

CULTURAL CHANGE AS A RESULT
OF TRADE RELATIONS IN THE
PARKLANDS OF CENTRAL
SASKATCHEWAN

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Abstract

The Lozinsky subphase is an archaeological entity found in the parklands of central Saskatchewan, and which dates to the late precontact period. This subphase has only recently been defined by Walde (1994), and there remain many questions regarding its placement in the precontact record. The ceramics and tool kit characteristic of the Lozinsky subphase indicate that it held strong ties with the Mortlach phase of the northern plains, and it appears that the Lozinsky subphase is a modified expression of the Mortlach phase. The cultural material of the Lozinsky subphase also shows evidence of influence from boreal forest cultures, specifically the Pehonan complex of the Selkirk composite. This mixture of plains and boreal forest traits in the Lozinsky subphase is evidently a result of interaction between those boreal forest peoples who produced the Pehonan complex and parkland occupants responsible for the Mortlach phase.

A number of models have been proposed to explain how these parklands and boreal forest peoples interacted during late precontact and post contact times. These models attribute interaction between the peoples of the Mortlach phase and the Selkirk composite to co-occupation of the parklands, and/or long distance visiting. One avenue of interaction that has been largely ignored is that the boreal forest and plains groups were involved in formalized trading relationships. The participation of the two groups in a trade fair may have been an important factor that resulted in the mixture of plains and forest traits exhibited by the Lozinsky subphase. This thesis will explore this possibility, focusing on the Muskoday/Birch Hills region of the central Saskatchewan parklands as the possible location of a trade fair.

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I dedicate this thesis to my wife Tricia, and my children Rain and River, whose understanding, encouragement and sacrifice made this thesis possible.

Chapter 1 Introduction

1.1 Statement of Objectives

The focus of this thesis is the late precontact period of an area in the central Saskatchewan parklands. Archaeological work within this region has been fairly limited, and we are still in the process of determining the nature of the area's prehistory. In this regard there are a number of obvious questions regarding the parklands during the late precontact period that need to be addressed.

One of the basic questions yet to be sufficiently answered is which Late Woodland archaeological culture or cultures occupied the parklands. For the specific study area this volume is concerned with, the Birch Hills-Prince Albert region (Figure 1.1), it has been acknowledged that the Late Woodland cultures had some connections to plains cultures to the south. The exact definition of this culture has been a point of contention, though. Recently, Walde (1994) has identified this archaeological entity as the Lozinsky subphase of the Mortlach phase, based on pottery attributes and lithic materials from sites in the parklands. Another accepted fact from this area is that there is evidence of some manner of interaction which occurred between plains- and woodland-adapted groups. This evidence takes the form of syncretic pottery (see Figure 1.2), pottery that has both plains and forest traits. The nature of this interaction, and the location where the interaction took place, has yet to be sufficiently resolved. One aspect that has been largely overlooked in terms of interaction is the possibility that late precontact groups

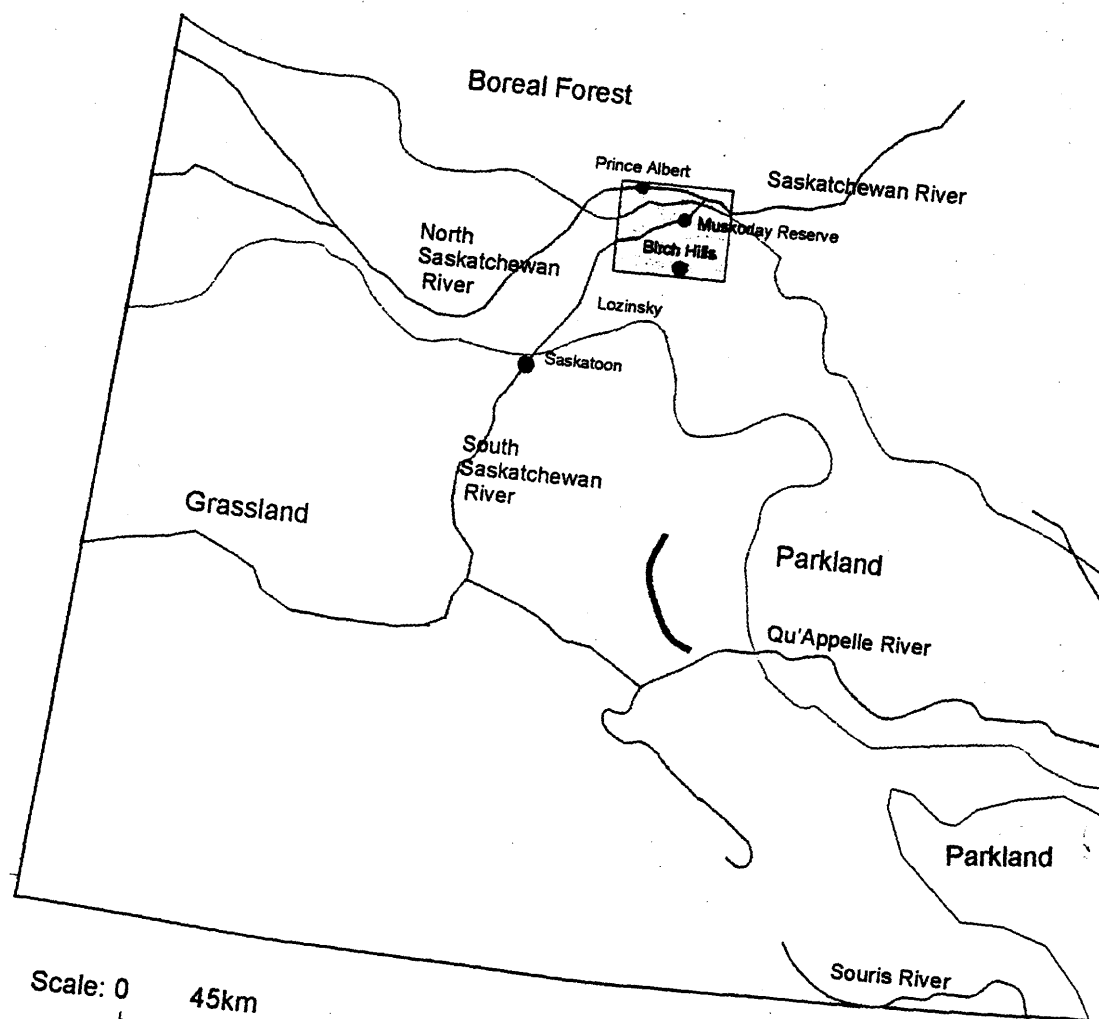
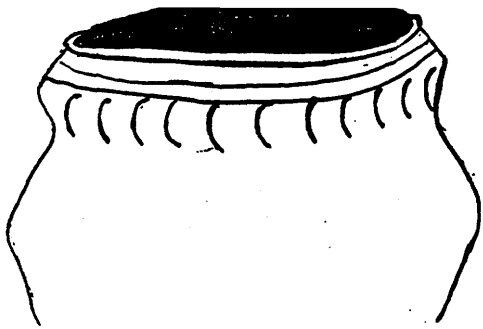
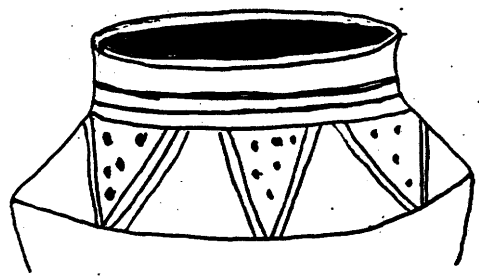


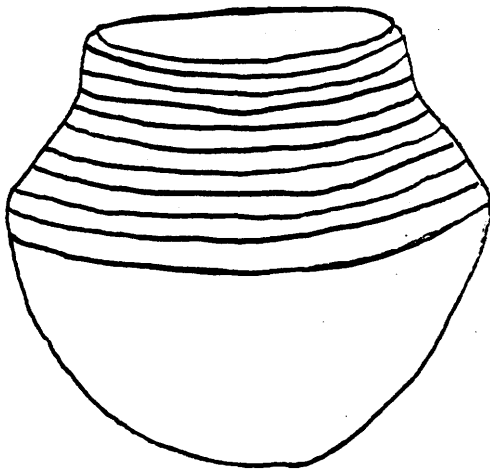
Figure 1.1. Map of Saskatchewan showing the location of the Parklands and the study area.



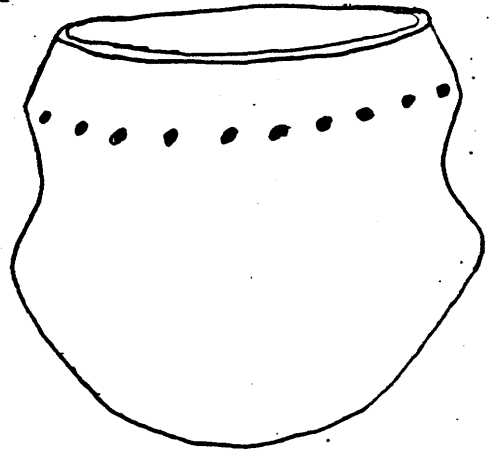
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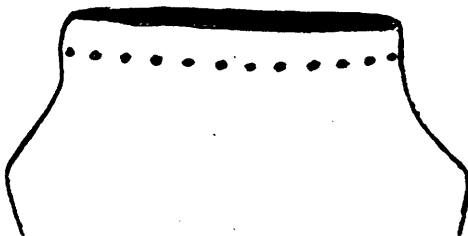
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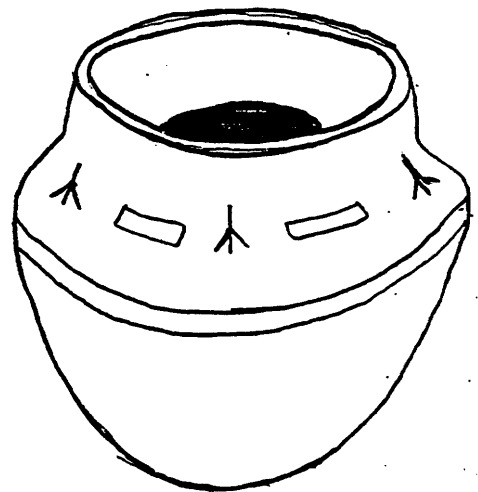
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Figure 1.2. Images of Mortlach and Selkirk Vessels:
a-c, Mortlach vessels; d, syncretic Mortlach/Selkirk vessel; e-f, Selkirk vessels.

in the parkland may have been involved in a formalized trading relationship with both forest and grassland groups.

By examining materials collected from the Muskoday-Birch Hills region it is hoped that these questions can be answered. The focus of this research, therefore, will be to investigate the possibility that formalized trading relationships were a major element of interaction between plains and forest cultures. Basic to this research are the Late Woodland archaeological cultures of the study region, the Lozinsky subphase of the parklands and the Pehonan complex located north of the study area in the boreal forest.

The main focus of this research will be to provide a hypothesis that trading relationships between the peoples who produced the Mortlach phase on the parkland and the Selkirk composite in the boreal forest led to the formation of the Lozinsky subphase. In an attempt to clarify the relationship between the different cultural units we will be discussing we first have to discuss the nomenclature used to define them. For the plains the taxonomic system is based on Willey and Phillips (1953) who defined the basic unit of an archaeological culture as the phase. In their work they defined a phase as:

"[a] space-time-culture unit possessing traits sufficiently characteristic to distinguish it from all other units similarly conceived, whether of the same or other cultural traditions, geographically limited to a locality or region and chronologically limited to a relatively brief span of time" (Willey and Phillips 1953: 620).

Reeves (1983:39) modified this definition by excluding the geographic limits. By doing so Reeves then introduced the subphase as representing geographic divisions within the phase (Vickers 1986:13). Reeves (1983:39) states that "subphases are divisions of a phase useful in studying the internal variation within a phase". The subphase and the phase are known from

components; "the manifestation of a given . . . phase . . . at a specific site" (Willey and Philips 1953: 619).

This system is contrasted with Syms' (1977) system of classification which has been employed to organize Selkirk materials from the boreal forest (Meyer and Russell 1987: 4). In Syms' approach, it is the assemblages that make up higher divisions: "The term assemblage refers to the surviving materials, features, and evidence of activities of a single residential group over a short period of time at one site." Also, assemblage "is used in the same sense as the term component . . ." (Syms 1977:70). The mid level division of this system, the complex, is composed of a number of assemblages. Syms (1977:70-71) defines a complex as:

"a number of assemblages left by the same group over a sufficiently narrow time period that the cultural expressions undergo only minor changes . . . represent[ing] the remains of a shared lifestyle, the same overall tool kit, the same technological skills and preferences, and the same typological and technological attributes."

The complexes then make up the composite, a series of complexes "which share a set of traits, both technological and stylistic, that may be conceived as being sufficiently similar to indicate a common and recent ancestry but sufficiently different that microevolutionary changes have taken place" (Syms 1977:71).

1.2 The Lozinsky Subphase of the Mortlach Phase

The Mortlach phase is a late precontact culture found in southern and central Saskatchewan, southwestern Manitoba, northwestern North Dakota and northeastern Montana. This archaeological entity has been identified on the basis of thin, compact pottery vessels, manufactured by paddling, which occur in several vessel forms, with a wide variety of decoration. While this

material exhibits an unusually large range of vessel forms and decorative techniques (see Figure 1.2) that make its classification difficult, the material is also quite different from contemporaneous materials produced by neighboring cultural groups (Walde 1994).

The diversity of the Mortlach pottery has led to controversy in regards to classifying the material. Research has provided evidence that the pottery differs enough from north to south to divide the materials. The actual dividing line between the two has yet to be sufficiently resolved. Malainey (1991), has argued that the material should be divided into two distinct pottery wares, Mortlach and Wascana, and assigns the latter to the Moose Jaw "culture." She places the Moose Jaw culture north of the Qu'Appelle Valley and the Mortlach ware, characteristic of the Mortlach "aggregate," south of the Qu'Appelle. Walde (1994) has argued that the late precontact pottery forms a single entity, the Mortlach phase, with two subphases, the Lozinsky subphase in the parklands and the Lake Midden subphase on the grasslands. The differing interpretations within the research are based largely upon different approaches to pottery analysis. The two researchers used different methods regarding identification of individual vessels, and different categories of vessel profiles (Malainey 1996:167). They also treat Selkirk pottery differently, in that Malainey included Selkirk materials in her analysis while Walde treats Selkirk vessels as 'foreign' and does not include these vessels in his study (Walde 1994:60). These different approaches thus lead to two different interpretations.

Malainey identifies the different sites as characterized by Wascana or Mortlach ware largely based on vessel profile frequencies (1991:320). Malainey states that the Wascana ware sites north of the Qu'Appelle contain vessel forms which are 90 % Non-Wedge profiles, while the Mortlach ware

sites are made up of at least 30 % Wedge profile (Malainey 1996:179). Walde argues that

[t]his method does not permit comparison of assemblages with each other but only with two ideal composite assemblages which do not, in fact, exist. In addition, the method of assigning assemblages to one or other of the composites by inspection alone is, in my view, too subjective, relying on personal impressions of how close a fit to a given ideal is necessary to permit identification (Walde 1994:47).

This led Walde to test Malainey's hypothesis using a cluster analysis of her relative frequencies of profile types for each site within the study region.

Walde suggests that if two entities produced these materials as suggested by Malainey, there should be a corresponding division into two groupings in the cluster analysis. With the results of his analysis Walde concluded that within these materials there was no such discernible patterning, indicating it was a single entity, the Mortlach phase.

Walde does note that while there is no discernible patterning in the Mortlach pottery itself, there are other differences which suggest that the Mortlach phase should be divided into two subphases. Walde argues that his analysis suggests a division of Mortlach into northern and southern subphases.

[T]he division indicated by cluster analysis coincides reasonably well with the southern boundary of the parklands in central Saskatchewan. Examination of Mortlach pottery is of little utility in understanding this division. The range of variation is much the same throughout the study area. Rather it is the occurrence of non-Mortlach ceramics which has caused this division. Selkirk vessels with their vertical profiles, outer lip corner decoration, fabric impressed surfaces, and ubiquitous rim punctates along with syncretic Selkirk/Mortlach vessels make up significant proportions of the assemblages from sites in the parklands (Walde 1994:84).

Walde concludes, therefore, that for the late precontact period in central and southern Saskatchewan there is one archaeological entity, the Mortlach phase. Within this phase are two subphases and each subphase is defined by participation in different external social relationships. The southern subphase, Lake Midden, shows evidence of interaction with the Middle Missouri villagers, while the northern subphase, Lozinsky, reflects interaction with Selkirk cultural groups to the north. As mentioned above, the evidence of Lozinsky - Selkirk interaction includes the presence of Selkirk and of syncretic Selkirk/Mortlach pottery. Lithic materials in the parkland Mortlach sites also point to Selkirk interaction. Lake Midden sites contain a high percentage of fused shale and Knife River flint which indicates interaction with Middle Missouri Villages. The Lozinsky subphase sites contain low numbers of these southern materials, but have a higher frequency of northern materials, such as Gronlid siltstone, indicating interaction was occurring with groups to the north (Walde 1994:113).

Malainey has criticized Walde's interpretations for a number of reasons. Malainey argues that Walde's approach to classifying vessel numbers and profile forms was too restricted, and that this would give a false reading of distribution (Malainey 1996:169). She also argues that some of the sample sizes used by Walde were too small and would therefore have a high standard deviation, making the results inconclusive (1996:177-179). Malainey does her own cluster analysis using her data and also another cluster analysis using Walde's data. The results of these cluster analyses are once again very different. With the use of her own data Malainey reports the results as corresponding to her original hypothesis that divided the pottery into two different wares divided by the Qu'Appelle River. Using Walde's data she reports results which correspond to neither her own hypothesis nor Walde's.

Malainey states that with the use of Walde's data two of the sites from the Lozinsky subphase area in the parklands, the Williams and Lozinsky sites, "show a close relationship to grassland sites from the Estevan area and North Dakota" (Malainey 1996:179).

Instead of strengthening her own argument, these results tend to confirm Walde's original criticism of Malainey's research. The different results from the cluster analysis using each data set only strengthens the idea that interpretations that use vessel form percentages to identify pottery types are inappropriate. Regardless, Malianey's approach is not applicable to the materials from the area we are concerned with. The small number of vessels from each site we are dealing with in this research would not allow us to make similar comparisons. In order to produce a statistically valid representation "data from at least 30 vessels from each site is required for quantitative analysis" (Malainey 1996:175). The sites in the Muskoday/Birch Hills region are surface collections, the majority of which contain only one or two vessels. For these reasons the use of Malainey's Moose Jaw culture and Mortlach aggregate is rejected in favor of Walde's Lozinsky and Lake Midden subphases. For the purposes of this thesis the materials from the late precontact period in the parklands will be considered to belong to the Lozinsky subphase of the Mortlach phase.

The Mortlach phase is an archaeological entity from the northern plains dating from about A. D. 1500 to the direct contact period (Walde 1994:106). This archaeological group is identified on the basis of a distinctive pottery described as thin and compact earthenware pottery that usually exhibits one of four major vessel profiles; Vertical, Angled Rim, S-Rim, and Wedge Rim (Walde et al 1995:41). The exteriors of these vessels can be roughened with cord or fabric wrapped paddles, or with incised paddles, or the surface can be

smoothed (Walde et al 1995:41). The decoration found on this pottery is extremely diverse, but distinctive from vessels found in surrounding areas. The typical Mortlach phase tool kit contains Plains Side-notched projectile points, often made of Knife River flint or fused shale. Bifacially flaked knives and end scrapers are common tools found in Mortlach components. The fact that some endscrapers made of Knife River flint have been bifacially reduced and that ceramic gaming discs have been found in Mortlach sites, indicate that there was some contact with the Middle Missouri villagers (Walde et al., 1995:43). There was also a well developed bone tool industry which included bone handles for slot knives and bone ice gliders which often were decorated with incised geometric designs (Walde et al., 1995:43).

The Lozinsky subphase of the Mortlach phase has been defined by Walde on the basis of the distinctive pottery (which will be discussed in greater detail in Chapter 5) and, as stated above, by the frequency of northern and southern lithic materials.

1.3 The Pehonan Complex of the Selkirk Composite

The Selkirk composite is an archaeological entity of the late precontact period which is found from northwestern Saskatchewan to northwestern Ontario. The composite is defined on the basis of a distinctive ceramic and lithic and bone tool industry, each of which contain a series or set of technological and stylistic traits that are commonly found at all Selkirk sites. For the Selkirk ware these common attributes include globular vessel form, laminated paste tempered with crushed grit, exterior surface treatment consisting of a smoothed textile impression, and decoration usually consisting of a single row of punctates around the rim exterior (Hanna 1983:31; Hlady 1970:11-112, 1971:7-8; Meyer 1981:24-26).

