

Dendroarchaeological and Contextual Investigations of Remote Log Structures in
Jasper, Banff, and Kootenay National Parks, Canada

by

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ABSTRACT

The aim of this thesis is to undertake a comprehensive dendroarchaeological-contextual investigation of 35 sites (44 log structures) in Jasper, Banff, and Kootenay National Parks. Through tree-ring analysis and investigations of relevant documents (i.e., archives and interviews), three main objectives are met: 1) an architectural inventory and tree-ring analysis of sampled structures in the three parks; 2) an exploration of remote construction activity in the three parks, in terms of functional, temporal, and spatial distributions, and tree species selection; and 3) a detailed dendroarchaeological-contextual investigation of three structure case studies. The results provide new insights into remote construction activity from the late-nineteenth to early-twentieth century in the three parks. It assists Parks Canada in their attempt to interpret the cultural heritage resources of this area and contributes to the international need to document and explore vernacular architecture.

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1.0 Introduction

For hundreds of years, the southern Canadian Rocky Mountains have attracted a variety of cultural groups and activities, which is very apparent within the National Parks, where visitors have left their imprint on the landscape in the form of remote log structures, including cabins, teepees, and crib burial sites. Although these structures form an essential heritage element of the National Parks of the southern Canadian Rocky Mountains, time and increasing use of this landscape is threatening their existence. To ensure that historical information was not lost, I have worked collaboratively with Parks Canada and the University of Victoria Tree-Ring Laboratory (UVTRL) to complete dendroarchaeological and contextual investigations of abandoned log structures in Jasper (JNP), Banff (BNP), and Kootenay National Parks (KNP).

Although similar dendroarchaeological research has been conducted in the National Parks of the southern Canadian Rocky Mountains (Smith *et al.* 1998; Smith 1999) and similar contextual investigations of log structures have been conducted in southern British Columbia (Bunney 1980), no representative dendroarchaeological-contextual manuscript of log structures exists. This thesis resolves this issue by dendroarchaeologically analyzing and investigating the context (i.e., builder and function) of 35 sites (44 structures) in JNP, BNP, and KNP.

1.1 Objectives

The analysis consists of three main components:

- 1) An architectural inventory and dendroarchaeological analysis of sampled structures located within JNP, BNP, and KNP.

- 2) An exploration of remote construction activity of abandoned log structures in the three Parks, in terms of temporal, functional, and geographical distributions, and tree species selection.

- 3) A detailed dendroarchaeological-contextual investigation of three structure case studies.

A primary emphasis of the project is to apply dendrochronology to determine each structure's date of construction. This research is complemented by the exploration of primary and secondary data sources, including archival documents and interviews, to determine the builders and functions of the various structures. The results of these investigations provide new insights into the history of late-nineteenth and early-twentieth century remote building construction in JNP, BNP, and KNP.

This research was designed to contribute to the documentation of National Park history and should assist Parks Canada as it attempts to interpret the cultural heritage resources of this area. This research also contributes to the international need to document and explore vernacular architecture (Dyer 1997; Glassie 1999; Fitch 2001).

The insights acquired through this research program are also expected to facilitate a broader understanding of the capabilities of dendroarchaeology. With the creation and crossdating of living and floating tree-ring chronologies, the research furthers the technical application of this approach in western Canada. Additionally, the living chronologies created will be available for ongoing research in the related fields of dendroglaciology and dendroclimatology (i.e., Carter *et al.* 1999).

1.2 Thesis Format

Chapter 2.0 provides a literature review of research related to the tree-ring analysis of log structures in the mountain parks of the southern Canadian Rocky Mountains. It includes a review of dendrochronology, dendroarchaeology, a brief background of the history of key cultural groups and activities in JNP, BNP, and KNP, and a discussion of vernacular architecture.

Chapter 3.0 presents the methods followed in the thesis, including: study site selection, tree-ring analysis (dendrochronological sampling and dating), determining builders and structure functions, and interpretations and descriptions of results (living and structure chronologies, construction activity, case studies, and summary appendices).

Chapter 4.0 describes the characteristics, including date range and tree species, of the crossdated structure and living chronologies from 36 sites in JNP, BNP, and KNP.

Chapter 5.0 explores remote construction activity at 35 sites (44 structures) in the three parks, specifically in relation to eight structure functional classes.

Chapter 6.0 explores the tree-ring analysis, structure context (builder and purpose), and construction sequence (tree-ring dates) of three log structure groupings: 1) Ewan Moberly Homestead; 2) Billy Carver Cabin; 3) Jimmy Simpson structures: Tangle Creek Cabin, Glacier Lake Cabin, Mistaya River Cabin, Glacier Trail Cabin, and Saskatchewan Crossing Teepee.

Chapter 7.0 presents the conclusions of the thesis and makes suggestions for future research.

Appendix A provides summarized site and tree-ring dating results for all 35 structure sites (44 structures) sampled in JNP, BNP, and KNP. Appendix B contains transcriptions of six interviews conducted between June 15 and July 2, 2002 in JNP and BNP, and also in the town of Brûlé.

2.0 Literature Review

2.1 Dendrochronology

Dendrochronology is a dating technique based on the recognition that trees in the mid- and high-latitudes grow annual rings that vary in size from year-to-year. These variations in ring widths are related to factors such as the age of the tree, climate, and individual or stand disturbance. For instance, favorable climatic conditions can promote the growth of wide rings, while unfavorable conditions lead to the growth of narrow rings. These annual variations in tree-ring patterns can be matched between trees of the same species growing under similar climatic conditions (Baillie 1982). The procedure used to match these patterns is referred to as crossdating and enables both absolute and relative dating of tree-rings. Absolute dating occurs when two individual tree-ring sequences or chronologies (combined tree-ring patterns of multiple trees) are crossdated and the calendar date of the outermost ring of one of the samples is known. This allows for the identification of the calendar year when each ring was formed. Relative dating occurs when the calendar dates for all samples are unknown or 'floating' in time; tree-rings can only be dated relative to each other (Fritts 1976; Baillie 1982).

2.2 D endroarchaeology

In the early twentieth century, Andrew E. Douglass, who is often referred to as the father of dendrochronology, discovered the dating capabilities of tree-rings. Douglass introduced his techniques to North American and European archaeologists, who in turn appropriated the procedure to date the construction of various human-built structures (Fritts 1976; Heikkinen and Edwards 1983). This procedure has led to the successful dating of structures over 3000 years old (Schweingruber 1996).

Absolute dating of human-built structures occurs when a construction timber and a living tree-ring chronology from the same site are crossdated (Fritts 1976). This procedure enables determination of the minimum year a tree was cut down for construction (Heikkinen and Edwards 1983; Nielsen *et al.* 1995; Pearson 1997). If the entire ring sequence is present (earlywood and latewood tissue), it is assumed that

the tree was cut down sometime between the end of one year's growth period and the beginning of another. If only earlywood is present, it can be concluded that the tree was felled during that year's growth period (Baillie 1982; Nielsen *et al.* 1995; Baxter 1997). Precise dating is possible when a sample has bark, as this infers that the last year of growth is present (Baillie 1982; Nielsen *et al.* 1995). The felling date, however, is not necessarily the construction date (Fairchild-Parks and Harlan 1992; Nielsen *et al.* 1995), as the logs may have been stored for a number of years or reused from older buildings (Nielsen *et al.* 1995).

Tree-ring dating of historic structures has been successful in both Europe and North America (Baillie 1982; Kyncl *et al.* 2000; Therrell 2000). In England, extensive work has been done on dating and describing the historical context of a full range of building types (rural to urban and domestic to ecclesiastical) and time periods (twelfth through the nineteenth centuries) (Heikkinen and Edwards 1983; Pearson 1997). In the United States, the majority of research has been conducted in the southwestern states (Arizona, New Mexico, and Texas), and has focused on dating the structures and appropriating chronologies for research in other sub-disciplines of dendrochronology (Douglass 1929; Fairchild-Parks and Harlan 1992; Baxter 1997; Towner *et al.* 2001). Recently there has been a move from simply dating structures to also investigating their human history (Towner *et al.* 2001).

In comparison to the situation in Europe and the United States, dendroarchaeology in Canada remains in its infancy (Nielsen *et al.* 1995). In Nova Scotia, both secular and ecclesiastical buildings have been dated using dendroarchaeological research techniques (Ruffman 2000; Ruffman *et al.* 2001). In Manitoba, dendroarchaeological dating has been used to verify dates recorded in historical documents and interpreted through construction style. The majority of structures studied have not received an in depth exploration of their historical context (Nielsen 1993; Nielsen 1994; Nielsen *et al.* 1995). In British Columbia and within the mountain parks of Alberta, only a handful of structures have been dated and placed in their historical context using a dendroarchaeological approach (Parker 1984; Smith *et al.* 1998; Smith 1999; Brelsford *et al.* 2000; Smith 2003). A manuscript of log structures in southern British

Columbia does exist (Bunney 1980), however it does not involve dendroarchaeological analysis.

2.3 Parks History

The mountain parks of the southern Canadian Rocky Mountains have witnessed various cultural groups and activities: First Nations, explorers, fur trade, Métis, railway construction, trappers and outfitters, warden service, and mining. While each of these phases in the history of the parks represents different cultural groups and activities, all have left their imprint in the form of abandoned log structures.

Prehistoric evidence of human occupation dates as far back as 11, 000 Y.B.P. (Canadian Parks Service 1989a), however the focus of this thesis is on the log structures constructed during the historic period, primarily those linked to cultural groups and activities from the late-nineteenth to the early-twentieth centuries.

Before the arrival of Europeans in western Canada, a number of Native groups inhabited the area of the southern Canadian Rocky Mountains, including the Kootenay and Interior Salish groups who used the mountain passes for hunting and trading (Canadian Parks Service 1989a; Parks Canada 2001b). The introduction of horses and firearms to Plains Native groups, including the Peigan and the Stoney, forced these groups west of the Continental Divide (Canadian Parks Service 1989a). The majority of Native groups were nomadic and as such depended on the easily transported teepee (Luxton 1975). Teepees were commonly pitched over pits; many of which are marked by remnant materials including flint arrow heads (Luxton 1975).

Following the routes first traveled by Natives, many of which are still in use today (Parks Canada 2001b), were Euro-descendant explorers and fur traders. Between 1810 – 1811 David Thompson, renowned geographer, was the first Euro-descendant to discover and cross Athabasca Pass, creating a route for fur brigades traveling to and from the Pacific Coast (Lothian 1976). In 1841 George Simpson, governor of the Hudson's Bay Company, was the first Euro-descendent to travel through the Bow

River Valley and what became Simpson Pass; he had the primary goal of finding profitable sources of furs to send back to Europe (Lothian 1976; Canadian Parks Service 1989a). While settlement was not the primary concern of the early explorers and fur traders, their activities led to the creation of various trading posts, including Piegan Post along the Bow River in BNP and Jasper House along the Athabasca River in JNP and (Luxton 1975).

During the second half of the nineteenth century there was increased interest in the possibility of settlement in the Northwest Territories of Canada and the possibility of building a road or railway to the Pacific coast. Prospects were investigated through the Palliser Expedition (Fraser 1969; Lothian 1976).

One of the first groups to settle in the southern Canadian Rocky Mountains were the Métis, an interracial population parented by Native women and European men involved in the fur trade (Burley 1997). From the early-nineteenth century until the beginning of the twentieth century, the Athabasca River Valley was home to many Métis families, including Moberly, Joachim, and Findlay. With the creation of JNP in 1907, these families were evicted and relocated to new residences in Hinton, Edson, and Grand Cache. Their established homesteads were sold to the Parks service; many of the remains are still to be found, including the Ewan Moberly Homestead in JNP (Figure 2.1) (Wallace and Meropoulis 2000).



Figure 2.1 - Ewan Moberly Homestead (photo orientation: westward facing). Source: Parks Canada Agency ID#283R-mh0014.

The Palliser Expedition and the apparent threat of Americans taking over unpopulated areas of North America led to the eventual development of a railway through the Canadian Rocky Mountains (Lothian 1976; Canadian Parks Service 1989a). The Canadian government presented the construction of the railway to the province of British Columbia as incentive to join the Canadian union (Canadian Parks Service 1989a; Lothian 1987). The Canadian Pacific Railway and later the Grand Trunk Pacific Railway and the Canadian Northern Railway received contracts to survey and construct routes (Lothian 1987). Both the Canadian Pacific Railway's and the Canadian government's attempts to gain control of the land opened up by the railway led to the beginnings of Canada's first national park, Rocky Mountain Park (later BNP) in 1885. This was followed by the creation of Glacier (1886), Yoho (1886), Jasper (1907), and Kootenay National Parks (1920) (Lothian 1976; Canadian Parks Service 1989b). Along the railway lines are remnant buildings, including construction camps. The Celestine Lake Road Railroad Construction Camp in JNP contains structures for both habitation and equipment (Figure 2.2) (Pickard 1984).



Figure 2.2 - Celestine Lake Road Railroad Construction Camp structure 3 (99P3).
Source: Smith 1999.

The railway inevitably brought more visitors to the National Parks, including outfitters and trappers looking for profit. Many of these early travelers assisted in the ascents and discovery of various mountains and natural features. One of these was Jimmy Simpson, who assisted Reverend James Outram in the first ascents of 10 major peaks in the Canadian Rocky Mountains (Hart 1993). The remains of some of Simpson's outfitting activities exist in the form of structures in the area of Saskatchewan Crossing, including the Glacier Lake Cabin (Figure 2.3). While such outfitting excursions were permitted in the parks, trapping and hunting was not (Burns and Schintz 2000). However, in the off-season, outfitters like Simpson would turn to trapping to supplement their incomes (Figure 2.4) (Hart 1993).



Figure 2.3 – Glacier Lake Cabin (BNP): a Jimmy Simpson outfitting structure (photo orientation: northward facing). Photo: July 2001.



Figure 2.4 – Tangle Creek Cabin (JNP): a Jimmy Simpson trapping cabin. Source: Smith *et al.* 1998.

The threat of illegal trapping and hunting led to the implementation of a warden service. The first printed regulations in 1890 prohibited killing wild animals and birds, except predators (i.e., wolves, bears, coyotes, cougars, wolverines, lynx, hawks and eagles). In 1907 the regulations were amended to prohibit the hunting of all

animals (Burns and Schintz 2000). However, continued poaching led to the formation of game and fire guardians (wardens) in 1909 (Burns and Schintz 2000), who set up various patrol routes and cabins to monitor activities in the parks (Perry 2003).

Mining began as early as 1887 when the Canadian Anthracite Coal Company sunk a mine outside Banff townsite (Hart 1999). The Canadian government encouraged the creation of additional mines in BNP and other parks to meet demands for metals during the First World War (Bella 1987). Commercial mining continued in the parks until the 1930s and many small-scale operations continued into the 1950s (Bella 1987). Structures associated with abandoned mines persist, including the Derr Creek Graphite Mine Camp in JNP (Perry 2003).

2.4 Vernacular Architecture

The log structures examined in this thesis can be classified as vernacular architecture, also referred to as indigenous, folk, or traditional architecture (Oliver 1997).

Vernacular architecture has a range of forms, uses, and meanings. *The Encyclopedia of Vernacular Architecture* provides a working definition:

Vernacular architecture comprises the dwellings and all other buildings of the people. Related to their environmental contexts and available resources, they are customarily owner- or community-built, utilizing traditional technologies. All forms of vernacular architecture are built to meet specific needs, accommodating the values, economies and ways of living of the cultures that produce them (Oliver 1997: p.xxiii).

While the form and function of regional vernacular structures stems from the available resources and specific needs of the people who produce them, their traditions may be derived from international, national, and regional building traditions. In particular, log cabin construction in North America, though varied by regional vernacular, is rooted in European building traditions, including, but not limited to, those of the English, French, Ukrainians, Swedes, and Germans (Glassie and Kniffen 1966; Rempel 1980).

While similarities exist, materials and construction techniques can differentiate each building tradition:

- Traditional English log construction includes half-timbering, where load bearing vertical timbers create the structure frame and the spaces between the timbers are infilled with brickwork and plaster (Rempel 1980; Kalman 1994).
- Traditional French log construction also includes load bearing vertical timbers and half-timbering (*colombage*) with stone and clay, rubble stone (*pierroté*), or brick (*briqueté*) infilling (Kalman 1994). It differs from the English tradition in that it also includes a protective sheathing (e.g., wood siding or a mortar-like mix) (Kalman 1994).

While the above building traditions of the English and French were influential in Quebec from the seventeenth century and in the Canadian Prairies into the early-twentieth century, they became less popular because the infill was easily eroded in the harsh continental climate of North America (Kalman 1994).

A variant of the French *colombage*, the *pièce sur pièce*, was adapted in response to the Canadian environment (Kalman 1994). It incorporates a more durable infill of horizontally stacked squared logs constructed in the form of *poteaux en coulisse* (grooved-post: logs inserted horizontally into intervals of grooved posts) or *à queue d'aronde* (dovetail joinery: a solid fan-like shape on one log is inserted into a hollow fan-like shape on an adjoining log) (Kalman 1994). *Pièce sur pièce* is commonly referred to as log cabin construction; in some cases logs were left rounded and connected with less-sophisticated saddle notch joinery (Kalman 1994).

While the French *pièce sur pièce* was an improvement over half-timbering, the horizontal log building traditions of the Ukrainians, Swedes, and Germans proved even more durable to the extremes of the continental climate and took advantage of the timber rich landscape of North America (Lehr 1976; Glassie and Kniffen 1966):

- Traditional Ukrainian log construction involves stacking horizontal logs and securely joining them by dovetail or saddle notching (rounded notches cut on one or both sides of a log which fits into the logs above and below) and sometimes pegging (Glassie and Kniffen 1966; Lehr 1976). The addition of extensive insulation, including layered mud, straw, cow dung, and lime over the log wall, enabled the structure to keep cool during summers and warm during the winters (Lehr 1976).
- Traditional Swedish log construction consists of round or squared horizontal logs notched with either saddle notch or dovetail and are left projecting or cut flush at the corners (Weslager 1969); in most cases the excellent craftsmanship left no need for chinking (Rempel 1980).
- Traditional German log construction also consists of round or squared horizontal logs joined by dovetail, saddle notch, and additionally the V-notch (variant of saddle notch where notches are cut into a V rather than rounded). However, logs are chinked with clay or wood wedges (Glassie and Kniffen 1966; Rempel 1980).

While the above building traditions are described as influential on the architectural form of log structures in North America, the majority of literature describing the dissemination of specific ethnic building traditions within North America pertains to the United States (Glassie and Kniffen 1966; Weslager 1969). Literature focusing on Canada is limited to specific pockets of traditions (e.g., Ukrainian log construction in Alberta (Lehr 1976)) or general building traditions across Canada (Kalman 1994).

Furthermore, multiple debates exist over the dissemination of the various building traditions. While horizontal log construction ---and dovetail notching--- is widely accepted as originating in the traditions of the Swedes and Germans, some scholars believe the French introduced the technique to Quebec as early as the seventeenth century and to English settlers in North America during the eighteenth century (Kalman 1994).

Some researchers also suggest North American Natives were advanced in horizontal log construction, specifically the Inuit cultures that constructed horizontal driftwood structures with dovetail notching in Alaska during the Western Thule occupation as early as 3000 B.C. (Weslager 1969). However, other scholars suggest North American Natives were not introduced to log cabin techniques until European influences made contact with Native cultures during colonization and that the techniques used in the Western Thule occupation are rooted in Eurasian cultures (Weslager 1969). Nevertheless, at least one of the many forms of Native log construction, the teepee (a conical tent of bark or skin covered poles), was appropriated by North American residents of the late-nineteenth and early-twentieth centuries (Weslager 1969).

In light of the lack of relevant literature and the existence of dissemination debates, the differentiation of building techniques in the southern Canadian Rocky Mountains in this thesis is based on multiple assumptions. First, it is assumed that the same influences in the United States were present in Canada, specifically the corner-notching traditions of the Swedes and Germans. Second, while debates exist over the origin of many techniques, it is assumed the majority is of European origin. Third, it is believed that the building traditions originating in Europe were inevitably mixed as the immigrating cultures settled into a mixed ethnic landscape. Having said this last assumption, it may be difficult to infer a direct commonality between the ethnicity of the builder and the ethnic origins of the building traditions they adopt. However, commonalities are documented when evidence permits (see Chapter 6.0: Case Studies).

Historical-Geographical Approach

The focus of a vernacular architecture study varies depending upon the disciplinary approach taken, which in this thesis is a historical-geographical approach emphasizing dendroarchaeological (tree-ring) analysis.

