying the barracks and killing the crew. The Russians rebuilt the fort and continued their trade activities on the coast, yet they never moved inland, choosing rather to maintain permanent settlements along the coast. Abel states, "Because most of these early visitors were searching primarily for sea otter pelts, inland contacts were not necessary for trade" (1993: 65). Although relations were tense, the Russian traders continued to deal with the Tlingit Chilkat, who became middlemen for an interior trade. The Chilkat's middleman position would make them important players in inland trading practices for decades to come.

The next major trading establishment to move into the northwest was the North West Company (NWC). Between 1803 and 1806, the NWC was able to build three posts along the Mackenzie River but they were forced to abandon these posts due to an insufficient supply of trade goods. The NWC did push

further west, moving into the Athabasca and Mackenzie Rivers, over the Rocky Mountains and into the Pacific slope (Innis 1999). The NWC established posts along the Mackenzie and in the Liard River basin, between 1805 and 1806, when they began a trading relationship with the Kutchin bringing the latter into an intermediary trade role with the Han who lived in Northwest Yukon and Alaska (Figure 3). In 1812 the NWC began to establish trade along the Columbia River in British Columbia. Their focus was primarily on improving trade networks along the Columbia and in New Caledonia and moving their trade westward (Karamanski 1983: 29).

Through the establishment of these posts, both the Kutchin and the Tlingit would become important intermediaries in trade, the Kutchin through the NWC, and the Tlingit through the Russian American Company (Coates 1991: 22). The Coastal Tlingit soon came to dominate trade networks in the Yukon. As Coates points out, "Acting through Han and Tutchone intermediaries, the Tlingit soon drew much of the upper Yukon basin into their trading sphere" (Coates 1991: 22). Well-established trade networks created by the Russian American Trade Company and the North West Company thus set the stage for Hudson's Bay Company movement northwestward.

In 1821, following its merger with the NWC, the Hudson Bay Company's greatest concern in the northwestern fur trade was the growing domination of trade by the Russian American Company. Specifically, the HBC was concerned that the Russians would begin obtaining inland furs through their Indigenous trade networks (Ostenstat 1976: 35-65). This concern was justified on September 21st, 1821 when a decree issued by the Russian Government barred all non-Russians from Russian territory, including inland regions. This decree was given to halt other fur trade company exploits on the northwest coast.

The merger of the Hudson's Bay Company and the North West Company in 1821 ended a long battle for control of fur reserves. Now that the HBC no longer needed to spend its energies competing with the NWC they could spend resources on fur trade expansion. With the stability the merger produced, the HBC was granted a trade monopoly over a large part of British North America, including the Yukon River basin (Coates 1980: 25). On December 5th, 1821 the HBC was granted the following trade rights by the British government:

> …with the exclusive privilege of trading with the Indians in all such parts of North America to the northward and the westward of the lands and territories belonging to the United States of America as shall not form part of any of our provinces in North America, or of any lands or territories belonging to the said United States of America, or to any European government, state or power… (Great Britain, Parliament, House of Commons, Select Committee on the Hudson's Bay Company 1858: 426)

Once permission was granted for the HBC to proceed, the Company began expanding into the Yukon River basin. Their motivation was twofold. Firstly, they wanted to open new fur reserves; and secondly, it was meant to create revenue "in

the form of profitable fur returns or indirectly in the form of such non-monetary benefits as the protection of monopoly" (Coates 1980: 25-26).

An important change occurred in 1825 when the Russians signed an agreement with the British, allowing them to trade in Russian territory and also granting British traders the right to navigate rivers flowing through Russian territory in order to reach British territory in the interior (Coates 1980: 32). The HBC monopoly and the ability to navigate waterways allowed the HBC to begin what Coates terms a "two pronged exploration" west of the Mackenzie (Figure 4). A major reason for this exploration was a decline in the demand for beaver pelts in the 1830s. Once a popular material for making hats, beaver pelts now lay unsold in factory warehouses as the silk hat came into fashion and soon replaced the beaver hat as a fashion item. The HBC decided that it would need to find a new marketable item, such as marten, which was found in abundance in the Yukon basin. The HBC committee expressed this in the following letter:

> From an extraordinary freak of fashion, the article (beaver), moreover, has of late fallen much into disuse in hat making, silk hats being principally worn at present; the consequence is that its value has greatly decreased in the market, as will be seen by the accompanying sales catalogues. This depression however is but temporary, as no doubt exists that beaver hats will soon again come into more general use, when of course an amendment may be expected in price…The martens on the other hand, as you will observe by the late sales, have commanded very high prices. (HBCA A.6/26/I, Para 23, Governor, Deputy Governor and Committee [Outward Correspondence] to George Simpson, 1 April 1843)

Marten was not the only fur being promoted at this time. Other luxury furs such as mink and fox were marketed in Europe as well (Hammond 1988: 149).

The Hudson Bay Company's major move into the Yukon began in 1840 and was headed by fur trader John Bell (Coates 1991: 23). Bell first moved into the Peel River Post (later called Fort McPherson) (Figure 5). His attempts to continue westward were stalled by the Peel River Kutchin who did not want him to go further west as this expansion would destroy Indigenous trading patterns, which, as mentioned earlier, had been partially created by the NWC (Figure 3). Hudson's Bay Company Governor George Simpson, a strong supporter of northwestward expansion, encouraged Bell to continue his move westward and suggested that he use Indigenous guides who were not familiar to the area and who would have no personal reasons for stalling Bell's movement west. Finally, in 1845, Bell reached Colville River (synonymous with Yukon River) (Coates 1991: 23).

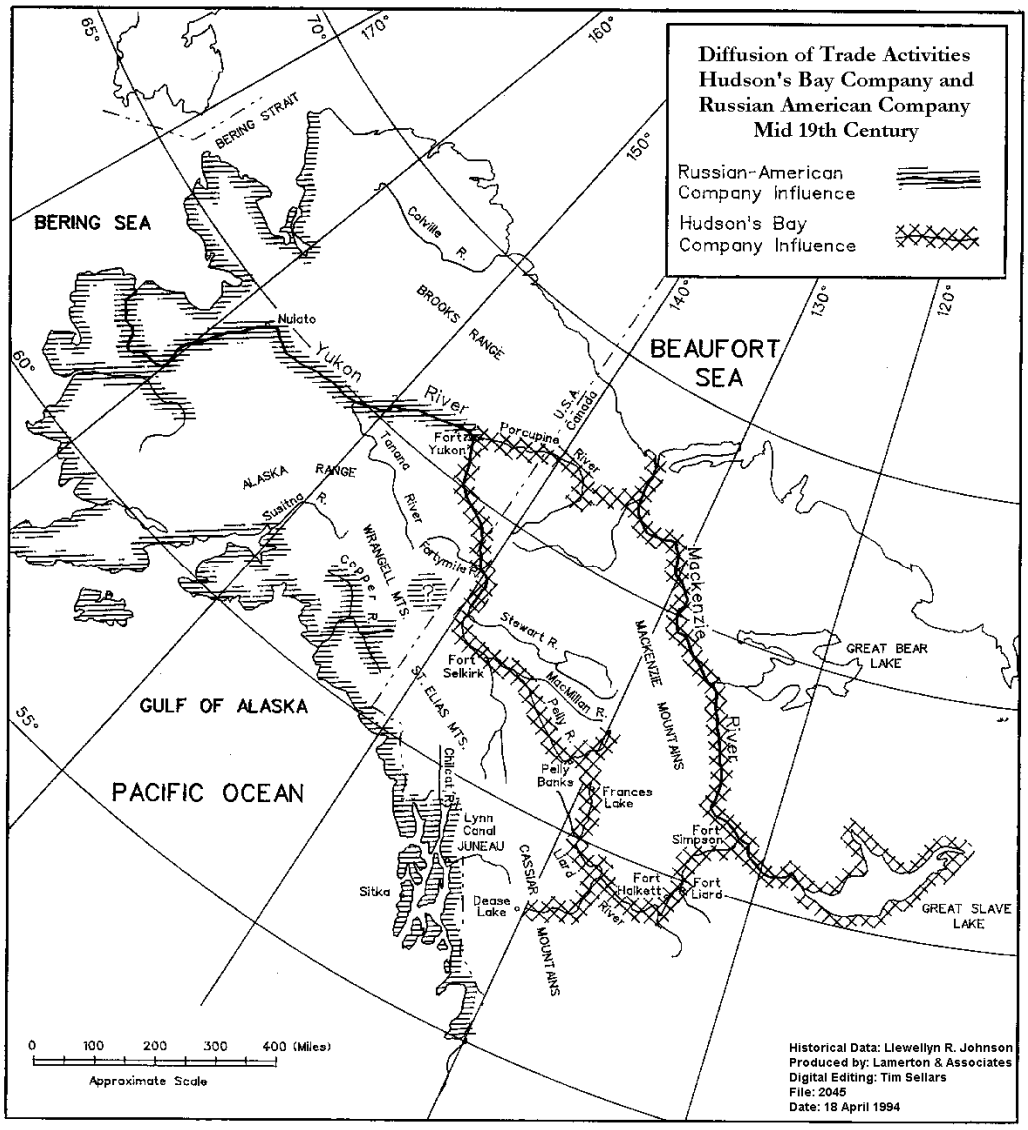

Figure 4. Map of Trade Diffusion by the Hudson's Bay Company and Russian American Company (adapted from Johnson and Legros 2000: xi; used with permission of Government of Yukon, Cultural Services Branch).

The second part of the Hudson Bay Company's expansion came from the south and was headed by Robert Campbell who would eventually open Fort Selkirk at the confluence of the Pelly and Yukon Rivers. A letter sent to Campbell by Governor Simpson explained his mission:

> Norway House, 4, July, 1837
>
> Dear Sir,
>
> I have to acknowledge receipt of your letter of 30th Nov., and am very pleased at your spirited tender of your services to establish Dease's Lake, which has called forth the approbation of the Council and let to your promotion to the rank of Clerk (hitherto I

> had been rated as “Postmaster”) with an advance of salary. Rest assured that merit will in this service always meet its reward…
>
> Let me beg that your attention be particularly directed to pushing the trade across the Mountains and down Pelly River, (the Stikine is meant, as the upper part of that river had been named the *Pelly* until I found it to be the Stikine) and Robert Campbell is not the man I take him to be unless in due time he plants the H. B/ Standard on the shores of the Pacific… I remain, Dear Sir, Yours most sincerely, Geo. Simpson. (Campbell 1958: 36 [July 4th, 1837])

The Hudson’s Bay Company’s desire for furs pushed exploration westward, as did their desire to trade with Indigenous groups who, up to that point, had conducted little or no direct trade with European traders. With this in mind, Campbell began his westward move in 1839. Campbell was so adept at establishing forts that on his move westward he was able to help generate the following posts: Dease Lake (British Columbia), Frances Lake (Yukon), Pelly Banks (Yukon), and finally Fort Selkirk (Yukon) (Figures 4 and 5). Campbell moved slowly along Francis Lake and the Pelly River all the while attempting to establish Indigenous trade relationships. It was near Dease Lake that Campbell first recognized the strong Indigenous trade ties between the Tlingit Chilkat and the inland Indigenous group living in the interior (Campbell 1958: 38-45 [July 23rd, 1838]). These Indigenous trade networks would have significant repercussions for Fort Selkirk, and its inhabitants, in the future.

Towards the end of the winter of 1848 Campbell received a letter from Murdock McPherson, Mackenzie District commander, instructing him to establish a new trading post at the forks of the Pelly and Lewes (Yukon) Rivers (Figure 5) (HBCA, B/200/b/22: 37-41, 1847-1848 [March 15th, 1848]). The establishment of this post would move the Hudson’s Bay Company further northwest, again, establishing contact with Indigenous groups who had not directly traded with the HBC in the past. Campbell was able to open the post on the forks of the two rivers on June 1st, 1848. He writes in his personal journal:

> …we safely reached the forks of the Pelly and Lewes with boat, skiff, canoes & raft, all of which were of great service to us afterwards. On selecting a site we proceeded with the erection of the building in earnest & got on rapidly, naming the new post Fort Selkirk. (Campbell 1958: 81 [June 1st, 1848])

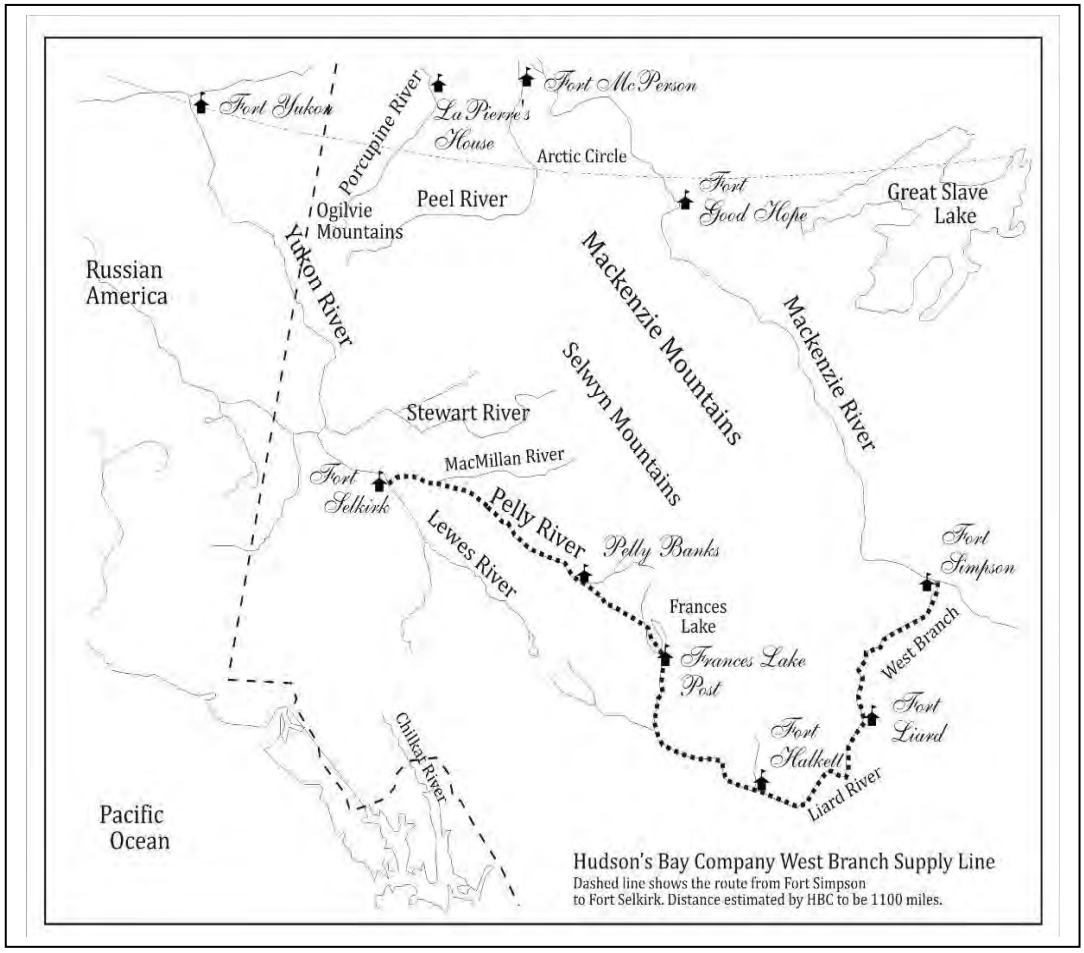

Figure 5. HBC Forts in Yukon, Alaska and NWT Circa 1848 (Gotthardt 2010b, used with permission of author).

Importantly, Campbell and Stewart's daily journals differ from Campbell's personal journal, by depicting the establishment of the Fort Selkirk site as being a difficult task, Campbell writes, "Spent the day looking for a place to build but we were unfortunate. Every place has something objectionable" (2000: 3 [Jun. 1st, 1848]). When a site was finally located the fur traders erected post buildings and commenced trade relations between themselves and Indigenous groups in the area, primarily the Northern Tutchone.

HBC and Fort Selkirk – The Trade Post Sphere

A useful method to understand the social dynamics between the fur traders and Indigenous groups is to study the individuals who constituted the fort population so that in turn the social dynamics between the fort and surrounding nearby Indigenous group populations can be studied (Morantz 1983). Again, because information is fragmentary, it is only possible to present certain aspects of the fur traders' lives. As well, the material culture traded and utilized at the fort

denotes the types of activities that occurred between fur traders and Indigenous HBC hunters, and just as importantly, the surrounding Indigenous bands who participated in trade. Establishing the origin of HBC Indigenous hunters can also provide information on relationships between the HBC and surrounding Indigenous bands including the level of integration between these groups.

The European and Indigenous traders who comprised the fort complement consisted of a motley crew of men from various parts of Europe and North America. Class differences amongst the men at the fort played a significant role in determining their official position within the ranks of the HBC and at Fort Selkirk. Robert Campbell, who was the company clerk, came from a highland farm in Perthshire, Scotland (Campbell 1958: 1 [1808]). His second in command, assistant clerk James Green Stewart, came from an affluent, first generation Scottish family living in Quebec City. Stewart's father was a doctor who sat on bank boards and acted as advisor to governments (MacKinnon 2000). Thus, even the two top ranking men at the fort came from very different backgrounds.

Campbell and Stewart's daily fort journals relate employees' daily chores and the account records describe the name and position of some employees during particular years. The latter records are incomplete, but the year 1851 is complete. During that year Campbell listed 12 men under his employ, their contract end dates, their capacity at the fort and their yearly salaries (Table 4).

The place of origin for other fort employees can be garnered from Campbell's daily journal. For instance some of Campbell's employees were Métis, such as Baptiste Forcier, while others were Indigenous, such as Peter Pelly, who was Campbell's adopted son, bought as a boy from unidentified Kaska people (NA, MG 30, D39, fa 455 [Sept. 6th, 1852]). There were also lower ranking British traders such as Andrew Flett and Murdoch McLeod (HBCA, B/196/d/1: 14, 1851-1852). Campbell also had various company Indigenous and Métis hunters including La Pie and Kitsah, as well as Francis Hoole, who for some time worked as an interpreter for Campbell (Campbell 1958: 39-45 [July 23rd, 1838]; NA, MG 30, D39, fol. 455 [Sept. 6th, 1852]); Karamanski 1983: 144). It was common practice for the Hudson's Bay Company to hire Métis or Indigenous people as fort hunters. Fort employees came from different backgrounds, and might have been expected to live socially stratified lives at the fort, but analysis of the daily fort journal depicts a different story.

Officially, positions held by the men included the following: steersman, bowsman, fisherman, middleman, assistant clerk and clerk (Table 4) (HBCA, B/196/d/1: 14, 1851-1852). These positions had specific salaries associated with them, which varied depending on rank. For instance, a steersman was paid 27 pounds per year, a bowsman was paid 25 pounds per year, a fisherman was paid 25 pounds per year, a middleman was paid between 16 and 22 pounds per year, the assistant clerk was paid 75 pounds per year, while the clerk was paid 100 pounds per year (HBCA, B/196/d/1: 14, 1851-1852). Employee contracts seem to have lasted either one or two years. For instance Campbell writes, "Thomas, Reid, & Donald engaged today, the two ends for 2 years, the centre for one" (Campbell and Stewart 2000: 24 [Jan. 3rd, 1849]).

HBC Employee	Contract	Capacity	Annual Salaries
			£ (pounds)
Baptiste Forcier	1852	steersman	27
Francois Parisien	1853	bowsman	25
John Brough	1853	fisherman	25
Andrew Flett	1852	middleman	22
Jeremiah Charleston	1852	middleman	22
Peter Pelly	1854	middleman	15
Baptiste La Pie	1852	middleman	22
William Leash	1852	middleman	16
Norbert Le Beau	1852	middleman	22
Murdoch McLeod	1855	middleman	16
James G. Stewart	1852	clerk	75
Robert Campbell	1852	clerk	100

Table 4. Statement of Servants Wages, Fort Selkirk Outfit 1851 (HBCA B/196/d/1: 14, 1851-1852).

Although in the official accounts workers' positions were particularized, and salaries could depend on ethnicity, the daily journal depicts all the men as having similar and often interchangeable responsibilities at Fort Selkirk. For instance, Campbell's entry on one day says, "Reid and Flett finished a chimney; Charleston & Brough sawing roofing, finished the logging & roofing of the kitchen, hung one door, and made another (Campbell and Stewart 2000: 5 [Jun. 23rd, 1848]), and on another day he writes, "Norbert & McLeod (were) sawing…" (Campbell and Stewart 2000: 120 [Oct. 24th, 1851]). This interchangeability in daily tasks would have meant that social stratification amongst the men was not as structured as was suggested in their titles or at other more established posts. Yet, there were some fort employees who were assigned specific jobs. For instance, on numerous occasions Reid was left to tend the post while Campbell and Stewart were away, "Reid remains here in charge of the Fort with Brough & Peter for his assistant" (Campbell and Stewart 2000: 82 [Sep. 2nd, 1850]). Some men were considered better equipped to manage specific tasks; in this case Reid may have been the only other literate man at the fort (Johnson and Legros 2000: v-vi).

This interchangeability in jobs was the result of one important aspect of fur trade life in the Yukon: obtaining food for subsistence, a vital task for the fur traders. It was common HBC procedure when sending employees off to establish remote forts to "depend on pemmican and the gun for the journey inland, and on fishing and Indian hunters, with a reserve of English provisions as a last resort in a bad season, for winter at the post" (Rich 1960: 42). Provisioning was such a significant priority that for the most part the traders were more concerned with obtaining food than with obtaining furs for trade and Robert Campbell spent most of his energy directing people in this endeavour. All available men were sent to hunt, including company hunters and fur traders. From the production and preparation of sleighs and snowshoes, to the establishment of hunting camps and caches, everyone at the fort was somehow involved in the acquisition of food. These activities were dictated by season and game availability. Items such as hunting and gathering tools were therefore of vital importance to the fort

personnel. Campbell supplied Indigenous people who were known as hunters with ammunition and nets and it appears that these were given whether the hunters could pay for them or not:

> This morning our interpreter left us after frightening our Indians with stories of bad Indians as thick as mosquitoes. We gave the men a gun each out of the Outfit, this humble Co. not allowing us such superfluities…The rest equipt. with ammo left us to make the summer hunt. Camped at forks McMillan's river. (Campbell and Stewart 2000: 2 [May 29th, 1848])

As will be demonstrated, this need to provision the fort placed the Europeans in an Indigenous frame of trade, meaning they had to alter their provisioning and fur trading practices to reflect Northern Tutchone practices, rather than vice versa.

Analysis of the fort's seasonal round can help determine what types of activities took precedence at the fort, and whether these were associated with trade. The summer was a time for hunting large game. Fort traders and hunters were sent out to hunt for meat, and to recover meat from caches. The rest of the animal (hide, antler and bone), was normally utilized for the production of tools and clothes. Moose and caribou were the primary game brought in during the summer months (Campbell and Stewart 2000). Moose, the chief large game animal, was rarely brought in during the winter months (Campbell and Stewart 2000). Caribou was usually hunted in March and April and then again in September (Campbell and Stewart 2000). In 1849 Fort Selkirk received 183 pounds of fresh meat, 276 pounds of dried meat, 24 pounds of fowl, and 2,200 pounds of fresh fish and 677 pounds of dried fish for subsistence purposes (HBCA B/196/z/1: 1, 1849). Interestingly, a comparison of yearly dried meat provisions at similarly sized Fort George-Buckingham House Site Plantation, located in central Alberta, for the year 1796-7 indicates that individual tribes, such as the Assiniboine, brought in 242 pounds of dried meat (Gullason 1990: 69). This amount is similar to Fort Selkirk's dry meat intake, which totalled 246 pounds for the year 1849. The difference is that Fort George-Buckingham House had nine groups trading meat, while Fort Selkirk had approximately three. Given the consumption of meat and fish required by people doing heavy work and the fish fed to dogs this is not a lot of sustenance.

Some of the meat may have been used to make pemmican, which was placed in bags and used throughout the winter and into the spring, in fact Campbell mentions that they, "Tapped our last bag of pemican" exactly ten days after the Pelly river ice break up (Campbell and Stewart 2000: 133-134 [May 20th, 1852]). The pemmican could also have been brought with them in 1848 when they first arrived at the FSI locality. Either Fort Selkirk was making pemmican or it was being sent from Fort Simpson. This food would have been useful for travelling and it appears that the HBC traders used it is as a last resort when fresh meat was in short supply.

A great deal of effort was expended in obtaining provisions in and around the fort. Early on in the fort's operations fort hunters and tradesmen spent a

considerable amount of each day looking for food, for instance:

> Baptise arrived in the morning from the hunters camp at the Forks of McMillan's river. Says there are no moose and they are badly off for provisions. He went across the Lewes to see and kill a moose for us. Marcette also went off but was unsuccessful. (Campbell and Stewart 2000: 5 [Jun. 28th, 1848])

Other animals taken included ducks and geese, normally hunted in May, “Thom, Brough & Peter started to hunt ducks, the former returned in the evening with 2 geese & 1 Duck”, they would also be hunted, in less frequency, in June, August and September (Campbell and Stewart 2000: 34 [May 9th, 1849]). During the summer months a good deal of effort was placed in procuring fish. Campbell comments daily on the number of fish the fort has harvested (Campbell and Stewart 2000). An important requirement for catching fish, such as salmon, trout, pike and white fish was the production of nets, a job carried out by various traders, “Reid lacing a net”(Campbell and Stewart 2000: 41 [Jul. 27th, 1849]) and “Brough finished a net he commenced Thursday”(Campbell and Stewart 2000: 46 [Sep. 8th, 1849]). Fish drying normally occurred in the fall (Campbell and Stewart 2000: 122 [Nov. 14th, 1851]). Fish, especially salmon, is very high in fat and is relatively easy to dry and keep preserved for the lean winter months.

Another subsistence based occupation that kept the fort crew busy was maintaining the vegetable garden. Although growing conditions in Yukon are problematic, the fort members were able to grow a small variety of vegetables. Less than two weeks after their arrival, the Fort Selkirk traders, “Made a stage and put all the goods upon it, sowed our potatoes and some other seeds and arranged a place for sowing the barley” (Campbell and Stewart 2000: 3 [Jun. 2nd, 1848]). Now and then Campbell also described his crop yield, “Took up our Crop of Turnips which we ought to have done Saturday as the frost of last night has injured them” (Campbell and Stewart 2000: 14 [Oct. 2nd, 1848]). Crops at Fort Selkirk were sowed during the months of May and June and harvested before the first frost, usually in mid-September. Campbell also requested gardening implements such as patent grass scythes, handled garden spades and assorted garden seeds in the indent requisitions of 1852 and 1853 (HBCA, B/196/d/1: 38-44).

During the post’s history Fort Selkirk had two locations: Fort Selkirk I was located on the banks of the Pelly River at its confluence with the Yukon River and Fort Selkirk II was located on the banks of the Yukon River across from the original fort (Figure 2). As such, a considerable amount of energy was expended on constructing these buildings. Campbell and Stewart describe in detail the daily construction chores of the crew. In addition to food procurement, daily chores at the fort included building construction, “Reid, Marcette, Savoyard & Donald squaring wood for the store; the rest about the house. Finished the flooring. Put in the Windows etc. of Mr. C. room” (Campbell and Stewart 2000: 6 [Jul. 5th, 1848]).

The documented material culture required to keep Fort Selkirk in operation was analysed to understand HBC socio-economic relations with fort employees. To facilitate subsistence hunting, Campbell had to provision his fort hunters. Throughout the years 1851 to May 1852 Campbell recorded all items given to fort hunters to hunt (Table 5) (HBCA, B/196/d/1: 7-9, 1849).

Mooseskin (moose hide) and deerskin (caribou hide) were the items most often given to fort hunters. They needed these items to make clothing (i.e., footwear and gloves) and to construct shelters. Stroud, a rough woollen fabric, and grease were given next. Stroud was used for clothing and grease was often added to dry meat to make pemmican. Half of the items given to fort hunters during these two years consisted of biodegradable materials that may not appear in the archaeological record. There is no mention of requests for arms or ammunition in the private orders.

The heavy focus on subsistence activities by the fort complement may indicate a greater participation within the Northern Tutchone economy. The following sections detailing low trade (furs) output reinforces this interpretation, though perhaps for different reasons; i.e., lack of trade goods. Early on, the fort's viability as a trading post came into question due to a lack of supplies and tradable goods. More than once Campbell complains of a shortage of trade supplies from Fort Simpson:

> Not having had supplies, letters, or tidings from Fort Simpson last Fall as we ought to have done, we naturally expected to have received an Express from there telling us the why & the wherefore ere the close of this month. But we have not the satisfaction to record that event yet, which is rather unaccountable having had plenty time to be here now had they left there on the first ice. Nor can the Gentleman in charge plead any excuse for such unheard of negligence, leaving us thus to our fate in this remote dreary wilderness without either supplies or news. (Campbell and Stewart 2000: 64 [Feb. 28th, 1850])

During an exceptionally cold month of May Campbell writes, "The Store is as empty as a church of everything tradeable" (Campbell and Stewart 2000: 110 [May 28th, 1849]). On another occasion he says:

> Here ends the month of May, dreary and cold in the extreme, little or no vegetation & the banks of the river covered with Ice still, little or no provisions in Store, no sign of people from above which bespeaks anything but good news. Our situation is by no means agreeable one or one that is much to be envied. (Campbell and Stewart 2000: 36 [May 31st, 1849])

Item	Year 1851	Year 1852 (to May)	Total
mooseskin	15	10	25
deerskin (caribou)	5	5	10
Glengarry cap	1	0	1
firesteel	2	0	2
scalping knife	2	0	2
stroud	8	1	9
grease	2	6	8
fur	0	1	1
snuff	0	1	1
tobacco	0	1	1
handkerchief	0	3	3
crooked knife	2	0	2
comb	1	0	1
cotton shirt	0	1	1
blanket	1	0	1
capote	0	1	1
bell	0	1	1
locking flap	1	0	1
tracking shoes	1	0	1
beaver skin	1	0	1
women's scissors	1	0	1
Total	**43**	**31**	**74**

Table 5. Supplies Given to Fort Hunters from January 1851 to May 1852 (HBCA, B/196/d/1: 7-9, 1849).

Without tradable items the Northern Tutchone may have quickly decided that trade relations with the fort were not reliable. Simply put, there was little at the fort that the Indigenous population needed or desired. Analysis of the Campbell and Stewart journals supports this assumption.

According to the fort's daily journal, during the year 1848 there is no record of Northern Tutchone trading furs at the fort (Table 6). In 1849 the Northern Tutchone trade furs nine times, in 1850 they trade furs two times, in 1851 they trade furs three times and in 1852 they trade furs seven times. The greatest quantity of furs are traded in the second year of the fort's existence and then there is a two-year decline in fur trade followed by a rise again during the fort's final year. According to the account records 1,430 furs were brought to Fort Selkirk in 1848 and 1,462 furs were brought to the post in 1850-51 (Table 7). As discussed earlier, one reason for the Northern Tutchone's lack of trade during 1850 and 1851 may have been that the fort received fewer tradable goods during these years (Campbell and Stewart 2000: 64 [February 28th, 1850; July 25th, 1850]). Trade goods finally arrived "from all quarters" in the fall of 1851 (Campbell and Stewart 2000: 118: [October 2nd, 1851]). Stewart states "…supplies which are unusual. Campbell will be pleased the store is so well filled and I am sure (Campbell and Stewart 2000: 118: [October 2nd, 1851]). Interestingly, Campbell also comments that the Chilkat did not arrive to trade with the Northern Tutchone

Period	Northern Tutchone	Han	Fort Hunters	Kaska	Total
1848					
Winter					0
Spring		1			1
Summer		3	1		4
Fall					0
1849					
Winter					0
Spring	4	2	1		7
Summer	3	1			4
Fall	2				2
1850					
Winter		1			1
Spring	1		1		2
Summer	1	1			2
Fall		1			1
1851					
Winter			1		1
Spring	1	1			2
Summer	1				1
Fall	1				1
1852					
Winter					0
Spring	6			1	7
Summer	1				1
Fall					0
Total	**21**	**11**	**4**	**1**	**37**

Table 6. Number of Times per Year Campbell Mentions Furs Being Traded at Fort Selkirk (based on data obtained from Campbell and Stewart 2000).

in 1849, thus their choice of trading partners that year was limited (Campbell and Stewart 2000). Evidence of poor fur returns is also found in account records. A comparison of Fort Selkirk returns (Figure 7) and other Mackenzie District post fur returns (Table 8) demonstrates the lower fur returns at Fort Selkirk. Fort Halkett, with fur returns totalling 1,716 and which "never lived up to expectations" as a productive fur trade post has the most similar fur return totals to those of Fort Selkirk (N=1462) (Karamanski 1983: 90).

Another reason for the lack of fur trade returns during these years may be illness as Campbell writes, "Illness spreading amongst the Indian children. Lord have mercy upon us...I trust the next month will end more cheerfully than this one & that at least we may be clear from sickness" (Campbell and Stewart 2000: 103 [May 31st, 1851]). Campbell also describes seeing the effects of Indigenous illness as he travelled down the Yukon River to Fort Yukon in 1851 and estimated that at least one-third of the local people had died from the mumps (Campbell and Stewart 2000: 102 [May 20th, 1851]; Campbell 1958: 109 [May 30th, 1851]; Dawson 1987: 138B; Anderson to Council, HBCA B/200/b/28: 55 [Nov. 30th, 1852]).

Fur	Aug. – Dec. 1848	Apr. 1850 – May 1851	Total
Bear, black	16	32	48
Bear, brown	6	8	14
Bear, grizzly	4	9	13
Beaver, large	241		241
Beaver, small	107		107
Beaver		358	358
Castor	8	8	16
Fox, red	4	21	25
Fox, cross	4	44	48
Fox, silver		35	35
Fox, black	3		3
Lynx	216	38	
Wolverines	14	78	92
Rats	85		85
Otters	10	11	21
Marten	447	587	1034
Moose, large skin	93	212	305
Moose, small skin	136		136
Deer, large skin	11	21	32
Deer, small skin	25		25
Total	**1430**	**1462**	**2892**

Table 7. Fort Selkirk Fur Returns for 1848 and 1850-51 (HBCA B/196/d/1: 2, 4, 1851-2).

Since the Northern Tutchone traded more some years than others the final upswing in trade relations between the fort and Tutchone may have caused the Chilkat concern as the fort was in direct competition with their traditional trading partners. As mentioned earlier in this chapter, although the quantity of furs traded at the fort were low there were substantial amounts of meat being brought in by the Northern Tutchone, presumably in conjunction with their seasonal round. The Northern Tutchone may have largely traded meat, instead of furs, in exchange for HBC items. Trading meat with the HBC and trade goods with the Chilkat would have allowed the Northern Tutchone to keep both trading partners. This relationship undoubtedly was not profitable for the HBC at Fort Selkirk and reinforces the premise that European traders were placed in an Indigenous sphere of trade rather than vice versa.

After obtaining subsistence, trade with Indigenous peoples was the primary goal of the HBC to keep Fort Selkirk viable. A comparison of the Fort Selkirk inventory for 1851, including unauthorized supplies brought in from Fort Pelly Banks and Fort Yukon (1851), authorized supplies brought in from Fort Simpson (1851) and indents (requests for goods not including men's private orders) for the years 1852 and 1853 although fragmentary, reveal the type and possibly the popularity of items traded at Fort Selkirk (HBCA, B/196/d/1: 1-6, 21-36, 1851-1852). Following the classification categories used in the material culture analysis (Chapter 7), items listed in the account records were placed in one of seven complexes: clothing, arms and ammunition, architectural and construction, metal working, storage and transportation, household and culinary, and personal use.

Fur	Fort Simpson	Fort Liard	Fort Norman	Fort Good Hope	Fort Halkett	Total
Bears, black large	150	39	16	16	6	227
Bears, cub	36	25	1	4	3	69
Bears, brown large	1					1
Bears, brown cub						
Grizzly, large				1		1
Grizzly, cub						
Beaver, large	1062	582	318	475	1240	3677
Beaver, small	307	153	81	183	208	932
Beaver, coating	121	69	24		45	259
Castoreum	52	33	12	25	28	150
Moose, dried skin	30	20			24	74
Fox, silver			7	1	2	10
Fox, cross	11	7	7	6		31
Fox, red	6		5	9		20
Fox, white			1	1		2
Lynx	1657	643	237	22	16	2575
Marten	870	516	972	1155	82	3595
Mink	29	6	1	6	2	44
Muskrat	2233	290	2192	11389	47	16151
Otter	18	4	3	2	4	31
Swan skins	24	5				29
Wolf	1	3	2	8	1	15
Wolverine	36	21	37	19	8	121
Swan quills	1050	125				1175
Total	**7694**	**2541**	**3916**	**13322**	**1716**	**29189**

Table 8. Mackenzie District Returns: 1830
(HBCA B/200/d/23, fol. 85d from Yerbury 1986: 112, Table 16).

These classifications do not delineate between items used by the fort crew and those traded to Indigenous traders. It is assumed that the fort men would have ordered their own goods through the "men's private orders" (HBCA B/196/d/1: 23-36, 1851-1852). The following are counts for requested indents between 1851 and 1852.

The largest amount of inventoried and requested items rests within the clothing complex. In a letter to James Anderson, Campbell stated, "I am formerly of the opinion that with the exception of a few blankets, it will be of advantage to neither party to introduce or encourage the trade in cloth or capots among the Indians of the Pelly itself" (HBCA B/200/b/26: 74, 1851-1852 [August 6th, 1851]). Considering this statement, it is difficult to account for the number of capotes and yards of stroud being ordered by Campbell, particularly since he requests new types of stroud in his indent (HBCA, B/196/d/1: 44). These blankets may have been given to fort hunters.

The quantity of beads ordered is interesting as Campbell has none in his 1851 inventory until receiving 20 pounds from Fort Yukon. He then asks for 14 pounds (almost ¼ box of beads) to be sent to him in 1852 followed by 26 pounds in 1853. The lack of beads would have made it difficult to trade with the Northern Tutchone, particularly since he states at the end of his indent:

> The articles most in demand are beads like the sample forwarded you by M. Hardisty. Guns, Tobacco, and Powder - Any new kind of stroud... The Hairpin Shell is in great demand among themselves. (HBCA, B/196/d/1: 44)

Anderson echoes the importance of shells for trade purposes in a letter to John Rowand at Fort Edmonton:

> Should a small box containing Hyqua shells for Mackenzie River District come out by the Columbia Fall Express, I would thank you to forward it by the winter packet via Green Lake and isle a la Crosse, as it is of the greatest importance that it should reach here as early as possible, these shells being much required for the Youcon and Selkirk Trade. (HBCA, B/200/b/26: 39, 1851-1852 [March 3rd, 1852])

This concern is later reiterated in a letter to Fort Vancouver whereby Anderson asks that four thousand shells be delivered from the Pacific Coast (HBCA, B/200/b/26: 39, 1851-1852 [March 5th, 1852]). Beads were obviously important to Indigenous groups throughout the Mackenzie District as Alexander Murray, Clerk at Fort Yukon states:

> I receive the [outfit?] by the return of my men from Lapiers House on January 5th and must say, that I was greatly mortified to find so limited a supply of the articles most needed (beads and guns) being sent… (Murray 1910: 93)

In the arms and ammunition complex, there is a great demand for knives (360 items). Regarding guns and gun paraphernalia, Campbell ordered items such as powder horns (24 items), gunpowder kegs (8 items), shot (20 bags), gun flints (8 bags), worm wire guns (4 boxes?), common Indian guns (at least 4 cases), and lock stocks (12 items). Again, these items would have been useful to fort hunters and may have been traded to surrounding Indigenous groups. Keeping in mind that the Northern Tutchone would have been using traditional tools and weaponry for hundreds of years, the need for European weaponry may have been minimal, especially when the Northern Tutchone and HBC traders were just beginning to establish trade relations during this Early Contact Period. European weaponry could have been considered a hindrance, as it was a new technology that required learning, was not dependable and also required a steady supply of ammunition (Townsend 1983: 29). If ammunition supplies were not dependable and shortages were common then depending on European arms for hunting could have been detrimental for Indigenous hunters. Traditional weaponry would be highly advantageous in this situation until the trade supply system improved to the point where ammunition supplies could be relied upon. Yet, as mentioned in the above quote, guns and powder were in high demand and Campbell comments that the Northern Tutchone traded furs for guns, “The Gros Coiffe left a deposit of 21

Martens, for which he wanted a gun; but as he would not yet get it for that, he says he will make up the number required by & bye" (Campbell and Stewart 2000: 16 [October 20th, 1848]).

Alternatively, Indigenous traders may also have considered guns as status markers. As Reedy-Maschner and Maschner state, "In the subarctic case, however, changing demographic conditions and trade networks and access to new goods (particularly new weapons) changed the basic structure of the indigenous status hierarchy" (Reedy-Maschner and Maschner 1999: 729). The importance of guns may have had little to do with their original use as weapons and more to do with their use as prestige items. They continue:

> …status was essential to the success of these young males, who saw access to Western goods as a new means to high status in their own social groups. High status and increasing prestige led to greater social, political, and economic power and, at least in theory, should have led to greater reproductive success. (Reedy-Maschner and Maschner 1999: 732).

As well, prestige could be derived from the functions of a gun as a means of providing more game thereby leading to increased prestige as an excellent hunter and/or provider.

In the architectural and construction complex orders include various types of axes (148 items), files (313 items), window glass (36 panes), putty (4 lbs.), padlocks (12 items), chisels (22 items), and twine (125 bundles) as well as other construction material. Again, the indents show the importance of some items over others in trade. Twine was in high demand as 196 bundles of string twine were found within the inventory and requests combined. Requests for twine for 1851 and 1852 totalled approximately 125 bundles. Presumably, twine was used to mend and make fishing nets, an important source of food for the fort members.

The metal working complex includes copper kettles, principally because the copper was used as a form of sheet metal. Approximately 59 pounds of copper was inventoried and ordered from 1851 to 1853. The storage and transportation complex contained a very small quantity of oil cloth (1 yard) and Red River carrying straps (24 straps).

The household and culinary complex is interesting because of the requests. Keeping in mind that none of the inventory or indent requests are part of the men's private orders it is presumable that items such as forks, table knives, spoons, bread pans, flat table earthenware, foolscap paper, pens, black ink and various spices, teas, flour, condiments and medicinal ointments were ordered not only as business and fort supplies but also for trade with visiting traders.

Finally, the personal use complex consists of various quantities of looking glasses (6 dozen), handkerchiefs (5 dozen), brass finger rings (4 gros.), combs (3 ½ dozen) as well as a large quantity of vermillion (14 lbs.). Striking is the difference in inventoried tobacco totals (1 bale, 1 ball and 10 lbs.) and the indent request of 21 pounds for the years 1851-1852.

On numerous occasions Campbell comments on the lack of tobacco:

> …Our Tobacco, with the parsimonious economy we used it, run out till yesterday. But now we are entirely without it, and a sad disappointment to the Indians to be without this must be delicious Weed. The only thing for which they come to the Fort. To be without almost all trading articles & it in particular make my situation anything but a pleasant one, not even an Interpreter. I and the Company's interests owe a deep debt of gratitude to someone for bringing such circumstances. (Campbell and Stewart 2000: 15-16 [Oct. 13th, 1848])

Campbell's sarcasm stems from his dissatisfaction with the HBC's policy of economizing. It appears that the items Campbell wanted most were beads, hairpin shells, tobacco, guns, powder, axes, files, knives, buttons, vermillion, twine, worsted bells, stroud, condiments and medicines. Unfortunately for Campbell, old ironworks and unsalable goods were sent to new districts, such as Fort Selkirk, since it was assumed that Indigenous people there were unacquainted with European goods (Innis 1999: 305 [1930]). Anderson instructs Campbell to take the best quality leather in trade for cheap company articles and not to take moose or bear hides because of their weight and relatively low value to the company (Anderson to Campbell, HBCA, B/200/b/26: 20 [Jan. 8th, 1852]). Since the Northern Tutchone had already been trading with the Coastal Tlingit Chilkat for quite some time before Fort Selkirk was established they would have been familiar with European goods, quality and prices. Also, the Chilkat did not require the Northern Tutchone to trade dressed furs while Fort Selkirk did; dressing furs would have taken time away from normal daily activities and may have made the Tutchone reluctant to trade with the HBC (Campbell to McPherson, B/200/b/24: 60, 1850). Again, the Northern Tutchone had no reason to rely solely on trade with Fort Selkirk when they were probably already obtaining higher quality European goods from the Chilkat. These facts would have contributed to trade difficulties at Fort Selkirk.

To summarize, the subsistence needs of the post may have impeded its fur trading function (Tables 7, 8). The subsistence demands not only worked to undercut the fur trading potential of Fort Selkirk but pushed Campbell and the personnel of Fort Selkirk into a more "Indigenous" context of trade, that included food exchange, and subsistence as well as the attainment status goods. For instance, rather than convince the Tutchone to hunt more marten, HBC traders were forced to adopt Tutchone lifeways simply to survive, particularly because they were in the subarctic and on the periphery of HBC supply lines. The tenuous existence of the HBC post on the Yukon may have convinced the Tutchone that they could acquire those European goods they needed from Fort Selkirk through the trade of provisions and small quantities of furs to the post, reserving most of their furs for the Chilkat traders. In that way they could keep both trading groups happy, at least theoretically, and two sources of trade are always better than one in

terms of survival and power.

Women and Families at Fort Selkirk

Obtaining personal information on specific people at the fort is difficult. The analysis of Campbell's records provides information on the presence and roles of a few women and other aspects of family life at Fort Selkirk (HBCA, B/196/d/1: 23-36, 1851-1852). On numerous occasions Robert Campbell mentions women living at the fort. For instance, in 1852, the day that the fort was attacked by the Chilkat, he writes, "During the uproar Brough & the two women disappeared" (Campbell and Stewart 2000: 141 [Aug. 20th, 1852]). A few days later he notes, "Women smoking leather" (Campbell and Stewart 2000: 142 [Aug. 26th, 1852]). In another entry he goes on to say, "People busy getting wood & etc. ready for the canoe Women making shoes & etc. & etc." (Campbell and Stewart 2000: 143 [Sep. 3rd, 1852]). Clearly Indigenous women had a role to play at the fort, their knowledge of the local landscape and lifeways, for example their ability to make shoes and other garments, would have been valued by the rest of the fort complement. Presumably, these women were wives of the fort traders and hunters. What remains unknown is how many of these women were Indigenous women from outside the area and how many were local Indigenous women. The inclusion of local women into the fort would have meant Northern Tutchone acceptance of Fort Selkirk and the establishment of long-term trade networks between the two groups. This in turn could have been perceived as a threat by the Tlingit Chilkat since integration between the two groups would have proved an obvious threat to their interior trade networks.

By the time Fort Selkirk had been established the HBC had accepted inter-cultural marriages (Driscoll 2001). The only marriage described by Campbell at Fort Selkirk is between a European trader and the daughter of an Indigenous fort hunter, "Woe to the Bachelors! Flett was married this evening to Cachozi, Le Gauch's daughter. All kind of happenings attend them & may they prosper &c." (Campbell and Stewart 2000: 124 [Dec. 8th, 1851]). In many fur trade instances, these wives would have been considered "country wives", and, similar to the role of country wives at other forts, they would have helped augment the population with children produced from the union (Gullason 1990: 93-94). Campbell wrote to Anderson at Fort Simpson to inform him of the marriage of Andrew Flett, who was an Orkneyman, to Cachozi who was the daughter of a Fort Liard member. He claimed he permitted the marriage for the following reasons:

> I am also sorry to observe that our Steersman Fr. Forcier's wife died last summer of Consumption, leaving us without a woman at all in the fort for the numerous duties required for equipping the people for the winter… under such circumstances, I hope I shall not be censured should I allow one of our Orkneymen take to wife a daughter of one of our Fort de Liard hunters. (HBCA, B/200/b/26: 78-79, 1851-1852 [Aug. 25th, 1851])

Cachozi was to replace the deceased Lolique Forcier. Lolique Forcier was the wife of Francois Forcier, a HBC employee; they had both travelled with Campbell to Fort Selkirk. Anderson agreed to the marriage saying:

> You can allow the man you allude to, to take one of the Hunters daughters, but he must engage for three Years, and execute a marriage contract, a copy of which you will please to transmit with his engagement. (HBCA, B/200/b/26: 20, 1851-1852 [Jan. 8th, 1852])

In this instance the marriage was not permitted to be a "country marriage" as a marriage contract was required. Whether there were no women left at the fort after Lolique's death is questionable since many of the fort hunters had brought spouses with them and these women could have been Métis or Indigenous from other localities.

Excluding their ability to live in remote areas and produce clothing for fort employees, there were other benefits to having women at the fort. On one occasion, Campbell and Stewart both write about a woman, probably Métis, who was left in charge of the fort, Campbell says, "Madame Marcelle remains alone here until Mr. Stewart arrive[s] which will be ere Wednesday I trust" while in Stewart's version he writes, "Marcette's wife takes care of the fort in my absence." (Campbell and Stewart 2000: 57 [Nov. 25th, 1849]).

Fort hunters were often permitted to bring their families with them. For instance Kitsah, an Indigenous fort hunter, had a wife at Fort Selkirk:

> We all arrived safe and sound last night loaded with dry and fresh meat, fish and grease all of wh: shall be accounted for in its proper place. Kitsah & spouse accompanied us with a sleigh each. (Campbell and Stewart 2000: 60 [Jan. 6th, 1850)

In fact, a review of company correspondence by Johnson found that the post "contained some 30 names of individuals who appear to be company hunters. In addition, to that number are wives, children and grandparents" (Johnson and Legros 2000: 148). A study of the journal records and correspondence brings the total number of fort hunters and crew members closer to fifteen or twenty (Campbell and Stewart 2000; Anderson to Campbell, HBCA, B/200/b/26: fol. 21, 1851 [January 8th, 1852]). These men and their families would have come in and out of the Fort Selkirk region at the request of the Mackenzie District headquarters.

For instance, a letter from Campbell to Anderson (who was managing the Mackenzie District in 1851) requests Francis Hoole and his family, excluding his grown sons, come to Fort Selkirk to work (HBCA, B/200/b/26: 78-79, 1851-1852 [Aug. 25th, 1851]). Anderson denies Campbell's request but permits him to bring another interpreter, Pierre Lenoire, who was working for William Hardisty at Fort Yukon (HBCA, B/200/b/25, 1851-1852 [Jan. 8th, 1852]) (Figure 5). However, in the Selkirk journals Campbell mentions families sparingly, "Early this morning

Kitsa, La Pie, Le Gauch & Geordie arrived with their families" (Campbell and Stewart 2000: 6 [Jul. 7th, 1848]). The men's private orders are more telling.

Men's private orders for the years 1851-1852 provide evidence for families living at or near the fort (HBCA B/196/d/1: 23-36, 1851-1852). Men ordered such items as hair ribbon in various colours, cochineal to dye clothes, silk thread, thimbles, shawls, bonnets, beads, glover's needles and silk handkerchiefs, all items traditionally associated with women. Three of the men ordered women's fine shoes. Campbell also noted beside two of the men's private orders that they were married and that one had a child. The amount of trade items each individual ordered is also significant since those with families would likely order more goods, for instance, Baptiste La Pie and Andrew Flett, both have the longest list of requested goods and both had families at the fort (HBCA, B/196/d/1: 23-36, 1851-1852). The only other reason that the men would order such items would be to conduct private trade with Indigenous groups, which was strictly forbidden by the HBC. In a letter to Campbell, Anderson writes:

> I trust that you do not allow your men to barter provisions or leather from the Indians, give them due notice that it will not be allowed, and that if any one infringes this rule he will be heavily fined. (HBCA, B/200/b/26: 23, 1851-1852 [Jan. 8th, 1852])

What cannot be garnered from the daily fort journal or the account records is whether any of the women living at the fort were Northern Tutchone. It seems that most of the women who lived at the fort were wives or daughters of fort hunters, who were normally either Indigenous or Métis hunters from other parts of the country. Neither the journals nor account records specify whether any of the women mentioned were Northern Tutchone.