Within the composite there are also some variations in vessels which have allowed for the definition of a number of regional complexes. Presently the identified Selkirk complexes include Clearwater Lake, Grass River, Kame Hills, Kisis, and Pehonan (Meyer and Russell 1987; Paquin 1995:10). Characteristic of all Selkirk components is the Clearwater Lake Punctate type (Hlady 1971). This type is recognized on the basis of globular vessels with a single row of punctates on the rim (Hlady 1971:17), and a smoothed textile impressed surface treatment (MacLean 1996). The lip surfaces and corners are often decorated. The particular complex we are concerned with is Pehonan (see Figure 1.2), which has been described as containing a majority of Clearwater Lake Punctate type vessels, along with vessels unique to the region centered along the upper Saskatchewan River valley. These unique vessels are Selkirk vessels that contain some attributes associated with contemporaneous plains potteries to the south, including decorated and angular shoulders, and S profiles (Meyer 1984:43). Another trait found within the Pehonan complex, but which is not a plains trait, is the occasional presence of interior punctates.

Other than pottery, Pehonan assemblages characteristically contain side-notched and triangular projectile points, along with bifacial and unifacial tools, such as knives and endscrapers, and also contain notched and grooved mauls. Adze blades have also been found in Pehonan assemblages. Bone tools such as long bone fleshers and barbed bone points are also characteristic of Pehonan (Meyer 1981:33). Pehonan assemblages date from the mid to late 1300's until the early fur trade period (Meyer and Russell 1987: 17).

1.4 Past Interpretations Concerning Occupation of the Parkland with Regards to Plains-Boreal Forest Interaction

It has long been assumed that grassland- and woodland-adapted groups interacted in some capacity in late precontact times. Materials such as Gronlid siltstone found at Lozinsky subphase sites suggest that these people were trading with their neighbors to the north. It can also be assumed that there were a number of important medicines that were only obtainable in the forest that would have encouraged the people responsible for the Lozinsky subphase to trade with northern groups.

The historic record has occasionally noted trade of medicines or medicinal knowledge between cultural groups, as well as the existence of traveling "medicine men." In western Canada, the Crees were noted for their skills with medicines (Clavelle 1997).

Similarly, exotic lithic materials such as Knife River flint and obsidian, as well as the presence of such exotic materials as dentalium at Selkirk sites in the Nipawin region indicate these people were trading with peoples to the south (Meyer et al. 1991). The archaeological evidence of trade between these two groups is supported by the early ethnographic and historic records which indicate that the latest inhabitants of the area, the woodland Cree and the grassland Assiniboine, often hunted and camped together. Mandelbaum (1940:166) claims that for this reason the Assiniboine were cultural "godfathers" to the Plains Cree, since this interaction led some Cree groups to eventually adopt a plains lifeway. For the central Saskatchewan region the archaeological evidence that supports the idea of grassland/woodland interaction during the late precontact period was obtained through two major studies, the Nipawin Reservoir Heritage study and a project entitled the Environmental Baseline Study of the Saskatchewan River, Saskatchewan, in the Vicinity of Choiceland and the 'Forks' (Pipe et. al 1982). These two

projects, one of which focused on sites along the Saskatchewan River near Nipawin, and the other that dealt with the area of the forks of the North and South Saskatchewan Rivers, led to the recognition that late precontact pottery from the sites exhibited a mixture of grassland and woodland traits, evidence of woodland-grassland interaction (Meyer and Epp 1990:323). While woodland/grassland interaction has been recognized for a long time, the actual interpretations of the type and location of interaction has varied considerably. The major differences in these interpretations are largely due to how different researchers have viewed the parklands in terms of the utilization of the area.

Ray (1972), Syms (1977), and Nicholson (1988) all present a similar view of the parklands as an area co-occupied by plains and forest groups. They argue that the bison were wintering in the parkland and this drew the boreal forest and plains groups to occupy the region at the same time. Interaction between forest and grassland adapted groups would have been easily accomplished due to their close proximity within this narrow ecotone.

Meyer and Epp (1990) dispute this theory, not on the basis of bison migration into the parklands, but on the difference of social organization exhibited by forest and grassland groups. Meyer and Epp argue that during the Late Woodland period, the parklands were used by plains bison hunters not as a separate ecotone, but as "an extension of the grasslands" (1990:337). The plains groups had a more complex level of sociopolitical and military organization as compared to the boreal forest groups, and therefore the plains groups would have been able to exclude the forest groups from the parkland (Meyer and Epp 1990:338). Unlike the previous interpretations, the parkland is seen as being occupied solely by plains adapted groups in the winter, and the forest adapted groups would have spent the winter further north, deeper

inside the forest. The authors argue that interaction between plains and woodland adapted groups would, therefore, have occurred through "long-distance visiting by individuals and family groups - probably associated with a certain amount of intermarriage" (Meyer and Epp 1990:337). For this reason they suggest that any overlap of cultural territories would have occurred at the boreal forest/parkland edge, and that this area should be considered the effective ecotone (Meyer and Epp 1990:338)

Walde (1994:113-118) proposes a similar view to the Meyer and Epp model, indicating that interaction would have occurred at the boreal forest/parkland edge. Walde's model differs in that he believes that the parklands were occupied year round by the people who produced the parkland-adapted Lozinsky subphase. Interaction between the two groups would not have to occur through long distance visiting as suggested by Meyer and Epp, but would occur when the Selkirk groups were at the southern edge of the forest in the spring and summer.

Malainey and Sherriff (1996) present a different view of how the parklands were utilized, largely based on their interpretations of the bison's seasonal movements. These researchers argue that the historic record indicates that the bison did not winter in the parklands, but that the majority of the herds remained on the northern grasslands.

While bison moved onto the northern parts of the plains during the fall and winter, historic records indicate the majority of bison did not winter in the sheltered parkland. Contrary to expectations, vast herds of bison were observed on the grasslands in December, January and February, while herds approached sheltered areas if there was a severe storm or extended periods of cold weather, there are no reports of similar concentrations of bison in the parkland. Even in a normal winter bison frequently did not reach many of the fur trading posts situated in the parkland (Malainey and Sherriff 1996:341).

Malainey and Sherriff also point to the historic record to indicate where various groups spent the winter. The authors state that the historic records show that the plains groups remained on the open grasslands during the winter, and that parkland-adapted groups, as well as forest-adapted groups, would move closer to the northern edge of the grasslands in the winter (Malainey and Sherriff 1996:352). Malainey and Sherriff indicate that since the bison were scarce in the parkland, parkland- and forest- adapted groups "wintered closer to the northern edge of the grasslands, where they still could exploit wintering bison herds" (Malainey and Sherriff 1996:351). In this hypothesis, grasslands- and woodland-adapted groups remain separated, similar to Meyer and Epp's interpretation. Instead of the forest groups moving north into the forest though, they are seen as remaining in the south closer to parkland-adapted groups. The authors also imply that the historic examples of settlement patterning would have been exhibited in the late precontact period.

From these examples we can see that there are three major interpretations on how the parklands were utilized and when and where interaction between groups was occurring:

- 1) The co-occupation model sees the parklands being used in the winter by both plains- and woodland-adapted groups, and interaction would therefore have taken place at this time.
- 2) The exclusion model has the parklands occupied exclusively by plains-adapted groups, utilizing the area as an extension of the grasslands. The seasonal rounds of the plains- and forest-adapted groups would see no direct contact between the two, and interaction would largely be the result of long distance visiting.
- 3) The parkland-adapted group model has the area occupied year round by one group. Walde suggests that the interaction occurred largely in the spring

and summer when forest groups moved to the southern edge of the forest. Malainey and Sherriff argue that the interaction would have occurred during the winter as well since the forest-adapted groups remained close to, or even on the parklands.

1.5 Research Focus

The goals of this research are therefore twofold: A) to test Walde's concept of the Lozinsky subphase, and B) to determine the nature of woodlands/plains interaction in the Late Woodland period. The examination and analysis of pottery from the Muskoday/Birch Hills region will be used to address both of these questions. The collections I will be dealing with are surface materials collected by Lenore and Lawrence Hanson, avocational archaeologists who presently farm 2 km north of the town of Birch Hills. The Hansons have collected within the Muskoday/Birch Hills region from the early 1950's until the mid 1980's. The Hansons usually stored artifacts according to collection areas, especially diagnostic and unusual artifacts. The majority of cores, flakes and other lithic debitage were not given any provenience. Some of the areas at which the Hansons collected were recorded by their legal land descriptions which were recorded to the quarter section. The majority of materials collected were not as finely defined.

The Hanson's collection was registered by Margaret Hanna of the Royal Saskatchewan Museum in 1982. This involved photographing and recording the materials collected according to individual sites when the legal land descriptions were given. For the remainder of the artifacts, which the Hansons had stored according to separate sites, a collection number was assigned.

To assess Walde's concept of the Lozinsky subphase the pottery from the study area will be examined in regards to plains and woodland traits. If Walde's hypothesis is correct the Lozinsky subphase materials from this area should include Selkirk materials, as well as syncretic vessels that exhibit Selkirk and Mortlach attributes.

The problem of plains/woodland interaction will be dealt with in a wider scope. First I would propose an alternate explanation for this interaction in the late precontact period. The interaction occurred between the people who inhabited the southern edge of the woodlands and produced the Pehonan complex, and a parkland adapted people who left the Lozinsky subphase. It is reasonable to assume that the Lozinsky subphase was produced by a typical plains group, and that as Meyer and Epp (1990) have proposed the parklands were utilized not as a distinct ecotone, but as an extension of the grasslands. As suggested by Meyer and Epp (1990), long distance visiting and trading, which involved intermarriage between the groups, would have been one source of interaction. Another source of interaction, I believe, involved much more formalized trade activities.

Researchers such as Wood (1972) and Vehic and Bahn (1994) have long recognized that during the precontact period aboriginal groups participated in what has been termed a "pan-continental trade network in North America" (Wood 1972:154). This network, which facilitated the movement of materials and ideas across cultural boundaries long before the introduction of the European fur trade, has often been overlooked as a means of explaining cultural change. Active participation in this network could easily explain the mixing of woodland and grassland traits found in the Lozinsky subphase pottery.

In particular there are a number of clues that point to the Muskoday area as being the location of a major feature of this pan-continental trade network, a trade fair. A trade fair can be described as an annual event which brings together two or more distinct cultural groups. As the name suggests the main purpose of this gathering was to conduct trade, but aboriginal trade involved a number of social aspects, such as the exchange of personnel and ideas, which could account for the fusion of cultural traits found in the Lozinsky subphase.

In order to test the hypothesis that the study area was the location of a trade fair, a number of avenues of investigation will be undertaken. Picha (1996), in his work on the James River Rendezvous, has compiled a list of the resources needed to hold a trade fair. If the Muskoday/Birch Hills area is the location of a trade fair the area should contain all of these resources.

Two other tests of the hypothesis involve the use of models proposed for aggregation or ingathering sites. While aggregation sites and trade fairs differ in regards to their main functions, they do contain common elements, and for this reason it is assumed that the aggregation model will be useful in identifying trade fairs. (A detailed account of why the two can be considered analogous for the purposes of this discussion will be presented in Chapter 4.) The two models that will be used to test this hypothesis are the model of Meyer and Thistle (1994) for ingathering centers along the Saskatchewan River, and Conkey's (1980) scale of diversity of design elements expected for artifacts at an ingathering site. If the Muskoday/Birch Hills region is the location of a trade fair it should fall within the parameters set by Meyer and Thistle for aggregation sites along the Saskatchewan River. The pottery from the area should also conform to Conkey's scale of diversity, and it is expected that the material from the site would show more mixing of plains and woodland traits

than the materials described by Walde from other late precontact parkland sites.

Chapter 2 Environmental Setting

2.1 Introduction

The general area of investigation in this volume comprises the parklands of central Saskatchewan. The parklands in general can be seen as patches of prairie meadows made up of low shrubs and herbaceous species, interspersed with isolated groves of predominantly trembling aspen, and less frequently with Balsam Poplar and White Birch (Larson 1980:31; Rowe 1959:22). As one moves northward on the parkland, the frequency of the groves of trees increases (Coupland and Bradshaw 1953). This area can be seen as a transition zone between the grasslands and the boreal forest. The area coincides with the black and degraded black soil zones of Saskatchewan, "made up of deep tills and glacio-lucustrine deposits, mainly of loam to clay loam texture and moderately calcareous" (Rowe 1959:22). The materials analyzed in this volume are from the Muskoday-Birch Hills area from within this general region and the following discussion will focus on this specific area.

With major climatic shifts the location of the parkland has changed over time. Episodes such as the Altithermal period saw the grasslands, parklands and forest shift northwards. During the late precontact period, though, the location of the parkland is assumed to have been roughly the same as at present (Meyer and Epp 1990:323). The only source of major discussion has been the location of the southern edge of the parkland. Archibold and Wilson (1980) and Malainey and Sherriff (1996) have argued that with the advent of

agriculture the southern edge of the forest and grasslands has moved southwards. Others such as Coupland and Rowe (1969), Wier and Mathews (1971), and Morgan (1978) suggest that the southern edge of the parkland has receded with the advent of agriculture, and that in the late precontact period the southern edge of the parkland had a more southerly and westerly distribution. Since the study area we are dealing with is located at the northern edge of the parkland it can be assumed that conditions in the late precontact period were similar to those known historically.

Some of the earliest references to the general area are given by Matthew Cocking and Anthony Henday, Hudson's Bay Company employees sent onto the plains to encourage aboriginal groups to travel to Hudson Bay to trade. In 1754 Anthony Henday made his trip inland. Leaving his canoes, probably near the present Red Earth Reserve, Henday's party continued overland. Henday entered the northern parkland southeast of the Birch Hills region just east of the present town of Melfort. Henday traveled over the parklands between August 2 and August 13, when he entered the "Muskuty plains" (Burpee 1907:327-328). During his trip through the area he described it as a region of "Hills and Dales with little woods" that becomes further south "Level land and poor Woods" (Burpee 1907:327-328). Within the parklands Henday reported "cherry trees, on which are plenty of fruit, plenty Filberts" (Burpee 1907:327). While Henday and his party were in the parklands, he recorded that his guides killed 8 moose and 13 Waskesew (elk) (Burpee 1907:327-328).

Cocking, who made a similar trip inland in 1772, gave a more detailed account of the parklands which is more relevant to this research because he actually passed through the study area. On August 14, 1772 Cocking and companions abandoned their canoes near the Birch Hills region, and began

the overland portion of their journey (Burpee 1908:102). On the 15th of August Cocking mentioned passing over "several hillocks named Birch-hills", and noted that the Waskesew Hills (now referred to by the English translation Red Deer Hills) could be seen to the west (Burpee 1908:102). While within this area Cocking reported that it was "hilly, producing short Grass, low willow & ponds in places", and later he described the same region as "a grassy, shrubby Country" (Burpee 1908:102). Cocking also recorded some of the vegetation of the area, including: strawberries, raspberries, hip-berries, as well as wormwood, mynthe, sage, baum and other herbs. He also related that his aboriginal guides had informed him that "in Winter buffalo are plenty here, which is confirmed by the quantity of Dung on the ground" (Burpee 1908:102). On the 18th of August Cocking commented that the company did not proceed because the women were gathering nuts. On August 21 Cocking noted the abundance of elk and "Grizzle bears" (Burpee 1908:102).

These early accounts of the parklands provided by Henday and Cocking provide insight into the geography of the study area during the early fur trade period. Presumably these conditions had been consistent during the late precontact period as well. With this background we can now proceed to a more detailed examination of the parklands and the study area in general.

2.2 Physiographic and Ecoregional Areas

The Muskoday-Birch Hills area is within the Lac La Ronge Lowland section of the Manitoba-Saskatchewan Lowlands Region, characterized by undulating to gently rolling topography (Kabzems et al. 1986:3). The predominant soil is Dark Gray Chernozemic, with Luvisolic soils at the higher elevations and Brunisolic soils on sandy deposits (Harris et al. 1989).

The ecological regions that make up this area are the Aspen Grove Ecodistrict of the Parkland Ecoregion, and the Mixedwood-Parkland Transition Ecodistrict of the Southern Boreal Ecoregion (Harris et al. 1989:4). The Mixedwood-Parkland Transition Ecodistrict is described as having a subhumid-cool climate, while the Aspen Grove district has a dry and warm climate. Annual precipitation in each area is 420 and 410 mm respectively (Kabzems et al. 1986).

2.3 Vegetation

The majority of trees of the Mixedwood-Parkland Transition district are aspen and white spruce, but jack pine, black spruce, tamarack, white birch, and manitoba maple are also present (Kabzems et al. 1986). The grasslands in the area are dominated by northern wheatgrass and hairy wild rye, but speargrasses, wheatgrasses and rough fescue are also present (Harris et al. 1989:4).

In the Aspen Grove district the dominant trees are trembling aspen and balsam poplar, with occasional stands of white birch, green ash, and manitoba maple found along creeks and rivers (Kabzems et al. 1986). The grassland areas are usually composed of fescue and spear grass. Other common prairie vegetation includes chokecherry, hazelnut, saskatoon, wolf willow and pincherry bushes (Harris et al. 1989:4).

The species present in the parklands provided a wide variety of vegetative resources for aboriginal peoples. The forest-grassland mix of flora offered the inhabitants resource species of both areas (see Table 2.1) (Ray 1972:105). These resources included berries, such as Saskatoon and pincherry already mentioned, the hazelnut, and plants with starchy roots such as the water parsnip, cattail, bulrush and prairie turnip (Meyer 1982:41-42).

**Table 2.1 Important Plant Resources Possibly Used For
Subsistence in the Parklands***

Common Name	Species Name
chokecherry	<i>Prunus virginiana</i>
pincherry	<i>Prunus pensylvanica</i>
saskatoon	<i>Amelanchier alnifolia</i>
raspberry (3 species)	<i>Rubus spp.</i>
strawberry	<i>Fragaria glauca</i>
currant (6 species)	<i>Ribes spp.</i>
canada blueberry	<i>Vaccinium myrtilloides</i>
bog cranberry	<i>Vaccinium oxycoccus</i>
bush-cranberry (2 species)	<i>Viburnum spp.</i>
rose (2 species)	<i>Rosa spp.</i>
bearberry	<i>Arctostaphylos ura-ursi</i>
wolf-willow	<i>Elaeagnus commutata</i>
bunchberry	<i>Cornus canadensis</i>
round leaved hawthorn	<i>Crataegus chrysocarapa</i>
beaked hazelnut	<i>Corylus cornuta</i>
water parsnip	<i>Sium suave</i>
common cattail	<i>Typha latifolia</i>
great bulrush	<i>Scripus validus</i>
western red lily	<i>Lilium philadelphicum</i>
yellow pond lily	<i>Nuphar variegatum</i>
jerusalem artichoke	<i>Helianthus tuberosus</i>
fairy bells	<i>Disporum trachycarpum</i>

*after Meyer 1982, and Johnson, Kershaw, MacKinnon and Pojar 1995

2.4 Fauna

The mixture of grassland/forest flora also attracts a variety of fauna from both the boreal forest and the grasslands into the parklands (see Table 2.2), making the parklands "an area of high density and high diversity in plant and animal resources" (Walde 1994: 14). The diversity of plant life represented by the presence of both woodland and grassland species becomes important especially for the number of mammals found within the study area. The number of mammal species in a given area is determined in part by the availability of habitat (Richards and Fung 1969: 82), and the diversity of plant life on the parklands results in an increase of habitat.

Table 2.2 Important Mammalian Subsistence Resources Located in the Study Area*

Common Name	Species Name
bison	<i>Bison bison</i>
moose	<i>Alces alces</i>
elk	<i>Cervus canadensis</i>
mule deer	<i>Ordocolleus hemionus</i>
black bear	<i>Euarctous americanus</i>
beaver	<i>Castor canadensis</i>
muskrats	<i>Ondatra zibethcus</i>
white-tailed jackrabbit	<i>Lepus townsendii</i>
snowshoe rabbit	<i>Lepus americanus</i>
porcupine	<i>Erethizon dorsatum</i>
badger	<i>Taxidae taxus</i>
woodchuck	<i>Marmota monax</i>

* after Meyer 1982 and Richards and Fung 1969

Some of the most important resource species present would be the large ungulates: bison, elk, moose and mule deer. Malainey and Sherriff have argued that bison herds were usually not found in the parklands, except during times of extreme cold or during severe blizzards (1996: 352). Elk and mule deer would have been abundant in this area, given that they "may be especially adapted to this ecotonal zone" (Meyer 1982: 34).

Another important resource would have been the smaller animals such as the beaver, white tailed jackrabbit, snowshoe hare and porcupines. Birds would also be present in large numbers (see Table 2.3), especially during the spring and fall migrations when waterfowl such as geese, ducks and swans, would have been abundant. Other bird resources would have included the sharp-tailed and ruffed grouse, as well as willow ptarmigan.