Historical Approach

Until the last half of the twentieth century, historians largely neglected vernacular architecture in favour of grand, high-style architecture (Dyer 1997; Pounds 1997;

Fitch 2001). A combination of barriers seems responsible for this deficit: historians favoured architecture representing classes in seats of power (i.e., government); vernacular builders kept few written records; and historians largely ignored what was considered inadequate archaeological evidence (Pounds 1997). In response, this thesis attempts to shed light on vernacular architecture in the southern Canadian Rocky Mountains by taking an historical approach that focuses on researching primary and secondary sources to determine structure context (function and builder) and dating structures, through dendroarchaeological analysis.

Geographical Approach

The geographical approach has largely focused on understanding vernacular architecture as elements of cultural landscapes, developed through the interaction of humans with the physical environment (Knapp 1997). At the end of the nineteenth century, geographers studying ‘the built environment’ were examining cultural landscapes in the context of rural settlement patterns, emphasizing both building form and materials (Jones and Sauer 1915; Brunhes 1920; Knapp 1997). During the 1960s and 1970s, geographical inquiry of vernacular architecture took a back seat to mainstream quantitative analysis and spatial abstractions (Knapp 1997). In North America renewed interest in historic preservation has encouraged a resurgence of descriptive research on vernacular architecture and theoretical interpretations of cultural landscapes (i.e., reading landscapes for social meaning) (Rooney *et al.* 1982; Goss 1988; Knapp 1997). This thesis adds to the ever-evolving geographical approach by interpreting the cultural landscape of vernacular structures in the southern Canadian Rocky Mountains.

While different approaches to the study of vernacular architecture exist, there is considerable value in recording vernacular structures in the face of their imminent deterioration and destruction (Oliver 1997). As components of the National Parks, the structures examined in this thesis are protected under the Parks Canada Agency Act (Department of Justice 2004). They are, however, threatened by natural weathering and merit thorough documentation and interpretation.

3.0 Study Sites and Methods

3.1 Introduction

This chapter describes the methods used in the dendroarchaeological analysis (tree-ring analysis) and contextual investigations (structure builders and functions) of sites in JNP, BNP, and KNP. It begins with a description of the study sites, including selection, locations, access, and primary data collection. Tree-ring analysis is described under the umbrella of dendroarchaeology, specifically sample collection and preparation, chronology development, and crossdating. Contextual investigations involve researching primary and secondary sources, including archival research and interviews.

3.2 Study Sites

3.2.1 Selection and Locations

The structures documented in this thesis were selected following reconnaissance surveys by Parks Canada personnel. They are found at scattered front-country and back-country locations within JNP, BNP, and KNP (Figure 3.1). Related investigations were completed between 1998 and 1999 by a research team from the University of Victoria Tree-Ring Laboratory (UVTRL). The research described within this thesis expands upon that earlier work by focusing on log structures found at 21 additional sites (26 structures) in July 2001 (Table 3.1).

3.2.2 Access and Primary Data Collection

In July 2001, under the supervision of Parks Canada wardens Rod Wallace and Don Mickle, field sites were accessed in the three parks via automobile, helicopter, horseback, and on foot. At each site, a thorough inventory was compiled, including descriptions of site condition and location (Table 3.2). Field investigations and dendroarchaeological results for sites sampled by the UVTRL between 1998 and 1999 were accessed from UVTRL reports 99-01 and 2000-04 (Smith 1998; Smith *et al.* 1999).

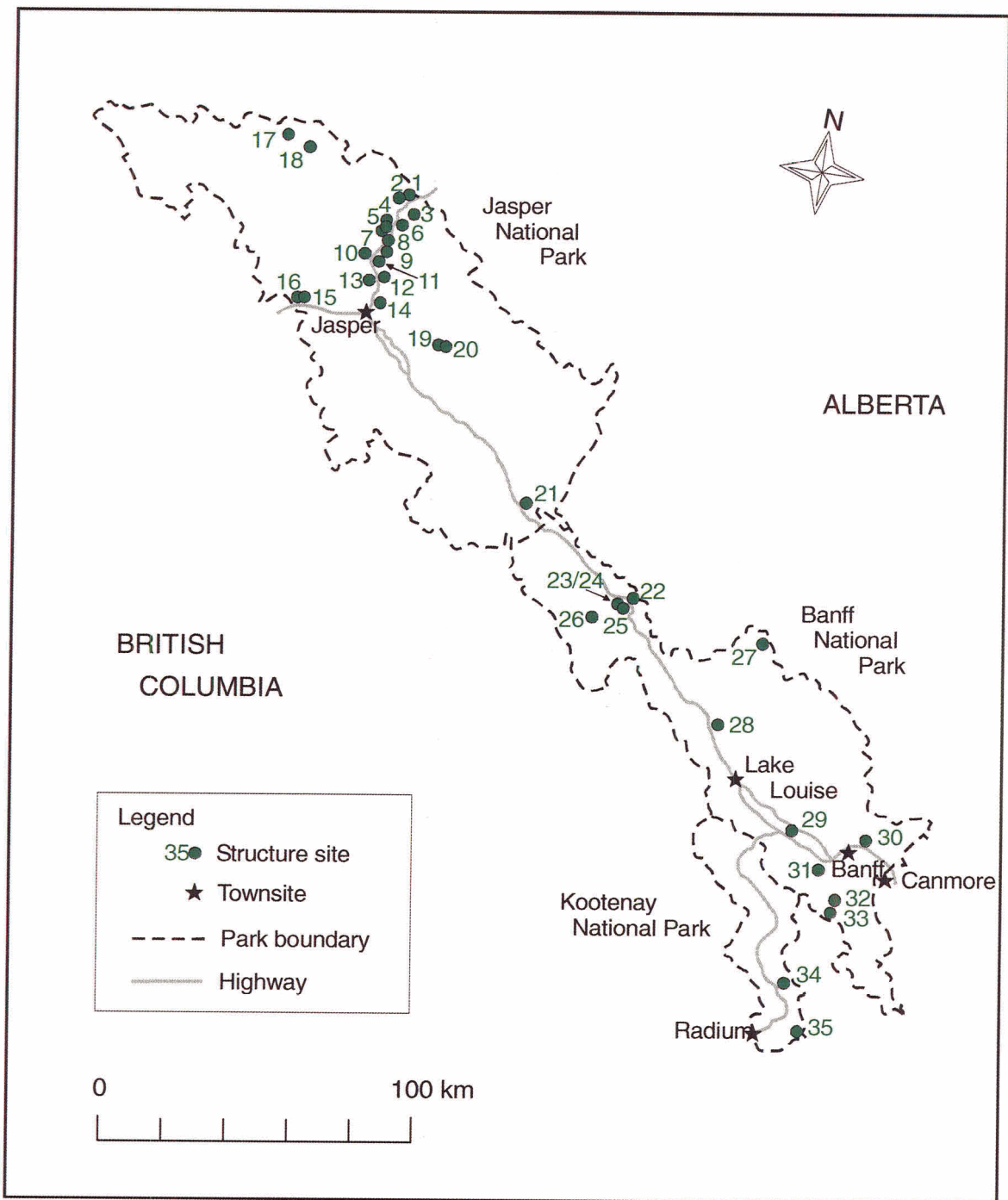


Figure 3.1 - Location of structure sites in JNP, BNP, and KNP. Structure site numbers correspond to site names provided in Table 3.1. Adapted from Heggen 2003.

Table 3.1 – Location of structures in JNP, BNP, and KNP.

Site name and official site #	National Park	Number of Structures	Location (UTM)	Date Sampled
1. Bedson Ridge Cabin [?R]	JNP	1	0442393E, 5898085N	July 2001
2. Fiddle River Railroad Camp [?R]	JNP	1	0435290E, 5897920N	August 1999
3. Disaster Point Cabin [?R]	JNP	1	0442620E, 5890560N	August 1999
4. Ram Pasture Structure [251R]	JNP	1	0432501E, 5887074N	July 2001
5. Railside Cabin [?R]	JNP	1	0431760E, 5885677N	August 1999
6. Rocky River Cabin [?R]	JNP	1	0434799E, 5888430N	August 1999
7. Celestine Lake Railroad Construction Camp [256R]	JNP	4	0431421E, 5885677N	August 1999
8. Talbot Lake Log Foundation [234R]	JNP	1	0433460E, 5884170N	August 1999
9. Edna Lake Structure [271R]	JNP	1	0431048E, 5881450N	July 2001
10. Ewan Moberly Homestead [283R]	JNP	2	0425746E, 5878224N	July 2001
11. Morro Peak Structure [?R]	JNP	1	0431405E, 5885155N	July 2001
12. Hoodoo Ridge Crib [1043R]	JNP	1	0430810E, 5869647N	July 2001
13. Athabasca Meeting Place [313R]	JNP	3	0429252E, 5869303N	July 2001
14. Keith Lake Cabin [1760R]	JNP	1	0431930E, 5861850N	August 1999
15. Derr Creek Mine Camp [1171R]	JNP	1	0406587E, 5860690N	August 1999
16. Miette Creek Railroad Construction Camp [?R]	JNP	2	0404265E, 5860646N	August 1999
17. Side Pass Cabin [1657R]	JNP	1	0399148E, 5921085N	July 2001
18. Indian Meadow Crib [928R]	JNP	1	0406218E, 5914775N	July 2001
19. Evelyn Creek Cabin [?R]	JNP	1	0454007E, 5844928N	July 2001
20. Maligne Lake Outlet Cabin [?R]	JNP	1	0456280E, 5842330N	August 1999
21. Tangle Creek Cabin [1700R]	JNP	1	0481000E, 5790600N	September 1998
22. Owen Creek Warden Cabin [1483R]	BNP	1	0522900E, 5760700N	August 1999
23. Saskatchewan Crossing Teepee [1445R]	BNP	1	0517022E, 5756558N	July 2001
24. Glacier Trail Cabin [1445R]	BNP	1	0517022E, 5756558N	August 1999
25. Mistaya River Cabin [1443R]	BNP	1	0519415E, 5756358N	July 2001
26. Glacier Lake Cabin [447/ 1224R]	BNP	1	0511348E, 5752721N	July 2001
27. Indianhead Creek Crib [1755R]	BNP	1	0568795E, 5743800N	July 2001
28. Hector 9 Mile Cabin [1747R]	BNP	1	0600573E, 5671922N	August 1999
29. Silver City Cabin [80R]	BNP	1	0576291E, 5679551N	July 2001
30. Billy Carver Cabin [61R]*	BNP	2	0606209E, 5672403N	July 2001
31. Bill Peyto Cabin [1920R]	BNP	1	0589989E, 5668088N	July 2001
32. Turtle Tom's Cabin [1699R]	BNP	1	0595727E, 5658123N	July 2001
33. Fatigue Creek Cabin [2030R]	BNP	1	0594326E, 5659545N	July 2001
34. Dog Lake Cabin [1031T]	KNP	1	0574950E, 5626517N	July 2001
35. Kootenay River Cabin [368T]	KNP	2	0583855E, 5609619N	July 2001

* The 2 structures from Billy Carver Cabin are sections of one structure, however, their distinct dating differences merit treatment as separate building episodes.

Table 3.2 - Field observations recorded at study sites.

Observation	Description
1. Site Name	named by park wardens and research team.
2. UTM Coordinates	measured using Garmin 12 GSP unit.
3. Elevation (m)	acquired with GPS unit and confirmed with 1: 50,000 map sheet.
4. Site description	predominant tree species; presence of stumps; geographical features; # of structures; # of logs per structure side.
5. Site sketch and photographs	floor plan; façade.
6. Structure dimensions	l x w x h; average log diameter; orientation.
7. Structure form	type of structure (cabin, crib, teepee); joinery; axe or saw marks; chinking; roof; doors; windows.
8. Presence of artifacts	glass; cans; equipment; inscriptions; nails.
9. Tree-ring samples (from structures)	location; code; # of samples per log; presence of bark; form of sample (core or disc); species.
10. Tree-ring samples (from living trees)	# of samples per tree; sample code; # of trees; species; presence of bark.

3.3 Tree-Ring Analysis

3.3.1 Dendroarchaeology Model

Dendroarchaeological (tree-ring) analysis refers to the study of human history through the interpretation of data derived from the tree-ring dating of log structures. It is guided by the dendroarchaeology model developed by researchers at the Laboratory of Tree-Ring Research at the University of Arizona (Dean 1996), that promotes the investigation of structures through an integrated review of related chronological, behavioural, and environmental data (Towner *et al.* 2001; Nash 2002):

- Chronological data can be determined through analysis of sample attributes and tool marks (Towner *et al.* 2001), but specifically through the crossdating of tree-ring samples and the subsequent interpretation of the tree-ring dates.

- Behavioural data are derived from the interpretation of tree-ring samples as artifacts (Dean 1996). Interpretation may include investigations into seasonal wood procurement, wood storage, and wood use (tool marks, joinery) (Kemrer 1978).
- Environmental data relate to ecological information derived from tree-ring records, and can include species selection and climatic reconstruction (Towner *et al.* 2001).

In this thesis I focus primarily on gathering chronological and behavioural data. Environmental data are only discussed in the context of tree species selection and distribution.

3.3.2 Tree-Ring Samples

Structure Samples

Tree-ring samples were taken from log structures in order to obtain a structure specific tree-ring record (floating chronology). This record reveals the yearly variations in tree-ring width of each sample (each structure log), in most cases from date of establishment (pith) to death (felling date or bark ring). Floating chronologies provide the means for determining the date structure logs were felled for construction.

Structure samples were taken in two forms: cross sections ('cookies', 360° circumference samples) with the use of a saw, and tree-core samples with the use of a two-thread 5 mm increment borer held at 90° to the structure log surface (Baillie 1982; Smith *et al.* 1998; Smith 1999). The protocol included taking samples from at least six logs (Heikkinen and Edwards 1983), with a goal of obtaining two radii from each log (each sample) for a total of twelve radii (6 samples). In an effort to minimize disturbance, cores were preferred. However, in cases of advanced rotting, cookies were obtained, as they are more likely to provide intact samples; each cookie inherently contained 360° for the selection of two radii. Samples were preferentially taken from unfinished logs at the point where bark was still evident.

Living Tree Samples

In order to assign calendar dates to the structure samples, they must be crossdated with a living chronology. If a previously established living chronology was not available, twenty living trees within the immediate vicinity (i.e., within 100 m²) of the structure were sampled (two radii per tree, for a total of forty radii) using an increment borer (Fritts 1976; Nielsen *et al.* 1995). The trees with the largest diameter at breast height were sampled, as they are more likely to contain more growth rings (Fritts 1976; Therrell 2000).

The tree species for living and structure samples were identified on the basis of specific tree species characteristics. Bark, needles, and cones primarily identified living trees. Structure logs were primarily identified by their bark. In cases where there was no bark other characteristics were identified, including latewood proportions, heartwood-sapwood differentiation, the abundance of resin canals, and the prominent living tree species at the site. While bark is an easily identifiable characteristic, the previously mentioned characteristics are species specific and can aid in identification (Schweingruber 1993).

Sample Preparation

The increment core samples were stored in plastic straws and the cookie samples were secured with duct tape. They were then labelled with site and species information, and transported to the UVTRL for analysis. After being allowed to air dry, the cores were glued to slotted wooden boards and were sanded with progressively finer sandpaper grades (80, 120, 240, 400 grit) to emphasize the boundaries between the annual growth rings (Nielsen *et al.* 1995). The cookies were allowed to air-dry and were then reinforced with paraffin wax as necessary to prevent deterioration prior to being progressively sanded (Nielsen 1994).

3.3.3 Chronology Development and Crossdating

Tree-ring widths were measured to the nearest 0.01 mm with the use of the WinDENDRO digital image processing and measuring system (Guay *et al.* 1992) and a Velmex-type stage with a 40x microscope. Samples were visually crossdated into floating and living

chronologies with the use of narrow marker years; they were quality checked using the International Tree-Ring Data Bank (ITRDB) software program COFECHA at a 99% confidence interval with crossdating intervals determined according to the number of tree-rings per sample (Table 3.3) (Holmes 1994). The COFECHA program generates descriptive statistics that aid in the interpretation of crossdating results (Figure 3.4) (Fritts 1976; Gedalof and Smith 2001; Grissino-Mayer 2001). Problematic samples were re-examined for measurement errors and, if the error persisted, were deleted until a significant overall correlation (Table 3.5) existed for each chronology. The completed structure and living chronologies are available in the UVTRL tree-ring chronology database.

Table 3.3 - Standardized crossdating intervals used in the COFECHA program: based on the number of tree-rings per sample.

Crossdating Interval	Number of tree-rings
50-year segments with a 25-year lag	> or = 100 tree-rings
25-year segments with a 12-year lag	> or = 50 tree-rings
15-year segments with a 7-year lag	> or = 35 tree-rings

Table 3.4 - Descriptive statistics produced in COFECHA that aid in the interpretation of crossdating results.

Descriptive statistic	Definition
Mean series correlation	Measures the degree of commonality in a series in response to external factors; a high value suggests trees at that site respond similarly to external factors.
Mean sensitivity	Measures the relative difference in tree-ring width between successive years (0↔2; 0 = no change, i.e., complacent rings; 2 =missing ring).
Mean measurement	Represents the average of all tree-ring measurements (complacent to missing).
Mean first-order autocorrelation	Measures the degree one year's growth is correlated with the previous year's growth; a high value suggests one year's growth is correlated with the previous year's growth, not outside factors.

Table 3.5 - Minimum values of the Pearson correlation coefficient (r) (one-tailed test) for corresponding tree-ring sample sizes at a 99 percent confidence interval.

Sample size (# of rings)	Minimum Pearson's r
> or = 50 rings	0.328
> or = 25 rings	0.462
> or = 15 rings	0.592

Crossdating Chronologies

The cookies and cores from individual structures were compiled into floating chronologies, where the year of the outermost ring was unknown (Fritts 1976). The living trees were compiled into absolute chronologies, where the year of the ring closest to the bark is known (Figure 3.2) (Fritts 1976). Following this, attempts were made to crossdate the floating and living chronologies for a specific site (Figure 3.3). If the radii could be crossdated, the floating chronologies were assigned absolute dates (Fritts 1976). In instances where crossdating was unsuccessful, attempts were made to crossdate the floating chronologies against previously established living chronologies prepared by other researchers.

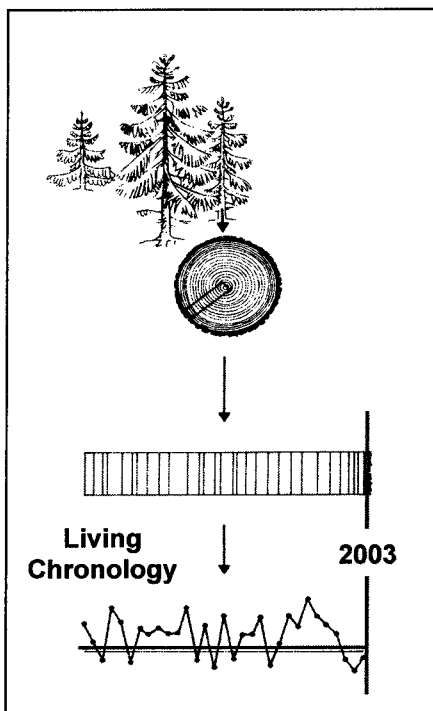


Figure 3.2 - Diagram of the creation of a living (absolute) chronology. Adapted from Schweingruber 1988 with kind. Permission of Kluwer Academic Publishers.

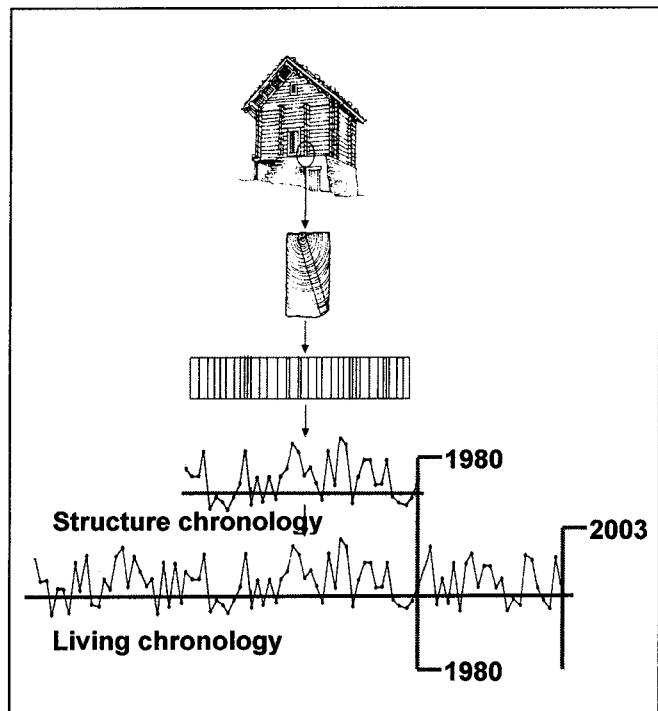


Figure 3.3 - Diagram of the absolute dating of a floating chronology from a log structure. Adapted from Schweingruber 1988 with kind. Permission of Kluwer Academic Publishers.