Understanding Northern Tutchone female demography and social roles during the Fort Selkirk period can indicate Northern Tutchone social relations and their relationship with the fort, particularly the level of integration between the two groups. Again, Campbell provides no specific information about Indigenous women's demography or social roles. Occasionally he comments on the arrival of a woman at the fort, for instance, "The Indians except Bluffy & a widow Woman went up the Lewes to Fish" (Campbell and Stewart 2000: 47 [Sep. 17th, 1849]); "An Indian woman came in starving, she left again in the evening" (Campbell and Stewart 2000: 67 [Mar. 29th, 1850]); "In the evening an Indian with two wives arrived from above" (Campbell and Stewart 2000: 47 [Sep. 20th, 1849]); and "A party of four Indians & two wives (the "Beloved" being one of them) were crossed this morning from the other side of the Lewis" (Campbell and Stewart 2000: 14 [Oct. 2nd, 1848]). Women were almost never mentioned by name but only through their status as a man's wife; men could have more than one wife (Campbell and Stewart 2000: 47 [Sep. 20th, 1849]).

The only Northern Tutchone woman that Campbell expressly comments on is "Beloved" who he never mentions by any other name. Her name appears in the daily journal 17 times, usually associated with setting fishnets at her camp. "Beloved's" camp is the only one in which Campbell mentions staying overnight,

unless travelling great distance for trade. “Peter & I are going down to visit the Nets at beloved's Camp & sleep there (Campbell and Stewart 2000: 48 [Sep. 22nd, 1849]). Understanding the nature of Campbell’s relationship with “Beloved” would be speculative; suffice it to say that his relationship with her and her camp, located almost directly across the Pelly (Yukon) river from the fort, seems to have been strong (Figure 7).

Fort Selkirk also supported the children of traders and hunters. These children are most often mentioned in relation to a birth or an illness. For instance, Marcette, a post hunter and his wife, who Campbell refers to as Madame Marcette, gave birth to a daughter at the fort (Campbell and Stewart 2000: 12 [Sept. 14th, 1848]). Another birth is also mentioned, “Kitsah's wife was confirmed at 8h20m of a boy but I am sorry to say she is but poorly, I trust not dangerously ill” (Campbell and Stewart 2000: 125 [Dec. 16th 1851]). European illnesses had already run rampant throughout the area by the time that Fort Selkirk was erected and continued to afflict Indigenous communities for some time after (Zagoskin 1967: 145-146). Although the Northern Tutchone did not have direct contact with European fur traders until 1848 they did have indirect contact with European diseases through groups such as the Tlingit Chilkat traders who travelled inland on trading voyages. Once Fort Selkirk was erected, additional diseases unknown to the Upper Yukon basin Indigenous people could have come with the HBC traders from the Mackenzie River (Fortuine 1989: 199-227).

Child illness was prevalent during the spring of 1851, for instance Campbell writes, “The Gauch's child very ill indeed. I brought up Marcette to see what he could do for it & he has been giving him some medicine” (Campbell and Stewart 2000: 102 [May 22nd, 1851]). A few days later Campbell writes:

> This has been a melancholy day for us. We heard of the death of the Gauch's child & now I brought up the body & the families. Providence has been pleased to take this poor child away but the parents are inconsolable for the loss of it. (Campbell and Stewart 2000: 103 [May 29th, 1851])

Baptiste La Pie’s child was also inflicted with illness, “One of La Pie's children has taken this malady that is about & I am afraid it will go the round. God protect us from it” (Campbell and Stewart 2000: 103 [May 30th, 1851]).

Illness also afflicted women at the fort, “Early in the morning LaPie arrived with his wife at the brink of the grave, poor thing.” (Campbell and Stewart 2000: 8 [Aug. 2nd, 1848]). When LaPie’s wife dies Campbell writes:

> It has pleased Providence to convert our house (so recently put up) into a house of mourning and of death. This afternoon Lapie's wife departed this world and its cares after an illness of some days. Her last moments were tranquil and she closed her eyes upon the vanities, troubles & afflictions of this life as one falling into a deep sleep. The scene was truly affecting and one that should remind us all of the uncertainty of our existence on this earth and make us

> turn our thoughts heavenward so that, when our time shall come, "Death & its horrors will appear as nought in comparison with the joy & bliss that awaits those (beyond the dark valley) who believe in the Redeemer and walk in his Statutes." We had great difficulty in preventing LaPie from injuring himself; but by the assistance of the Wood Indians and our people, we did not allow him to get any opportunity of doing himself injury. He is now quiet and it is to be hoped he will continue so for the sake of his children & his own. It was a heart rendering spectacle and an example of the best feelings of the heart brought to light in a state of nature. (Campbell and Stewart 2000: 8-9 [Aug. 3rd, 1848])

Because sources are fragmentary it is difficult to know how women and children affected trade relations between the fort and the Northern Tutchone. Presumably, they would have necessitated the need for more provisions such as food, clothing, and medicine. Yet, women also helped maintain the fort.

With so much illness at Fort Selkirk medicines were very important. Fort account records list various types of medicines ordered by the traders. Items such as essence of peppermint, elixir paregoric, paregoric mesal lozenges, Turlington balsam and gauze would have been necessary remedies for some but not all illnesses (HBCA, B/196/d/1: 23-36, 1851-1852). These remedies are found in the men's private orders (HBCA, B/196/d/1: 23-36, 1851-1852) and also in indents for the years 1852 and 1853 (HBCA, B/196/d/1: 43, 1851-1852). On one occasion Campbell sets a fort hunters leg, "Arrived with Forcier on my sleigh who has broken his leg above the ankle in [his] coming down a mountain with meat. I set it & the swelling has gone down" (Campbell and Stewart 2000: 129 [Feb. 28th, 1852]) and on another occasion Campbell writes:

> Four men and 2 boys arrived from above (Wood Indians[8]). Brought a few pounds of meat and a few skins. 3 went off and 3 remained, one with sore leg, put a plaster on it and it is to be hoped it will do it good. (Campbell and Stewart 2000: 3 [Jun. 7th, 1848])

To summarize, over time Fort Selkirk traders and Tutchone people may have become more integrated at the kinship level even as the Tutchone kept their trade options open. This may have been one factor in the growing unease of the Chilkat to the HBC presence. Although there is no concrete evidence to support stronger kinship ties there is circumstantial evidence. For instance, as mentioned earlier in this section, when the Chilkat attack Fort Selkirk, Campbell writes that Brough and two women disappear. It can be assumed that these women went to a Northern Tutchone camp. They would not have been welcome there unless the women were Northern Tutchone. As well, Campbell's relationship with "Beloved" who lived across the river is another indication that he may have been in a relationship with a Northern Tutchone woman. This may have forged ties between the two groups at a kinship level. Finally, by comparing the clearly

8 Northern Tutchone

identifiable outsider women who went to the fort with their men, and the number of men at Fort Selkirk who were ordering women's or familial goods in their indents, it can be inferred that some of the men were involved in relationships with local Indigenous women who were very likely Northern Tutchone. Given eleven of the twelve men who are recorded as HBC servants for the year 1851 (HBCA, B/196/d/1: 14 [1851-1852]) ordered women's goods (i.e., women's hair ribbon, women's scissors and/or ladies shoes), and only two of them brought women to Fort Selkirk (HBCA, B/196/d/1: 23-34, 1851-1852), many of the men could have formed attachments to Tutchone women. The Chilkat may have felt threatened by these new relationships, since these new bonds would have interfered with the links they had already forged with the Northern Tutchone.

HBC and Fort Selkirk – The Indigenous Sphere

To determine the role of the Northern Tutchone at Fort Selkirk, it is important to analyse the HBC documents with a focus on the Indigenous perspective. It must be stressed that the Fort Selkirk journals do not comment on Indigenous culture or socio-economic conditions unless these elements pertained specifically to interactions at the fort and then only minimally so. The Northern Tutchone were closely tied through trade with the Tlingit Chilkat and this is significant in the study of trade relations between the Northern Tutchone and Fort Selkirk because it would have meant less reliance on the fort by the Northern Tutchone. By understanding the seasonal round of the Northern Tutchone, and the frequency which they visited and traded at the fort, the development of trade relations over the short Fort Selkirk period can be explored. The Northern Tutchone traded a great deal of meat at the post, more so than furs, and this practice was tied to their regular hunting cycles. Knowledge of meat provisioning at the post is necessary to comprehend mutual trade connections. An understanding of group territoriality is also useful to understand what groups, and how many, including the Northern Tutchone, Kaska, Han and Chilkat, visited and/or traded at the post. Unfortunately, because of the fragmentary nature of the records and Campbell's lack of interest in recording Indigenous lifeways, reconstruction of group demography is problematic.

To explore trade relations between the Northern Tutchone, the Tlingit Chilkat and the Hudson's Bay Company it is necessary to consider competition between the Chilkat and the HBC in the region since this relationship eventually led to the demise of Fort Selkirk. During this period, the Tlingit Chilkat were a subgroup living along the Lynn Canal on the Northwest Coast of the Alaska Panhandle. They were renowned by Europeans for their trade in sea otter, which had been a prize trade item on the Northwest Coast since the end of the 18th century. The Chilkat became middlemen and had benefited from a competitive trade system whereby manufactured goods came from Europe or America to the Northwest Coast. On the coast the manufactured goods were traded for furs, which the Chilkat supplied. The Chilkat obtained these furs through trade with the interior Indigenous groups such as the Northern Tutchone (Figure 6). Interior furs became even more in demand as over harvesting lessened the number of sea otters on the

coast. Eventually the Tlingit became the strongest and richest of the Northwest coast Indigenous groups by controlling the passes through the coastal mountains (Emmons 1991: 55; Schwatka 1891: 60). Almost immediately upon his arrival at the Pelly and Lewes (Yukon) Rivers, Robert Campbell realizes the importance of trade connections between the Northern Tutchone and the Coastal Tlingit Chilkat:

> Late in the evening 15 Indians from the coast arrived, Tchilcats on a trading expedition with the Auna's. They are well supplied with goods, blankets, ammo, & etc. (Campbell and Stewart 2000: 6 [Jul. 8th, 1848])

> A party of the Coast Indians, seven in number with the beloved's mother, arrived this morning en Canoe down the Lewis. Their Canoe is of seal skins, about 30 of them. Soon after they loosed it up and put the skeleton of a frame in the woods. They met the Wood Indians up the Lewis and traded their leather & Furs which they left encache till their return from hence. (Campbell and Stewart 2000: 6 [Jul. 8th, 1848])

These two quotations, written early in the fort's history, demonstrate the relationship that existed between the Coastal Chilkat and interior Indigenous groups. Such strong trading bonds existed prior to the establishment of Fort Selkirk. It seems reasonable to assume that the Chilkat would have been dismayed with the HBC's plans to open forts in the interior. When Fort Selkirk opened they were in direct competition with the Tlingit Chilkat. Besides having well established trade relations with the Northern Tutchone the Chilkat had another advantage over Fort Selkirk. They were able to trade with the HBC steamer, S.S. Beaver, which stopped at Lynn Canal, a Chilkat village. As Johnson notes:

> The Beaver was directed by the company to be primarily a trading vessel…The tariff used by the Beaver in trade was much lower than that being used by the company at Fort Selkirk. Consequently, the Chilcat traders were bringing HBC goods acquired from the Beaver into the upper Yukon basin at a price lower than what Campbell was allowed to use in trade with the local Indians. (Johnson and Legros 2000: 149)

James Anderson at Fort Simpson wrote to Campbell regarding the trade difficulties the latter was having:

> As far as I can judge from the very imperfect information I have received, Selkirk is placed too near the coast, you will I fear be troubled by the incursions of the Indian Traders from the coast who can dispose of their Goods at a far cheaper rate than we can afford to sell ours. It strikes me forcibly that were the Post 60 or 100 miles lower down the River, it would be better situated for trade and more out of the sphere of the Traders, it would also have

> the effect of drawing the Indians below. (HBCA, B/200/b/26: 20-21, 1851-1852 [Jan. 8th, 1852])
>
> I regret to find that the forebodings I entertained regarding opposition from the Coast Indians have been realized, we can hardly sell at a lower price than we do at present, if we wish to reap any profit, I can add nothing to what I have already said on this subject, except that I wish to know what articles these Coast Indians bring up for trade, and at what price they sell them. (HBCA, B/200/b/26: 24, 1851-1852 [Jan. 25th, 1852])

Anderson was aware of the price differences and variety of goods between the Chilkat and Fort Selkirk stores as he also states, "The Chilkats sell 1 lb powder for a MB[9] a 3 point blanket for a Moose Skin and so on" (HBCA, B/200/b/28: 53, 1851-1852 [Nov. 30th, 1852]). A comparison of the types of beads traded from the S.S. Beaver and at Fort Selkirk substantiates Anderson's statements (Table 9) (HBCA, C/7/15: 1; 1849; HBCA, B/196/d/1: 1-44, 1851-1852). Table 9 clearly demonstrates the larger quantity of trade beads available for trade on the HBC S.S. Beaver as compared to beads available for trade at Fort Selkirk.

Frank Mahoney, a trader on the Alaska coast noted in 1870 that the Chilkat:

> ... catch some furs about their own grounds, but the greater portion comes from the interior, or where they go to trade twice a year, spring and fall. There is no doubt but that they make a big profit on their skins they bring down…They will allow no whites to pass up the rivers. The trade which the coast Indians take into the interior consists of dry goods, blankets, tobacco, powder, shot, and light flint-lock muskets… Although the ammunition and muskets are prohibited trade in this Territory, still the Indians get them from the Hudson's Bay Company of Fort Simpson. Steel traps, knives, hatchets, needles and thread, and a little cheap jewelry, form their principal trade, for which they get in exchange, marten, mink, silver, cross and red fox, black, brown, and grizzly bear, lynx,

[9] The goods obtained for trade by the HBC were valued in British sterling. However, Pre-contact Indigenous people did not use the same monetary system. The HBC was therefore forced to set up a barter system that applied to both furs and goods bartered. This accounting system was based on a unit called "Made Beaver" (MB). The MB established sterling as equivalence between volume of goods traded and furs taken in return in terms of the number of prime, whole beaver pelts which they represented (Ray 1978: 54).

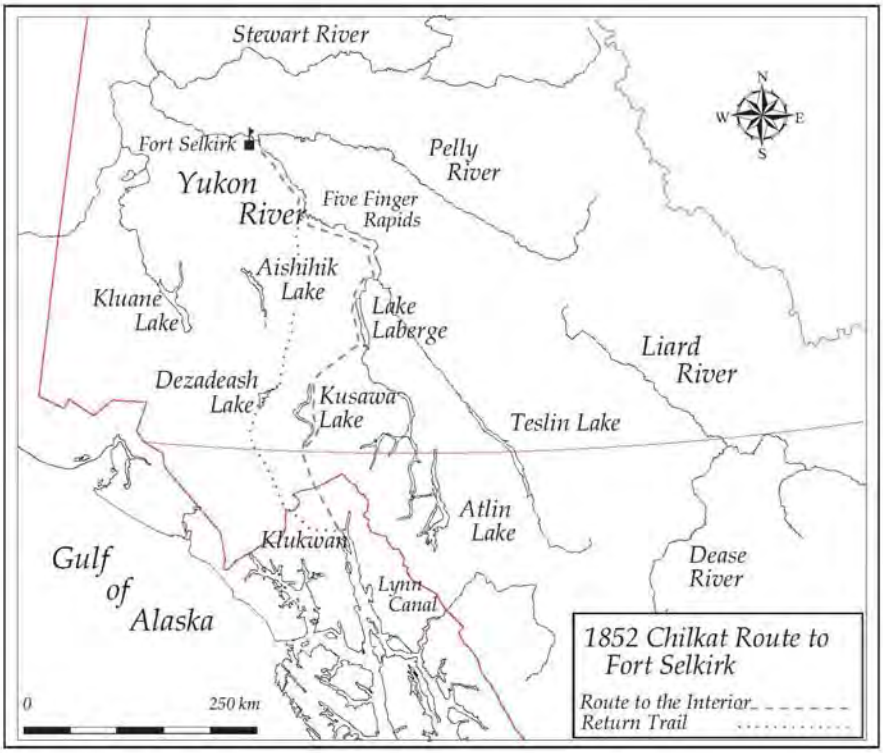

Figure 6. Coastal Tlingit Chilkat Route to Fort Selkirk (adapted from Davidson [1901] in Johnson and Legros 2000: 139).

> wolverine, ermine, beaver, land otter, and some inferior skins… In addition to yard goods and blankets, powder and shot, tobacco and molasses (for making hooch), the traders sell Steel traps, knives, vermillion, flour, hard bread, beans, rice and some few articles in the way of clothing, pants, shirts (cotton and woolen), blue cloth caps with glazed covers, shoes, and some minor articles. (Mahoney 1870: 18-21)

Even with the Chilkat mark-up, it appears that the goods the Chilkat traded to the Tutchone were less expensive and more varied than the goods traded out of Fort Selkirk. This created a scenario in which the HBC was competing with itself. The Northern Tutchone were profiting from this by purchasing goods from the trading partner who offered the best price.

Proper record keeping on the part of Campbell was also problematic. Anderson clearly points out to Campbell that the lack of proper accounting by Campbell may itself have led to the poor trade he experienced at Fort Selkirk. Anderson was quite blatant in his disappointment at Robert Campbell's inability to keep proper records stating:

> I beg that in future the accounts be kept in the annexed form, a priced Invoice for the Outfit at La Pierre House, an Indian Tariff, and sundry(?) other Documents are now sent. (HBCA, B/200/b/26: 22, 1851-1852 [Jan. 8th, 1852]).

> I request that the Report you transmitted this Summer be very full and minute, it is utterly out of my power to form a correct opinion regarding the affairs of your post, or give the information required by the Governor and Council from the letters you have sent me. (HBCA, B/200/b/26: 23, 1851-1852 [Jan. 8th, 1852])
>
> ...The trading Goods are also priced in MB and the Returns and Provisions must also be priced in the same way and a balance struck... I forwarded a Tariff last January, I wish you would compare it with the Tariff at the Youcon, and should there be any difference after it to the Youcon Standard, which I wish to be adhered to, and make the requisite alterations in the pricing of the Invoice. (HBCA, B/200/b/26: 59, 1851-1852 [May 27th, 1852])

Campbell's inability to keep proper records may have been an important factor in the fort's low rate of profit. For the year 1852 Anderson states that Fort Selkirk had a loss of £731 pounds (HBCA, B/200/b/28: 53, 1851-1852 [Nov. 30th, 1852]). The lack of Made Beaver pricing makes it difficult to determine the cost of goods at Fort Selkirk as compared to the cost being traded on the coast by the HBC, S.S. Beaver. As can be seen above, Anderson encouraged Campbell to use the same Made Beaver prices for the goods traded at Fort Yukon. Whether Campbell did use the same pricing has not been determined. Already established trading connections and lower trade tariffs would set the stage for trade difficulties at Fort Selkirk.

The Northern Tutchone who had never dealt directly with European traders must have known the benefits of playing both the Chilkat and the HBC against each other for their personal gain. Thus, the Northern Tutchone never solely relied on the fort for its subsistence goods but rather took advantage of what the fort had to offer in terms of trade when it was conducive to do so. They obtained goods for provisions from Fort Selkirk and traded furs with the Chilkat as a strategic means of playing their options. Campbell states:

> Naultze [Nalt-Zee?] alias the Borne and party arrived last night. Though they have killed plenty of animals, they brought between them only about 3 skins - Between Bluffy's family and this party 50 skins Moose & deer have been brought to the Camp but of meat only the above 3 skins & of Fur & leather about as much. The rest they trade with the Chilcats. (Campbell and Stewart 2000: 50 [Oct. 11th, 1849])

Clearly, the Northern Tutchone were purposely withholding trade furs from the HBC but a mutual trading relationship did become more pronounced over time.

Bead Type	HBC Steamship S.S. Beaver 1849	HBC Fort Selkirk 1851
Common striped blue		x
Red cut necklace		x
Green cut necklace		x
Blue cut necklace		x
Common round light blue	x	
Cut glass dark blue No. 4	x	
Cut glass light blue	x	
White enamel	x	
Barley corn	x	
Pipe no. 3	x	
Dark blue pound	x	
Blue common striped	x	
White common white	x	
Opal cut glass	x	
Total Bead Types	**10**	**4**

Table 9. Comparison of the Types of Beads Traded From the S.S. Beaver and at Fort Selkirk.

Period	Northern Tutchone	Han	Kaska	Chilkat	Near Coast	Total
Jun. - Oct. 1848	91	61		45		197
Oct. - Dec. 1848	23					23
Dec. - Mar. 1848-9	16					16
Mar. - Jun. 1849	29	13			3	45
Jun. - Oct. 1849	55	13		51		119
Oct. - Dec. 1849	21					21
Dec. - Mar. 1849-50	14					14
Mar. - Jun. 1850	31	8		3		42
Jun. - Oct. 1850	33	9		3		45
Oct. - Dec. 1850	13	4				17
Dec. - Mar. 1850-1	23	4	4			31
Mar. - Jun. 1851	33	7		8		48
Jun. - Oct. 1851	86	15	1	27		129
Oct. - Dec. 1851	35		7	8		50
Dec. - Mar. 1851-2	24					24
Mar. - Jun. 1852	18	2				20
Jun. - Oct. 1852	102		5	27		134
Total	**647**	**136**	**17**	**172**	**3**	**975**

Table 10. Frequency of Indigenous Visitors to Fort Selkirk (based on data taken from Campbell and Stewart 2000).

For instance, Campbell writes to McPherson:

> I am glad to observe that the natives are getting more inclined to trade with us, A large quantity of half dressed leather and some Furs are left in our store by them waiting till we have wherewith to pay for them. (HBCA, B/200/b/24: 60 [Jul. 24th, 1850])

A review of Indigenous visitors to the post over four years demonstrates an increase in the number of Northern Tutchone visiting the fort[10] (Table 10). Indigenous trade groups mentioned in the daily journal include: the Northern Tutchone (called Wood Indians, Gens de Bois, Tichinital Tinna, Tuchni Tatinnah, Elletzah and Strange Indians); Han (called Aunais, Ayans, Ayuns, Ionais); E'spatotena Kaska (called Knife Indians and Gens de Couteaus); and finally Tlingit Chilkat (also spelled Chilcat) (Figure 3) (Johnson and Legros 2000: 146-147; Legros 2007: 83-93). Each group had a different trading relationship with Fort Selkirk. Unfortunately, although an abstract count can be made of visitors to the fort, there is no documented description of Indigenous traders and the goods they traded at the post. The Northern Tutchone had the greatest amount of contact with the post, and probably participated most in the trade of furs, leather and meat (Table 6; Table 10). Once arriving at the fort they often remained for long periods of time before leaving again, much to the dismay of Robert Campbell, "Indians still here & very troublesome. They traded a few beaver skins & 20 or 30 lbs. of meat…" (Campbell and Stewart 2000: 106 [Jun. 20th, 1851]).

Northern Tutchone traders came into the fort at various times of the year and for different reasons. Although obtaining information on their seasonal round is difficult, the increase in Tutchone visitors to the fort does point to integration of the post in their yearly seasonal round. For instance the majority of Northern Tutchone visits to the post occurred between the months of June and October, during the summer and early fall.

Over time there was an increase in the number of Northern Tutchone visiting the fort. In the summer of 1848 there were approximately 91 visitors; in 1849 there were 55 visitors; in 1850 there were only 33 visitors; in 1851 there were 86 visitors; and in 1852 there were 102 visitors. This drop in visitors in 1849 and 1850 may be due to illness and starvation, which swept the area during these years or to a lack of trade supplies at the fort (Campbell and Stewart 2000). According to J. W. Ellington, an Anglican missionary who went to Stewart in 1888 there were approximately 200 people living near the Stewart, Pelly and White rivers and these people formed a group (CMS A115 [Jul. 1888]). A population report written in 1910 estimated that there were 362 Northern Tutchone people living at Little Salmon, Tatlmain Lake, White River, Tatchun Lake, Fort Selkirk, Mayo, Aishihik Lake, and Big Salmon (Green, Indian Affairs Archives, RG 10, Vol. 3962, File 147 654-1 Public Archives of Canada). Although this report was made 30 to 50 years after the fort's abandonment it is possible that up to half of the local Tutchone population visited the fort during the year 1852. This figure is significant as it indicates the possibility of closer integration and trade between the two groups over time.

Since the trip inland would have been arduous and time consuming (Figure 6), the Chilkat made large yearly trade expeditions to the interior which usually occurred in August with smaller contingents travelling during the months of May, July, September and October (Campbell and Stewart 2000). The Coastal Chilkat arrived every summer to visit the fort but never traded any goods. Rather, they

[10] This count is for Indigenous groups who visited the fort, whether they traded or not. Group sizes are difficult to determine due to lack of explicit numbers of visitors at any one time.

would stop for a few days much to Campbell's displeasure, "The Chilcat, Rossignol, who left here the 8th with a stranger arrived again. Fine weather. Many useless Indians about" (Campbell and Stewart 2000: 48 [Sep. 25th, 1849]).

They arrived in large groups, which would have been necessary in order to ship items from the coast inland and vice versa:

> Eighteen Chilcats with the Lewis River Chief arrived this morning on different rafts. One of them, who apparently is a Chief among them, has remained here, the rest he sent off immediately downwards to trade with the Natives wherever they have rendezvoused. Except one they are all strangers & so far peaceable. With 3 who passed yesterday this is now 37 Chilcat traders who have passed here within these three days. (Campbell and Stewart 2000: 44 [Aug. 25th, 1849])

In another journal entry Campbell writes, "Hanin & some of his followers came down the river. They traded some of their Furs with the Chilcats" (Campbell and Stewart 2000: 82 [Aug. 27th, 1850]). In the summer of 1848 (June to October), there were 45 Chilkat at Fort Selkirk, 51 in 1849, only three in 1850, and 27 in 1851. Finally, in 1852, 27 Chilkat pillaged the fort (Campbell and Stewart 2000: 141 [Aug. 21st – 22nd, 1852]). Other Chilkat people may have passed by the fort on trading expeditions, but they did not stop at the fort. The Northern Tutchone's guarded reliance on trade with the fort over a four-year period, and continuous trade association with the Chilkat throughout the fort era may have proven fruitful after the raid of 1852. A return to pre-Fort Selkirk trade patterns with the Chilkat would have been relatively simple.

The Chilkat also traded with groups other than the Northern Tutchone. Campbell mentions trade between the Chilkat and the Han, but it is possible that they also traded with other Indigenous groups in the area:

> The Indians from below went off likewise and I am very sorry that none of the Ayunas come in that I might have the pleasure of address [ing] Mr. Murray. The Confounded Chilcat & Thlinskit [Thlingit Thling] has intercepted them all, taken their fur & etc. and returned them back empty handed. In the evening 8 More Chilcats arrived down the Lewis fresh from the Coast. They are the party who arrived 19th Sept last. This makes 45 Indian traders who have arrived within the past week. (Campbell and Stewart 2000: 45 [Aug. 31st, 1849])

This quotation indicates that the HBC at Fort Selkirk traded with other Indigenous groups in the area. The Han people traded at the post but their trade excursions were less frequent and of less duration. They would leave immediately after trade had transpired because of the longer distance required in returning home (Figure 3). Interestingly, most Han visits occurred during the first year of the fort's establishment, possibly because of their curiosity about the fort and its trade

practices. The Kaska also traded at Fort Selkirk beginning in the winter of 1850-1851 and continued to trade until the end of the fort's existence (Campbell and Stewart 2000).

The occurrence of visitors and their cultural affiliation was calculated from the Campbell and Stewart journals (2000). Table 6 lists furs brought into Fort Selkirk by each Indigenous trading group. This table shows that the Han and Kaska also supplied Fort Selkirk with furs. The majority of trade occurred at the end of June, during the transition from spring to summer. This would have been an ideal time because it was open water season; travel on the river would have been feasible. Hunters probably incorporated trapping furs into their seasonal cycle, accumulating enough furs in the winter and spring to trade in late spring. The majority of furs were traded in 1849, there was a sharp decrease in trade in 1850 and 1851 and then trade rose once more in 1852 (Campbell and Stewart 2000). Again, the decline in trade could have resulted from various factors such as illness, Chilkat unhappiness with their long time trading partner's affiliation with Fort Selkirk and lack of tradable goods.

Although there is a de-emphasis on Campbell's part regarding the number of furs traded, a review of the account records demonstrates that a number of furs were being shipped back to Fort Simpson during the year 1851 (Table 7; Table 11). These furs may have been brought in by fort traders as well as local Indigenous groups, which would explain the larger amount of furs being shipped back to Fort Simpson versus the number of Indigenous visitors who traded at the fort. Comparison with a similarly sized post, Fort George-Buckingham House (near Elk Point, Alberta), demonstrates the amount of furs obtained at each post (Gullason 1990). For instance, during the year 1793-94 the Cree brought in 700 beaver skins, the Peigan 100 beaver skins, the Sars 100 beaver skins and the Assiniboine 23 beaver skins. Comparatively, during the year 1851, Campbell packed 105 beaver skins and 17 prime beaver skins for shipment to Fort Simpson (HBCA, B/196/d/1:15, 1851). Although the total number of beaver skins brought into Fort George-Buckingham House is much greater than the returns at Fort Selkirk, some of the individual Indigenous groups who traded at the former post brought in similar numbers of beaver skins to those brought into Fort Selkirk. The number of pelts that one Indigenous group brought into Fort Selkirk seems about average for a post of its size. Unfortunately for Fort Selkirk, they were only trading consistently with the Northern Tutchone.

As mentioned above, the beginning of this paper, the mid-19th century witnessed a decline in European demand for beaver pelts. Table 11 clearly demonstrates that the rise in marten is due to its importance to the HBC as a commodity, so much so that the 1851 fur packing account lists 124 martens and only 122 beavers and prime beavers combined (HBCA B/196/d/1: 15, 1851). Again, these fur counts are significant as they reinforce historical data that describes the HBC's introduction of new luxury furs into the European market such as marten, fox, lynx and wolverine. Mink, which was also being promoted, was not trapped as much as other mammals.

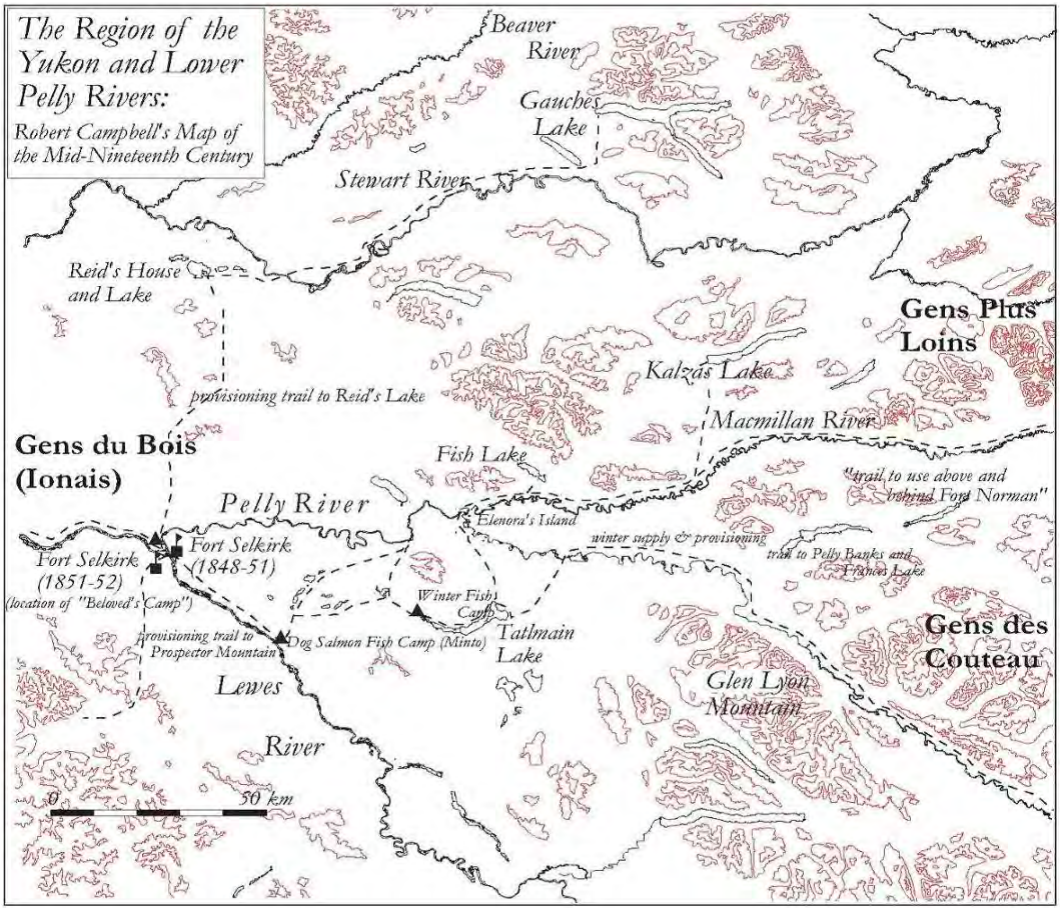

Figure 7. Hunting and Fishing Camps Near Fort Selkirk (adapted from Johnson and Legros 2000: 23).

Although not as lucrative as furs, Campbell did accept leather and hides for trade. Leather is traded approximately 33 times according to his daily journal. Table 11 lists deerskin (caribou) as part of the 1851 shipment of items sent back to headquarters. The Northern Tutchone traded more deer and moose hides than they did furs. Leather was important for fort employees and fort hunters, who would use it to produce clothes and shelters. These items were not tradable in Europe and therefore had little value to the HBC. Large caribou and moose hides were also expensive to ship back to England as Campbell notes in a letter to Anderson:

> A large quantity of Moose Skins can be procured in that quarter, but I fear their value will not cover the freight of transport, but at the same time it will be injurious to the intent of the trade and poor Indians not to trade them, please favor me with your instructions on this subject. (HBCA, B/200/b/26: 74, 1851-1852 [Aug. 6th, 1851])

Fur	# 1 A Pack	# 2 A Pack	#3 A Pack	#4 A Pack	#5 A Pack	#6 A Parcel	Total
Brown Bear			4				4
Grizzly Bear				7			7
Prime Black Bear					9		9
Prime Grizzly Bear					1	2	3
Beaver	5	50	50				105
Prime Large Beaver					16	1	17
Large Dressed Deer Skin						15	15
Cross Fox			7				7
Red Fox		7					7
Prime Cross Fox					2		2
Silver Fox		6					6
Prime Red Fox					1		1
Prime Lynx					16		16
Marten	100	24					124
Prime Marten					6		6
Mink			1				1
Otter	3		1				4
Wolf			1				1
Wolverine				20			20
Total	**108**	**87**	**64**	**27**	**51**	**18**	**355**

Table 11. Fur Packing Account for the Year 1851 (HBCA B/196/d/1:15, 1851).

Most trade occurred in the spring, summer and early fall months, from March to October (Table 12). The highest month for trade was April followed by October. During April the majority of furs traded were marten while in October the majority of furs were beaver.

Campbell and Stewart describe two kinds of camps in their daily journals. There are the Northern Tutchone hunting camps and the local fort hunter's camps. The fort relied on both of these kinds of camps for provisions. Fort hunters seem to have had closer relationships with the Northern Tutchone, often setting up their camps near pre-existing Indigenous hunting and fishing camps (Campbell and Stewart 2000: 17 [Oct. 31st, 1848]). They would often arrive at the post with Northern Tutchone people, "Shortly after Le Gauche, Marcellais, & Johnny with 9 Wood Indians, 5 men & 4 boys arrived" (Campbell and Stewart 2000: 8 [Aug. 2nd, 1848]). Fort hunters were provisioners of meat and hides. These hunters were assigned to various camps, which could be situated many kilometres away from Fort Selkirk. Often, these camps were named after the hunter who maintained them:

> Peter arrived from Reids fishery at Tatlamain and, if I understand the Tally sent by him, he has 5300 fish secured, excellent from so few nets. There are a great number of Indians at that Lake. (Campbell and Stewart 2000: 17 [Oct. 31st, 1848])

Year	Month	Amount of Furs Brought In
1850	April	299
	May	55
	June	74
	July	17
	August	71
	October	105
	November	76
1851	January	29
	March	48
	April	474
	Total	**1248**

Table 12. Furs Traded in 1850/1851 (HBCA, B/196/z/1: 4, 1850).

Another fort hunter had a lake named after him, “At early dawn, Forcier, Donald & Thomas started for Tatlamain, Peter for LaPie's Lake & LaPie on a tour de chasse” (Campbell and Stewart 2000: 93 [Feb. 21st, 1851]). Fort hunters spent a great deal of time living in camps in the area of the fort hunting for meat and furs, which they would bring back to Fort Selkirk a few times a year, to be shipped off in packs back to the main fort branch. Campbell relied on his HBC hunters to bring in furs, “Marcette & Peter were to go on to Flett's Lake to bring home the furs &c.” (Campbell and Stewart 2000: 90 [Jan. 7th, 1851]). Flett was a hunter who had travelled to Fort Selkirk with Campbell; he was stationed at the lake to fish, trap and hunt during the winter**.** The fort relied on both of these camps for provisions, for instance Johnson writes:

> For the summer hunt and for all his hunting and fishing, Campbell was totally dependent upon the Indian and Métis hunters who accompanied him to Fort Selkirk. Those hunters and their camps were distributed over a large area, some being over 100 miles from Fort Selkirk. The rapid deployment of the hunters over such a vast unknown area suggests quick co-operation from the local Indians. The journal accounts seem to bear this out as there are repeated references to a HBC hunters’ camp in the proximity of camps of local Indians. (Johnson and Legros 2000: 147)

The argument has been made that the Northern Tutchone were somewhat ambivalent about the presence of the HBC in their territory. Unfortunately, using fragmentary evidence makes it difficult to determine the extent of their reliance on the fort. Campbell continually expresses the difficulties he has in obtaining furs, leather and meat from the Northern Tutchone. Campbell acknowledges the high rate of HBC tariffs and lower Coastal Chilkat rates are a possible factor:

> Traded only 1 Moose skin from the arrivals of yesterday. The rest of what they brought they would not part with for anything we had to sell at our Tariff. The Beloved's husband & another lad arrived with furs & leather also, but unable to effect a trade, they took off again. (Campbell and Stewart 2000: 16 [Oct. 20th, 1848])

> Naultze [Nalt-Zee?] alias the Borne and party arrived last night. Though they have killed plenty of animals, they brought between them only about 3 skins - Between Bluffy's family and this party 50 skins Moose & deer have been brought to the Camp but of meat only the above 3 skins & of Fur & leather about as much. The rest they trade with the Chilcats. (Campbell and Stewart 2000: 50 [Oct. 11th, 1849])

He also seems to emphasize the lack of tradable goods at the fort, "Eight Indians arrived this morning but brought nothing as usual, but it is hardly to be wondered at for we have literally nothing to trade with them" (Campbell and Stewart 2000: 34 [May 11th, 1849]). Campbell was so distraught by the lack of trade provisions that in a private letter to his friend, Chief Factor Donald Ross, at Norway House he wrote:

> …We received neither Powder, or Ball, yet of outfit '49. – In fact Tobacco, Guns, a few Kettles, & axes, is all the trading Goods was got last Fall. The rest of what we carried across, were supplies for the Fort, Men & Hunters. For Furs we have, I may say, nothing to trade, - the more the pity, there are plenty of Furs & leather in Caches, at the mercy of the Wolverines, and elements[s], in every direction round us, which the Indians are very anxious to dispose of particularly so this season, as for some reason we are ignorant of, Not an Indian visited the Country for trade this Season… (letter from Robert Campbell to Donald Ross in Wilson 1970: 104-10)

As suggested above, the Tutchone would often save their best furs for the Chilkat trade convoys that arrived during the summer because Fort Selkirk had little or no trade goods.

There is also daily mention of Indigenous people coming into the fort to trade meat. Campbell relied not only on his fort hunters, but also on Tutchone hunters, to provide meat provisions, which did not come on a consistent basis. In her study of Eastern James Bay Cree, Morantz defines local HBC food provisioners as the "homeguard" (1983: 38; see also Vibert 1997: 194). Some local Northern Tutchone were in effect provisioners of furs, leather and meat. According to Campbell, as much as they provided meat to the fort at other times the Northern Tutchone also withheld it.

Reliance on meat supplied by the Northern Tutchone proved difficult, as they were not always dependable. On a few occasions Campbell voiced his concern that the Tutchone were withholding meat from the fort, particularly during times

of food scarcity:

> The Interpreter, alias Meysee or Etzatummetah, and four other Indians with a small parcel [of] meat each arrived & to my surprise the men sent off yesterday on meeting those Indians at the Camp last night, they dissuaded them from going further by stating it to be too far off. In fact they wanted the meat for themselves. The scamp of Indians they have large caches all over the country but won't give any of them to the Fort, nor allow those few that would do so. (Campbell and Stewart 2000: 15 [Oct. 11th, 1848])

> Late, Its a tumetah alias the Interpreter with his family arrived with literally nothing to trade. I believe all the Indians have entered into a combination to bring neither Food or meat to the Fort although they have plenty of both in caches. (Campbell and Stewart 2000: 49 [Sept. 30th, 1949])

Withholding meat could have been utilized as a means of demonstrating the Northern Tutchone's lack of dependence on the fort. If trade was not going as expected with the fort, withholding meat would have been a simple and powerful means of expressing dissatisfaction.

Hoarding meat was not always intentional and on many occasions it was the Northern Tutchone who expected meat from Fort Selkirk. Campbell often comments on Indigenous starvation, particularly during the winter and early spring months. Mary Black-Rogers' research on starvation and the meaning of the word amongst Subarctic Algonquians, Athapaskans and fur trade culture indicates that "starving" had many different meanings and often had little to do with a lack of food as it could also indicate that times were lean rather than that people were actually suffering from physical starvation (Black-Rogers 1986: 1). In Campbell's writings regarding Indigenous and fort personnel, "starvation" seems to correlate with Black-Rogers' findings:

> Two of the starving Indians left for a fishing lake on the road to Tatlamain from which they brought some Jackfish from a visit of 7 days the men paid there last week and it is no small relief to me that they are off with the prospect of procuring their sustenance. They have lived almost entirely on roots for the past fortnight which they procured with much address & toil being caches made under ground by the mice… (Campbell and Stewart 2000: 63 (Feb. 27th, 1850])

> Men & Indians went off. The latter say at least if we understood them right that a number of Indians have died of starvation. I am afraid this is a hard winter everywhere. (Campbell and Stewart 2000: 67 [Mar. 28th, 1850])

The former quotation exemplifies metaphorical starvation, in that people were still eating although they were deprived of their normal foods and were eating starvation foods, while the latter is used in a literal sense as people were actually dying from hunger. Campbell's daily journal comments on Indigenous people "starving" 44 times, while fort personnel are said to be "starving" 18 times. This is a considerable difference and may have to do with both practical and cultural reasons. The fort may have been better at collecting winter provisions; therefore, less people were starving. On the other hand, Indigenous use of the word may have had multiple meanings, as Black-Rogers argues.

Determining the territoriality of different Northern Tutchone groups using primary documents would be very useful in understanding their seasonal round and social relations. Unfortunately, this analysis is a difficult task with the minimal information found in the daily journal relating to Indigenous camps and hunting localities. The location (river direction) from which groups arrived can be gleaned from the journals. Campbell never consistently records the number of people coming into the fort, nor the number of people living at any specific Northern Tutchone camp. For instance, he uses terminology such as, "a group", "some" and "a band" without qualifying these. He writes "A whole band of Indians arrived from above but brought little or nothing" (Campbell and Stewart 2000: 36 [Jun. 5th, 1849]). Over the course of the fort's life, Northern Tutchone arrived from upriver 37 times while they arrived from downriver 33 times:

> Arrived from below, the Indian with the palsied legs with a deer skin; and, from above, the [Hunter?] the Lame Man and a whole host of others of minor note. They brought to the store only a few pieces of meat, about 5 skins, 54 fish. (Campbell and Stewart 2000: 13 [Sep. 25th, 1848])

The number of Northern Tutchone visits to the fort from either upriver or downriver is relatively balanced, probably because of the centrality of the fort (Figure 7). The daily journal indicates the name of some camps but not their location. Campbell usually refers to Northern Tutchone camps in the vicinity of the fort (Figure 7), after noteworthy Northern Tutchone people, for example: "Beloved's Camp", "Clingit Clin [Thlingit Thling] New Fort camp" and "Bluffy's Camp". Another camp that he mentions is a Kaska camp which he calls "Colville's Camp" after the Kaska chief (Campbell 1851: 106 [May 17th, 1851]).

Campbell may have recognized some of the people he named camps after as chiefs. Other noteworthy Indigenous people in Campbell's journal are referred to by name or nickname. These people may have had special relationships with the fort, although Campbell's desire to recognize a person by name may have been used as a means of maintaining good relations with important people who the fort had a turbulent affiliation with, such as Tlingit Chilkat chief, Skillaka (Campbell and Stewart 2000: 108 [Jul. 10th, 1858]).

Summary: The End of Fort Selkirk and the Defeat of the Dual Northern Tutchone Trading Strategy

On August 22nd, 1852, twenty-seven Coastal Tlingit Chilkat attacked Fort Selkirk:

> Since last date we had a narrow escape of being cut to pieces, the alternative has been the loss of our all. About noon Saturday the boat with some of the hunters (HBC) arrived unsuspectedly from above, though expected only in Fall…the Indians (Chilkats) rushed with hellish yells into the water & dragged it ashore here; & in less than a minute they had everything out & the guns from Gauche & Kitsah…I was seized by the arms & three sprung (yelling like furies) presenting their guns to my breast…The whole scene passed in about 3 minutes from the unfortunate arrival of the boats till they were masters of all… (Campbell and Stewart 2000: 141 [Aug. 22nd, 1852])

The Chilkat's final attempt to bring down Fort Selkirk was successful. That very day the fort crew rafted away, and Campbell, filled with anger at having been forcibly removed from his post was never permitted to retaliate or rebuild Fort Selkirk. Interestingly, the Northern Tutchone had stayed away from the fort in the days leading up to the Chilkat attack. Thus, the question remains, did the Northern Tutchone want Fort Selkirk terminated, did the Chilkat frighten them, or did they happen to be away that day by happenstance? According to George Dawson, a few years after Campbell and his crew left, the Northern Tutchone, seeking ironworks, burnt down what remained of Fort Selkirk after the rampage (1987: 138). The ejection and later burning of Fort Selkirk represents active strategies of resistance in the form of open struggle and violence by the Coastal Tlingit Chilkat and the Northern Tutchone (see Lightfoot 2005: 88).

With the arrival of the HBC, the Northern Tutchone who had been participating in a structured trade relationship with the Coastal Tlingit Chilkat for some time, were presented with a new trading opportunity, or conjuncture. The oral and historical sources presented in Chapters 4 and 5 demonstrate that the Northern Tutchone opened their sphere of trade to include the HBC, thereby transforming their traditional trade practices. Yet, the extent of that transformation may not have been pronounced, as it appears that the Northern Tutchone made little changes to their pre-contact lifeways. There was little interruption to their yearly seasonal round even though they added the HBC to their trade sphere.

Fur trade was the purpose of the fort's establishment. Erecting Fort Selkirk on the forks of the Pelly and Lewes (Yukon) Rivers was a strategic move by the HBC to move northwestward. The HBC wanted to reach the ocean, monopolizing trade along the way and halting Russian American Company expansion. The Russian American Company had been trading with the Coastal Chilkat for decades before the HBC arrived and had made them the wealthiest Indigenous traders and middlemen in the Northwest.

Though data are fragmentary, it is possible to argue that the Northern Tutchone were never solely reliant on the Hudson's Bay Company for their trade needs. Instead, this chapter maintains that the Northern Tutchone actively strove to maintain trade relationships concurrently with the HBC Fort Selkirk and the Coastal Tlingit Chilkat. This arrangement allowed them to keep their options open by trading strategically with both groups. The journals and accounts reveal particular themes, which support this interpretation.

First, the Northern Tutchone did not succumb to rapid reliance on Fort Selkirk and the HBC. Fort Selkirk was never provided with enough trade goods to make the fort viable or a reliable source for the Northern Tutchone. Analysis of the account records (including supplies, indents and men's private orders) indicate that the most important and sought after trade items included beads, tobacco, vermillion, bells, and buttons, as well as utilitarian goods such as axes, files, knives, twine, condiments and medicines. A comparison of some of the more popular items traded and requested at Fort Selkirk, and those same items traded from the HBC S.S. Beaver steamship that sailed along the Alaska coast, reveal that the latter had more varieties of particular items for trade (i.e., more styles of beads to trade with Indigenous people). Consequently, there was a greater availability of goods coming in from the coast by way of the Chilkat. HBC correspondence between Fort Simpson and Fort Selkirk also points to pricing differences between the two HBC stores resulting in a situation in which the HBC was competing with itself. Fort Selkirk, which obtained supplies from Fort Simpson, many hundreds of kilometres away, was unable to obtain the variety and quantity of goods needed to compete with the Chilkat who were obtaining goods from the HBC, S.S. Beaver.

The Northern Tutchone often did not trade their good quality furs at the post, particularly when they had already established strong trade ties with the Tlingit Chilkat who did not require furs to be dressed (a requirement of the HBC). Over four years the Tutchone continued to trade with the fort in ever increasing amounts, although never to the same extent as with the Chilkat. This increase in trade may have resulted in a gradual partial integration of the two groups, which may have also been fostered through intermarriage between the Tutchone and HBC traders. The Northern Tutchone may have knowingly manipulated the Chilkat and HBC into competing for Tutchone furs. This can be viewed as a calculated manipulation of trade; a particular form of resistance in which the Tutchone profited (Lightfoot 2005: 88). This would have benefitted the Tutchone and allowed them to control trade by keeping their options open. This integration may have threatened the Chilkat traders enough that they evicted the HBC.

Second, most of Campbell and Stewart's daily journal entries focus on provisioning the fort and keeping themselves nourished. The fort crew had little time to harvest furs as they spent most of their energies hunting for food and fishing. When they did obtain tradable goods they were often given to fort hunters who needed them to set up camps around the fort area. This allowed the Northern Tutchone to control trade in another way, by frequently hoarding meat. Campbell often states that the local populations had an abundance of meat which they purposefully held back from the fort. This form of manipulation would have been

a powerful way of exerting control of their resources as the fort was often reliant on Northern Tutchone meat provisions for their subsistence (Lightfoot 2005: 104).