One of the most important resources in terms of this specific region would have been the fish. The North and South Saskatchewan rivers which run through the study area contains 30 of the 58 native species found in

Table 2.3 Important Aves Subsistence Resources in the Study Area*

Common Name	Species Name
sharp-tailed grouse	<i>Pedioecetes phasianellus</i>
ruffed grouse	<i>Bonasa umbellus</i>
willow ptarmigan	<i>Lagopus lagopus</i>
canada goose	<i>Branta canadensis</i>
snow goose	<i>Chen hyperborea</i>
white-fronted goose	<i>Anser albifrons</i>
whistling swans	<i>Olor columbianus</i>
trumpeter swans	<i>Olor canadensis</i>
sandhill crane	<i>Grus canadensis</i>
whooping crane	<i>Grus americana</i>
great blue heron	<i>Ardea herodias</i>

* after Meyer 1982 and Richards and Fung 1969

Saskatchewan (Atton and Merkowsky 1983: 6). Of the species present in the South Saskatchewan River (see Table 2.4), 13 are considered to have been used for subsistence in the past (Meyer 1982; Smith 1991; Atton, Merkowsky and Snell 1992). The probability that the study area was utilized in the past as an area for fishing is enhanced by the fact that modern anglers still use this location (Lawrence Hanson 1997, personal communication).

The presence of these fish resources are important in terms of this study in that they provided one of the requirements needed for large gatherings such as a trade fair or aggregation which I will be discussing later. One of the preconditions for a large gathering of people is an abundant and predictable food resource (Picha 1996). In the study area the fish resources would have probably met these requirements in the spring since this is when the majority of the species spawn (Smith 1991: 40). During the spring a number of species spawn in succession, providing a longer period of high productivity of the resource (Smith 1991) and thus, making a spring gathering more likely. The spawning periods would, therefore, provide an abundant and predictable

resource which was of high value because the quality of the fish is also best during this period, since the fish are most nutritious just before spawning (Atton 1969:84). The quality of the resource is especially important in the spring since this is the time when mammals have the lowest fat content; therefore, the fish resources would be prized because of their high oil content.

Table 2.4 Important Fish Fauna Available as Subsistence Resources in the Study Area*

Common Name	Species Name
walleye	<i>Stizostedion vitreum</i>
sauger	<i>Stizostedion canadensis</i>
northern pike	<i>Esox lucius</i>
goldeye	<i>Hiodon alosoides</i>
lake sturgeon	<i>Acipenser fulvescens</i>
yellow perch	<i>Perca flavescens</i>
longnose sucker	<i>Catostomus catostomus</i>
white sucker	<i>Catostomus commersoni</i>
northern redhorse sucker	<i>Moxostoma marcorepidotium</i>
silver redhorse sucker	<i>Moxostoma anisurum</i>
quillback sucker	<i>Carpionodes cyprinus</i>
cisco	<i>Coregonus artedii</i>
lake whitefish	<i>Coregonus clupeaformis</i>

* after Meyer 1982, Smith 1991 and Atton, Merkowsky and Snell 1992

2.5 The Study Area

Within the study area are a number of geographic features which would have made the area attractive for hosting large gatherings of people in the past. The study area's most dominant features are the valley complexes of the North and South Saskatchewan Rivers (see Figure 2.1). These rivers not only provided a seasonally abundant fish resource, but were also important transportation routes for woodland groups. While the North and South Saskatchewan Rivers provided east-west routes, other rivers (such as the Sturgeon River that enters the North Saskatchewan west of Prince Albert)

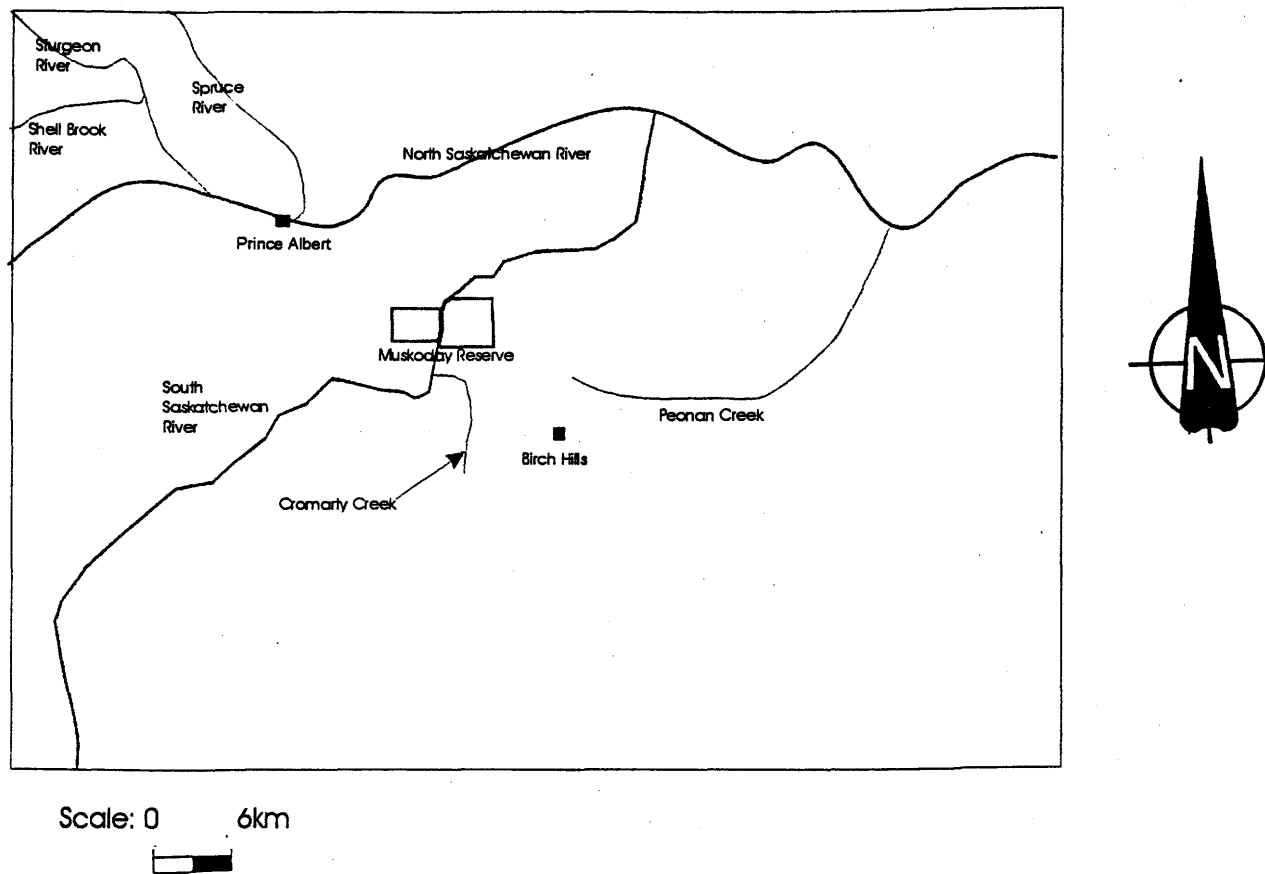


Figure 2.1 The Muskoday/Birch Hills Study Area

provided a route into the north country (Morton 1939:321). These rivers, while providing transportation routes for the woodland groups, also acted as a barrier to grassland groups who did not use canoes. Fords across the rivers were, therefore, important aspects of overland routes in the parklands. Within the study area there are two historic trails that have been recorded as being in use before the 1850s (Richards and Fung 1969:11). These trails are shown as crossing the South Saskatchewan River at the present location of Muskoday Reserve, presumably at Crossing Island. There is another ford across the South Saskatchewan just south of the reserve at Cromerty Creek which would have probably been incorporated into a precontact trail system (Lawrence Hanson 1997, personal communication).

The creeks within the area are also important in that they would have provided an ideal source of fresh water that would make these locations attractive camping spots.

2.6 Summary

The study region can be viewed as an area of diverse resources that would have been attractive to peoples in the past. Located in the parklands, the area contains flora and fauna associated with both the grasslands and the boreal forest, therefore providing a high density of resources. The major rivers in the study area provide a seasonally abundant fish resource and acted as major transportation routes for forest groups. There were also a number of overland trails within the area that made the region readily accessible, especially to grassland groups. In the following chapters the argument will be made that the unique combination of resources, and the geographic setting of the area, provided potential for the study area to be selected as the location for a trade fair.

Chapter 3 Late Precontact Trade Systems

3.1 Introduction

Trade has long been recognized as an important instrument for cultural change.

There can be no question of the significance of trade in the economies and subsistence, among other aspects of culture, of non literate as well as literate and highly industrialized societies. Trade began in the Paleolithic in the Old World, and has become increasingly important in all parts of the world ever since. There are probably few devices as effective as trade in promoting culture change and the diffusion of cultural elements, yet its significance in most of the world's simpler societies has not been systematically explored. (Wood 1972:153)

One of the goals of this paper is to identify the mechanisms of trade and specify how they act to bring about cultural change. Specifically it will be argued that the formation of the Lozinsky subphase is a direct result of participation in trade relationships that involve social connections to outside groups. In order to sustain this argument we first have to establish the likely nature of the trade system in the study area during the late precontact period. Once the likely trade mechanisms have been established, then we can examine how these mechanisms may have acted in the formation of the Lozinsky subphase.

3.2 Identifying Late Precontact Trade Systems

As Vehic and Bahn (1994) have shown, people have been actively participating in trading relations on the northern Plains since the Paleoindian

period, but the mechanisms that governed this early trade have yet to be determined. When dealing with the late Precontact period though, the mechanisms of trade are more easily defined. The archaeological evidence from the late Precontact period can be more confidently interpreted with the use of ethnographic analogy, providing a clearer picture of the mechanisms of trade. Wood has argued that "it is obvious that a prehistoric system existed to move [trade goods] and it is not plausible to construct a system radically distinct from the ones known for the historic period to explain such movement" (1972:161).

The use of ethnographic information as an analogy for precontact trade has been criticized in the past, the argument being that the introduction of the European fur trade would have altered existing aboriginal trade. While this criticism may be true to a certain extent, in that new goods were introduced into the system, it can be shown that the introduction of European trade had little impact on the existing aboriginal trade system itself. This argument can be supported by evidence (which will be discussed later in this chapter) that shows that Europeans adapted their trading practices to fit into the existing aboriginal trade systems.

Wood argues that the archaeological and ethnographic records point to "an aboriginal pan-continental trade network in North America" (1972:154). This network was composed of a number of regional systems which were "morphologically integrated, interdependent units, each consisting of a number of interdependent subsystems" (Clarke 1968:43-44). Most often these regional systems have been defined and named by geographic area, such as the Great Basin, the Pacific Plateau, or the Pacific Coast (Hughes 1994; Wood 1972; Jablow 1967). In the case of the northern Plains the system is named after the most influential participants, the Middle Missouri villages (Ewers

1968). Within each region were centers where much of the trade activity was focused; it was these "nodes or trade centers" as Wood (1972:155) calls them, which were connected by trade routes to form the larger trade network. There were also trade routes within the regional system that went from the trading centers to secondary centers which made up the regional subsystems.

When discussing these regional systems researchers have usually broken them down into internal and external systems. Woolworth (1986) does this for the historic Dakota, identifying internal and external systems. Bahn (1982) divides Upper Paleolithic trade sites into aggregation and super-aggregation sites. This approach has been criticized because it has "tended to paint artificial dichotomies, which overemphasize internal and external characteristics of the relations" (Picha and Picha 1993:1). This approach can be confusing because there is no clear separation of intergroup and intragroup trade. Instead, I propose that the system should be analyzed according to primary, secondary, and tertiary trade centres, based on the types of trade activities, (long distance, regional and local trade), the matrix of people involved, and the activities carried out within each system.

3.3 The Primary Trade System

The primary trade system acts to link individuals and small groups to the larger trade networks. Included in this system are trade activities that are focused on low level trade, where exchange takes place between individuals or small family groups. The process of long distance visiting proposed by Meyer and Epp (1990) would be an example of low level trade activities. This interaction at the individual or family level would include the exchange of goods and information. The primary system also includes trade activities at congregation centers, where members of the larger cultural group are

gathered together for various reasons and for different periods of time. These congregation centers would be the primary trade centers. For the study area we are concerned with, the groups involved in primary trade would be the regional bands of the boreal forest and the tribal groups from the plains. These primary trade centers connect the smaller tribal or regional bands to the larger centers of trade.

Since we are dealing with band societies from the boreal forest, and tribal societies from the plains, each of which exhibit different levels of sociopolitical complexity, we have to define the primary system for each group. Both of these groups can be loosely defined as hunter-gatherers which share a common feature of "an annual cycle characterized by periods of concentration and dispersion" (Conkey 1980: 609). The plains tribes present a special case though, in that the abundance of the buffalo resource allowed these nomadic groups to maintain a more complex sociopolitical organization than one usually associates with hunter-gatherers. The groups from the boreal forest are more representative of hunter-gatherers, with their band society social organization. Band society is defined as

[E]galitarian societies integrated largely on the basis of kinship and marriage. Their leadership is informal and temporary, and labor is divided generally by sex and age. (Thomas 1989: 356-357)

June Helm (1968), in her characterization of band societies, divides them into three stages, the local band, the regional band, and the marriage universe. The local band is usually composed of a group of closely related families and tends to number around 25 individuals (Helm 1968: 375). The regional band is composed of the local bands within a certain area and tends to involve around 200 individuals (Helm 1968:119-121). The marriage universe in turn

is composed of a number of regional bands and has an average membership of 500 (Birdsell 1968:232-233).

Tribes on the northern plains, while similar to band societies, are more complex in their sociopolitical organization. Mandelbaum (1940:181) asserted that the term Plains Cree tribe did not indicate a cohesive political or societal entity, but "there was enough linguistic and cultural homogeneity to warrant the common appellation." The plains tribes we are dealing with can, therefore, be viewed as a fluid collection of autonomous bands. Each band was "composed of ambilaterally related individuals, ranging from 200 to 800 in number" (Sharrock 1974:104). Each band had its own territory and within this territory the band would fission into smaller units or fuse into larger ones depending on available resources.

Researchers such as Frison (1978), and Morgan (1979), have argued that during the bison rut communal bison hunting would have been very difficult, but that this is also the period of the year when seasonal water supplies were at their lowest; therefore, bands would have congregated at reliable water resources. Vickers (1991: 63-64), argues that the archaeological record in Alberta does not correspond to the idea that plains groups were congregating at water supplies. In fact the archaeological record shows the opposite, summer sites tend to be small in size, and it is the fall, winter and spring sites which are the largest. Regardless of which of the above scenarios is accepted, the bands within the tribe came into contact with one another during different times of the year in order to participate in communal bison hunts (Bamforth 1988:25). Not all the bands of a tribe would get together for these communal hunts, but the fact that two or more bands would fuse together for communal hunting purposes meant that, unlike the boreal forest groups, there would be interaction among a large majority of the

bands within the tribe throughout the year. It can be assumed that at these times the bands conducted social, religious and trade activities. For this reason the annual ingathering centers, as Nicks (1986) calls them, described for boreal forest groups, would not be required for plains tribes, in that the social and religious functions that were carried out at an ingathering center could be accomplished when large groups had come together at communal bison hunts. The communal hunts were therefore not only important in an economic sense, but played an important role in the sociopolitical life of the plains tribes. All of the religious, social and political activities that were carried out by the boreal forest bands at an ingathering center were undertaken by the plains tribes at the communal bison hunting locations. It can be assumed that the location of the communal hunts became important locations in the plains tribes social and sacred geography, much like the ingathering centers in the boreal forest and parklands.

Since boreal forest and plains groups exhibit different social organization, and therefore different annual cycles of fission and fusion, the primary trade centers would also be different. For the band society peoples of the boreal forest, the primary centers were the annual aggregation sites, or ingathering centers. For the band societies the local bands are the main socio-economic grouping for the majority of the year, when these bands are dispersed over the regional band's territory. Once or twice a year, usually in the spring or fall, the members of the regional band met at an ingathering center for religious and social purposes. The annual aggregation was important for a number of reasons. First religious ceremonies and other activities reinforced the social ties that held the regional band together. Also, spouses were selected and marriages were arranged; families which are not

getting along with other members of their local band were provided a chance to choose a different local band.

While the main factors involved in an aggregation were social, it can be assumed that trade was conducted at least on a limited scale. One major aspect of social relationships among these groups was the custom of gift giving and exchange that dominated most religious and social interactions. As we will discuss further in the next section, the nature of interaction between groups usually involves the exchange of materials, and for this reason the ingathering center as a social event automatically becomes a part of the trade network.

For the tribal societies on the plains the patterning of dispersion and aggregation is quite different. As mentioned previously, the many bands that comprised the tribe had numerous opportunities throughout the year to join with other bands for communal hunting. For this reason there is no actual primary center made up of the members of one tribe such as the aggregation site of the band societies. Instead the analogous aggregation for these tribal societies would occur when all the bands from within the linguistic nation congregated together. This was the case with the Dakota, where at times 11 different bands would congregate annually for the Dakota nation's rendezvous (Woolworth 1986:15). It was here that the social activities that reinforced group solidarity were performed, and as mentioned previously this often included a limited amount of trade or gift giving. The Dakota Rendezvous was also a secondary center that hosted a trade fair that included outside groups. The primary trade center for the plains groups can therefore be seen as being enacted within the secondary trade center, as well as occurring at communal hunting sites.

The primary system of trade and the trade centers associated with them can be viewed as the basis of the aboriginal trade network. The exchange of ideas and goods at this level formed the foundation upon which the secondary and tertiary systems were based. The majority of this activity occurred within a regional band, or within a tribe or nation. For this reason the primary system does not facilitate the movement of goods and ideas across cultural borders. The main source of cross cultural influence would be greatest at the tertiary and secondary trade centers where a number of unrelated groups were interacting. The study area's great distance from the primary centers of the Middle Missouri villages, therefore, dictates that any trading activity that involved large scale interaction between the two groups within the area would have occurred at a secondary trade center, the trade fair.

3.4 The Secondary Trade Centers

The secondary centers create the links which tie the primary centers into the pan-continental network, and also provide links to the tertiary centers. Through these secondary centers goods from the tertiary centers are dispersed throughout the region, and across regional boundaries. The secondary trade centers are often referred to as a rendezvous or trade fair. Trade fairs have been defined as:

[A] periodic, large, spatially and temporally predictable gathering of unrelated hunter-gatherers, often representing ethnically and linguistically distinct groups. During the course of these gatherings, at least some part of the interaction is the exchange of goods. Not all aggregations of this sort would be predicated on the notion of trade. However, exchange is a part of the inter societal interaction, which, from an archaeological standpoint, is significant because it is most likely to be visible in the material record (Jackson 1991:266).

In order to facilitate a large gathering a resource base is needed to feed the participants. Another requirement would be the presence of lines of

communication and travel. Jackson (1991:276) studied a number of trade fairs from around the world and noted that one of the prerequisites for trade fairs was they had to be easily accessible, and that they were often held on the coast or near waterways. Other prerequisites include available space, suitable water, and adequate timber (Picha and Picha 1993:7).

For the Middle Missouri region a number of these trade fairs have been recognized. The most well documented are the Shoshoni and Dakota trade fairs (Ewers 1968). Less well known is the trade fair in the Black Hills which the Cheyenne and Arikara are said to have participated in between 1803-1805 (Jablow 1966: 58). Also connected to the Middle Missouri region was another trade fair on the Platte River involving the Arapaho, Kaskaias, Kiowa, Comanche and Cheyenne (Jablow 1966:60).

In all four of these examples the trade fair was an aggregation of a number of nomadic tribes, with one of the main purposes being the exchange of goods. Each of these trade fairs had direct connections to the Middle Missouri trade centers, usually through a specific group. In the case of the Shoshoni trade fair the Crow were attributed with being the link between the Mandan-Hidatsa villages and the trade fair. "The Crows traveled to a trading rendezvous in the west with the Shoshonis, Flatheads, and Nez Perces, and the Shoshoni in turn trade, through the Utes west of the Rockies, with the Spaniards of New Mexico " (Ewers 1968:17). Ewers implies that the other trade fairs were similarly connected to the tertiary trade centers through one representative group. In the Platte River trade fair it was the Cheyenne, and at the Dakota trade fair it was the Tetons (Ewers 1968:16-17). The connection between trade center and fair dominated by one group is probably related to the proximity of the group. Tribes from further away probably sent trade representatives to the villages, while closer tribes such as the Crow arrived en

masse, and therefore played a greater role in the secondary trading system. Jackson (1991: 278) reports similar group involvement at the trade fairs, "...essentially all members of nearby tribes attended fairs, while from greater distances fewer individuals represented their respective groups".

All the groups represented at the Dakota fair are recorded as being present at the tertiary trade centers, but it is the Tetons, who are closest to the villages, that are credited with providing the Middle Missouri link to the Dakota fair. This is not to say that the other Dakota groups were less active in trading relationships, but that they probably had closer ties to other regions such as the Mississippi. For this reason the trade fairs can be viewed as having a wider scope than the primary system, since materials from a number of regions were being traded at one time. In the case of the Shoshoni trade fair, the Crow brought materials from the Middle Missouri region, the Nez Perce brought material from west of the Rockies and the Utes brought material from New Mexico (Ewers 1968: 17).