Once a floating chronology was crossdated, recording the date assigned to the outermost tree-ring could identify a minimum cutting date. If bark was present, it was concluded that

the tree's final year of growth was present (Nielsen *et al.* 1995). In such instances the date is referred to as a cutting date. In instances where there was no bark, the date is referred to as a minimum cutting date. In most instances it was assumed that the structures were built with green logs (used immediately after felling) (Heikkinen and Edwards 1983). While it is possible that logs were left to season, it is more likely that the structures were built green due to the remoteness of the sites and the presence of bark on most logs. Bark is usually stripped from logs that are left to season (Mills and Shupe 1997).

If a variety of cutting dates were provided, it was inferred that the structure was built over a series of years (repair and reuse). However, if a cluster of dates existed, some of which contain bark, then it was interpreted as the main building episode. More recent dates were inferred to be replacement logs. The presence or absence of earlywood and latewood were also noted as a means to determine the season of wood procurement (Table 3.6) (Baillie 1982).

Table 3.6 - Using the presence of earlywood and/or latewood to determine the season (time of year) structure logs were felled for construction.

Final tree-ring (at bark) composition*	Season felled**
inc. ew	Late spring to summer (ca. March to June)
ew	Summer (ca. May to July)
inc. lw	Late summer/ early fall (ca. July to September)
lw	Fall to early spring of following year (ca. September to March of following year)
No information	Late spring to early spring of following year

*inc. = incomplete; ew = earlywood; lw = latewood.

**Each season includes a variable temporal period (i.e., March to June); this is intended to incorporate elevation differences. For example, incomplete earlywood may form earlier (i.e., March) at a low elevation site (i.e., 1000 m asl), and later (i.e., June) for a high elevation site (i.e., 1700 m asl).

3.4 Contextual Investigations

These investigations began with a survey of the structure and site. Inscriptions on the structures were used as a means of identifying builders (inscribed name) and multiple occupation periods (when inscriptions included dates). Artifacts, including glass bottles and cans, were used as a means of inferring function. For example, if a bed, stove, and food cans were present, it was assumed that the structure functioned as a dwelling. The structure architecture, specifically the form, may also provide clues about function. For

example, if windows, a door, and a chimney were present, it could be inferred that the structure was a dwelling. Such preliminary interpretations were later compared to inferences made by Parks Canada, local historians, and in UVTRL reports.

While site artifacts were used to infer structure function, various additional types of information can be derived from site artifacts (Renfrew and Bahn 1996). Duration of occupation can be interpreted on the basis of temporally diagnostic artifacts. For example, bottles, cans, nails, can labels, and remnant paper (i.e., used in chinking) can all be dated to shed light on site use and abandonment (Mackie 2004). Occupants can also be revealed through artifacts. In particular, artifacts may provide evidence that men, women, children, and domestic animals were at the site (Mackie 2004). Ethnicity of the occupants can also be interpreted through specific artifacts like chinese medicine bottles (Mackie 2004). Specific individuals can also be traced based on their idiosyncrasies. This may include the use of particular tobacco tins, brands of bottles or cans, or specific ways of opening cans (Mackie 2004).

3.4.1 Secondary and Additional Primary Sources

Secondary sources were examined to provide information about what cultural groups were in the area of the structures around their date of construction (Hart 1993, 1979). This information acted as a guide for archival research at the Whyte Museum of the Canadian Rockies in Banff and the Jasper Yellowhead Archives. With preliminary structure dates and functions in mind, photos, newspaper articles, archaeological reports, and documented interviews were examined.

Archival research was supplemented by interviews with selected individuals identified with the assistance of Parks Canada wardens Rod Wallace and Don Mickle. Candidates were selected on the basis of their potential knowledge about the history of the structures. Interviewees were audiotape recorded while discussing their knowledge of the structures (see Appendix B).

Structure functions are formalized into structure functional classes. Each class is based on interpretations made by Parks Canada, local historians, and UVTRL members regarding each structure, including structure date, location, form, and remnant materials in the context of Park history. All inferred functions by Parks Canada are deemed correct unless additional evidence suggests otherwise (ie. photographs depicting a different function, as in the case of Hoodoo Ridge Crib; or tree-ring dates post-date inferred activity, as with the Fiddle River Cabin (see Appendix A)). Information from interviewees and UVTRL reports is considered as a guideline for interpreting function, but is deemed correct (most plausible function) if no conflicting evidence is found. Based on the outcome of interpretations, structures are then grouped within one of eight general functional classes.

4.0 Characteristics of living and structure chronologies in Jasper, Banff, and Kootenay National Parks

4.1 Introduction

This chapter describes the crossdated living and structure tree-ring chronologies collected at 36 sites in JNP, BNP, and KNP. It begins with an account of the general characteristics of the chronologies and is followed by a description of chronology tree species. Conclusions are made about predominant tree species used in structure construction. Tree species selection is linked to site characteristics and findings about the general distribution of log structures are related to the ecoregions of the southern Canadian Rocky Mountains.

4.2 General Characteristics

Fifty-three tree-ring chronologies were collected from 36 sites: 15 living chronologies and 38 structure chronologies (Table 4.1a/b). Thirteen of the living tree-ring chronologies were collected during fieldwork conducted in 2001, with the remaining 2 being developed by the UVTRL (Celestine Lake Road Construction Camp #7) in 1999 and C.W. Ferguson and M.L. Parker (Pyramid and Patricia Lakes #36) in 1966 (Figure 4.1). Twenty of the structure floating tree-ring chronologies were collected during fieldwork in 2001; the remaining 18 were collected by the UVTRL in 1998 and 1999. Five of the floating tree-ring chronologies could not be crossdated. Together the living and structure tree-ring chronologies consist of five tree species: Douglas-fir (*Pseudotsuga menziesii*), Engelmann spruce (*Picea engelmannii*), lodgepole pine (*Pinus contorta*), white spruce (*Picea glauca*), and spruce (*Picea spp.*). Spruce is intended to include spruce species that could not be differentiated, which may include Engelmann spruce, white spruce, or a hybrid of the two.

Figure 4.1a – Parameters for the crossdated structure and living chronologies in the study.

Site No.	Site Name	Chronology	Tree species	N = Trees (cores)	Range (years AD)	Chronology length (years)	Mean series correlation	Mean sensitivity	Mean measurement	Auto-correlation
1	Bedson Ridge Cabin	Structure: 01BRC-cd.txt	ES	3 (6)	1645 - 1907	263	0.392	0.245	0.65	0.812
2	Fiddle River Camp	Structure: n/a	n/a	4 (8)	1783 - 1917	135	n/a	n/a	n/a	n/a
3	Disaster Point Cabin	Structure: n/a	n/a	7 (12)	1651 - 1882	232	n/a	n/a	n/a	n/a
4	Ram Pasture Structure	Structure: 01RPS-cd.txt	WS	4 (8)	1736 - 1895	160	0.760	0.250	0.55	0.828
5	Railside Cabin	Structure: n/a	Spr.	12 (23)	1699 - 1894	196	n/a	n/a	n/a	n/a
6	Rocky River Cabin	Structure: n/a	n/a	10 (19)	1765 - 1906	142	n/a	n/a	n/a	n/a
7	Celestine Lake Road Railroad Construction Camp*	Living: 99Spruce.txt Structure 1: n/a Structure 2: n/a Structure 3: n/a Structure 4: n/a	ES S S S S	44 (80) 13 (21) 11 (21) 19 (33) 6 (11)	1699 - 1999 1685 - 1907 1728 - 1911 1730 - 1909 1701 - 1902	301 223 183 180 202	0.599 n/a n/a n/a n/a	0.242 n/a n/a n/a n/a	0.75 n/a n/a n/a n/a	0.836 n/a n/a n/a n/a
8	Talbot Lake Log Foundation	Structure: n/a	n/a	1 (2)	1800 - 1908	109	n/a	n/a	n/a	n/a
9	Edna Lake Structure	Structure: not crossdated								
10	Ewan Moberly Homestead	Structure 1: 01EMH1-cd.txt Structure 2: 01EMH2-cd.txt	ES ES LP	5 (8) 7 (7) 1 (1)	1751 - 1904 1764 - 1906 1765 - 1877	154 143 113	0.619 0.575	0.250 0.225	0.77 0.58	0.821 0.715
11	Morro Peak Structure	Structure: 01MPS-cd.txt	DF	5 (10)	1722 - 1909	188	0.683	0.341	0.68	0.821

*Chronologies created by UVTRL (1999). ** Chronology created by C.W. Ferguson and M.L. Parker (1966). Only crossdated chronologies are included. ES = Engelmann Spruce; LP = Lodgepole Pine; WS = White Spruce; S = Spruce (possibly ES or WS); DF = Douglas-fir; n/a = not available (crossdated results not available in UVTRL or Ferguson and Parker reports).

Figure 4.1b – Parameters for the crossdated structure and living chronologies in the study.

Site No.	Site Name	Chronology	Tree species	N = Trees (cores)	Range (years AD)	Chronology length (years)	Mean series correlation	Mean sensitivity	Mean measurement	Auto-correlation
12	Hoodoo Ridge Crib	Living: 01HRC300-lc.txt	DF	6 (12)	1669 - 2000	332	0.522	0.319	0.73	0.731
		Structure: 01HRC-cd.txt	DF	5 (9)	1784 - 1900	117	0.636	0.239	0.75	0.703
13	Athabasca Meeting Place	Structure 1: 01AMP1-cd.txt	LP	1 (2)	1776 - 1898	123	0.791	0.272	1.04	0.907
		Structure 2: 01AMP2-cd.txt	LP	2 (3)	1857 - 1904	58	0.687	0.276	1.03	0.627
		Structure 3: 01AMP3-cd.txt	LP	5 (10)	1768 - 1904	137	0.523	0.246	0.64	0.915
14	Keith Lake Cabin	Structure: n/a	n/a	12 (23)	1765 - 1890	126	n/a	n/a	n/a	n/a
15	Derr Creek Mine Camp	Structure: n/a	DF	2 (4)	1783 - 1906	124	n/a	n/a	n/a	n/a
			LP/Spr.	8 (14)	1793 - 1906	114	n/a	n/a	n/a	n/a
16	Miette Creek Railroad Construction Camp	Structure 1: n/a	LP/Spr.	11 (21)	1763 - 1903	141	n/a	n/a	n/a	n/a
		Structure 2: n/a	LP/Spr.	3 (6)	1768 - 1903	136	n/a	n/a	n/a	n/a
17	Side Pass Cabin	Living: 01SPC900-lc.txt	ES	19 (36)	1722 - 2000	279	0.678	0.167	0.86	0.773
		Structure: 01SPC-cd.txt	ES	4 (8)	1734 - 1919	186	0.601	0.208	0.47	0.947
18	Indian Meadow Crib	Living: 01IMC600-lc.txt	LP	18 (34)	1818 - 2000	183	0.557	0.179	1.01	0.937
		Structure: 01IMC-cd.txt	LP	3 (6)	1840 - 1901	62	0.589	0.163	1.52	0.797
19	Evelyn Creek Cabin	Structure: not crossdated								

*Chronologies created by UVTRL (1999). ** Chronology created by C.W. Ferguson and M.L. Parker (1966). Only crossdated chronologies are included. ES = Engelmann Spruce; LP = Lodgepole Pine; WS = White Spruce; S = Spruce (possibly ES or WS); DF = Douglas-fir; n/a = not available (crossdated results not available in UVTRL or Ferguson and Parker reports).

Figure 4.1c – Parameters for the crossdated structure and living chronologies in the study.

Site No.	Site Name	Chronology	Tree species	N = Trees (cores)	Range (years AD)	Chronology length (years)	Mean series correlation	Mean sensitivity	Mean measurement	Auto-correlation
20	Maligne Lake Outlet Cabin	Structure: n/a	LP/Spr.	11 (17)	1763 - 1913	151	n/a	n/a	n/a	n/a
21	Tangle Creek Cabin	Structure: n/a	ES	13 (14)	1682 - 1904	223	0.615	n/a	n/a	n/a
22	Owen Creek Warden Cabin	Structure: n/a	Spr.	12 (21)	1636 - 1911	276	n/a	n/a	n/a	n/a
23	Saskatchewan Crossing Teepee	Structure: 01SCT-cd.txt	ES	9 (9)	1632 - 1923	292	0.447	0.275	0.22	0.800
24	Glacier Trail Cabin	Living: 99KL900-lc.txt Structure: n/a	ES ES	19 (37) 11 (20)	1633 - 1998 1601 - 1907	366 307	0.753 n/a	0.244 n/a	0.49 n/a	0.783 n/a
25	Mistaya River Cabin	Structure: 01MRC-cd.txt	ES	6 (12)	1599 - 1904	306	0.574	0.175	0.38	0.798
26	Glacier Lake Cabin	Living: 01GLC600-lc.txt Structure: 01GLC-cd.txt	LP LP	9 (15) 4 (9)	1745 - 2000 1766 - 1924	256 159	0.617 0.572	0.238 0.221	0.45 0.47	0.847 0.921
27	Indianhead Creek Crib	Living: 01ICC600-lc.txt Structure: 01ICC-cd.txt	LP LP	19 (35) 2 (2)	1786 - 2000 1744 - 1890	215 147	0.674 0.704	0.204 0.239	1.31 0.43	0.846 0.893
28	Hector 9 Mile Cabin	Structure: n/a	Spr.	10 (17)	1461 - 1915	455	n/a	n/a	n/a	n/a
29	Silver City Cabin	Living: 01SCC900-lc.txt Structure: not crossdated	ES	19 (35)	1860 - 2000	141	0.548	0.163	1.61	0.790

*Chronologies created by UVTRL (1999). ** Chronology created by C.W. Ferguson and M.L. Parker (1966). Only crossdated chronologies are included. ES = Engelmann Spruce; LP = Lodgepole Pine; WS = White Spruce; S = Spruce (possibly ES or WS); DF = Douglas-fir; n/a = not available (crossdated results not available in UVTRL or Ferguson and Parker reports).

Figure 4.1d– Parameters for the crossdated structure and living chronologies in the study.

Site No.	Site Name	Chronology	Tree species	N = Trees (cores)	Range (years AD)	Chronology length (years)	Mean series correlation	Mean sensitivity	Mean measurement	Auto-correlation
30	Billy Carver Cabin	Living: 01BCC600-lc.txt Structure: 01BCC-cd.txt	LP	20 (40)	1877 - 2000	124	0.654	0.186	1.28	0.883
			LP	11 (19)	1877 - 1934	58	0.684	0.205	1.56	0.761
31	Bill Peyto Cabin	Living: 01BPC600-lc.txt Structure: 01BPC-cd.txt	LP	19 (31)	1828 - 2000	173	0.550	0.172	0.69	0.948
			LP	6 (11)	1826 - 1932	107	0.536	0.160	0.89	0.948
32	Turtle Tom's Cabin	Living: 01TTC600-lc.txt Structure: not crossdated	LP	10 (20)	1906 - 2000	95	0.573	0.185	2.11	0.888
33	Fatigue Creek Cabin	Living: 01FCC900-lc.txt Structure: not crossdated	ES	10 (19)	1922 - 2000	79	0.598	0.129	2.19	0.922
34	Dog Lake Cabin	Living: 01DLC600-lc.txt Living: 01DLC900-lc.txt Structure: 01DLC-cd.txt	LP	9 (16)	1864 - 2000	137	0.342	0.173	0.99	0.887
			ES	9 (18)	1844 - 2000	157	0.490	0.155	2.40	0.889
			ES	6 (10)	1835 - 1914	80	0.507	0.135	2.32	0.902
35	Kootenay River Cabin	Structure 1: 01KRC1-cd.txt Structure 2: 01KRC2-cd.txt Living: cana026.txt	DF	1 (2)	1869 - 1940	72	0.477	0.206	1.09	0.787
			LP	2 (3)	1856 - 1920	65				
			ES	2 (4)	1831 - 1913	83				
			DF	2 (4)	1831 - 1913	83	0.551	0.244	0.81	0.920
36	Pyramid & Patricia Lakes**	Living: cana026.txt	LP	4 (8)	1833 - 1913	81	n/a	n/a	n/a	n/a
			DF	36 (n/a)	1540 - 1965	426	n/a	n/a	n/a	n/a

*Chronologies created by UVTRL (1999). ** Chronology created by C. W. Ferguson and M.L. Parker (1966). Only crossdated chronologies are included. ES = Engelmann Spruce; LP = Lodgepole Pine; WS = White Spruce; S = Spruce (possibly ES or WS); DF = Douglas-fir; n/a = not available (crossdated results not available in UVTRL or Ferguson and Parker reports).

Figure 4.1a – Tree species and time period of species-specific structure and living chronologies sampled in JNP, BNP, and KNP: map highlights structure locations. Adapted from Heggen 2003.

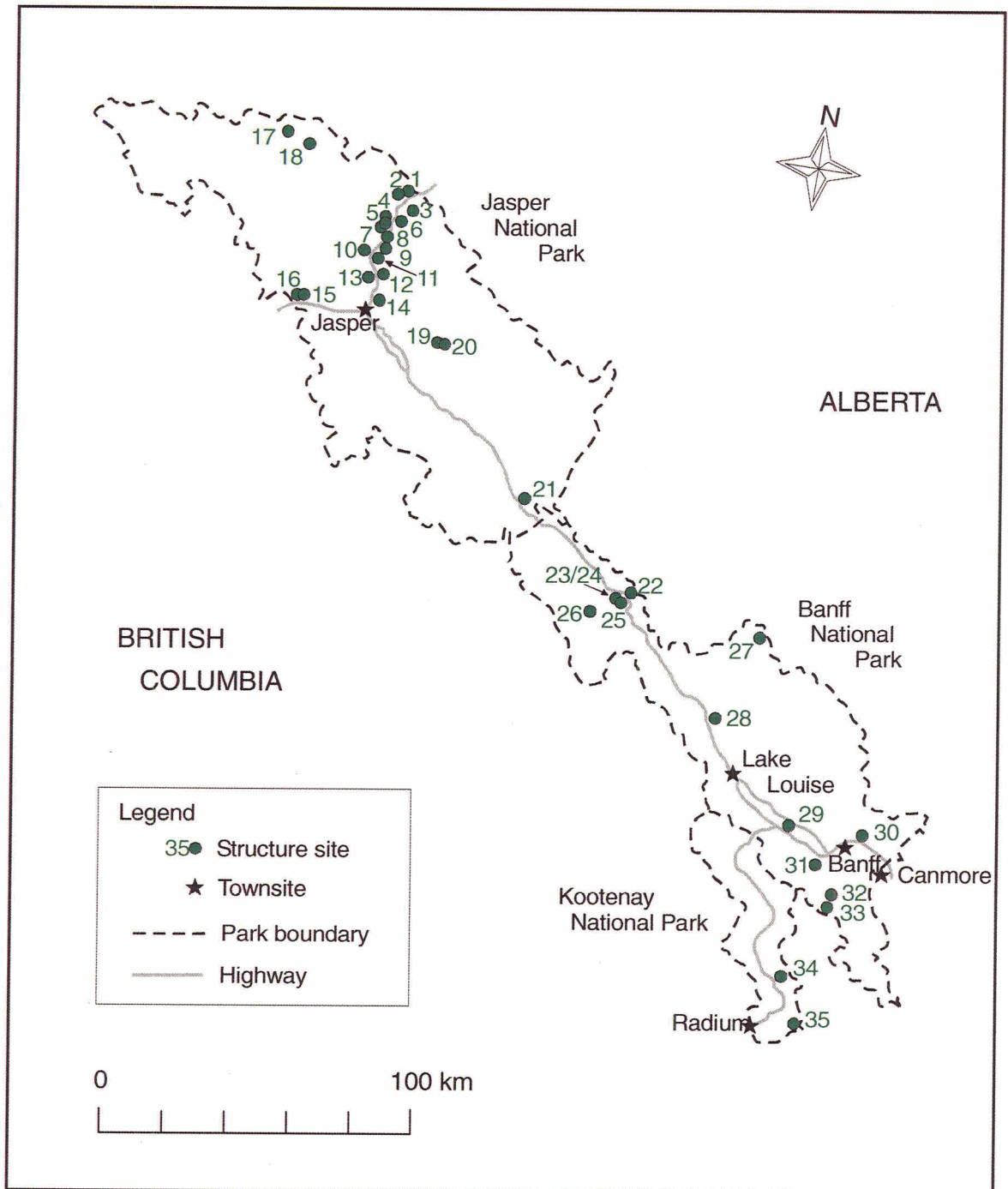


Figure 4.1b – Tree species and time period of species-specific structure and living chronologies sampled in JNP, BNP, and KNP.