When the fort was finally ransacked and the Hudson's Bay Company crew sent away, trade relationships with the Chilkat likely continued until the next wave of Europeans arrived. This chapter argues that the Northern Tutchone maintained their independence through a strategy in which they maintained trade ties with both the Chilkat and HBC. Thus, when the Chilkat evicted the HBC traders it was not only a defeat of Campbell and his men but of a dual trading network, which had worked very well for the Northern Tutchone for a number of years. They walked a fine and difficult line that proved, in the final analysis, not to work to the Tutchone's advantage. To trade enough furs to the HBC to keep them in operation at Fort Selkirk inevitably irritated the Chilkat enough to destroy the HBC post. Ultimately, low profits meant that the HBC prohibited Campbell from ever rebuilding Fort Selkirk.

Chapter 6: Fort Selkirk I Archaeological Field Investigations

The aim of the following three chapters is to present archaeological evidence of socio-economic interactions between the Northern Tutchone and HBC traders. The oral and documentary evidence (chapters 4 and 5) supports the premise that the Northern Tutchone participated in trade with the HBC as long as it was conducive to do so without a great amount of social upheaval or a dramatic alteration to their lifeways. Analysis of the material culture record provides another avenue to determine the level of Northern Tutchone agentic choice in regards to their interactions with the HBC.

Previous Archaeological Research at Fort Selkirk

As detailed in previous chapters, this is an historical archaeology project, one that combines various data sources to reveal socio-economic interactions between the Northern Tutchone and Hudson's Bay Company (HBC) fur traders at Fort Selkirk I. The preceding chapters have focused on ethnohistorical and historical accounts of contact between these two groups. However, a detailed account of the fort site and its inhabitants is missing from these documentary references. For instance, descriptions of HBC and Indigenous living areas, the number of people permanently living at the fort, and activities occurring at the site are only partially described in the documentary record. This chapter reviews previous archaeological investigations conducted at FSI, elaborates on the field methodology and describes excavated features at the post.

Former archaeological research has been undertaken at Fort Selkirk I (KeVd-8) and II (KeVe-2). The latter is located on the Yukon River approximately 3.29 km downstream from KeVd-8 (Easton and Gotthardt 1987; Gotthardt and Easton 1989; Gotthardt 1990b) (Figure 2). Richard S. MacNeish conducted test excavations of the Pre-contact component at Fort Selkirk II in the early 1960s (MacNeish 1964). Later, Jeff Hunston visited the Fort Selkirk II site in 1977 and collected Pre-contact material from the riverbed (Hunston 1978). In 1980, an archaeological survey was carried out at Fort Selkirk II by Settlement Surveys Ltd. (Pollock and Newton 1980). For this work, 32 features were located within the Fort Selkirk II townsite. Feature positions and extent were approximated on a map of the site but little subsurface testing was undertaken to determine the boundaries or function of these features, therefore "a significant number of features readily identifiable by surface disturbance (such as berms and depressions) were overlooked" (Easton and Gotthardt 1987: 17).

In 1981, prior to stabilizing nine late 19th and early 20th century buildings, B. M. Newton of Fedirchuk, McCullough and Associates undertook archaeological impact assessments of the structures. A metal detector was utilized to locate features and the archaeologist concluded that no significant subsurface artifact concentrations or subsurface remains were present within the impact zone (Newton 1981: 28).

In 1986, Ross of Parks Canada conducted an archaeological excavation of the historic foundation of Big Jonathan's house at Fort Selkirk II. Big Jonathan Campbell was the hereditary chief of the Selkirk First Nation. His excavations retrieved a number of historic artifacts but none representative of the period before European contact (Ross 1987).

However, during excavations led by Gotthardt and Easton in 1987, a crew-member found a chipped biface, without stratigraphic context. The purpose of the 1987 excavations was to relocate, test and stake features that had been previously identified by Settlement Surveys Ltd. in 1980 (Easton and Gotthardt 1987: 18). Surveys conducted included: townsite features, inland survey, riverfront survey, riverbank salvage, and building assessments (Easton and Gotthardt 1987). These surveys and testing revealed evidence of Pre-contact occupation occurring principally in the eastern or upriver end of the Fort Selkirk II townsite (Easton and Gotthardt 1987). Evidence of the HBC at Fort Selkirk II included three elongated mound sub-features, assumed to be basalt chimney features (B33-A; B33-B; B33-D), a cobble spall scraper, ceramic, glass and kaolin pipe fragments, mortar, and charred wood planks. All of these pointed to "initial interaction of two cultural traditions at Fort Selkirk" (Easton and Gotthardt 1987).

In 1988, Gotthardt and Easton once again carried out archaeological research at Fort Selkirk, this time by conducting both an archaeological and culture history study, which included oral history and place name research. Excavations at KeVe-2 were undertaken with two main objectives: the determination of the antiquity and sequence of Pre-contact occupation at the site and the improved understanding of occupations of the site predating and contemporary with the first appearance of European fur traders in the area (Gotthardt and Easton 1989). Their results concluded that, "the interpretation of the late prehistoric occupation at Fort Selkirk as a trade rendezvous may be strengthened by additional consultation with Selkirk elders", and that, " the reconstructions of past settlement patterns must also take into account the loss of proportion of sites along a dynamic riverine system" (Gotthardt and Easton 1989: 67). In effect, more oral history work was recommended in order to determine whether Fort Selkirk was a trading area prior to Euro-Canadian contact.

In 1989, Gotthardt conducted archaeological excavations at Pre-contact site KeVd-3 (Native Traditional Village), and at two historic localities: Fort Selkirk II (KeVe-2) and Fort Selkirk I (KeVd-8) (1990b). Due to their close proximity, today KeVd-3 (Native Old Village) and KeVe-2 (Fort Selkirk II) have the same borden number: KeVe-2. The Native Traditional Village is located on a high bank on the left side of the Yukon River approximately 2.5 km upstream from the Fort Selkirk II townsite (Figure 2). As mentioned in Chapter 1, Robert Campbell mentions this locality as a possible place for the first fort but chose a different locality because he was wary of the Indigenous people living in that locality (B/200/b/28: 102, 1852-1853 [Jun. 15th, 1852]).

Excavations of the Native Old Village resulted in the location of two separate periods of occupation (Gotthardt 1990b: 3, Hare and Gotthardt 1996: 20-24). The older occupation was found below White River Ash and contained three projectile points and a small collection of flakes and chips indicating a Northern Archaic

tradition (1,150-5,000 B.P.). The small number of artifacts suggested a single-use short term campsite. Above White River Ash were the remains of a larger seasonal camp used over many generations. Two hundred and twenty-one lithic artifacts were collected including microblades, small tools, flakes and a copper projectile point (raw material from the headwaters of the White River). At least 28 different kinds of lithic material were utilized. Some of the material was imported, such as obsidian (from the St. Elias Mountains approximately 400 km southwest of Fort Selkirk) and exotic cherts, chalcedonies and agates (sources found near Carmacks Village, at Miller's Ridge, and near Mount Nansen) (Hare and Gotthardt 1996: 20-24). The tools found at the site suggested the many routine tasks of a base camp such as fishing, hunting, working hides, cutting meat and making tools. The assemblage indicated "that little or no primary reduction took place here and that most of the debitage accumulated is the result of tool manufacture and reworking of tools" (Gotthardt 1990b: 3). The archaeologists believed that these remains indicated a long history for the site, one that predated the HBC fort and trade with the Coastal Tlingit Chilkat. Finally, the variability in lithic material indicated that this was a trade rendezvous location.

Excavations at KeVe-2 uncovered five more possible basalt stone chimney depressions and two cellar features assumed to be associated with the Fort Selkirk II period. Excavations at KeVd-8 (FSI) successfully located what was believed to be the general fort circumference (Gotthardt 1990b: 25). However, researchers were not able to identify documented structures. In all, five basalt chimney stone accumulations, four possible building berms and one cellar feature were identified (Gotthardt 1990b: 25).

Field Narrative

From the project's outset it was determined that survey and excavation should be concentrated within the pre-recorded locality of FSI. Often excavations cannot cover wide areas, particularly when there are time constraints, therefore studying a locality that had already been partially identified made sense, particularly where building features were visibly present on the surface.

Recovery of Fort Selkirk I era material culture required an array of archaeological techniques. These included pedestrian survey, shovel test survey, geophysical survey, and subsurface excavation. The remainder of this chapter focuses almost exclusively on data recovered through excavation as this was the strategy that provided the bulk of material.

Two seasons (2006 – 2007) of fieldwork at FSI (KeVd-8) were conducted (Figure 8). The first field season focused on site survey and testing and excavation of the historic Fort Selkirk I site. The second field season focused on opening a large ash midden located at the site and identifying palisade remains. The goals of the 2006 and 2007 field seasons were to: (1) conduct systematic survey/testing to locate and map structural remains related to the 1848-1851 HBC post, (2) excavate to recover material culture to assist in the interpretation of activities at the post, and (3) explore spatial organization of remains.

2006 Pedestrian Survey

On June 12th, Dr. Ruth Gotthardt and Greg Hare (Government of Yukon archaeologists) and assistants travelled to Pelly Farm located approximately 7.5 km upriver from Fort Selkirk I. From there the crew boarded a riverboat, with field equipment and supplies, and went downriver to the location of FSI. Upon arrival at FSI, the crew immediately began cutting brush to make room for a camp and to clear the archaeological site. The following day the Heritage Unit staff returned to Whitehorse and those of us that remained continued to clear brush and set up camp. The Selkirk First Nation crew arrived for their first shift on June 19th, they included: Alice Joe (cook), Lauren McGinty, Curtis Joe, and Delaney Alfred. During the course of the summer two other Selkirk First Nation crew members join our project: Lyndelle Johnson and Dayna Joe. Unfortunately, approximately one week after survey testing commenced a large forest fire came within 30 m of the camp and the site, and the crew were forced to evacuate and set up camp at Pelly Farm. The group boated into Fort Selkirk I from Pelly Farm for the remainder of the field season.

The first step in recovering evidence of the HBC post at Fort Selkirk I involved a random pedestrian survey followed by a larger transect shovel test survey. The primary objective of this work was mainly to identify visible surface features, particularly those 19th century deposits previously recorded by Government of Yukon archaeologists in 1989 (Gotthardt 1990b). Unfortunately, due to the thickness of the forest, ground inspection was slowed down considerably. Visibility problems were also an issue. Eventually, a large wood beam cellar was located that was first identified in 1989. We were also able to identify four chimney features composed of basalt rocks about 30 m north and east of the cellar.

Transect intervals of 10 m were used in all four directions from the cellar. Two aspects of the survey were informative. First, the area mapped by Gotthardt (1990b) appeared to have different boundaries from the area we surveyed. This difference may be partially due to the forest's thickness and the undulation of terrain due to flooding that makes it difficult to relocate previously identified features and to find new features. Second, other areas of the pedestrian survey revealed no surface artifacts aside from modern debris such as tin cans adjacent to the river and a wood plank table 70 m south of the datum overlooking the Yukon River.

Based on the survey results, we narrowed the general focus to between the Pelly River on the west side, the slough on the east side, and the Yukon River on the south end (Figure 8). The density of features in one area resulted in concentrating around a roughly 70 m radius from the cellar.

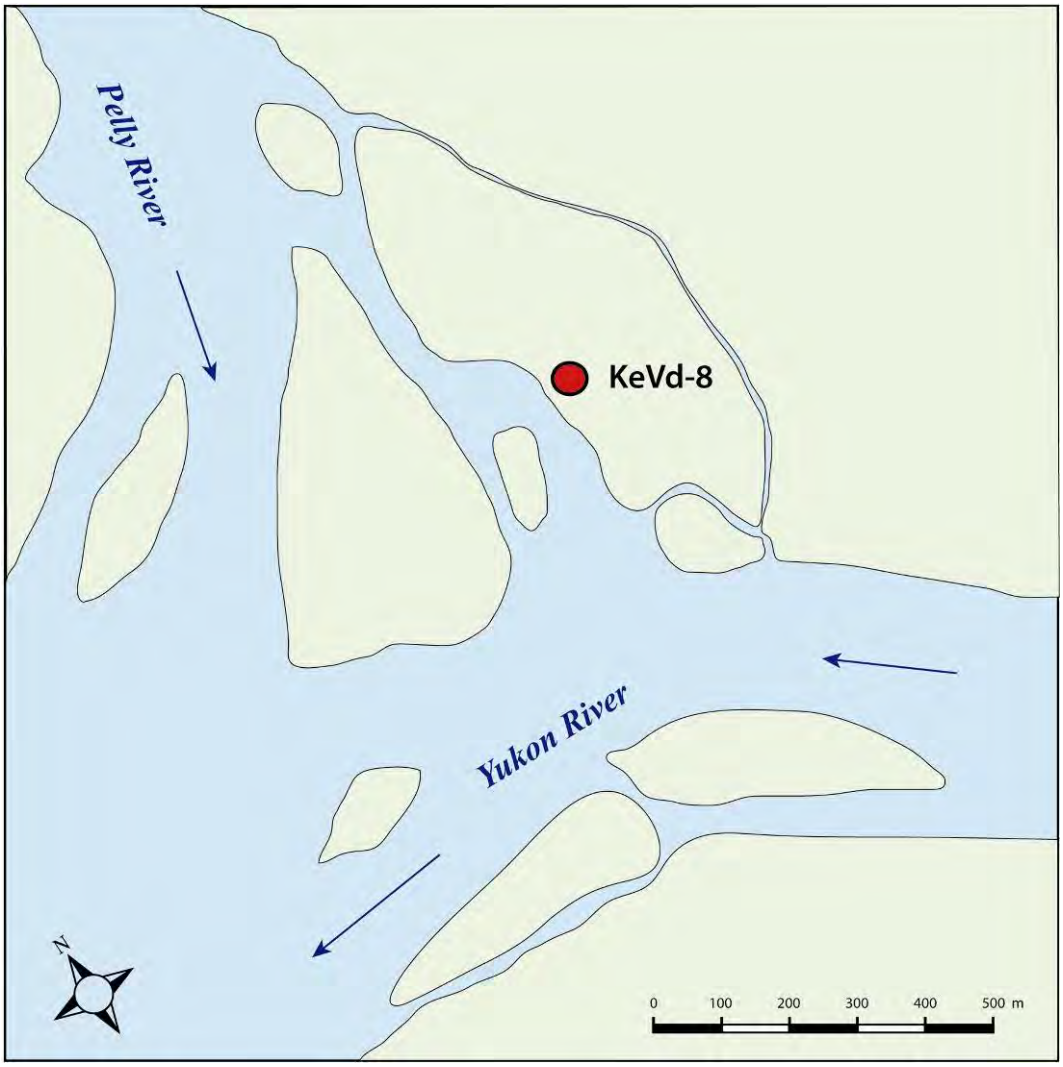

Figure 8. Fort Selkirk I Overview Map.

2006 Shovel Test Survey

After conducting a pedestrian survey a central site datum was set near the Cellar Feature 1 west wall (Figure 9). A true north baseline was established with a transit and extended 50 m north and 70 m south of the datum. Transects running east (to 60 m) and west (to 50 m) were placed every 10 m along the baseline. Shovel tests were excavated every ten metres along the transects. The units were approximately 0.5 by 0.5 m and 50 cm depth below surface (dbs). In many cases the ideal depth was not achieved due to discontinuous permafrost, which hindered testing in some areas. Matrix from each excavation unit was screened using a 1/4 inch (.635 cm) mesh screen.

Out of 94 shovel tests, 13 were positive for artifactual remains and these were clustered around the cellar, principally on the eastern side. There were 46 artifacts including one square nail, one grey chert flake and three fragments of mortar. Results of the shovel test survey suggested that archaeological deposits did not exist away from the cellar feature.

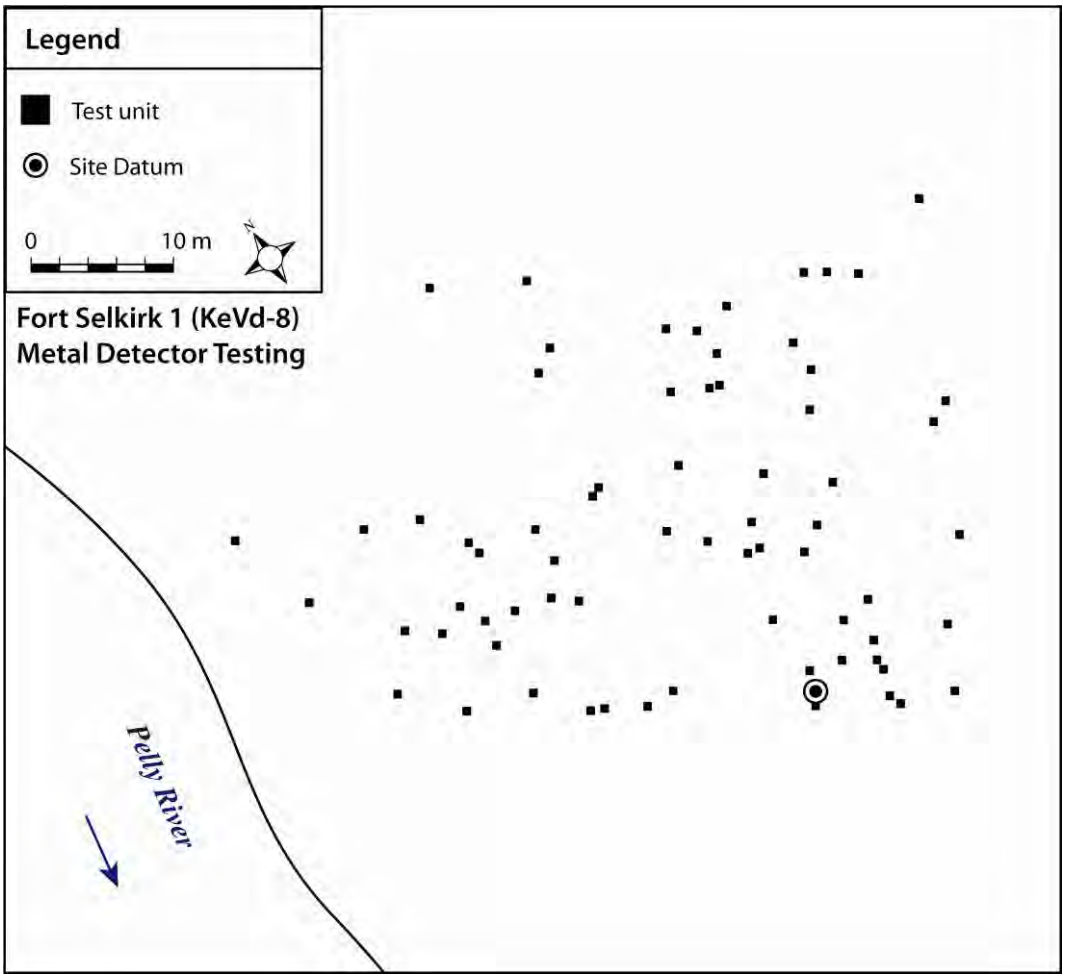

Figure 9. Metal Detector Survey Map.

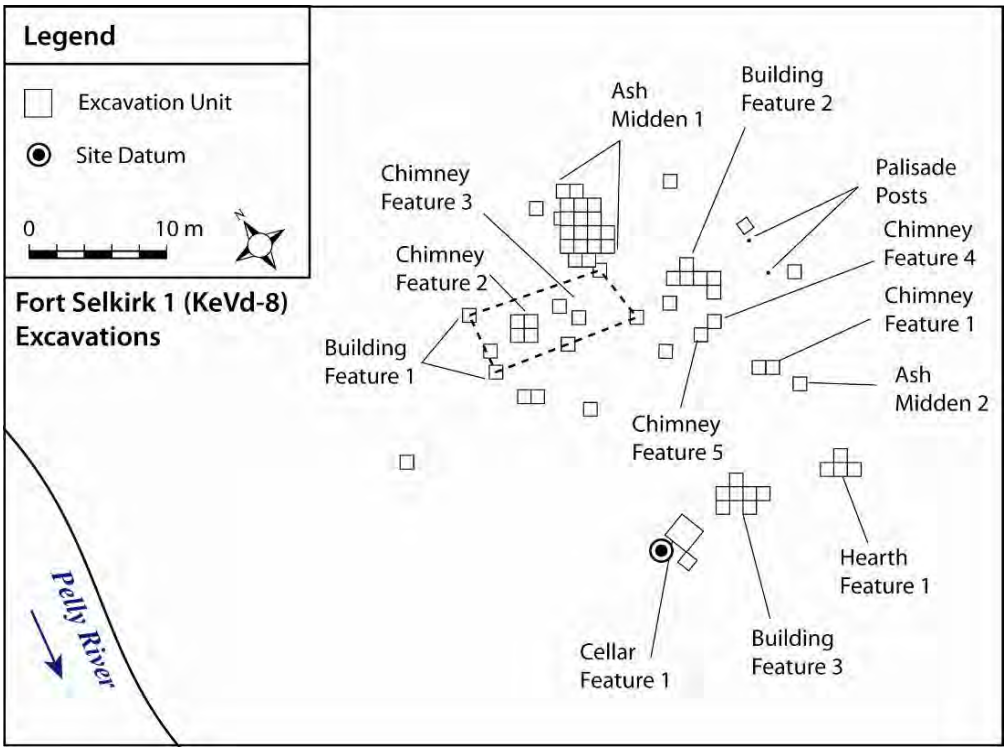

Figure 10. Excavation Map.

Metal Detector Survey

Since the site was located in an isolated area which appeared to have little post occupation disturbance, a metal detector was used to located metal remains[11] (Figure 10). Areas that were positive for metal material were marked and subsequently shovel tested (0.5 x 0.5). Shovel tests were excavated to 40 cm dbs when possible. Thereafter, test units (1 x 1 m) were opened in areas where artifacts were found. Sixty-four units containing metal artifactual remains were opened and these were clustered around the northern side of the cellar (Figure 9, Metal Detector Map). Eight hundred and six artifacts and faunal remains were found including copper and iron objects. There seemed to be little evidence of intensive historical occupation away from the cellar locality therefore testing shifted directly to the area surrounding the cellar.

Subsurface Field Excavation

Subsurface testing followed completion of the metal detecting operation. Excavation objectives were to (1) expose chimney features, (2) excavate metal

[11] As Silliman et al. state "the value of geophysical survey in archaeology has been demonstrated in a variety of research contexts, spanning academic and cultural resource management domains and both historical and prehistoric periods... Given that historical archaeologists consistently focus on recovering and understanding the built environment and spatial layout of sites, geophysical technology can be essential components of the archaeological tool kit" (2000b: 89-109).

detector units, (3) expose ash middens (4) locate a possible palisade, (5) locate building remains, exposing foundations and excavating intramural and extramural space, and (6) simultaneously reveal aspects of the organization and use of space across the site.

To pursue these objectives, 13 possible features and five test units were excavated over the course of two field seasons (Figure 9). Excavation procedure involved placing 1 x 1 m units at surface features or positive test units. Each unit or feature was given a secondary vertical datum, normally the highest corner of the unit or units and this point was tied to the central datum. Levels were originally designated by natural stratigraphy in order to follow depositional events, but this record became difficult for the inexperienced crew to interpret, therefore a change was made to arbitrary 10 cm levels. Artifacts were placed in 10 cm level bags unless they were found in situ, in which case, they were piece-plotted in three dimensions. Trowels and shovels were used and most units were excavated to 60 cm dbd (depth below datum) or dbs (depth below surface), depending on whether the unit had features and/or permafrost. Additional vertical control of artifacts and faunal remains was maintained by dividing units into quadrants.

Matrix from each excavation unit was screened using a 1/4 inch (.635 cm) mesh screen. After excavations were completed, a plan view of each feature was drafted to scale and contour profile maps were drawn on at least one wall of each unit. Finally, a map of the site was drawn with the aid of a transit. All units were digitally photographed.

At the end of the 2006 field season 55 1x1 m units were excavated, which included three to four possible building features, three to five possible chimney features, two ash middens, and two possible palisade posts[12] (Table 13).

2007 Subsurface Field Excavations

The 2007 archaeological investigations at Fort Selkirk I focused on exposing the rest of Ash Midden 1 that was partially opened in 2006 and on delineating the circumference of the fort palisade to determine the extent of the fort and to help locate where visiting Northern Tutchone and other Indigenous groups might have set up camp. As Burley et al. note “For an archaeologist, nothing more clearly defines a site boundary than a surrounding wall” (1996: 91). Since most of the trees in the area to be excavated had been felled and the area had been mapped the previous year, excavation began immediately. The 2007 excavations were begun by adding 1 x 1 m units to the already existing units at Mound Feature 1. Ten 1 x 1 m units and one 0.5 x 0.5 m unit were excavated at Mound Feature 1. This feature yielded more evidence of 19th century contact period artifacts such as ceramics, pipe stems, trade beads, lead shot, bone glass and metal material as well as Indigenous manufactured bone implements.

[12] Feature names given in the field were renamed in the laboratory, see Table 13.

Feature	Field Designation	Unit	Description
Cellar Feature 1	Cellar Feature 1 Cellar Trench 1 Cellar Unit 11 Wall Frame Shovel Test	Unit 1, 2, 3, 4 Test Unit 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14 Unit 11 1, 2, 3, 4, 5	large log lined cellar feature with corresponding foundation beams around the perimeter
Hearth Feature 1	Chimney Feature 1	Unit 1, 2, 3, 4	hearth built with Fort Selkirk I basalt chimney rocks that post-dates the fort's occupation.
Chimney Feature 1	Chimney Feature 2	Unit 1, 2	chimney feature collapsed in alignment containing large basalt rocks, associated with chimney feature 4 and 5.
Chimney Feature 2	Chimney Feature 3	Unit 1, 3	collapsed chimney feature containing large basalt rocks located within building feature 1
Chimney Feature 3	Chimney Feature 4	N/A	collapsed chimney feature located within building feature 1, mapped but not excavated
Chimney Feature 4	House Foundation 3	Unit 1	collapsed chimney feature located directly south of house foundation 3, associated with chimney feature 1 and 5.
Chimney Feature 5	Depression 1	Unit 1	chimney feature associated with chimney feature 1 and 4.
Ash Midden 1	Mound Feature 1	Unit 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19	large ash midden adjacent to the outer northeast corner of house foundation 1
Ash Midden 2	Chimney Feature 5	Unit 64	ash midden located under and directly east of a large standing tree
Building Feature 1	House Foundation 1	Unit 1, 1a, 2, 2b, 3, 5, 5a, 6, 6a, 46, 46b, 47	building foundation with four corners and centre cross beam exposed
Building Feature 2	House Foundation 3 Chimney Feature 6	Unit 2, 3, 4, 5, 6 Unit 1?	possible house foundation beams
Building Feature 3	Wall Feature 1	Units 1, 2, 3, 4, 5, 6, 7	possible house foundation beams
Metal Detector Shovel Test 59	House Foundation 2	Unit 59	metal detector opened into 1x1 m unit
Metal Detector Shovel Test 43	Test Unit 43	Unit 43	metal detector opened into 1x1 m unit
Metal Detector Shovel Test 15	Unit 15	Unit 15	metal detector opened into 1x1 m unit
Metal Detector Shovel Test 24	Unit 24	Unit 24	metal detector opened into 1x1 m unit
Metal Detector Shovel Test 29	Unit 29	Unit 29	metal detector opened into 1x1 m unit

Feature	Field Designation	Unit	Description
Palisade Shovel Test	Palisade Trench	Unit 1	2006 trench
	Palisade Test		2007 palisade post tests
	Palisade Post		2-4 possible palisade posts
Metal Detector Shovel Test (not turned into units)	Metal Detector Shovel Test	1-23, 25-42, 44-58, 60-64	
Transect Shovel Test	Transect Shovel Test	0N to 50N, 10E to 60E, 0S to 70S, 10W to 50W	

Table 13. Features and Field Designations.

Testing was also conducted on what was believed to be the perimeter of the site to locate evidence of a palisade wall. Twenty 0.5 x 0.5 m shovel tests were laid out running along the east side of the baseline in 5 m intervals. Two possible palisade posts were uncovered but results are uncertain since no other posts were encountered. Two 1 x 1 m and one 1 x 0.5 m test units were placed between the two possible palisade posts uncovered in 2006. Wood chips, either a result of processing timber or used to mud the buildings, were found in all three units. One unit contained cut timber remains providing evidence of one palisade post. At the end of the 2007 field season, wood features were covered in polypropylene to preserve the wood. Other open units were covered in tarp, and all were completely backfilled.

Natural and Cultural Stratigraphy

The foregoing narrative provides context to discuss the natural features of KeVd-8. The site rests within the floodplain of the Pelly and Yukon Rivers. A study conducted by Livingston et al. determined that there are three distinct lithofacies[13] present in the floodplain stratigraphy of the Yukon River; presumably it can be inferred that similar lithofacies exist along the Pelly River (2009: 357-7). These are present at KeVd-8.

Facies I is composed of pebble to cobble-sized gravel that represents bar formations. Facies II is composed of medium grained sand, which represents early accretion of channel deposits and lacks organic beds but may contain wood fragments. Facies III consists of the inter-flood accumulations of fine-grained sediment and organic beds created by "low frequency vertical accretion of the floodplain by ice jam flooding" (Livingston et al. 2009: 362).

Sedimentary composition at KeVd-8 consists of distinct, recurring, over-bank flood-deposited sediment layers (beds) separated by organic material. Flood beds are bounded by inter-flood accumulations of organic litter (leaves, needles and twigs), indicating a stable vegetated surface between depositional events. This decomposition may have occurred during seasonal ice jam over-bank flooding. These are likely analogous to beds described by Livingston et al. from the middle

[13] A facies is defined here as a spatially restricted sedimentary deposit that exhibits characteristics (e.g. lithology, texture, structure and fossil content) that are significantly different from the characteristics of other deposits (see Waters 1996: 38-39).

Figure 11. Unit 43, Photograph, West Wall.

Yukon downstream from Dawson City (2009: 357-71). As Livingston et al. describe, "the repetition of similar sized flood beds (1 to 2 cm thick) is interpreted as an indication of rapid deposition, where floodwaters cease movement and sediment settles into the floodplain surface" (2009: 363). They continue:

> laterally-continuous beds of compressed organic material separating flood beds closely approximate detritus from the modern forest floor. In effect, the organic beds are palaeosols, or in this case floodplain regosols. (Livingston et al. 2009: 363)

Lastly, the thickness of organic beds indicates the duration between ice jam floods (Figures 11 and 12).

The geomorphological structure of the locality has important ramifications for stratigraphic interpretation of the site. Other than at Ash Midden 1, there was little cultural stratification in the historic deposits. The surface of fluvial deposits tended to parallel the ground surface indicating that the topographic contours are better explained by the geomorphological substrate than by cultural modification of the surface. The only cultural stratigraphy visible in these excavations was (1) the superposition of a 20th century hearth on top of an HBC era mottled orange, grey and charcoal ash lens; (2) the Ash Midden 1 cultural layer composed primarily of mottled brown, grey and charcoal ash; (3) a mottled orange, grey and charcoal ash lens directly outside the southeast corner of Building Feature 1; and (4) a mottled orange, grey and charcoal ash layer at Ash Midden 2. No clear-cut

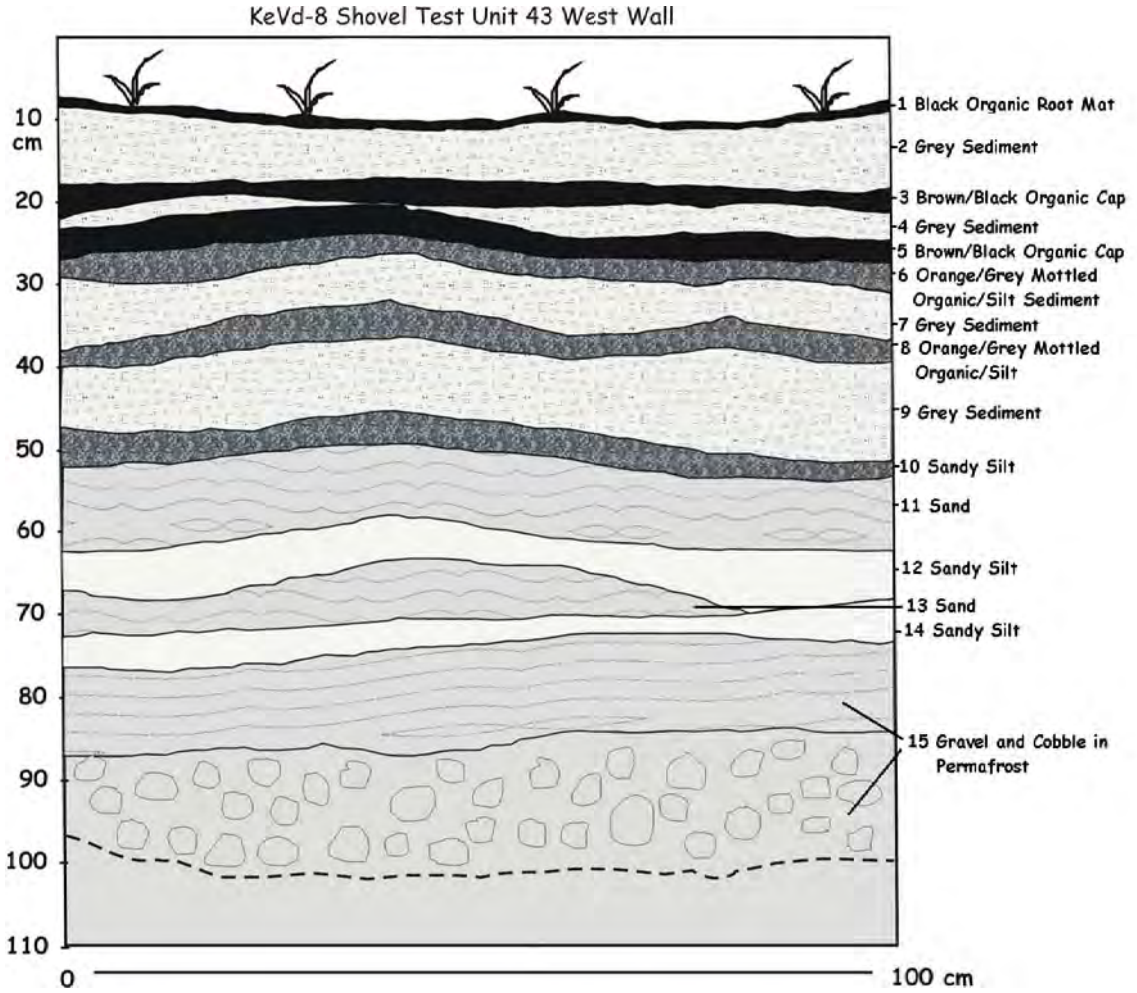

Figure 12. Unit 43, West Wall Profile.

Pre-contact layers or features were detected and it was often difficult to determine the reason for the vertical positioning of artifacts except to attribute it to bioturbation processes such as river flooding, animal burrowing, and/or permafrost heaving.

Metal Detector Shovel Test 43 was opened to demonstrate the typical Fort Selkirk I stratigraphy found outside of features (Figures 11 and 12). Layer 1 is composed of a dense black organic root mat (organic cap) ranging in thickness from 0 to 5 cm. This level often contained historic remains, represented by the presence of Euro-Canadian artifacts such as glass beads, windowpane and other glass, metal material, ceramics, and clay pipe remains. There were also a few Indigenous manufactured bone and antler implements, as well as faunal material. Layer 2 is composed of an over-bank grey sediment layer of variable thickness (1 to 7 cm). This represents the first in a series of over-bank sediment layers. Artifacts are occasionally found within this level. Layer 3 is composed of a dark brown to black organic cap of variable thickness (1 to 5 cm). Leaves and wood matter are present. This level represents the first of numerous palaeosols and occasionally contains the presence of Euro-Canadian and Indigenous remains. Again, due to pedoturbation processes[14] (such as faunalturbation, floralturbation and cryoturbation[15]), artifacts can move from their original context. The fourth layer consists of another grey over-bank sediment layer of variable thickness (0.5 to 4 cm). Leaves and wood matter are also present in this layer. Artifacts are occasionally found in this layer. Layer 5 is a dark brown to black organic cap palaeosol and is between 3 and 5 cm in thickness. This is typically the last layer in which artifacts and faunal remains appear. Layer 6 consists of an orange and grey mottled organic and silt sediment cap. This level is of variable thickness (2 to 4 cm). Leaves and wood matter are present. No artifacts were found within this cap. Layer 7 consists of another grey over-bank sediment layer of variable thickness (6 to 8 cm). This sediment layer is much thicker than previous ones. Tree roots, wood matter and leaves are still present at this level. No artifacts are present. Layer 8 consists of the second orange and grey mottled organic and silt sediment cap. This layer is variable in thickness (3 to 4 cm) and contains leaves and wood matter; no artifacts were found. Layer 9 is a large grey over-bank sediment layer, which varies in thickness between 7 and 12 cm. There are small leaves and or wood matter present. Layer 10 is a sandy silt layer that ranges in thickness between 4 and 7 cm; small fragments of wood matter present. Layer 11 is sand and ranges in thickness between 4 and 7 cm. Again, there are small fragments of wood matter present. Layer 12 is a layer of sandy silt that ranges in thickness from 0 to 8 cm. There are no wood matter fragments present. Layer 13 consists of a sand layer that varies in thickness from 2 to 5 cm. There is no visible organic material present. Layer 14 is the final layer of sandy silt and measures between 11

[14] Sediments and soils are subjected to a host of disturbance processes that alter horizons and move particles, including artifacts of various sizes. This large family of processes is known as pedoturbation, which means mixing of soils and sediments (Schiffer 1987: 206; Wood and Johnson 1978: 317).

[15] Faunalturbation refers to animals burrowing below ground, floralturbation refers to living and dead plant root action, and cryoturbation refers to freeze-thaw action, including frost heave (Schiffer 2007: 213-214).

and 12 cm. Layer 15 consists of gravel and cobbles situated in permafrost. No further excavation was conducted at this unit. Again, this unit typifies the natural stratigraphy found at KeVd-8 and supports ice-jam flooding research conducted for the northern Yukon River (Livingston et al. 2009).

Features and Stratigraphy

Plan maps and stratigraphic profiles are provided for significant features. Feature locations can be found in Figure 8. Artifacts are only briefly discussed, as the following chapter contains a more thorough analysis of Fort Selkirk I material culture.

Archival Mention of Building Features at Fort Selkirk

Prior to identifying and excavating KeVd-8 features on the ground, it was necessary to identify the types of building features that might have been present at the site. To do this identification, features described in the Campbell and Stewart journal were recorded (2000) (Table 14). Not all of these buildings would have been separate structures, for instance, the Big House and the Store may have been located in the same building, in order for the head clerk to control trade goods (Burley 1996: 88). Typically, the size and position of buildings is a direct indicator of the commonly enforced HBC fort layout. HBC trading posts traditionally had a U-shaped configuration in which the head clerk's accommodation was set back from the river and other buildings, and was larger than the other structures. The layout of FSI appears to mirror this plan (Figure 8).

Cellar Feature 1

Cellar Feature 1 consists of a large square below ground cellar with sides measuring 2.11 m x 2.10 m x 2 m x 2.10 m and 1.25 m dbd (Figures 13 and 14). The feature was divided into four units to ease excavation. The cellar was partially filled with river silts followed by organic caps comprised of tree branches and leaves owing to periodic flooding episodes and periods of stability.

There were three silt deposits and four organic caps (including the modern surface floor). The southeast corner of the feature had an animal burrow at 35 cm dbd. Due to the cellar's large size and depth, excavation took place over the course of two months. This was done to allow the permafrost to thaw. The cellar was built using local logs and cut wood planks, which may have been produced in the saw pit. All four walls of the feature are lined with horizontal logs, while the floor has logs running north to south. Twenty-nine logs lined the cellar floor, nine logs and 12 logs were found along the north and south walls respectively and four logs and two cut wood planks were found along the east wall, and six to seven logs comprised the west wall. All four walls had dislodged logs and/or planks. The surface of the log floor contained evidence of decomposing bark.

Feature Name	Date Begun/Completed	Construction Descriptions (Campbell and Stewart 2000) Description
Big House	Begun June 3rd, 1848	4 squared logs used for the upper frame (p. 3) two squared logs used for the upper frame (p. 3) roofed with sticks (p. 3) mounted posts (p. 4) sawn flooring (p. 4) logs of roof and walls chinked with moss and interior mudded (p. 4, 6) ground about the front of the building was levelled (p. 3) contained rooms for Campbell and Stewart (p. 5) Campbell's room had a windowpane (p. 6) Stewart's room had a ceiling (p. 11) there were at least two chimneys, one at either end, in each man's room (p. 4, 5) chimneys were made of local stone and mud/clay (p. 4) contained at least one cellar which was flooded in 1850 (p. 71)
Hall	?	chimney erected in centre of the building (p. 5) flooring placed down (p. 7)
Kitchen	Begun June 20th, 1848	framed with log walls and roof (p. 7) two doors (p. 5) roof covered with earth (p. 5) plank floors (p. 7) 1 chimney (p. 5)
Store	Completed August 1848	log foundation (p. 6) squared timbre framework and grooved and mortised posts (p. 6, 7) interior contained at least two levels (either a second story or loft) (p. 8) contained attic (p. 10) roof and exterior walls covered with moss and then bark (p. 9) contained at least one cellar (p. 9) plank flooring (p. 11) had partition inside (p. 10) apartment for fish (p. 27)
Men's House	Begun July 18th and completed August 25th, 1848	plural descriptions may denote two rooms rather than two buildings (p. 6) grooved and mortised posts (p. 7) roofing of sticks (p. 10) one chimney in each (p. 10) exterior walls mudded and barked (p. 10) plank flooring over log sleepers (p. 10) may have contained upper level, attic or loft and doors (p. 10)
Shop	?	making a counter in the shop (p. 10) walling the inside of the shop with bark (p. 11)
Meat Store	Begun August 31st, 1848	dug into the ground (p. 11) flooring was laid in it (p. 11) large amounts of ice and meat were stored in it (p. 27)
Saw Pit	Begun March 8th, 1848	a saw pit was dug on the island from which most of the building logs were cut (Log Island) (p. 28)
Stage	Begun June 2nd, 1848 and August	at least one elevated cache was erected to store fish and/or meat during the winter (p. 10)

Feature Name	Date Begun/Completed	Construction Descriptions (Campbell and Stewart 2000) Description
	25th, 1848	
Garden Plot	Begun June 2nd, 1848	at least two garden plots (p. 3)
Graveyard	August 4th, 1848	at least two people buried near Fort Selkirk I (p. 9)

Table 14. Feature Descriptions Found in the Fort Selkirk Journals.

Figure 13. Cellar Feature 1, Photograph of Four Walls and Floor.

The upper southwest corner of Cellar Feature 1 was excavated to further reveal the construction technique employed in building the cellar. Two overlapping wood planks (at 55 and 60 cm dbs) were found at the corner with a standing cut log post (at 43 cm dbs) sitting directly outside of the planks.

Artifactual remains were minimal and included a white drawn bead at 117 cm dbd and a sheet metal scrap (probably from a can) at 122 cm dbd. Faunal remains occurred between 80 and 100 cm dbd. Nineteen 0.5 x 0.5 shovel test units were placed near Cellar Feature 1 to determine if the cellar was a stand-alone building or if it was housed within a larger structure. Shovel test 9, located northeast of

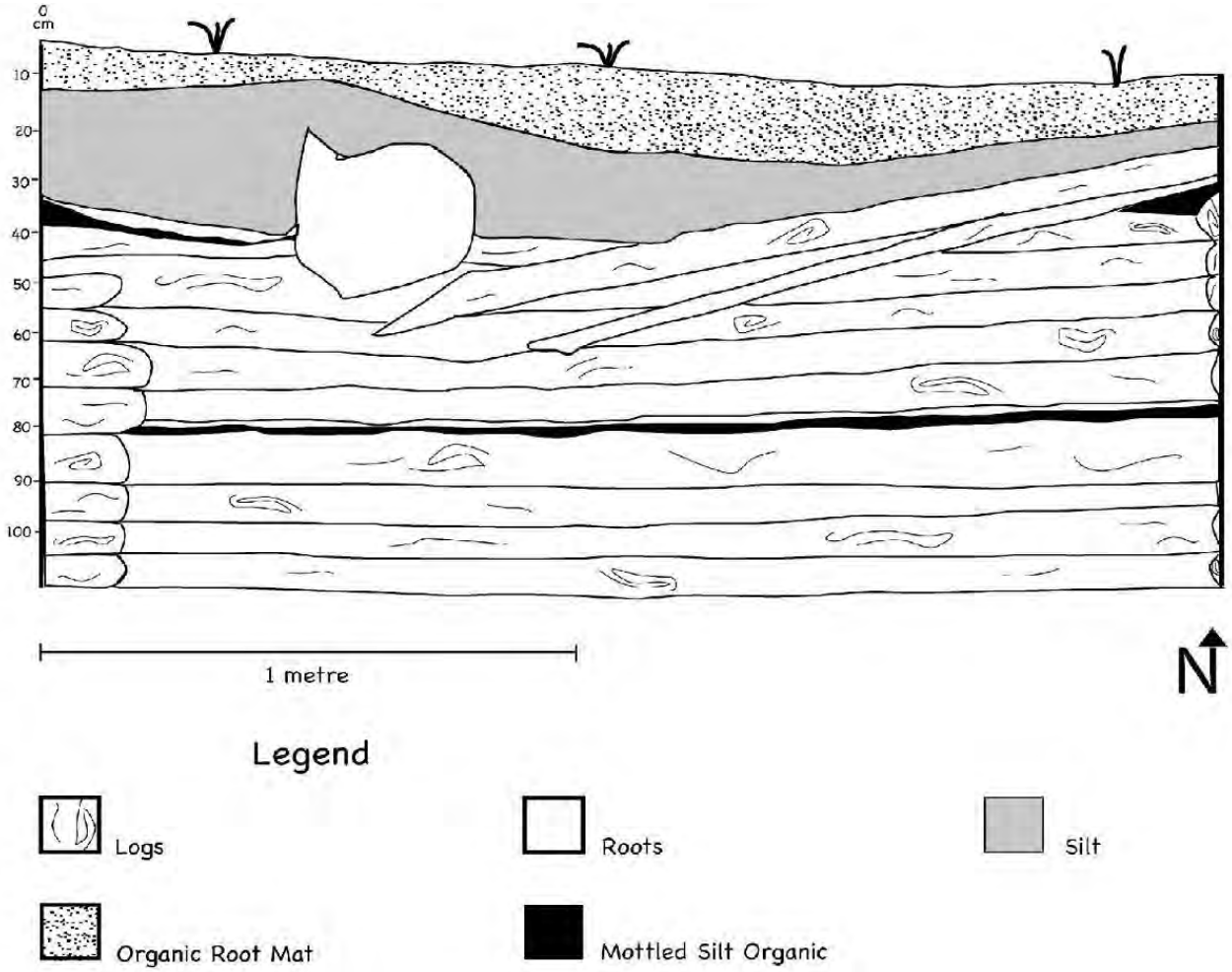

Figure 14. Cellar Feature 1, North Wall Profile.

Figure 15. Hearth Feature 1, Plan View of Units 1 and 2.

Cellar Feature 1 revealed the end of a wood beam running north to south. Shovel tests 10-12 were placed south of shovel test 9 and also contained a wood beam running north to south. The beam running through shovel test 9, 10, and 12 appears to be the same beam. The beam found in shovel test 11 does not line up with the other beam but still appears to be associated with Cellar Feature 1. The beams were found between 26 – 49 cm dbd. No artifactual remains were located in these test units.

Hearth Feature 1

Hearth Feature 1 consists of the superposition of a 20th century hearth constructed out of nine large angular basalt rocks obtained from exposed FSI era chimney features and an orange, grey and black charcoal lens below (Figure 15). The feature measures 1.8 x 1 m. Four 1 x 1 m units were excavated. Units 1, 2 and 3 were excavated to a depth of 40 cm dbd while unit 4 was excavated to a depth of 75 cm dbd. The stratigraphy of Hearth Feature 1 consists of four organic caps (including the modern surface floor), and four silt layers. One of the organic layers was partially mottled with orange and black charcoal. The mottled organic cap appears at 11 cm dbd and continues to 23 cm dbd. This feature appears to be a FSI era ash midden where 19th century artifacts were recovered, including a lithic flake, mortar, clay pipe fragments, ceramic tableware and beads. Both calcined and uncalcined faunal remains were also found. Modern wire-cut nails were found at 0 – 5 cm dbd and are assumed to be contemporaneous with the 20th century hearth.

Figure 16. Chimney Feature 1, Photograph of Units 1 and 2.

Chimney Feature 1

This is a partially exposed collapsed chimney feature (Figures 16 and 17). The chimney is composed of angularly shaped basalt rocks, which are aligned in a rectangular fashion on the ground (Figures 16 and 17). The chimney collapse probably occurred as one event. Two adjoining 1 x 1 m units were opened directly over the chimney feature. The exposed feature measures approximately 1 x 2 m and may indicate the standing height of the feature. Basalt rocks varied in size from approximately 10 cm3 to 40 cm3 and were stacked on top of each other creating two levels; there was grey silt between all the rocks from more recent flood events. Mottled orange and dark brown ash was found along the eastern side

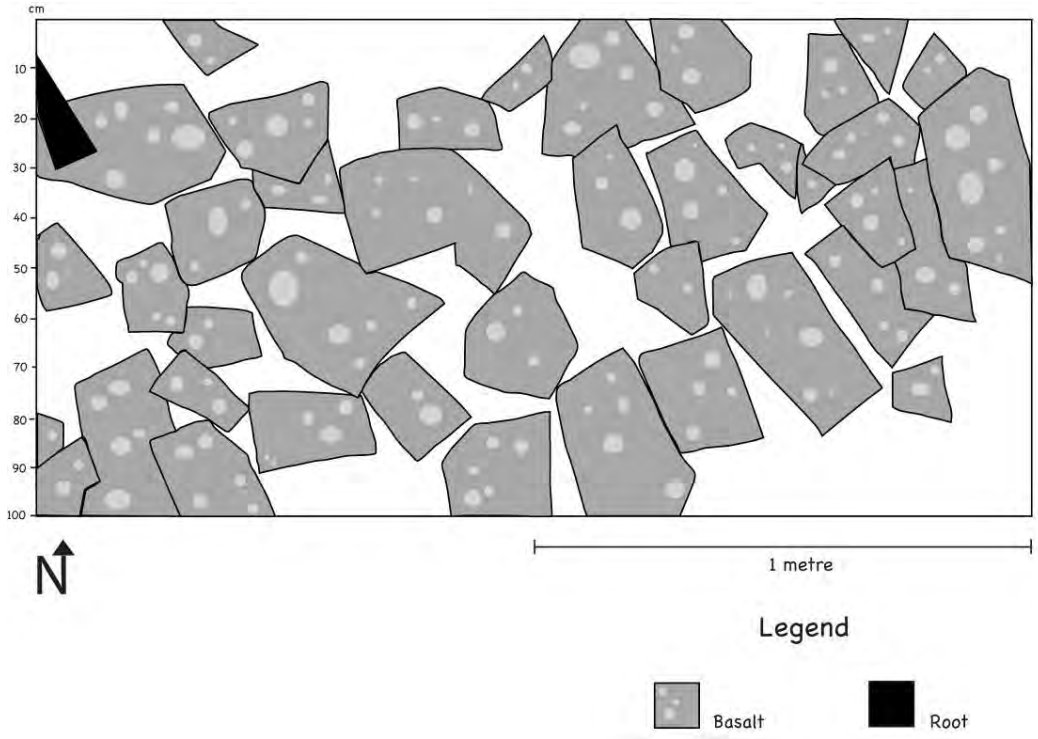

Figure 17. Chimney Feature 1, Plan View of Units 1 and 2.

of unit 1 at 34 cm dbd indicating that this is the base of the chimney feature. Interestingly, there were no river cobbles or mortar remains found at this or any of the other chimney features[16]. The top layer of basalt rocks was mapped and removed, while the bottom layer was mapped and left in situ. No artifacts were recovered from this feature.