Using these examples, Jackson's definition of a trade fair can be made more precise, at least for the Middle Missouri region. The trade fair in this region can be defined as a gathering of often unrelated groups for the purpose of trade, and social interaction. The trade carried out is inter-regional in that the groups involved have ties to different trading centers in different regions. The requirements for a trade fair include; a resource base to feed the participants, adequate space, water and timber, and a system of trails that provides easy access and links to primary and tertiary trade centers.

3.5 Tertiary Trade Centres

The tertiary system was composed of the major trade centers that made up the pan-continental network. These centers were the main focus of inter-

regional trade and also acted to redistribute goods and information throughout the region. Hirth (1978) describes these centers as gateway communities, which acted to facilitate the passage of goods and ideas between distinct natural or cultural areas.

[Gateway communities] are generally located along natural corridors of communication and at the critical passages between areas of high ... productivity; dense population; high demand or supply for scarce resources; and at the interface of different technologies or levels of sociopolitical complexity. (Hirth 1978:37)

These trade centers were usually permanent locations as in the case of the Mandan-Hidatsa, and Arikara villages in the Middle Missouri system, or in the case of the Pacific Plateau system, the Dalles fishing camp occupied by the Wasco and Wishram. These permanent locations were usually occupied by sedentary or at least semi-sedentary groups.

The permanence of these trade centers was dependent on an abundance of resources to provide for long term occupation by the host group, as well as to support visiting traders and still provide a surplus that acted as an impetus for exchange. The Dalles in the Pacific Plateau was a major fishing camp with fish being the resource supporting long term occupation, as well as being a major trade item (Galm 1994). Lewis and Clark mention seeing 50 tons of dried fish when they entered the Dalles area (Thwaites 1959, III:148 - 155), and Griswold (1970) has estimated that the annual production of dried fish for trade at the Dalles was 500 tons. In the Middle Missouri region the resource base would have been the agricultural products produced by the Plains villagers (Ewers 1968; Jablow 1967).

As mentioned earlier, another important aspect of the trade center is the lines of travel that connected trade centers to other nodes in the network and to the secondary and tertiary systems. For the Middle Missouri trade centers

these trade routes are well documented and radiate out in all directions. Ewers (1968:18) notes that "this network of intertribal trade involved no fewer than 19 Indian tribes" .

The trade among all these tribes was not carried out at the same time; different groups would have incorporated trade at the villages into their seasonal round according to other priorities. Assiniboine chiefs near Lake Winnipeg had told La Verendrye in 1734 that they planned to go to the Mandan to buy corn as soon as spring arrived, and that the previous fall a similar trip had been undertaken (Ewers 1968:20). During the winter of 1738 La Verendrye left two men with the Mandan to learn their language and customs. When these men returned to La Verendrye they reported that in June a group of allied tribes from the west had come to the village to trade and had remained over a month. La Verendrye's men noted that this was an event which occurred "every year, at the beginning of June" (Ewers 1968:18). It is probably misleading to think that all trade at these centers involved the direct participation of large groups, such as the 1739 account of a number of allied tribes arriving to trade. As Arkush (1993:623) points out, the Yokut tribes in California had "individuals and families who functioned as professional traders, and who apparently covered great distances during their trading expeditions." The groups farther away from the Middle Missouri villages may have sent similar representatives to trade, or simply relied on indirect trade with the villages through the secondary system.

3.6 Social Aspects of Trade

"Economic systems are embedded in social relations"
(Polanyi 1944: 272).

If we analyze aboriginal trade by focusing on the social relations that the trade network is based on, it becomes evident why trade has been

identified as an important aspect of cultural change. Gudeman (1986) argues that there has been a tendency to use common economic theories to describe aboriginal systems, and that these theories are based on western ideologies which create an unrealistic assessment of aboriginal trade. Instead of using these western models Whelan (1993:247) advocates "a more relativistic position, choosing to understand the logic of non-Western economies from the inside by examining the indigenous constructions (local models) on which people base their actions".

Whelan (1993) takes this approach in her study of Dakota trade practices, and looks for the underlying aboriginal ideologies that influenced the behavior of the Dakota in regards to trading practices. One of the most important factors identified by Whelan (1993:259) is the aboriginal view of nature. The Dakota view of nature was that it was unlimited in its bounty since nature's resources were controlled by spirits and deities. To gain access to the resources of nature one only had to show the proper respect to these deities. In effect the showing of respect was a system of exchange between humans and the deities, where a fee was paid for the use of a resource, either in the form of a prayer or an offering. Whelan argues that this system of exchange was based on a kinship relationship between humans and the deities, with the deities representing a father who provided for his children (the humans) if they had shown the proper respect. Whelan argues that kinship obligations were used to define most aboriginal relationships and that "exchanges between humans, between humans and nature, and between humans and deities shared many of the same features because all were patterned after kinship obligations and rights" (1993:252). By examining these kinship ties between groups involved in trade we can see how these relations would work on two levels to bring about culture change. The first level

involves the individual relationships between trading partners, and on a larger scale are the relationships between groups at trade fairs.

3.7 Trade Partners

As stated above, human relations involving hunter-gatherers are most often based on kinship. Whelan claims the Dakota divided the world into "friends (symbolized by the use of kinship terminology, and the exchange of goods and services) and enemies (identified as the legitimate objects of warfare, scalping, capture, or death) (1993:249). The village could therefore be viewed as "large, extended families where economic production, distribution, and consumption were regulated by the rules of kinship . . . as long as kin ties were maintained, society provided for life" (Whelan 1993:252-253).

As a form of insurance against resource shortage the kinship ties were extended outside of the local and regional bands or tribe through the formation of trade partnerships, where partners were given fictive kin status. Formal and metaphoric adoption of outsiders allowed hunter-gatherers to incorporate potential enemies into tribal life (Whelan 1993: 253). By extending kinship to the outside trading partner a number of kinship obligations had to be met. These trade networks of fictive kin "allow[ed] a group to have periodic access to the surplus production of another group's territory, either through obtaining commodities or via temporary use rights" (Jackson 1991:277).

Since trade relations are based on kinship ties, the trade relations involving hunter-gatherers can then be viewed as a system of reciprocity, where ties between kin are maintained by gift giving and exchange. Whelan (1993: 256) notes that for the Dakota;

Reciprocity - mutual exchange between socially defined partners
- was the key to economic production, distribution, and
consumption among the Dakota. Cycles of 'gift' and counter 'gift'
were used to keep social ties strong.

Cleland (1993:116) makes a similar observation for the Chippewa, where "the circulation of goods in Chippewa society during the fur trade era was governed by the reciprocal relations of kinsmen."

The social ties between partners were maintained because the kinship ties obligated each partner to participate in a cycle of gift giving and receiving.

In situations where social and economic behavior are organized around reciprocity, "debt" is actually required to keep the system functioning. Full repayment is not intended and no notion of "getting out of debt" is involved. The point is to stay in debt so that social ties are maintained and you are assured of having an ally when future needs arise (Whelan 1993:256).

The best examples of how kinship relations were extended to trading partners can be seen in the early fur trade accounts. The Europeans involved in the fur trade were incorporated into the aboriginal trade network in the same manner as any outside group, social bonds were created through fictive or real kinship ties (Whelan 1993; Thistle 1980; Van Kirk 1986). Records of Dakota interaction with Europeans list fictive kinship terms that extended to traders (brother) and government representatives (father). The kinship term used was important in defining the expected relationship between those involved. By calling the European traders brother it was implied that the relationship was based on equality and reciprocity, while the term father implied a more one sided relationship existed between the Dakota and the government.

A Dakota father was responsible for providing food and aid to his children without expectation of immediate repayment. A brother-brother relationship was much more egalitarian and carried the expectation that each participant would repay the other equally for any aid given. Fur traders were normally called "brother,"

indicating that the Dakota expected an egalitarian relationship with traders. . . . In contrast the United States President and other government emissaries were referred to as "father," a much more one-sided relationship (Whelan, 1993:253).

The fictive kin ties extended to trading partners were often enhanced by making the kinship ties real. This was either done by marriage between family members of the trading partners, (Spence 1982:187; Wood 1972:163) or by the formal adoption of the trading partner or one of their kin (Wood 1972:163; Whelan 1993:253). With trading partnerships being based on real and fictive kinship, the trade network can be seen as "a vast network of kinship relationships [which] extended throughout the entire Plains" (Bruner 1961:200).

While kinship ties provided a mechanism that allowed the formation of trading partnerships between peoples from different groups, other mechanisms existed to facilitate congregations of large groups meeting for the purpose of trade. Hunter-gatherers were often at war with their neighbors, and yet still managed to engage in trading relationships. Wood (1972:162) argues that this is not an uncommon occurrence, even for industrialized nations where economic interests allow trade to occur even between groups engaged in active hostilities. In the case of hunter-gatherers, trade was maintained with enemies "through an alternating pattern of economic interdependence and social avoidance" (Wood 1972:162).

One of the mechanisms used to provide a sense of solidarity between trading groups who were at other times engaged in hostilities was the use of ritual (Bahn 1982:264). As Rappaport (1971:35) has argued "regulatory mechanisms which are arbitrary are likely to be sanctified." In the case of the Mandan trade centers, adoption was once again used to create kinship ties amongst the trading partners, but in this case the adoptions were carried out in

a ceremony involving the participating groups (Wood 1972:162). The Dakota also used a formal adoption ceremony, the *hunka* ceremony, to facilitate trade with otherwise hostile groups (Whelan 1993:253). Through the use of these and other ceremonies hostile groups could, for a short period of time, put aside hostilities for the purposes of trade.

Feasting, dancing, and ceremonial activities served to reinforce, if only temporarily, social solidarity among the participants, who in other contexts might have treated each other as enemies. In some cases there were also games and other contests that acted as non lethal expressions of underlying intergroup competition (Jackson 1991: 276).

Through participation in rituals members of different groups were able to achieve a sense of solidarity which allowed for peaceful interaction.

3.8 Trade as a Mechanism of Culture Change

Trade provided an avenue which linked individuals over large geographical areas, and also provided a mechanism that enabled the periodic joining of culturally unrelated hunter-gatherer groups at trade centers. Trade not only moved goods across cultural boundaries, but provided a mechanism that could move people and ideas across cultural borders as well. Wood (1972:165) states that one of the most important aspects of trade was the movement of information, and that "[t]here is no question that the social interaction which took place at these fairs facilitated the rapid dissemination of information and ideas over large parts of the continent." Marquardt (1985:81) argues that environmental information would itself become a commodity, and that this commodity included "social and political information as well as such basic information as data about rainfall, the ripening of nuts, or the availability of various resources."

Bamforth (1988:24) argues that within a society where aggregation is an annual pattern, the increase in population size during these periods results in an increase in cultural homogeneity within the population. This cultural leveling should also occur when different societies meet on a regular basis for the purpose of trade. Regular contact and exchange of ideas between groups would result in these societies eventually exhibiting a number of common traits.. This homogeneity can be seen in different trading regions in the forms of languages devised to facilitate the transfer or brokerage of information. In the Pacific Plateau region this was done through the use of jargon (Jackson 1991), and in the Middle Missouri region with the use of the sophisticated sign language (Wood 1972). The intermarriage associated with trade partnerships also contributed to the process which Wood (1972) describes as "cultural leveling". Walker (1967:24) states that at the time of contact some tribes had become so intermarried that "it was virtually impossible to tell them apart." The participation of different groups in the same rituals and festivities at trade centers also encouraged homogeneity (Wood: 1972:165).

[One consequence of systematic trade] was the diffusion of cultural elements over large areas. This contributed to cultural uniformity between alien groups, and provided a means of leveling cultural differences over wide areas (Wood 1972:164).

Anastasio (1955:92) made similar arguments for the Plateau region, where he claimed that the interaction that occurred through trade eventually resulted in the formation of a single social system in the region.

3.9 Summary

Aboriginal groups across the continent during the precontact period were linked through a series of trade systems. Two of these systems, the secondary and tertiary trade centers, brought together a number of unrelated

groups for the purposes of trade. In order to facilitate this trade unrelated groups were required to form real or fictive kinship ties to provide a framework that spelled out the expected relationships between trade partners. The formation of these kinship ties involved the incorporation of outsiders into the local group through adoption or intermarriage. Thus ideas were exchanged along with goods, individuals from outside groups were incorporated into the culture, and these new members brought new ideas with them. The process of trade can therefore be seen as a mechanism that influenced culture change.

For the Muskoday/Birch Hills region, the most likely trading activity in the area would have involved a trade fair. Such a trade fair would explain the presence of the Lozinsky subphase and Pehonan materials found within the area. These two archaeological cultures are defined mainly by the ceramics, both of which are seen as a mixture of woodland and plains traits. The exchange of goods, ideas and personnel involved with a trade fair would be expected to result in "cultural leveling", where the two distinct groups, over time, would exhibit some similar traits. In order to suggest that the exhibited traits of these two archaeological cultures are the result of participation in the trade network, a number of avenues of investigation will be undertaken in support of the hypothesis that the Muskoday/Birch Hills region was the location of a trade fair.

Chapter 4. Evidence That the Study Area Was Occupied for Purposes of Trade

4.1 Introduction

The nature of the archaeological database makes providing definitive answers for some problems troublesome. One way in which to overcome this problem is to use a number of different lines of inquiry. In this manner even if a definitive answer can not be determined, at least a number of results which support the hypothesis will strengthen the researchers argument. Whether the Muskoday/Birch Hills area was the location of a trade fair is one of these questions which is made more difficult to answer since the materials we are dealing with are surface collected. In order to overcome this problem, three major lines of inquiry will be investigated, with the assumption that positive results in all three will strengthen the validity of the hypothesis.

As mentioned in the introduction, the testing of the hypothesis that the Muskoday/Birch Hills region was the location of a trade fair will involve comparing the study area, and the materials found within the study area, to three different sets of evidence. The first set is a compilation of a number of environmental factors identified as being essential for a large gathering such as a trade fair or an aggregation site. If the Muskoday area was the location of a trade fair, all the requirements listed should be present within the study area.

The other two sets of evidence that are to be used to test the hypothesis were not formulated to deal with trade fairs, but are based on data concerning aggregation sites. The validity of using these sets of evidence to test for the presence or absence of a trade fair site is enhanced by a number of factors. As discussed in Chapter 3, the main difference between an aggregation and a trade fair is that an aggregation is held for mainly social reasons, while the trade fair's main focus is trade. This is not to suggest that there is not some overlap in purpose between the two events. A large component of the trade fair is concerned with social aspects; in particular, the formation of trading partnerships. As already discussed, the social activities which occur at an aggregation site often involve gift giving, and they are therefore considered here as part of the tertiary trading system. Trade fairs can be seen as being superimposed on an aggregation, as in the case of the James River Rendezvous. While the main function of this gathering was for the purpose of trade between Dakota tribes and other outside groups, the host Dakota also used this opportunity to carry out activities that are associated with aggregation sites.

The annual fairs were a time for reorganizing the bands in each village under a headman or headwoman called an *ithican* or "wearer of the shirt." Annually at these fairs marriages took place on an exogamous village basis. Tribal hunting parties were organized in the summer and band hunting parties were organized in the winter. During the annual fairs, 160 headmen sat in council and planned for the next year. (Woolworth 1986: 16-17)

Out of efficiency the host of the trade fair would likely have used the opportunity of the fair to carry out the social functions associated with an aggregation site. As we will discuss later, the resources needed in order to hold each of the activities are the same. Most

important is an abundant and reliable food resource that would allow for a large gathering of people, which for the study area is the spring spawning run of fish. The relatively short duration of this resource's availability would indicate that holding an aggregation and a trade fair at different times is unlikely.

As mentioned previously in Chapter 3, the tribes or bands that are closest to the trade fair location usually attended en masse, while groups from further away would have sent representatives. It would seem likely, therefore, that the host group would have had the majority of its members at the trade fair, allowing the social aspects associated with aggregation to be carried out at the same time.

Archaeologically, a trade fair and an aggregation site would be very similar in terms of site formation. Conkey (1980) has argued that an aggregation site can be identified in the archaeological record because of the greater number of individuals involved as compared to other, smaller sites. The increased number of participants would result in a larger site which would exhibit a greater range of activities, some of which would be exclusive to aggregation sites. All of these factors would be applicable to a trade fair as well, if not on an even larger scale. A trade fair would be expected to have been attended by a larger number of people, the host group would probably be represented by a majority of its members from the regional band or tribes, on top of which would be members of outside groups coming to trade. An aggregation site would only contain members of the regional band or members of a particular tribe. The trade fair should, therefore, leave the same archaeological evidence; a larger site with evidence of a wider range of activities, with some of the activities being exclusive to the

trade fair site. For these reasons we can therefore argue that the evidence proposed by Conkey (1980) and Meyer and Thistle (1995) for the identification of aggregation sites can be used to indicate the presence of a trade fair, if modified to the specifics of a gathering composed of a number of unrelated cultural groups, rather than a single cultural entity.

4.2 Environmental Requirements for a Trade Fair

Past research into aggregation and trade fair centers has shown that there are a number of environmental factors that are essential for gatherings of large groups. If the Muskoday/Birch Hills region is a trade fair locality, these environmental factors would have to be present.

Conkey (1980), Jackson (1991), Picha and Picha (1993), Meyer and Thistle (1995) and Picha (1996), have all conducted research that deals with aggregation and trade fair sites. From this past research we can compile a list of all the environmental factors that are essential for hosting the large groups of people found at these sites. These include:

1. **Suitable Space.** In order to facilitate the large numbers of people a suitable location was needed which could, in essence, accommodate this number of people. In some areas, such as the boreal forest, large enough clearings to accommodate this many people would limit site location.

2. **Suitable Water.** As with any other camp site the availability of fresh water becomes important, and the positioning of any site is usually influenced by access to water.

3. Abundant and Predictable Food Resource. The greater the number of individuals involved, the greater the amount of food that would be needed to support them. This resource would also have to be reliable and predictable, which usually means a seasonably harvestable resource.

4. Easily Accessable. In order for participants to get to the trade fair trails or water routes were needed to facilitate travel. This was especially important for participants who would have had to travel long distances.

5. Adequate Timber. Fuel would be needed either for cooking or heat. Picha and Picha (1993: 8) have suggested this factor may have resulted in trade fairs being moved periodically. The fairs would have been held in the same general region, but as the fuel was exhausted adjacent locations would have been used.

From this list we can see that the Muskoday/Birch Hills region contained all of the characteristics essential for hosting a trade fair. While the area is on the northern edge of the parklands where forest cover is most dense, it would still have had meadows, presumably large enough for large camps. The valley tops along the South Saskatchewan River in the study area would probably contain a number of suitable clearings. These locations would also be favored because they would have provided a suitable source of water, either from the river or from the creeks that run into the river in the area. The

river would also provide a suitable resource base. As discussed in Chapter 2, the South Saskatchewan River has a number of fish species that spawn in the spring. This would provide a suitable quantity of subsistence resources, while at the same time the resource would be predictable and reliable. The river would also act as a major travel route for woodland groups. The Sturgeon River, 16 km to the northwest on the North Saskatchewan river has been described as a major route into the boreal forest (Morton 1939:321), as was the main Saskatchewan River. Added to the river routes are a number of historic trails that criss crossed the area, some of which were probably in use in the precontact period (Richards and Fung, 1969:11). The area also contains a major ford across the South Saskatchewan which would have probably been incorporated into a precontact trail system (Lawrence Hanson 1997, personal communication). The study area's location on the northern edge of the parkland would mean that adequate timber would have been abundant and therefore would not have been a major factor in site positioning.

The study area can be seen as containing all the essential resources and characteristics needed to host a trade fair. This fact that these requirements could have been met does not in itself suggest the area was used for such a purpose, only the possibility that it could have. In order to support the proposition that the area was utilized for a trade fair we have to turn to the next two evidence sets.

4.3 Aggregation Center Model

Recently Meyer and colleagues have published on research focussed on the Late Woodland period along the Saskatchewan River

valley of Saskatchewan and Manitoba that has resulted in the identification of a number of aggregation centers (Meyer 1994; Meyer and Thistle 1995; Meyer et al. 1992). From this research some aspects of the social geography of the region have been proposed for the late precontact and the contact periods. Meyer and Thistle (1995) have suggested that these aggregation centers have a long history of use, and that their importance in the social geography of the woodland groups of the area continued through into the historic period.

Based on this past research Meyer and Thistle (1995) have listed a number of lines of evidence that they used to identify six aggregation sites along the Saskatchewan River valley. As noted above, the similarities that exist between aggregation areas and trade fair localities should allow us to use these same lines of evidence to test whether the study area was the location of a trade fair. If this hypothesis is correct, the Muskoday/Birch Hills area should fit into the Meyer and Thistle model of aggregation centers.

Meyer and Thistle (1995) identified four criteria that they used to discern aggregation centers along the Saskatchewan River valley.

These include:

- A) Conkey's concepts of site size and diversity for aggregation sites.
- B) The Cree names of the aggregation sites were recorded by early explorers and fur traders.
- C) The aggregation centers influenced the positioning of fur trade posts.
- D) These sites were maintained as important foci for Cree groups well into the historic period.