Site #	Site Name	Tree Species	Time Period (years AD)
1	Bedson Ridge Cabin	ES	1645 – 1907 S
2	Fiddle River Camp	n/a	1783 – 1917 S
3	Disaster Point Cabin	n/a	1651 – 1882 S
4	Ram Pasture Structure	WS	1736 – 1895 S
5	Railside Cabin	Spr.	1699 – 1894 S
6	Rocky River Cabin	n/a	1765 – 1906 S
7	Celestine Lake Road Railroad Construction Camp*	ES	1699 – 1999 L
		Spr.	1685 – 1911 S
8	Talbot Lake Log Foundation	n/a	1800 – 1908 S
9	Edna Lake Structure		Structure not crossdated
10	Ewan Moberly Homestead	ES	1751 – 1906 S
		LP	1765 – 1877 S
11	Morro Peak Structure	DF	1722 – 1909 S
12	Hoodoo Ridge Crib	DF	1669 – 2000 L
		DF	1784 – 1900 S
13	Athabasca Meeting Place	LP	1768 – 1904 S
14	Keith Lake Cabin	n/a	1765 – 1890 S
15	Derr Creek Mine Camp	DF	1783 – 1906 S
		LP/Spr.	1793 – 1906 S
16	Miette Creek Railroad Construction Camp	LP/Spr.	1763 – 1903 S
17	Side Pass Cabin	ES	1722 – 2000 L
		ES	1734 – 1919 S
18	Indian Meadow Crib	LP	1818 – 2000 L
		LP	1840 – 1901 S
19	Evelyn Creek Cabin		Structure not crossdated
20	Maligne Lake Outlet Cabin	LP/Spr.	1763 – 1913 S
21	Tangle Creek Cabin	ES	1682 – 1904 S
22	Owen Creek Warden Cabin	Spr.	1636 – 1911 S
23	Saskatchewan Crossing Teepee	ES	1632 – 1923 S
24	Glacier Trail Cabin	ES	1633 – 1998 L
		ES	1601 – 1907 S
25	Mistaya River Cabin	ES	1599 – 1904 S
26	Glacier Lake Cabin	LP	1745 – 2000 L
		LP	1766 – 1924 S
27	Indianhead Creek Crib	LP	1786 – 2000 L
		LP	1744 – 1890 S
28	Hector 9 Mile Cabin	Spr.	1461 – 1915 S
29	Silver City Cabin	ES	1860 – 2000 L Structure not crossdated

Figure 4.1c – Tree species and time period of species-specific structure and living chronologies sampled in JNP, BNP, and KNP.

Site #	Site Name	Tree Species	Time Period (years AD)
30	Billy Carver Cabin	LP	1877 – 2000 L
		LP	1877 – 1934 S
31	Bill Peyto Cabin	LP	1828 – 2000 L
		LP	1826 – 1932 S
32	Turtle Tom's Cabin	LP	1906 – 2000 L Structure not crossdated
33	Fatigue Creek Cabin	ES	1922 – 2000 L Structure not crossdated
34	Dog Lake Cabin	LP	1864 – 2000 L
		ES	1844 – 2000 L
		ES	1835 – 1914 S
35	Kootenay River Cabin	DF	1831 – 1940 S
		LP	1833 – 1920 S
		ES	1831 – 1913 S
36	Pyramid & Patricia Lakes**	DF	1540 – 1965 L

S = Structure Chronology; L = Living Chronology; ES = Engelmann spruce; WS = white spruce; Spr. = spruce spp. (possibly ES or WS); LP = lodgepole pine; DF = Douglas-fir; * = Chronology created by UVTRL in 1999; ** = Chronology created by C.W. Ferguson and M.L. Parker in 1966.

Of the five species, the Douglas-fir chronologies span the greatest time period (1540 – 2000 AD) and the spruce chronologies include the oldest tree-ring date (1461 AD) (Table 4.2) for all three parks.

- In JNP the Douglas-fir chronologies span the greatest time period (1540 – 2000 AD: sites #11, 12, 15, and 36) (Figure 4.1)
- In BNP, the spruce chronologies span the greatest time period (1461 – 1915 AD; sites #22 and 28).
- In KNP, the Engelmann spruce chronologies span the greatest time period (1831 – 2000 AD: sites #34 and 35).

Table 4.2 – Chronology time periods and tree species occurrence and in all three parks and in each individual park based on the number of structure and living chronologies at each site.

JNP, BNP, and KNP			
Tree Species	# of structure chronologies containing species*	# of living chronologies containing species**	Time Period***
Engelmann spruce	9	7	1599 – 2000 AD
white spruce	1	0	1736 – 1895 AD
spruce	7	0	1461 – 1915 AD
lodgepole pine	11	7	1744 – 2000 AD
Douglas-fir	4	2	1540 – 2000 AD
JNP			
Tree Species	# of structure chronologies containing species	# of living chronologies containing species	Time Period
Engelmann spruce	4	2	1645 – 2000 AD
white spruce	1	0	1736 – 1895 AD
spruce	5	0	1685 – 1913 AD
lodgepole pine	6	1	1763 – 2000 AD
Douglas-fir	3	2	1540 – 2000 AD
BNP			
Tree Species	# of structure chronologies containing species	# of living chronologies containing species	Time Period
Engelmann spruce	3	4	1599 – 2000 AD
white spruce	0	0	n/a
spruce	2	0	1461 – 1915 AD
lodgepole pine	4	5	1744 – 2000 AD
Douglas-fir	0	0	n/a
KNP			
Tree Species	# of structure chronologies containing species	# of living chronologies containing species	Time Period
Engelmann spruce	2	1	1831 – 2000 AD
white spruce	0	0	n/a
spruce	0	0	n/a
lodgepole pine	1	1	1833 – 2000 AD
Douglas-fir	1	0	1831 – 1940 AD

* Each structure chronology that contains the corresponding tree species is added together to give a value for tree species occurrence in all three parks combined and then in each individual park.

**Each structure chronology that contains the corresponding tree species is added together to give a value for tree species occurrence in all three parks combined and then in each individual park.

***Same-tree species samples from all structure and living chronologies in all three parks and in each individual park are temporally combined (i.e., date ranges added together) so that each tree species is represented by one time period.

4.3 Tree Species

Living tree-ring chronologies were developed following an on-site assessment of the type of tree used to build each structure and the predominant tree species found growing at each site. Engelmann spruce and lodgepole pine, followed by Douglas-fir trees, were the most predominant species found in the vicinity of the structures. Overall, the structures were largely constructed of lodgepole pine logs, followed by Engelmann spruce, spruce, Douglas-fir, and white spruce (Table 4.2; Figure 4.1). The tree species used, however, within each park did differ:

- JNP structures were predominantly constructed of lodgepole pine logs, followed by Engelmann spruce, spruce, Douglas-fir, and white spruce.
- BNP structures were predominantly built from lodgepole pine logs, followed by Engelmann spruce, and spruce.
- KNP structures were constructed from Engelmann spruce trees, followed by lodgepole pine and Douglas-fir.

While it could be concluded that tree species selection is related to preferred building materials (i.e., lodgepole pine grows straight and is conducive to straighter walls), there is little doubt that material use is also a result of site characteristics. The structure sites are remote and in most cases limited the builder to trees found growing in the immediate vicinity. Exceptions include railway structures, for which logs could have been brought in by rail. However, site selection is ultimately determined by location and function. For example, a trapper would place their structure along a trap line in an area dominated by desired animals.

4.4 Site Characteristics and Tree Species

The tree species and the elevation of each site are linked to one of four ecoregions characteristic of the southern Canadian Rocky Mountains: Montane, Lower Subalpine, Upper Subalpine, and Alpine. It is possible to situate each site into a broader ecoregion classification and conclusions can be made about the general distribution of log structures by ecoregion.

An ecoregion is a unit of ecological land classification characterized by elevation, vegetation features, and macroclimate (Holland and Coen 1982) (Table 4.3). Boundaries between ecoregions are not static and as a result, characteristics of neighbouring ecoregions may blend together. Additionally, elevation boundaries tend to be slightly lower on northerly aspects and higher on southerly aspects (Holland and Coen 1982). For example, a site at 1000 m in BNP may be considered within the Montane ecoregion even though the elevation is lower than the established boundary in Table 4.3. To resolve the issue of transitional boundaries, each site ecoregion has been confirmed with those plotted on maps produced by Holland and Coen (1984 and 1982) (Table 4.4).

It is apparent that the majority of sites in all three parks are situated within the Montane ecoregion: 24 of 36 sites. The remaining sites are located in the Lower Subalpine ecoregion: 12 of 36 sites. None of the structures studied in this thesis were located in the Upper Subalpine or Alpine ecoregions. From these results, it is possible to suggest that the colder temperatures and greater snowfall in the Upper Subalpine and the lack of trees in the Alpine ecoregions limit the construction of log structures. For example, railroad construction would require lower elevation sites that experienced minimal snow cover year round, specifically valley bottoms (e.g., Athabasca River Valley).

It can also be inferred that additional structures located in the parks will be predominantly located in either the Montane or Lower Subalpine regions. However, these conclusions may be biased as a result of sampling strategy: sites were not sought in the Upper Subalpine and Alpine regions.

Table 4.3 - Ecoregions of BNP, JNP, and KNP: defined by elevation and vegetation*.

Ecoregion	National Park		
	BNP	JNP	KNP
Montane	<p>Elevation: c.1350 - 1600 m</p> <p>Vegetation: Dominated by Douglas-fir, lodgepole pine, white spruce, aspen poplar, and grasslands; Engelmann spruce (rare)</p> <p>Macroclimate: Warmest and driest ecoregion; intermittent snow cover (result of warming Chinooks)</p>	<p>Elevation: c.1000 - 1350 m</p> <p>Vegetation: Dominated by Douglas fir, lodgepole pine, white spruce, aspen poplar, and grasslands; Engelmann spruce (rare)</p> <p>Macroclimate: Warmest and driest ecoregion; intermittent snow cover (result of warming Chinooks)</p>	<p>Elevation: c.1000 - 1900 m</p> <p>Vegetation: Douglas-fir, western red cedar, white spruce, and lodgepole pine</p> <p>Macroclimate: Warmest and driest ecoregion; temperature inversions are common</p>
Lower Subalpine	<p>Elevation: c.1600 - 2000 m</p> <p>Vegetation: Dominated by Engelmann spruce, and subalpine fir; lodgepole pine at lower altitudes; white spruce (rare)</p> <p>Macroclimate: Cooler and wetter than Montane; continuous snow cover in winter</p>	<p>Elevation: c.1350 - 1900 m</p> <p>Vegetation: Dominated by Engelmann spruce, and subalpine fir; lodgepole pine at lower altitudes; white spruce (rare)</p> <p>Macroclimate: Cooler and wetter than Montane; continuous snow cover in winter</p>	<p>Elevation: c.1900 - 2000m</p> <p>Vegetation: Engelmann spruce, white spruce, and lodgepole pine</p> <p>Macroclimate: Cooler and wetter than Montane;</p>
Upper Subalpine	<p>Elevation: c.2000 - 2300 m</p> <p>Vegetation: Dominated by Engelmann spruce and subalpine fir; subalpine larch (southern Banff); lodgepole generally absent</p> <p>Macroclimate: Cooler and wetter than Lower subalpine; greater snowfall and shorter growing season</p>	<p>Elevation: c.1900 - 2200 m</p> <p>Vegetation: Dominated by Engelmann spruce and subalpine fir; subalpine larch (southern Banff); lodgepole generally absent</p> <p>Macroclimate: Cooler and wetter than Lower subalpine; greater snowfall and shorter growing season</p>	<p>Elevation: c.2000 - 2350 m</p> <p>Vegetation: Engelmann spruce, subalpine fir; lodgepole pine generally absent</p> <p>Macroclimate: Cooler and wetter than Lower subalpine;</p>
Alpine	<p>Elevation: c2300 m +</p> <p>Vegetation: above tree line; Engelmann spruce (rare)</p> <p>Macroclimate: Coldest ecoregion</p>	<p>Elevation: c2200 m +</p> <p>Vegetation: above tree line; Engelmann spruce (rare)</p> <p>Macroclimate: Coldest ecoregion</p>	<p>Elevation: c2350 m +</p> <p>Vegetation: above tree line</p> <p>Macroclimate: Coldest ecoregion</p>

*Holland and Coen 1984 and 1882, Strong and Leggat 1981, and Rhemtulla *et al.* 2002.

Table 4.4 – Site ecoregions as determined by plotted ecoregions in Holland and Coen 1984 and 1982: sites #1 – 21 & 36 JNP, #22 – 33 BNP, and #34 and 35 KNP.

Site #	Site Name & Elevation	Ecoregion*	Site #	Site Name & Elevation	Ecoregion*
1	Bedson Ridge Cabin: 1000 m	M	19	Evelyn Creek Crib: 1020 m	L.S.
2	Fiddle River Camp: 945 m	M	20	Maligne Lake Outlet Cabin: 1020 m	L.S.
3	Disaster Point Cabin: 1000 m	L.S.	21	Tangle Creek Cabin: 1990 m	L.S.
4	Ram Pasture Structure: 1055m	M	22	Owen Creek Warden Cabin: 1400 m	M
5	Railside Cabin: 945 m	M	23	Saskatchewan Crossing Teepee: 1400 m	M
6	Rocky River Cabin: 985 m	M	24	Glacier Trail Cabin: 1400 m	M
7	Celestine Lake Road Railroad Construction Camp: 1020 m	M	25	Mistaya River Cabin: 1410 m	M
8	Talbot Lake Log Foundation: 945 m	M	26	Glacier Lake Cabin: 1400 m	M
9	Edna Lake Structure: 1020 m	M	27	Indianhead Creek Crib: 1785 m	L.S.
10	Ewan Moberly Homestead: 1022 m	M	28	Hector 9 Mile Cabin: 1850 m	L.S.
11	Morro Peak Structure: 1030 m	M	29	Silver City Cabin: 1420 m	L.S.
12	Hoodoo Ridge Crib: 1030 m	M	30	Billy Carver Cabin: 1430 m	M
13	Athabasca Meeting Place: 1020 m	M	31	Bill Peyto Cabin: 1480 m	L.S.
14	Fiddle River Camp: 945 m	M	32	Turtle Tom's Cabin: 1670 m	L.S.
15	Fiddle River Camp: 945 m	M	33	Fatigue Creek Cabin: 1660 m	L.S.
16	Miette Creek Railroad Construction Camp: 1160 m	M	34	Dog Lake Cabin: 1070 m	M
17	Side Pass Cabin: 1670 m	L.S.	35	Kootenay River Cabin: 1070 m	M
18	Indian Meadow Crib: 1390 m	L.S.	36	Pyramid & Patricia Lakes**: 1128 m	M

*M = Montane; L.S. = Lower Subalpine.

4.5 Summary

This chapter explored the characteristics, including date range and tree species, of the crossdated structure and living chronologies from 36 sites in JNP, BNP, and KNP. The Douglas-fir chronologies had the longest date range (1560 – 2000 AD) and the spruce chronologies included the oldest tree-ring date (1461 AD) for all three Parks.

Lodgepole pine was the most abundantly used species for construction in all three Parks, followed by Engelmann spruce, spruce, Douglas-fir, and white spruce. However, when looking at the parks individually, it was evident that lodgepole pine was favoured in JNP and BNP, while Engelmann spruce was favoured in KNP. Tree species found at the sites were then linked to broader ecoregions and conclusions were made about the general distribution of log structures: log structures are located in the Montane and Lower Subalpine ecoregions.

5.0 Construction Activity in Jasper, Banff, and Kootenay National Parks

5.1 Introduction

This chapter investigates the tree-ring dating results for 35 structure sites (44 structures) in the context of remote construction activity in JNP, BNP, and KNP. Structure construction dates are determined by crossdating floating chronologies with living chronologies prepared by UVTRL members and collaborators (see Chapter 4.0). Each structure is assigned to a functional class and respectively plotted and mapped according to temporal and spatial distributions. The structures are then interpreted in relation to park boundary changes.

5.2 Tree-Ring Dating

A total of 35 sites (44 structures) were sampled and tree-ring dated: 28 structures in JNP, 13 structures in BNP, and 3 structures in KNP (Table 5.1). Five structures did not crossdate (Table 5.2) and, therefore, are limited to a non-chronological discussion. Detailed dating results are presented in Appendix A.

Table 5.1a – Summary of tree-ring dates for structures in JNP, BNP, and KNP.

Site name and official site #	National Park	# of structures	Construction (felling date)	Season
1. Bedson Ridge Cabin [?R]	JNP	1	1907	late summer or early fall
2. Fiddle River Railroad Camp [?R]	JNP	1	1917	late spring to early spring 1918
3. Disaster Point Cabin [?R]	JNP	1	1882	late spring to early spring 1883
4. Ram Pasture Structure [251R]	JNP	1	1895	summer
5. Railside Cabin [?R]	JNP	1	1894	late spring to early spring 1895
6. Rocky River Cabin [?R]	JNP	1	1906	late spring to early spring 1907
7. Celestine Lake Railroad Construction Camp [256R]	JNP	Structure 1 Structure 2 Structure 3 Structure 4	1907 1911 1909 1902	fall to early spring 1908 fall to early spring 1912 fall to early spring 1910 late spring to early spring 1903
8. Talbot Lake Log Foundation [234R]	JNP	1	1908	late spring to early spring 1909
9. Edna Lake Structure [271R]	JNP	1	no date	
10. Ewan Moberly Homestead [283R]	JNP	Structure 1 Structure 2	1904 dB 1906	late summer or early fall fall to early spring 1907
11. Morro Peak Structure [?R]	JNP	1	1909	fall to early spring 1910
12. Hoodoo Ridge Crib [1043R]	JNP	1	1900 B	fall to early spring 1901
13. Athabasca Meeting Place [313R]	JNP	Structure 1 Structure 2 Structure 3	1898 1914 1907	summer summer fall to early spring 1908
14. Keith Lake Cabin [1760R]	JNP	1	1890 B	summer
15. Derr Creek Mine Camp [1171R]	JNP	1	1906	late spring to early spring 1907
16. Miette Creek Railroad Construction Camp [?R]	JNP	Structure 1 Structure 2	1903 1903	fall to early spring 1904 fall to early spring 1904
17. Side Pass Cabin [1657R]	JNP	1	1919 B	fall to early spring 1920
18. Indian Meadow Crib [928R]	JNP	1	1901 B	fall to early spring 1902
19. Evelyn Creek Cabin [?R]	JNP	1	no date	
20. Maligne Lake Outlet Cabin [?R]	JNP	1	1913	late spring to early spring 1914
21. Tangle Creek Cabin [1700R]	JNP	1	1904 B	fall to early spring 1905
22. Owen Creek Warden Cabin [1483R]	BNP	1	1911	late spring to early spring 1912

Table 5.1b – Summary of tree-ring dates for structures in JNP, BNP, and KNP.

Site name and official site #	National Park	# of structures	Construction (felling date)	Season
23. Saskatchewan Crossing Teepee [1445R]	BNP	1	1923	late spring to summer
24. Glacier Trail Cabin [1445R]	BNP	1	1907	late spring to early spring 1908
25. Mistaya River Cabin [1443R]	BNP	1	1904 B	late summer to early spring 1905
26. Glacier Lake Cabin [447/ 1224R]	BNP	1	1924 B	fall to early spring 1925
27. Indianhead Creek Crib [1755R]	BNP	1	1890	summer
28. Hector 9 Mile Cabin [1747R]	BNP	1	1915 B	fall to early spring 1916
29. Silver City Cabin [80R]	BNP	1	no date	
30. Billy Carver Cabin [61R]	BNP	Structure 1* Structure 2*	1913 B 1933 B	fall to early spring 1914 fall to early spring 1934
31. Bill Peyto Cabin [1920R]	BNP	1	1932 B	fall to early spring 1933
32. Turtle Tom's Cabin [1699R]	BNP	1	no date	
33. Fatigue Creek Cabin [2030R]	BNP	1	no date	
34. Dog Lake Cabin [1031T]	KNP	1	1914	fall to early spring 1915
35. Kootenay River Cabin [368T]	KNP	Structure 1 Structure 2	1913 1913 B	fall to early spring of 1914 fall to early spring of 1914

* Billy Carver Cabin structures 1 and 2 are sections of one structure, however their distinct dating differences merit treatment as separate building episodes.