Chimney Feature 2

Chimney Feature 2 is located on the inside northwest portion of Building Feature 1 (Figure 18). The feature is an exposed mound, which was sectioned into four units, two of which were partially excavated (units 1 and 3) (Figure 18). The exposed feature measures approximately 1 x 1 m. Unit 1 contains a layer of basalt rocks ranging in size from approximately 10 cm3 to 32 cm3. Silt is found between the rocks. Below the rocks, at 6 to 19 cm dbd, there is a mottled orange and dark brown layer that appears to be ash debris. Unit 3 is similar to unit 1 with a mottled orange and dark brown layer at 9 cm dbd. Because the layer of basalt rocks is small and concentrated within a 1 x 1 m area it is assumed that the rest of the chimney feature was moved across the Yukon River to build new chimneys at KeVd-2. Faunal remains and small fragments of mortar were located at this feature but no river cobbles or artifacts were recovered.

[16] Excavation at Fort Selkirk II (KeVd-2) the previous year uncovered a chimney feature containing basalt rocks filled in with river cobbles and mortar.

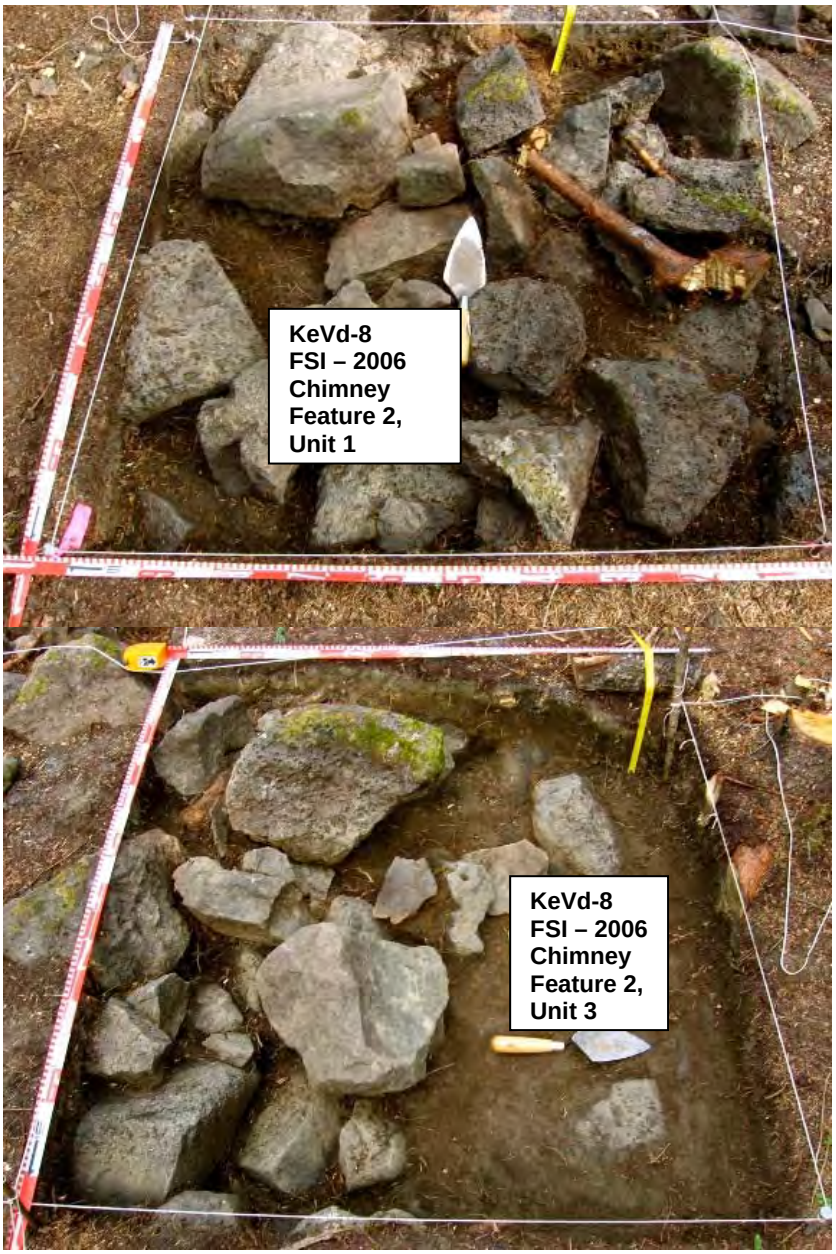

Figure 18. Chimney Feature 2, Photographs of Units 1 and 3.

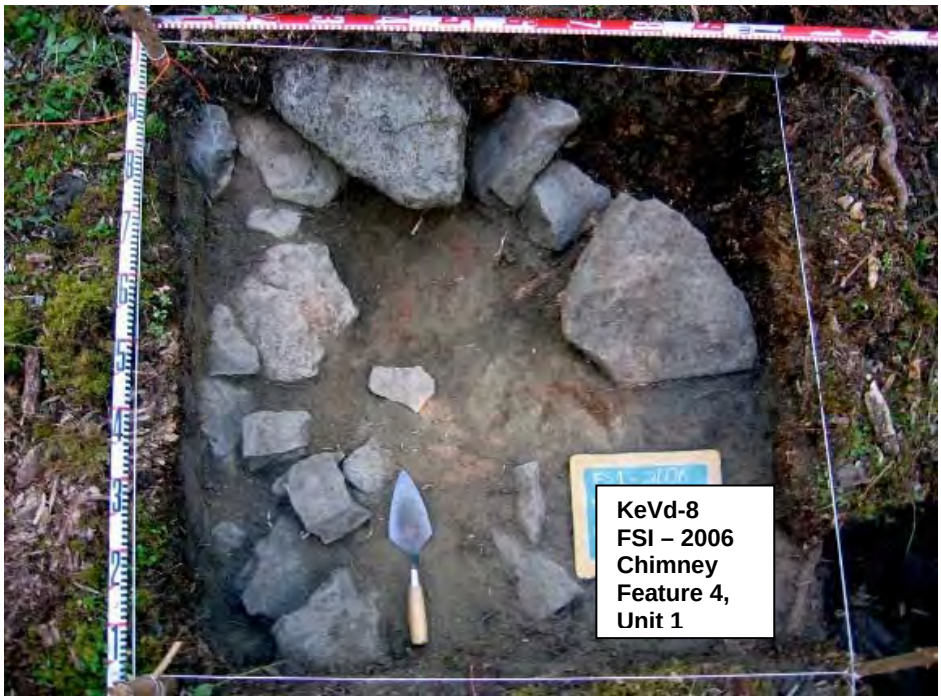

Figure 19. Chimney Feature 4 Photograph of Unit 1.

Chimney Feature 4

This is a collapsed chimney feature situated 1 m north of Chimney Feature 1 (Figure 19). A 1 x 1 m unit was opened over the feature. Stratigraphy was difficult to determine as the unit was directly on top of the buried feature. Excavation of the feature exposed basalt chimney rocks situated on top of a layer of mottled orange, dark brown, black ash and charcoal at 19 cm dbd. Most of the rocks were located on the north and west sides of the unit. The unit was excavated to 31 cm dbd. No artifacts were recovered from this unit but faunal remains were recovered. Due to their proximity, Chimney Feature 1, 4 and 5 may all be part of the same feature or part of the same building structure.

Chimney Feature 5

This is a 1 x 1 m unit situated partially on a slope and partially on a depression and is located less than 1 m southwest of Chimney Feature 4 (Figures 20 and 21). This feature is interesting because it allows for a better understanding of chimney construction techniques[17]. The chimney is composed of what appears to be a basalt stone firebox placed on top of a thick layer of silt. The uneven coarse chimney stones were stacked in a compound manner. No mortar or chinking,

[17] During his stop at FSII, Schwatka drew the remains of 3 chimney features. Two of the better preserved chimneys contained double-sided fireboxes with chinking and mortar (Schwatka 1893: 204-205; for a description of other northwestern fort chimney construction techniques see Burley et al. 1996: 87).

Figure 20. Chimney Feature 5, Photograph.

typical of chimney construction, were recovered from the FSI[18]. The chimney feature consists of basalt chimney rocks beginning at 14 cm dbd and continuing to 62 cm dbd, most of which are located on the north and eastern sides of the unit. There are wood beams projecting out from the walls at 29, 30, and 41 cm dbd. Bark or wood chips were present at 91 and 97 cm dbd. Charcoal was found at 32and 89 cm dbd, against the eastern wall, which is closest to Chimney Feature 4.No ash was found in this unit. A thick layer of clay was found at approximately 65 cm dbd and may have been part of the chimney construction, having been placed at the bottom of the chimney to stabilize it and presumably to stop below ground fires (see also Karklins 1983: 28). Five fragments of uncalcined bone and four fragments of orange mortar were found. No artifacts were present. Again, this feature is associated with Chimney Features 1 and 4. They may all be different portions of the same chimney.

Ash Midden 1

Ash Midden 1 is a refuse and ash midden that abuts against the exterior northeast side of Building Feature 1 (Figures 22, 23, 24). This midden contained a large portion of the artifacts recovered at FSI. Eighteen 1 x 1 m and one 1 x 0.5 m adjoining units were excavated (Figure 25). The mottled grey, cream ash and charcoal midden began at approximately 10 cm dbd and continued to 42 cm dbd. Even so, ash and artifacts were found sporadically throughout the units at 1 cm dbd. This distribution may be attributed to the movement of matrices through

[18] Excavations at FSII during the 2005 field season also uncovered basalt stones with chinking and mortar (Castillo 2006).

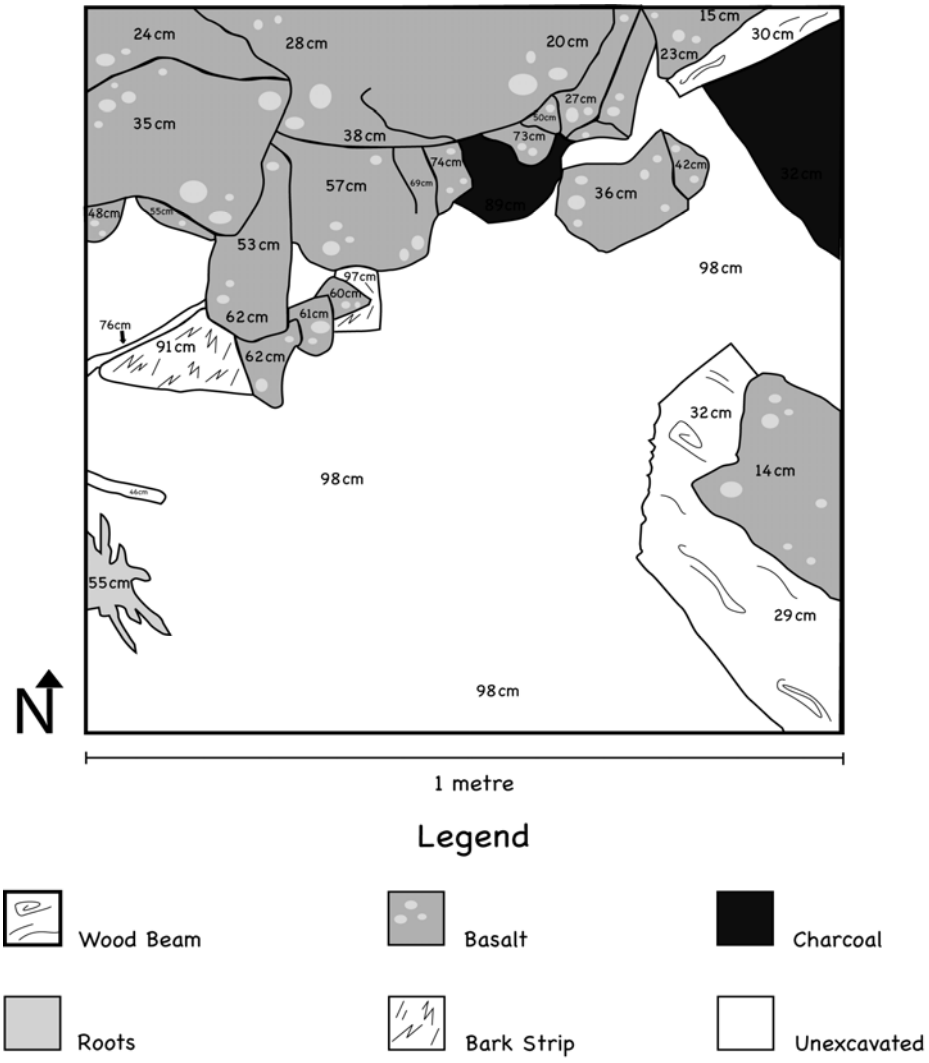

Figure 21. Chimney Feature 5, Plan View.

pedoturbation processes such as cryoturbation or through flooding episodes. The overall stratigraphy of this feature consists of six silt layers, four organic caps (including the modern surface floor), and the ash layer. Below the ash layer is a charcoal layer that may have been created when the first hot ash heap was placed on the surface floor. Smaller charcoal lenses appear throughout the ash midden layer, these are sporadic discard events. Under the ash layer in some units, there were concentrations of river cobbles deposited there by ice-push flooding events. Presumably the ash midden was created when inhabitants of Building Feature 1 disposed of their chimney ash and refuse outside the building. Due to time constraints the entire midden was not exposed.

Other attributes of note at Ash Midden 1 include a FSI era tree stump cut clean across with an axe found in unit 3 at 9 cm dbd. This indicates site clearing by the HBC fur traders. Also notable is a complete squirrel nest with a well-preserved

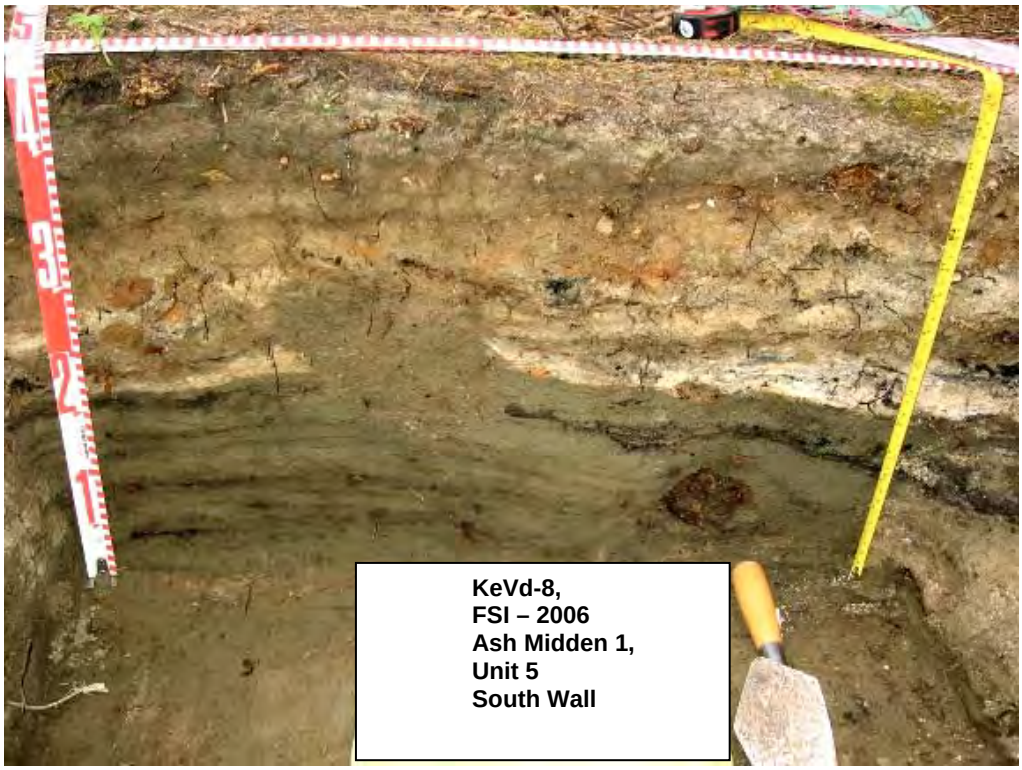

Figure 22. Ash Midden 1, Photograph of Unit 5, South Wall.

carcass still intact in unit 4 at 32 cm dbd demonstrating the possibility of faunalturbation processes at the site. Over time the ash midden accumulated a large quantity of refuse, including hundreds of artifacts and faunal remains.

Ash Midden 2

Ash Midden 2 is located directly east of a large spruce tree and sits partially underneath the roots. Originally, this was a metal find spot that was opened to a 1 x 1 m unit when half of an HBC axe-head was located within the ash layer. The stratigraphy of this unit is complex because of root disturbance. Starting at 4 cm dbd there is a mottled orange, grey ash and black charcoal layer or midden that ends at between 43 and 46 cm dbd. Within this layer is a small brown organic lens and three orange ash lenses. There was also a rodent hole at 24 to 40 cm dbd on the west side of the unit, and this was followed by four black organic caps and four grey silt layers. Another large FSI era axe-cut tree stump was found in the centre of the unit at 29 cm dbd (Figure 26). The midden contained large quantities of charcoal, burnt faunal remains as well as Fort Selkirk I era artifacts. The unit was excavated to 61 cm dbd. This midden may be associated with Building Feature 3, which is located just west of the large tree and excavation unit.

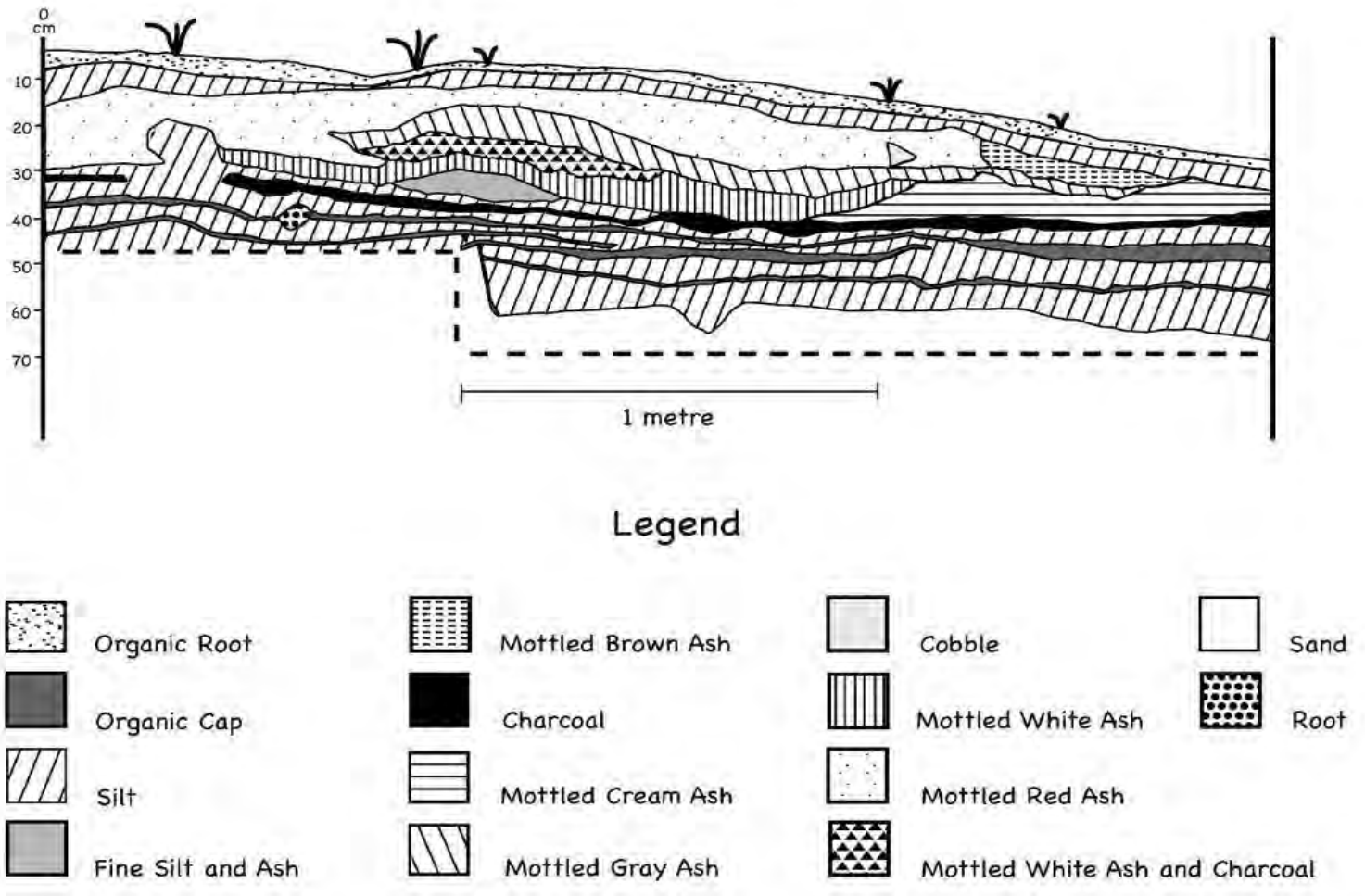

Figure 23. Ash Midden 1 Profile, Units 5, 1 and 8, South Facing.

Figure 24. Ash Midden 1, Photograph of Unit 1, North Wall.

Figure 25. Ash Midden 1, Photograph of Excavated Feature, South Facing, Fort Selkirk Era Cut Tree Stump Seen in the Centre.

Figure 26. Ash Midden 2, Photograph (including FSI Era Tree Stump).

Building Feature 1

Building Feature 1 is the remains of a building, located 17 m from the site datum (Figure 10). The building faces perpendicular to the river and may have been part of one side of a U-shaped building configuration typical of HBC forts. Chimney Features 2 and 3 were the only above-ground evidence of the building.

Twelve 1 x 1 m units (including Chimney Feature 2, units 1 and 3), two 1 x 0.25 m units and two 0.25 x 0.25 m units were excavated. All four corners of the building were opened exposing horizontal lapped principal carrying sills (foundation logs) (Figures 27, 28, 29, 30, 31). The top log had a round notched bottom (simple or keyed lap) that was laid crosswise over the bottom sill. It appears that the top log was mortised so that a vertical tenoned log or post could be inserted (Rempel 1980: 27). All the lumber used in constructing the sills appeared to have been at least partially squared.

In both the northeast and southeast corners a second log was found on the inside corner, butted against the main sill log, or sitting below the top log, running east to west (Figures 27, 28, 29). A log was found running north to south inside the building feature butted against the top sill log and the second log. These may have been used as extra support for the foundation beams.

The dimensions of the building are 10.5 m (34.5 ft) x 4.5 m (14.8 ft). The northwest corner is in an extreme state of decay (Figure 31) but the other three corners were well-preserved, particularly the southeast corner (Figures 27, 28, 29, 30). Sill features ranged in depth from 17 cm dbd to 50 cm dbd. Mottled orange and grey ash and charcoal layers were found butted against the outside western

Figure 27. Building Feature 1, Photograph of Northeast Corner.

side of the building. This deposit may be ash cleaned out from inside the building. Fort Selkirk I era artifacts were found within Building Feature 1, 5 - 50 cm dbd. It is impossible to decipher whether the popular Hudson's Bay Frame was used in the construction of Building Feature 1 as the wall logs were removed. This was a French style of cabin construction involving dove tailed keying which was superior to other forms of keying since it was self-draining and therefore less subject to rot at the corners. It became the accepted method of building trading posts and was also known as Manitoba Frame, Red River Frame, and Canadian Frame (Rempel 1980: 15).

In the south-central part of the building two units were opened. Two possible floor joists running north to south and east to west appeared at 17 to 23 cm dbd and meet in the southern end of unit 1a (Figure 32). It is difficult to determine if the joists overlap or are butted against each other. A smaller squared plank juts out of the west wall and is a possible floor joist. Other than this small plank, the building shows minimal evidence of a wooden floor.

Other wooden features include a few random scattered pieces of building debris such as small square timber fragments and wood or bark shavings scattered throughout all the units at approximately 30-35 cm dbd, directly below the sill logs. No door sills were identified in this feature. The low frequency of intact in situ structural remains indicates that the building was systematically dismantled and moved to the fort's new site approximately 4 km down the Yukon River. It is likely that sill logs remained at Fort Selkirk I because they would have been frozen in early spring when the fort was moved and had already started decomposing.

Figure 28. Building Feature 1, Photograph, Southeast Corner.

Intramural stratigraphy of Building Feature 1 was obtained in unit 1a and consists of eight layers of organic caps (including the modern surface floor) containing tree branches and leaves, overlapped by 8 layers of river silts. A charcoal lens appears between 23 cm and 34 cm dbd. This lens is at the same level as the bottom of the squared wood plank jutting out from the west wall between 17 and 23 cm dbd. This may be a floor joist sitting over charcoal from chimney debris.

The position of the building in respect to the Pelly River and the two chimney features found within the structure indicate that this building may have been used as a habitation for the HBC crew, otherwise known as the men's house (see Burley et al. 1996: 81-97). Stratigraphy was difficult to record as the features

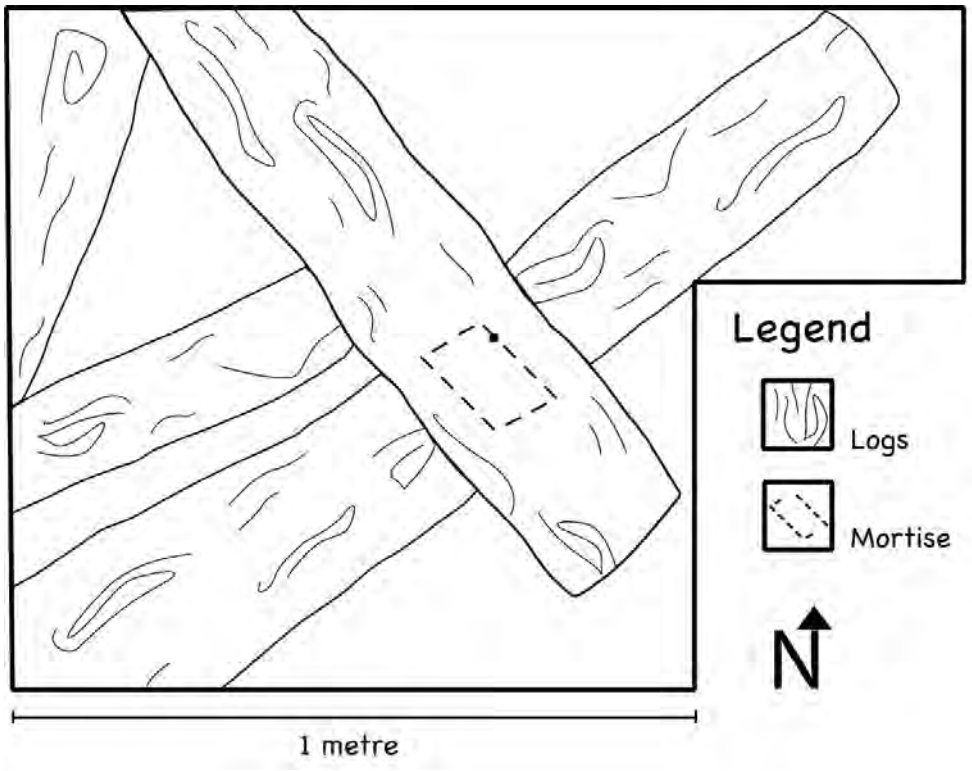

Figure 29. Building Feature 1, Plan View, Southeast Corner.

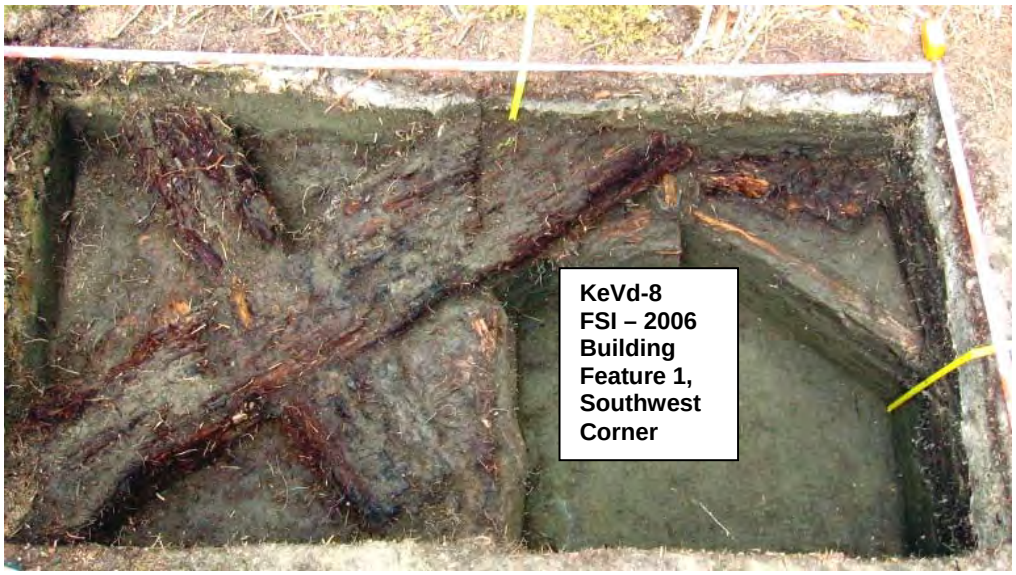

Figure 30. Building Feature 1, Photograph, Southwest Corner, North Facing.

Figure 31. Building Feature 1, Photograph, Northwest Corner, North Facing.

Figure 32. Building Feature 1, Photograph, Interior Building Floor Joists.

were left in situ. Artifacts found within House Feature 1 include ceramics, glass, copper, iron, vermillion, mortar, bone artifacts as well as faunal remains. Artifacts were primarily found between 20-30 cm dbd but as high as 10 cm dbd. Faunal and mortar remains were found as deep as 50 cm dbd.

Building Feature 2

The feature is located just east of Building Feature 1 and northeast of Cellar Feature 1 forming the far end of the U-shaped site pattern (Figures 33 and 34). Six 1 x 1 m units were excavated. Two timber beams (l. 255 cm, w. 18 cm, t. 6 cm; l. 120 cm; l. 120 cm, w. 20 cm, t. 6 cm) were found running southeast to northwest ranging in depth between 43 and 50 cm dbd. Another timber beam (l. 152 cm, w. 42 cm, t. 6 cm) was found running southwest to northeast at 16 cm dbd. The timber appears to have been processed for use in building construction as the logs have been squared. What appears to be a wood chip floor was found directly below all the beams, indicating that they were in situ and have not been moved by ice-push or other events. The wood chips could also indicate the remains of a wood-chip floor. Finally, a cut wood log appears at 32 cm dbd and was inserted into the ground. The base of the log was not found.

The overall stratigraphy of this feature consisted of approximately nine organic caps (including the modern ground cover) and nine river silt layers. Excavation concluded at 62 cm dbd. A mottled orange, brown and grey ash layers was found at 20-30 cm dbd. Artifacts were found at this level in units 3 and 4 and included copper, lithic, vermillion, and ceramic objects.

Building Feature 3

Building Feature 3 was located directly east of Cellar Feature 1. Seven 1 x 1 m units were excavated (Figures 35 and 36). A long timber beam (l. 319 cm, w. 20 cm, t. 7 cm) was found running southeast to northwest. It contained two simple, sawn laps on either end of the beam used to lap another beam horizontally across it, such as a floor joist. There were also five smaller pieces of cut timber. Wood chips were found in the southeast corner. Two fragments (l. 22 cm, w. 17 cm, t. 6 cm; l. 25 cm, w. 19 cm, t. 6 cm) were stacked on a larger piece (l. 62 cm, w. 20 cm, t. 7 cm). One piece projected out of the unit 2 south wall and another came out of the east wall. Wood chips were found sporadically throughout the opened feature at between 28 and 42 cm dbd and sat directly below the large wood beam indicating that the beam is in situ. Again, the timber appears to have been processed for use in building construction as the logs had been squared. The general stratigraphy of the feature consists of seven organic caps (including the modern ground cover) and seven river silt layers. Excavation of the feature concluded at approximately 80 cm dbd. Artifacts were found throughout the feature at 12 to 25 cm dbd and interestingly included a large quantity of window glass as well as copper, clay pipe remains, lead, vermillion, lithic and mortar fragments. Faunal remains were also present.

Figure 33. Building Feature 2, Photograph, West Facing.

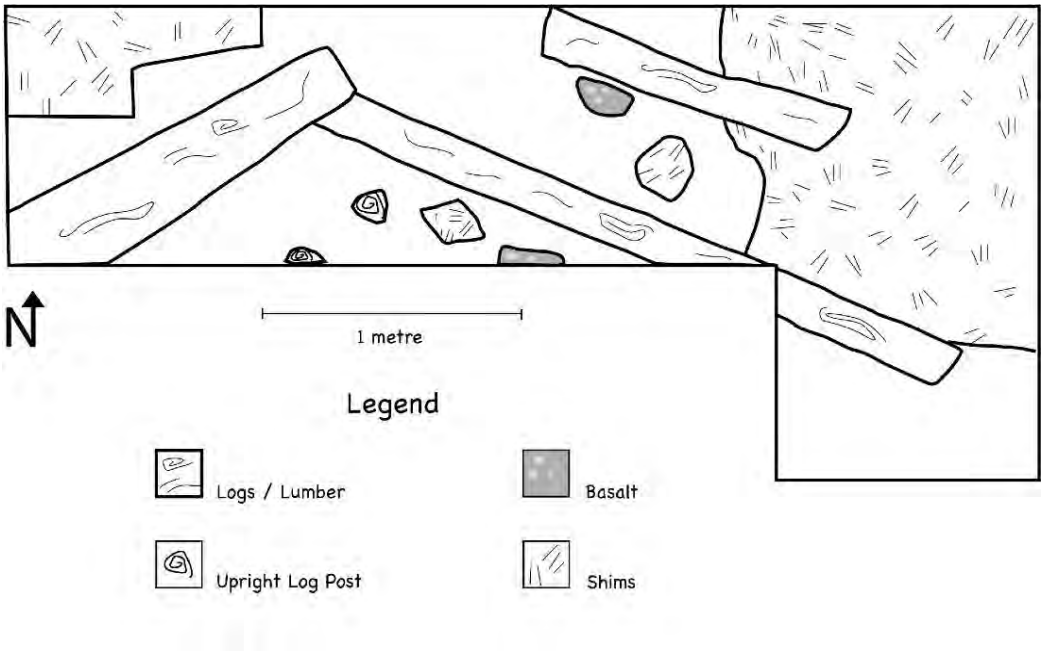

Figure 34. Building Feature 2, Plan View.

Figure 35. Building Feature 3, Photograph, West Facing.

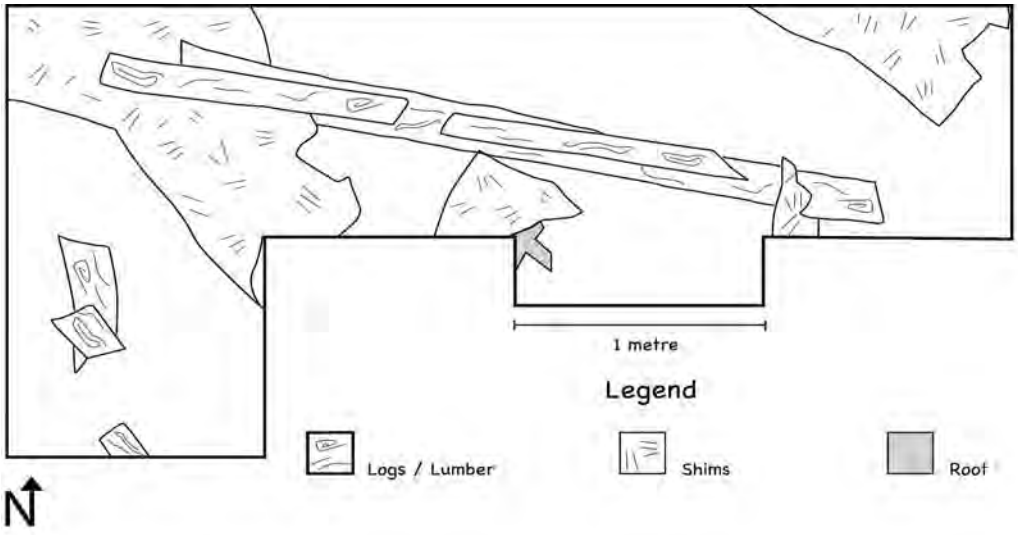

Figure 36. Building Feature 3, Plan View of Units 1 through 7.

This feature may be associated with Building Feature 2. If this is one large building, it may be the clerk's quarters as that building is typically the building situated at the back of the site facing towards the river and is typically the largest of all the buildings at the fort. The clerk's quarters were "the symbolic centre of the post, being used to accommodate the clerk and to entertain high ranking visitors" (Burley et al. 1996: 86).

Palisade Shovel Tests

Two possible partial palisade posts were found approximately 17 m northeast of the central datum (Figure 10). These posts may have been part of the easternmost fort barricade at one time. One of the posts was removed and appears to have been cut flat at the bottom with an axe. The post (l. 49 cm, dia. 14 cm) was buried 73 cm deep. The second post was found 3 m southeast of the first and was not removed. No other posts were found and the missing posts may therefore have been salvaged by the traders and used in construction of Fort Selkirk II.

A small 1 x 2 m trench was placed south of the second post and was excavated to 40 cm dbd. Faunal remains, a fragment of slate and charcoal, ash and mortar fragments were found at 15-20 cm dbd, indicating that this level was concurrent with the FSI era. As the two palisade posts were 3 m or 10 ft apart, three 1 x 1 m test units were place at 10 ft intervals southeast of the southernmost post. A wood plank cut in a similar fashion to the long beam found in House Feature 3 was found in unit 4 coming out of the north wall with the grain running north to south at 17 cm dbd. Due to time constraints, the unit was not opened further. Because of the beam's location, it may be associated with House Feature 2.

Discussion

To complement the foregoing details of methodology and general findings, a consideration of the significance of these findings for the analysis and interpretation of material remains follows. These concern (1) minimal evidence of Indigenous occupation at KeVd-8, and (2) pedoturbation and alluvial processes of the excavated site deposits.

As a means of interpreting HBC and Northern Tutchone era use of the Fort Selkirk I locality, feature remains and their use must be identified. Determining who produced the material culture, in this case features, found at the site and their locations in relation to the fort's boundaries may assist in understanding the extent to which the Northern Tutchone interacted with the HBC fur traders. Yet, there was no feature or stratigraphic evidence of an Indigenous Pre-contact or Indigenous contact period occupation of the FSI locality. In fact, other than within a few features (e.g., Ash Midden 1), stratigraphy did not play a large role in the identification of cultural layers and location of HBC era artifacts. This is due in part to the short time span of the HBC occupation at FSI and also in part to the repeated flooding events and discontinuous permafrost heaving that occurred at the site. Some features and artifacts appear to have been moved after the HBC occupation.

For this reason, vertical layers in the artifact analysis will typically be collapsed meaning that each feature will be considered as a whole rather than analyzing individual layers. The reason for this approach is that the clustering of materials at 20-40 cm dbd in all the areas indicates that this zone reflects the 19th century ground surface. Yet, the fact that these items cluster rather than occur exclusively there indicates vertical shifting (the movement of artifacts above 20 cm and below 40 cm dbd). Since artifacts are more likely to have moved relatively short distances horizontally compared to the number of "levels" through which they might have migrated, more attention is placed on spatial differences across features rather than to levels within them. Few unit-by-unit data are presented here, but rather the focus is on artifact location in relation to features.

Summary

The intent of excavations at KeVd-8 was to locate and expose building features and other intramural and extramural structures at the Fort Selkirk I post and to locate evidence of contact era occupations. One building foundation, one underground cellar and one to three other possible structures were found. It appears that Fort Selkirk I was organized in a U-shaped pattern as found at other fort sites in Canada such as Fort George, North Saskatchewan River, Alberta (Kidd 1970), Victoria Post, North Saskatchewan River, Alberta (Losey 1977; Forsman 1985), Nottingham House, Saskatchewan and Alberta region (Karklins 1983), Fort St. Johns, Peace River, British Columbia (Burley et al. 1996: 81-97), and Rocky Mountain Fort, Peace River, British Columbia (Burley et al. 1996: 49-65).

Importantly, the fort layout appears to have taken up minimal space across the site. This pattern is standard for a remote fort built in the boreal forest, where having a small contingent of men and living in extremely low temperatures would have made fort construction and heating difficult. A small fort would have taken less time to build and buildings would have stayed heated longer (Pyszczyk 1992). Even so, it appears that few traders were permanent residents of the fort for long periods of time, particularly those with families. Fort hunters and their families, perhaps out of necessity, lived away from the post possibly at good hunting and fishing localities. People may have also lived away from the fort because of the reoccurring flooding events that occurred there.

Although FSI was occupied for only four years, there was a range of mid-19th century material culture. Material culture appeared in the form of building and chimney features as well as artifacts, the latter being most prevalent directly behind House Feature 1, in Ash Midden 1. The cultural remains detected through surface collection and full excavation provide data for interpreting HBC residential life, trade practices and interaction with Northern Tutchone people. There was little cultural stratification, meaning that artifacts and features were found at different levels throughout the site, a result of pedoturbation and fluvial processes and possibly of the fort dismantling processes.

Overall, the features indicate a variety of activities and purposes. A large cellar feature suggests a storage area for meats. A maximum of five chimney features

indicate that residential dwellings were present at Fort Selkirk I. Two to three ash midden features demonstrate the dumping of refuse outside of building structures and the processing of large quantities of bone. One definite building structure and two other possible building features again indicate that dwellings were present at the site and that lumber building materials were processed prior to their use. All the feature evidence is consistent with Campbell and Stewart's journal descriptions of building Fort Selkirk I.

As detailed in the following chapters, there was an average quantity of common 19th century HBC artifacts found within the fort (particularly in Ash items were found along with a nominal number of artifacts strongly associated with Indigenous lifeways such as lithic tool fragments, and incised bone. Thousands of small calcined bone fragments, typically the result of bone grease Midden 1) including ceramic wares and pipe fragments, metal objects such as brass buttons and lead shot, glass beads, bottle fragments, and textiles[19]. These extraction, were also found[20] (for a description of bone marrow, fat and grease extraction see Burley et al. 1996: 57; for an ethnographic description of marrow and grease extraction by women in Old Crow, Yukon see Leechman 1951: 355). Local lithic material such as debitage and retouched flakes as well as faunal artifacts and remains are strongly linked to an Indigenous presence at Fort Selkirk in the mid-19th century. Yet, no Indigenous brush camps were identified.

All the available evidence indicates that the features and many of the artifacts recovered through excavation were deposited primarily by HBC employees and their families who lived and worked at the fort. However, this is not the case with the faunal remains which will be described in more detail in a later chapter. These items and deposits undoubtedly held key roles in the HBC fur traders' social, domestic and working relations at Fort Selkirk I. As will be demonstrated in future chapters, material remains reveal not only the limitations imposed on the fur traders because of their remote location and lack of access to goods, but also the social and economic negotiations that occurred at Fort Selkirk amongst the HBC and local Indigenous traders.

[19] Heinz Pyszczyk's study of variability in ceramic diversity over time indicates that forts which existed for less than ten years had an average of eight to ten Spode-Copeland ceramic patterns. His conclusion is that there is a relationship between artifact diversity and site occupation length (Pyszczyk 1984: 67-68). The FSI site contained three identifiable patterns which is less than average for a fort occupied less than ten years.

[20] Bone grease provisioning was a labour-intensive activity that resulted in the production of large quantities of pemmican needed by the fort crew and local people, particularly when traveling (Burley et al. 1996: 57).

Chapter 7: Material Culture Descriptions

Historical archaeological explorations of contact period encounters between Euro-Canadian and Indigenous people have involved the study of both mass-produced European objects and regionally produced Indigenous artifacts and their use by both groups. Typically, the ratios of Indigenous to non-Indigenous material culture are used to determine the level of contact or acculturation that has occurred in a particular culture contact setting (Morlan 1972; Quimby 1966). As Lightfoot et al. state "these studies depicted passive and unidirectional models of acculturation, and they were unable to distinguish complex social processes underlying the synergism of multi-ethnic interactions" (Lightfoot et al. 1998: 200).

Archaeological excavations at Fort Selkirk I were undertaken to study socio-economic negotiations between HBC employees and Northern Tutchone at the time of first contact; negotiations that were carried out through agentic practices. The recovery of ceramic, glass, metal, lithic, shell, textile, wood and bone artifacts within an Early Contact Period fort context allows an access into an examination of Euro-Canadian influence on Indigenous lives and choices and integration of foreign material culture (for another example of Indigenous-European interaction during the contact period fur trade see Gullason 1990). Alternatively, material culture studies can provide information into Euro-Canadian adoption of Indigenous material culture, particularly in a remote sub-arctic environment. Finally, material culture can support historical data in identifying people who participated within the fort and Indigenous spheres, be they Euro-Canadian, Métis, and Indigenous fort employees or local Indigenous traders such as the Northern Tutchone.

General Remarks and Classification

Collection Overview

This chapter presents the description and analysis of material remains recovered from Fort Selkirk I during the 2006 and 2007 excavations. The artifacts are assigned to eight functional classes or complexes: Indigenous-Use Complex, Architectural/Construction Complex, Arms/Ammunition Complex, Clothing Complex, Household/Culinary Complex, Medicine Complex, Metal Working Complex, Personal Use Complex, and Storage/Transportation Complex (for a description of historical archaeology classificatory systems see Sprague 1981). Objects that could not be identified, or whose function was not evident, were placed in a ninth, Untyped Complex that includes (Metal, Glass, Wood and Miscellaneous). This classification technique was done because it is believed that the collection is suitable for more sophisticated treatment than that of using only

material as the primary criterion for classification. In total 971 artifacts were recovered during excavation of FSI[21].

The first order of organization separates Indigenous use artifacts, most of which were produced locally, and manufactured objects of the Euro-Canadian culture, most of which were imported. Indigenous-Use artifacts are not numerous, and have been grouped by the material. The Indigenous-Use complex has an additional subcategory, Indigenous-Use artifacts made from European materials that are functional equivalents to Indigenous objects. This subcategory represents material recycling or object *recontextualization* (see Thomas 1991: 5) and as such can make classifying the recycled object difficult. Clark points out that recycling can present classification difficulties since the original item can belong both to the original functional category and to the recycled category (1995: 94). Other difficulties with this classificatory system include determining whether an Indigenous-Use artifact was created by a local Indigenous person or an HBC employee.

Indigenous-Use Artifacts

Indigenous-Use Complex

Artifacts in this category are made from locally or regionally available lithic, faunal, wood, and shell material as well as European iron. These items may have been manufactured at Fort Selkirk I or they may have been brought in and discarded by visitors. In all likelihood, these items were created by Indigenous people but again, determining who made the artifact is difficult. Numerous Indigenous groups visited FSI and the HBC employed non-local Indigenous and Métis people and their families (Campbell and Stewart 2000). As previously mentioned, Campbell and Stewart recorded the following visitors to Fort Selkirk: Northern Tutchone, Han, Kaska, Chilkat and others from near the coast (2000). The artifacts found at FSI correspond to other Contact Period implements found in Yukon but stylistically they are so generalized that they could be from a broad time range (Debrowolsky and Hammer 2001; Hammer and Thomas 2006; Le Blanc 1984; Thomas 2003; Workman 1978). Even so, there were no Pre-contact deposits noted and many of the artifacts were found near the surface or within Fort Selkirk I era middens.

Lithic Artifacts (Local Material)

The local material lithic artifacts recovered from FSI all appear to be either Late Pre-contact or contemporaneous with the post occupation. Thirty-two Indigenous-produced lithic artifacts were recovered from FSI. The artifacts in this category includes flake and core shatter, retouched flakes, a tci-tho, split cobble, core fragments, core shatter, a piece of edge ground stone, end scrapers, hide scraper, split pebble and pièce esquillée implements. These are made of agate,

[21] Linda Gullason's excavations at similarly sized Fort George-Buckingham House site plantation contained a similar number of artifacts (N=597) (Gullason 1990: 196).

chalcedony, chert, quartz, quartzite, slate and other siliceous material (Table 15; Figure 37).

Core Fragments (N=2)

Cores are those masses of stone that serve as objective pieces for detaching flakes or are intended for further reduction to make formalized tools (Andrefsky 1998). There are two unidirectional core fragments in the collection both of which have small amounts of cortex indicating early stage core reduction. Unidirectional core fragments are those that have a single striking surface with all detachments trending in the same direction away from the platform. Raw materials include quartz and chert (Table 15; Figure 37).

Core Shatter (N=5)

Core shatter is non-flake debitage such as cubical shatter that includes debris that is non-orientable, or lacking recognizable ventral and dorsal surfaces (Table 15; Figure 37). There are five core shatter specimens in the collection. All five have visible cortex which indicates possible early stage core reduction. Raw materials include quartz (n=1), quartzite (n=3) and chert (n=1) (Table 15; Figure 37).

Flakes (N=3)

A flake includes all debitage with a discernible point of applied force or striking platform (Andrefsky 1998: 81). Three flakes were found at Fort Selkirk I (Table 15; Figure 37). Raw materials include quartzite (n=1), and chert (n=2). A local source of grey chert is found in the Tatlmain region of Central Yukon (Thomas 2003: 41).

Flake Shatter (N=7)

Flake shatter includes all flake debitage with no recognizable striking platform (Andrefsky 1998: 81-83). There are seven flake shatter fragments in the collection (Table 15; Figure 37). Materials include chert (n=4), quartz (n=2), and quartzite (n=1). A local translucent amber and brown agate source is found at Murray Creek waterfall, northwest of Carmacks Village in Central Yukon (Gotthardt and Hare personal communication 2009).

Retouched Flakes (N=2)

There is one grey chert flake that has minimal retouch along both ventral lateral margins. Another example is composed of chalcedony and has retouch on the right ventral and left dorsal edges (Table 15; Figure 37). White chalcedony is available in small nodules in the hills west of Carmacks village in central Yukon (Thomas 2003: 41). No wear is evident on the edges of these flakes.

End Scrapers (N=3)

There are three possible end scrapers in the Fort Selkirk I collection. Le Blanc describes this class of artifact as consisting "of simple flake blanks which have gone through a stage of primary trimming and have one or more marginally retouched unifacial edges..." (1984: 152). Following Clark, end scrapers are divided into two categories, "those with pronounced intentionally formed, flaked bevels and those with light retouch of the edges which may have resulted from utilization of the unshaped flake" (1995: 153). The FSI collection contains two of the former (657, 962) and one of the latter (1857). They are composed of chert material (Table 15; Figure 37).

Tabular Hide Scraper or Tci-tho (N=1)

The tabular hide scraper is composed of slate material (see Clark 1995: 155). These stone slab implements are also called tabular bifaces, and tci-thos, and are found and used in the Western Subarctic and in parts of the Arctic. Le Blanc defines this implement as consisting of "pieces of tabular raw material which have been bifacially retouched along all or portions of their margins" (1984: 276). They are used for processing caribou, moose and other large mammal hides (an ethnographic description of stone hide scraper use by the Northern Tutchone can be found in Legros 2007: 366). According to Clark they create a suede-like surface during an advanced stage of the tanning process (1995). They typically have a straight back and curved edge that extends upward at each end to meet the back. Flaking of this specimen is limited to rough retouch and blunting on the concave edge (Table 15; Figure 37).