The first indicator was based on Conkey's (1980) work at Altamira, an Upper Paleolithic aggregation site in Spain. Conkey suggests a number of factors that can be used to distinguish between an aggregation site and a dispersion site. One such factor is that aggregation sites are occupied by more people, which results in larger sites. The larger number of people would result in a greater range of activities taking place, as compared to dispersion sites. In the archaeological record this would be reflected as a large site with a greater diversity of features and artifact classes (Conkey 1980: 612). Binford (1982: 179) has critiqued this approach stating that there is no connection between aggregation and diversity, and that "[m]any other contexts not particularly associated with aggregation could result in regular and regionally patterned differences in diversity". While Binford's point is valid in assuming there could be other factors that could replicate the patterning of diversity expected for an aggregation site, his criticism does not stand up when there are other lines of evidence to identify an aggregation site, such as those used by Meyer and Thistle (1995). By using this type of approach to identify an aggregation site, where not only internal diversity of the sites in the region are examined, the researcher can be fairly certain as to whether the site was used as an aggregation site or not. Binford's criticism is even less valid when dealing with trade fair sites, where the diversity is the result of a number of unrelated groups meeting for the purpose of trade. There have been no other examples besides a trade fair which would see the gathering of large numbers of people of unrelated cultural groups, and therefore one would not expect other sites

occupied by a single cultural group to mimic the diversity of a trade fair site.

Meyer and Thistle (1995) use Conkey's model as a first step in identifying the aggregation sites along the Saskatchewan River valley. Conkey's regional diversity test is easy to use in the boreal forest, where the usual dispersion sites are quite small. In the Nipawin study region, Meyer and Thistle (1995:413) identified one aggregation locale, Nipowiwinihk. Here there were several large Selkirk sites, both on the valley crest and the valley bottom below. Selkirk sites in the valley outside of Nipowiwinihk "were not numerous and those that were investigated were relatively small with few features and fewer artifact classes. These sites typically produced sherds of only one or two pottery vessels" (Meyer and Thistle 1995:413). Conversely, the Selkirk sites identified at Nipowiwinihk were much larger with considerably more artifacts and more artifact classes represented.

The extensive excavations at the Lloyd, Bushfield West, and Bushfield east sites produced evidence of large, dense occupations with numerous features (hearths, rock-filled pits). Many rare classes of lithic and bone/antler tools were present, including drill bits, worked steatite, fish gorges, and barbed harpoon points. Pottery was well represented. For example, the sample recovered from the Bushfield West site represents at least one hundred vessels (Meyer and Thistle 1995:412).

Therefore, when a comparison of all known sites in a region is made the aggregation sites can be identified on the basis of the site size, and the diversity of the artifact classes represented will be much greater than in the majority of the dispersion sites.

The second indicator for aggregation sites identified by Meyer and Thistle is the recording of the Cree place names for aggregation sites in the journals of early fur traders and explorers.

It is apparent, therefore, that the traders regularly refer to the aggregation centers by their Cree names and that those place-names (apart from river, lake, and portage names) that do appear in the fur-trade and missionary documents refer to very special places - the most significant locations of the time period. In short, when a given location is named in the historical accounts, it is strong evidence that it was an aggregating center (Meyer and Thistle 1995: 415).

The third indicator used by Meyer and Thistle is the positioning of fur trade posts, which were influenced by the aggregation sites. The positioning of the posts at aggregation centers was either the result of traders recognizing them as central locations of importance, or the Natives lobbying as to where the posts should be located. The latter was the case for Fort Bourbon, built in 1737 by La Verendrye, who was told by a Cree chief to build at the aggregation center because "there was abundance of game and fish" (Burpee 1927:250). Also relevant is Samuel Hearne's comment that

[a]s each Different Tribe are desirous of having goods brought as near their own doors as Possable, it is a Piece of Polisy in them to Praise their part for the Plentiffulness of Furrs and Provisions and at the Same time condemn every other Part (Tyrrell 1934: 117).

Whether the traders realized the importance of these locations or whether the Natives influenced their decisions, the majority of aggregation centers had numerous fur trade posts built at or near them since they "were clearly the most appropriate locations for maximizing trading contacts and, therefore, profits" (Meyer and Thistle 1995: 431). Cocking, when travelling inland in 1772, makes a remark about the Opaskweyaw (which he gives as "Basquia") aggregation center, which supports this idea. Cocking notes that "[t]his is a long frequented place where the Canadians rendezvous & trade with the Natives" (Burpee

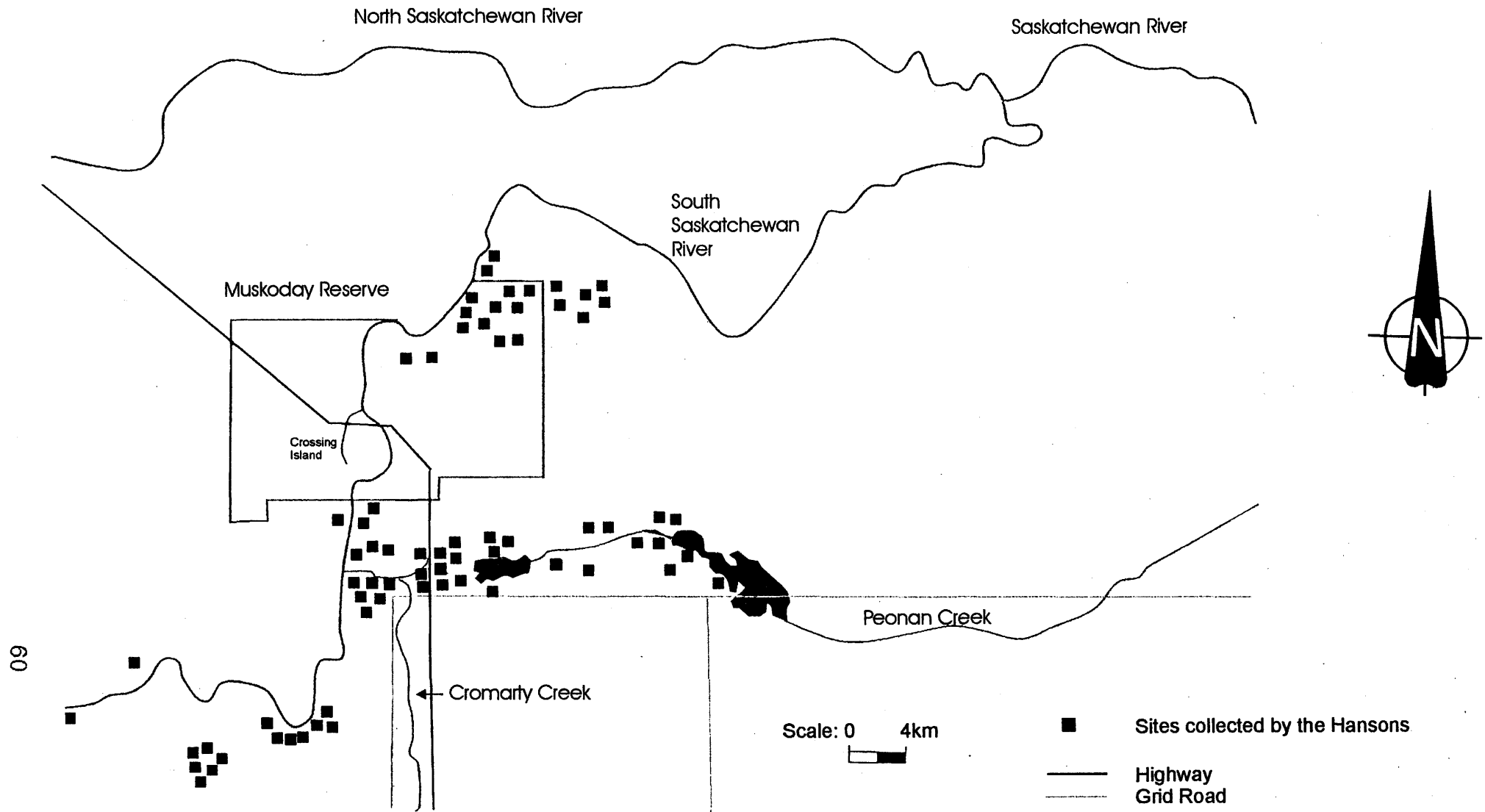
1908:99). If posts were not located at aggregation sites they were usually situated between them, at the boundary between two regional bands. This would allow the traders access to two regional bands instead of one.

The final indicator used was that some of these sites were maintained as important foci for Cree groups well into the historic period, continuing in some cases to the present day.

Even though the rendezvous centers of the Saskatchewan River valley have their origins in precontact times and remained important through the fur-trade period, they have influenced the contemporary settlement pattern. When the reserves were set up in the late 1800's, Cimawawin (Chemahawin band), Opaskweyaw (The Pas band), and Pehonan (James Smith band) were all maintained as important Cree occupational foci (Meyer and Thistle 1995:431-432).

Using a modified version of these same four areas of inquiry, the hypothesis that the Muskoday/Birch Hills area was the location of a trade fair can be tested. The first set of criteria proposed, then, is site size and diversity as set out by Conkey (1980), and adapted by Meyer and Thistle (1995). Since the materials we are dealing with are from surface collections, the density of features is difficult to compare. What we can do is compare the density of Late Woodland sites within the region, similar to work done in the Nipawin study area. The Nipowiwinihk aggregation location had a number of large Late Woodland sites, a reflection of a long history of reoccupation of this important area. If the Muskoday/Birch Hills region is a trade fair locality we should see a high density of sites within the area. Figure 4.1 shows the location of the 66 sites at which the Hanson's collected within the Muskoday/Birch Hills region. Of these 66 site there are 38 sites which contain Lozinsky subphase or Pehonan vessels. While the locations of

Figure 4.1 Map of Sites Within the Study Area



the collecting areas were recorded by the Hansons, the artifacts were not always recorded according to the collection areas, making it impossible to pinpoint the exact location of the sites which produced the late period pottery.

In order to illustrate the density of Late Precontact sites from within the Muskoday region these sites have to be compared to sites within the larger area. In 1981 the Saskatchewan Research Council (SRC) undertook a survey of the North and South Saskatchewan Rivers, including the Forks region of the Saskatchewan River. This project was undertaken in response to proposed hydroelectric development in the area, and the SRC archaeologists surveyed the valley regions that were to be inundated in the area (Wilson 1982). We can therefore compare the density of late precontact sites along the river valley within the region, to the density of sites along the South Saskatchewan River valley within the Muskoday/Birch Hills study area.

From the Forks the SRC study area extended eastward for approximately 7.5 km along the Saskatchewan River. To the west, the study area extended along the North Saskatchewan River up to Rabbit Island, which is located approximately 5 km east of Prince Albert. On the South Saskatchewan, the study area was from the Forks to the northern boundary of the Muskoday Reserve.

The Forks project recorded four late precontact sites within the study area; Iceberg (FhNf-9), Bee Flat (FgNi-51), Crown (FhNi-46), and Harper Valley (FgNi-24). Therefore, in the approximately 110 linear km surveyed by the SRC archaeologists, there were only four late precontact sites identified, spread across all three river valleys. This is compared to the 38 sites identified by the Hansons. These figures are

based on using the northern boundary of the Muskoday Reserve as a separation point for the two studies. A more objective view should include the Harper Valley site identified by the SRC. The Harper Valley Site is located 1.5 km north of the Muskoday Reserve and should be grouped with materials collected by the Hansons. A more accurate comparison would, therefore, include 3 late precontact sites along 107 kilometers of the river valleys, and 39 late precontact sites recorded for the Muskoday Reserve area.

The Harper Valley site is of a size and density beyond anything found elsewhere within the SRC study area. Unlike the other late precontact sites examined by the SRC, the Harper Valley site is quite large, covering 7.75 ha of valley bottom land (Wilson 1982:831). The SRC archaeologists tested the site, digging eight 1 meter square units. These test units produced charcoal, burnt bone, bone fragments, flakes and core fragments as well as the pottery. The cutbank that bordered the site to the east contained a number of cultural remains, including a hearth. When compared to the other late precontact sites recorded by the SRC archaeologists it is obvious that the Harper Valley site is unique within the area. The other late precontact sites were artifact scatters with fewer artifacts contained in a smaller area.

While the density of sites within the Muskoday area is similar to that exhibited in the model provided by Meyer and Thistle, there are also some interesting differences. The large number of sites in the study area are more dispersed than the sites at ingathering centers along the Saskatchewan River. This may be an indicator that can be used to differentiate between a trade fair site and an ingathering location. The scattering of sites within the small area may be a

reflection of different social and cultural groups camping within close proximity for the purposes of trade. This would be similar to the fur trade accounts, where different cultural groups were recorded as being at the forts at the same time to trade. The different groups camped in view of one another, but maintained some distance between camps.

The second set of criteria used by Meyer and Thistle was the use of Cree place names for aggregation sites, as recorded by early explorers, fur traders and missionaries. The Muskoday Reserve area has been similarly recorded in these journals in two different fashions. In the first instance, though, the place name has not been recorded in Cree, but is only mentioned by its English translation. In two separate expeditions in 1764 and 1767 Joseph Smith and later William Pink traveled inland from York Fort to spend the winter on the plains in an attempt to entice Natives from the area to travel to the Bay to trade. Both parties, on their return to the Bay, stopped at the South Saskatchewan River at the "Birch Hills," near or at the present Muskoday Reserve, to manufacture canoes for the return trip (Morton 1939: 274-276). While this spot is recorded as Birch Hills, the area did not contain the birch needed to make canoes. Smith sent part of his party south from this location to collect birch bark, while another part of the party travelled to the north, to the North Saskatchewan River. Three years later when William Pink stopped at the Birch Hills on the South Saskatchewan to build canoes, he stated that the actual hills where the birch bark was obtained were located four days journey towards the south (Morton 1939).

In 1772 Mathew Cocking made a similar trip inland, leaving the Saskatchewan River at Fort à la Corne and traveling on foot across the

plains. On the seventh day of travel overland Cocking recorded passing "some hillocks named Birch Hills, and Younger Brothers" (Burpee 1908:102). The fact that the area was named and recorded by these early traders suggests that it was an area of importance in the social geography of the peoples inhabiting the area in the past.

The fact that the area was identified as being an area of canoe manufacture has important implications for defining the area as a congregation center. Meyer and Thistle have indicated that one of the important activities carried out by Cree groups at boreal forest aggregation sites was the manufacture of canoes. "Canoes, of course, were vital to the essentially aquatic lifeway of these Crees during the summer..." (Meyer and Thistle 1995: 422). Joseph La France (Dobbs 1744: 37) and William Tomison (Rich and Johnson 1951: 232), early fur traders, both mention canoe building as an important aspect of the aggregation sites in the Boreal Forest. One would assume that if the trade fair was occurring in the spring, canoe building may have been an important task undertaken here as well.

A stronger reference to the importance of the place was the recording of the present name of the area, Muskoday. Muskoday is a derivation of muskotew, a Cree word meaning plains or grassland (Anderson 1975: 90). The area was often recorded as the edge of the "muscotay" plains, by traders travelling up the South Saskatchewan River (Morton 1939). The area is so named because along this particular route inland this is the first area where the river actually enters the parkland, with meadows.

In 1763, Joseph Smith, a Hudson's Bay Company employee sent to encourage western groups to trade at York Fort records joining

several camps at the Birch Hills to build canoes for the trip to York Factory (Russell 1991:98). William Pink, who made four trips inland between 1766 and 1770, made similar references to the Birch Hills area as a place where people would congregate to build canoes in the spring (Russell 1991:100). After the canoes were completed some of the people at these congregations would leave to trade at York Factory. In March of 1770 Pink recorded arriving at the canoe building site, but did not record where this site is located. There were a number of groups camped at this spot, but not all of the participants at the site left for York Factory to trade.

The canoe building sites clearly served as spring aggregation camps even for Indians not going to trade. By the time Pink reached [the canoe building] site, his group consisted of about 70 tents and over the next week he tells of others joining them: the leader Wapinesiw with 20 tents who had been on a raid to the South against the Snake; the Assiniboin leader Canepickopoet with a HBC man and 18 tents; and the Cree leader Wenastacy with six tents. This camp of some 114 tents would represent between 900 and 1100 people (Russell 1991: 104).

The references to the Birch Hills area made by Smith and Pink, indicate that the area was being used in the early historic period as a meeting ground for different ethnic groups before some of these people left for Hudson Bay to trade with the Europeans. The continued use of the region as part of the annual trading trips may be a continuation of the area's precontact use as a trade fair.

These references show that the general area was recorded under two names, Birch Hills and Muskoday, indicating the importance of the area to the local social geography. The location was also mentioned specifically as an area where the groups would meet before traveling to York Fort to trade. As we will discuss in more detail later in

this chapter, the introduction of European posts into the area may have altered the secondary trading system, therefore influencing where the trade fairs were held. If the influence of the fur trade on the secondary trade system extended back to the opening of posts on Hudson Bay, these references could indicate that the trade fair location was still being used as part of the secondary system, even if it was only as a meeting place where groups met before leaving to trade with the Europeans.

The third set of criteria is the influence the aggregation sites had on the positioning of fur trade posts. Within the Forks region are a number of fur trade posts, the earliest being the North West Company's Fort Maranquin (Mosquito), 1816-17, built at the Forks (Wilson 1982:774). There were also a number of independant houses and North West Company posts situated around the mouth of the Sturgeon River, near present day Prince Albert (Morton 1939:318). Further up the South Saskatchewan was Hudson House, and a number of later posts occupied nearby by the Canadians (Morton 1939:329-30). Within the Muskoday/Birch Hills area, there were three separate houses established on Crossing Island by independant traders in 1795. Peter Fiddler suggests in his journal that this spot was chosen because the Canadians "were afraid to venture higher up, on account of the late destruction of Our Settlement (Hudson House) the year before" (Morton 1939). The positioning of the fur trade posts in this region, therefore, is not focused on Muskoday. Indeed the positioning in the surrounding regions suggest the possibility that the posts were positioned on the borders between bands, as Meyer and Thistle (1995) have suggested for Cumberland House, instead of at the congregating center itself. In

the one instance when three trading posts were present the decision to build here seems to have been based on fear of attack, rather than any conscious decision regarding profitability of the area.

The fact that there were few fur trade posts established within the Muskoday area is probably due to the influence exerted by aboriginal groups. The Cree groups within the forest were active participants in the fur trade and have been recognized as playing a vital role within the fur trade as middlemen (Ray 1972; Thistle 1986). Before the fur trade companies expanded inland these Cree groups would trade furs for European goods at posts in the east, and then in turn trade the European goods to aboriginal groups in the west, including plains groups. It can be assumed that the Cree groups from around the study area would not encourage the Europeans to occupy a trade fair site on the edge of the parklands, since this would effectively end their middleman status with their closest customers on the plains. Later, when a number of fur trade posts were established in the area, these middlemen would have had to move their trade further to the south onto the plains to reach groups without direct access to a fur trade post. By the 1780's the number of fur trade posts within the area would have ended any need for a trade fair site. The fur trade journals indicate that the posts become the main focus of the secondary trade system; it is at the posts that unrelated groups come into contact with one another on a regular basis. However, at this time the Middle Missouri Villages were still the focus of the tertiary trade system for the northern plains.

The final indicator was that the aggregation sites continued to be significant locations for modern Cree groups, often being occupied in the form of reserves. The fact that the study area was chosen as the

location for the Chacastapasin Reserve and the Muskoday Reserve, may indicate a similar connection to the history of the area's precontact use. The Chacastapasin reserve was dissolved in the 1880s, when the government falsely accused the members of the Chacastapasin band of being rebels associated with the Riel rebellion. Based on these accusations the government opened the land to European settlers (Pyrch 1973). The Muskoday reserve is still a functioning reserve.

4.4 Summary

The conclusions reached by the two previous tests indicate that the study area could have been the location of a trade fair. The Muskoday/Birch Hills region contains all of the environmental factors required for a congregation site such as a trade fair. The food supply, water, fuel, space and trails which are needed in order to hold such an event all exist within this area. The study area also corresponds to three of the four factors proposed by Meyer and Thistle.

Three of the requirements point to the study area's importance in the past. The density of late precontact sites within the area, as compared to the larger surrounding area surveyed by the SRC points to the location's importance in that it was repeatedly occupied. The importance of the study area is also reflected in the historic records by the simple fact that the area was named a number of times. The fact that the area was chosen as location for two reserves, one of which is still occupied, also points to the area as being culturally significant into the late 1800's - and through to the present.

The one factor that does not correspond to Meyer and Thistle's model is the location of the fur trade posts. However, as has been

explained, the groups acting as middlemen in the early fur trade would have discouraged posts from being built here. After a number of posts were established in the surrounding area it can be assumed that these replaced the trade fair as the major focus of the secondary trade system.

The fact that the number of sites within the study area is high, does corresponds to Meyer and Thistle's model. However, the sites within the Muskoday/Birch Hills region are more dispersed than the sites at ingathering centers along the Saskatchewan River identified by Meyer and Thistle, which may be an indicator that could be used to distinguish trade fairs from ingathering sites.