Table 5.2 - Possible factors prohibiting the crossdating of five structures.

Structure	Possible factors prohibiting crossdating
Edna Lake Structure (#9)	<ul style="list-style-type: none"> • No living chronology taken from structure site • Very narrow perimeter rings (difficult to measure), creating a complacent ring series • Attributed to railroad construction (logs may have been brought from different location)
Evelyn Creek Cabin (#19)	<ul style="list-style-type: none"> • No living chronology taken from structure sites • Too few rings in samples (young trees used in construction)
Silver City Cabin (#29)	<ul style="list-style-type: none"> • Complacent living chronology • Living chronology too young (no temporal overlap with structure chronology) • Very narrow perimeter rings (difficult to measure), creating a complacent ring series
Turtle Tom's Cabin (#32)	<ul style="list-style-type: none"> • Complacent living chronology • Living chronology too young (no temporal overlap with structure chronology) • Very narrow perimeter rings (difficult to measure), creating a complacent ring series
Fatigue Creek Cabin (#33)	<ul style="list-style-type: none"> • Complacent living chronology • Living chronology too young (no temporal overlap with structure chronology) • Very narrow perimeter rings (difficult to measure), creating a complacent ring series

5.3 Structure Functional Classes

Structure functional classes are based on interpretations made by Parks Canada, local historians, and in UVTRL reports regarding each structure, including structure date, location, form, and remnant materials in the context of Park history (Table 5.2).

Table 5.3a - Categorizing structure functional class by primary purpose, as interpreted by Parks Canada, local historians, and the UVTRL.

Functional Class	Primary Purpose
Railroad Construction	<p>Related to Railroad construction in the Parks, specifically overlaps with construction periods and locations. May include:</p> <ol style="list-style-type: none"> 1) Habitation structures: the structure's primary purpose is to house railroad employees. 2) Storage structures: housing blasting materials and related construction equipment and materials. <p>11 structures included: Bedson Ridge Cabin, Celestine Lake Road Railroad Construction Camp (4 structures), Miette Creek Railway Construction Camp (2 structures), Morro Peak Structure, Ram Pasture Structure, Railside Cabin, and Edna Lake Structure.</p>
Trapper or Outfitter	<p>Related to seasonal habitation for the purposes of nomadic life, including guiding, outfitting, hunting, and trapping activities. May include:</p> <ol style="list-style-type: none"> 1) Secluded appearance: situated away from main trails or roadways; possibly hidden by vegetation or natural features; small, low to the ground form. 2) Remnant materials: cooking equipment (ie. pots and pans). 3) Evidence of seasonal habitation (ie. archival records stating seasonal trap line location). <p>8 structures included: Mistaya River Cabin, Glacier Trail Cabin, Saskatchewan Crossing Teepee, Glacier Lake Cabin, Tangle Creek Cabin, Side Pass Cabin, Turtle Tom's Cabin, and Fatigue Creek Cabin.</p>
Homesteads and Outbuildings	<p>Related to permanent habitation for the purposes of a sedentary lifestyle, includes farming activities as a means of subsistence. May include:</p> <ol style="list-style-type: none"> 1) Large structures with multiple outbuildings: houses, storage facilities, barns. 2) Evidence inferring sedentary lifestyle of habitants (ie. archival records stating occupancy period); exception is the Evelyn Creek Cabin which was used seasonally. <p>10 structures included: Ewan Moberly Homestead (2 structures), Billy Carver Cabin (2 structures*), Kootenay River Cabin (2 structures*), Hoodoo Ridge Crib, Dog Lake Structure, Bill Peyto Cabin, and Evelyn Creek Cabin.</p>
Warden Service	<p>Related to the warden service, and includes patrol cabins used by Parks Canada employees. May include:</p> <ol style="list-style-type: none"> 1) Solidly constructed cabin with living quarters. 2) Situated along established Parks Canada patrol routes. <p>3 structures included: Owen Creek Warden Cabin, Hector 9 Mile Warden Cabin, and Maligne Lake Outlet Cabin.</p>

*In some cases, sections of a primary structure are treated as separate structures. They are treated as such if they have a distinctly different dating period (i.e., BCC) or are not attached, but significantly close (i.e., within 1 m) so that they appear to be additions to one main structure (i.e., KRC).

Table 5.3b - Categorizing structure functional class by primary purpose, as interpreted by Parks Canada, local historians, and the UVTRL.

Functional Class	Primary Purpose
Burial Sites	Related to human burials. May include: <ol style="list-style-type: none"> 1) Crib-like form, lacking a roof, with burial mound inside. 2) Grave marker (i.e., cross). 2 structures included: Indian Meadow Crib, and Indianhead Creek Crib.
Mining	Related to mining activities. May include: <ol style="list-style-type: none"> 1) Close proximity to a mine. 2) Living quarters: root cellar, multiple rooms that make function as sleeping and eating areas. 1 structure included: Derr Creek Mine Cabin.
Multiple Use	Related to various activities in the Parks. May include: <ol style="list-style-type: none"> 1) Links to fur trade, railroad construction, logging, social gatherings, Métis occupation, warden service, and guide/ outfitting. 3 structures include: Athabasca Meeting Place (3 structures).
Unknown	Insubstantial evidence for determining function. 6 structures included: Disaster Point Cabin, Keith Lake Cabin, Rocky River Cabin, Talbot Lake Log Foundation, Fiddle River Cabin, and Silver City Cabin.

*In some cases, sections of a primary structure are treated as separate structures. They are treated as such if they have a distinctly different dating period (i.e., BCC) or are not attached, but significantly close (i.e., within 1 m) so that they appear to be additions to one main structure (i.e., KRC).

5.4 Construction Activity

5.4.1 General Construction Activity

All of the tree-ring dated structures were built between 1882 and 1933, with a prominent building episode between 1903 and 1915 (Figure 5.1). One log from the Kootenay River Cabin (#35) dated to 1940, however, it is considered a replacement log in a structure that was built in 1913. The heightened building activity between 1903 and 1915 corresponds with transportation route construction in all three parks (Lothian 1987). The majority of structures are related to railroad construction and homesteading.

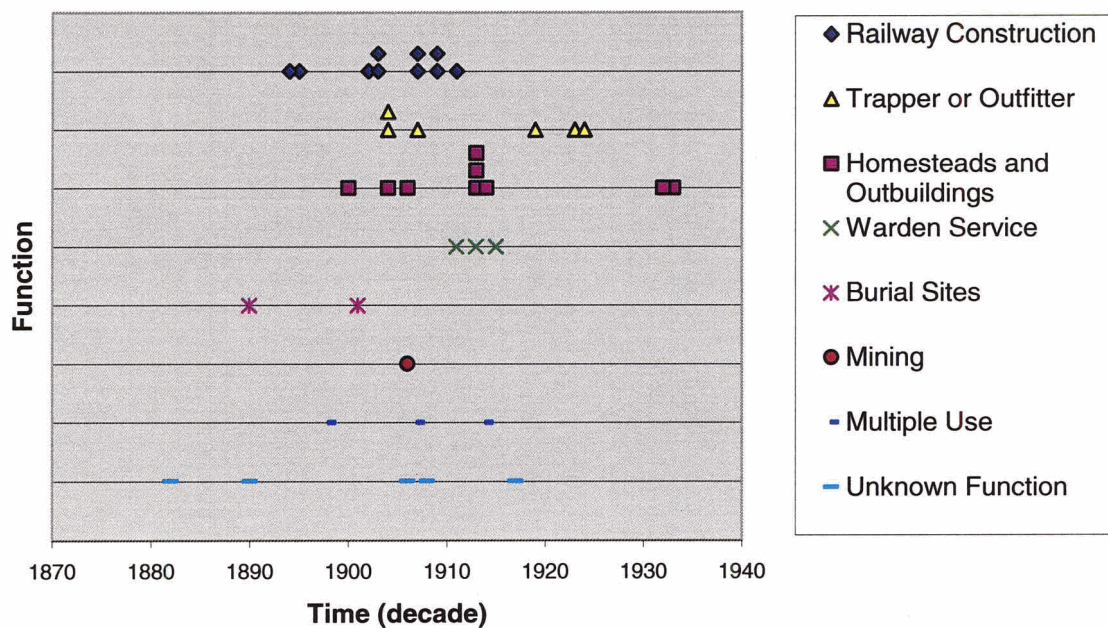


Figure 5.1 – Thematic timeline for 39 tree-ring dated structures. Time (decade) is presented on the x-axis and function (structure functional class) is presented on the y-axis. Five structures could not be crossdated and are therefore excluded from the thematic timeline.

5.4.2 Railroad

All 10 structures attributed to railroad construction between 1894 and 1911 are located in JNP. They exist along the corridor that runs from the northeast park gate near Brûlé, Alberta to the east park gate at Yellowhead Pass (Figure 5.2). One structure (Edna Lake Structure #9) located in JNP could not be crossdated.

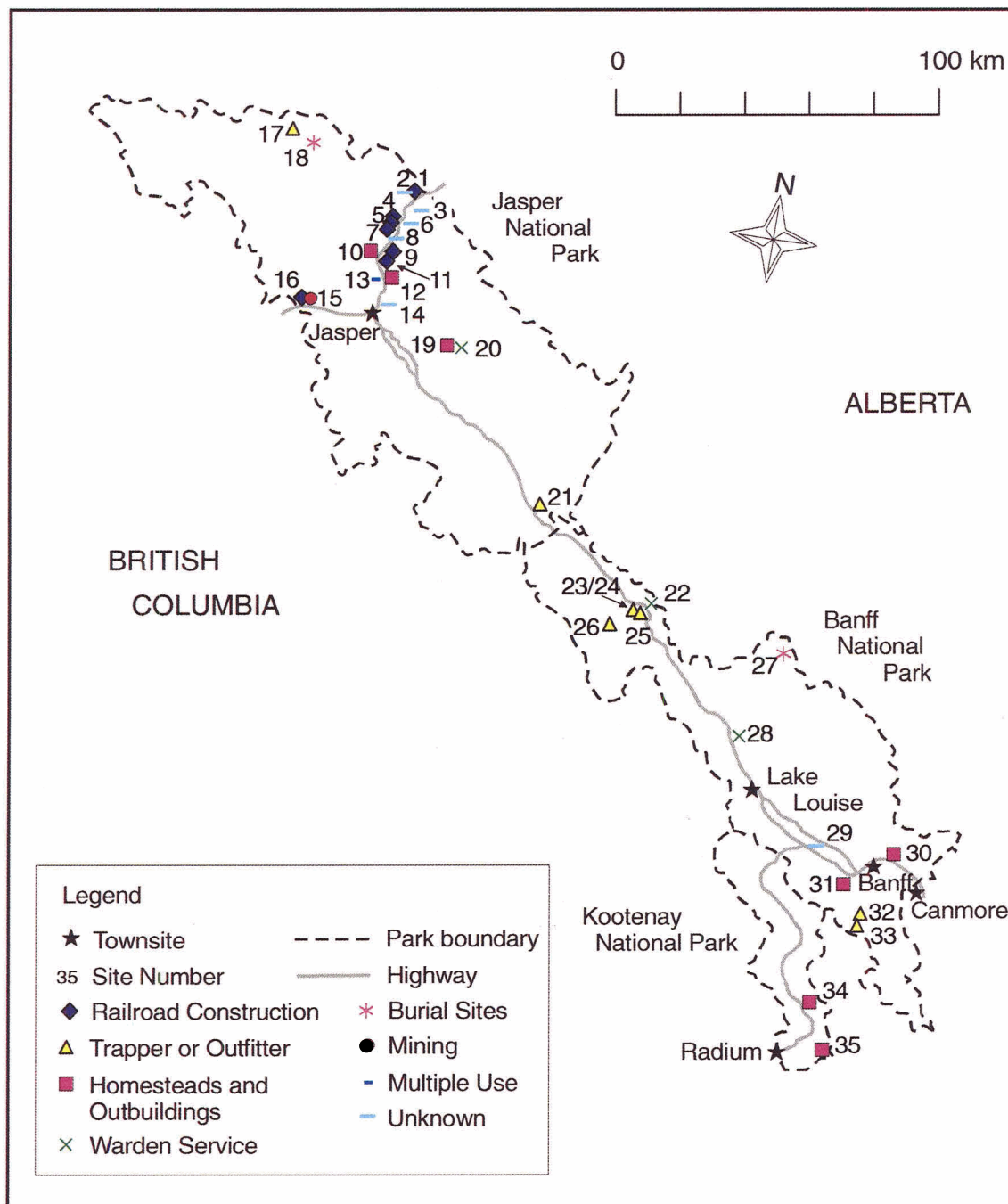


Figure 5.2- Geographical distribution of structures by functional class.
Adapted from Heggen 2003.

Surveys for railroad construction in JNP occurred in this area between 1908-1910 (Wallace 2002b), and the Grand Trunk signed construction contracts in 1909 and 1910. The Canadian Northern Railway Company began a secondary route in 1911 (Lothian

1987). It is evident that some of the structures in the railroad construction class pre-date these activities (Figure 5.1). These earlier dates are the result of a lack of bark and presumably multiple missing perimeter rings. Nevertheless, established evidence from Parks Canada and local historians attribute these structures to railroad construction (see Appendix A).

5.4.3 Trapper and Outfitter Structures

Six of the trapper and outfitter structures are located in BNP, two of which could not be crossdated (Turtle Tom's Cabin #32 and Fatigue Creek Cabin #33), and two are located in JNP. The structures correspond to two periods: 1904 – 1907 (Tangle Creek Cabin #21, Glacier Trail Cabin #24, and Mistaya River Cabin #25) and 1919 – 1924 (Side Pass Cabin #17, Saskatchewan Crossing Teepee #23, and Glacier Lake Cabin #26); at a time when these sites were outside of park boundaries (Figure 5.3).

It is plausible that these structures were used for multiple years, as they, excluding Side Pass Cabin (#17), are attributed to Jimmy Simpson, who was known to outfit in the area of Saskatchewan Crossing well into the 1920s (refer to Chapter 6.0; Hart 1993). It is possible that Simpson worked out of the first cluster (1904 – 1907) and then built additional structures as his business grew, specifically Saskatchewan Crossing Teepee (#23) (1923), and Glacier Lake Cabin (#26) (1924). The structures in the region of Saskatchewan Crossing were incorporated into JNP when boundaries were extended in 1927, and later transferred to BNP in 1929, at which time JNP northern boundaries were also extended to include Side Pass Cabin (#17) (Lothian 1976). The incorporation of the Saskatchewan Crossing region came with hostility from outfitters who guided in the area for many years (Lothian 1976). With an established outfitting lodge at Bow Lake (Num-Ti-Jah), approximately 35 km southeast of Saskatchewan Crossing, it is likely Simpson continued to bring groups through the area; however it is difficult to determine whether he continued to hunt or trap, which would have been prohibited by park regulations (Burns and Schintz 2000). Side Pass Cabin (#17) may have also been used after its inclusion into JNP; however this hypothesis is difficult to verify without additional research and artifact dating.

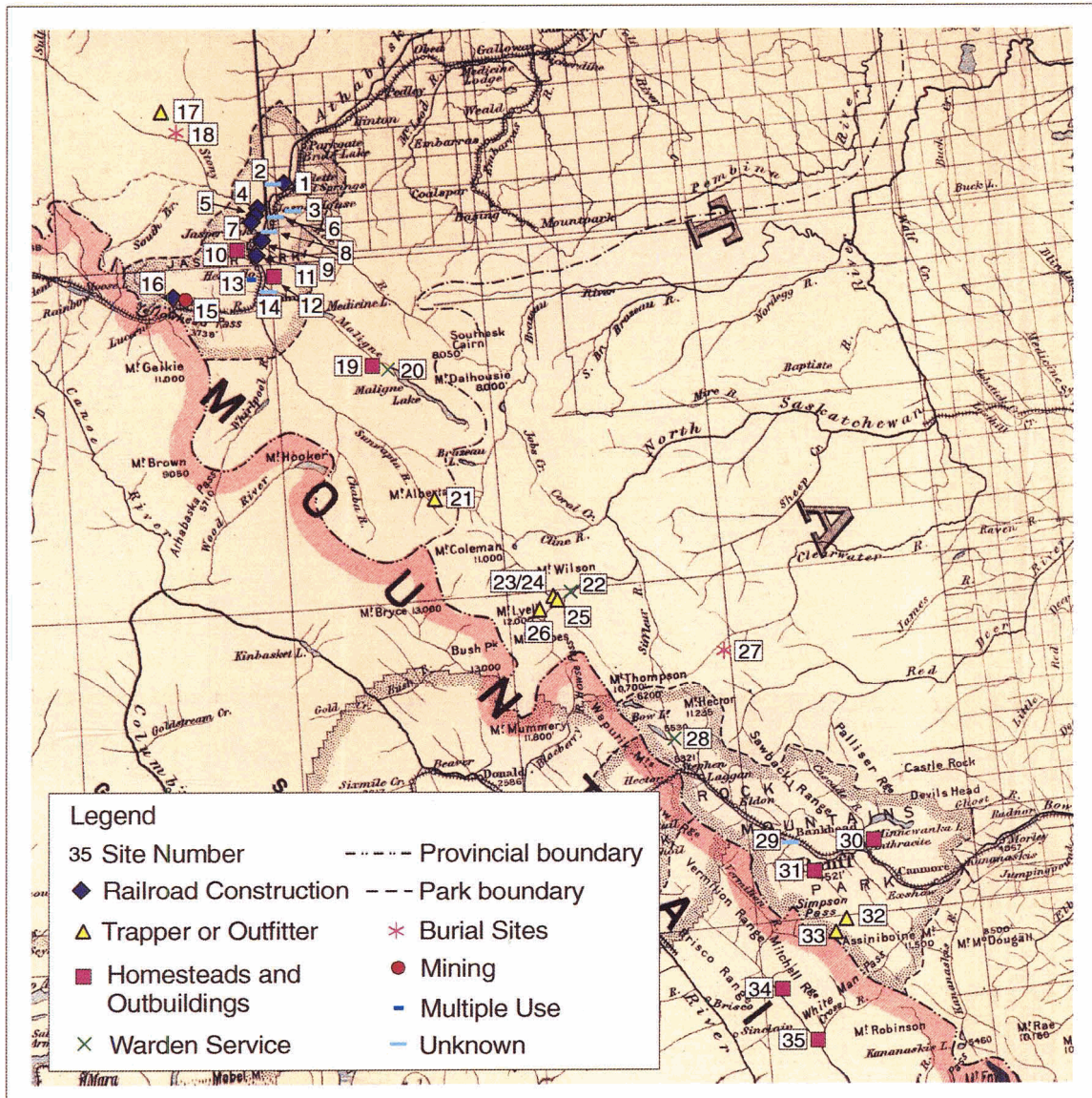


Figure 5.3 - 1915 Park boundaries in relation to log structures. Refer to table 5.1a/b for structure names (i.e., Bedson Ridge Cabin #1). Adapted from Dowling 1915 and reproduced with the permission of the Minister of Public Works and Government Services Canada, 2004 and Courtesy of Natural Resources Canada, Geological Survey of Canada.

5.4.4 Homesteads and Outbuildings

Homesteads and outbuildings are located in all three parks, and date from 1900 – 1933. Each park appears to have its own construction phase: JNP (1900 – 1906), KNP (1913 – 1914), and BNP (1913 – 1933).

JNP was established in 1907, and as a result families with established homesteads were evicted to outlying areas (Wallace and Meropoulis 2000). It is, therefore, not surprising that the sampled homestead structures in the park date to 1907 or earlier. The Evelyn Creek Cabin (#19) did not crossdate. However, information gathered from local historian Bill Ruddy (Brelsford 2002f) suggests the structure was built in the 1970s, at which time it would have been within JNP boundaries and, therefore, was built illegally (Lothian 1976).

The structures examined in KNP pre-date establishment of the park in 1920 (Lothian 1987), and relate to the homesteading period (1900 –1920) (Francis 1995). The 1913 – 1914 dating cluster is likely related to early surveys and construction of the Banff-Windermere Highway. While explorers used the route as early as the 1840s, it was not until 1911 that formal surveys for road construction began. A shortage of funds in 1913 led to a halt in surveys and construction, which did not resume until 1920 (Lothian 1976). Nevertheless, early surveys and construction likely coincided with an increase in people working and traveling through the area, potentially resulting in the need to establish homesteads and related outbuildings along the survey corridor. It is also possible that these structures were used after their incorporation into KNP.