Stone Wedge (N=1)

There is one stone wedge, possibly a pièce esquillée, in the collection (Table 15; Unit 37). The item is composed of chert. Pièces esquillées are also called bipolar cores (see Le Blanc 1984: 183; 1991). Le Blanc characterizes these artifacts as being "flake based lithic specimens which have opposed battered margins or battered margins opposite flat surfaces which may be platforms or basal areas" (Le Blanc 1984: 183-185). Andrefsky believes that bipolar technology is a method used to maximize lithic raw material (1994: 388). The technique is also a way of obtaining useable cutting edges from small objective pieces, and recycling raw materials that have already been made into artifacts (Parry and Kelly 1987). It is also believed that bipolar or pièces esquillées objects were used as wedges for splitting wood and bone (Gramly and Rutledge 1981; Lothrop and Gramly 1982; MacDonald 1968). Yet, Le Blanc comments that "there is no compelling reason to conclude that the presence of pièces esquillées always signifies bone/antler working" (1991: 11).

Artifact Type	Cat. #	Description	Provenience
Core Fragment	937	unidirectional core fragment, 25-50% cortex visible, dark grey quartzite (l. 26.0 mm, w. 21.5 mm, t. 0.7 mm, wt. 4.16 g) (Fig. 37a)	House Foundation 1, Unit 6, 20-25 mm dbs
	1509	unidirectional core fragment, 25-50% cortex visible, grey chert (2.0 mm, w. 23.0 mm, t. 8.0 mm, wt. 3.3 g) (Fig. 37b)	Ash Feature 1, Unit 13, 0-10 mm dbd
Core Shatter	285	core shatter, possibly early stage reduction, 0-25% cortex visible, white quartz (l. 53.0 mm, w. 34.0 mm, t. 19.0 mm, wt. 35.21 g) (Fig. 37c)	Ash Feature 1, Unit 3, 7 mm dbs
	596	core shatter, possibly early stage reduction, 0-25% cortex visible, dark grey chert, 22.0 mm long (1. 22.0 mm, w. 21.0 mm, t. 15.0 mm, wt. 4.51 g) (Fig. 37d)	Metal Detector, ST 10, 10-15 mm dbs
	685	core shatter, possibly early stage reduction, 0-25% cortex visible, white quartz (l. 35.0 mm, w. 28.0 mm, t. 27.0 mm, wt. 22.66 g) (Fig. 37e)	Metal Detector ST 63, 10-15 mm dbs
	1507	core shatter, primary flake, grey coarse grain quartzite, 0-25% cortex visible (1. 30.0 mm, w. 28.0 mm, t. 4.0 mm, wt. 3.29 g) (Fig. 37f)	Ash Feature 1, Unit 13, 0-10 mm dbd
	1508	core shatter, 0-25% cortex visible, grey quartzite (l. 60.0 mm, w. 31.0 mm, t. 9.0 mm, wt. 3.29 g) (Fig. 37g)	Ash Feature 1, Unit 13, 0-10 mm dbd
Flake	430	flake, visible platform, 25-50% cortex visible, dark grey quartzite (l. 31.0 mm, w. 22.0 mm, t. 4.0 mm, wt. 2.36 g) (Fig. 37h)	Ash Feature 1, Unit 6, 10 mm dbd
	1133	flake, partial platform visible, distal end present, 0-25% cortex visible, light grey chert (l. 36.0 mm, w. 16.0 mm, t. 7.0 mm, wt. 3.19 g) (Fig. 37i)	Transect Shovel Test Unit 10N 20E, 22 mm dbs
	1555	flake, visible platform, bulb of force visible on ventral side, signs of flake removal on dorsal side, light grey chert (l. 13.5 mm, w. 11.0 mm, t. 3.0 mm, wt. 0.31 g) (Fig. 37j)	Ash Feature 1, Unit 14, 10-20 mm dbd
Flake Shatter	70	flake shatter, 0-10% cortex visible, dark grey quartzite (l. 16.0 mm, w. 12.5 mm, t. 2.0 mm, wt. 0.32 g) (Fig. 37k)	Ash Feature 1, Unit 2, 19 mm dbd
	640	possible flake shatter, 0-10% cortex visible, white quartz (l. 9.0 mm, w. 9.0 mm, t. 4.0 mm, wt. 0.50 g) (Fig. 37l)	Metal Detector ST 41, 20 mm dbs

	658	flake shatter, 0% cortex visible, dark grey chert (l. 12.0 mm, w. 7.0 mm, t. 3.0 mm, wt. 0.18 g) (Fig. 37m)	Metal Detector ST 46, 19 mm dbd
	896	flake shatter, 0% cortex visible, dark grey chert (l. 8.5 mm, w. 6.0 mm, t. 4.0 mm, wt. 0.18 g) (Fig. 37n)	House Foundation 1, Unit 4, 20-25 mm dbd
	1362	flake shatter, 0% cortex, dark grey chert (1. 29.0 mm, w. 13.0 mm, t. 3.0 mm, wt. 0.74 g) (Fig. 37o)	Ash Feature 1, Unit 10, 10-15 mm dbd
	1400	flake shatter, 0% cortex, orange agate (l. 16.0 mm, w. 4.5 mm, t. 4.5 mm, wt. 0.56 g) (Fig. 37p)	Ash Feature 1, Unit 11, 10-20 mm dbd
	1653	flake shatter, 0% cortex, light grey chert (l. 18.0 mm, w. 9.0 mm, t. 4.0 mm, wt. 0.77 g) (Fig. 37q)	Ash Feature 1, Unit 15, 20-30 mm dbd
	1885	possible flake shatter, 0% cortex, white quartz (l. 13.0 mm, w. 5.5 mm, t. 2.0 mm, wt. 0.17 g) (Fig. 37r)	Chimney Feature 5, Unit 64, 40-45 mm dbd
Retouched Flake	1017	retouched flake, 0% cortex, white translucent chalcedony, retouch along dorsal and ventral edges (lateral, proximal and distal ends) (l. 20.0 mm, w. 21.0 mm, t. 5.0 mm, wt. 2.78 g) (Fig. 37s)	Metal Detector ST 15, 13 mm dbd
	1314	retouched flake, 0% cortex, grey chert, minimal retouch along ventral lateral margins (l. 25.5 mm, w. 15.0 mm, t. 4.0 mm, wt. 1.69 g) (Fig. 37t)	Ash Feature 1, Unit 10, 10-20 mm dbd
End Scraper	657	end scraper, 0-10% cortex, dark grey chert, distal end of scraper present, very rough (l. 26.0 mm, w. 13.0 mm, t. 9.0 mm, wt. 2.77 g) (Fig. 37u)	Metal Detector ST 46, 19 mm dbd
	962	end scraper, 0% cortex, light grey chert, distal end of scraper present, retouch on the distal end, bevelled edge, very smooth (l. 16.0 mm, w. 16.0 mm, t. 8.0 mm, wt. 2.02 g) (Fig. 37v)	House Foundation 1, Unit 6a, 30 mm dbd
	1857	end scraper, 100% cortex on dorsal side, grey chert, very rough, retouch on ventral distal edge (l. 29.0 mm, w. 20.0 mm, t. 9.0 mm, wt. 5.71 g) (Fig. 37w)	Palisade ST 14, 15 mm dbs
Tabular Hide Scraper	1225	tabular hide scraper, dark grey slate, straight back edge, rough retouch and blunting at concave edge, the artifact measures l. 104 mm, w. 58 mm, t. 0.5 mm (Fig. 37aa)	Palisade Trench 1, Unit 1, 17 mm dbs

Stone Wedge	1356	stone wedge, possible pièce esquillée, 0% cortex, light grey chert, crushing on distal, proximal and lateral edges, bifacial flaking seems to be purposeful (l. 21 mm, w. 21.0 mm, t. 6.0 mm, wt. 2.96 g) (Fig. 37x)	Ash Midden 1, Unit 10, 0-10 mm dbd
Edge Ground Stone	1688	edge ground stone, 100% cortex, dark grey quartzite, flat with latitudinal groove striations on concave edge (l. 93.0 mm, w. 27.0 mm, t. 6.5 mm, wt. 26.51 g) (Fig. 37z)	Ash Midden 1, Unit 16, 10-20 mm dbd

Table 15. Lithic Artifacts (Local Material) Number, Description and Provenience.

Edge Ground Stone (N=1)

There is one edge ground stone artifact in the collection (see Le Blanc 1984: 290). The stone, made of quartzite material, is flat, convex on one side and concave on the other (Table 15; Figure 37). The concave edge has latitudinal groove striations. Possible uses include an abrader or a whetstone for sharpening bone and metal tools.

Pebbles and Cobbles (N=20)

The pebbles and cobbles found at the site are not artifacts but given the characteristically silty ground at Fort Selkirk I it is assumed that they were intentionally brought in by humans. Ice-jam pushing may have also brought them in but the pebbles and cobbles would likely be located in discrete group deposits and this was not the case with the specimens collected. There are 20 pebbles and cobbles including one split cobble and one split pebble. Materials include chert (n=1), quartz (n=10), quartzite (n=7), pyrite (n=1) and slate (n=1) (Table15; Figures 37y and 37bb).

Fire Cracked Rock (N=19)

There are 19 fragments of fire cracked rock (FCR) in the collection. These have been deliberately over heated resulting in splitting. Only some of the rocks were associated with hearth features.

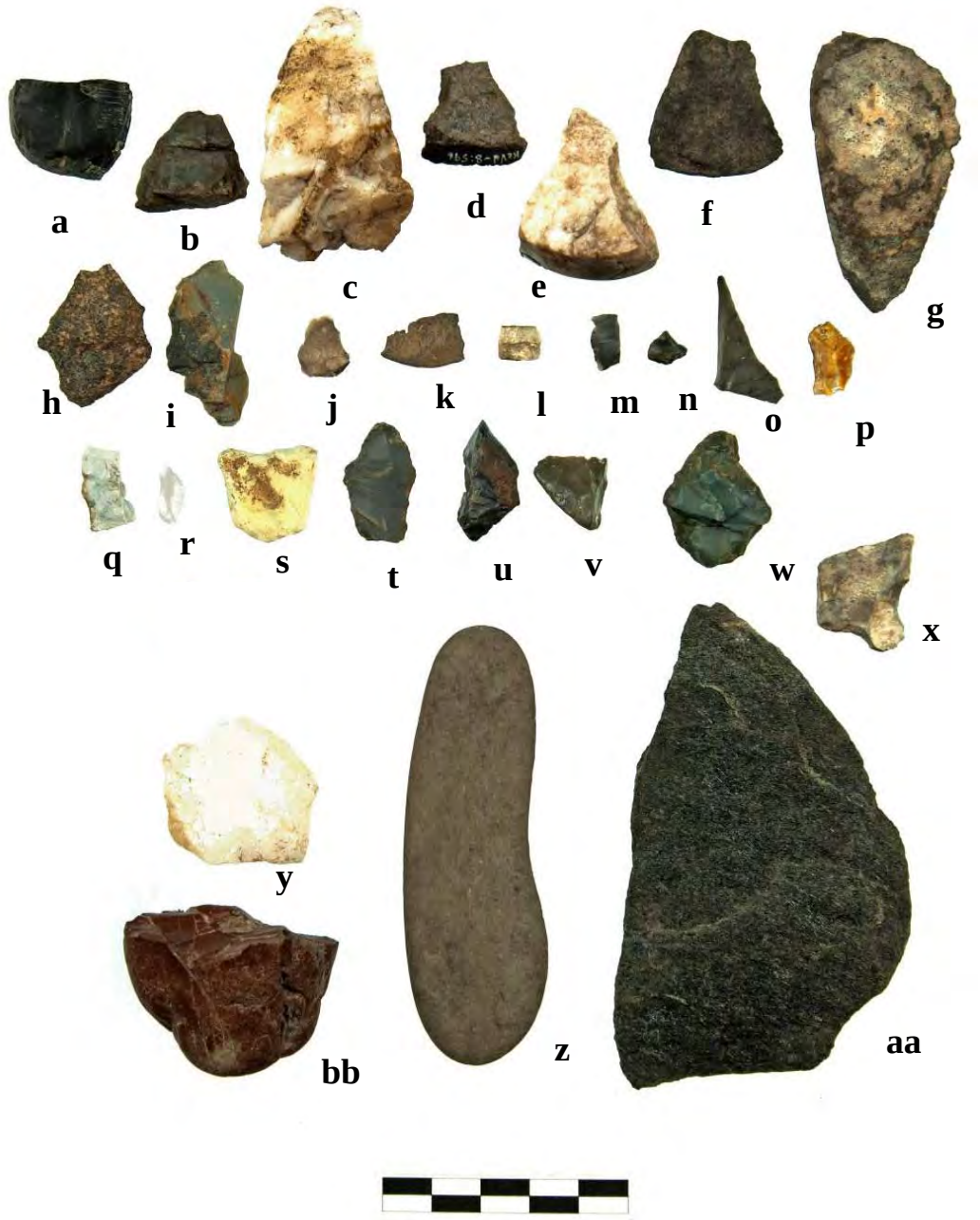

Figure 37. Lithic Artifacts[22].

[22] All artifact photographs in Chapter 7 are used with permission of Yukon Government.

Bone and Antler Artifacts

Thirty-one bone and antler artifacts were recovered from Fort Selkirk I (Figures 38, 39, 40, 41, 42). These include two bilaterally barbed antler points (see Le Blanc 1984: 321, and Clark 1995: 95), three to four bone beamers, a polished bone creaser, an insert tool, a retouched bone, various unidentified bone tools and objects, a worked bird bone tube, a worked porcupine incisor, and a possible antler wedge. There are two decorated specimens. The first is an ornamented moose scapula with an animal motif, possibly a moose, incised on the anterior side. The other specimen is a carved bird blunt that has geometric patterns incised along both the ventral and dorsal sides. These last two artifacts have particular significance because there is very little Late Pre-contact and Early Contact Period Northern Tutchone art documented (Gotthardt 2009, personal communication).

Ornamented Moose Scapula (N=1)

This ornamented moose (*Alces alces*) scapula contains cut marks along the left side of the dorsal proximal end and along the scapular spine (678) (Figures 38, 39). The distal end is missing and may have been chopped off. The ventral side contains an etched figure of an animal, possibly a caribou eating a branch (Figure 39). The artifact measures: l. 336.0 mm, w. 265.1 mm. McClellan describes Southern Tutchone use of ornamented scapulas as follows:

> A shaman may prepare special scapulae for clients who are having difficulty in getting game. To do this he draws on a scapula a picture of where the man plans to hunt or else a picture of the animal he wants to kill. He then puts the scapula in the fire. It will crack a certain way on the "map" where the game will be found… (McClellan 1975: 550)

Bird Blunt (N=1)

One carved round antler bird blunt with cross hatching running laterally down the distal half of one side was recovered (1727) (Figure 40a). The blunt has a round cross-section and striations, or hafting scores, running horizontally along the proximal margins of the shaft. Opposing sides of the shaft have been carved to form a sharp upside down V at the centre of the blunt. The distal end of the blunt comes to a four-quadrant style semi-rounded tip. The entire implement is well polished. Although partially missing, the proximal end cross section appears to be a tapered rectangular stem. The specimen has root etching. This object was a blunt used to stun birds (see Emmons 1991: 138). The artifact measures: l. 78.0 mm, w. 15.0 mm, t. 15.0 mm.

Figure 38. Decorated Moose Scapula.

Figure 39. Decorated Moose Scapula Close-Up View.

Bilaterally Barbed Antler Projectile Points (N=2)

There are two bilaterally barbed antler points in the collection. One specimen comprises the complete distal end of a point and has three pointed barbs on each side of the proximal end (haft element); part of which is missing (442): l. 58.0 mm; w. 9.5 mm; t. 4.0 mm (Figure 40b). The point has root etching on the surface. It could not be determined whether the barbs were cut with a metal implement.

The other bilaterally barbed point is partially calcined and is missing both the distal tip and proximal end (1955) (Figure 40c). A row of finely cut pointed barbs runs along each edge with the barbs being more closely spaced towards the proximal end of the shaft. Longitudinal barb lines run on both faces along the base of the barbs. Clark states that this "is a feature very widespread in northwestern North America and probably used to guide preparation of the barbs" (Clark 1995: 158). It appears that the barbs were cut with a sharp edged implement and the point was ground and polished as there are faint vertical striations running the length of the shaft. The point measures: l. 58.0 mm, w. 9.5 mm, t. 4.0 mm.

Beamers (N=4)

There are four beamer fragments from three individual implements. Beamers are split medial and lateral halves of a long bone core, typically a caribou metatarsal, which provide scraping edges (Morlan 1973: 300; for a description of beamer production see Le Blanc 1984: 321-322). The beamer was used during the hide tanning process to remove hair by scraping the skins or hides. One complete beamer specimen consists of the medial half of a left caribou metatarsal (943) (Figure 41a). The primary and secondary cutting edges appear to have been made with a metal implement creating faint diagonal striations (Le Blanc 1984: 321; Morlan 1973: 300). The cutting edges are well polished. The artifact measures: l. 265.0 mm, w. 37.0 mm, t. 16.0 mm.

The second beamer also consists of the medial half of a left caribou metatarsal; the distal end is missing (1886) (Figure 41b). The beamer has polished primary and secondary edges and faint diagonal striations indicating metal filing of the bone. The artifact measure: l. 220.0 mm, w. 38.0 mm, t. 14.0 mm.

The third artifact consists of two caribou metatarsal fragments that fit together (1956, 1957) (Figure 41c). Both the distal and proximal ends are missing. The outer cortex has been polished and contains faint diagonal striations. Only the secondary surface is present and it is highly polished. All the specimens are partially calcined. Together, the artifact measures: l. 114 mm, w. 34 mm, t. 3.2 mm.

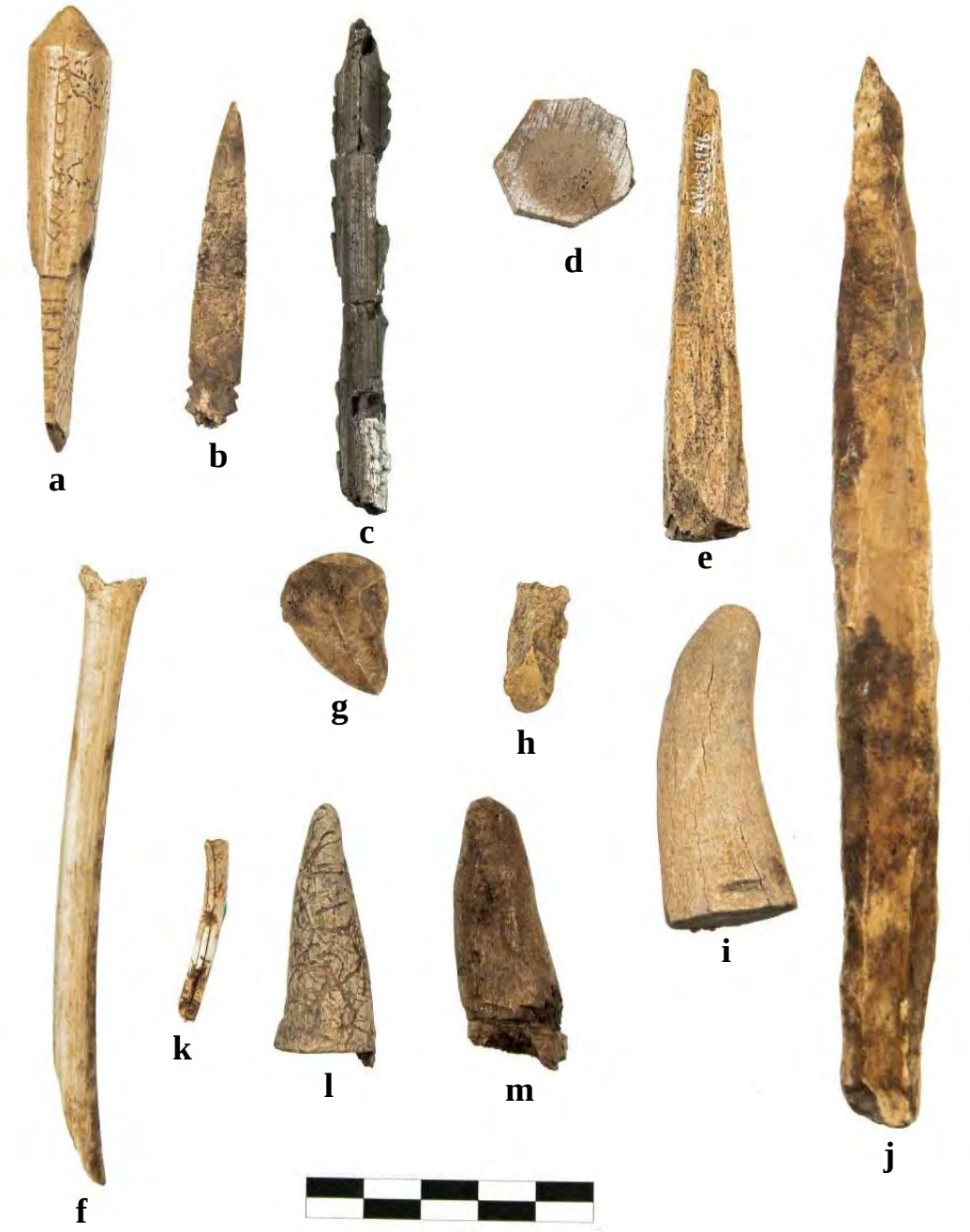

Figure 40. Bone and Antler Artifacts.

Antler Byproducts (N=3)

All three specimens appear to be transversely cut small antler tines. Artifact 1402 has a clean saw cut that was possibly sanded, at the proximal end (Figure 40i). Artifact 742 also has a clean saw cut at the proximal end and still has a small piece of antler attached at one end (Figure 40l). The last antler tine has visible chop marks at the proximal end (1700) (Figure 40m).

Bone Flakes (N=5)

All five bone flakes are the possible byproduct of butchering, or bone blank shaping. Two of the flakes have evidence of butchering fractures (1951, 1963) (Figure 40g and 40h). One of the flakes appears polished and may have been shaped (1963) (Figure 40h). All the flakes are less than 30 mm in length.

Worked Porcupine Incisor (N=1)

The worked porcupine (*Erethizontidae*) upper incisor is notched on the centre of the lingual side (1952) (Figure 40k). Also on the lingual side are two longitudinal incised grooves that may have been placed there to remove a strip of the tooth. These grooves may be decoration (see Le Blanc 1984: 330). The distal end of the tooth is damaged. This artifact may have been used on clothing, or made into a chisel-like tool. The artifact measures: l. 33.0 mm, w. 4.0 mm, t. 4.0 mm.

Worked Bird Bone (N=1)

This artifact is the right ulna diaphysis of a swan (*Anserinae*) (1953) (Figure 40f). It may be a drinking tube used by girls during puberty (for an ethnographic description of swan drinking tubes see McClellan 1975: 169; Osgood 1936: 162). There is a red stain which may be ochre along the shaft. There are vertical striations around the circumference as well as transverse nicks or cut marks. The bone is polished. Both the proximal and distal ends are missing. The artifact measures: l. 106.0 mm, d. 12.0 mm.

Bone Objects with Miscellaneous Cuts, Whittling and Polishing (N=4)

The first object is a moose metapodial (1946) (Figure 40e). The artifact exhibits a polished distal end and cortex missing from the proximal end. The edges have been worked, possibly with a metal file, and shaped into a point. This may have been a creaser. The artifact measures: l. 83.0 mm, w. 15 mm, t. 10 mm.

The second artifact is a long bone (1499) (Figure 40j). The specimen contains worked edges that appear to be chipped. The outer cortex appears partially filed. This may have been a bone implement that was never completed. The artifact measures: 1. 186.0 mm, w. 18 mm, t. 7.5 mm.

Figure 41. Long Bone Beamers.

A third specimen is a caribou left femur (1954) (Figure 42a). The artifact exhibits chop marks on the distal end and diaphysis wear on the proximal end. One edge is whittled and mildly polished. This process may have been an attempt at shaping it. The artifact measures: l. 101.24 mm, w. 30.77 mm.

A fourth bone, a moose (*Alces alces*) humerus diaphysis fragment has wear and minimal polishing on one side of the proximal end (1960) (Figure 42b). One side of the distal end appears to have crushing damage. The artifact measures: l. 137.0 mm, w. 38.0 mm, t. 31.0 mm.

Retouched Bone (N=1)

This is a long bone fragment that has been intentionally retouched on one end by percussion flaking (1947) (Figure 42c). Le Blanc states that typically "each retouched area has several overlapping flake scars which are similar to that which would be found in flaked stone" (Le Blanc 1984: 329). These features are present on this specimen. There appears to be light polish on the retouched end. It may have been used as a wedging tool for wood splitting (Gotthardt personal communication 2009). The artifact measures: l. 101.0 mm, w. 26.0 mm, t. 6.0 mm.

Transversely Cut Antler Beam Section (N=1)

This is a transversely cut antler beam section (64) (Figure 42e). The proximal end has been sawn with a metal implement. Two sides of the distal end have been chopped at an angle, which suggests cutting and snapping of a larger piece. The tip of the distal end is missing. The artifact measures: l. 71.0 mm, w. 30.0 mm, t. 27.0 mm.

Unidentified Bone Tool Fragments (N=6)

There are six unidentified bone tool fragments in the collection. The first is a large mammal bone fragment that has been crudely worked and exhibits chop marks; it is a byproduct of making something else and appears to have been chopped out of a larger bone fragment (1958) (Figure 42g). The specimen has been whittled and polished. There are vertical file striations on three sides of the fragment. The artifact measures: l. 47.0 mm, w. 14.0 mm, t. 8.0 mm.

Another possible tool fragment consists of a partially incised bone with a vertical groove along one margin (1948) (Figure 42f). The outer cortex is polished. The artifact measures: l. 35.0 mm, w. 8.0 mm, t. 4.0 mm.

There is a moose (*Alces alces*) 2nd or 5th metapodial tool fragment that has a partially polished distal shaft (1949) (Figure 42h). The distal end tapers on both sides but the tip is partially missing. The proximal half of the fragment's cortex has been worn down, partially exposing the interior cancellous tissue. The artifact measures: l. 59.0 mm, w. 14.0 mm, t. 8.0 mm.

Another bone tool fragment contains wear on both ends and appears to be battered or scraped (1966) (Figure 42i). Cortical bone is completely exposed on

one side. The artifact is polished and use wear striations are visible throughout the surface. The artifact measures: l. 50.0 mm, w. 30.0 mm, t. 1.5 mm.

A third bone tool fragment consists of a large caribou (*Artiodactyla*) metapodial fragment (1962) (Figure 42d). The bone is completely burnt black and highly polished. The specimen exhibits very small transverse scratches running across half the long bone surface; these may have resulted from the use of a metal file. Approximately one-third of the long bone diameter is present. The surface of one lateral edge appears to have been scraped. The artifact measures: l. 81.0 mm, w. 19.0 mm, t. 5.0 mm.

A small bone tool fragment contains an incised cut line on one side which runs along the narrow length of the bone (1964) (Figure 42j). This may be the byproduct of tool production. It measures: l. 15.0 mm, w. 6.0 mm, t. 5.0 mm.

Bark Artifacts

Birchbark Strip (N=2)

A large well-preserved birchbark strip was recovered within Ash Midden 1 (1872) (Figure 43a). Bark was used by Athapaskans to produce containers such as cooking pots, spoons, baby carriers and other implements (Clark 1995: 160; Legros 2007: 358; McClellan 1975: 209, 280, 311; Murray 1910: 92). There are no cut marks or holes on the specimen. The artifact measures: l. 400.0 mm, w. 160.0 mm, t. 2.0 mm. A very small curled birchbark strip was also recovered from Ash Midden 1 (1560) (Figure 43b).

Indigenous objects that may have been produced using European technology include: an ornamented moose scapula, bilaterally barbed point, three beamers, three modified antler blanks, an awl, a bone creaser, bone byproduct, bone with miscellaneous cuts, whittling and polishing and retouched bone. It is uncertain whether these objects were produced by HBC crew-members such as Indigenous or Métis staff or local Indigenous people such as the Northern Tutchone.

Euro-Canadian Material Reshaped into Indigenous Technology

Iron Artifacts

Iron Projectile Point (N=1)

There is one iron projectile point (1696) (Figure 44). It is a symmetrical triangular blade with three distal pointing barbs on each side. Two of the barbs on one side are now partially broken off. The barbs were cut with a metal implement, possibly a cold chisel. The tip of the blade is also missing. The blade has a flat uniform profile. The stem forms a point (rat-tail). Presently, four other iron projectile points have been identified in southern Yukon (Hare et al. 2008). None of these match the stylistic attributes of the iron point from Fort Selkirk. Krech notes that “there was a demand for metal arrowheads during the early fur trade era” and this may have continued into the mid-19th century, therefore identifying

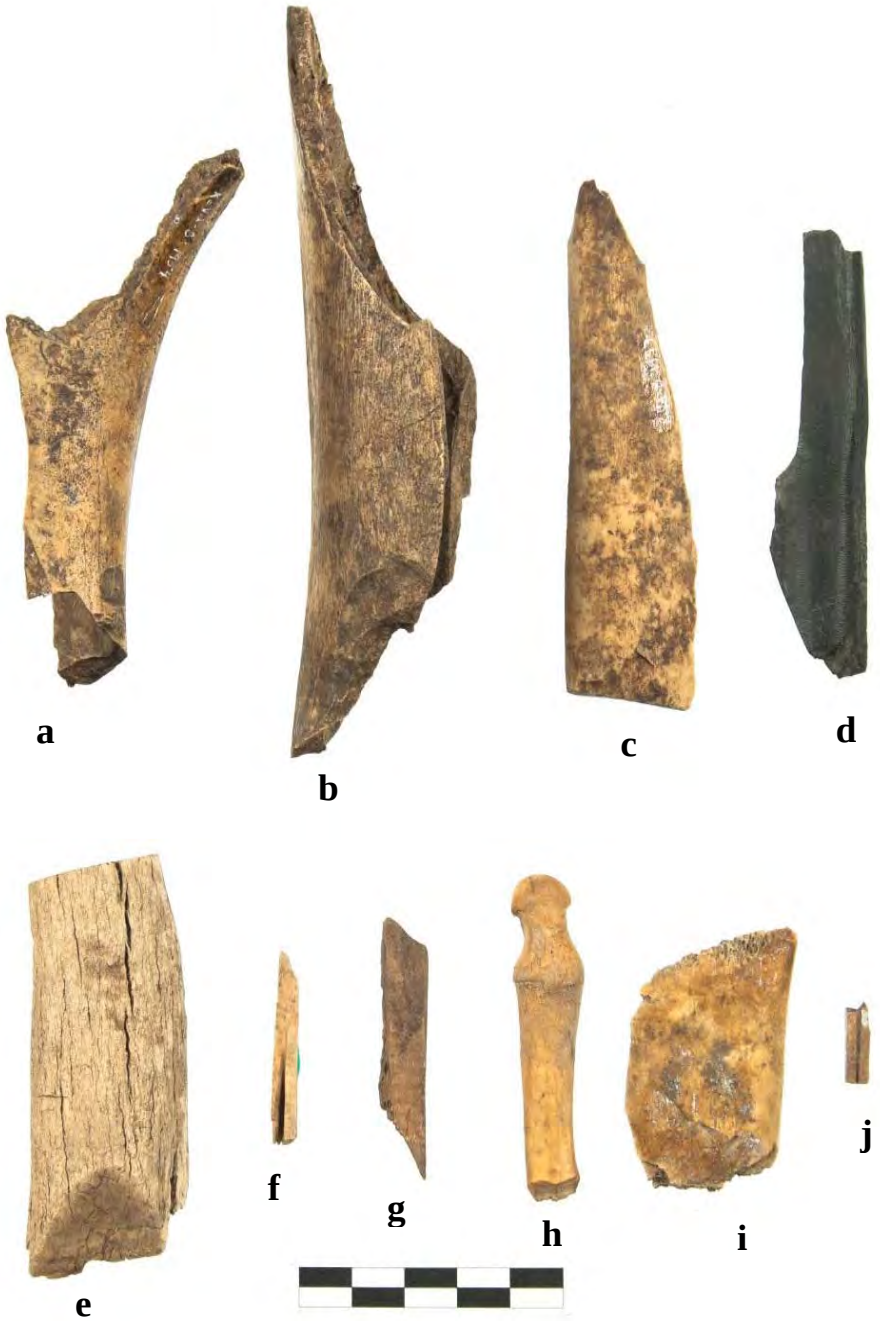

Figure 42. Miscellaneous Bone Tools and Worked Bone Fragments.

Figure 43. Birchbark Strips.

the producer is problematic (1987: 251). The artifact measures: l. 60.0 mm, w. 21.0 mm, t. 2.0 mm.

Imported European Manufactures
Arms/Ammunition Complex

Trigger Guard Fragment (N=1)

There is one possible green copper alloy ornamental trigger guard fragment (1543), probably from a pistol (see Kidd 1970: 71, Fig. 59e: 82) (Figure 45c). It appears to be hand decorated with etching on the front side. Most of the finger loop has been broken off. The backside has a projecting rectangular arm or hooked flange with a perforation through it which may have been the means of attachment to the stock. The top end of the specimen has been broken off. The remaining body is designed to resemble a column. The dimensions of this specimen are: l. 36 mm, w. 17 mm, t. 15 mm. The specimen came from Ash Midden 1.

Gunflints

The flintlock gun was introduced around 1630 (Flayderman 1998) (Figure 45). The mechanism worked by attaching the flint to a spring-loaded arm. When the trigger was pressed, a cover slid off a flash pan, then the arm snapped forward striking the flint against a metal plate over the striking surface/flash pan producing enough sparks to ignite the powder. The flintlock gun was traded by

Figure 44. Iron Projectile Point.

the HBC during the Fort Selkirk era. Witthoft notes that “the last dated lock marked for Hudson Bay that I have seen is 1873...but I believe later dates are known for... locks from the Rocky Mountain states” (1966: 38). Flintlock guns remained in use long after the appearance of percussion caps in 1820 because they were inexpensive guns that were economical to use (Witthoft 1966: 37).

The recovered gunflints appear to be of two types: blades struck from prepared polyhedral cores (blade gunflints) and individual flakes struck from irregular, unprepared cores (spall gunflints). According to Robin Torrence, blade gunflints were English in origin while spall gunflints originated in France (1986: 66-79). Flints are mentioned in the FS account records as flints, mixed flints, roach flints and pistol flints (HBCA, B.196/d/1:1-44). All but one of the flint types are made of translucent dark brown material that appears to be dark grey to black in reflected light. Artifact 1750 is a translucent brown that appears light grey with black lines running through it. The flints are of English origin as demonstrated by their dark translucent brown colour and demi-cone of percussion (Witthoft 1966: 36). French flints were made on spalls or flakes. Table 16 provides measurable blade and spall gunflint dimensions and provenience as well as unattributable gunflint data.

Blade Gunflint (N=15)

Blade gunflints are represented by 17 specimens (Table 16) (for examples see Figure 44b, ff, g, h, p, s). The flints are square to rectangular in outline and have

Type	Artifact Number	Length (mm)	Width (mm)	Thickness (mm)	Provenience	No.
blade	59	19.0	19.0	8.5	Ash Midden 1, Unit 2, 3 mm dbd	1
blade	356	21.0	12.0	7.0	Ash Midden 1, Unit 5, 20-25 mm dbd	1
blade	491	23.5	19.0	7.0	Ash Midden 1, Unit 7, 10-15 mm dbd	1
blade	1012	18.0	16.0	8.0	Metal Detector ST 15, 10-15 mm dbs	1
blade	1029	27.0	20.0	9.0	Building Feature 3, Unit 2, 12 mm dbd	1
blade	1171	22.5	21.0	7.0	Chimney Feature 2, Unit 3, 25-30 mm dbd	1
blade	1277	26.0	23.0	8.0	Ash Midden 1, Unit 9, 10-20 mm dbd	1
blade	1400	16.0	9.0	4.5	Ash Midden 1, Unit 11, 10-20 mm dbd	1
blade	1401	13.5	12.0	4.5	Ash Midden 1, Unit 11, 10-20 mm dbd	1
blade	1522	17.0	13.0	7.0	Ash Midden 1, Unit 14, 10-20 mm dbd	1
blade	1604	26.0	21.0	8.0	Ash Midden 1, Unit 15, 30-40 mm dbd	1
blade	1634	20.0	16.0	5.5	Ash Midden 1, Unit 15, 20-30 mm dbd	1
blade	1654	16.0	13.5	3.0	Ash Midden 1, Unit 15, 20-30 mm dbd	1
blade	1728	13.0	9.5	6.5	Ash Midden 1, Unit 17, 23 mm dbd	1
blade	1750	21.0	19.0	7.0	Ash Midden 1, Unit 18, 10-20 mm dbd	1
Subtotal						15
spall?	649	29.0	22.0	10.0	Metal Detector ST 44, 15 mm dbs	1
Subtotal						1
incomplete	519	11.0	9.0	2.0	Ash Midden 1, Unit 8, 25-30 mm dbd	1
incomplete	760	9.0	7.0	2.0	Hearth Feature 1, Unit 3, 0-10 mm dbd	1
incomplete	1184	10.0	8.0	3.0	Chimney Feature 4, Unit 4, 20-25 mm dbd	1
incomplete	1185	11.0	10.0	4.0	Chimney Feature 4, Unit 4, 20-25 mm dbd	1
incomplete	1278	17.0	12.0	6.0	Ash Midden 1, Unit 9, 10-20 mm dbd	1
incomplete	1408	11.0	7.0	2.0	Ash Feature 1, Unit 11, 20-30 mm dbd	1
incomplete	1527	4.5	10.0	3.0	Ash Midden 1, Unit 14, 25-30 mm dbd	1
incomplete	1583	11.0	6.0	10.0	Ash Midden 1, Unit 14, 20-25 mm dbd	1
incomplete	1695	15.0	6.0	2.0	Ash Midden 1, Unit 16, 10-20 mm dbd	1
Subtotal						9
Total						**25**

Table 16. Measurable Blade and Spall Gunflint Dimensions and Provenience.

trapezoidal longitudinal cross sections. All the flints in this category have a flat back. Three of the flints have a visible single sided front edge (59, 1029, 1277). The heel and/or sides are visible in five of the specimens (59, 356, 1604, 1029, 1277). The heels, sides and striking edges exhibit varying degrees of secondary percussion flaking performed during the knapping process. Again, with some specimens the heels and sides were knapped with the ventral faces of the flints uppermost, while the edges were trimmed with the dorsal surface turned up. As a result, some of the flints have secondary flake scars on the sides and heels of the flints, and on the underside of the striking edge. It appears that some of the flints were broken, trimmed and reused. Complete blade flints range in size between l.

10.0 mm to 29.0 mm, w. 9.0 mm to 23.0 mm, t. 5.5 mm to 10.0 mm. Flint widths measuring under 23.0 mm may be pistol flints while those measuring over 23.0 mm may be carabine (rifle or musket) flints (Karklins 1983: 145). The majority of flints were found in Ash Midden I.

Spall Gunflint (N=1)

There is one possible spall gunflint specimen (649) (Figure 45gg). The flint is rectangular and has a triangular longitudinal cross sections; it is single edged. The demi-cone of percussion is not evident on this example. The flint measures l. 29.0 mm, w. 22.0 mm, t. 10.0 mm and may be a carabine flint (Karklins 1983: 145) (Table 16). The perimeter of the flint has been trimmed in the same manner as the blade gunflints.

Unattributable Gunflint Fragments (N=9)

There are seven gunflint fragments and flakes (Table 16). These may have been exhausted flint specimens or flakes from reworking. They may also have resulted from failures during use.

Lead Shot (N=32)

There are 32 lead shot in the collection ranging in size from 3.87 mm to 4.88 mm in diameter with a mean of 4.25 mm (Figure 45j-o). Shot and ball are mentioned in the FS account records as shot, B.B. shot, and ball shot (HBCA, B.196/d/1: 1-44). The specimens are primarily of sizes such as are presently used to hunt medium-sized mammals and large-sized game birds such as fox, duck, goose and swan (Karklins 1983: 148-9). One of these specimens (1443) may be a compressed shot.

Lead Musket Ball (N=1)

There is one unused lead musket ball (1701) in the collection which fits a .55 calibre barrel and is 14.24 mm in diameter (Engelhardt 1961: 165) (Figure 45r). The ball was probably intended for use in a smoothbore flintlock musket (ibid.). The musket ball is similar in size to those found at Fort Reliance (Clark 1995: 163) Nottingham House (Karklins 1983: 148) and Fort Pelly I (Klimko 1983: 219).

Percussion Cap (N=4)

The percussion cap was introduced in 1830 and was intended to replace flintlock rifles that often misfired in wet conditions (443[Figure 45d], 458[Figure 45e], 1164[Figure 45a], 1643[Figure 45f]). The cap is a primer containing fulminate of mercury that was placed over a hollow metal “nipple” at the rear end of the gun barrel. Pulling the trigger releases a hammer which strikes the

percussion cap and ignites the explosive primer. The flame travels through the hollow nipple to ignite the main powder charge to propel the bullet (Winant 1956). The percussion caps in the collection are called *common caps* and are made of copper and have striations around the perimeter (Gooding 2003: 116). Percussion caps are mentioned in the FS account records (HBCA, B.196/d/1:1-44). They measure l. 5.0 mm to 7.0 mm, w. 5.0 mm to 6.0 mm. Two of the caps have been fired.

Cartridge Case (N=1)

There is one centrefire cartridge case in the collection (604) (Figure 45i). The headstamp reads "D.C. Co. 44-40" (Dominion Cartridge Co.). This cartridge was made for the .44 calibre Winchester repeating rifle. Designed as a rifle cartridge, the .44-40 became very popular as a handgun chambering as well. The cartridge was originally developed for the Winchester Model 1873 lever-action repeating rifle (Barnes 2006: 96), therefore it postdates the Fort Selkirk era. It was found at the surface of Metal Detector Shovel Test 17, located near the riverbank.

Bullet (N=1)

There is one 30 calibre bullet (684) (Figure 45q). The oldest .30-30 cartridge was the 30 Winchester cartridge. It was first introduced in 1895 (Barnes 2006: 56). The bullet post-dates the Fort Selkirk era.

Metal Working Complex

Cut Copper Sheets (N=20)

The cut copper sheets vary in form (Figure 46a, b, c, d, e, f, g). Three are distinctive. Artifact 599, for example, is a piece of copper alloy sheeting with a hollow centre that tapers at one end and has been deliberately flattened at one end (Figure 46a). This may be a decorative item such as a tinkling cone (for other examples of copper tinkling cones see Kidd 1970: 170, Figure 95: 185). Three other pieces of folded copper alloy sheeting have been flattened on one end, and also resemble copper tinkling cones (Figure 46d, 47a, aa). Artifact 1053 is a long strip that runs to a point and contains two nail puncture holes (Figure 47b). All the specimens in the category appear to be made of recycled imported European copper (for a description of Indigenous copper processing see Franklin et al. 1981: 20). The recycling of European copper artifacts whereby items such as copper kettles were cut and reworked into other implements has been documented at other forts (Losey 1973: 62, Figures 3-6). Copper kettles were mentioned in the FS account records (HBCA, B.196/d/1:1-44). Copper sheets vary in size from l. 14.0 mm to 64.0 mm and t. 0.5 mm to 5.0 mm. The majority of copper sheet fragments were found in Ash Feature 1.

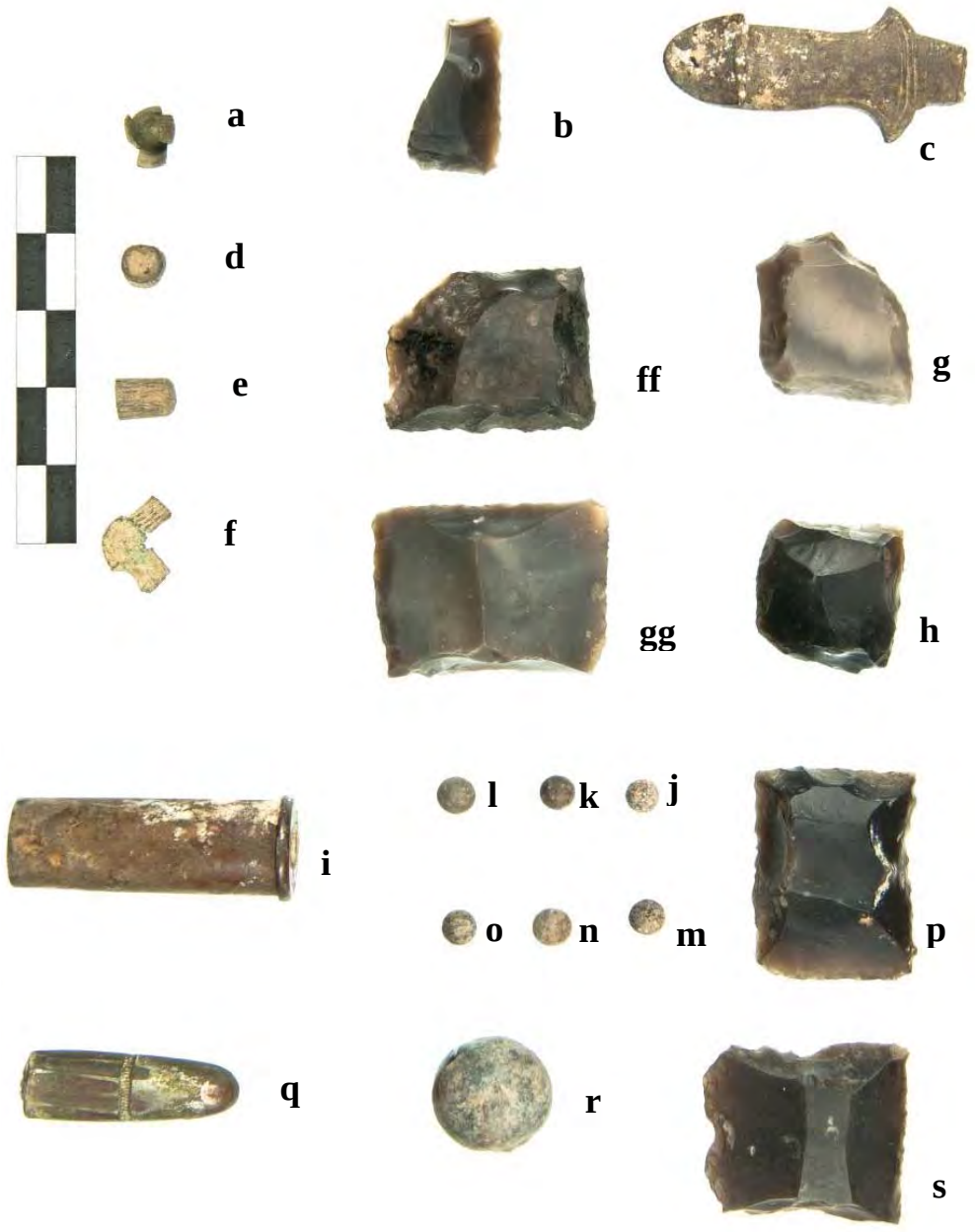

Figure 45. Arms and Ammunition Complex.

Figure 46. Cut Copper Sheeting.

Copper Bar (N=1)

There is one small copper bar that appears to have been cut on all four sides to form a square (1504) (Figure 47c). It is thicker than other copper found at the site and measures 1. 1.8 mm, w. 2.0 mm, t. 2.0 mm. The bar is of European origin. It was found in Ash Midden 1.

Cut Iron Sheet (N=9)

There are nine rectangular specimens in this category which appear to be cut scraps of iron sheet (235, 536, 673, 1427, 1715). The majority of the iron sheeting was found in Ash Midden 1. Artifacts 235 (Figure 47d) and 1715 (Figure 47e) have been cut with a metal implement. The artifacts range in size from l. 29 .0 mm to 44 mm and t. 0.5 mm to 5.0 mm.

Cut Lead Bar (N=1)

This specimen is triangular in shape and appears to have been cut with a metal implement (598) (Figure 47f). The surface may contain a coating such as paint or varnish. There is white residue on the outside and green corrosion products underneath. It was found in Metal Detector Shovel Test 13. The artifact measures: l. 39.0 mm, w. 30.0 mm, t. 2.5 mm.

Figure 47. Metal Working Complex.

Lead Tube (N=1)

The lead blank is a solid tube with one end partially flattened (448) (Figure 47g). It was found in Ash Feature 1. The artifact measures: l. 26.5 mm, w. 11.0 mm, t. 13.0 mm.

Cut Lead Sheet (N=2)

There are two cut lead sheet fragments. One example has a metal flap that pulls away from the rest of the sheet (571) (Figure 47h). They measure: l. 2.4 mm.

Lead Sprue (N=5)

The lead sprue specimens appear to be the cut-off excess created during metalworking (1380).

Figure 48. Birchbark Strips.

Architectural/Construction Complex

Axe (N=2)

The two heavily corroded axe specimens were found in Metal Detector Shovel Test 9 (594) (Figure 48b) and Shovel Test 64 (689) (Figure 48a). Axes are mentioned in the FS account records as round handled, square handled, right hand, half, voyaging, round headed half, square headed large, and square handled small 1/2 axe (HBCA, B.196/d/1: 1-44). The items were found at opposite ends of the site. Fitted together they form a single bitted, eyed axe head that has been split in two (terminology is borrowed from Ross 1976). Similar axe-heads were found at Fort Vancouver (Ross 1976). The blade is 200.0 mm long. The convex knife-edged bit end is 114.0 mm wide, while the posterior portion is 62.0 mm wide and 55.0 mm at its thickest with the side reattached. There is a cleft at the centre of the axe. The eye is almond shaped. The letters “E.S.” appear on the side of the axe

and are called the *guild marks* or maker's mark (Figure 48b).

Chisel or Iron Wedge (N=1)

This is a small iron chisel that has a gradual bifacial bevel to the bit. Chisels are mentioned in the FS account records as broad, narrow, broad ice, narrow ice, and farmers ice chisels (HBCA, B.196/d/1: 1-44). It may have been used to split wood (1463) (Figure 49b). It was found in Ash Midden 1. The artifact measures: l. 37.0 mm, w. 10.0 mm, t. 5.0 mm.

Iron Cotter Pin? (N=1)

One flat iron bar has been bent into the form of a cotter pin (1663) (Figure 49c). Cotter pins are inserted through holes in two or more pieces and bent at the ends to fasten the pieces together. The artifact was found in Ash Midden 1. The artifact measures: l. 40.0 mm, w. 17.0 mm, t. 8.0 mm.

Iron Hook (N=1)

There is one possible bent iron hook in the collection (1674) (Figure 49d). It was found in Ash Feature 1. The artifact measures: l. 33.0 mm, w. 5.0 mm, t. 5.0 mm.

Basalt Fragments (N=25)

There are 25 basalt fragments. These were used in the construction of the chimneys as basalt assists in even heat distribution. On the west bank of the Pelly River, at its confluence with the Yukon River, there is an outcrop of basalt (for a description of the basalt source see Francis and Ludden 1990). These fragments were mined by the HBC traders for use in construction of the chimney features. The use of basalt in chimney construction is also found at Fort Selkirk II (Castillo 2006; Hare and Gotthardt 1996: 27). The pieces average 7.5 g.