Another factor which indicates this area was important in regards to the social geography of the past inhabitants is the location of the study area as compared to the ingathering centers located by Meyer and Thistle. The authors noted that the ingathering centers were spaced at regular intervals, between 80 and 100 kilometers apart. This regular spacing may indicate a degree of regularity in the sizes of the territories of the regional bands in the forest (Meyer and Thistle 1995:427). The Muskoday reserve area is located approximately 40 kilometers west of the next identified center at Pehonan, or a distance of 70 kilometers if you follow the river. This distance does not correspond to the spacing of the ingathering centers, suggesting that the Muskoday area was used for some other purpose.

The evidence presented here does not allow us to state whether the area was used as the location of a trade fair or not. What these tests have shown is that the possibility exists that this could have been the case. In an attempt to focus more clearly on the question of the

existence of a trade fair site, the pottery from the study area will be compared to that from other sites from the Saskatchewan plains. With the analysis of this material it is hoped that the distributional patterning of ceramic attributes found within the Lozinsky subphase will point to the area of major interaction. The patterning of the ceramic attributes can be tested against Conkey's diversity test established for aggregation sites. In order to use this test, we will once again have to modify Conkey's expected results to fit within the expectations for a trade fair site rather than an aggregation site.

Chapter 5 Distribution of Pottery Within the Study Area

5.1 Conkey's Diversity of Design Elements at Altamira

As I have discussed previously, a universal aspect of band societies is a patterning of fission and fusion during their annual seasonal round. The subsistence base and the technologies employed by these groups result in the regional bands splitting up into a number of local bands in order to sufficiently meet the necessary subsistence requirements. Once or twice a year the local bands composing the regional band come together as a group, largely for the purposes of social reproduction. The process of arranging marriages, renewing and re-affirming kinship ties, and other social activities that take place at an aggregation site are part of this social reproduction, where the social aspects that unify and hold the group together as an autonomous unit are strengthened to ensure continuation of the society. The process by which individuals identify themselves with the larger group involves two main aspects, the use of rituals and the use of symbols. As we have stated previously, since the primary context for an aggregation site is social, the main activities that occur here are rituals. Along with these rituals would be the use of symbolism to signify the group's cohesion. Conkey (1980) has argued that this symbolism, when exhibited on pieces of portable art as design elements, can be used to identify aggregation sites.

In order to explain how symbols can be used to identify aggregation sites we have to examine how symbolism would be used on a regional scale to signify membership within a larger group. To begin, Conkey (1980: 616) argues that there are a number of symbols, design elements or motifs that would convey the message of belonging to a particular group. Within a regional band, therefore, we could expect a number of design elements that all convey the same message of belonging. There would also be a number of symbolic design elements that would have meaning only for smaller groups within the regional band, perhaps at the local band level. Other design elements would be personal; the individual artist or manufacturer could use designs that had significance only to the artist.

This description of the use of symbolic designs is obviously simplified; there would be a number of factors and levels of meaning conveyed by these symbols that the archaeologist can never identify. The use of this oversimplified version does allow a basic understanding of the use of symbolism which can be used to make some generalized expectations of the distribution of design elements within a given area. Using this generalized scenario of design techniques, Conkey gives a list of expected results which should occur if Altamira was an aggregating site(1980: 616). This list includes;

1. The diversity of symbols will be greater at aggregation sites than at dispersion sites. This is due to the fact that all the local bands are present, and therefore all the different design elements would be represented. Included at the site would be those symbols that indicate societal membership, as well as sub-group and personal designs.

2. There will be a number of core elements that will be widespread over the regional band's territory. These core elements would be the symbols of societal membership which are common to all members of the group and therefore most commonly found.
3. There will be design elements unique to the aggregation site. Since the aggregation site is concerned largely with ritual activities, and symbolism plays a large role in ritual activities, it can be assumed that there will be ritual designs related to ceremonies which occur only at aggregation sites.
4. Elements lacking at the aggregation site should not occur at dispersion sites. Since the aggregation site is composed of most, if not all of the society's membership, it is assumed that all the design elements used by individuals would be represented at this gathering.

To test this hypothesis Conkey then compared the design elements found carved on antler and bone at Altamira to similarly decorated pieces at four other Magdalenian sites believed to be dispersion sites. In this analysis Conkey found that all four statements were confirmed. The diversity of design elements was greatest at Altamira; there was a core group of six design elements found at all sites; there was a group of eleven design elements unique to Altamira, and there were only six out of 52 design elements found at other sites that were not present at Altamira (Conkey 1980: 616-17).

Conkey's model of design diversity is geared towards identifying aggregation sites, not trade fair centers. The similarities of the two site types though, should allow us to modify the hypothesis to test for a trade fair site. In order to do this we will have to identify suitable analogous materials which will exhibit a number of design elements similar to

Conkey's carved bone and antler. Secondly, Conkey's ideas on the distribution of design elements over an area occupied by a single society will have to be expanded to include interaction between two or more distinct groups.

As an analogy to Conkey's carved bone and antler, this research will focus on ceramics from within the study area (Meyer 1993: 15).

This is going to be somewhat more complex than Conkey's example, since instead of just design elements there are a number of attributes of the ceramics which can show variability. Vessel form, mode of manufacture, surface finish, as well as design elements all have a certain degree of variability and can show signs of outside influence. Therefore, the design elements of ceramics are used to identify archaeological cultures and, presumably, these archaeological cultures relate to different past cultural groups.

5.2 Expected Distribution of Ceramic Variables Between Groups Involved in Formalized Trade.

In order to propose a hypothesis of the expected distribution of pottery attributes for a trade fair site, we will have to address the use of design elements. Just as Conkey did for the Magdalenian period of Europe, a simplified version of the relationships of the symbolism that is part of pottery manufacture has to be discussed. Unlike Conkey's study, the distribution of design elements for a trade fair site reflect interaction between two or more distinct cultural groups, in this case between peoples who produced the Lozinsky subphase and the Pehonan complex. If we consider each group separately we would expect the diversity of pottery attributes within the territory occupied by each group to be somewhat similar to Conkey's outline for Altamira.

However, it must be remembered that the two groups we are dealing with do not exhibit the same level of sociopolitical complexity. The boreal forest group is considered a band society, and therefore would exhibit traits similar to those outlined by Conkey. The Lozinsky subphase group is a plains tribal society, and would not fit the same patterning of fission and fusion. Still we should be able to describe basic principles of how the plains group would have been dispersed over its territory, and what to expect in terms of distribution of pottery attributes.

There should be a number of core attributes of the pottery which is common to all of the participants in each specific group, as well as regional variations specific to subgroups, and a number of individual variations. One would expect that the individual variations found on the pottery would be greater than those found by Conkey, since the plastic nature of the medium would allow for more flexibility in the manufacture, as well as more areas to express variability, not only in decoration, but in vessel form, surface texture, etc.

For each group then we should expect to see a core of pottery attributes common to each of the respective cultures. The core attributes we are dealing with cover a wider geographic area than those of the bone and antler carvings described by Conkey. In her work at Altamira the core attributes were used to identify a single regional band, and the secondary attributes identified subgroups within the regional band, either local bands or individual members. With the use of pottery from our study area the core attributes are used to identify archaeological entities which include, in the case of Selkirk, numerous regional bands, and a number of different tribes for the Mortlach phase.

These core attributes are, of course, the same attributes used to define the pottery vessels as belonging to a certain archaeological culture.

For the Selkirk pottery these core attributes have been described as;

[v]essels are typically globular in morphology, with a characteristic smoothed exterior textile impression. Paste is often laminated with a tendency to exfoliate, and is tempered with coarse, crushed grit made up primarily of quartz and feldspar. A single row of punctates encircling the neck or rim and lip decoration are commonly found on these vessels (Paquin 1995:45).

The Mortlach phase pottery is much more variable than Selkirk, and therefore the core attributes are more diverse. Walde (1994:101), gives the core attributes of Mortlach pottery as thin, compact vessels formed by paddling. There are four major vessel profiles: vertical, angled rim, S-rim, and wedge rim. Exterior surfaces can be cord-roughened, fabric-impressed, check or simple stamped, or smoothed. Decorative techniques include the use of dentate stamps, cord wrapped objects, solid tools, fingers, pointed tools and hollow tools. The areas of vessel decoration also vary considerably, and can be on the lip, rim, neck or shoulders, or on any combination of the above areas. Even with this wide variability within the phase yet Mortlach pottery is still readily recognizable as a distinct entity.

The ceramic assemblages everywhere are extremely heterogeneous with vessel forms, exterior surface finishes, and approaches to decoration mixing freely. These assemblages are, however, quite distinct from those in surrounding areas (Walde 1994:101).

The secondary attributes dealt with in this study identify the regional expressions of these archaeological cultures, the Lozinsky subphase of the Mortlach phase, and the Pehonan complex of the Selkirk composite. An interesting aspect of both of the regional

expressions is that the secondary attributes that define them are attributed to outside influences. The secondary attributes which identify the Pehonan complex include occasional angular and decorated shoulders, and "vessels with 'S' profiles which result from the presence of incurvate or externally thickened rims. The occasional presence of interior punctates has also been noted" (Meyer 1984:43). These secondary attributes which define Pehonan have been described as typical plains pottery traits, suggesting interaction between plains and woodland groups (Burley et al. 1982:83, Meyer 1981:29). Similarly, the secondary traits used to define the Lozinsky subphase have been attributed to interaction with woodland groups which resulted in the adoption of woodland attributes into the Mortlach pottery assemblage in the parklands.

The secondary attributes, for both groups, are simply an adoption of some of the core attributes exhibited by the other group. The tertiary attributes we would expect to find within each cultural region would be analagous to those in Conkey's work, namely individual stylistic differences exhibited by each manufacturer.

Given this simplified version of the stylistic traits found within the two different regions, we can make some predictions of the expected distributions of these traits based on the assumption that the Muskoday/Birch Hills region was the location of a trade fair.

As we have discussed previously, trade fairs are usually attended by a number of different groups involved in this trade. Groups which are located at a greater distance from the trade fair often only send a few representatives to the fair instead of attending en masse. Groups with territories close to the trade fair site are often represented

by a majority of the group's members. If the Muskoday/Birch Hills region is the location of a trade fair we can therefore expect the majority of participants to be those with territories close to the fair location. For this region the majority of participants would be those responsible for the Pehonan complex of the southern boreal forest and the Lozinsky subphase from the parklands. The pottery from a trade fair site at this location should be expected to yield a majority of these two pottery types.

Part of the process of trade involves a number of ritual activities. Rituals are used to provide a symbolic connection between unrelated trading partners. These rituals serve to define the relationship that is expected between partners by placing them into one's own kinship lines. The kinship relationship defines how the partners are to relate to one another, and what is expected of each other. The trading partner is given either fictive kinship through adoption ceremonies, or the kinship ties can be real ones created through marriage. While the main function of the trade fair is to facilitate the exchange of goods, we can see that ritual activities play an important role in trade.

The process of trade at these sites, involving participation in ritual activities and creation of real and fictive kinship ties between the groups, would result in what Wood (1972) calls cultural leveling. The trade relationships involved not just the exchange of goods, but also the exchange of information and ideas which resulted in the diffusion of cultural elements across social boundaries. This diffusion of cultural elements is exhibited in the groups we are dealing with as the adoption of pottery attributes. Since the main focus of interaction is the trade fair, a time when outside influences are at their greatest, it can be assumed

that the greatest examples of this influence would be exhibited at the trade fair site. We should, therefore, expect to see the most dramatic cases of culturally mixed traits at this site.

From the above discussion we can see that Conkey's (1980: 616) list of traits expected for the diversity of design elements at an aggregation site can be modified to test for the presence of a trade fair site.

- 1) The diversity of the pottery types at a trade fair site will be greater than from sites found within the territories of the Lozinsky subphase or the Pehonan complex. The numbers of individuals from both groups participating in the trade fair should be reflected in the archaeological record, where we would expect to find Mortlach, Selkirk and syncretic vessels being represented in high frequencies.
- 2) There will be two sets of core attributes, one in the boreal forest and the other in the parklands. These two sets of attributes will overlap at the trade fair site, and both sets of core attributes should be present in the archaeological record within the study area.
- 3) The mass representation by the two groups would also dictate that vessels and vessel attributes not found at the trade fair site should not occur at other dispersion sites within the region.

These three statements of the expected distribution of pottery attributes are a direct modification of Conkey's predictions for the distribution of portable art. One hypothesis proposed by Conkey has been omitted in this case, the statement that there will be design elements unique to the site based on the importance of ritual activity. Conkey argued that the portable artwork played an important role in ritual activities. Since an aggregation site is centered around these

activities, and would presumably have rituals unique to the site, this should be reflected in unique pieces of art found only at the site. Pottery from a trade fair site would not exhibit this same distributional pattern since ritualistic activities are usually not reflected in this pottery. However, there have been some rare vessels from aggregation sites which do exhibit unique attributes that suggest they were used in ritual activities. One such vessel was recovered at the Municipal Camp site in the Nipowiwinihk aggregation center. This Pehonan vessel had rectangular and 3-toed bird's foot decorative elements encircling the neck, and was also decorated with red paint. The unique decoration of this vessel, as compared to other Pehonan vessels in the area suggests that the "vessel was intended for use in a ritual context" (Meyer and McKeand 1994: 73). The evidence of ritualistic activities at aggregation sites in the southern boreal forest are more typically exhibited as features left behind by ceremonial structures such as sweat lodges. These are evidenced by shallow pits filled with fire-cracked rock, as excavated at the Lloyd site (Quigg 1983: 98, Meyer and Thistle 1995:412). For this reason we would not expect to find ceremonial vessels unique to the trade fair site.

In order to test the three main points of this hypothesis we can compare the material collected from the Muskoday/Birch Hills region to the Lozinsky subphase material identified by Walde (1994). If it can be shown that there are a number of these attributes which conform to the expected pattern outlined above, we can at least argue that this hypothesis has some validity.

5.3 Distribution of Lozinsky subphase and Selkirk Materials within the Parklands.

In order to illustrate the distributional patterns of Lozinsky subphase material across the parklands of central Saskatchewan (see Figure 5.1), Walde's (1994) analysis of these materials can be used. Appendix A is a shortened list of the vessel attributes from the sites examined by Walde. Using this list we can then plot the distribution of pottery types within the region. In an attempt to clarify the distributional patterns the vessels have been identified as Mortlach, Selkirk and syncretic Mortlach/Selkirk. Similarly the assemblages from the Muskoday/Birch Hills region have been compiled in Appendix B, which gives an attribute list for each vessel. From these lists the makeup of the site assemblages have been broken down by vessel type within each site. For the sites analyzed by Walde, these figures appear in Table 5.1, and the sites within the Muskoday/Birch Hills region appear in Table 5.2. Using these tables we can check the validity of the proposed statements of pottery distribution for the parklands.

The breakdown of the assemblages into vessel types as listed in Tables 5.1 and 5.2 show that all three problem statements are supported. First of all the tables show that vessels that do not occur at the trade fair site do not occur elsewhere in the parklands. Secondly, the core sets of attributes which define the Mortlach and Selkirk wares are both present at the trade fair site.

The last, and most significant point, is that the study area contains the most diverse assemblage from within the parklands. Mortlach vessels make up 87 % (147 of 169) of the total parkland site

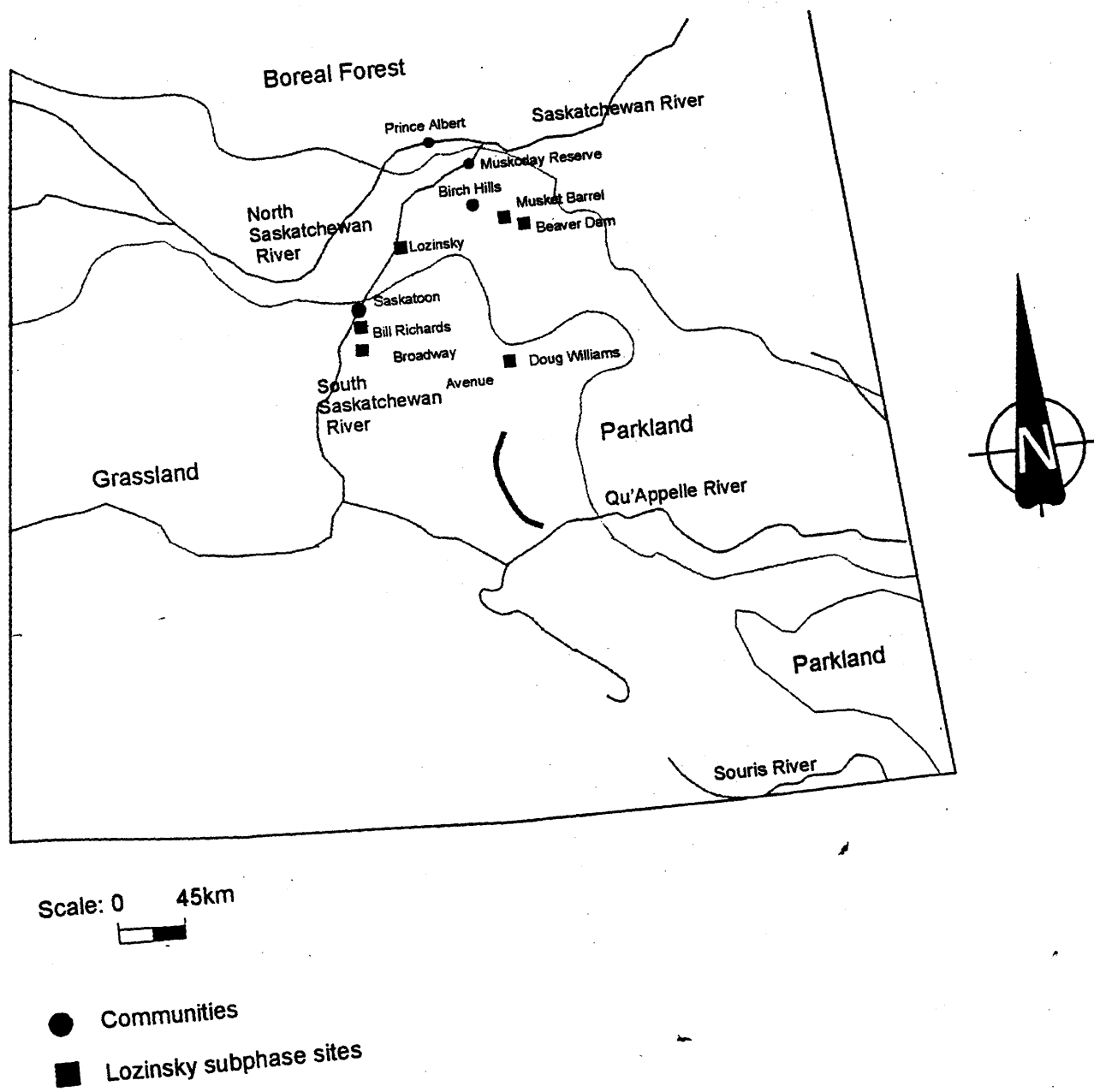


Figure 5.1 Map of Lozinsky Subphase Sites

Table 5.1 Pottery Assemblages from Lozinsky subphase sites Analyzed by Walde.

Sites	Total	Mortlach		Selkirk		Syncretic		Punctates*	
		No.	(%)	No.	(%)	No.	(%)	No.	(%)
Lozinsky (FdNm-51)	56	45	80	10	18	1	2	0	0
Broadway Ave.	17	10	59	3	18	4	24	4	29
Bill Richards (Fa Np-9)	4	3	75	0	0	1	25	1	25
Musket Barrel	5	4	80	1	20	0	0	0	0
Beaver Dam	2	1	50	0	0	1	50	0	0
Doug Williams (EjNg-3)	84	84	100	0	0	0	0	3	4
Total	169	147	87	14	8	7	4	8	5

* The count of vessels which have punctates include only Mortlach and syncretic vessels, Selkirk vessels have been excluded.