An exact abandonment date for the Kootenay River Cabin (#35) is unknown, but a replacement log dating to 1940 was found in the structure. This date places the structure within park boundaries while in use. However, Parks Canada records reveal W.A. Dillon registered the structure as a homestead in 1913, presumably legalizing structure use until at least 1940 (Francis 1995). It is unknown whether Dog Lake Cabin, which functioned as a barn, was registered as a homestead. However, a carving on the structure exterior stating “John Abrahams May 13, 1942” does infer the structure may have been in use after Park creation in 1920. John Abrahams could be the original builder or a visitor after abandonment.

The two homesteads in BNP were constructed within park boundaries between 1913 and 1933 (Lothian 1976; Lothian 1987). The Billy Carver Cabin (#30) is in close proximity

to the mining town of Anthracite (Hart 1999), however, it closed in 1904, pre-dating construction of the Billy Carver Cabin (#30). The Bill Peyto Cabin (#31) is approximately 10 km west of the Banff townsite. A direct corridor linking the cabin to the Banff townsite was not established until construction of the Trans-Canada Highway in 1958 (Lothian 1976). Both structures appear to be illegal homesteads.

5.4.5 Warden Service

Three warden service structures were sampled and date from 1913 – 1915.

Of the three structures, the Hector 9 Mile Warden Cabin (#28) was apparently the only one inside park boundaries when built in 1915 (Figure 5.3). It was one of a string of patrol cabins utilized by the warden service before vehicle travel (Perry 2003). A main transportation route was not put through the area until highway construction in the 1930s (Lothian 1987). Furthermore, the 1915 map fails to incorporate adjustments made in 1914 to extend JNP boundaries close to the original dimensions of 1911; boundaries in 1914 would have likely extended to re-include Maligne Lake (Lothian 1976). The Maligne Lake Outlet Cabin (#20) had a minimum date of late spring 1913 to early spring of 1914, but there was no bark present on any of the samples and likely missing perimeter rings. It is possible the structure was built sometime during or after 1914 in response to the extension of the park boundaries.

The area of the Owen Creek Warden Cabin (#22) was not incorporated into JNP until 1927. It was transferred to BNP in 1929 (Lothian 1976). This date conflicts with the minimum tree-ring date of 1911 and the Parks Canada inference that the structure was built in 1915 (Perry 2003). However, an infield assessment by UVTRL members inferred that surface dressing removed 10 to 20 perimeter rings on many logs (Smith 1999). Considering this inference, it is possible that the structure was built between 1921 and 1931, placing it during both JNP and BNP occupation of Saskatchewan Crossing.

5.4.6 Burial Sites

Two burial sites, one in BNP (Indianhead Creek Crib #27) and the other in JNP (Indian Meadow Crib #18), date to 1890 and 1901 respectively, placing them outside park boundaries during construction (Figure 5.3). Both sites were not incorporated into their respective parks until boundary adjustments made in 1929 (Lothian 1976). Local historians in BNP link the Indianhead Creek Crib (#27) to the Stoney First Nations, who likely traveled through the area hunting for sheep (Davies and Keith 2002). JNP local historians hypothesize that the Indian Meadow Crib (#18) is related to the Jasper House People, Métis of Iroquois and Cree descent, who trapped in the area during the 1800s and into the early 1900s (Hallam 2002; Peterson 2002).

5.4.7 Mining

Only one structure is directly attributed to mining: Derr Creek Mine Camp (#15) with a minimum construction date of 1906. According to Parks Canada this structure was likely used as a miner's cabin and is associated with a graphite mine (Parks Canada site 1173R) (Perry 2003). Commercial mining continued in the parks until the 1930s, and many small-scale operations continued into the 1950s (Bella 1987).

5.4.8 Multiple Use

The three structures sampled at Athabasca Meeting Place (#13), located in JNP, date to 1898 (structure 1), 1907 (structure 3), and 1914 (structure 2). Structure 1, a building footprint, pre-dates the 1907 establishment of JNP, at which time the site was incorporated into the Park (Lothian 1987). Local historians Bob Hallam, Tom Peterson, and Tom Vinson believe that the site is linked to multiple functions: fur trade (c. 1824 – 1849), railroad construction (c. 1910 – 1913), logging (c. 1919), and a Jasper resident gathering place (c. 1950s) (Brelsford 2002d; 2002e). Parks Canada also suggests the site may relate to the warden service, guide outfitting and Métis occupation (Porter 1998). However, the minimum dates for structures range from 1898 – 1914 and therefore the structures likely correspond to railroad construction and logging activities. An examination of *in-situ* artifacts could help clarify the occupation period(s).

5.4.9 Unknown

Five structures, all located in JNP, have unknown functions and date from 1882 – 1917. One structure located in BNP, is of both unknown date and function. Three of the structures, Disaster Point Cabin (#3) (1882), Keith Lake Cabin (#14) (1890), and Rocky River Cabin (#6) (1906), pre-date park establishment (Lothian 1976); the remaining two structures, Talbot Lake Log Foundation (#8) (1908) and Fiddle River Cabin (#2) (1917), date within 10 years of park creation. While the dates provided could suggest links to railroad construction or trapping activities, there are no supporting documents from Parks Canada or inferences from local historians to make such conclusions. Further research is needed in order to make adequate conclusions on structure functions.

5.5 Summary

A total of 35 structure sites (44 structures) were sampled and tree-ring dated: 28 structures in JNP, 13 structures in BNP, and 3 structures in KNP. All of the dated structures were constructed between 1882 and 1933, with a prominent building episode between 1903 and 1915. The structures are attributed to one of eight functional classes. Listed in descending order of occurrence, they are: railroad construction (11 structures), homesteads and outbuildings (10 structures), trapper or outfitter structures (8 structures), an unknown function category (6 structures), warden service (3 structures), multiple use (3 structures), burial sites (2 structures), and mining (1 structure). Structures were related to specific events or people in park history and compared to park boundary changes, specifically whether the structures were inside established boundaries, outside of established boundaries, or incorporated into boundaries after construction.

6.0 Case Studies

6.1 Introduction

The following chapter applies tree-ring analysis and explores the construction sequence (tree-ring dates) and structure context (builder and function) of three log structure groupings: 1) Ewan Moberly Homestead; 2) Billy Carver Cabin; and 3) Jimmy Simpson structures: Tangle Creek Cabin, Glacier Lake Cabin, Mistaya River Cabin, Glacier Trail Cabin, and Saskatchewan Crossing Teepee. Each case study follows a common format: introduction, site description, structure condition, structure context, tree-ring analysis, and conclusion. The Jimmy Simpson case study varies slightly in format in that each of the 5 structures is evaluated individually. The final result is a clarification of structure construction sequence and structure context.

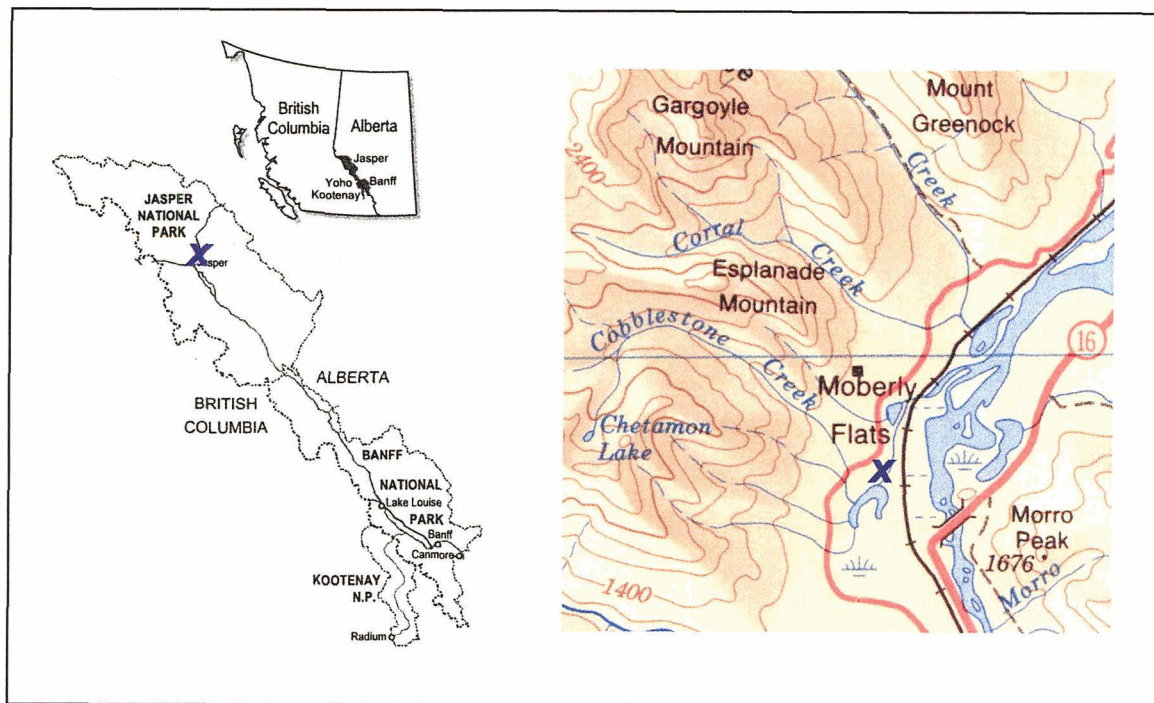
6.2 Case Study 1: Ewan Moberly Homestead

The Ewan Moberly Homestead (Figure 6.1) is located in the Athabasca River Valley of JNP along Celestine Lake Road, approximately 600 m north of Cobblestone Creek (Figure 6.2) (Sumpter *et al.* 1992). The Ewan Moberly family constructed the two main habitation structures between 1877 and 1906.



Figure 6.1 - Ewan Moberly Homestead, JNP (photo orientation: westward facing). Source: Parks Canada Agency ID#283R-mh0014.

Figure 6.2 - Ewan Moberly Homestead. Adapted from Natural Resources Canada 1985a map. This map is based on information taken from The Atlas of Canada. © 2004. Her Majesty the Queen in Right of Canada with permission of Natural Resources Canada.



The site consists of two main shed-like habitation structures (Figure 6.1), which are slightly raised on a sandy ridge in an aeolian-capped alluvial fan landscape dominated by grass, spruce, and aspen (Sumpter *et al.* 1989; Sumpter *et al.* 1992). Other structures include a storage cellar, a grave, a number of depressions near Celestine Lake Road, a bridge and trail remains, and a log perimeter fence outlining an area of 600 m by 360 m (Pickard 1984; Sumpter *et al.* 1989; Sumpter *et al.* 1992). Additional depressions between the river and the homestead likely functioned as barns (Brelsford 2002e). This technique of incorporating a dugout depression was documented in 1865 by Milton and Cheadle (1970) and is linked to Métis building traditions. They specifically describe a structure built by their Métis guide consisting a low wooden frame with cut out windows and doors and a dugout floor. The design was intended to raise the structure height and render the building warmer (Milton and Cheadle 1970).

The main structure is approximately 6.8 m long, 6.2 m wide, and 3.2 m high and is constructed of Engelmann spruce, lodgepole pine, and Douglas-fir logs connected by dovetail joinery (Figure 6.3). The logs have been hewn flat and are insulated with wood and mud chinking. Both sides A and C have centrally located doorways, while sides B and D have centrally located windows. Originally logs supported an upper loft; notches that held these beams are still visible (Pickard 1984). It is possible that the loft functioned as sleeping quarters.

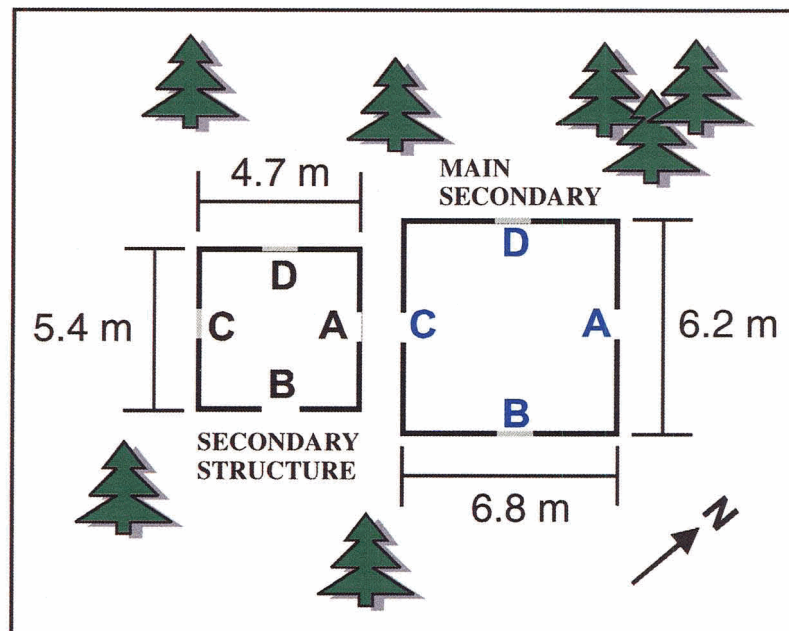


Figure 6.3 - Ewan Moberly Homestead dimensional drawing.

The secondary structure functioned as a storage shed, as inferred by Parks Canada personnel, and is approximately 5.4 m long, 4.7 m wide, and 2.7 m high. It is built from hewn Engelmann spruce and lodgepole pine logs connected by V-notched joinery (Figure 6.3) (Pickard 1984). The structure presently lacks a roof, however, *in situ* crossbeams suggest its previous existence. Sides B and D have centrally located open doorways, while sides A and D have centrally located open windows. Both structures consist of one room with no remnant materials.

The architectural form of the main structure is similar to what Kalman (1994) describes as the architecture of the Métis. The dovetail notched horizontal logs are the standard for

Métis farm buildings in Canada's western interior (Kalman 1994). As a result, it is apparent that there is a commonality between the ethnicity of the builder and their building tradition. The V-notching on the secondary structure, a variant of the saddle notch and common in the German building tradition (Glassie and Kniffen 1966), is a simpler and less durable notching and infers a temporary existence for this structure.

6.2.1 Structure Condition: Stabilization

Parks Canada, the Métis Nation of Alberta, and Métis living in the Jasper region initiated the Ewan Moberly Building Stabilization project in 1995. It was viewed as a step towards the protection and appreciation of Métis history. Many Métis descendants, including Mike Moberly, the great grandson of Ewan Moberly, played a key role in the restoration process (Figure 6.4) (Wallace and Meropoulis 2000). Stabilization began with the installation of temporary protective support posts on the main structure's gable ends (Figure 6.5) (Wallace and Meropoulis 2000). Following this construction, the roof, window and doorframes were replaced and the upper wall logs and gable ends were replaced in order to strengthen the structure (Figure 6.6). Construction was based on authentic reproduction where possible, including the creation of hewn logs, roof shingles, and connective dovetail joinery. The main structure of the Homestead is now in stable condition (Figure 6.7).



Figure 6.4 - Mike Moberly hewing replacement beams for the main structure of the Ewan Moberly Homestead. Source: Parks Canada Agency ID#283R-mh0102.



Figure 6.5 - Stabilizing the EMH main building in preparation for restoration (photo orientation: eastward facing). Source: Parks Canada Agency ID#283R-mh0018.



Figure 6.6 - In progress: replacement of roof and associated features (photo orientation: eastward facing). Source: Parks Canada Agency ID#283R-mh0029.



Figure 6.7 - Ewan Moberly Homestead: post stabilization (photo orientation: westward facing). Source: Parks Canada Agency ID#283R-mh0089.

6.2.2 Structure Context: The Moberly Family

From the early 1800s until the beginning of the twentieth century, the Athabasca River Valley was home to various Métis peoples, including the Moberly, Joachim, and Findlay families. With the creation of Jasper National Park in 1907, these families were evicted to new residences in outlying areas, including the Hinton, Edson, and Grand Cache areas.

Many families sold established homesteads to the Parks service; the remains of which are still to be found (Wallace and Meropoulis 2000). The Ewan Moberly family left their imprint in the form of two primary log buildings and various outbuildings collectively called the Ewan Moberly Homestead (Figure 6.1).

Ewan Moberly was the Métis son of Henry John Moberly, a Hudson Bay Company trader based at Jasper House during the 1850s, and Suzanne Cardinal, a woman of Iroquois descent who is buried at the Ewan Moberly Homestead (Gainer 2002) (Figure 6.8). Around 1861, H.J. Moberly abandoned his family, leaving S. Cardinal to raise their two sons, Ewan and John, alone (Murphy 2002).

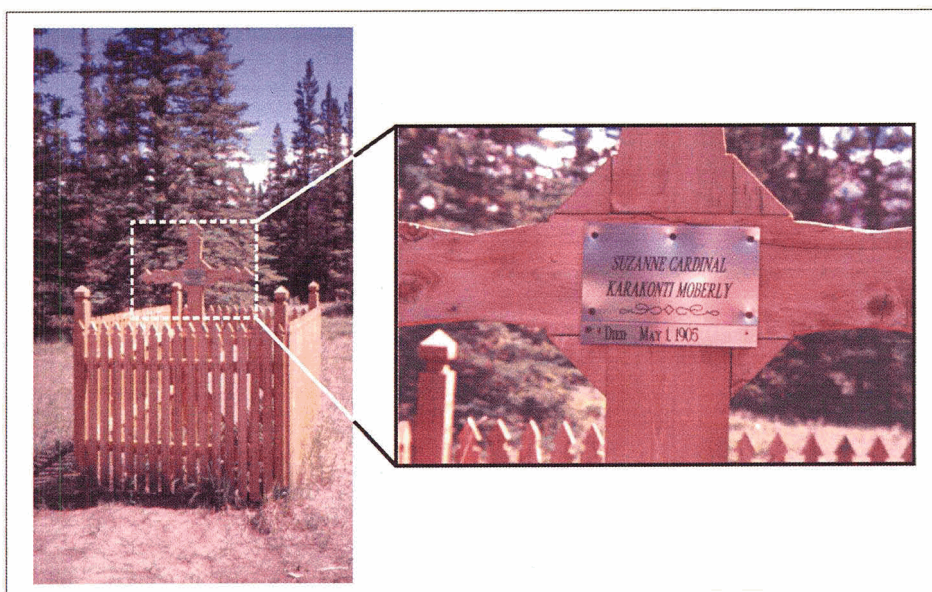


Figure 6.8 - Suzanne Cardinal Grave Site. Inscription on grave marker reads: Suzanne Cardinal Karakonti Moberly Died May 1st 1905. Photos: July 2001.

It is unknown whether H.J. Moberly originally settled the site of the Ewan Moberly Homestead or whether S. Cardinal settled here with her children after his departure. However, the remains of an additional structure consisting of multiple depressions and a chimney mound are located approximately 160 m northwest of the Ewan Moberly Homestead (Pickard 1984). The remains may represent the Moberly's first settlement structure.

It is believed that Ewan Moberly began occupation and construction of his homestead in 1897 (Wallace 2002a). His brother John created his own homestead on the opposite (eastern) side of the Athabasca River; an illegal campfire burned it down in 1989 (Figure 6.9) (Brelsford 2001a). As a result, the Ewan Moberly Homestead is one of the last intact Métis structures in the Athabasca River Valley.



Figure 6.9 - John Moberly Homestead, JNP. Photo: July 2001.

Ewan Moberly worked the land surrounding the homestead by raising livestock and farming oats and barley (Pickard 1984; Murphy 2002). Here he and his wife Madeleine raised a family, consisting of three sons, Adolphus, William, and Joe and four daughters, Friesen, Adelaide, Clarice, and Alecta (DeCandole 1990).

The homestead is located near one of the only historically safe areas where it is possible to ford the Athabasca River. “[I]t became common practice for travelers [crossing the river] to shoot a rifle into the air indicating their need for assistance. Members of the Moberly family would then take them across by canoe, and if needed help herd their horses across the river” (McLay 2001). The remains of an undated bridge can also be

found in one of the river tributaries east of the Moberly Flats (Figure 6.10); it was likely built to aid in river crossing.



Figure 6.10 - Remains of bridge crossing Athabasca River tributary east of the Moberly Flats (photo orientation: southeastward facing). Photo: July 2001.

With the creation of Jasper Park, the Moberlys were evicted from their homestead to Grande Cache in the spring of 1909 (Murphy no date). The Moberlys received \$1670 from the federal government for their buildings, which were subsequently employed by the Warden Service (Gainer no date; Pickard 1984; DeCandole 1990).