Plane Blade or Chisel (N=1)

The plane blade or chisel has a gradual bifacial bevel to the bit (620) (Figure 49e). The anterior end of the bit is straight. The posterior end of the implement is missing and may have rusted away, it may have had a rectangular cross-profile. The object was found in Metal Detector Shovel Test 25. It measures: l. 50.0 mm x w. 48.0 mm x t. 16.0 mm.

File or Gimlet (N=1)

There is one possible heavily corroded file or gimlet (a hand tool for drilling small holes (1493) (Figure 49f). Files are mentioned in the FS account records as bastard, flat bastard, hand saw, pit saw, crescent, cut saw, half round, flat smooth,

Range (mm)	No.	Percentage
<0.90	1	1.63
1.00 - 1.09	18	29.50
1.10 - 1.19	10	16.39
1.20 - 1.29	9	14.75
1.30 - 1.39	4	6.55
1.40 - 1.49	2	3.27
1.50 - 1.59	6	9.83
1.60 - 1.69	2	3.27
1.70 - 1.79	2	3.27
1.80 - 1.89	2	3.27
1.90 - 1.99	3	4.91
2.00 - 2.09	1	1.63
2.10 - 2.19	1	1.63

Table 17. Fort Selkirk I Flat Pane Glass Thickness.

Dates (ca.)	Most Often Occurring Thickness (in.)	Most Often Occurring Thickness (mm)
1810-1825	0.055	1.40
1820-1835	0.055	1.40
1830-1840	0.045	1.15
1835-1845	0.045-0.055	1.15 - 1.40
1845-1855	0.065	1.65
1850-1865	0.075	1.90

Table 18. Window Glass Data from 15 Historic Sites in the Pacific Northwest (after Roenke 1978: 116, Table 30).

cross cut saw, pile saw, and tenon saw files (HBCA, B.196/d/1: 1-44). The specimen is an elongated triangle with both ends missing. It appears that the object may be bifacially bevelled but this feature is difficult to determine due to corrosion. This artifact was found in Ash Midden 1 and measures: l. 50.0 mm, w. 12.0 mm, t. 5.0 mm.

Pane Glass (N=61)

In the Pacific Northwest, the majority of the window glass in use during the first half of the 19th century was principally supplied by the Hudson's Bay Company that obtained most of its materials and goods from England. This glass was predominantly crown glass (an old form of window glass made by blowing a globe and spinning it until it formed a flat disc) since crown glass remained the most commonly produced type of window glass in England until about 1850 (Roenke 1978: 116).

There are 61 specimens of flat pane glass from FSI (1074[Figure 49g], 1075[Figure 49h], 1106[Figure 49i]). Pane glass is mentioned in the FS account records as square window glass 8 1/2 x 7 1/2 (HBCA, B.196/d/1: 1-44). Many of the shards have varying degrees of an iridescent polychromatic lustre on both surfaces that is caused by weathering (Roenke 1978: 22-23). According to

Roenke, pane glass became thicker over time (1978: 116). Table 17 shows FSI flat pane glass thicknesses.

Pane glass that falls within the range of 1.10 mm (0.044 in) and 1.40 mm (0.055 in) comprises the largest selection of glass in this category (37.7%). Following Roenke's pane glass dating system (1978: 116, Table 30), the glass found at Fort Selkirk I is in accord with the dates of 1835-1845 (Table 18). Although FSI was occupied a few years later (1848-1851), fort building supplies would have been kept in storage and would have travelled great distances to arrive at their intended location, making the small difference in dates plausible. Most of the pane glass shards were found in Building Feature 3.

Iron Hinge (N=1)

There is one commercially prepared large iron butt hinge that has three screw holes on either side (609) (Figure 49a). One side is partially missing. The specimen is highly corroded but it appears to contain a fixed pin. It measures: l. 77.0 mm x w. 55.0 mm x t. 6.0 mm. The hinge was found in Metal Detector Shovel Test 20.

Mortar/Chinking (N=3492)

The mortar found at FSI appears to have been made of grasses/plants and clay found along the river's edge. Mortar was utilized for building chimneys and buildings. Chimney mortar appears to have turned an orange-brown colour due to continual heating and reheating. Most specimens were no bigger than a peach pit. Mortar was primarily found in Ash Midden 1.

Nails

The site produced 98 nails, including tacks and spikes (Table 19). Nails are mentioned in the FS account records as assorted nails (HBCA, B.196/d/1: 1-44). There are 82 machine cut nails (1510[Figure 49j, 270[Figure 49l], 603[Figure 49k]), one 4.8 mm hand forged copper tack (14) (Figure 49n), one 46.0 mm spike (46) (Figure 49m), six barbed common wire nails (336, 634, 734[Figure 49o], 748, 749, 804) and eight unidentifiable severely corroded examples [Figure 49p]. The condition of nails varies from some minor corrosion to severe decay.

Early machine cut nails began to replace hand wrought nails in North America between 1790 and 1830. By the early 19th century, machine stamped nails were being manufactured on a wide scale in the eastern United States (Nelson 1968). A change from cut nails to wire nails occurred in Yukon between 1886 and 1896 (Clark 1995: 166). Some wire nails were manufactured in North America in 1870

Area	Cut/Spike	Wire	Indeterminate	Tack	Total
Ash Midden 1	69	0	7	1	77
Ash Midden 2	3	0	0	0	3
Hearth Feature 1	1	4	0	0	5
Building Feature 1	2	0	1	0	3
Metal Detector Shovel Test 16	1	0	0	0	1
Metal Detector Shovel Test 33	0	1	0	0	1
Metal Detector Shovel Test 45	1	0	0	0	1
Metal Detector Shovel Test 51	1	0	0	0	1
Palisade Shovel Test	5	0	0	0	5
Transect Shovel Test, 0N 20E	0	0	1	0	1
Total	**8**	**5**	**9**	**1**	**98**
Percentage	**84.69**	**5.1**	**9.18**	**1.02**	**100**

Table 19. Nail Types and Frequencies.

Penny Size	Length (inches)	Length (nearest mm)	Quantity
2d	1	25	16
3d	1.25	32	9
4d	1.50	38	28
6d	2	51	8
7d	2.25	57	8
8d	2.5	65	5
9d	2.75	70	2
10d	3	76	2

Table 20. Cut Nail Sizes and Quantity.

but were not used in construction until 1883-1884. They became the dominant nail type by the beginning of the 20th century at which time cut nails fell into disuse (unless they were recycled) (Priess 1974: 22-28).

The square cut nails were predominantly found in Ash Midden 1 (Figure 10). It is interesting that most of the nails were found within this feature since middens are typically locations of refuse discard and nail recycling should be expected at such a remote location. The wire cut nails were predominantly found in Hearth Feature 1, a feature which contains cultural levels that post-date the fort's occupancy (Clark 1995: 167). Presumably, the wood used for fuel at Hearth Feature 1 had wire nails and they were left after the wood was burned.

Length estimates of 78 cut nails using the penny size measurement (a classification system used in England into the 20th century) was done both in inches and millimetres (Table 20). The most popular size was the 4d penny size.

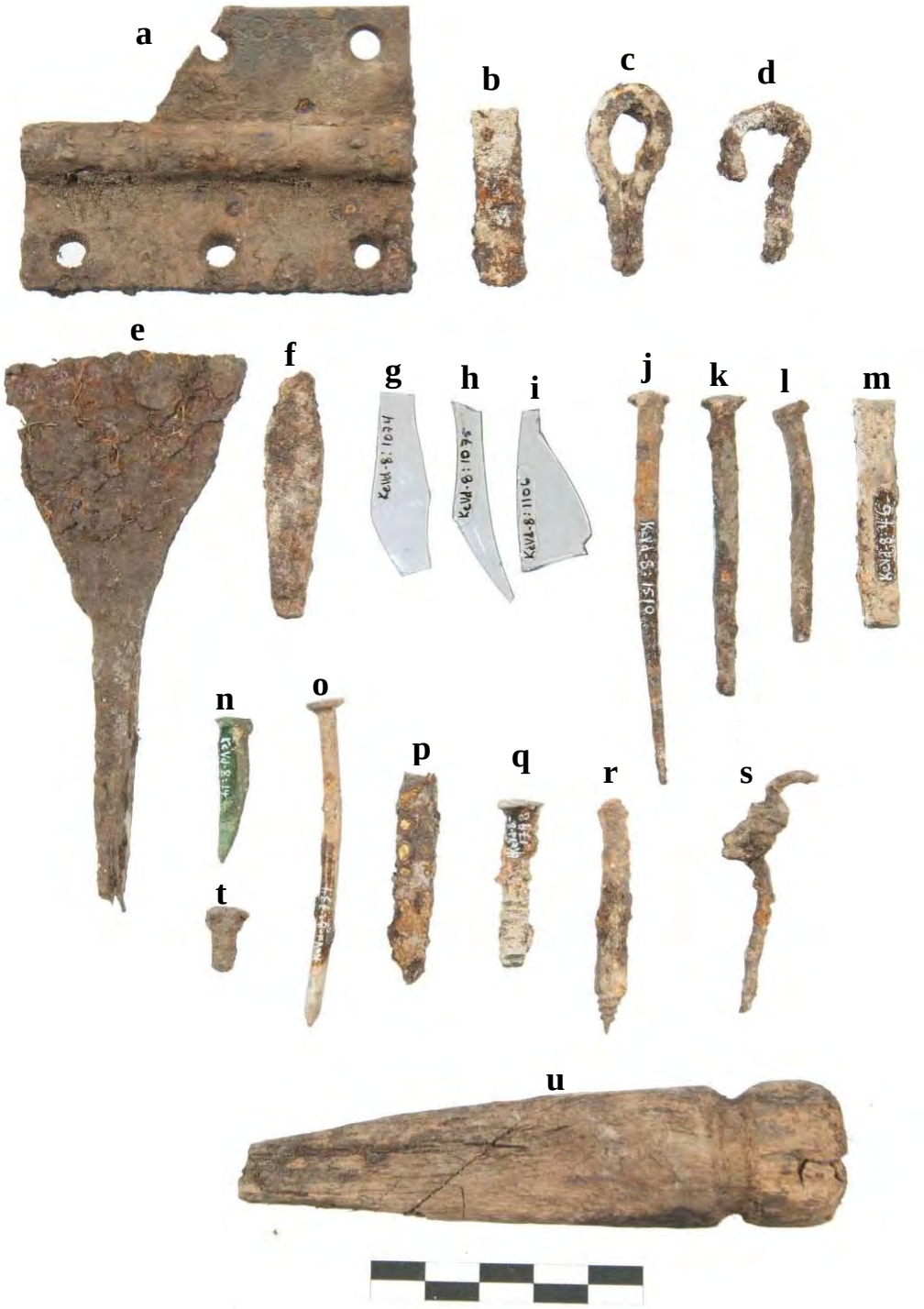

Figure 49. Architectural/Construction Complex.

Wood Screws (N=3)

Three screws were recovered from Ash Midden 1. Artifact 1798 has a slotted head for the insertion of a tool and measures l. 32 mm (Figure 49q). Artifact 1438 is missing the head and measures l. 45 mm (Figure 49r). Artifact 1392 is a possible screw but is difficult to identify and measures l. 13 mm (Figure 49t). All artifacts are highly corroded.

Palisade Post (N=1)

The remains of a palisade post was recovered, the bottom of which appears to have been sawn as it is cleanly cut and contains no root evidence (1871). The specimen's base measurements are: l. 480.0 mm, c. 450.0 mm, d. 17.0 mm.

Wooden Peg (N=1)

A large wooden peg was located in Building Feature 1 (1870) (Figure 49u). The peg appears to have been hand carved. The top of the head has red staining that may be paint. The head of the peg is the same circumference as the shank, the neck is an incised area running around the circumference of the specimen below the head. The shank of the peg tapers into a chisel point on one side. The peg's dimensions are: l. 112.0 mm, c. 97.0 mm, d. 26.0 mm.

Double Strand Wire Fragment (N=1)

Two wire fragments which are twisted together appear to be barbed, although barbed wire was not invented until 1865 (309) (Figure 49t). Thus, it may be wire used for another purpose. The specimen was found in Ash Midden 1.

Plaster (N=2)

Two small fragments of plaster were found in Ash Midden 1 (532, 533).

Clothing Complex

Glass Beads (N=178)

Identification and description of the bead assemblage from Fort Selkirk I follows in part Clark's classification system for northwestern North American bead collections (1995: 194-211). Beads are present in the FS account records as common striped blue, blue cut necklace, red cut necklace, green cut necklace, blue common, fancy cut colours, common round pound, white, white enamel, seed, and large white (HBCA, B.196/d/1: 1-44). The classification system used for FSI does have some differences. To facilitate inter-site comparisons of

Variety	Occurrence	Frequency
Drawn Beads	164	92.13
Wound Beads	11	6.17
Unidentified Bead	3	1.68
Total	**178**	**100**

Table 21. Classification of Beads by Manufacturing Process.

Variety	Occurrence	Frequency
Drawn:		
Very Small (< 2 mm)	14	7.87
Small (2 – 4 mm)	142	79.77
Medium (4.01 – 6 mm)	5	2.81
Large (6.01 – 10 mm)	6	3.37
Wound:		
Very Small (< 2 mm)	1	0.56
Small (2 – 4 mm)	1	0.56
Medium (4.01 – 6 mm)	3	1.68
Large (6.01 – 10 mm)	2	1.12
Very Large (> 10 mm)	1	0.56
Unidentified Beads	3	1.69
Total	**178**	**100**

Table 22. Classification of Measurable Beads by Size.

bead collections bead classification protocols established by Kidd and Kidd (1970), Karklins (1985) and Ross (1997) are included as well. In particular, an attribute hierarchy of manufacturing technique, layering, shape, finish and decoration established by Ross (1997) and modified by Silliman (2000a) is found in Table 23 and results are located in Table 24.

The primary classification of beads at FSI is through their manufacturing process (Table 21). Most of the beads found in the collection are drawn beads, which are made of sections of glass tubing drawn out from a hollow globe of molten glass. The canes are chopped into bead-length segments for subsequent finishing, sorting and packaging. The ends of the beads may be rough (unfinished) or rounded as a result of subsequent heating and agitation in a large metal drum or pan. Present, but in much smaller quantities are wound beads, which were manufactured individually or conjoined (probably accidentally) by wrapping or winding molten glass around a rotating mandrel, such as a wire, rod or straw coated with a clay slip. They were then removed from the shafts, annealed, cleaned, sorted and packaged. Both drawn and wound beads may contain facets (Ross 1974). There are no moulded beads in the collection.

According to Clark, the sizing of beads is important as it can reflect changing bead preference over time (Clark 1995: 194). Archaeological sizes are defined through bead length measured parallel to the perforation. Size categories have the following numerical values: very small: under 2.00 mm; small: 2.00 to 4.00 mm; medium: 4.01 to 6 mm; large: 6.01 to 10.00 mm; very large: over 10.00 mm (after Karklins 1983: 81-82) (Table 22).

Bead colour variation is limited in the FSI collection (Figure 50). Rather than use a Munsell Soil Colour Chart (Munsell Colour Company 1992) or Colour

Harmony Manual (Container Corporation of America 1976) to identify bead colour, analysis follows Clark's intuitive colour identification method for bead identification (1995: 196-198).

Multicoloured bead layering is present in many of the beads (Table 22). Other than the intentional layering of the Cornaline d'Aleppo beads, fortuitous layering of beads (the same colour hues layered but with a different chroma, colour value and/or diaphaneity) appear to have been produced naturally when a gather of one colour cooled in stages[23].

The diaphaneity of the specimens is described using the terms opaque, translucent and transparent (Table 21). Beads that are opaque are impenetrable to light except on the thinnest edges. Translucent specimens transmit light, yet diffuse it so that objects viewed through them are indistinct. Objects viewed through transparent beads are clearly visible.

The site produced 178 glass beads representing 16 attribute hierarchy types (Table 23; Table 24). The general pattern within the assemblage is the predominance of drawn beads over other forms (92.13%) (Table 22). This distribution is typical of other northern northwestern archaeological sites (Clark 1995: 200-201) as well as coastal sites further south such as the large HBC mercantile centre of Fort Vancouver in the Columbia District (ca. 1829 - 1860) (Ross 1990: 60).

The collection at FSI has a high proportion of very small, small and medium-sized beads (Table 22). Of all the bead sizes, it appears that the drawn 2.0 mm to 4.0 mm size beads, what Clark terms "intergrade" beads (1995: 195) are the most dominant found within the site (Table 22). According to Ross, beads smaller than 6.00 mm are typically embroidery beads (Ross 1997: 191).

Colour variation can represent potential Indigenous choice in bead selection (Figure 51). As the bar graph indicates (Figure 50) red on white (and red on grey and red on black) beads, otherwise known as Cornaline d'Aleppo beads, are the most dominant in the collection totalling 52.8%[24]. The next highest percentage is occupied by white beads at 38.2%. Blue beads (including turquoise varieties) are next, totalling 6.7% of the collection. Amber beads are next at 1.7% followed by one possible black bead making up the final 0.6% of the collection. The predominance of red on white beads at FSI is interesting as other recorded northwestern sites are typically dominated by white beads (Clark 1995: 200-201).

Drawn and simple wound beads were sorted by group size and colour. Complex beads, those which are multifaceted, were sorted separately. The following observations were made regarding bead distributions. Almost all the beads came from Ash Midden 1 (91.57%), located directly behind Building Feature 1. This locality also contained the greatest variety in bead class, size and

[23] Ross states "this phenomenon results as glass cools from its surface to its interior, causing different chemical elements to migrate slower or faster. As coalescing elements freeze, concentric layers which are brighter or duller, lighter or darker, or more opaque, translucent or transparent than adjacent layers are created" (1990: 38). This process creates polychrome beads.

[24] The colour variation within the inside bead layer is probably a result of weathering and not the original bead colour which is believed to have been white.

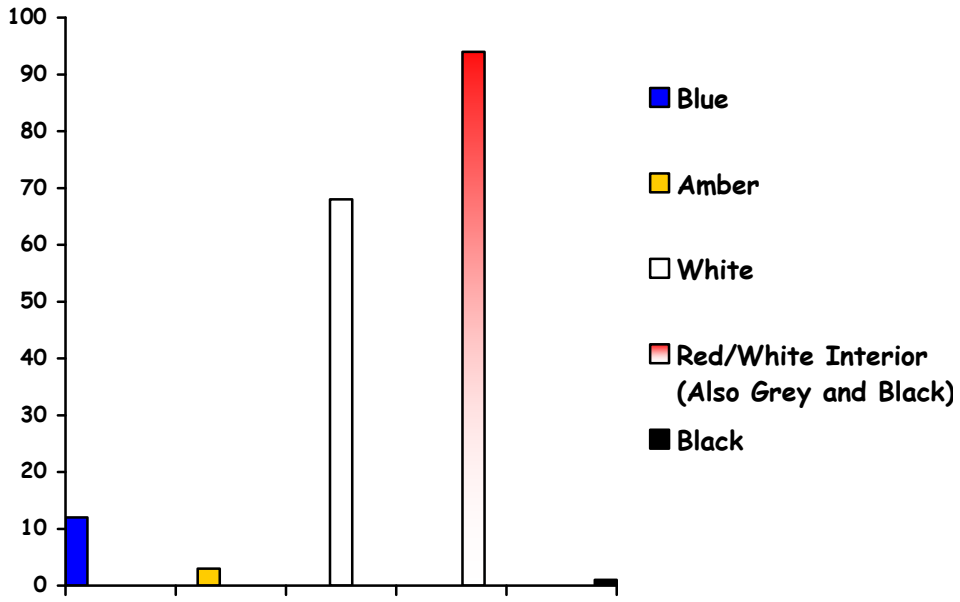

Figure 50. Bar Graph of Colours for 178 FSI Beads.

colour having all the drawn and wound multifaceted beads, beads appearing in all size categories, as well as containing 99% of the Cornaline d'Aleppo style. There is one 2.0-4.0 mm light blue wound bead found in Ash Midden 1 which is similar to what Clark terms *robin's egg turquoise*, a bead found in many western sites such as Fort Reliance (see Clark 1995: 195).

Although in far less abundance, Building Feature 1 contained the second greatest variety of beads and was the only other locality containing Cornaline d'Aleppo beads. This is also the only other locality containing wound beads (including one blue and one turquoise plain wound bead). There were five drawn beads and two wound beads totalling 3.93% of the FSI bead collection. Ash Midden 2 had the third highest frequency of beads at 2.25% (4 beads) of the FSI bead collection. Drawn beads were present in the under 2 mm and 2 - 4 mm ranges. There were no wound beads found at this location.

Hearth Feature 1 contained two drawn white beads (1.12%). No other beads were found in this location. Cellar Feature 1 and Palisade Shovel Test both had one bead each (0.56%) falling within the white drawn 2 - 4 mm bead range. Finally three unidentified beads were recorded. Bead 546 is badly burned. Beads 1284 and 1835 are fragments of possible white beads but they are too damaged to be identifiable.

The predominance of beads in Ash Midden 1 indicates that these objects were either attached to clothing or objects which were discarded in the midden intentionally or that beads were unintentionally discarded while quarters were being cleaned. Single beads found in other localities may have been dropped or fallen off clothing accidentally.

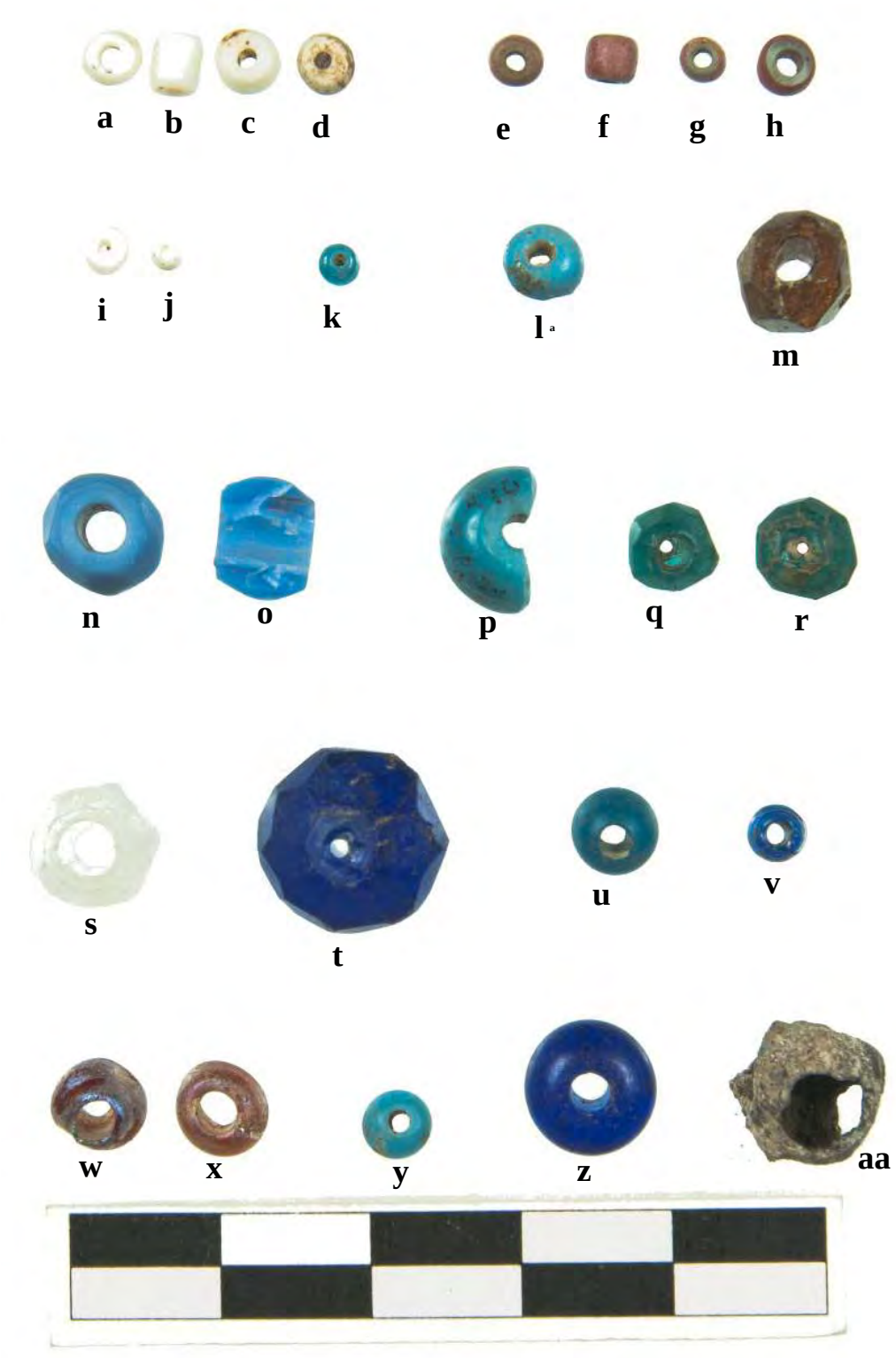

Figure 51. Glass Bead Varieties.

Attribute	Options							
Manu-facturing Technique	D/ Drawn	W/ Wound	Ws/ Wound-and-Shaped					
Layering	M Mono-chrome	P Poly-chrome						
Shape	B Bi-pyramid	C Cylinder	O Ovoid	M Molded (may have facets)	Me Melon	P Pyramid	S Spheroid	T Toroid
Finish	C Cut	H Hot-tumbled						
Decoration	Db Banded	Df Faceted	Ds Striped	U Un-decorated				

Table 23. Glass Bead Attribute Hierarchy Classification (After Silliman 2000: 390).

Type	Colour	#	%	Notes
D/PCHU*	white on white, opaque on opaque	61	34.26	(Fig. 51a, b, c, d)
D/PCHU	red on white, opaque	94	52.81	Cornaline d'Aleppo (centre can also be grey or black) (Fig. 51e, f, g, h)
D/MCHU	white, opaque	4	2.25	(Fig. 51i, j)
D/MCHU	turquoise, opaque	1	0.56	(Fig. 51k)
D/MCHU	turquoise, opaque	1	0.56	(Fig. 51l)
D/MMCDf	amber, translucent	1	0.56	complex; straight, ground facets (Fig. 51m)
D/PMCDf	light blue, opaque on opaque	2	1.12	complex; straight, ground facets (Fig. 51n, o)
D/MSHU	turquoise, translucent	1	0.56	(Fig. 51p)
W/MSCDf	turquoise, translucent	2	1.12	35-54 randomly ground facets, bi-conical, punched perforation (Fig. 51q, r)
W/MSCDf		1	0.56	35-54 randomly ground facets, bi-conical, punched perforation (Fig. 51f)
W/MSCDf	blue, translucent	1	0.56	35-54 randomly ground facets, bi-conical, punched perforation (Fig. 51t)
W/MSHU	blue, translucent	1	0.56	(Fig. 51u)
W/MSHU	blue, translucent	1	0.56	prolate spheroidal (barrel shaped) (Fig. 51v)
W/MSHU	amber, translucent	2	1.12	prolate spheroidal (barrel shaped) (Fig. 51w, x)
W/MTHU	turquoise, opaque	1	0.56	(Fig. 51y)

Type	Colour	#	%	Notes
W/MTHU	blue, translucent	1	0.56	(Fig. 51z)
unidentified	N/A	3	1.70	(546) (Fig. 51aa)
Total		**178**		

Table 24. Occurrence of Beads by Class (after Ross 1997 and Silliman 2000: 390; * See Table 23 for type coding).

According to Clark, seed beads (under 2.00 mm) appear in Alaska sites after 1868, thus postdating the Russian period, yet, seed beads found within the excavated features and associated with other FSI material remains are present at FSI meaning that they were in Yukon as early as 1848. Ross believes the red on white Cornaline d'Aleppo varieties "are commonly associated with Native-American sites, and are especially common during the early and mid-19th century" (Ross 1990: 44). Yet, Clark states that Cornaline d'Aleppo beads did not come into use in the Yukon drainage and western Alaska until American traders were present in the mid- to late-1870s (1995: 196, 201-202). He goes on to say that very small drawn beads (seed beads) and red on white beads may have appeared in the Mackenzie drainage earlier due to HBC traders as evidenced by a garment studied by Clark[25]. Alternatively, Clark describes seeing garments collected by R. Kennicott (ca. 1860 - 1862) from the northern Yukon territory and garments collected by W. H. Dall (ca. 1866 - 1868) from the middle Yukon drainage that did not contain very small or red on white beads. FSI contains both of these bead types and in great numbers, therefore these beads were already in use in central Yukon by 1848.

Metal Buttons

Iron and Copper Alloy Buttons (N=4)

There are four two-piece cast white-metal buttons. All four specimens have a slightly convex, spun back with a copper alloy wire eye set into a raised boss on the button back. All specimens have a plain flat front. They all measure 20.5 mm in diameter and 8.0 mm in depth (including the eyelet). The specimens were found in Ash Midden 1 (562[Figure 52c], 1288[Figure 52f], 1502[Figure 52i]), and Building Feature 1 (858) (Figure 52l).

Copper Alloy Buttons (N=5)

There are five copper alloy buttons with slightly convex backs, raised boss and rounded raised edges. Three of the specimens have copper alloy wire eyes (1561[Figure 52o], 1616[Figure 52r], 1864[Figure 52b]) while the other two are missing their wire eyes (857[Figure 52e], 1239[Figure 52h]). All specimens have a plain flat front. The buttons range in diameter from 11.5 mm to 18.5 mm and have a depth of 7.5 mm. Two of the buttons were found in Ash Midden 1, one

[25]The garment was collected by B. R. Ross of the HBC and is housed in the Canadian Museum of Civilization (Clark 1995: 196).

was found in Building Feature 1 and one was found in Palisade Shovel Test 14.

Iron Four-Hole Buttons (N=1)

There is one iron four-hole button. The specimen is highly corroded but appears to have a rounded raised edge concave front. The buttons diameter is 8.0 mm and the depth is 2.5 mm. The specimen was found in Ash Midden 1 (1682) (Figure 52k).

Copper Alloy Four-Hole Buttons (N=1)

There is one four-hole copper alloy cast white-metal button. The specimen has a rounded raised edge concave front. The buttons diameter is 14.5 mm and the depth is 2.0 mm. The specimen was found in Ash Midden 1 (1641) (Figure 52n).

Bone Buttons

Four Hole Bone Buttons (N=4)

The four bone buttons in the collection all have convex backs. Three of the buttons have mildly concave fronts with rounded raised edges (1281[Figure 52q], 1731[Figure 52a], 1812[Figure 52d]). One partial button has a flat front and a depressed central area (311) (Figure 52g). One button contains lathe grinding rings that are visible on the back of the specimen (1731) (Figure 52a). The buttons range in size from 12.5 mm to 17.0 mm in diameter and are 2.5 mm to 4.0 mm in depth. All specimens were found in Ash Midden 1.

Four Hole Ceramic Buttons (N=4)

The three ceramic buttons in the collection all have convex backs. Two of the buttons have mildly concave fronts with rounded raised edges (241[Figure 52j], 1296[Figure 52m]). One partial button has a flat front and a depressed central area (445) the other partial button is of the rounded edge variety (241[Figure 52j]. The only whole button is 9.5 mm in diameter and 2.0 mm in depth. All four specimens were found in Ash Midden 1.

Textiles (N=7)

Several pieces of textile were collected. Materials appear to be blue wool (1426[Figure 53a], 1453[Figure 53b], 1578[Figure 53c], 1730[Figure 53d]) an unidentified yellow cloth (1773[Figure 53e], 1800[Figure 53f) and a corroded or burnt fibre shaped into the figure eight (1413) (Figure 53g). Blue fabric is found in the FS account records as coats, cotton shirts, capotes, stroud (course woolen cloth) and ribbon. Other clothing mentioned in the FS records include cap varieties such as Glengarry bonnets, milled, milled worsted, fine cloth foraging, men’s highland bonnet worsted, scarlet and worsted caps. There are also grey,

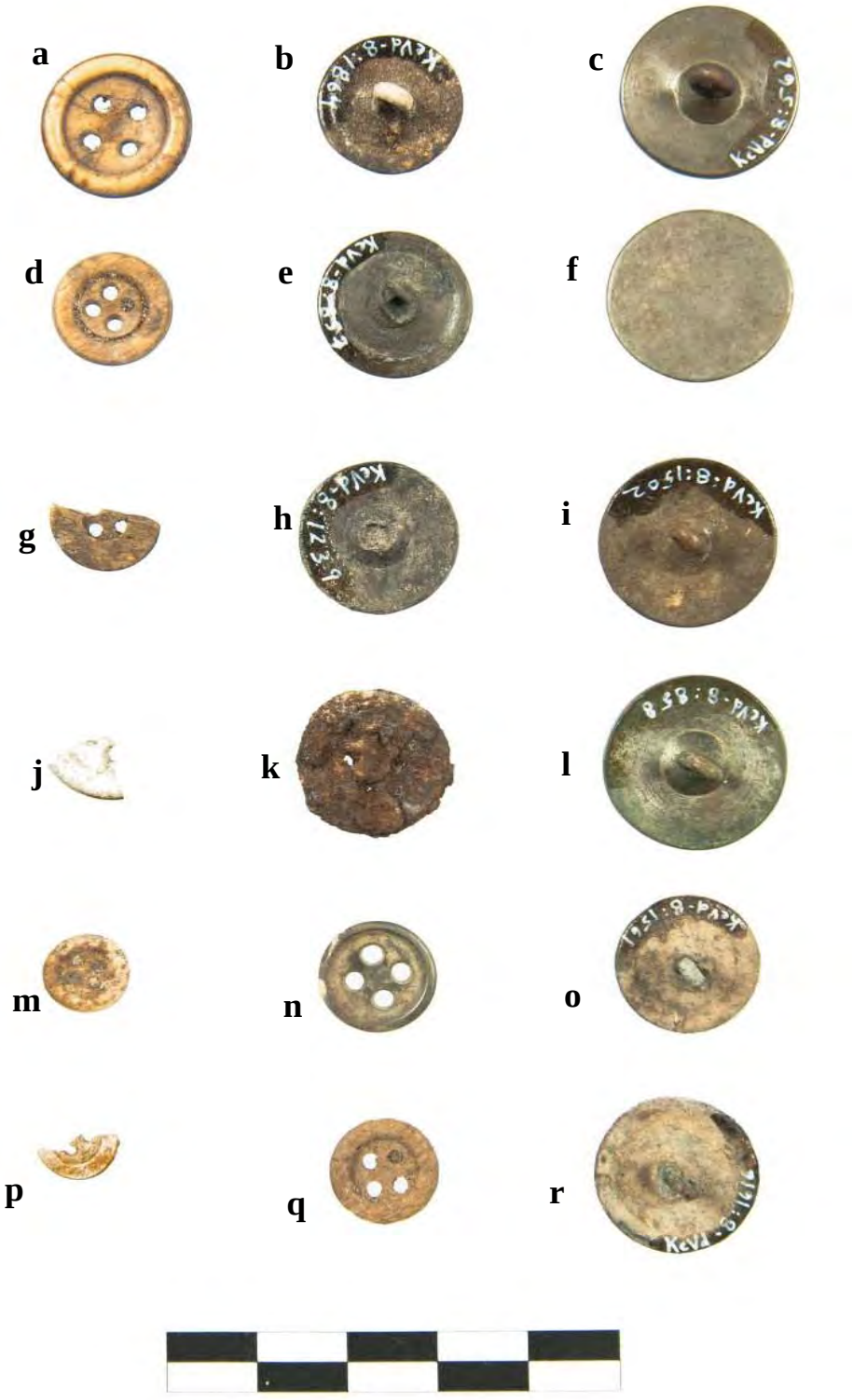

Figure 52. Buttons.

Indian white, white, cotton handkerchief, and tailors milled capotes (HBCA, B, 196/d/1: 1-44). All the specimens, except 1413, have a plain warp and weft weave. Specimen 1730 is a large fragment of wool that has begun to fall apart. All the specimens were found in Ash Midden 1.

Grommet (N=1)

There is one possible lead grommet (10) (Figure 53h). The grommet is 8.5 mm in diameter and 1.5 mm deep. It was found in Ash Midden 1.

Sewing Needles (N=1)

An entire sewing needle was found in Ash Midden 1 (1412) (Figure 53i). Needles are found in the FS records as glovers and brown head needles (HBCA, B, 196/d/1: 1-44). The specimen is made of iron and is corroded. The needles measurements are: l. 70.0 mm, d. 2.0 mm.

Copper Rivets (N=2)

One unattached rivet with a partially flattened head was located in Building Feature 1 (983) (Figure 53j). The rivet measures: d. 10.5 mm, t. 2.5 mm. A smaller rivet appears to have been sawed or cut off below the head and was located in Ash Feature 1 (1487) (Figure 53k). The rivet measures: d. 7.0 mm, t. 3.5 mm.

Abalone Shell (N=1)

There is a small fragment of bright iridescent blue/green abalone shell (*Haliotis*), possibly traded from the Northwest Coast, which appears to be cut into a slanted wedge on all four sides (541) (Figure 53l). The bright blue/green abalone variety was traded along the coast from California and was considered "the jewel of the entire Northwest Coast for personal wear and for inlaying the most valued carvings" (Emmons 1991: 174). According to McClellan "In all tribes, abalone shell was valued as much as, if not more than, dentalia" (1975: 318). The artifact measures: l. 6 mm, w. 3 mm, t. 1 mm. This specimen was found in Ash Midden 1.

Household/Culinary Complex

Ceramic Tableware

All 94 ceramics sherds in the collection were separated by paste type, glaze, and decoration. Due to the frequent ambiguity in separating refined earthenware into stoneware, pearlware, whiteware, and creamware and the fact that potters often did not make these distinctions themselves, archaeologists have noted that transfer-print colours, design elements and manufacturer maker's marks are better

Figure 53. Clothing Complex.

indicators of types and dates (Majewski and O'Brien 1987; Miller 1980; Sussman 1977). However, decorations are fragmentary, not all the designs were identifiable, and a maker's mark was found on only one sherd. The ceramic tableware in the FSI collection consists of small refined earthenware sherds. These are sorted into two groups: plain and transfer-print. Ceramic tablewares are mentioned in the FS account records as plates and black and earthenware flat table plates (HBCA, B.196/d/1:1-44).

Plain Glazed Refined Earthenware (N=18)

There is one plain brown glazed earthenware sherd which was found in Building Feature 2 (1183) (Figure 54a). The rest of the sherds that fall within this category are clear glazed plain white earthenware sherds. They may belong to transfer-print wares and are fragments from areas of vessels without decoration. The sherds range in size from: l. 10.0 mm to 48.0 mm, w. 1.0 mm to 13.0 mm, t. 1.0 mm to 3.0 mm.

Blue on White Transfer-Print Refined Earthenware (N=76)

The blue on white transfer-print earthenware in this collection is presumably from Copeland and Garrett who "negotiated a contract with the Hudson's Bay Company to be their sole suppliers of earthenware...This contract lasted until the 1870s" (Wilkinson 2008: 10; see also Sussman 1979: 9). The sherds range in size from: 1. 3.0 mm to 50.0 mm, w. 2.0 mm to 30.0 mm, t. 0.5 mm to 5.0 mm. There are 13 rim sherds which range in diameter from 27.0 mm to 200.0 mm. Three rim sherd diameters cannot be determined because of their small size. There are four base sherds with ringed bases which range in diameter from 80.0 mm to 95.0 mm.

Thirty-six sherds have patterns present on their concave side, 13 sherds have

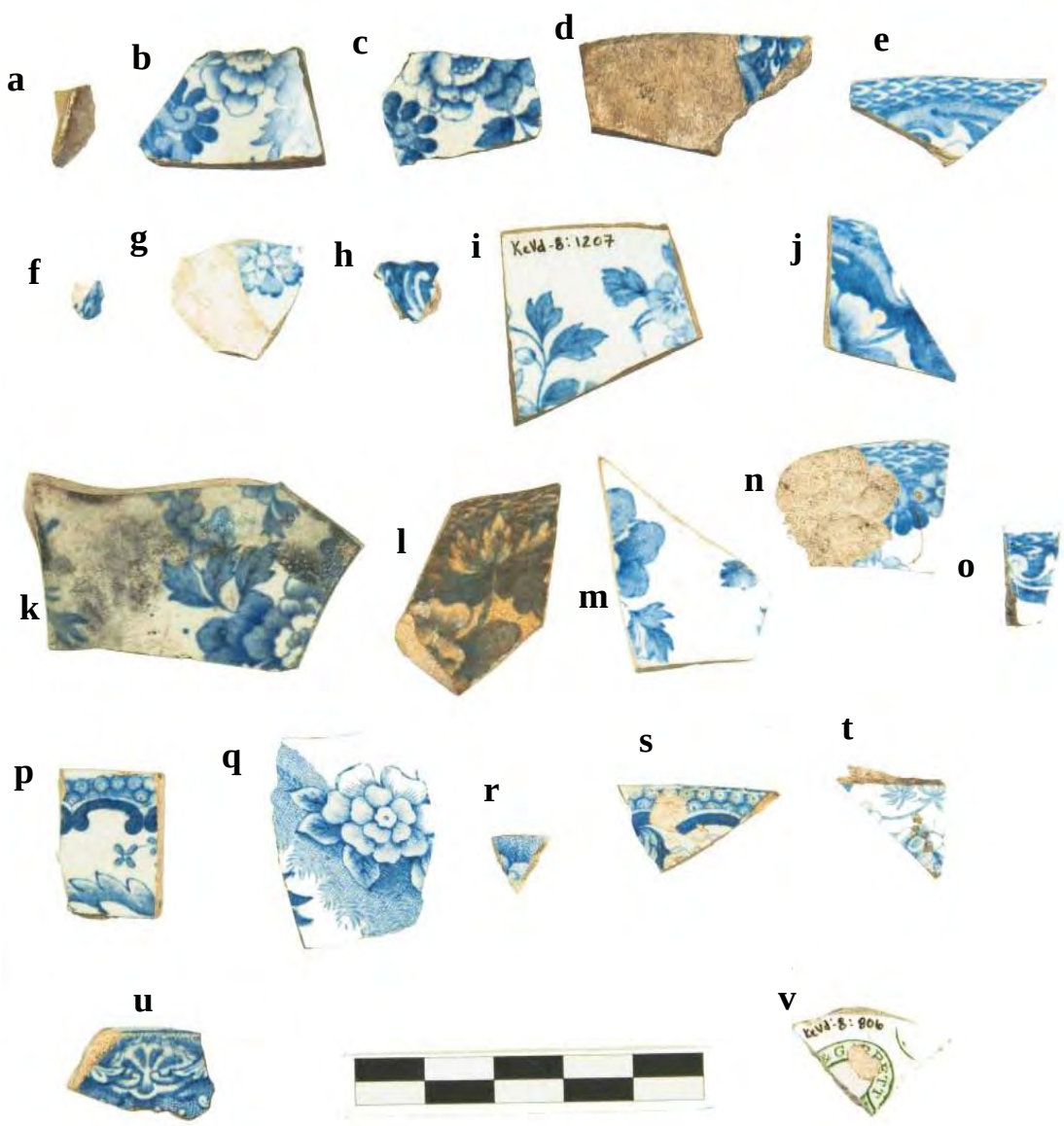

Figure 54. Ceramic Tableware.

patterns present on their convex side, and 11 have patterns on both the convex and concave sides of the specimen. Eight sherds were too small to determine the side on which the pattern was present. Three patterns were identifiable and dateable using Lynne Sussman's "Spode/Copeland Transfer-Printed Patterns" (1979). The pattern "British Flowers" was present on 14 of the sherds and dates to 1829 (323, 437, 438, 506, 697, 785, 888, 1207, 1319, 1359, 1398, 1582, 1717, 1759 (Figures

Locality	Undecorated Clear Glaze	Blue on White Transfer-Print	Brown Glaze	Total
Ash Midden 1	11	39	0	50
Ash Midden 2	0	2	0	2
Building Feature 1	2	11	0	13
Building Feature 2	0	0	1	1
Chimney Feature 4	1	0	0	1
Hearth Feature 1	3	16	0	19
Unit 59	0	4	0	4
Metal Detector Shovel Tests	0	3	0	3
Palisade Shovel Test	0	1	0	1
Total	**17**	**76**	**1**	**94**
Percent	**18.08**	**80.85**	**1.06**	**100**

Table 25. Localities and Frequencies of Refined Earthenware Types at FSI.

54b-o). The pattern "Fruit and Flowers" was present on five of the sherds and dates to 1826 (656, 901, 905, 1399, 1421) (Figures 54p-t). The pattern "Lily" was found on one sherd and dates to 1837 (631) (Figure 54u). One sherd contains a maker's mark which reads "& Garrett" (806) (Figure 54v). The exact makers mark has not been dated but Copeland and Garrett entered into partnership in 1833, a partnership which ended in 1847 (Sussman 1979: 9-10).

Table 25 summarizes the localities in which ceramics were found and their frequency. Most of the undecorated sherds (N=11) were found in Ash Midden 1. Most of the blue on white transfer-print sherds were found in Ash Midden 1 (N=39) followed by Hearth Feature 1 (N=16) and then Building Feature 1 (N=10). The only brown glaze sherd was found in Building Feature 2. The majority of the ceramics were associated with building features or midden deposits rather than in Metal Detector Shovel Tests or units excavated away from buildings. This distribution is logical since ceramics were likely kept within buildings and utilized and broken within buildings. They would have been discarded with other household refuse in nearby middens.

Lantern Glass (N=3)

There are three fragments of lantern or hurricane glass. Hurricane glass is typically much thinner than window glass and is curved. The thickest shard in the group measures 1.05 mm. All the specimens were found in Ash Midden 1 (369, 507, 1689) (Figures 55a-c).

Fire Steels/Strike-A-Light (N=3)

There are two fire steel fragments (274, 1762) (Figures 55d, e) and one possible fire-steel fragment (439) (Figures 55f). Fire steels are mentioned in the FS account records as common and oval firesteels (HBCA, B.196/d/1:1-44). One fire steel measures 92.0 mm in length and curves at one end (274). The opposite end appears to taper. This artifact is similar to one found by Kidd (1970: 119; Figure 74d, e: 136). Another fire steel measures 52.0 mm in length and curves at one end (1762). The third possible fire steel is the end of an object with a curved

flat body. All three specimens were found in Ash Midden 1.

Table Cutlery Handle (N=1)

This is a European bone handle (781) with a cross-hatch design which would have been attached to the cutlery implement, the design is typical of handles for the period 1825-1850 (for other examples see Kidd 1972: 45) (Figure 55z). Table cutlery is mentioned in the FS account records as forbuck(?) table knives with forks (HBCA, B. 196/d/1:1-44). The artifact measures: l. 27.0 mm, w. 15.0 mm, t. 6.5 mm.

Table Cutlery Knife (N=1)

There is one iron cutlery knife (1000, 1001) (Figure 55g). The tip of the blade was broken off but has been reattached. The blade is mildly rectangular with a rounded tip. The bottom of the blade has a sharp cleft on one side. At the bottom of the knife is the complete tang made of the same material. The handle is missing. The knife blade measures: l. 130.0 mm, w. 180.0 mm, t. 2.0 mm and was found in Metal Detector Shovel Test 15.

Iron Knives (N=4)

There is one partial iron knife blade (1494) (Figure 55h), two possible heavily corroded iron knife fragments (1530, 1531) (Figures 55m, n) and one possible iron knife handle (1554) (Figure 55k). Knives are mentioned in the FS account records as scalping, cartouche, finger, roach, barwood roach, and common pocket knives (HBCA, B.196/d/1:1-44). The partial knife blade appears to be a wharncliffe style pocketknife blade (Kertzman 2009). It has a straight edge and a spine that tapers to the tip. The partial blade dimensions are: l. 42.0 mm x w. 12.0 mm x t. 2.5 mm. The iron knife handle is missing a blade, comes to a tip at the base and is heavily corroded. The dimensions are: l. 62.0 mm x 11.0 mm x t. 9.0 mm. All the artifacts were found in Ash Midden 1.

Copper Alloy Kettle Lugs (N=3)

There are three partial copper alloy kettle rim lug fragments[26]. The basic form of these lugs consists of an elongated rectangle fashioned of two thicknesses of metal, with two sharp corners at one end folded over. Between these corners, or near that end of the rectangle, is a large perforation. Two small rivet holes occur near the end of the rectangle opposite the large perforation. These rivet holes would serve for attachment of the lug to the kettle, the large perforation for attachment of a handle (Kidd 1970: 122). One folded sheet copper alloy lug is l. 26.0 mm, w. 40.0 mm, t. 1.0 mm (671) (Figure 55i). It was located at Metal Detector Shovel Test 50. The bale hole is partially missing as the lug appears to have been bent off at this point. The bail hole is 11.0 mm in diameter. The corners of the specimen have been bent over. The two remaining specimens are from the

[26] Again, copper kettles were mentioned in the FS account records (HBCA, B.196/d/1:1-44).

lower part of the lug, where the rivet holes are located. One specimen measures l. 20.0 mm, w. 50.0 mm, t. 1 mm and is cut straight along one of the rivet holes (1539) (Figure 55j). It was recovered from Ash Midden 1. The other specimen measures l. 25.0 mm, 43.0 mm, t. 1.0 mm and is cut approximately 6.0 mm below the rivet holes (650) (Figure 55o). It was recovered at Metal Detector Shovel Test 44. Both artifact 1539 and 650 have cut corners on one end.

Copper Alloy Hinges (N=2)

There is one partial and one complete copper alloy hinge. They both appear to have been made with recycled material. As copper is quite malleable, the hinges were probably made for small boxes or other more decorative household items. The complete hinge consists of one piece of sheet copper which is butterfly shaped and folded at the centre (608) (Figure 55p). There is a large rectangular cut along the centre of the folded specimen. A rusted iron pin sits inside the fold. The far edges of the copper sheet have been sharply cut. Both sides of the specimen contain five small perforations, presumably for a rivet or nail. The hinge measures 1. 52.0 mm, w. 64.0 mm, t. 1.0 mm. The specimen was found in Metal Detector Shovel Test 19. This is a partial hinge leaf and is similar to the complete hinge except that the folded end and one leaf are missing (617) (Figure 55q). There are also five perforations on this specimen. The hinge measures l. 42.0 mm, w. 64.0 mm, t. 1.0 mm. The hinge was found in Metal Detector Shovel Test 24.

Iron Bottle Wire Hinge (N=1)

There is an iron bottle wire hinge used to secure a cork to a bottle (628) (Figure 55l). The hinge measures l. 41.0 mm, w. 44.0 mm, t. 3.0 mm. It was found in Metal Detector Shovel Test 28.

Bail Lug? (N=1)

There is one possible iron bail lug with a circular perforation in the centre (1449) (Figure 55r) (see Forsman 1985: 94; Figure 42c: 95). The dimensions are l. 23.0 mm, l. 19.0 mm, t. 1.0 mm. The object was found in Ash Midden 1.

Bone Needle Case? (N=1)

There is one possible bone needle case (1822) (Figure 55s). The specimen is part of a cylinder or tube, and is curved and thin walled. The rim is present and contains a lip that hangs over the side. The base appears to be broken. It appears to have been threaded along the interior rim, possibly onto another object. The object may also be a lace making tool or a composite pipe. The dimensions are l. 22.0 mm, w. 8.0 mm, t. 2.0 mm. The object was found in Palisade Shovel Test 2.