**Table 5.2 Pottery Assemblages from Sites within the
Muskoday-Birch Hills Study Area**

Sites	Total	Mortlach	Selkirk	Syncretic	Punctates*
SW-29-46-25-2	2	2	0	0	2
Lot 18-47-25-2	4	2	0	2	1
Lot 9-47-24-2	2	1	0	1	1
Lot 19-47-24-2	2	1	1	0	0
NW-3-47A-24-2	1	1	0	0	0
SW-3-47A-24-2	5	4	1	0	2
NE-3-47A-24-3	4	1	2	1	0
Collection #2	2	0	1	1	0
Collection #3	1	1	0	0	0
Collection #4	1	1	0	0	0
Collection #5	1	1	0	0	0
Collection #6	1	0	1	0	0
Collection #7	1	0	1	0	0
Collection #8	1	1	0	0	1
Collection #10	1	0	1	0	0
Collection #11	1	1	0	0	0
Collection #12	1	1	0	0	0
Collection #13	1	1	0	0	0
Collection #14	1	1	0	0	0
Collection #16	1	0	0	1	0
Collection #17	1	0	1	0	0
Collection #19	1	1	0	0	0
Collection #20	2	0	1	1	0
Collection #21	1	1	0	0	0
Collection #25	1	0	1	0	0
Collection #26	1	0	0	1	0
Collection #28	1	1	0	0	1
Collection #30	1	0	1	0	0
Collection #31	1	1	0	0	0
Collection #33	1	0	1	0	0
Collection #36	1	0	0	1	0
Collection #38	1	1	0	0	1
Collection #39	1	0	1	0	0
Collection #40	1	0	1	0	0
Collection #42	1	1	0	0	1
Collection #46	1	0	1	0	0
Collection #48	1	0	0	1	0
Total	52	26	16	10	10
%		50	31	19	

* The count of vessels which have punctates include only Mortlach and syncretic vessels, Selkirk vessels have been excluded.

assemblages, as compared to Selkirk and syncretic vessels which make up approximately 8 % (14 of 169) and 4 % (7 of 169) respectively. From within the Muskoday/Birch Hills area, Mortlach vessels comprise only 50 % (26 of 52) of the total and the averaged assemblage. Selkirk vessels make up 31 % (16 of 52) of the total assemblage, and syncretic vessels 19 % (10 of 52). This diversity of vessel types within the study region is mirrored by the use of punctates as a design element.

The use of punctates as a design element is not common in southern Mortlach pottery. For Selkirk pottery, the presence of a single row of punctates is a core attribute characteristically present. Examining the distribution of this design element from sites across the parklands, we can see a distributional pattern similar to that exhibited by the vessel types. For sites across the parkland, Table 5.1 shows that there are 8 out of a total of 154 Mortlach and syncretic vessels that have punctates used as a design element, roughly 5 %. Within the Muskoday/Birch Hills study area the use of punctates as a design element rises to 10 out of a total of 36 Mortlach and syncretic vessels, or 28 %.

5.4 Interpretations.

With the above analysis of pottery from the parklands we can make a number of observations. First, the distribution of Mortlach, Selkirk and syncretic vessels across the parklands suggests that the interaction between plains and forest groups occurred at the boreal forest/parkland interface, as proposed by Meyer and Epp (1994). This site of interaction, where outside cultural influences are at their greatest, would be expected to produce the highest percentage of Selkirk and

syncretic vessels. The evidence from the archaeological record is consistent with the interpretation that the interaction took place at the parkland/forest interface. The Muskoday/Birch Hills region contains the highest percentages of Selkirk and syncretic vessels as compared to other sites within the parkland.

It should also be expected that as you move away from the point of interaction and cultural influence, the presence of the Selkirk and syncretic vessels would be very low to non-existent. This does not occur in this case; Table 1 indicates that there is a continuation of the forest influence still present in six of the eight sites from the parkland. The presence of Selkirk vessels in four of the sites particularly points to a continuing influence, even at sites at a great distance from direct cultural contact. The most likely explanation for this continued influence is that at the site of direct contact there was an exchange of personnel. Since the evidence of this interaction is ceramic vessels, it is assumed that the manufacturers of Selkirk vessels were being brought into the Mortlach phase groups occupying the parkland. Since the manufacturers of the ceramics are believed to have been women (Walde 1994:160), we can therefore assume that women from the Pehonan complex were being incorporated into the groups who produced the Mortlach phase, presumably through marriage. These individuals incorporated into the Mortlach groups would add their own decorative and/or morphological traits to those exhibited by the Mortlach culture. In this way we see the subdivision of Mortlach coming into existence. Introduction of outside members into the group, and therefore the addition of foreign vessel attributes, resulted in the formation of a distinct entity, the Lozinsky subphase.

The hypothesis that the study area was the location of a trade fair is supported by the distribution of pottery from the parkland region. The trade fair site attracted the majority of members from the two closest groups, the peoples responsible for the Lozinsky subphase and the Pehonan complex. This mixture of cultural groups resulted in the core attributes of the ceramic industries for both groups being represented in the archaeological record in the Muskoday/Birch Hills region. Influences brought about through direct contact at the trade fair resulted in the production of syncretic vessels—vessels which contain attributes from both cultures. As we have discussed in Chapter 3, relationships between trading partners were formed on the basis of real or fictive kinship. One manner in which kinship ties were created between unrelated groups was through marriage. With intermarriage, core attributes from the Selkirk culture were added to the Mortlach culture, creating the Lozinsky subphase.

Chapter 6. Summary and Conclusion

6.1 The Lozinsky subphase.

As stated in the first chapter there are a number of differing interpretations regarding occupation of the central Saskatchewan parkland, and subsequently, interaction between plains and woodland groups. Originally, researchers such as Ray (1972), Syms (1977), and Nicholson (1988), viewed the parklands as an area of dense subsistence resources that would have attracted both forest and grassland groups. This area was thought to be particularly attractive in the winter, as the bison were thought to have wintered there. The interaction between forest and plains groups was easily accomplished due to the fact that the groups were occupying the same area.

Meyer and Epp (1990:335) disagreed with this scenario for a number of reasons. First, they pointed out that, in the northern part of the parklands, there were only two known Selkirk components, one at the Mudrick site and the other at the Harper Valley site (FgNi-24). Significantly, Meyer (personal communication, 1997) would now identify the Harper Valley site as a Lozinsky subphase component, leaving only one known Selkirk component in this region - and this site is located in the northern part of the parklands. This Selkirk site, Mudrick, contained evidence that suggested it was occupied in the spring to early summer. Meyer and Epp contrasted this to Mortlach components, such as the Lozinsky site in the central parklands, which had a seasonality of late fall or winter. With this information the authors suggested that the northern plains groups occupied the grasslands in the summer, and

then wintered at the grassland/parkland edge, or if it was a harsh winter, within the parkland itself (Meyer and Epp 1990:336). The peoples who produced the Selkirk ware (Pehonan, at least) were believed to have been at the southern edge of the forest for the spring and summer, and to have wintered deeper inside the forest. The plains and woodland groups were, therefore, effectively separated for the majority of the year. This led the authors to propose that the interaction that was occurring took place through long distance visiting and intermarriage (Meyer and Epp 1990:337).

Walde (1990) has proposed a different scenario for the occupation of the parklands, one which is an amalgamation of the two previous ideas. Walde believes that the parklands would have been an area of diverse resources, much like the ideas presented in the the co-occupation model (Ray 1972, Syms 1977, and Nicholson 1988). Walde (1990:116-117) believes that the area was not utilized as an extension of the grasslands, but as a diverse area that would have provided stability even when bison resources were scarce. Walde argues that the diversity of the parkland allowed the northern Mortlach groups to occupy the parklands year round (1990:118). In this model the interaction would have, therefore, occurred in the spring, when the Selkirk groups were at the forest/parkland edge.

More recently Malainey and Sherriff (1996), have argued for a different co-occupation model. In their analysis of bison movements in the early historic period, the authors suggest that the bison herds rarely entered the parklands in the winter and were more likely to have remained on the open grasslands at that season. With the bison remaining on the plains, the authors argue that;

Parkland- and forest-adapted peoples wintered closer to the northern edge of the grasslands, where they still could exploit wintering bison herds (Malainey and Sherriff 1996: 351).

Therefore the interaction between forest and plains or parkland groups would have occurred at the southern parkland edge.

For each of the four models proposed we would expect a different distributional pattern of pottery across the parklands. For the co-occupation model we would expect an even mixture of Selkirk and Mortlach materials across the parklands. We would also expect to find a number of Selkirk components not associated with Mortlach materials, since one would not expect the two groups to camp together all the time. For the grassland extension model proposed by Meyer and Epp, we would expect that the Selkirk influences found in the Mortlach pottery would continue out onto the open grasslands, as the group moved into its summer range. For Walde's model of permanent occupation of the parklands, one would expect to find a homogeneous distribution of the Lozinsky subphase material across the parklands but not extending onto the open grasslands, with evidence of interaction occurring at the parkland/forest edge. Lastly for the Malainey and Sherriff model, the southern parklands and northern grasslands should contain the most mixing of Selkirk and Mortlach materials, as well as the most syncretic vessels.

From the analysis of the ceramics from the study area, as well as the material from the parklands analyzed by Walde, we can see that the actual distribution of the vessels supports Walde's hypothesis. Selkirk and syncretic vessels are concentrated at the forest/parkland edge, supporting the proposal made by Meyer and Epp, that this is the area of interaction. These Selkirk vessels do not occur outside the parklands though, suggesting that the group in contact with the Selkirk peoples was not leaving the parklands. If Meyer and Epp were correct in their assumption that the northern plains groups in

contact with the forest groups moved back onto the open grasslands for the summer we would expect to find some of the Selkirk or syncretic vessels in this grasslands area. The fact that these vessels do not appear in the northern grasslands also does not support Malainey and Sherriff's hypothesis that the southern edge of the parklands was co-occupied in the winter by parkland- and forest-adapted groups.

From the distribution of ceramics in this study we can, therefore, argue that the parklands of central Saskatchewan were occupied full time by peoples who produced a single archaeological entity, the Lozinsky subphase. The overall attributes exhibited in Lozinsky subphase pottery suggest that this group was closely related to the Mortlach culture on the grasslands. The presence of boreal forest traits on this same pottery suggests that the main source of interaction with outside groups was not with their kin to the south, but with the Selkirk groups to the north. It is argued here that the main focus of this interaction was through formalized trade relations.

The nature of aboriginal trade, which involves the formation of real or fictive kinship ties, can be seen as the mechanism of culture change that created the Lozinsky subphase. As discussed previously, aboriginal trading relations are based upon kinship lines, and this requires trading partners to establish real or fictive kinship ties to one another. This process of forming kinship ties often involves the exchange of members through intermarriage or adoption. I propose that it was through intermarriage and adoption that Pehonan members from the Boreal Forest were incorporated into the Mortlach group within the parklands. These new members brought with them ideas and traits that when combined with the Mortlach features produced the archaeological entity we know as the Lozinsky subphase. In this manner we can identify trading relations as the catalyst for culture change.

6.2 The Muskoday/Birch Hills Region as a Trade Fair Location.

As stated previously, based on the small samples from surface collections within the Muskoday/Birch Hills region, it cannot be proved that the area was the location of a trade fair site. Using this data to test a number of proposals concerning congregation sites it is hoped that the results will support this hypothesis. In order to test this hypothesis a number of models concerning aggregation sites have been modified to fit within the framework of testing for a trade fair. The other test involving Picha's environment requirements, was formulated with a trade fair in mind.

The research undertaken in this volume has given positive results for all three tests. The study area contains the environmental conditions required for a trade fair; suitable space, a suitable water supply, an abundant and predictable food resource, easy access through a network of trails and rivers, and finally adequate timber for fuel. It has been proposed here that the location of a trade fair, due to the size of the congregation occurring, and the resources required, would have had to have been chosen according to the other large congregating sites, the aggregation centers. For this reason I have argued that the trade fair site would have to fit into the social geography model proposed by Meyer and Thistle (1995) for the Saskatchewan River valley. From the positioning of the aggregation sites identified by Meyer it was shown that the Muskoday/Birch Hills region fit within four of the five requirements. The diversity and number of sites, the references to the area in the fur trade journals, the spacing from the aggregating center at Fort à la Corne and the continued importance of the area to native groups, all conform to Meyer's proposed model. The one requirement to which the study area did not correspond was the presence of fur trade posts at the aggregation centers.

The fact that the fur trade posts would have interfered with those groups acting as middlemen between Europeans and other aboriginal groups probably resulted in the aboriginal's discouraging posts from being established at a trade fair site. Later, as fur trade posts became established in the area, they may have replaced the trade fair as the secondary trade system's location.

Lastly, the distribution of the ceramics within the parklands conforms to the expected distribution for a trade fair site, using the modified relative diversity test based on Conkey's (1980) research. The Muskoday/Birch Hills region contains the most diverse mixture of Mortlach (Lozinsky subphase), Selkirk, and syncretic Mortlach/Selkirk vessels found on the parklands.

The distribution of the ceramics also fits well with the definition of a trade fair and the activities taking place there, as outlined in Chapter 3. The social aspects involved with aboriginal trade, the ceremonial activities used to overcome scalar stress, as well as the formation of real and fictive kinship ties between trading partners results in cultural leveling, a mixture of cultural traits producing a region of homogeneity as suggested by Wood (1972). This cultural mixing is seen in the Lozinsky subphase and the Pehonan complex, which are defined by the presence of traits from outside their respective cultural area. This phenomenon is most likely the result of intermarriage between the groups, where each group incorporates members from the opposite group. Intermarriage and adoption which are used in trading relations to create kinship ties, would explain the process by which the exchange of members occurred.

6.3 Future Research

In order to provide a definitive answer as to whether or not the Muskoday/Birch Hills area was the location of a trade fair, more research

within this area and in the parklands in general will have to be undertaken. Compared to other parts of the province, there has been very little work done in the parklands. For the late precontact period, this is especially true and work concerning this time period within the parklands has been located mostly in the area between Saskatoon and Nipawin (Walde 1994). As more work is done within the area a more accurate description of pottery distribution will emerge. For the Muskoday/Birch Hills region, an intensified survey program would have to be undertaken to prove the area was used for the purposes of trade. Only through such survey would one be able to identify the large sites within an area that could possibly be trade fair locations. Once the larger sites were identified, further testing would have to be undertaken to provide evidence of a trade fair. This evidence would include a mixture of materials from both forest and parkland groups, as opposed to material from an aggregation site which would belong to a single regional band from the forest. At this site one would also expect to find evidence of the ritual activities that were occurring at a trade fair. As mentioned previously, the archaeological evidence for ritual activities within this area tends to be the presence of specialized structures such as sweat lodges.

Until such work is undertaken, the hypothesis that the Muskoday/Birch Hills region was the location of a trade fair can not be positively confirmed. With the analysis of the ceramics from within the study area, and from across the parklands, we can make a number of interpretations. The presence of Mortlach pottery, some of which contains traits common to the Selkirk culture, indicates that peoples of this northern Mortlach culture were in direct contact with groups in the forest. The fact that these influences do not extend outside the parklands indicates that the Lozinsky subphase was produced by a parkland-adapted group which spent the majority of its seasonal round in this

area. The evidence that the interaction was taking place at the forest/parkland edge, and that the interaction involved the exchange of personnel, leads to the strong suggestion the study area was the location of a trade fair.

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Appendix A

Description of Pottery from Lozinsky Subphase sites in the Parkland

This list of sites, assemblages and collections of Lozinsky subphase materials has been adapted from Walde, 1994. As I have discussed before, the Lozinsky subphase is characterized by the presence of Selkirk and syncretic materials within Mortlach sites from the parklands. For the sake of simplicity the vessels are divided into Selkirk, Mortlach and syncretic Mortlach/Selkirk materials in the following tables. The attribute descriptions listed below are for Mortlach and syncretic vessels only, Selkirk vessels are excluded.

Lozinsky site (FdNm-51)

56 vessels: 10 Selkirk vessels which may have been paddled, 45 Mortlach and 1 Selkirk/Mortlach vessel with a square lip, decorated with an outward pointing triangle formed with CWO lines. Punctates decorate fabric impressed rim (Selkirk attribute)

Profiles

Angled rim	5
Wedge rim	2
Unassignable	38

Exterior finish

Vertical Cord roughened	10
Horizontal cord roughened	3
Fabric impressed	1
Obliterated	31

Lip decoration 33/45 vessels

inner corner	1
lip surface	2
outer corner	11
inner and outer	7
inner & lip	1
outer & lip	3
no decoration	8

Rim decoration 13/45 vessels

Horizontal CWO lines	11
Left to right oblique CWO	2

Broadway Avenue Site *(This collection has been modified from Walde's original analysis. David Meyer, in communication with Alice Kehoe, has been able to identify a number of additional rim sherds collected by Ken Cronk as originating from this site.)

18 vessels: 3 Selkirk, 10 Mortlach, 4 syncretic and 1 unassignable

Profiles

Straight rim	3
Angled rim	1
S-rim	2.
Unassignable	8

Exterior finish

Vertical cord roughened	4
Horizontal cord roughened	1
Fabric impressed	6
Obliterated	3

Lip decoration 12/14 vessels

Inner corner	0
Lip surface	5
Outer corner	5
Inner and outer	0
Inner & lip	0
Outer & lip	2
No decoration	2

Rim decoration 5/14 vessels

Horizontal CWO lines	0
Left to right oblique CWO	0
Finger pinches	1
Punctates	4
No decoration	9

Bill Richards (FaNp-9)

4 vessels: 3 Mortlach, 1 Syncretic

Profiles

Angled rim	0
Wedge rim	1
Straight	1
Unassignable	2

Exterior finish

Vertical Cord roughened	0
Horizontal cord roughened	0
Fabric impressed	0
Obliterated	1
Unassignable	3

Lip decoration 2/4 vessels

Inner corner	0
Lip surface	2
Outer corner	0
Inner and outer	0
Inner & lip	0
Outer & lip	0
No decoration	2

Rim decoration 2/4

Horizontal CWO lines	0
Left to right oblique CWO	0
Finger pinches	0
Hollow tool stamps	0
Dentate stamps	1
Incising	1
Punctates	1

*(Vessel 1 has dentate stamps and incising)

Musket Barrel Site

5 vessels: 1 Selkirk, 4 Mortlach

Profiles

Angled rim	0
Wedge rim	1
Straight	2
Unassignable	1

Exterior finish

Vertical Cord roughened	1
Horizontal cord roughened	0
Fabric impressed	0
Obliterated	1
Unassignable	2

Lip decoration 3/4 vessels

Inner corner	0
Lip surface	1
Outer corner	0
Inner and outer	0
Inner & lip	0
Outer & lip	1
Inner & outer & lip	1
No decoration	1

Rim decoration 2/4

Horizontal CWO lines	1
Left to right oblique CWO	1
Finger pinches	0
Hollow tool stamps	0
Dentate stamps	0
Incising	0
Punctates	0

Beaver Dam Site

2 vessels: 1 Syncretic, 1 Mortlach

Profiles

Angled rim	1
Wedge rim	0
Straight	1
Unassignable	0

Exterior finish

Vertical Cord roughened	0
Horizontal cord roughened	0
Fabric impressed	1
Obliterated	0
Check-stamped	1
Unassignable	0

Lip decoration 1/2 vessels (Lip not present on one vessel)

Inner corner	0
Lip surface	0
Outer corner	1
Inner and outer	0
Inner & lip	0
Outer & lip	0
Inner & outer & lip	0
No decoration	0

Rim decoration 2/2

Horizontal CWO lines	0
Left to right oblique CWO	0
Finger pinches	0
Tool stamps	1
Dentate stamps	1
Incising	1
Punctates	0

Vessel 1 has left to right oblique dentate stamps and a row of horizontal incisions below the angle.

The Doug Williams Site (EjNg - 3)
84 vessels, all Mortlach

Profiles

Angled rim	6
Wedge rim	6
Straight	8
Unassignable	64

Exterior finish

Vertical Cord roughened	14
Horizontal cord roughened	0
Fabric impressed	8
Obliterated	62
Unassignable	0

Lip decoration 69/84 vessels

Inner corner	2
Lip surface	38
Outer corner	18
Inner and outer	6
Inner & lip	0
Outer & lip	4
Inner & outer lip	1
No decoration	15

Rim decoration 23/84

CWO lines	13
Dentate stamps	5
Incising	1
Punctates	3
Pinpricks	1

Appendix B

Pottery From the Muskoday/Birch Hills Region

The following is a vessel by vessel description of the materials from the Muskoday/Birch Hills region. Once again for the purposes of simplicity the Lozinsky subphase material will be referred to as either Mortlach or Syncretic Mortlach/Selkirk. Vessels are recorded by land location, or if no location was given, the vessel is recorded by the collection number assigned by the Hansons.