6.2.3 Tree-Ring Analysis

Previous investigations have inferred that Ewan Moberly initially built his homestead continuously from 1897 and abandoned the site in the spring of 1909 in response to the creation of Jasper Park in 1907 (Pickard 1984; Murphy 2002; Wallace 2002a). The following analysis clarifies the construction sequence of the Ewan Moberly Homestead, where the main structure dates from 1899 to 1904 (Table 6.1).

Table 6.1 - Summary of results for tree-ring samples collected from the Ewan Moberly Homestead (main structure: 01EMH1-cd.txt). Pearson's r -values represent a measure of correlation between the Ewan Moberly Homestead cores (individual a/b pairs: 01EMH1-fc.txt) and the living chronology (99Spruce.txt) at a 99% confidence interval and at 50 lag 25 interval (except 102 at 25 lag 12 and 105 and 106 at 15 lag 7).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01EMH10 2	DF	SIDE A; BOTTOM LOG	LW; B (D.B)	1920 - 2000F	81	N/A	N/A
01EMH10 3	LP	SIDE B; 3 rd LOG UP	LW; NO B	1861 - 2000F	140	N/A	N/A
01EMH10 4	ES	SIDE D; 5 th LOG UP	INC. LW; B (D.B.)	1782 - 1904	123	1904	0.326
01EMH10 5	ES	SIDE A; 10 th LOG UP	LW; NO B	1970 - 2000F	31	N/A	N/A
01EMH10 6	ES	SIDE C; 10 th LOG UP	LW; NO B	1962 - 2000F	39	N/A	N/A
01EMH10 7	ES	SIDE A; 4 th LOG UP	LW; NO B	1764 - 1899	136	1899	0.361*
01EMH10 8A	ES	REPLACED BEAM	LW; B; SAMPLED IN PARKS COMPOUND; PITH	1758 - 1903	146	1903	0.322
01EMH10 8B	ES	REPLACED BEAM	LW; B; SAMPLED IN PARKS COMPOUND; PITH	1758 - 1903	146	1903	0.325
01EMH10 9A	ES	REPLACED BEAM	EW; NO B; SAMPLED IN PARKS COMPOUND	1754 - 1903	150	1903	0.463*
01EMH10 9B	ES	REPLACED BEAM	EW; NO B; SAMPLED IN PARKS COMPOUND; PITH	1751 - 1901	151	1901	0.332
01EMH11 0A	ES	REPLACED BEAM	LW; NO B; SAMPLED IN PARKS COMPOUND; PITH	1945 - 2000F	56	N/A	N/A
01EMH11 0B	ES	REPLACED BEAM	LW; NO B; SAMPLED IN PARKS COMPOUND; PITH	1945 - 2000F	56	N/A	N/A
01EMH11 1A	ES	REPLACED BEAM	LW; NO B; BG; SAMPLED IN PARKS COMPOUND; PITH	1814 - 1903	90	1903	0.703*
01EMH11 1B	ES	REPLACED BEAM	LW; NO B; BG; SAMPLED IN PARKS COMPOUND	1814 - 1903	90	1903	0.657*
MEAN PERSON'S r -VALUE							0.436

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Five radii produced a cutting date between the fall of 1903 and the early spring of 1904. However, one radius crossdated with the living chronology and produced a construction

date during the late summer to early fall of 1904, as indicated by the presence of bark and incomplete latewood.

- Remaining samples date between 1899 and 1903, with a 3-sample (5 radii) cluster dating from the fall of 1903 to the early spring of 1904.
- Samples 01EMH102 (Douglas-fir) and 01EMH103 (lodgepole pine) did not crossdate with the Engelmann spruce living chronology (99spruce.txt); this is likely a result of attempting to crossdate different species. A same species living chronology (Douglas-fir) was available for sample 01EMH102, however, the sample still did not crossdate. Upon re-examining the wood it is evident that 01EMH102 contains multiple sections of reaction wood and broken radii; these factors are likely responsible for unsuccessful crossdating.
- Samples 01EMH105, 01EMH106 and 01EMH110a/b also failed to crossdate with the living chronology. In considering the age of these samples and tree-ring patterns, this result is presumably a consequence of too few tree-rings and complacent sequences.

The secondary structure dates from 1877 to 1906 (Table 6.2). Eight of 13 samples crossdated with the living chronology. Two of the samples produced a cutting date of 1906; both samples originally contained bark, while one displayed earlywood and the other latewood. Therefore, the most recent construction activity occurred between the summer of 1906 and the early spring of 1907. However, due to the unsuitable condition of winter snow packs in the southern Canadian Rocky mountains, it is likely fall 1906 is the most recent cutting date.

- The remaining samples date from 1877 to 1905, all of which originally contained bark when sampled.

- Six of the samples from the secondary structure did not crossdate; this was due to a combination of reaction wood, very narrow ring sequences, complacent ring sequences, and broken sequences near the bark.

Table 6.2 - Summary of results for tree-ring samples collected from the Ewan Moberly Homestead (secondary structure: 01EMH2-cd.txt). Pearson's r -values represent a measure of correlation between the Ewan Moberly Homestead cores (individual a/b pairs: 01EMH2-fc.txt) and the living chronology (99Spruce.txt) at a 99% confidence interval and at 25 lag 12 interval (except 023, 024, 03, 05, 06, 07 at 50 lag 25).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUTSIDE DATE	r- VALUE
01EMH02 1	ES	SIDE D; 7 TH LOG UP	INC. LW; NO B; B ON ORIG.	1827 - 1903	77	1903	0.368
01EMH02 2	ES	SIDE D; 11 RD LOG UP	EW; NO B; B ON ORIG.	1834 - 1906	73	1906	0.402
01EMH02 3	ES	SIDE A; 4 TH LOG UP	LW; NO B; B ON ORIG.	1764 - 1906	143	1906	0.420*
01EMH02 4	LP	SIDE B; 8 TH LOG UP	LW; NO B; B ON ORIG.	1765 - 1877	113	1877	0.498*
01EMH02 5	ES	SIDE D; 10 TH LOG UP	EW; B; PITH	1666 - 2000F	335	N/A	N/A
02EMH01	LP	SIDE A; 10 TH LOG UP	LW; NO B; BG; B ON ORIG.	1868 - 2000F	133	N/A	N/A
02EMH02	ES	SIDE A; 5 TH LOG UP	LW; NO B; B ON ORIG.	1818 - 2000F	183	N/A	N/A
02EMH03	ES	SIDE B; 3 RD LOG UP	EW; NO B; B ON ORIG.	1766 - 1901	136	1901	0.613*
02EMH04	ES	SIDE B; 4 TH LOG UP	EW; NO B; B ON ORIG.	1832 - 1905	74	1905	0.558*
02EMH05	LP	SIDE C; 7 TH LOG UP	LW; NO B; BG; B ON ORIG.	1859 - 2000F	142	N/A	N/A
02EMH06	ES	SIDE C; 3 RD LOG UP	EW; NO BARK; BG; B ON ORIG.	1787 - 1905	119	1905	0.447*
02EMH07	ES	SIDE D; 2 ND LOG UP	LW; NO B; BG; B ON ORIG.	1775 - 1905	131	1905	0.538*
02EMH08	ES	SIDE A; 10 TH LOG UP	EW; B; BG; D.B.	1852 - 2000F	149	N/A	N/A
MEAN PERSON'S r -VALUE							0.481

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

6.2.4 Discussion

Cutting dates for both structures range from 1877 to 1904 (main structure: 1899 to 1904; secondary structure: 1877 to 1906). This interval substantiates previous records that

show the Ewan Moberly family continuously occupied the site from 1897 to 1909 (Pickard 1984; Murphy 2002; Wallace 2002a).

It was previously inferred that the main structure was built after 1900 (Wallace 2002a); this inference is supported by new tree-ring evidence that shows construction began in 1899 and ended in 1904. It is possible the 1899 log was actually felled in the early spring of 1900, as denoted by the presence of latewood. The final construction date of 1904 and the date cluster from 1903 to 1904 reveals that renovations of the main structure did not occur during or after the creation of Jasper Park, and that the main building phase likely occurred from 1903 to 1904.

Previous conclusions inferred that the secondary structure was built roughly 1897 – 1899 (Wallace 2002a). Tree-ring evidence shows a much lengthier building period from 1877 to 1906, predating previous inferences by 20 years. One hypothesis is that the log, and likely some of the other undated logs, were deadfalls or reused from an earlier undated structure. Outbuildings on Métis farms were sometimes constructed of materials from former houses (Burley 1997). It is possible that logs were reused from the structure denoted by depressions and a chimney mound, located 160 m northwest (Pickard 1984). The older logs could have been stockpiled until new logs were cut to build the secondary structure. The idea of stockpiling is supported by the fact that more recently felled logs (1905 to 1907) are placed in the structure above and below the 1877 log. Therefore, it is apparent that the main building phase (1905 to 1906) of the secondary structure occurred after the main structure and continued up until the creation of JNP.

6.2.5 Summary

In light of the analysis it is apparent that the majority of logs for the main structure were cut for construction first (1903 to 1904) and the secondary structure was constructed two years later (1905 to 1906), with stockpiling occurring in the meantime. Furthermore, the tree-ring derived construction dates correspond with local Métis history. The Métis of the upper Athabasca Valley are known to have maintained a semi nomadic lifestyle, until

around 1905 when homesteads like that of the Moberly family were constructed (Wallace 2002a).

6.3 Case Study 2: Billy Carver Cabin

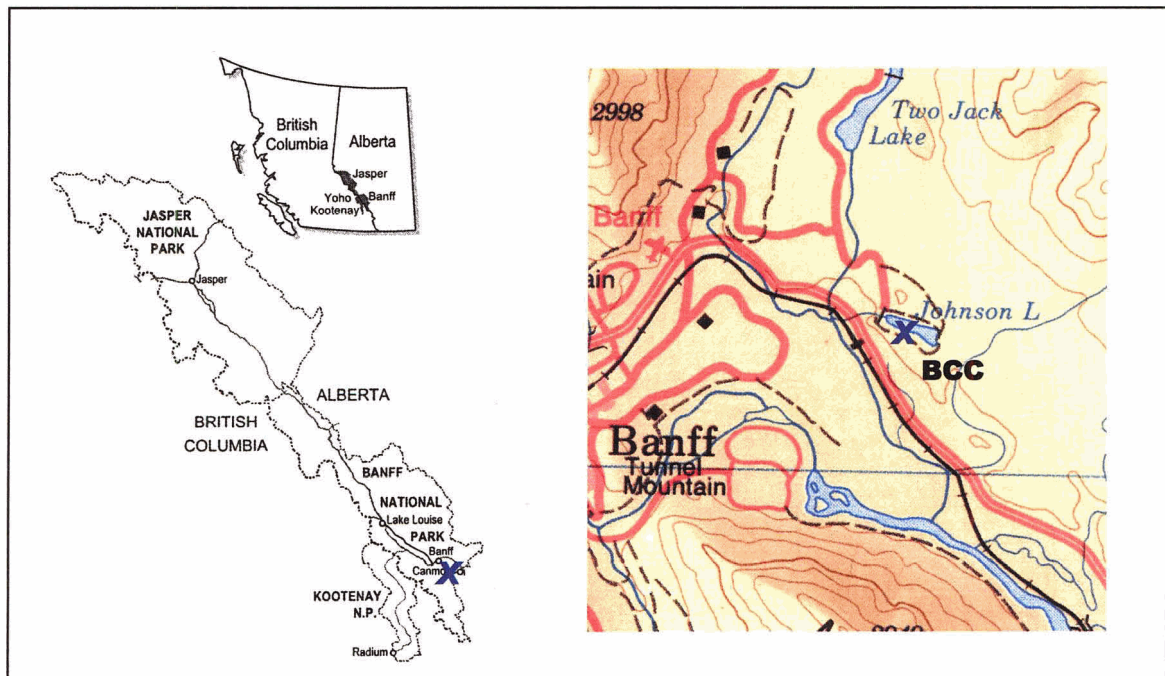
The Billy Carver Cabin (Figure 6.11) is a hermit structure located at the SE corner of Johnson Lake BNP, approximately 100 m from the lakeshore (Porter and Mellen 1983; Langemann and Lesich 1992) and above the remnants of the Anthracite coal-mining town that closed in the late 1880s (Figure 6.12) (Trono 1996). Billy Carver constructed it over two main building phases in 1913 and 1933.



Figure 6.11 - Billy Carver Cabin, BNP (photo orientation: eastward facing). Photo: July 2001.

The Billy Carver Cabin consists of two distinct components, labelled as room A and B (Figure 6.13). Room A is approximately 3.7 m long, 2.9 m wide, and 2.1 m high, while room B is approximately 2.3 m long, 3.5 m wide, and 2.3 m high. The structure consists of two windows, the smaller one located on side A of room B and the larger window located offset to the left of side B on room A. One door is located on side A, left of the larger window. The entire structure consists of undressed lodgepole pine logs with stick chinking connected by saddle notch joinery and reinforced with nails (round and square headed; wire and machine cut) (Steer and Porter 1981a). Weathering has revealed additional sequences of building materials over the exterior log walls (Figure 5.14). Lumber planks act as vertical supports at the corners, along window frames, at wall

Figure 6.12 - Billy Carver Cabin. Adapted from Natural Resources Canada 1985a map. This map is based on information taken from The Atlas of Canada. © 2004. Her Majesty the Queen in Right of Canada with permission of Natural Resources Canada.



centres, and along the roofline (Mellen 1983b). A 10 cm insulation layer of clay or perlite is plastered over the logs (Mellen 1983b). Both sides of the structure have medium gable roofs layered from the exterior to the interior with tin sheets, 2 layers of lath, two layers of tarpaper, and logs. The interior ceiling, walls, and floor are covered with wood panelling, tarpaper, and black paint (Steer *et al.* 1995). An interior doorway connects rooms A and B, and there appear to be remnants of a plastered cellar depression in the floor of room B. Remnant materials found in the interior include an airtight stove at the corner of side B/C (Mellen 1983b). Around the exterior of the structure remnant materials were noted, including: scrap metal, cans, wood boxes, a stove (Figure 6.15), and a cache box with rubber rainseal hanging from a tree (Mellen 1983b). The forest is dominated by lodgepole pine with Engelmann spruce, Douglas-fir, and trembling aspen.

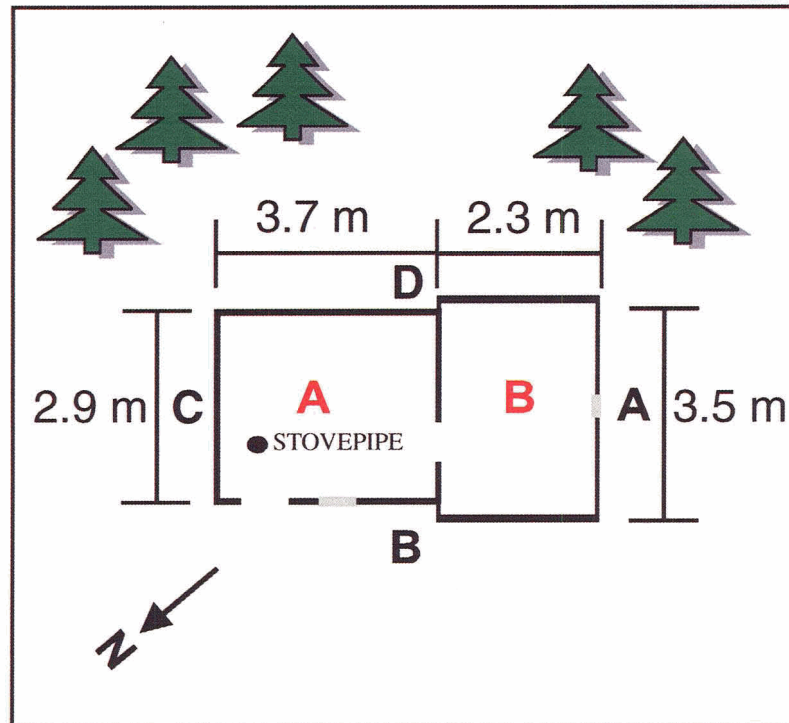


Figure 6.13 - Billy Carver Cabin dimensional drawing.

The architectural form of this structure is reminiscent of the Ukrainian log cabins constructed in Alberta during the late-nineteenth and early-twentieth centuries, specifically the extensive insulation layer over the log walls (Lehr 1976). The half-timbering and the combination of infill and vertical supports have French and English origins (Rempel 1980 and Kalman 1994). Billy Carver's ethnic origins are English (London, England), and it is possible to conclude a partial commonality between the ethnicity of the builder (English) and the ethnic origins of his mixed building tradition (English, French, and Ukrainian).

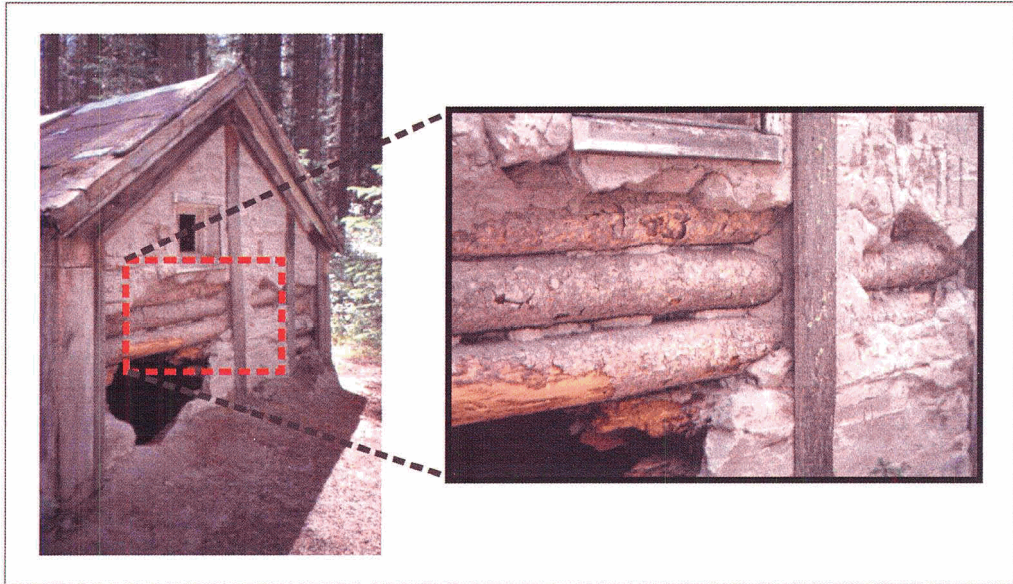


Figure 6.14 - Detail of layered building materials on structure exterior (room B, side A).
Photos: July 2001.



Figure 6.15 - Stove found outside BCC. Photo: July 2001.

6.3.1 Structure Condition: Deterioration

Photos of the structure from 1966, 1976, 1982, and 2002 show increased weathering and deterioration (Figure 6.16). From 1966 to 1982 the plaster on side A appears to be predominantly intact, except for partial log exposure at corner A/D (1976 photo).

Between 1982 and 2002 significant erosion on side A occurred. The lower portion of the exterior wall reveals horizontal timbers and a large hole opening up into room B. Side C appears to have lost a significant amount of plaster prior to the 1966 photo and changed very little up to 2002. A comparison of the 1982 and 2002 photos also shows a significant decrease in remnant materials and debris. It is possible that the site experienced increased visitors post 1982, as suggested by graffiti carved into the exterior plaster, and as a result experienced an increase in decay and loss of artifacts.

6.3.2 Structure Context: Billy Carver

Parks Canada hypothesizes the structure was built in 1910 by the hermit Billy Carver (Mellen 1983b). [Note: archival documents present him as both Billy Carver and Billie Phillips Leader]. In a 1918 visit, Park Warden A. Scotty Wright described him as a Billie Phillips, a young man of 38, and a native of London, England (Anonymous 1918). His name was documented as Billie Phillips. A photo taken of Wright and the hermit (date unknown) shows “Billy/ie” as a middle-aged man and is documented as having the name Billie Phillips Leader (Figure 6.17). It is possible that “Billy/ie” gave a false last name, or perhaps his middle name(s), in hopes of maintaining privacy. Wright noted that the hermit “apparently desire[d] to make no friends, preferring to live alone unmolested” (Anonymous 1918). In three newspaper articles from later dates, the same hermit is referred to as Billy Carver (Anonymous 1937; Anonymous 1938; Trono 1996). There is no mention of the name change, but the description of a hermit living in a recluse shack at Johnson’s Lake is consistent (Anonymous 1937; Anonymous 1938; Trono 1996).

Figure 6.16 - Structure deterioration shown in photos from 1966, 1976, 1982, and 2002.