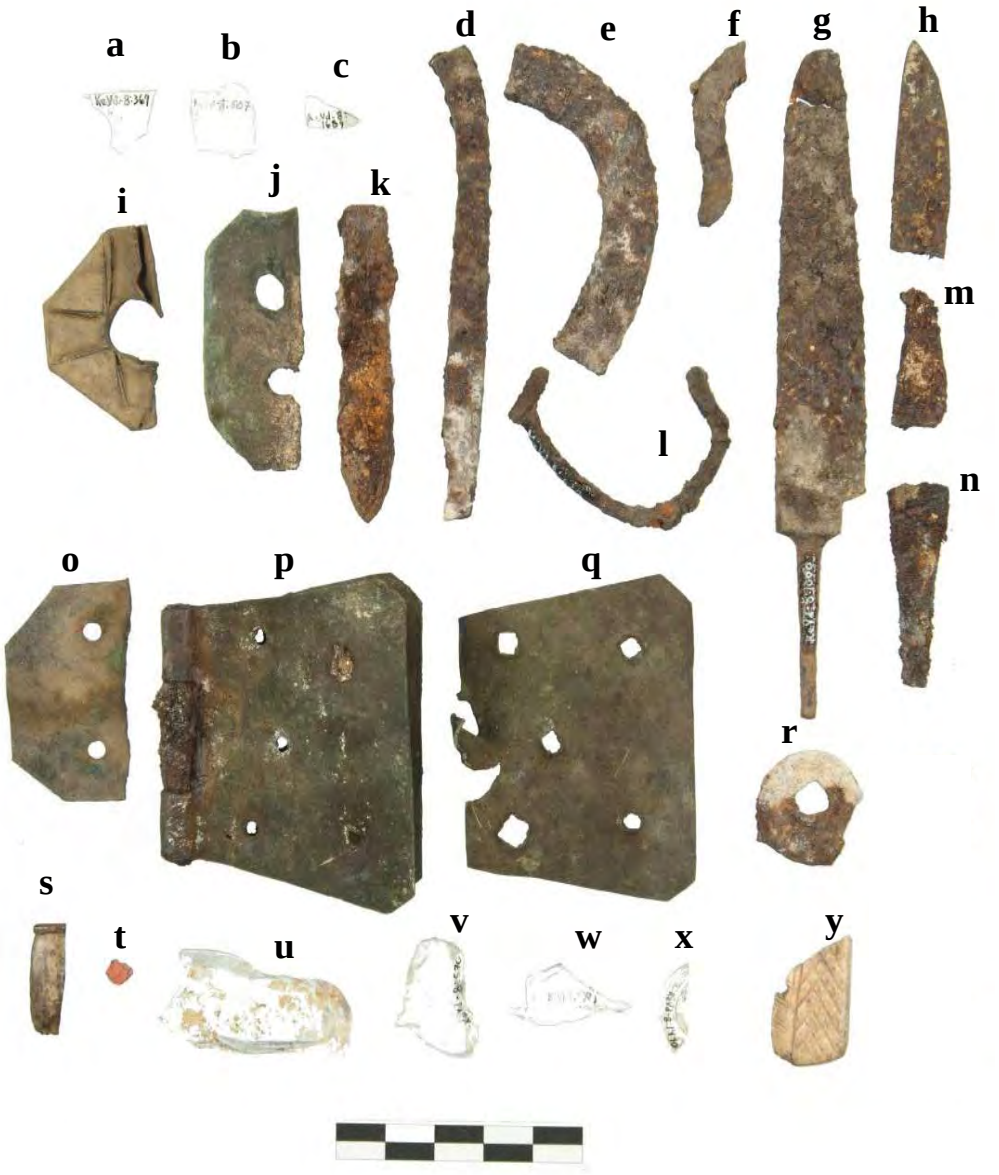

Figure 55. Household/Culinary Complex and Personal Use Complex.

Seal Wax or Vermillion? (N=10)

There are ten specimens of a bright red material that appear to be sealing wax used to seal documents. The substance may also be vermillion (a bright red mercuric sulphide used as pigment). Vermillion is mentioned in the FS account records (HBCA, B.196/d/1: 1-44). Specimens were recovered in Ash Midden 2 (1884) (Figure 55t), Building Feature 3 (1032, 1037, 1039, 1043, 1044, 1112), Building Feature 2 (1165), Metal Detector Shovel Test 24 (1220), and Ash Midden 1 (1811).

Glass Medicine Bottle (N=4)

There are four clear glass medicine bottle fragments. Medicines and vials are mentioned in the FS account records as vest cork, paregoric elixir, essence of peppermint, spirits hartshorn, white lint, castor oil, olive oil, bersilicon ointment, saturnine ointment, purges, powdered rhubarb, epsom salt, tincture opium, common vials, and vomits (HBCA, B.196/d/1: 1-44). The fragments are possibly from bottles that contained "TURLINGTON'S BALSAM OF LIFE" which was a compound tincture of benzoin, and was initially patented in 1744 (Johnson 1967: 24-25 in Kidd 1970: 131). These bottles were generally pear shaped with a stepped outline and rectangular cross section. The date would be stamped on one narrow side of the bottle, the word "LONDON" on the opposite narrow side. Two of the bottle fragments connect together and are part of the bottles neck (570) (Figure 55v) and side (258) (Figure 55u). The side reads "LONDON". Another shard appears to be from the same bottle but does not connect to the other specimens and contains unidentifiable letter and or numbers (1381) (Figure 55w). There is one rim/lip shard that measures 20.0 mm in diameter (1490) (Figure 55x). All the shards were found in Ash Midden 1.

Personal Use Complex

Hair Comb (N=1)

There is one elongated diamond shaped possible women's hair comb tooth[27] made of bone (468)[28]. The complete length of the tooth cannot be given as it has been broken off: l. 37.0 mm, w. 8.0 mm, t. 1.0 mm. It was found in Ash Midden 1 (Figure 56bb).

Clay Pipe Fragments (N=74)

There are 74 clay pipe fragments. Pipes and tobacco are mentioned in the FS account records (HBCA, B.196/d/1:1-44). There are two bowl/stem fragments, four bowl/ spur fragments, 31 bowl fragments, and 38 stem fragments. There is one original mouthpiece fragment (973) (Figure 56a). All the bowl fragments are unmarked conical bowls, some of which contain spurs (216, 469, 1469, 1692), while others are missing their bases (Figures 56b-e). The spurs on two of the bowls appear to have embossed letters on their sides but they are illegible due to wear (469, 1692). There are two small bowl rims which both have burned edges (807, 1002) (Figures 56f, g). Most of the mould marks on the stems and bowls have been worn away. The largest bowl consists of two fragments fitted together measuring: l. 38.0 mm, d. 29.0 mm (1468, 1469) (Figures 56h, d). The stems of the pipes are straight and unmarked. The longest stem consists of two fragments fitted together and measures l. 72.0 mm (18, 472) (Figures 56i, j).

[27] The tooth is similar in shape and size to modern French hair combs for women.
[28] Combs are mentioned in the FS account records as large horn, fine horn, small horn, ivory, and dressing combs (HBCA, B.196/d/1: 1 - 44).

It appears that pipes continued to be used after they were broken as four stem remnants contain teeth and/or wear marks (223, 259, 915, 1376) (Figures 56k-n). Dating of pipestem specimens was not conducted as there is little variability in pipestem sizes after 1800 (Orser 2002: 423-424). A visual comparison of pipe bowls from the FSI collection and Hume's pipestem chronology shows that FSI bowls fall in line with those produced between 1820 and 1860 (Hume 1970: 303, Figure 97). Specimens were recovered from Ash Midden 1, Metal Detector Shovel Tests (651, 661) (Figures 56o, p), Hearth Feature 1 (779, 780, 807, 815) (Figures 56q, qq, f, r) Building Feature 1 (862, 915, 917, 973, 974) (Figures 56s, m, t, a, u) Metal Detector Shovel Test 15 (1002, 1010) (Figures 56g, v), Building Feature 3 (1048) (Figures 56w), Metal Detector(Shovel Test 59 (1157, 1158) (Figures 56x, y) and Palisade Shovel Test (1842) (Figure 56z).

Lithic Pipe Fragment? (N=1)

There is one possible lithic pipe fragment (565) (Figure 56aa). This is a small specimen, triangular in outline with one side sharply cut and another side containing one groove running length wise and two grooves running in the opposite direction. The specimen appears to have been broken in half. There is a round, drilled perforation in the centre. This may be part of a perforated spur or projection from a pipe. The specimen measures l. 6.0 mm, w. 6.0 mm, t. 4.0 mm and was found in Ash Midden 1. The fragment is similar to one found by Kidd (1970: 154; Figure 87g: 158).

Storage/Transportation Complex

Metal Cans Not Modified (N=3)

All the complete can specimens appear to post-date the FSI period and were found with the use of a metal detector. There is one rectangular can with the hole-in-top lid (post-1900) still attached (589) (Figure 57a). The can and lid measure l. 91.0 mm, w. 84.0 mm, t. 55.0 mm. It appears to be a corned beef can with the words "ARGENTINA ESTAB NO. 15 INSPECCIONADO SF." embossed on the top of the tin lid. The lid is still partially attached through the key-wind mechanism. This type of can first appeared circa 1875 (Rock 1984: 97-111) and was used for canned corn beef. The key was first introduced in 1885 (Cobb 1914: 94; Fontana et al. 1962: 71-72). This can was found in Metal Detector Shovel Test 4. A round can with a double side seam and no lid was found in Metal Detector Shovel Test 10 (595). The length of this specimen is 97.0 mm. A round lid, likely belonging to artifact 595, was found in Metal Detector Shovel Test 6 (591). The dimensions of this artifact are l. 13.0 mm, d. 108.0 mm. The lid appears to be a double side seam (post 1880s) and has the remains of the key on the top of the lid.

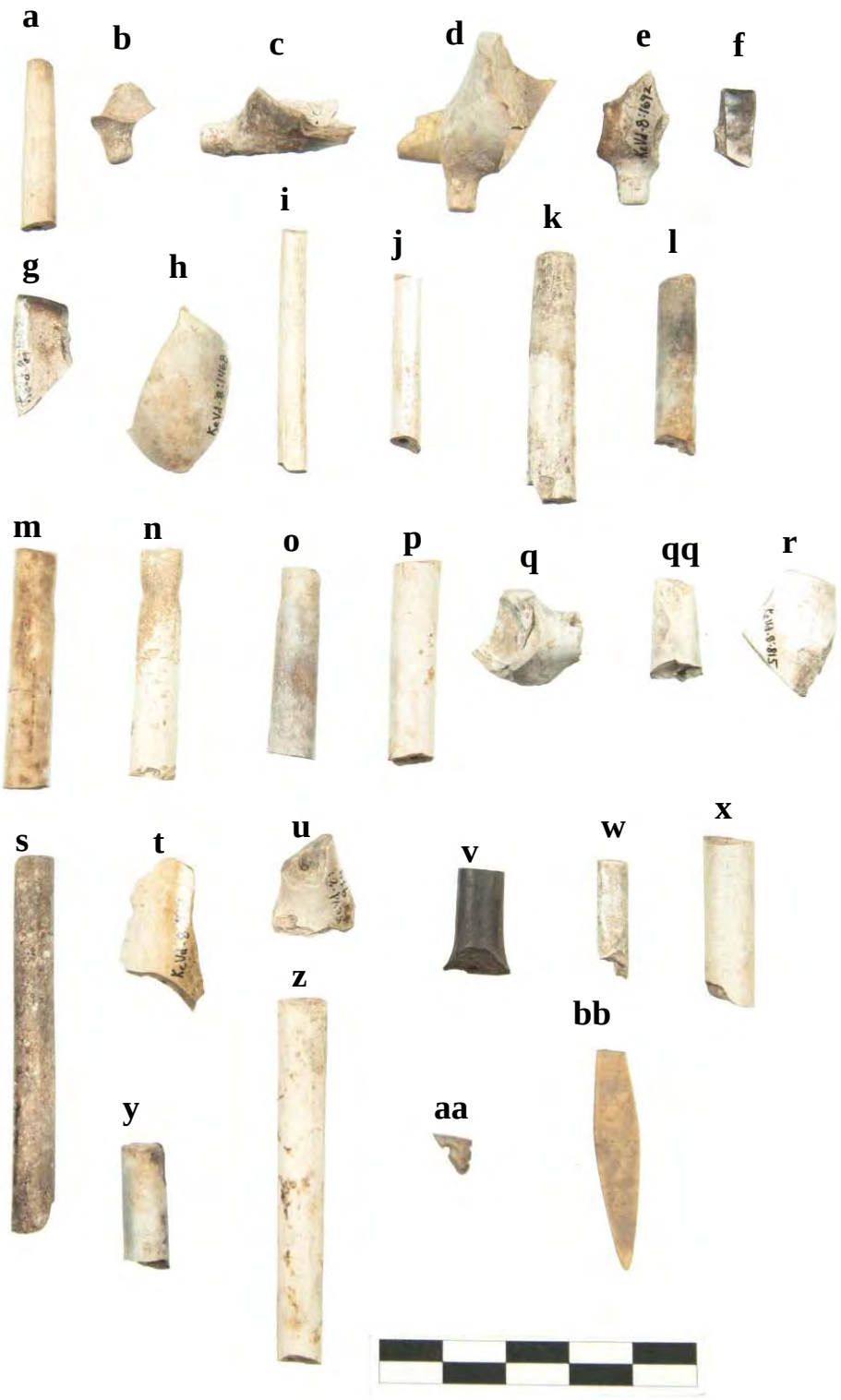

Figure 56. Ceramic and Lithic Pipe Fragments.

Figure 57. Storage/Transportation Complex.

Metal Cans Modified (N=2)

The two modified can specimens appear to post-date the site's primary occupation. One specimen appears to be the bottom or top of a can that has been cut sharply along various points and folded randomly. The double side seam (post-1880s) is visible along one side of the specimen (638). The specimen was found in Metal Detector Shovel Test 35. The other specimen is the top of a metal petrol can and contains the handle and spout hole with the metal lid still attached (636). The top of the can has been removed with a knife or can opener. The dimensions of the lid are l. 227.0 mm, w. 227.0 mm, t. 1.0 mm. The specimen was found in Metal Detector Shovel Test 34.

Sheet Metal Scraps, Cans (N=18)

All of these specimens appear to come from small square cans. One specimen consists of approximately seven fragments of what may be a highly corroded example (682). The largest fragment appears to have a stamped end (post 1847) (Rock 1984: 97-111). The specimens were found in Metal Detector Shovel Test 61. Another specimen consists of a long piece of sheet metal with a stamped can end (post-1847) (1130). The specimen is likely from a rectangular can and was found in Cellar Feature 1. Seven other extremely corroded metal specimens appear to have stamped can ends and may have fit together at one time. They were all found in Ash Midden 1. There is one sheet metal fragment that contains a rusted copper rivet punched through the centre (Figure 57c). The specimen has a stamped end. There are five sheet metal strips of what appear to be the seams of cans. All the fragments have white powder on them that indicates the possible use of lead as a sealant. These specimens were found in Ash Midden 1. One can

fragment has a strip of sheet metal soldered onto the body of the can. This specimen is from Ash Midden 1.

Other Sheet Metal Scraps, Cans? (N=14)

Specimens in this category are probably sheet metal scraps that originated from square cans but do not contain distinguishing marks such as seams or stamped ends. The specimens are highly corroded. They range in thickness from 0.9 mm to 1.1 mm. Artifact 331 is a rectangular scrap of sheet metal that has a perforation close to one corner and a circular cut on the opposite corner. It measures: l. 41.5 mm, w. 61.0 mm, t. 0.9 mm. There is an elongated cut piece of sheet metal that has been cut into a curve at one end; both ends are folded over (307). Specimens were found in Ash Midden 1 and Metal Detector Shovel Tests 40 and 60.

Can Key (N=1)

There is one post-1885 sardine can key found (see Cobb 1914: 94; Fontana et al. 1962: 71-72). The specimen was found in Metal Detector Shovel Test 56.

Iron Key? (N=1)

This specimen appears to be a highly corroded key (291) (Figure 57d). It has a square end with a perforation in the centre. There is a short thin shank that has a perforation at the far end. The key may have been used for a chest or for survey equipment. The measurements are l. 30.0 mm, w. 15.0 mm, t. 4.0 mm. It was found in Ash Midden 1.

Iron Barrel Hoops (N=2)

There are two highly corroded barrel hoop specimens. The first consists of two straps of iron overlapped and joined with an iron rivet (612) (Figure 57b). The specimen is bent so it is difficult to determine the length but it roughly measures: w. 26.0 mm, t. 2.0 mm. It was found in Metal Detector Shovel Test 21. The second specimen consists of four iron fragments, the largest containing an iron rivet (662). These fragments appear to be associated and broken off in situ. The fragments were found in Metal Detector Shovel Test 46.

Lead Bale Seal (N=1)

The seal is unbroken and consists of two 29.0 mm diameter discs connected by a 5.5 mm wide band (626) (Figure 58). One disc displays the stamped letters “ALSAGERS PACKER LONDON” and contains a picture of a sheep with a strap around its midriff. The other disc has the fraction “505/21” etched into it. The two circular discs would have been folded over the bale wires or string to complete the seal. The seal would have been used to count goods, such as wool blankets, arriving from England. Seals with identical originator’s markings have been

Figure 58. Front and Back Views of Lead Bale Seal.

unearthed at Nottingham House (ca. 1802-1806) (Karklins 1983: 174-175) and Edmonton House III (ca. 1820-1813) (Nicks 1969: 151). Charles Alsager was a packer for the Hudson's Bay Company who operated in London with and without a partner from 1776 to about 1822 (Kent's London Directory 1776: 8; Pigot's London Directory 1822: 128).

Untyped Artifacts

Untyped Metal Complex

Fragmentary Metal Iron (N=1)

There is one fragment of miscellaneous iron which cannot be identified to a functional class (1755). The fragment measures: 7.0 mm, w. 5.0 mm, t. 1.0 mm. It was found in Ash Midden 1.

Fragmentary Metal Copper (N=1)

There is one unidentified tube-like copper specimen that is flattened on one end and sharply cut on the other (1092). There is one thin cut copper alloy strip with a copper piercing through it that appears to have been made at the time of the fragments production (605). This specimen may have been used for decorative purposes as it is very thin (see Kidd 1970: 169, Figure 94 l, n: 184). The artifact measures: l. 12.5 mm, w. 7.0 mm, t. 0.5 mm.

Fragmentary Metal Unidentified (N=5)

There are five unidentified metal specimens that are not iron and which cannot be identified to a functional class. Two of the artifacts are lead (1411, 179).

Iron Ring (N=1)

This is a thin iron ring. A similar one was found by Kidd at Fort George. He indicates that the diameter is similar to that of "a gun barrel but the metal appears too thin" (Kidd 1970: 114, Figure 73u: 117).

Untyped Glass Complex

Unidentified Glass (N=10)

There are ten shards of clear unidentified glass. Seven of these specimens have been burned and were found in Ash Midden 1. Three other shards are too small to identify and were found in Metal Detector Shovel Test 41 (n=1) and Building Feature 3 (n=2).

Untyped Wood Complex

Unidentified Wood (N=1)

There are two small cut wood fragments which fit together and measure l. 69.0, w. 66.0 mm, t. 12.0 mm. They were recovered from Metal Detector Shovel Test 59.

Untyped Miscellaneous Complex

Animal Fur (N=5)

This category consists of two specimens of animal hair. The hair has not been identified. Both specimens were found in Ash Midden 1.

Discussion

Artifacts within the Indigenous use complex consist of lithic, faunal, wood, shell, iron and copper materials. Other than iron, Northern Tutchone and other hunter gatherer groups living in central Yukon manufactured artifacts out of these materials during the Late Pre-contact and Early Contact Period (Le Blanc 1984; Legros 2007; MacNeish 1964; McClellan 1975; Morlan 1972, 1973; Workman 1978).

Bone and antler artifacts such as bilaterally barbed antler points, beamers, a bird blunt, awls, a swan bone drinking tube and an ornamented bone scapula support the lithic evidence for a Northern Tutchone presence at FSI. These tools

appear in conjunction with the HBC Euro-Canadian materials and as such demonstrate that there was interaction between the HBC traders and their Indigenous counterparts. Many of the artifacts were found within building structures and middens indicating that the Northern Tutchone were at least visiting the HBC traders within their residences. The occurrence of the drinking tube and four long bone beamers used for processing hides, indicates the presence of Indigenous women at the site as these are typically objects employed by Athapaskan women in the western subarctic (McClellan 1975: 169; Osgood 1936: 162). Evidence of metal filing and cutting on bone and antler implements demonstrates a choice to use European tools in the production of Indigenous use objects when these were available. According to LeMoine "different manufacturing techniques and uses leave identifiable traces on bone and antler" (1994: 317), in particular abrasive wear that includes polishing (1994: 319). This feature may be seen on but not restricted to barbed points, beamers, awls, and interestingly, on the ornamented moose scapula.

As would be expected, the arms and ammunition complex contained a large collection of gunflints and shot as well as evidence of one musket ball and the partial remains of a gun trigger guard. The number of shot found at FSI is typical for other forts in Yukon (see Clark 1995: 164). Gunflints are less common at Early Contact Period Yukon sites. Nonetheless, it is reasonable to find a large number of flints at mid-century HBC sites as flintlock guns were still being used and traded by the HBC during this time.

Metal working artifacts and by products such as lead sprue and cut metal, including cut copper and sheet iron are also quite common at FSI. This lead, copper and iron material appears to be discarded or recycled metal remains that were reworked into new items. Being so geographically isolated, HBC employees presumably would have recycled materials until they were exhausted. The cut copper sheeting may have been used to make tacks, possible tinkling cones or decorative hinges, all of which were found at FSI.

The architectural and construction complex includes items such as axes, chisels (that could also be used for metal working), and other construction tools as well as pane glass. The latter in particular can offer building and temporal information. During the 19th century, pane glass became thicker over time (Roenke 1978: 22-23). Analysis of pane glass found at FSI indicates that the glass sherds sizes are in accordance with the dates of 1835-1845, only a decade prior to the fort's construction. The glass was primarily located in Building Feature 3, interpreted to be Robert Campbell and James Stewart's habitation quarters. The clothing complex consists of buttons, textiles, a sewing needle, rivets, abalone shell and glass beads. The high quantity of glass beads points to the importance of this item for the HBC crew and local Indigenous traders. According to the HBC account records, the HBC complement consisting of European, Métis and Indigenous men and their families ordered beads for their own personal use (HBCA, B.196/d/1: 1-44).

The predominance of Cornaline d'Aleppo beads followed in popularity by white beads differs from the colour trends of other northern northwestern fur trade sites (Clark 1995). Northern Tutchone and other Indigenous groups may have

been receiving different types of beads from their Chilkat trade partners, therefore requesting particular styles they could not obtain anywhere else.

The household and culinary complex is a diverse group that includes kitchenwares, copper kettle remains, firesteels, seal wax, lantern glass, glass medicine bottles, and ceramic earthenware. Ceramic earthenware at FSI provides temporal information. Some of the blue on white transfer-print earthenware sherds recovered from the site (particularly within Ash Midden 1) can be dated to between 1826 and 1837. Again, because many of the goods imported from England took months to arrive, and then were held in storage, the earthenware dates fit well within the fort occupation timeframe. Their presence in Ash Midden 1 provides a relative date for the feature. No other transfer-print colours are present.

The personal use complex is very small and consists of smoking pipe fragments and a bone tooth from a hair comb. The HBC complement was at FSI to carry out trade and their supply line over vast distances was very far away; therefore obtaining trade goods, let alone personal goods was difficult, as Campbell states numerous times in the fort journals (Campbell and Stewart 2000: 36 [May 31st, 1849]), 64 [Feb. 28th, 1850]). Nonetheless, the men's personal requests included an ivory comb, silk, multi-coloured, gold, black and lady's hair ribbon, women's fine shoes, women's scissors, women's thimbles, ruffle (fabric), a silk bonnet, and tartan and small shawls (HBCA, B. 196/d/1: 1-44). Although not all of these are definitively women's items many are.

The storage and transportation complex consists of metal cans, iron barrel hoops and a lead bale seal. The only complete can found at the site post-dates the fort but the recovered metal can scraps may be from the post era, particularly those fragments with lead seams. The lead bale seal is of interest as it reinforces the post's whole purpose, that of a place to conduct commerce and trade.

Summary

The Euro-Canadian and Indigenous goods recovered from Fort Selkirk I reveal the remains of a small fort that housed a multiethnic contingent of people including European, Métis, non-local and possibly local Indigenous individuals. The local Indigenous population consisted of the Northern Tutchone as well as other regional groups (Han, Kaska, Chilkat and others from near the coast), who visited the fort and left behind evidence of their presence (Campbell and Stewart 2000). Artifacts found at the fort included common Indigenous use tools, some traditionally used by men and others by women. That the typically northwestern subarctic women's tools (four bone beamers and a bird drinking tube) were found within or near the fort building remains demonstrates the close proximity in which people from different cultural groups visited and/or lived and worked. The continued use of these materials indicates that Indigenous women may have chosen to assert their identity even though they were living at an HBC fort.

There are a number of Indigenous use artifacts that were transformed using European materials such as saws and files. An ornamented moose scapula used by the Northern Tutchone in traditional shamanistic practices may have had

significant meaning and value to the producer. In her discussion of shamanistic practices by the southern Yukon people, McClellan describes a shaman "preparing scapulae for clients who are having difficulty getting game. To do this he draws on a scapula a picture of where the man plans to hunt or else a picture of the animal he wants to kill" (1975: 550).

Another artifact of notable interest is an iron projectile point (a skeumorph). It is the only one found at the site and may have one of two possible origins. First, it may be the purposeful transformation of a European material into an Indigenous artifact by a person living in or visiting the fort. This artifact may demonstrate the replacement of European iron for stone as a raw material for the manufacture of an implement either in imitation or to replicate the function of making stone tools (see Harrison 2003: 312). Second, it may have been used as a trade item by the HBC because trade guns were subject to freezing therefore Indigenous hunters preferred and demanded metal projectile points, particularly during the early fur trade (Krech 1987: 217). Some of the bone and antler tools such as two bone beamers and a bone creaser were manufactured with a metal implement as well (see Le Blanc 1984: 321-322; Morlan 1973: 300). Using metal tools to carve and shape bone implements indicates that people did not stop manufacturing pre-contact tools, they just made them with European materials.

Unfortunately, artifactual evidence of Indigenous camps at FSI is ambiguous. The presence of a small number of fire-cracked rocks (FCR), which indicate the conventional methods of Pre-contact aboriginal cooking, were found along the eastern limits of the fort where the possible palisade post was located, as well as in a midden (Ash Midden 1) associated with a habitation site (House Feature 1). The small number of FCR and hearth features indicate that the Northern Tutchone, and other local visitors, may have chosen to stay only a short time at the fort during their visits. People may have visited the fort and camped across the Yukon River, at the location of their traditional fishing camp and trade rendezvous locality (Hare and Gotthardt 1996). Alternatively, the post personnel may have cleaned and disposed of fort refuse in the middens as was done at the Fort George-Buckingham House site plantation (ca. 1792-1800) (Gullason 1990: 136).

As the primary requirement of the fort crew was to obtain subsistence, it is logical to expect gun and ammunition remains. The recycling of materials is also to be expected as the fort was at the extreme end of the HBC supply lines. Pane glass, that would appear to be a luxury item, was important enough to be shipped from Fort Simpson to Fort Selkirk, over 1600 km away. This occurrence at Fort Selkirk suggests that a heavy and fragile commodity was important enough and easy enough to transport to FSI, even with the distance involved; an interesting commentary on what was deemed necessary at such an isolated post.

Buttons and other clothing artifacts were likely used by the HBC crew but were also traded to Indigenous groups in the area. Glass beads were numerous, indicating their importance at FSI. Beads are also found in the men's private orders and Campbell emphasizes their importance by underlining his request for them in the account records (HBCA, B.196/d/1: 1-4). Glass beads would have replaced shell beads after contact but would have been utilized to express

Indigenous identities in the same way, only the material would have differed (Martinez 1998: 129).

The blue on white transfer-print ceramics account for a large part of the household and culinary collection. Transfer-print pottery was very popular within the HBC during this time yet it appears rather ornate considering the locality of the fort (Sussman 1979: 9). Notably, there was no evidence of pottery recycling at the site.

Apart from Campbell and Stewart's journal, the HBC account records, and some related letters, the archaeological material described in this report is all that remains to mark the HBC's initial entrance into Northern Tutchone country. While not overly abundant, the material is varied enough to provide a general overview of the post's material culture and possibly a better understanding of the people who visited and lived at Fort Selkirk I. These everyday utilitarian artifacts demonstrate agentic choice, whether it be the choice to produce bone and antler implements and the types of tools produced, or the choice of Indigenous women and HBC traders to co-habitate. Choice can be seen in the building of the fort at that specific locality, and in the production and or use of metal projectile points as well as the use of European weaponry. Engaging in social interactions and sharing of material objects as evidenced by the intermixing of European and Indigenous artifacts within Ash Midden 1 and throughout the site also demonstrates active agency. Yet, as active agents in their relations with the fur traders, Indigenous visitors to the fort left a small footprint of their engagement in the fort system as represented by the low frequency of Indigenous use artifacts found at FSI; this too is a choice. This is indicative of their resistance to participate fully in the HBC sphere of trade. Yet to a certain extent they did participate; their material culture is evidence of this involvement.

In conclusion, the material culture and faunal remains (chapter 8) provide examples of the extent to which Indigenous men and women chose to participate within the Fort Selkirk I trade sphere and alternatively, the degree to which HBC employees participated within the Indigenous sphere of influence.

Chapter 8: Faunal Analysis

The procurement of meat by the HBC traders and the provisioning of meat by the Northern Tutchone and other visiting Indigenous groups played a pivotal role in the social interactions at the fort. Although obtaining furs was the economic goal of the HBC post, possibly the most important activity was acquiring food to survive the long winter and early spring months when protein was scarce. Accordingly, food procurement was an important part of daily life and much of HBC staff time was spent on hunting, fishing and trapping activities (Campbell and Stewart 2000). Arthur Ray states in his economic study of the early HBC fur trade that "since many of the men were not skilled hunters and trappers, the Hudson's Bay Company turned to Indians for the major portion of the food supplies that were used" (1978: 41). This situation explains why much of the meat obtained by the HBC came from the Northern Tutchone, whether through trade or the sharing of fishing localities[29] (for an in depth analysis of FSI food procurement practices by fort employees and Northern Tutchone see Chapter 4). As such, examination of the dietary habits of the fort may lead to a better understanding of the social interactions which took place at Fort Selkirk I.

To investigate these issues, a study of the faunal remains at FSI was completed. The objectives of the chapter are: (1) to present and synthesize the zooarchaeological data that were analyzed at the Zooarchaeological Laboratory and Museum of Zoology, Department of Anthropology, University of Alberta and (2) to use the data to address questions of fort crew and local Indigenous subsistence, material practices, and social relations regarding food and fur procurement at Fort Selkirk I.

Methods

Zooarchaeological Analysis

Interpretation of faunal remains was conducted by Tatiana Nomokonova, under contract to the Yukon Government Heritage Unit. Analysis includes both identifiable and undifferentiated specimens from all the excavated loci. Faunal remains were examined and identified to element, side, and lowest taxonomic level based on morphological comparisons with reference collections from the Zooarchaeological Laboratory and Museum of Zoology, University of Alberta. The objective was to identify as many bones as possible to the most specific taxonomic category, and to describe them fully with respect to element and other

[29] Binnema, in his analysis of the Northwestern Plains, states that the HBC was provisioned by Cree and Assiniboine bands who worked as full-time provisioners during the mid 1700s (2004: 119). At Fort Simpson, "most of the hunting was done by Indians, who were either official "fort hunters" paid in powder and shot, or members of the independent local bands known as home guard" (Karamanski 1983: 195). Karamanski argues that the reason meat was traded more often than furs at forts was due to people's ability to snare rabbit and hunt moose in their traditional winter hunting-band structure (1983: 195-196). It was easier to do this than to trap furs (ibid.).

characteristics. Data collected included size, context, modification, and weight following recommendations by Grayson (1984).

The faunal data are described using standard zooarchaeological quantitative measures; including: (1) the number of identified specimens (NISP), (2) minimum number of individuals (MNI), and (3) total weight in grams (g). The total NISP includes all specimens present in the collection, regardless to which taxonomic level they have been identified. The MNI is the figure necessary to account for all the skeletal elements present for an individual animal of a given taxon. To calculate MNI, the most abundant element or element portion for a given taxon in the assemblage is counted with a consideration of age, element size, and portion. The total MNI per one feature from a sample was calculated by adding all the bones from the samples together to distinguish the most abundant element within the total bone assemblage from that feature. The dissimilarity is represented in Table 26 and Tables 27-44, where the MNI count for the total site assemblage is different from the MNI calculated from individual features. It is important to be explicit about aggregation choices. Although different site loci at FSI may contain portions of the same animal, MNI totals are considered by feature since features are separated by at least 3 m. To obtain weight in grams, specimens were weighed on a scale with 0.01 gram increments. If a specimen weighed <0.01 gram, the minimum weight recorded in the database was 0.01 grams. As a result, some remains, for example fish, which probably weighed less than 0.01 gram, may be slightly overestimated by weight.

Results

There were 29,068 (NISP) specimens recovered from FSI (Tables 26, 45). The vast majority of identified faunal remains were from mammals (NISP=24,136, 83.01%). The remainder of the assemblage includes 231 birds (0.78%), 4053 fish (13.95%), 643 unidentified bones, likely fragments of birds and small mammals (2.12%), and five gastropods (0.02%). The assemblage includes many bone fragments that could not be identified even to the class taxonomic level (NISP=643, 2.21%). Artiodactyls, including moose (*Alces alces,* NISP=121, MNI=3) and caribou (*Rangifer tarandus,* NISP=38, MNI=2), are a prominent component of the assemblage that could be identified to species. Carnivores are represented by 61 specimens, including wolverine (*Gulo gulo,* NISP=21, MNI=2), dogs and wolves (*Canis* spp., NISP=15, MNI=2), lynx (*Lynx canadensis,* NISP=3, MNI=1), marten (*Martes americana,* NISP=2, MNI=1) and black bear (*Ursus americanus,* NISP=1, MNI=1). Other animal taxa include hare (*Lepus americanus,* NISP=350, MNI=13), beaver (*Castor canadensis,* NISP=18, MNI=2), porcupine, (*Erethizon dorsatum* NISP=9, MNI=1), marmot (*Marmota* spp., NISP=2, MNI=1) rodents (Rodentia, NISP=11, MNI=1), squirrels (Sciuridae, NISP=10, MNI=2), and mice and rats (Muridae, NISP=9, MNI=4).

Fish are particularly well represented, and include salmon, trout and whitefish (Salmoniformes, NISP=1211, MNI=52), with some of them identified as Pacific salmon and trout (*Oncorhynchus* spp., NISP=7, MNI=3), and whitefish (*Coregonus* spp., NISP=98, MNI=12). Most of the Salmoniform specimens are

comparable in size to Chinook salmon (*Oncorhynchus tshawytscha*). Salmon are difficult to identify to species and are also osteologically similar to large trout and char. Other fish specimens include northern pike (*Esox lucius*, NISP=8, MNI=1), burbot (*Lota lota*, NISP=8, MNI=1) and suckers (*Catostomus* spp., NISP=10, MNI=1).

Most of the bird remains belong to members of the duck, goose and swan family (Anatidae, NISP=37, MNI=5), including dabbling ducks and teals (*Anas* spp., NISP=2, MNI=1), geese and swans (Anaserinae, NISP=7, MNI=1), and brants (*Branta* spp., NISP=2, MNI=1). A small number of bones are identified to the grouse and ptarmigan family (Tetraonidae, NISP=12, MNI=2), including ptarmigan (*Lagorus* spp., NISP=4, MNI=1). Also present are members of the owl family (Strigidae, NISP=9, MNI=2), including great white owl (*Strix nebulosa*, NISP=1, MNI=1). Other specimens are identified as crow (*Corvus* spp., NISP=1, MNI=1) and common raven (*Corvus corax*, NISP=1, MNI=1).

Bone Modification

Cultural modification of bones is relatively common in the FSI assemblage (Tables 27-44). Thirty-one bone and antler implements are present and are discussed in further detail in chapter 4. Examples of cutting, chopping, sawing, hacking, scraping, and retouching have been recorded for 277 (0.95%) specimens (Figures 58-61). Large, unidentified mammal long bone fragments have the highest evidence of butchering (N=46) (Figure 59), followed by large unidentified mammal rib fragments (N=10 (Figure 60). Presumably these large mammal fragments come from either caribou or moose. Caribou elements constitute the highest number of identified FSI faunal remains with evidence of butchering (Figures 61, 62). This observation is logical as the large animals were likely cut down to sizes that were easier to manage and process resulting in cut marks.

Other modifications include evidence of burning on 14,478 (49.8%) specimens (Figure 41d). Most of the burnt bone fragments occurred in Ash Midden 1 (NISP=1150), Hearth Feature 1 (NISP=675), Metal Detector Shovel Tests (NISP=420), Building Feature 1 (NISP=380) and Palisade Shovel Test (NISP=398). Non-cultural bone modifications are represented by carnivore tooth punctures, gnawing, and/or chewing marks which are found on 33 (0.11%) specimens.

Figure 59. Ash Midden 1, Mammalia-unidentified, Long Bone Fragment, Cut Marks and Sawed Edge at Bottom of Photograph.

Figure 60. Mound Feature 1, Mammalia-Unidentified, Rib Fragment, Chop Marks at Right Side of Specimen.

Figure 61. Ash Midden 2, Artiodactyla, Rib Fragment, Cut Marks.

Figure 62. Ash Midden 1, Artiodactyla-Large, Rib Fragment, Chop Marks.

Discussion

Several patterns emerge after examination of the faunal taxonomic diversity and quantity across the site. First, there is a high proportion of fragmentary and therefore unidentifiable, mammal bone within the assemblage (N=22,757), particularly in Ash Midden 1 (N=18,315). Almost half of the bone at the site is burnt 49.80%. Total weight for the burned bone is 7.85 kg, approximately 1/4 of the collection (35.24 g). Much of that bone is found in Ash Midden 1 (NISP=11,150). All of these data relate to local food processing and/or post processing disposal whereby discarded bones may have been tossed into fire places under the chimneys which in turn would have been cleaned out periodically and dumped into middens.

Mammal, bird and fish remains are burnt indicating that any or all of these may have been processed for food. This large amount of fragmented bone may represent either or both of the following activities: (1) the ash feature was a place where discarded bones and ash from chimneys and hearths was placed resulting in an accumulation of ash deposits through time as seen in profile, and/or (2) bone grease production occurred at FSI, particularly near the locality of Ash Midden 1.

A description of caribou long bone processing and grease production is presented below:

> Marrow-containing long bones are generally cracked and opened to extract their valuable contents... Marrow, being unusually fat, is preferred food...Other bones containing fat in lesser quantity, such as ribs, phalanges, and mandibles, also can be smashed up, added to the long-bone fragments from the marrow removal process, and boiled to extract remnant fat or *bone grease.* (Spiess 1979: 24-25, my italics)

A description of bone grease preparation by Leechman (1954: 8-9) describes the meat being cut off the bone and dried. The meat is then placed on a caribou skin with a large stone set on the hide. The bones are smashed against the stone with an axe or stone hammer resulting in fragments the “size of fingernails”. The fragments are placed inside a pot which sits over a fire, the temperature kept below boiling. Eventually, the fat floats to the top and is skimmed off. The grease is kept in a caribou stomach (for up to several years) and is used in the same way as butter as a means of obtaining needed fat by combining it with dried meats.

Another use for bone grease was as an ingredient for making pemmican, which is “a compact, nutritious and imperishable food supply” that can be stored for years (Binnema 2004: 119). It typically consists of pulverized meat, dried berries and animal fat or grease. Pemmican was important to the HBC traders, as “the subarctic forests simply did not have the resource base to feed the traders” (ibid.). In fact, Campbell and Stewart mention their distress at the low supply of pemmican in the FS journals (Campbell and Stewart 2000: 133-4). It is reasonable to assume that bone grease and pemmican were produced at FSI.

Second, undifferentiated large mammals comprise a large number of specimens (NISP=499), including artiodactyls (NISP=186) represented by moose (NISP=121; MNI=9) and caribou (NISP=38; MNI=4). MNI can be seen as a taxonomic minimum and NISP a maximum estimate of taxonomic abundance in the archaeological record (Klein and Cruz-Uribe 1984: 30). With this consideration in mind, large undifferentiated mammals, artiodactyla and identified moose and caribou can be seen as comprising a large portion of the assemblage. Given the traders' focus on obtaining subsistence, the possible abundance of these animals is an important indicator of the vital role that large game hunting and meat had at FSI. Although MNI's are not given, total NISP counts at Fort Selkirk I parallel moose (NISP=135) and caribou (NISP=26) counts at Fort Reliance (1874-1886) (Clark 1995: 193, Table AI.5).

The presence of at least 4 (MNI) caribou is significant in view of Legros' statement suggesting that caribou were rarely, if ever hunted by the Northern Tutchone during the fort era. Legros indicates that caribou hides traded at FSI were likely brought in by neighbouring groups such as the Han and Kaska (Legros 2007: 160-164). He also states that, "Campbell does not mention even one personal sighting of caribou in *Northern Tutchone* country" (Legros 2007: 163-164; author's italics). If this is the case, the occurrence of caribou faunal remains at FSI is puzzling. Either outside groups were bringing the animal to Fort Selkirk, the fort hunters were going great distances to harvest caribou (which they could transport on sled) or the animals were present in Northern Tutchone territory and were being hunted for subsistence (and hides) by the fort hunters and possibly by the Northern Tutchone who would have traded not only the hides but possibly the meat to the HBC. This does not mean that caribou were as abundant as moose, since there are three times as many moose specimens as caribou.

Third, fish (NISP=4,053) and to a lesser extent birds (NISP=231) are important constituents of the faunal assemblage, although they are less plentiful outside of Ash Midden 1. Fish and bird bones represent important food sources for the people at FSI. The identifiable fish species reflect a predominantly riverine and lake focus. All the fish found within the FSI assemblage are present within Northern Tutchone country (Legros 2007: 297; Smith et al. 2004). As expected, salmon, trout and whitefish remains are abundant (NISP=1309). However, these represent a much smaller meat contribution when compared with the large and small mammals. The Campbell and Stewart journals document almost daily fishing excursions by the fort crew and Campbell stated that if had not been for Tatlmain Lake, he and his crew would have died of starvation in the winter of 1848 (Wilson 1970: 98). Legros points out that the Northern Tutchone could spend much of the year at fishing sites such as narrows, prompting the formation of semi-sedentary residential groups (Legros 2007: 304-305). Fish would be processed at these sites and could provide up to 40% of the total yearly protein consumed by the Northern Tutchone (Legros 2007: 294). The FSI complement would often go fish with the Northern Tutchone, thus they too may have processed their fish at these sites, rather than at FSI, thus explaining the low fish

bone yield at the fort[30]. As well, the low fish remains relative to mammals may be due to poor preservation of small bones.

Bird specimens representing the duck, goose and swan family (NISP=37; MNI=10) and grouse and ptarmigans (NISP=12; MNI=3) suggest hunting and trapping in both the valleys and above the tree line. Waterfowl were hunted during their migration periods during early May and between September and October. Species such as ducks, geese and swans were found at lakes and marshes where there were aquatic plants to feed on. Legros writes that there was a lack of these lakes and marshes in Northern Tutchone country so that people would have had to go on special expeditions to find these birds (Legros 2007: 265). Legros argues that since birds migrated during prime hunting season, the Northern Tutchone did not harvest these animals as much as they could have (ibid.). Bird remains found at FSI indicate that either fort hunters went great distances to obtain these animals or that they were available and harvested in Tutchone country. Fort hunters would have been hunting large game at the same time as the Northern Tutchone but they still managed to hunt birds therefore it seems possible that the Northern Tutchone also obtained more birds than Legros indicates.

Fourth, small sized mammals are present in low quantities, except for hare (NISP=350; MNI=24). Hares would have been readily available in the locality of the fort and would have provided a dependable if not low fat meat source in times of famine. If relied on too heavily, hare could lead to starvation periods as populations went through ten year cycles of abundance and then decline (Campbell in Wilson 1970: 145). Other small mammals of note are wolverine (NISP=21; MNI=2), beaver (NISP=18; MNI=5), dogs and wolves (NISP=15; 5), North American porcupine (NISP=9; MNI=2), foxes (NISP=4; MNI=1), lynx (NISP=3; MNI=2), and marten (NISP=1; MNI=1). Compared to large mammal, fish and bird, small mammals did not contribute significantly to the FSI diet.

Fifth, although in small number, fur bearing species such as bear, beaver, fox, lynx, marten, mink, otter, wolf and wolverine are present at FSI. The packing accounts for these animals were found in the Hudson's Bay Company account records for FSI (HBCA B.196/d/1: 15). There is a discrepancy between the furs being shipped out and the number of animals represented by the bones. This difference is to be expected as most of the furs would have been processed outside of the fort. By the early 1840s beaver was falling out of fashion and marten, fox, and mink had become popular in Europe (Hammond 1988: 149). These pelts were shipped back to headquarters in great numbers yet their faunal remains are minimally present in the fort assemblage. Fort hunters and local traders would have brought animals hides in after they were processed therefore faunal elements would have been discarded outside of the fort boundary (McClellan 1987: 161).

Sixth, although fur bearers were probably processed away from the fort, some of the specimens may have provided a source of protein. Some of the fur bearing animal bones had modifications such as burning (bear and beaver), and cut, chop or saw marks (marten). Of course, marten have very strong scent glands that would make the meat almost inedible. According to Legros (2007: 268) the

[30] Campbell and Stewart (2000) mention crew members fishing or caching fish at Tatlmain Lake over 60 times.

Northern Tutchone had taboos against eating marten, wolf, wolverine, fox and weasel. All of these were strictly hunted for their furs, although wolf pups were sometimes trapped and trained as pack animals. He does not give specific reasons for this practice, only to say that there was a Northern Tutchone cultural bias against eating these animals (ibid.). This may not have been the case for the HBC employees who would have had different cultural taboos regarding animal consumption. Thus, some of these animals may have been processed for both fur and meat at the site. In fact, Stewart comments "Eustache killed a beaver which I hope to share with my dear friend C. when he comes, which I hope is soon" (Campbell and Stewart 2000: 101 [May 12th, 1851]). The C. that Stewart refers to here appears to be Robert Campbell who was away at the time. Additionally, Campbell and Stewart mention trading, or having fort hunters bring back, bear tongue 27 times throughout the FSI journals (Campbell and Stewart 2000).

Seventh, the faunal remains show distinct spatial distributions at the site. There is a difference in faunal remains between Ash Midden 1 (NISP=23,251; wt.: 25,283.67 g) and the next largest assemblage of faunal remains which is located in Hearth Feature 1 is (NISP=1,352; wt.: 2816.99 g). This is a difference of 21,899 (NISP) or 22,466.68 g. Ash Midden 1 dominated all other features for the size of the feature, variability and quantity of animal remains. This large difference in faunal abundance is likely attributable to the proximity of Ash Midden 1 to House Feature 1. Two chimney feature bases were found within the building structure and ash and debris was likely dumped behind the building into Ash Midden 1. This midden may also have been the dump site for the garbage and chimney refuse from other living quarters such as Building Feature 2 and Building Feature 3. Faunal remains found within Building Feature 1 were third highest with a total of 1,108 (NISP; wt.: 1,526.78 g). These remains may have fallen or been trampled between the floorboards of the building. Finally, faunal remains that were found with metal fragments using a metal detector and during transect shovel tests indicate that aside from the possibility of natural forest fire occurrence, the metal detector which identified metal material within the locality of the fort also assisted in locating modified (burnt) faunal material (NISP=425). The transect shovel tests, which were spread out in all directions resulted in a fraction of burnt bone being found (NISP=79). It appears that although faunal remains were localized within the features, faunal remains were also present throughout the fort site.

Eighth, carnivore marked bones are either the result of wild animals chewing on faunal remains and faunal remains were intentionally or inadvertently fed to the domestic dogs that belonged to the FSI crew, Northern Tutchone and/or Chilkat and other people who visited the fort (Campbell and Stewart 2000). The remains may also be a result of post occupation carnivore scavenging. Dogs are mentioned 56 times in the FSI journals and were extremely important to the fort since they were used to track animals, pull sleds, and protect the crew (Campbell and Stewart 2000). A number of times, Campbell and Stewart insinuate that the fort dogs were lured away by the Chilkat, which is a testament to their importance (Campbell and Stewart 2000: 13 [Sep. 21st, 1848], 44 [Aug. 27th, 1849]). Wolves were often seen at FSI; Campbell writes that he killed a wolf that had been

lurking around the fort for days (Campbell and Stewart 2000: 26 [Feb. 3rd, 1849]).

Ninth, butchery evidence in the form of cut, chop and saw marks occur in relatively low numbers and primarily in the undifferentiated mammal and undifferentiated large mammal categories. Butchery marks appear on a number of undifferentiated large mammal skeletal elements including large unidentified mammal long bone fragments (NISP=46), rib fragments (NISP=10) and vertebrae, innominate, scapula, and ulna fragments (NISP=1). Undifferentiated small mammal specimens include rib (NISP=4), radius and mandibular (NISP=1). Identifiable mammals with evidence of cultural modification include caribou phalanx (NISP=4), metatarsal (NISP=3), scaphoid, 2nd phalanx, and femur (NISP=1). There is also one butchered marten skull and mandible (NISP=1). In total 277 specimens have evidence of cultural modifications (not including bone and antler artifacts).

Although there is a low frequency of butchery evidence within the FSI faunal collection, at least two caribou carcasses were partially butchered at the site. The numerous butchered large undifferentiated mammal elements indicate that the number of caribou and or moose butchered on site may have been higher as these species fall within the category of large mammal.

Tenth, undifferentiated faunal remains (including undifferentiated Mammalia, undifferentiated Aves and undifferentiated Pisces) from each feature offer another line of evidence for site interpretation. Undifferentiated fragmented bone is abundant at the site (N=26,188), with the vast majority being recovered at Ash Midden 1 (N=20,656). The total weight of unidentifiable Ash Midden 1 bone is 26,234.34 g. Hearth Feature 1 yielded the second most abundant amount of undifferentiated fragmented bone, with 1,190 specimens weighing 927.71 g. The remaining features all contained <1,000 undifferentiated fragmented bones. The abundance of fragmented bone seems to coincide with high amounts of burnt bone. Patterns of burning coincide with the feature faunal totals as Ash Midden 1 had the highest rate of burnt undifferentiated faunal remains totalling 11,273 elements, followed by Hearth Feature 1 with a total of 675 bones.

Summary

The archaeofaunal remains from the Fort Selkirk I assemblage demonstrate the variability in food and fur procurement by the post complement. The fort employees ate what was available and this resource included carnivores, fur bearers, fish, birds, small mammals as well as caribou and moose. Campbell and Stewart comment often in the Fort Selkirk journal that local groups traded meat for European-Canadian goods, some of the faunal remains may be from these exchanges but it is also likely that fort hunters obtained the meat locally. Interestingly, although Campbell and Stewart often comment that they are hungry and have little meat, they rarely mention the consumption of many of these animals, particularly the fur bearing animals with the exclusion of bear. Especially interesting is the identification of caribou elements within the fort assemblage. Their presence indicates that these animals were hunted locally and

consumed by the fort complement, contrary to previous assumptions that caribou were not found or only rarely found in Northern Tutchone territory.