SW-29-46-25-2

2 vessels, both are Mortlach

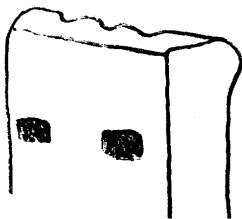
Vessel 1

Profile: straight rim

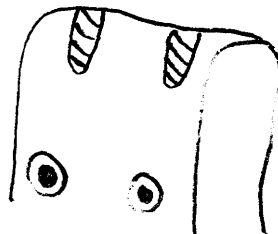
Exterior Finish: cord roughened

Outer Lip Decoration: solid tool impression on inner corner (possible quartering marks)

Rim decoration single row of rectangular punctates



Vessel 1



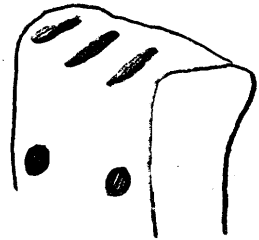
Vessel 2

Lot 18-47-25-2

4 rim sherds, 4 vessels - Vessels 1 and 2 are Syncretic, vessels 3 and 4 are Mortlach (Vessel 2 is a miniature Mortlach vessel)

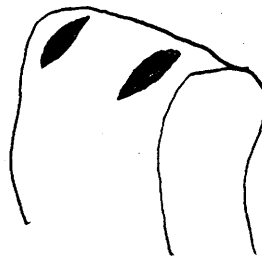
Vessel 1

Profile: Straight
Exterior Finish: smoothed
Lip Decoration: SET
Outer Rim Decoration: single row of punctates



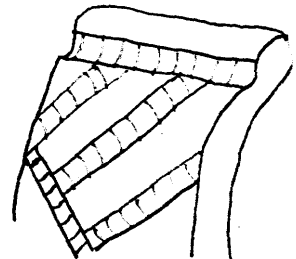
Vessel 2

Profile: S-rim
Exterior Finish: smoothed
Lip Decoration: SET
Outer Rim Decoration: N/A



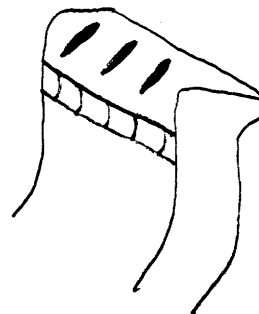
Vessel 3

Profile: S-rim
Exterior Finish: indeterminate
Lip Decoration: N/A
Outer Rim Decoration: horizontal CWO line below lip, and L-R oblique CWO meet R-L oblique CWO underneath horizontal line



Vessel 4

Profile: straight
Exterior Finish: horizontal cord roughened
Lip Decoration: SET
Outer Rim Decoration: N/A



Lot 9-47-24-2

5 rim sherds representing 2 vessels, Vessel 1 is Mortlach, Vessel 2 is syncretic

Vessel 1

Profile: S-rim

Exterior Finish: Vertical cord roughened

Lip Decoration: SET

Outer Rim Decoration: oblong punctates 13 mm below lip



Vessel 2

Profile: S-rim

Exterior Finish: vertical cord roughened

Lip Decoration: N/A

Outer Rim Decoration: N/A



Lot 19-47-24-2

2 Vessels, vessel 1 is Selkirk, vessel 2 is Mortlach

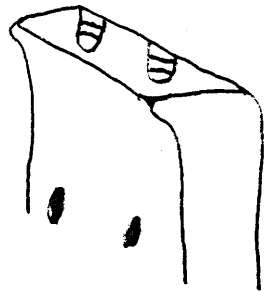
Vessel 1

Profile: straight

Exterior Finish: brushed

Lip Decoration: CWT

Outer Rim Decoration: row of punctates 17 mm below lip



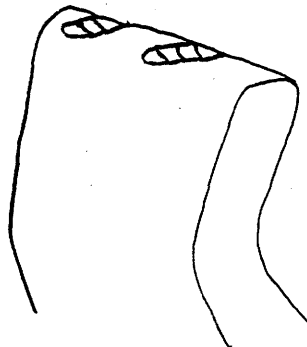
Vessel 2

Profile: S-rim

Exterior Finish: brushed

Lip Decoration: CWT

Outer Rim Decoration: N/A



NW 3-47A-24-2

1 vessel, Mortlach

Vessel 1

Profile: straight

Exterior Finish: oblique cord roughened

Lip Decoration: punctates on outer corner

Outer Rim Decoration: N/A

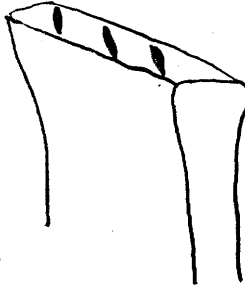


SW 3-47A-24-2

6 rim sherds representing 5 vessels; vessels 1, 2, 3 and 5 are Mortlach, vessel 4 is Selkirk

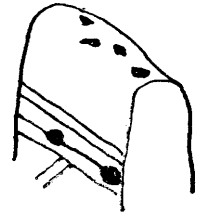
Vessel 1

Profile: straight
Exterior Finish: smoothed
Lip Decoration: SET
Outer Rim Decoration: N/A



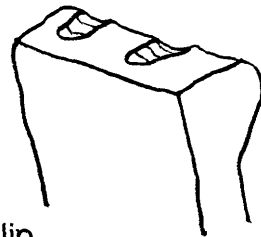
Vessel 2

Profile: straight
Exterior Finish: smoothed
Lip Decoration: brush impressions
Outer Rim Decoration: row of punctates with horizontal incised lines above and below and oblique incised line below this



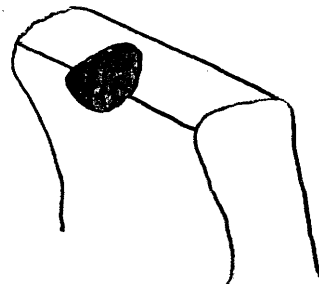
Vessel 3

Profile: straight
Exterior Finish: smoothed
Lip Decoration: CWT
Outer Rim Decoration: row of punctates 19 mm below lip



Vessel 4

Profile: straight
Exterior Finish: fabric impressed
Lip Decoration: punctates on outer corner
Outer Rim Decoration: N/A



Vessel 5

Profile: Wedge
Exterior Finish: fabric impressed
Lip Decoration: CWT
Outer Rim Decoration: N/A



NE 3-47A-24-3

4 rim sherds representing 4 vessels, vessels 1, & 2, are Selkirk, vessel 4 is Mortlach, vessel 3 is syncretic

Vessel 1

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: CWT

Outer Rim Decoration: row of punctates 26 mm below lip



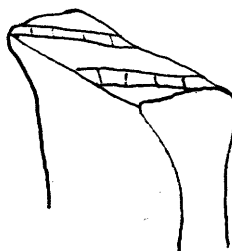
Vessel 2

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: CWT

Outer Rim Decoration: N/A



Vessel 3

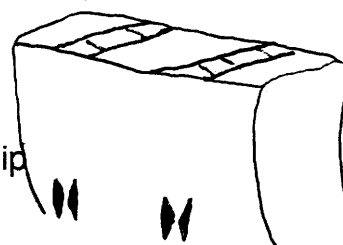
(Mortlach features: decoration, tightly wrapped CWT impressions. Selkirk features: thick vessel walls, laminated paste.)

Profile: straight

Exterior Finish: fabric impressed/smoothed

Lip Decoration: CWT

Outer Rim Decoration: pinch marks 20mm below lip



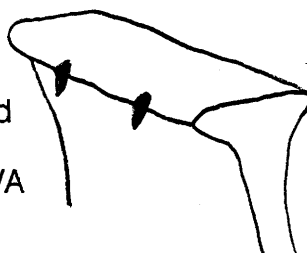
Vessel 4

Profile: straight

Exterior Finish: smoothed

Lip Decoration: N/A

Outer Rim Decoration: N/A



FiNi-9

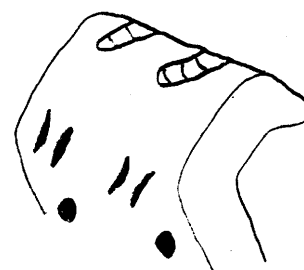
3 rim sherds and 3 neck sherds 1 vessel Mortlach

Profile: angled

Exterior Finish: fabric impressed

Lip Decoration: CWT

Outer Rim Decoration: pinch marks on angle of neck, row of punctates below this

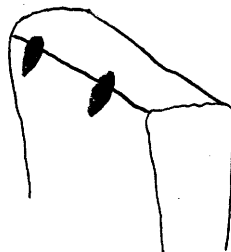


Collection 2

2 vessels, 3 sherds, Vessel 1 is Selkirk, vessel 2 is syncretic

Vessel 1

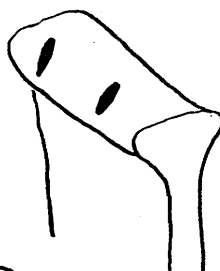
Profile: straight
Exterior Finish: fabric impressed
Lip Decoration: SET
Outer Rim Decoration: N/A



Vessel 2

(Mortlach features: thin walled, compact vessel. Selkirk features: smoothed exterior with SET decoration.)

Profile: straight
Exterior Finish: smoothed/brushed
Lip Decoration: SET
Outer Rim Decoration: N/A



Collection 3

1 sherd, Mortlach

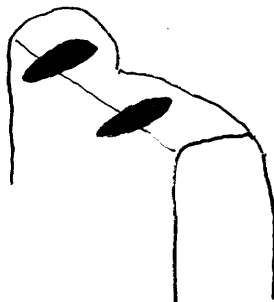
Profile: straight
Exterior Finish: cord roughened
Lip Decoration: SET i
Rim Decoration: N/A



Collection 4

1 sherd, Mortlach

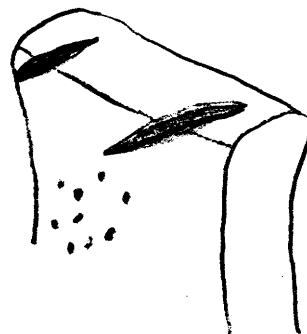
Profile: S-rim
Exterior Finish: smoothed
Lip Decoration: SET
Outer Rim Decoration: N/A



Collection 5

2 sherds (fit together), Mortlach

Profile: straight
Exterior Finish: smoothed/brushed
Lip Decoration: SET
Outer Rim Decoration: brush impressions



Collection 6

4 sherds (1 Vessel), Selkirk

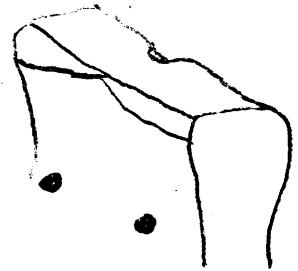
Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: tool impressed

Outer Rim Decoration: row of punctates 17 mm below lip

*same vessel as Collection 9

**Collection 7**

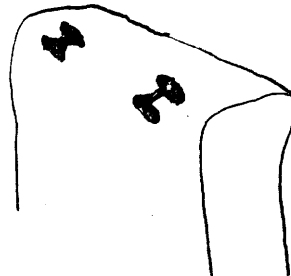
1 sherd, Selkirk

Profile: straight

Exterior Finish: smoothed

Lip Decoration: tool impressed

Outer Rim Decoration: N/A

**Collection 8**

1 sherd, Mortlach

Profile: S-rim

Exterior Finish: fabric impressed/smoothed

Lip Decoration: rectangular punctate

Outer Rim Decoration: N/A

**Collection 9**

1 sherd, Selkirk

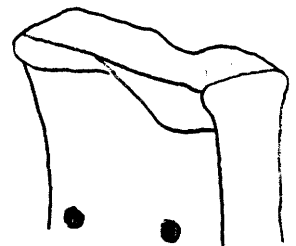
Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: tool impressed

Outer Rim Decoration: row of punctates 17 mm below lip

*same vessel as Collection 6

**Collection 10**

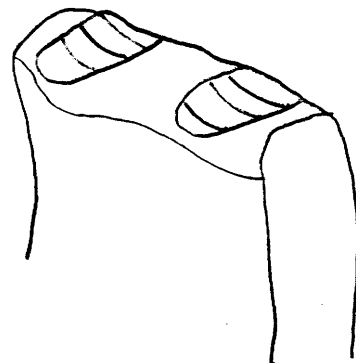
7 sherds, 1 vessel, Selkirk

Profile: straight

Exterior Finish: fabric impressed/smoothed

Lip Decoration: CWT

Outer Rim Decoration: N/A



Collection 11

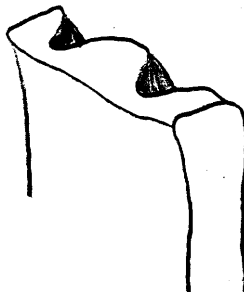
2 sherds (fit together), Mortlach

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: tool impressed

Outer Rim Decoration: N/A

**Collection 12**

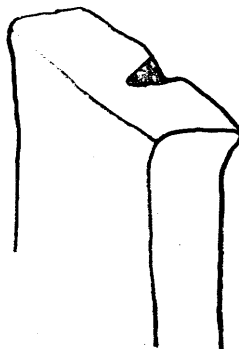
4 sherds (1 vessel), Mortlach

Profile: straight

Exterior Finish: cord roughened

Lip Decoration: SET

Outer Rim Decoration: N/A

**Collection 13**

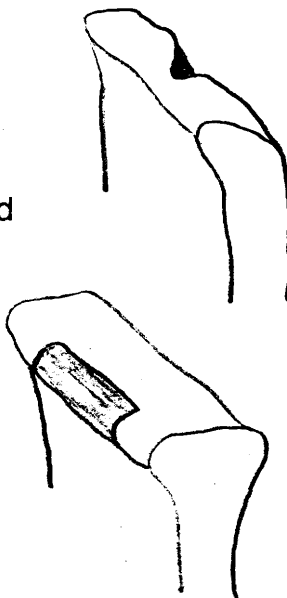
1 sherd, Mortlach

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: tool impressed

Outer Rim Decoration: N/A

**Collection 14**

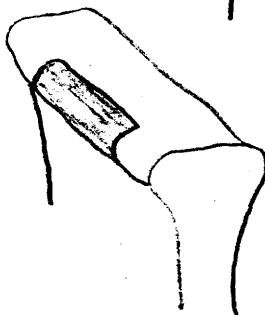
1 sherd, Mortlach

Profile: straight

Exterior Finish: smoothed

Lip Decoration: tool impressed

Outer Rim Decoration: N/A

**Collection 16**

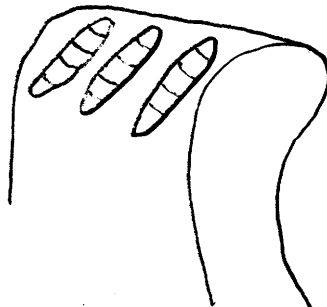
2 sherds, 1 vessel which is syncretic (Selkirk features: thick walled vessel with laminated paste. Mortlach features: tightly wrapped CWT used for decoration of the lip)>

Profile: S-rim

Exterior Finish: fabric impressed

Lip Decoration: CWT

Outer Rim Decoration: N/A



Collection 17

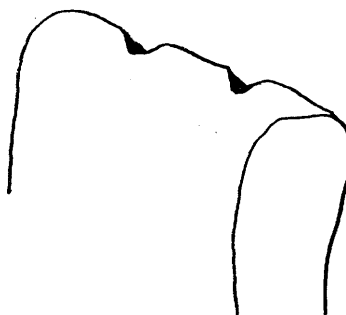
3 sherds (2 fit together) 1 vessel, Selkirk

Profile: straight

Exterior Finish: smoothed / brushed

Lip Decoration: tool impressed

Outer Rim Decoration: N/A

**Collection 19**

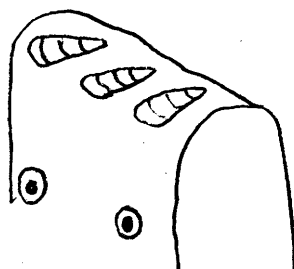
1 sherd, Mortlach

Profile: straight

Exterior Finish: smoothed

Lip Decoration: CWT

Outer Rim Decoration: Punctates 9 mm below rim

**Collection 20**

2 sherds, 2 vessels; Vessel 1 is Selkirk, Vessel 2 is syncretic (Mortlach features: thin vessel with compact paste. Selkirk feature: CWT decoration with cord wrapped loosely with wide spaces)

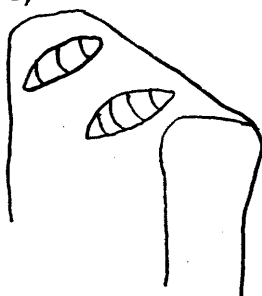
Vessel 1

Profile: straight

Exterior Finish: smoothed

Lip Decoration: CWT

Outer Rim Decoration: N/A

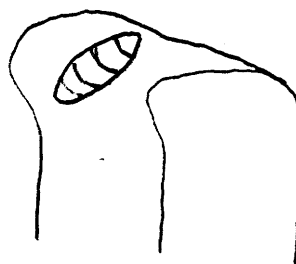
**Vessel 2**

Profile: straight

Exterior Finish: cord roughened

Lip Decoration: CWT

Outer Rim Decoration: N/A

**Collection 21**

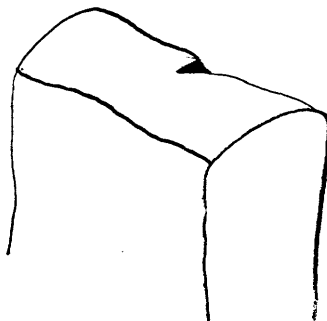
3 sherds, 1 vessel, Mortlach

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: tool impressed

Outer Rim Decoration: N/A



Collection 25

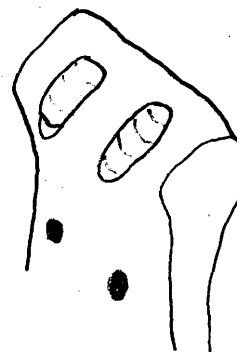
1 sherd, Selkirk

Profile: straight

Exterior Finish: smoothed

Lip Decoration: CWT

Outer Rim Decoration: row of punctates 18 mm below lip

**Collection 26**

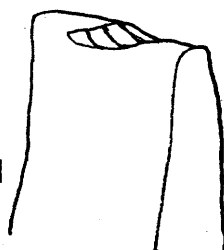
1 sherd, syncretic

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: CWT

Outer Rim Decoration: N/A

**Collection 28**

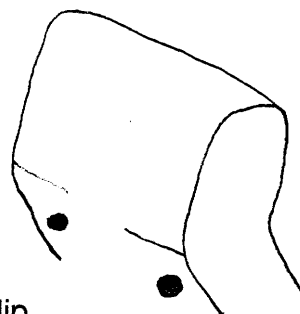
1 sherd, Mortlach

Profile: S-rim

Exterior Finish: fabric impressed

Lip Decoration: N/A

Outer Rim Decoration: row of punctates 15 mm below lip

**Collection 30**

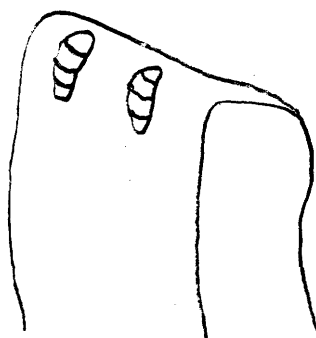
1 sherd, Selkirk

Profile: straight

Exterior Finish: smoothed

Lip Decoration: CWT

Outer Rim Decoration: N/A

**Collection 31**

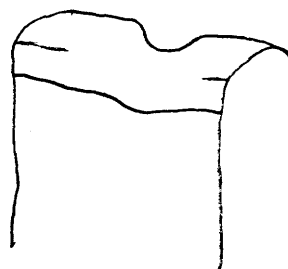
1 sherd, Mortlach

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: CWT

Outer Rim Decoration: N/A



Collection 33

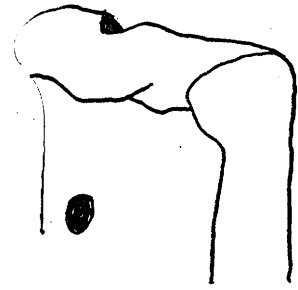
1 sherd, Selkirk

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: tool impressed

Outer Rim Decoration: row of punctates 20 mm below lip

**Collection 36**

1 sherd, syncretic miniature vessel

Profile: straight

Exterior Finish: smoothed

Lip Decoration: N/A

Outer Rim Decoration: rectangular stamp 12 mm below lip

**Collection 38**

1 sherd, Mortlach

Profile: straight

Exterior Finish: smoothed

Lip Decoration: CWT

Outer Rim Decoration: row of punctates 14 mm below lip

**Collection 39**

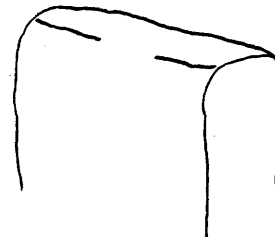
3 sherds (2 fit together) 1 vessel, Selkirk

Profile: straight

Exterior Finish: smoothed

Lip Decoration: N/A

Outer Rim Decoration: N/A

**Collection 40**

1 sherd, Selkirk

Profile: straight

Exterior Finish: fabric impressed

Lip Decoration: rectangular tool impression

Outer Rim Decoration: row of punctates 11 mm below lip



Collection 42

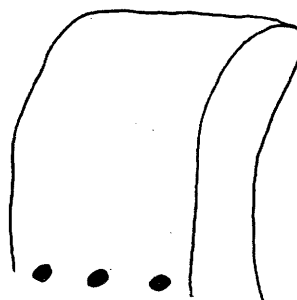
1 sherd, Mortlach

Profile: S-rim

Exterior Finish: smoothed

Lip Decoration: N/A

Outer Rim Decoration: row of punctates 44 mm below lip



Collection 46

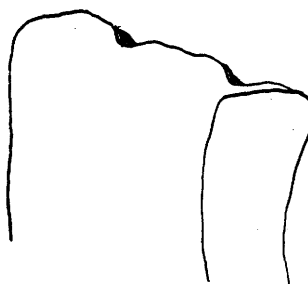
1 sherd, Selkirk

Profile: straight

Exterior Finish: smoothed

Lip Decoration: CWT

Outer Rim Decoration: N/A



Collection 48

1 sherd, syncretic miniature vessel

Profile: straight

Exterior Finish: fabric impressed/smoothed

Lip Decoration: incised line on lip

Outer Rim Decoration: N/A