Taxon	Common Names	NISP	%NISP	MNI
Mammalia-undifferentiated	Mammals	22756	78.29	
Mammalia-undifferentiated-large		499	1.72	
Mammalia-undifferentiated-small		68	0.23	
Artiodactyla	Even-toed mammals	81	0.27	
Artiodactyla-large		105	0.36	
Cervidae	Deer and relatives			
Rangifer tarandus	Caribou	38	0.13	2
Alces alces	Moose	121	0.41	3
Lagomorpha				
Leporidae	Hares and rabbits			
Lepus americanus	Varying hare	350	1.20	13
Rodentia	Rodents	11	0.04	1
Sciuridae	Squirrels and allies	10	0.03	2
Marmota spp.	Marmots	2	0.01	1
Castoridae	Beavers and relatives			
Castor canadensis	Beaver	18	0.06	2
Erithizontidae	Porcupine and relatives			
Erethizon dorsatum	North American porcupine	9	0.03	1
Muridae	Mice, rats, and relatives	9	0.03	4
Carnivora	Carnivores	11	0.04	
Carnivora-small		2	0.01	
Felidae	Cat family			
Lynx canadensis	Lynx	3	0.01	1
Canidae	Dogs and relatives			
Canis spp.	Dogs and wolves	15	0.05	2
Vulpes spp.	Foxes	4	0.01	1
Ursidae	Bears and relatives			
Ursus americanus	Black bear	1	0.00	1
Mustelidae	Weasels and relatives			
Martes americana	Marten	2	0.01	1
Gulo gulo	Wolverine	21	0.07	2
Total mammals		24136	83.01	
Aves-undifferentiated	Birds	154	0.53	
Aves-undifferentiated-large		1	0.00	
Anatidae	Ducks, geese, and swans	37	0.13	5
Anas spp.	Dabbling ducks and teals	2	0.01	1
Anserinae	Geese and swans	7	0.02	1
Branta spp.	Canada geese	2	0.01	1

Taxon	Common Names	NISP	%NISP	MNI
Tetraonidae	Grouse, ptarmigan, and relatives	12	0.04	2
Lagorus spp.	Ptarmigans	4	0.01	1
Strigidae	Typical owls	9	0.03	2
Strix nebulosa	Great grey owl	1	0.00	1
Corvidae	Crows and relatives			
Corvus spp.	Crows	1	0.00	1
Corvus corax	Common raven	1	0.00	1
Total birds		231	0.78	
Pisces-undifferentiated	Fishes	2711	9.33	
Salmonifomes	Salmon, trout, whitefish	1211	4.17	52
Oncorhynchus spp.	Pacific salmon and trout	7	0.02	3
Coregonus spp.	Whitefish	98	0.34	12
Catostomidae	Suckers and relatives			
Catostomus spp.	Suckers	10	0.03	1
Lotidae	Cod-like fish and relatives			
Lota lota	Burbot	8	0.03	1
Esocidae	Pike family			
Esox lucius	Northern pike	8	0.03	1
Total fish		4053	13.95	
Undifferentiated		643	2.12	
Gastropodia-freshwater	Gastropods, slugs, and snails	5	0.02	5
Total		**29068**	**100%**	

Table 26. Total Faunal Remains from Fort Selkirk I.

Taxon	NISP	MNI	Weight (g)	Cut/Chop /Saw Marks	Carnivore /Rodent Marks	Burning
Mammalia-undifferentiated	18315		14012.25	78	13	11150
Mammalia-undifferentiated-large	373		5689.82	38	2	29
Mammalia-undifferentiated-small	51		28.87	5		8
Artiodactyla	68		512.38	4	2	27
Artiodactyla-large	71		1278.19	6		20
Rangifer tarandus	33	1	451.72	7	1	11
Alces alces	91	3	2574.83	20	2	14
Castor canadensis	5	1	9.14			1
Erethizon dorsatum	4	1	5.26	1		1
Lepus americanus	33	3	16.52			2
Carnivora	8		29.51	1		1
Carnivora-small	1		0.73			
Rodentia	1		0.12			
Sciuridae	8	2	8.35			
Marmota spp.	1	1	2.76			
Muridae	8	3	0.68			
Lynx canadensis	1	1	14.05			
Gulo gulo	20	1	20.14			
Canis spp.	8	1	33.50	1		
Vulpes spp.	4	1	11.17			2
Aves-undifferentiated	115		43.36			5
Aves-undifferentiated-large	1		1.92			
Anatidae	20	3	11.08	1		1
Anserinae	6	1	21.84			
Anas spp.	2	1	1.13			

Taxon	NISP	MNI	Weight (g)	Cut/Chop /Saw Marks	Carnivore /Rodent Marks	Burning
Tetraonidae	9	2	3.33			
Lagorus spp.	4	2	1.90			
Strigidae	8	1	7.61			
Strix Nebulosa	1	1	2.24			
Corvus spp.	1	1	0.45			
Corvus corax	1	1	0.50			
Pisces-undifferentiated	2226		119.37			118
Salmoniformes	1075	42	174.72			88
Oncorhynchus spp.	7	3	8.34			
Coregonus spp,	87	8	9.70			1
Catostomus spp.	10	1	1.29			
Lota lota	7	1	0.98			
Esox lucius	7	1	4.17			
Undifferentiated	555		169.57	1		350
Gastropodia-freshwater	5	5	0.18			
Total	**23251**		**25283.67**	**162**	**20**	**11829**

Table 27. Faunal Remains From Ash Midden 1.

Taxon	NISP	MNI	Weight (g)	Cut/Chop /Saw Marks	Carnivore /Rodent Marks	Burning
Mammalia-undifferentiated	1093		897.56	3		675
Mammalia-undifferentiated-large	59		1087.53	5		
Mammalia-undifferentiated-small	3		3.24			
Artiodactyla-large	10		371.30	2		1
Rangifer tarandus	2	1	97.57			
Alces alces	6	1	254.55			
Castor canadensis	5	1	30.86			
Lepus americanus	28	3	14.61			
Carnivora	1	1	0.51			
Lynx canadensis	2	1	14.16			
Aves-undifferentiated	18		9.31			
Anatidae	6	2	4.73			
Pisces-undifferentiated	79		20.84			
Salmoniformes	5	1	1.95			
Coregonus spp.	3	2	1.48			
Lota lota	1	1	0.34			
Undifferentiated	31		6.45			
Total	**1352**		**2816.99**	**10**		**676**

Table 28. Faunal Remains From Hearth Feature 1.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop /Saw Marks	Carnivore/RBurning odent Marks	
Mammalia-undifferentiated	894		718.88	13	3	380
Mammalia-undifferentiated-large	36		500.40	15	1	1
Mammalia-undifferentiated-small	3		0.81			2
Artiodactyla	2		60.72	2		
Artiodactyla-large	4		35.74	2		1
Rangifer tarandus	1	1	29.45			
Alces alces	5	1	141.34	4		1
Lepus americanus	5	1	5.45			
Erethizon dorsatum	1	1	4.27			
Sciuridae	1	1	0.25			
Carnivora	1		0.09			
Canis spp.	1	1	1.38			
Aves-undifferentiated	1		0.16			
Anatidae	4	1	2.84			
Tetraonidae	1	1	0.36			
Pisces-undifferentiated	98		5.61			3
Salmoniformes	42	5	7.66			
Coregonus spp.	3	2	0.23			
Esox lucius	1	1	0.77			
Undifferentiated	4		0.37		1	
Total	**1108**		**1516.78**	**36**	**4**	**389**

Table 29. Faunal Remains From Building Feature 1.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop /Saw Marks	Carnivore/RBurning odent Marks	
Mammalia-undifferentiated	633		478.66	12	3	344
Mammalia-undifferentiated-large	2		51.77	1		
Mammalia-undifferentiated-small	3		1.63			1
Artiodactyla	3		29.32	3		
Artiodactyla-large	3		26.42	1		1
Alces alces	1	1	290.05	1		
Castor canadensis	5	1	75.34			
Lepus americanus	5	2	2.89			
Erethizon dorsatum	4		2.35			
Rodentia	8		0.35			
Marmota spp.	1		1.09			
Aves-undifferentiated	4		0.22			
Pisces-undifferentiated	202		8.54			4
Salmoniformes	57	2	10.83			9
Coregonus spp.	1	1	0.06			
Undifferentiated	29		1.64			
Total	**961**		**981.16**	**16**	**3**	**359**

Table 30. Faunal Remains From Ash Midden 2.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop/Saw Marks	Carnivore/ Rodent Marks	Burning
Mammalia-undifferentiated	587		828.79	13	1	420
Mammalia-undifferentiated-large	1		16.50			
Artiodactyla	2		45.18			1
Artiodactyla-large	4		100.24			
Rangifer tarandus	2	1	21.27	1		
Alces alces	4	1	40.57	2		
Lepus americanus	1	1	0.37			
Castor canadensis	1	1	4.13			1
Ursus americanus	1	1	2.44			1
Canis spp.	4	1	6.93			
Aves-undifferentiated	4	1	1.41			
Anatidae	4	1	2.39			
Anserinae	1	1	5.85			
Strigidae	1	1	0.42			
Branta spp.	1	1	0.53			
Pisces-undifferentiated	21		1.23			
Salmoniformes	13	1	2.21			2
Undifferentiated	1		0.38			
Total	**653**		**1080.84**	**14**	**1**	**425**

Table 31. Faunal Remains From Metal Detector Shovel Tests.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop/ Saw Marks	Carnivore/ Rodent Marks	Burning
Mammalia-undifferentiated	530		493.82	6		396
Mammalia-undifferentiated-large	3		71.19	2		
Mammalia-undifferentiated-small	5		2.48			1
Artiodactyla	1		21.08			
Artiodactyla-large	5		150.06	1		
Alces alces	7	1	319.47	1		
Sciuridae	1	1	0.37			
Castor canadensis	1	1	19.34			
Canis spp.	1	1	0.34			
Muridae	1	1	0.10			
Aves-undifferentiated	1		0.76			
Anatidae	1	1	0.50			
Branta spp.	1	1	0.10			
Tetraonidae	2	1	1.09			
Pisces-undifferentiated	34		1.82			1
Salmoniformes	8	2	1.87			
Coregonus spp.	2	1	0.09			
Undifferentiated	4		0.37			
Total	608		1084.85	10		398

Table 32. Faunal Remains From Palisade Shovel Tests.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop/ Saw Marks	Carnivore/Rodent Marks	Burning
Mammalia-undifferentiated	7		12.51			2
Mammalia-undifferentiated-large	1		23.43			
Artiodactyla-large	1		15.33		1	
Lepus americanus	258	9	178.35	2	1	1
Martes americana	1	1	0.95			
Rodentia	2	1	0.95			
Anatidae	1	1	1.58			
Undifferentiated	4		0.47			
Total	**275**	12	**233.57**	**2**		**3**

Table 33. Faunal Remains From Cellar Feature 1.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop /Saw Marks	Carnivore/ Rodent Marks	Burning
Mammalia-undifferentiated	117		90.60	2		12
Mammalia-undifferentiated-large	9		88.25	2		
Mammalia-undifferentiated-small	1		0.29			
Artiodactyla	1		2.08			
Artiodactyla-large	2		23.54			
Alces alces	1		4.24		1	
Castor canadensis	1		3.48			
Lepus americanus	1		0.91			
Carnivora-small	1		0.10			
Canis spp.	1	1	19.61			
Aves-undifferentiated	9		2.52			
Anatidae	1	1	1.11			
Pisces-undifferentiated	23		1.33			
Salmoniformes	5	1	1.31			
Coregonus spp.	1	1	0.05			
Undifferentiated	5		1.28			
Total	**179**		**240.70**	**4**	**1**	**12**

Table 34. Faunal Remains From Building Feature 3.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop/ Saw Marks	Carnivore/Rodent Marks	Burning
Mammalia-undifferentiated	126		98.06	1		78
Mammalia-undifferentiated-large	3		84.6			
Artiodactyla-large	3		140.62	1	1	1
Alces alces	5	1	816.99	3		
Lepus americanus	15	2	11.27	2		
Gulo gulo	1	1	16.84			
Aves-undifferentiated	1		1.96			
Pisces-undifferentiated	3		0.19			
Undifferentiated	7		0.74			
Total	**164**		**1171.27**	**8**	**1**	**79**

Table 35. Faunal Remains From Transect Shovel Tests.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop/ Saw Marks	Carnivore/RBurning odent Marks	
Mammalia-undifferentiated	99		83.91			68
Mammalia-undifferentiated-large	5		99.91			
Carnivora	1		0.42			
Salmoniformes	2		0.30			
Total	**107**		**184.54**			**68**

Table 36. Faunal Remains From Metal Detector Test Unit 15.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)	
				Cut/Chop/ Saw Marks	Carnivore/RBurning odent Marks
Mammalia-undifferentiated	134		104.51	1	121
Mammalia-undifferentiated-large	4		54.50		
Artiodactyla	4		24.80		4
Artiodactyla-large	2		143.05		
Salmoniformes	1		0.03		1
Total	**145**		**326.89**		**126**

Table 37. Faunal Remains From Metal Detector Test Unit 59.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)	
				Cut/Chop /Saw Marks	Carnivore/ Burning Rodent Marks
Mammalia-undifferentiated	75		31.50		54
Lepus americanus	1	1	0.16		
Salmoniformes	1		0.13		
Total	**77**		**31.79**		**54**

Table 38. Faunal Remains From Metal Detector Shovel Test Unit 27.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)	
				Cut/Chop /Saw Marks	Carnivore /Rodent Marks	Burning
Mammalia-undifferentiated	57		35.74	1	30
Mammalia-undifferentiated-small	1		0.58	1	
Aves-undifferentiated	1		0.16		1
Pisces-undifferentiated	10		0.46		1
Total	**69**		**36.94**	**2**	**32**

Table 39. Faunal Remains From Miscellaneous Locations (Screen, No Provenience).

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)		
				Cut/Chop/ Saw Marks	Carnivore /Rodent Marks	Burning
Mammalia-undifferentiated	48		45.43			21
Mammalia-undifferentiated-large	2		48.82	1		
Mammalia-undifferentiated-small	1		0.77			
Martes americana	1	1	8.22	1		
Pisces-undifferentiated	7		0.34			
Coregonus spp.	1	1	0.04			
Total	**60**		**103.62**	**2**		**21**

Table 40. Faunal Remains From Chimney Feature 2.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)	
				Cut/Chop /Saw Marks	Carnivore/Rodent Burning Marks
Mammalia-undifferentiated	33		91.50	1	5
Mammalia-undifferentiated-large	1		26.45		
Alces alces	1	1	11.46		
Pisces-undifferentiated	7		0.30		
Salmoniformes	2	1	0.19		
Undifferentiated	3		0.06		2
Total	**47**		**129.96**	**1**	**7**

Table 41. Faunal Remains From Metal Detector Test Unit 43.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)	
				Cut/Chop/ Saw Marks	Carnivore/Rodent Burning Marks
Mammalia-undifferentiated	8		8.50		
Pisces-undifferentiated	1		0.11		
Total	**9**		**8.61**		

Table 42. Faunal Remains From Metal Detector Test Unit 24.

Taxon	NISP	MNI	Weight (g)	Modification (based on NISP)	
				Cut/Chop/Saw Marks	Carnivore/ Rodent Marks Burning
Lepus americanus	3	1	5.01		
Total	**3**		**5.01**		

Table 43. Faunal Remains From Building Feature 2.

Taxon	Element	Total	Butchering Location
Alces alces	1st phalanx	14	7 1/2 split portions, 1 1/3 split portion
Alces alces	2nd phalanx	12	8 1/2 split portions
Alces alces	diaphysis	1	
Alces alces	femur	1	1 head portion
Alces alces	metatarsal	2	1 diaphysis, 1 distal portion
Alces alces	radius	3	1 distal portion
Alces alces	scaphoid	1	
Alces alces	scapula	1	1 head portion
Alces alces	ulna	3	1 notch portion, 1 proximal epiphysis, 1 diaphysis
cf., *Alces alces*	humerus	3	2 diaphysis, 1 proximal portion
cf., *Alces alces*	metatarsal	1	1 diaphysis
Anatidae	ulna	1	
Artiodactyla	femur	1	1 diaphysis
Artiodactyla	phalanx	1	1 distal epiphysis
Artiodactyla	rib fragment	2	
Artiodactyla	tibia	1	1 diaphysis
Artiodactyla	ulna	1	1 diaphysis
Artiodactyla-large	1st phalanx	2	1 proximal epiphysis, 1 distal
Artiodactyla-large	2nd phalanx	1	1 1/2 split
Artiodactyla-large	femur	2	2 diaphysis
Artiodactyla-large	humerus	1	1 distal
Aves-unidentified	ferculum	1	
Canis spp.	scaphoid	1	
Carnivora	rib	1	
Lepus americanus	mandibular (with teeth fragments)	1	
Lepus americanus	radius	1	

Taxon	Element	Total	Butchering Location
Mammalia-unidentified	epiphysis	1	
Mammalia-unidentified	femur	1	1 diaphysis
Mammalia-unidentified	long bone	41	
Mammalia-unidentified	radius?	1	
Mammalia-unidentified	rib fragment	20	2 head
Mammalia-unidentified	scapula	2	1 head portion, 1 blade portion
Mammalia-unidentified	unidentified	66	
Mammalia-unidentified	vertebrae fragment	3	
Mammalia-unidentified-large	cf. vertebrae fragment	1	
Mammalia-unidentified-large	innominate	1	
Mammalia-unidentified-large	long bone fragment	46	
Mammalia-unidentified-large	rib fragment	10	
Mammalia-unidentified-large	scapula	1	1 blade
Mammalia-unidentified-large	ulna	1	1 diaphysis
Mammalia-unidentified-large	unidentified	4	
Mammalia-unidentified-large	vertebrae	1	

Taxon	Element	Total	Butchering Location
Mammalia-unidentified-small	rib fragment	4	
Mammalia-unidentified-small	radius	1	1 proximal epiphysis
Mammalia-unidentified-small	mandibular	1	
Martes americana	skull and mandibulars	1	1 skull and mandibular
Rangifer tarandus	2nd phalanx	3	
Rangifer tarandus	metatarsal	3	1 distal portion
Rangifer tarandus	scaphoid	1	
cf., Rangifer tarandus	2nd phalanx fragment	1	
cf., Rangifer tarandus	femur	1	1 diaphysis fragment
Unidentified	long bone fragment	1	
Total		**277**	

Table 44. Butchery Evidence for Faunal Remains at FSI.

Taxon	AM* 1	HF 1	BF 1	AM 2	CF 1	BF 3	T ST	MD ST 59	MD ST 15	MD ST 27	ML	MD ST	P ST	CF 2	MD ST U 43	MD ST U 24	BF 2	Total	MNI
Mammalia-undifferentiated	18315	1093	894	633	7	117	126	134	99	75	57	587	530	48	33	8		22756	
Mammalia-undifferentiated-large	373	59	36	2	1	9	3	4	5			1	3	2	1			499	
Mammalia-undifferentiated-small	51	3	3	3		1					1		5	1				68	
Artiodactyla	68		2	3		1		4				2	1					81	
Artiodactyla-large	71	10	4	3	1	2	3	2				4	5					105	
Cervidae																			
Rangifer tarandus	33	2	1									2						38	2
Alces alces	91	6	5	1		1	5					4	7		1				3
Lagomorpha																			
Leporidae																			
Lepus americanus	33	28	5	5	258	1	15			1		1					3	350	13
Rodentia	1			8	2													11	1
Sciuridae	8		1										1						2
Marmota spp.	1			1														2	1
Castoridae																			

Taxon	AM* 1	HF 1	BF 1	AM 2	CF 1	BF 3	T ST	MD ST 59	MD ST 15	MD ST 27	ML	MD ST	P ST	CF 2	MD ST U 43	MD ST U 24	BF 2	Total	MNI
Castor canadensis	5	5		5		1						1	1					18	2
Erithizontidae																			
Erethizon dorsatum	4		1	4														9	1
Muridae	8												1					9	4
Carnivora	8	1	1						1									11	
Carnivora-small	1					1												2	
Felidae																			
Lynx canadensis	1	2																3	1
Canidae																			
Canis spp.	8		1			1						4	1					15	2
Vulpes spp.	4																	4	1
Ursidae																			
Ursus americanus												1						1	1
Mustelidae																			
Martes americana					1									1				2	1
Gulo gulo	20						1											21	2
Total mammals																		**24136**	

Taxon	AM* 1	HF 1	BF 1	AM 2	CF 1	BF 3	T ST	MD ST 59	MD ST 15	MD ST 27	ML	MD ST	P ST	CF 2	MD ST U 43	MD ST U 24	BF 2	Total	MNI
Aves-undifferentiated	115	18	1	4		9	1				1	4	1					154	
Aves-undifferentiated large																			
Anatidae	20	6	4		1	1						4	1					37	5
Anas spp.	2																	2	1
Total fish																		**4053**	
Anserinae	6											1						7	1
Branta spp.								1	1									2	1
Tetraonidae	9		1										2					12	2
Lagorus spp.	4																	4	1
Strigidae	8											1						9	2
Strix nebulosa	1																	1	1
Corvidae																			
Corvus spp.	1																	1	1
Corvus corax	1																	1	1
Total birds																		**230**	
Pisces-undifferentiated	2226	79	98	202		23	3				10	21	34	7	7	1		2711	
Salmoniformes	1075	5	42	57		5		1	2	1		13	8		2			1211	52

Taxon	AM* 1	HF 1	BF 1	AM 2	CF 1	BF 3	T ST	MD ST 59	MD ST 15	MD ST 27	ML	MD ST	P ST	CF 2	MD ST U 43	MD ST U 24	BF 2	Total	MNI
Oncorhynchus spp.	7																	7	3
Coregonus spp.	87	3	3	1		1							2	1				98	12
Catostomidae																			
Catostomus spp.	10																	10	1
Lotidae																			
Lota lota	7	1																8	1
Esocidae																			
Esox lucius	7		1															8	1
Total fish																		**4053**	
Undifferentiated	555	31	4	29	4	5	7					1	4		3			643	
Gastropodia-freshwater	5																	5	5
Total																			**29068**

Table 45. Faunal Remains from Fort Selkirk I - Summary of Specimens.

*AM1 - Ash Midden 1, HF1 - Hearth Feature 1, BF1 - Building Feature 1, AM2 - Ash Midden 2, CF1 - Cellar Feature 1, BF3 - Building Feature 3, TST - Transect Shovel Tests, MDST59 - Metal Detector Shovel Test 59, MDST15 - Metal Detector Shovel Test 27, ML - Miscellaneous Locations, MDST - Metal Detector Shovel Tests, PST - Palisade Shovel Test, CF2 - Chimney Feature 2, MDSTU43 - Metal Detector Shovel Test Unit 43, MDSTU24 - Metal Detector Shovel Test Unit 24, BF2 - Building Feature 2

Chapter 9: Conclusions

Investigating the role that Northern Tutchone and Hudson's Bay Company traders played as socio-economic agents at Fort Selkirk required synthesizing various types of data to determine agentic choices in this mid-19th century northwestern subarctic post. Utilizing a holistic multi-layered framework that included archaeological methods, archival research, oral histories, ethnography and ethnohistoric research as well as the theoretical concepts of agency and culture contact afforded an opportunity in which the research objectives of this project could be met. The broad objectives included: (1) to investigate how the HBC adapted their economic strategies to a remote subarctic region of Northwest Canada and to established Northern Tutchone socio-economic systems; and (2) to investigate how Northern Tutchone and HBC fur traders engaged in a complex trading relationship. This chapter summarizes the major findings of the research and is followed by a discussion on the identification of socio-economic interactions in the written and archaeological record of Fort Selkirk I using the theoretical framework described in Chapter 2.

Summary

Analysis of the Fort Selkirk archival documents (Chapter 5) resulted in the following conclusions: (1) the Northern Tutchone did not succumb to rapid reliance on Fort Selkirk and the HBC. They would have been aware that the fort's lack of trade goods made sole reliance on the HBC impossible. However, over time they did slowly integrate the HBC into their trade sphere. This may have caused the Chilkat enough anxiety at losing control of their trade position that they eventually ransacked Fort Selkirk and attacked its crew, and (2) the Northern Tutchone were never exclusively reliant on the HBC for their trade needs. The Tutchone negotiated relationships with both the HBC and Chilkat that allowed them to continue trading with both groups. This arrangement would have been advantageous since they may have been able to obtain different types of goods from each trade partner as well as negotiating better prices.

Identification and interpretation of FSI features indicate that: (1) the fort was much smaller than initially assumed and is comparable in size to other subarctic forts. Because of the small size of the fort, the post buildings could have had multiple functions as indicated by the various chimney features, cellar, and small U-shaped patterning of building remains; (2) the fort was placed in a low-lying area subject to frequent spring-time flooding. The latter situation shows the challenge faced by the HBC crew. In spite of considerable effort, no Northern Tutchone features were found. This apparent absence of Indigenous features may therefore indicate that the locality was not utilized in a significant way by the Northern Tutchone before the fort's erection or after its termination, presumably because of the flooding; and (3) repeated flooding allowed excellent preservation of wood building features and ash middens containing a variety of well-preserved artifacts.

To refine the interpretation of general site use and artifact distribution, analysis of European and Indigenous-use artifacts and faunal remains was conducted (Chapter 7). A diverse group of artifacts was placed in various standard analytical complexes. These artifacts included Indigenous-Use artifacts made of lithic, bone, antler, bark and metal as well as Euro-Canadian artifacts made of metal, glass, ceramic, and textiles. The Indigenous-Use Complex contained materials such as lithic artifacts that were not abundant and respectively, not varied, and included flake and core shatter, retouched flakes, a tci-tho, split cobble, core fragments, core shatter, a fragment of edge ground stone, end scrapers, hide scraper, split pebble, and a pièce esquillée implement. Materials included agate, chalcedony, chert, quartz, quartzite, slate and siliceous material. Numerous well-preserved bone and antler artifacts were recovered. Some of the more interesting objects include an ornamented moose scapula, an ornamented bird blunt, two bilaterally barbed antler projectile points, a long bone beamer, a possible bird bone drinking tube and a possible bone creaser. A birchbark strip that may have been used to make containers and an iron projectile point were also covered.

The Euro-Canadian artifact category contained various complexes. The arms and ammunition complex contained objects such as a trigger guard fragment, gunflints, lead shot, lead musket ball, percussion caps. The metal working complex included cut copper, iron, and lead sheets, copper and iron bars, as well as a lead tube and sprue.

The architectural and construction complex contained axe fragments, a chisel or iron wedge, a possible iron cotter pin, an iron hook, basalt fragments, a plane blade or chisel, a file or gimlet, windowpane shards, an iron hinge, mortar/chinking, and a large number of nails, predominantly machine cut. A partial palisade post, a well-preserved wooden peg and wire and plaster were also recovered. The clothing complex contained almost 200 glass beads. Beads were predominantly drawn, with a few wound varieties, as well as a small number of unidentified beads. The beads came in a diversity of colours with red on white (Cornaline d'Aleppo) beads making up the bulk of the collection at 52.8%. Other colours included varieties of blue, amber, white and black beads. Metal, bone and ceramic button varieties, rivets, a small cut piece of abalone shell, as well as small fragments of textiles were also recovered. Within the household and culinary complex were ceramic tableware sherds, including plain glazed and blue on white transfer-print refined earthenware. This complex also contained fire steels, table cutlery, iron knives, copper alloy kettle lugs and hinges, a wire hinge, both a possible bail lug and bone needle case, as well as seal wax fragments and fragments of a glass medicine bottle. In the personal use complex, clay pipe fragments were numerous and included bowl and stem pieces. Both a possible lithic pipe fragment and women's hair comb fragment were also found. Most of the items in the storage and transportation complex consisted of cans and can fragments. A lead bale seal was also included in this category. Finally, untyped artifacts included iron, copper, glass and animal fur.

Analysis of the items served several analytical objectives. The Euro-Canadian artifacts are indicative of a typical HBC assemblage. Even the fort's remoteness did not discourage the transport of highly fragile HBC goods that ultimately

appeared in the assemblage (i.e., blue on white transfer print ceramics and pane glass shards). The Indigenous-Use artifacts demonstrate the presence of local and/or regional groups (i.e., Northern Tutchone, Han, Kaska, and Chilkat) at FSI. As some of these artifacts appear in conjunction with Euro-Canadian artifacts there is the possibility that the HBC traders and Northern Tutchone (as well as other regional groups) were interacting and/or living together at the fort. At the very least, the presence of Indigenous-Use artifacts intermixed with Euro-Canadian material culture demonstrates the fort's role as a nexus of interaction for Indigenous and European traders. Objects such as four long bone beamers and what has been interpreted as a bird bone drinking tube indicate the possible presence of Athapaskan women at the fort and their choice to use tried and true methods for processing local materials, thereby sustaining their cultural practices.

Indigenous-Use tools manufactured with metal implements and an iron projectile point may also indicate Indigenous agency. Following Martindale's work on the hybridization of objects, the recycling of iron to create a projectile point indicates the intentional hybridization of a European material into something as utilitarian as a hunting tool (Martindale 2009: 85); in effect this item is the purposeful transformation of a colonial object into an Indigenous item or what Harrison terms a skeumorph (2003: 329). Silliman suggests that the continued manufacture of formal artifact types even when people have access to guns and other metal tools that replace the function of the object still being produced indicates a decision by the maker that "reflects active, daily practices of negotiating colonialism" or in this case, early contact interactions (Silliman 2001: 203). The practice of adopting metal tools to carve and shape bone tools is an important indicator of individual preference to selectively incorporate useful implements from a new culture that works for them within their own culture. In this case the Indigenous individuals may not have ceased to use pre-contact tools; they just made them with European materials.

By incorporating Euro-Canadian materials to create and/or supplement more traditional technologies Indigenous agents (either local or HBC) may have been integrating what they viewed as useful or valuable from the foreign culture and incorporating it into their daily lifeways, rather than adopting everything the HBC had to offer. The Northern Tutchone could live without the materials the HBC had for trade. The European technology provided by the HBC (i.e., metal axes, files, copper kettles, knives and in particular guns) may have changed Northern Tutchone economic patterns and made subsistence practices more efficient but people were not reliant on these materials. The Northern Tutchone and other Indigenous people had the choice of using traditional materials and weaponry or Euro-Canadian objects; they could have reverted back to their pre-HBC economy. It was the HBC traders who were reliant on the Northern Tutchone, particularly for their expertise as trappers and subsistence providers. Virtually all the HBC could provide could be replaced by traditional technology.

The faunal analysis (Chapter 8) exposes important characteristics of food and fur procurement at Fort Selkirk I. Carnivores, fur bearers, fish, birds, small mammals as well as caribou and moose comprised part of the faunal assemblage, most of which was found in the very large Ash Midden 1. A high proportion of

fragmentary and unidentifiable mammal bone dominated the faunal assemblage. Either bones were cracked into unidentifiable fragments unintentionally through repeated heating or they were processed for bone grease. Large mammals both undifferentiated and artiodactyls such as moose and caribou were present. The large game would have been vital to meeting FSI subsistence needs. Fish and birds were important components of the faunal assemblage as they represented essential food sources for local people and the HBC.

Except for hare, small-sized mammals were present in low quantities. Hare was found in greater quantities because it was a dependable but low fat meat source in times of famine. Yet, because of their low fat content, a reliance on hare for more than a few weeks could cause serious illness and death unless supplemented with other fats and carbohydrates (Speth and Spielmann 1983: 3-4).

A small number of fur bearing animals such as bear, beaver, fox, lynx, marten, mink, otter, wolf and wolverine were present at FSI and the packing accounts for these animals were found in the FSI account records. Some of these fur bearers may have been used as a source of protein by the HBC crew as evidenced by cut, chop and saw marks on marten and burning on bear and beaver. The Northern Tutchone, on the other hand, had food taboos that may have prohibited them from consuming some of these animals (i.e., marten) (Legros 2007: 268). Butchery marks were primarily found on undifferentiated mammals. Carnivore marks were present but in small quantities.

Discussion – Identifying Socio-Economic Interactions in the Written and Archaeological Record of Fort Selkirk I

Using archaeological and archival data gathered in previous chapters this section will incorporate the questions that informed my research (Chapter 1) and the theoretical and thematic framework (Chapter 2) to interpret some aspects of socioeconomic interactions between the Northern Tutchone and HBC. To summarize, the specific objectives of the research were (1) to investigate how European material culture was integrated or recontextualized into Indigenous socio-economic systems through excavation, and artifact analysis, of the Fort Selkirk I site; (2) to explore spatial organization of remains at Fort Selkirk to reveal aspects of social relations, including the role of women; and (3) to complement archaeological analysis with ethnohistoric studies to determine how European-Indigenous contact resulted in changes to mobility strategies, subsistence systems, and social relations for both groups. The following section discusses these questions and presents results of this research.

This research aimed to explore social relations through material remains and, if possible, to identify traceable differences in the public and private spheres of the fort and Northern Tutchone habitation sites. As well, the intention was to analyse building design and layout and how these represented power hierarchies within the fort and to external visitors. Since no Northern Tutchone habitation sites were found within or adjacent to FSI, it is impossible to determine public and private spheres within Indigenous habitation sites. Yet, the location of 12 features

(including building remains), over 900 artifacts and 29,000 faunal specimens at FSI can provide information on the lives of the HBC fur traders.

As Heinz Pyszczyk asserts, fur trade employees were organized vertically and horizontally depending on the tasks they performed (1992: 34). Their roles guided the positions they assumed as well as how much "income, power and prestige each person received" (1992: 34). In order of ranking and prestige, officers were at the top of the pyramid, followed by clerks (i.e., Robert Campbell), then craftsmen, and finally labourers. Typically an employee's ethnicity also dictated his position in the Company. Officers and clerks were usually English or Scottish, craftsmen and labourers were often Orkneymen, French Canadian or Métis, and fort hunters and/or interpreters were Indigenous. Finally, Indigenous and Métis women lived with Company men, helped maintain the private spheres within the fort, bore children and helped build alliances between the HBC traders and local Indigenous communities (ibid.). Of course people's roles within the fort were more fluid this; the archival records attest to this variation.

Understanding FSI spatial organization of buildings and how it related to social organization was complex for three reasons. First, the fort was moved across the Yukon River and downstream after repeated flooding episodes; this move left only partial remains still intact at FSI. Second, the fort was on the periphery of the HBC's trade sphere and therefore very isolated. As Pyszczyk states when describing the architecture of the western Canadian fur trade, "Many fur trade posts consisted of little more than a few small log buildings enclosed by a wooden picket fence, or palisade" because of the harsh environment and isolation of these places (1992: 33). Third, the archival record indicates that at most, six buildings were erected at FSI (big house, hall, kitchen, store, men's house and shop). The archaeological evidence points to between three and four building remains. Of course, one building could have multiple functions (i.e., the Clerk's house could also house the stores).

The relocation, isolation, and archival records of the fort all played a role in identifying building remains and their use. Approximately three building features were found. The first building (Building Feature 1) was constructed perpendicular to the Pelly River. The completely intact perimeter consisted of sills (foundations) that formed a rectangular building. Inside were two chimney foundations. Associated with Building Feature 1 was a very large ash midden that contained hundreds of artifacts and thousands of faunal remains; presumably the remains of multiple chimney cleanings. This building feature appeared to be a living space but what is not entirely clear is who dwelled within it. The possibility that all of the HBC employees (with the exception of Indigenous fort hunters) resided inside this building is feasible, particularly considering that the building had two chimneys and a variety of artifacts were found inside and outside the foundations[31]. Pyszczyk describes Fort George, in east central Alberta, as having houses with 12 individual compartments that would "house approximately 140

[31] An analysis of Western Canadian fort dwelling data by Pyszczyk determined that the proximity in habitation between HBC officers and labourers occurred out of economic necessity rather than ethnic compatibility (1992: 38). The more isolated the fort the closer the living quarters.

people, or roughly 11.6 people per compartment. Sometimes these houses or compartments were often no bigger than 200 square feet" (1992: 39). In other circumstances men could "live in barracks-like quarters that contained little or no internal partitioning" (1992: 39). The square footage of Building Feature 1 was 511 sq/ ft; several men and their families could have lived within this building.

The second possible building (an amalgamation of Building Features 2 and 3) was located furthest from the river. The sills found at this location did not definitively delineate the perimeter of a building. Three chimney features were located between the sills. If these three chimneys did in fact rest within one structure this would have been the largest of the buildings (although still moderately sized). Unfortunately, the building perimeter could not be determined. Artifacts within this feature mirrored those found within Building Feature 1 with some interesting exceptions. Windowpane shards were found, a particularly luxurious item to transport and use at the fort and probably something specifically meant for the use of Robert Campbell and/or James Stewart. If this was one large building, it may have been the clerk's quarters as that building is typically the largest at a fort and is situated back away from the river. At many western Canadian fur trade posts, the clerk's quarters were "the symbolic centre of the post, being used to accommodate the clerk and to entertain high ranking visitors" (Burley et al. 1996: 86).

Finally, Cellar Feature 1 was parallel to Building Feature 1 and to the left and forward of Building Features 2 and 3. This large, deep, cold storage cellar may have been part of the stores building. Traces of foundation sills surrounding the cellar indicate that the cellar was situated within a larger building.

As only two possible palisade posts were located in excavation the actual perimeter of the fort was not discovered. Yet, testing throughout the locality of the fort indicated the trading post had a small footprint and crew members lived in relatively close quarters even though they had differing positions within the HBC. It appears that the small fort size reduced the visible power hierarchy within the fort. The small size may have also been a visual indicator to outsiders that the fort inhabitants were not as socially stratified as the journals and account records indicate.

The vast number of faunal specimens, most of which were found within a large ash midden adjacent to an intact house foundation perimeter, reveals the importance of food in the daily life of the HBC traders. Analysis of the journals clearly indicated how important obtaining provisions was and at times, how difficult it was to engage the Northern Tutchone in meat exchange (Campbell and Stewart 2000). However, the journals also indicate the willingness on the part of the Northern Tutchone to share fishing lakes with the HBC traders and the trade of meat at certain periods of the year.

Fur trading was the primary goal of the HBC at Fort Selkirk and the material culture and written record indicate that fur bearing animals were traded by the Northern Tutchone and other groups at the post. Although there were just a few fur bearing animal remains found at the fort site, the account records demonstrate that the Tutchone did trade furs, although at their own discretion, rather than due to a reliance on the HBC.

One of the key questions this research attempted to answer was whether European-Indigenous contact resulted in changes to mobility, subsistence and social relations for both the Northern Tutchone and HBC employees. Did the Northern Tutchone and HBC traders face cultural upheaval and if so, did they resist this situation through strategization in the daily practice of fur trade interactions? In writing about Athapaskan people of the Mackenzie Valley during the 19th century Janes notes that cultural change was not as pronounced as was originally assumed and that "no significant reorientation of Athapaskan man-land relationships occurred" (1976: 344). Paralleling the Athapaskan people of the Mackenzie Valley, the Hudson's Bay Company trading post "became simply another temporary stop on the annual round" for the Northern Tutchone (ibid.) This observation is evidenced by the timing of Northern Tutchone trade visits to the fort which occurred primarily in the spring and early summer (with fewer visits in the early fall). Fur trapping would have occurred during the winter months therefore it is logical that the furs would be brought to the fort for trade in the spring. Spring summer and fall were typically times in which fishing and hunting were at their best. This time of the year would have been an ideal time to visit the fort because it was open water season, therefore travel on the river would have been feasible and visits could be incorporated into the regular fishing and hunting cycle.

The journals indicate that the Tutchone were often trading meat rather than furs at Fort Selkirk; again, meat procurement would have taken place as part of their regular hunting cycle anyway. When the Tutchone did trade furs, something that they eventually did with increasing frequency over time, they would not dress the animal skins (a requirement of the HBC) (Campbell to McPherson, B/200/b/24: 60, 1850). Having to dress the animals to HBC specifications would have taken time away from their typical hunting cycle and they were not required to dress furs when trading with the Chilkat. There is a clear indication that the HBC traders were unable to enforce any demands on the Northern Tutchone indicating that minimal cultural upheaval occurred among the Indigenous population.

The HBC traders did change their subsistence strategies to suit the demands of a cold northern environment. The journal entries are filled with comments regarding food and the lack thereof, ways of obtaining food, food gathering, food caching, meat trading and meat hoarding by the Northern Tutchone; traders were preoccupied with provisioning (Campbell and Stewart 2000). That Campbell felt the Northern Tutchone were hoarding meat demonstrates the relationship between the two groups. The Northern Tutchone were manipulating the provisions relationship to their advantage, demonstrating resistance to fully cooperating within the fort sphere. This form of manipulation would have been a powerful way of exerting control of their resources as the fort was often reliant on the Northern Tutchone provisions for their sustenance. As well, the Tutchone had to acquire their own subsistence security before they could provision others, thus there may have been a perception problem for the HBC in assuming that food hoarding was actually taking place. Cooperation within the fort sphere did change over time as relationships became more intertwined, but never to the extent that

the Northern Tutchone became reliant on the fort; rather, they maintained their independence. The HBC on the other hand were the dependent ones, for both trade furs and for food.

Finding evidence of women, particularly Indigenous or more specifically Northern Tutchone women provides answers to questions regarding changing social relationships. Women played an important role in the socio-economic interactions that the Northern Tutchone had with their trade partners. This included both the HBC and the Coastal Tlingit Chilkat, with whom they had a trade relationship with prior to the arrival of the HBC. Typical women's material cultural remains were found at Fort Selkirk, some within ash middens associated with dwellings. These items included the possible tooth from a woman's hair comb, as well as items associated with Indigenous women, including four long bone beamers for processing hides, a possible bird bone drinking tube and calcined bone, which is an end product left after extracting bone marrow and bone grease production. Again, all of these remains are typical of northwestern subarctic Athapaskan women's material culture. Although it is impossible to determine if these remains were left by Northern Tutchone women, at the very least their discovery does indicate that Indigenous or Métis women were present at the fort. These women may have continued using and making some of the same items in the same way as they would have within Indigenous living quarters. Women's continued use of an Athapaskan woman's tool kit even when metal implements were available to them indicates that women were choosing to assert their identity while living at an HBC fort. These tools may also have worked better for the task at hand than any European equivalent.

The archival record indicates that women were present at the fort and alludes to the presence of local Indigenous women as well. Evidence of women is primarily found in the men's private orders where Campbell indicates who is married, as well as the items the men ordered (i.e., hair ribbon, ladies shoes, etc.) (HBCA, B/196/d/1: 1-6, 21-36, 1851-1852). The journal also mentions women at the fort and describes a marriage that took place, but little detail is given as to who these women are or where they are from.

A primary component of building a trade relationship was the linking of families through intermarriage and previous oral history and ethnographic research by Legros indicates that the Northern Tutchone and Tlingit participated in intermarriages, a Tlingit often having both a coastal and inland wife (2007). This arrangement would have created deep bonds between the two groups. Intermarriage between the Northern Tutchone and fort personnel could have occurred, the artifacts and men's personal accounts indicate that co-habitation was a possibility, particularly the unmarried men's private orders that included requests for items such as women's hair ribbon (HBCA, B/196/d/1: 1-6, 21-36, 1851-1852). As well, during the Tlingit attack on the fort, Campbell mentions two women disappearing for numerous days (Campbell and Stewart 2000: 141 [Aug. 20th, 1852]). It is reasonable to conclude that they may have gone to their families' camp for safety as they returned a few days later unharmed. They may not have been welcome at a Tutchone camp if they were not related.

Determining the identity of groups and individuals involved in trade can expose changing socio-economic ties between the fort and its trade partners as well as how these trade interactions were negotiated. Material remains in the form of Indigenous use artifacts reveal the presence of Indigenous people at the fort but determining individuals archaeologically is nearly impossible. Recovered bone artifacts resemble Late Pre-contact artifacts found at other Northern Athapaskan sites in Yukon but that observation is the extent of group identification that was achievable archaeologically (Clark 1995; Le Blanc 1984; Morlan 1973; Thomas 2003). However, the fort journals sometimes refer to specific Indigenous groups as well as to individuals who visited and traded at the fort (Thlingit Thling [Northern Tutchone Chief], Gros Coiffe [Northern Tutchone Chief], Lame Man [Northern Tutchone], Beloved [Northern Tutchone]) (Campbell and Stewart 2000). For the most part, small groups of people would arrive to trade at any given time but often these people were unnamed.

To answer the question of how trade was conducted at the fort the archival record is key. The analysis of the journals indicates that visitors entering the fort to trade did not have to be high ranking; many times poor starving people arrived to trade meat and furs for other goods. This is in complete contrast to the trade tenets described in previous oral history and ethnographic research between the Northern Tutchone and Tlingit (Legros 1984: 21; Olson 1936: 212-214). The ability of 'commoners' (individual agents) to trade at Fort Selkirk may have caused distress to high ranking leaders who were used to controlling trade within their communities and may have allowed commoners to raise their status through acquisition of Euro-Canadian goods.

The question of whether trade was profitable for either the Northern Tutchone or FSI is an important one. The journals of Robert Campbell and James Stewart demonstrate that there was constant interaction (mostly in the form of trade) and negotiation between the Northern Tutchone and the fort (2000). However, the fort journals also indicate that there were often few tradable goods at the fort at any given time. This deficit would have clearly stopped the Northern Tutchone from relying on FSI as their sole provider of European goods. The account records support this interpretation as the indents are filled with requests for more supplies and trade goods (HBCA, B/196/d/1: 38-44). Correspondences between Robert Campbell and his Mackenzie District supervisors indicate that the fort was not making a profit and that it might never do so (HBCA, B/200/b/26: 20-21, 1851-1852 [Jan. 8th, 1852]). There were even suggestions that the Coastal Chilkat were trading at lower prices than the HBC and that they had more varied merchandise (ibid.). Although packing records show an increase in furs being sent back to district headquarters over time these furs were often not properly dressed, damaged, or from animals unpopular in European fur markets (i.e., bear) (HBCA B/196/d/1:15, 1851). This situation would have led the Northern Tutchone to continue trade relations with both the Chilkat and the HBC since the Chilkat would accept these "inferior" furs in trade (ibid.). The Northern Tutchone may have knowingly manipulated the HBC and Chilkat into competing for Tutchone furs. They had the option of only trading with the Chilkat but they chose to begin a trade relationship with the HBC, even though the fort had few desirable trade

goods. In this way, they were able to continue a dual trade network that was likely very profitable as it set the stage for competition between the Chilkat and the HBC.

An aspect of early contact that this research attempted to discover was the impact of European disease on the Northern Tutchone during the fort's existence. The Chilkat had already been meeting Europeans for decades prior to the arrival of the HBC at FSI and may have brought disease inland on their trade expeditions. The journals also indicate that people died at the fort, including children and wives of fort traders and hunters (Campbell and Stewart 2000). Disease spread through the fort and likely to fort visitors as well; they could have easily carried illness back to their own families.

Changes in mobility strategies appear to have been minimal for the Northern Tutchone during the fort's existence. Subsistence systems for the Northern Tutchone also appear to have remained relatively unchanged while subsistence systems for the HBC seem to have been in constant flux, as the crew searched for provisions with varying degrees of success from season to season. Finally, social relations appear to have become more entangled over time although not to the extent to which the Northern Tutchone and Chilkat were intertwined. This difference is likely due to the short period in which the fort existed. Given more time, undoubtedly co-habitation between the Northern Tutchone and HBC crew members would have occurred, yet this was not to be the case. Instead, the final act of culture contact struggle occurred when Campbell and his crew were expelled from Fort Selkirk by the Coastal Tlingit Chilkat and their fort was consequently burned down by the Northern Tutchone. This was an act of strategic resistance, in the form of open violence, which ended the dual trading network that the Northern Tutchone had benefitted from.

Conclusion

This dissertation attempted to use interdisciplinary research to examine how Hudson's Bay Company fur traders and Northern Tutchone Athapaskans negotiated their roles in socio-economic relations at Fort Selkirk to expose the underlying social processes of early European-Indigenous interaction in Yukon Territory. Using a holistic, multilayered framework I attempted to (1) ascertain how the HBC adapted their economic strategies to a remote northwestern subarctic region of Canada and to established Northern Tutchone socio-economic systems, and (2) to investigate how both groups engaged in a complex trading system.

Based on the oral, ethnographic and documentary evidence, it is clear that the contact and ensuing interactions (conjuncture) between the Northern Tutchone and HBC presented both groups with new trading opportunities. For the Northern Tutchone this new trading opportunity could have meant a shift in their traditional socioeconomic, mobility, and material culture practices, their habitus, but it did not.

Analysis of the archival record allowed me to demonstrate, on a micro level, the extent to which the Northern Tutchone and HBC interacted. Over time the

Northern Tutchone and HBC traders interacted more frequently and the fur and meat trade increased, if somewhat nominally, at FSI. Although the FSI journals are written through the eyes of the Euro-Canadian traders, analysis of the account records clearly demonstrate that the fort was never supplied with enough trade goods to make it profitable. Thus, while the Northern Tutchone did explore the viability of a new trade partnership, lack of HBC tradable goods meant that the Tutchone continued more intensive trade with the Chilkat. The lack of more intensive trade interactions between the Tutchone and HBC meant that there was no major alteration to Northern Tutchone habitus or structure.

Through analysis of the archaeological record I have shown that there is evidence, if only nominal, of Indigenous-European interaction at FSI, Indigenous and/or Métis women may have visited and possibly lived at the fort, fort life required residents to live in small quarters regardless of hierarchy, and that even in such a remote locality as FSI, the traders were provided with goods consistent with an HBC fort. Analysis of the material culture also revealed the difficulty in determining agentic practices of Indigenous traders at a fort, particularly as they have left minimal evidence of their time there. Importantly, the lack of Northern Tutchone artifactual remains also indicates agentic choice. The majority of Northern Tutchone may have purposefully remained outside of the HBC trade sphere, only having minimal contact with them during trade episodes, leaving a small material culture record behind.

Using multiple streams of evidence I was able to identify the manifold difficulties the HBC faced in setting up a remote fort at the confluence of the Pelly and Yukon Rivers. Some of these difficulties were overcome with ingenuity and perseverance. However, lack of food and tradable goods to the point of desperation as well as distance from trade lines and friction with the Coastal Chilkat eventually halted the fort's operations. The Northern Tutchone who already had a well-established and complex trade relationship with the Chilkat willingly began a trade relationship with Fort Selkirk I. Their ability to negotiate trade with these two parties for almost five years demonstrates their skills at negotiation and their choice to keep all trade avenues open to them. This research aimed to demonstrate the complexities of socio-economic relations between two very different cultures. My hope is that this dissertation will add to the rich history of the Northern Tutchone at the time of early contact with the Hudson's Bay Company. Additionally the intention of this project is to contribute to wider historical knowledge of the Canadian fur trade.

Future Directions

Future research should include location and excavation outside the FSI palisade as well as excavation of nearby Northern Tutchone camp sites to locate features and artifacts that might build on our understanding of agentic practice between the Northern Tutchone and HBC traders. As Northern Tutchone camp sites can sometimes be ephemeral locating these places may be difficult but very valuable. KeVd-2 on the south banks of the Yukon River across from FSI was a traditional fishing and gathering locality for the Tutchone. Although testing has

been done there, a more detailed excavation may provide a comparative collection in which to locate evidence of choice and resistance during the Fort Selkirk era.

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