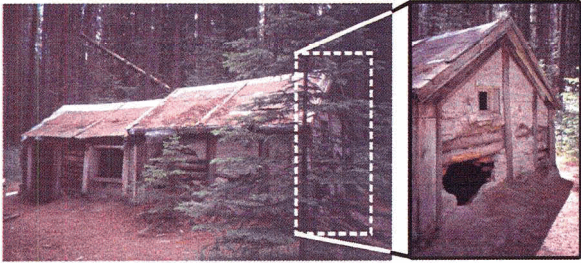

Year	View of Side A Deterioration	View of Side C Deterioration
1966	 1966a: view from W corner.	 1966b: view from E corner.
1976	 1976: view from W corner.	
1982	 1982a: view from NW.	 1982b: view from W.
2002	 2002a: view from NW with side A	 2002b: view from N.

Photo Sources: 1966a: Whyte Museum of the Canadian Rockies: ID# V605 NA8-11; photographer: Maryalice H. Stewart, Oct. 25, 1966.; 1966b: Whyte Museum of the Canadian Rockies: ID# V605 NA8-1; photographer: Maryalice H. Stewart, Oct. 25, 1966.; 1976: Whyte Museum of the Canadian Rockies: ID# V8/PA accn. 2603; photographer: Donna Dubruki, June 1976; 1982a Parks Canada Agency, ID# 61R-1M, June 23, 1982; 1982b: Parks Canada Agency, ID# 61R-2M, June 23, 1982; 2002a and 2002b: K. Brelsford.



Figure 6.17 - “The Anthracite Hermit (Billie Phillips Leader) [on viewer’s left] and Scotty Wright [on viewer’s right]”. Source: Whyte Museum of the Canadian Rockies (Image ID #M84/V711 PA105-16; photographer unknown; photo is in the public domain).

The second documented visit to the Billy Carver Cabin occurred on December 4, 1937 when Carver was approximately 57 years old (Anonymous 1937; Trono1996; Brelsford 2002a). Two young boys, Ted Keith and Edison Steele, were snowshoeing around Johnson Lake when they came upon the structure. They were aware it was likely the residence of ‘the hermit of Johnson Lake/ Anthracite’, and approached the cabin with the objective of asking for a cup of coffee (Anonymous 1937; Trono 1996; Brelsford 2002a). Keith and Steele could hear the man inside, but realized he was unable to open the door as it was frozen slightly ajar; the boys assisted the man in opening the door by pushing from the exterior. Once inside, they realized Carver was in a desperate state and in need medical assistance. Keith had noticed a stove with an open box of matches in the corner of the first room. It appeared that the man tried to light a fire, but was unsuccessful (Brelsford 2002a). Immediately the two boys lit a fire and attempted to get Carver as comfortable as possible before they left for town in search of help. The following

morning park wardens and the RCMP returned to take Carver to the hospital. Carver spent a few months in hospital before he was transferred to a retirement home in Gleichen (Anonymous 1937; Trono 1996; Brelsford 2002a), where he spent his last days (Trono 1996).

6.3.3 Tree-Ring Analysis

Previous investigations have inferred that Billy Carver built this structure for habitation in 1910 (Mellen 1983a). Parks Canada determined that room A functioned as the living room and room B as the bedroom (Mellen 1983a). Through tree-ring analysis and additional historical research it is possible to clarify the construction sequence.

- Of the 20 sample radii, only 1 did not crossdate (01BCC01b: likely due to too few rings) (Table 6.3).
- Four samples dated to 1913, all with latewood (8 of 8 radii) and 3 with attached bark (4 of 8 radii), indicating they were felled after (fall to early spring of following year) the growth season of 1913.
- Five samples dated to 1933, all with latewood (9 of 9 radii) and 2 with bark (2 of 9 radii), indicating they were felled after (fall to early spring of following year) the growth season of 1933.
- Radius 01BCC01a produced a minimum date of 1905, which is likely a result of perimeter ring loss as no bark was present and sample 01BCC03a (only 1 radius) crossdated to 1934, which is the most recent felling date for the structure.

Table 6.3 - Summary of results for tree-ring samples collected from the Billy Carver Cabin (61R) (01BCC-cd.txt). Pearson's r -values represent a measure of correlation between the Billy Carver Cabin cores (individual a/b pairs: 01BCC-fc.txt) and the living chronology (01BCC-lc.txt) at a 99% confidence interval and at 15 lag 7 interval (except 07a/b at 25 lag 12).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01BCC01A	LP	SIDE C; ROOM A	LW; NO B; PITH	1881 - 1905	25	1905	0.542
01BCC01B	LP	SIDE C; ROOM A	LW; NO B;	1979 - 2000F	22	N/A	N/A
01BCC02A	LP	SIDE C; ROOM A	LW; NO B;	1880 - 1913	34	1913	0.555
01BCC02B	LP	SIDE C; ROOM A	LW; B; PITH	1877 - 1913	37	1913	0.603*
01BCC03A	LP	SIDE B; ROOM A	LW; B	1896 - 1934	39	1934	0.753*
01BCC04A	LP	SIDE B; ROOM A	LW; B	1886 - 1913	28	1913	0.679*
01BCC04B	LP	SIDE B; ROOM A	LW; B	1878 - 1913	36	1913	0.780*
01BCC05A	LP	SIDE D; ROOM A	LW; D. B	1886 - 1912	28	1912	0.830*
01BCC05B	LP	SIDE D; ROOM A	LW; B	1886 - 1913	28	1913	0.617*
01BCC06A	LP	SIDE D; ROOM A	LW; NO B	1883 - 1913	31	1913	0.806*
01BCC06B	LP	SIDE D; ROOM A	LW; NO B	1884 - 1913	30	1913	0.710*
01BCC07A	LP	SIDE A; ROOM B	LW; NO B	1882 - 1933	52	1933	0.737*
01BCC07B	LP	SIDE A; ROOM B	LW; NO B	1880 - 1933	54	1933	0.574*
01BCC09A	LP	SIDE A; ROOM B	LW; NO B	1898 - 1933	36	1933	0.679*
01BCC09B	LP	SIDE A; ROOM B	LW; NO B	1897 - 1933	37	1933	0.650*
01BCC10A	LP	SIDE B; ROOM B	LW; B	1895 - 1933	39	1933	0.783*
01BCC11A	LP	SIDE B; ROOM B	LW; NO B; PITH	1897 - 1933	37	1933	0.768*
01BCC11B	LP	SIDE B; ROOM B	LW; NO B	1897 - 1933	37	1933	0.782*
01BCC12A	LP	SIDE B; ROOM B	LW; B	1893 - 1933	41	1933	0.695*
01BCC12B	LP	SIDE B; ROOM B	LW; NO B; PITH	1885 - 1933	49	1933	0.692*
MEAN PEARSON'S r -VALUE							0.697

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

6.3.4 Discussion

The 1913/ 1933 dating distribution corresponds to the two distinct rooms (A and B). Room A clearly dates to 1913, while room B dates to 1933 (Figure 6.18). It can therefore be stated that room A was built before room B. Furthermore, one log in room A (side B) dated to 1934; it is likely a replacement log procured in response to damages incurred during the construction of room B.

Parks Canada was close in their estimate of the original construction date (1910 vs. 1913). However it is now evident that Carver built a second room in 1933, which was evidently only four years before he left the site. It seems that even in his old age he was

able to maintain and renovate his home. It is possible he had help, perhaps from his acquaintance, Gee Moy, a Chinese gardener, who resided at Anthracite and supplied him with provisions (Trono 1996). However, Carver's hermit lifestyle would suggest he did it alone.

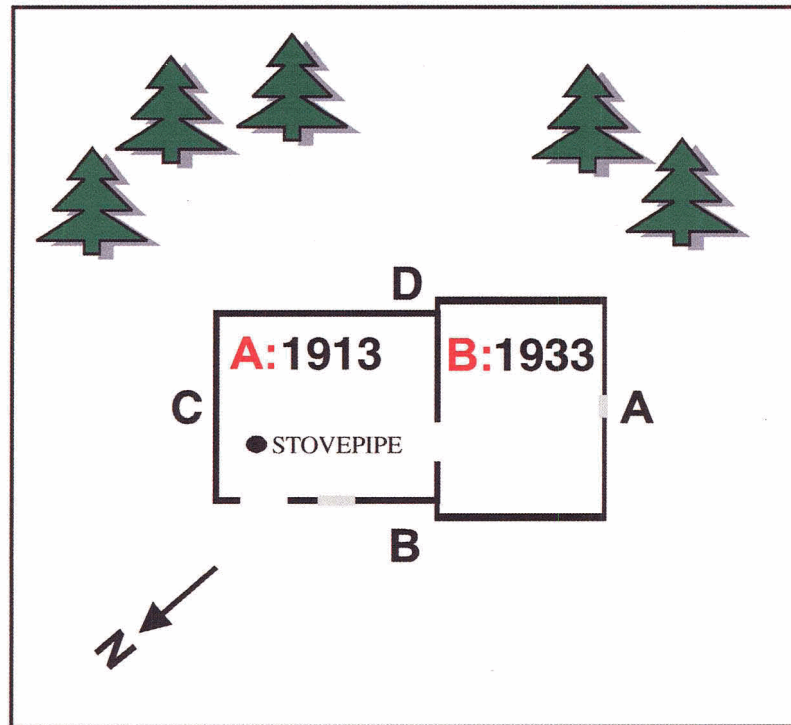


Figure 6.18 - Dating distinction between the two rooms of the Billy Carver Cabin.

6.3.5 Summary

Tree-ring analysis has revealed that the Billy Carver Cabin was constructed over two building phases in 1913 and 1933. Additional research has revealed controversy over the inhabitant's name and had shed light on the December 4, 1937 abandonment.

6.4 Case Study 3: Jimmy Simpson Structures

Visible evidence of Jimmy Simpson's explorations persist in the form of at least five structures located in JNP and BNP (Figure 6.19 and 6.20): Tangle Creek Cabin (JNP) 1904 (Figure 6.21); Glacier Lake Cabin (BNP) 1924 (Figure 6.22); Mistaya River Cabin (BNP) 1904 (Figure 6.23); Glacier Trail Cabin (BNP) 1907 (Figure 6.24); and Saskatchewan Crossing Teepee (BNP) 1923 (Figure 6.25).

6.4.1 Structures' Context: Jimmy Simpson, Sr.

Justin James McCarthy Simpson, commonly referred to as Jimmy Simpson, emigrated from England to Canada in 1896 (Hart 1993). After dabbling in a multitude of employment opportunities, from CPR construction in BNP to seal hunting off the coasts of California and Vancouver Island, Simpson settled in the southern Canadian Rocky Mountains (Hart 1993). Here he began a career as a trapper and guide outfitter, which continued well into the mid 1900s, culminating with the successful Num-Ti-Jah Lodge at Bow Lake, BNP [Num-Ti-Jah: Stoney word for pine marten, which were abundant in the area during his trapping days] (Hart 1993). Simpson's first major guiding experience began with Tom Wilson of Banff in 1898 (Hart 1993), where he quickly became familiar with the areas surrounding the North Saskatchewan River, including Wilcox Pass near the Columbia Icefield, the Alexandra and Mistaya Rivers, and areas running south into Lake Louise and the Banff townsite (Hart 1993). Simpson was also introduced to many noteworthy alpine explorers of the southern Canadian Rocky Mountains, including Reverend James Outram who participated in the first ascents of 10 major peaks (Hart 1993), and Mary Schaffer, one of the principal non-native female explorers known for producing the first map of Maligne Lake, JNP in 1911 (Hart 1980; Hart 1993).

Figure 6.19 - Structure in JNP. Adapted from Natural Resources Canada 1985a map. This map is based on information taken from The Atlas of Canada. © 2004. Her Majesty the Queen in Right of Canada with permission of Natural Resources Canada.

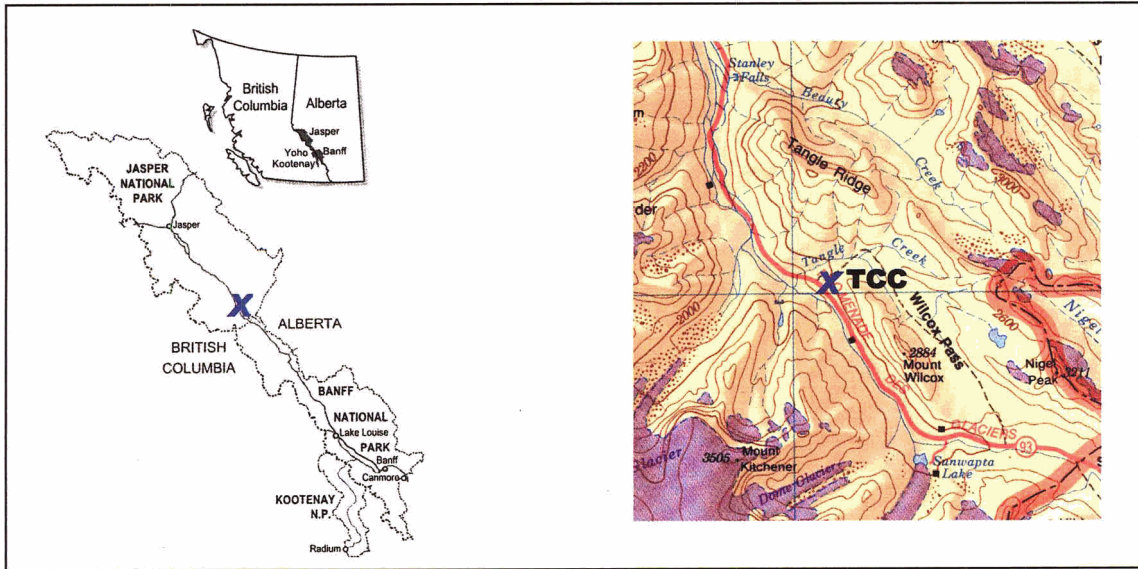
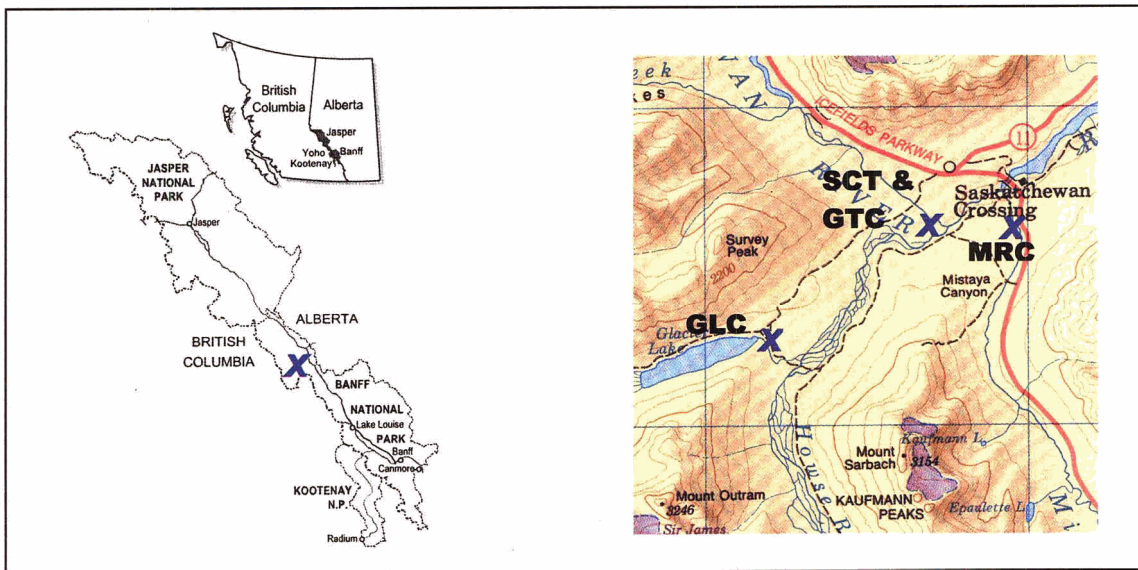


Figure 6.20 - Structures in BNP. Adapted from Natural Resources Canada 1985b map. This map is based on information taken from The Atlas of Canada. © 2004. Her Majesty the Queen in Right of Canada with permission of Natural Resources Canada.



6.4.2 Tangle Creek Cabin

Tangle Creek Cabin (Figure 6.21) is situated on a stream terrace approximately 50 m east of Tangle Creek and borders the hiking trail connecting Highway 93 with Wilcox Pass. Engelmann spruce and lodgepole pine dominate the environment with sphagnum and wildflower undergrowth (Wesbrook 2003). The structure consists of undressed Engelmann spruce logs, and the existence of multiple stumps in the area suggests the logs were cut on-site. Small spruce trees have also begun to grow within the interior of the structure. The cabin is approximately 4.7 m long and 4.7 m wide (Figure 6.22) with side D (W-facing) built slightly higher than side B (E-facing), possibly indicating the existence of a sloped roof. Roof logs have since collapsed and rest on the interior dirt floor. A low door opening is present on side D (W-facing) adjacent to corner A/D. The four walls are standing, however they have undergone moderate decay. Construction techniques appear to be saddle notch joinery with axe shaping, which is predominantly evident at the log-ends. Within the interior there are remains of what appears to be a sleeping platform framing the east wall (Wesbrook 2003). Smoke stained logs and multiple large flat rocks at the interior southwest corner suggest the existence of a hearth (Wesbrook 2003). Two cans were found at the site; one of which was a soldered type with Cross & Blackwell stamped on the lid (Wesbrook 2003).



Figure 6.21 - Tangle Creek Cabin, BNP. Source: Smith 1998.

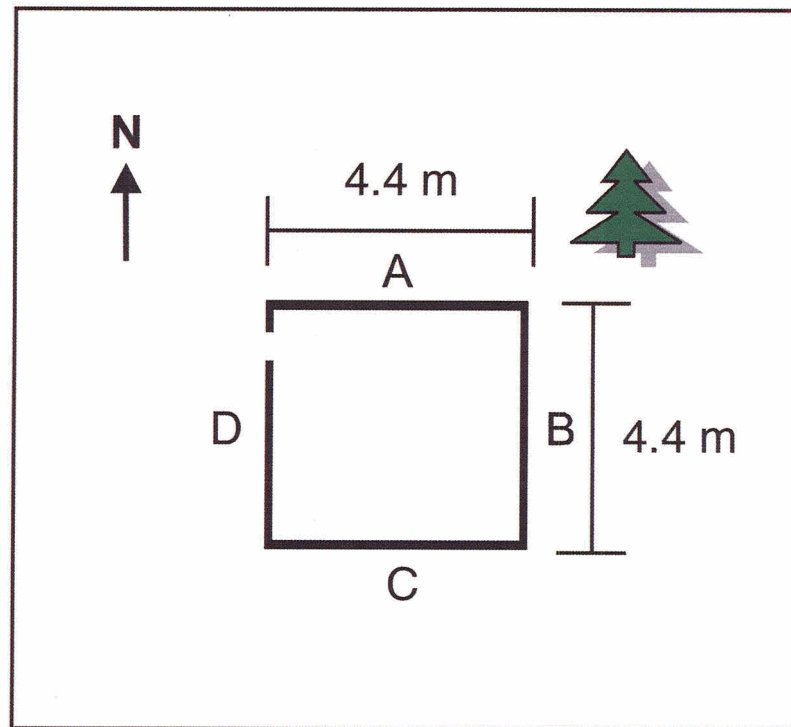


Figure 6.22 - Tangle Creek Cabin dimensional drawing.

The saddle notching and rough axe cuts suggest the structure underwent quick construction. The saddle notch is one of the speedier and easier notches to construct and the rough axe marks infer speed of construction may have been more important than aesthetics (Bunney 1980; Kalman 1994). This structure shares similarities with the horizontal log building traditions of the French, Swedes, and Germans who all used round logs joined by saddle notching (Rempel 19980; Kalman 1994); this infers no commonality between Simpson's ethnicity (English) (Hart 1993) and his adopted building traditions (French, Swede, and German). The low door and shed-like form are also reminiscent of what Parks Canada reports refer to as a 'secretive Simpson style' (Langemann and Perry 2001), which is shown in a photo of a Ballard and Simpson trapping cabin from c.1903 (Figure 6.23). The 'secretive Simpson style' is based on the assumption that Simpson built low to the ground so that his structures were not easily recognizable on the landscape. It does seem plausible that Simpson would intend to keep his cabins secret as they may denote the location of profitable trap lines.

Structure Context

Parks Canada noted an inscription above the doorway on the north side. It appears to be engraved with lead pencil and writes: 'J.W. Simpson Trapper Jan. 11 1910'; conversely the 'Jan.' could read 'June'. It seems likely Simpson, working as a trapper, was the original builder. However, it is difficult to determine whether the inscription was added more recently or on the date specified (Wesbrook 2003). Through tree-ring analysis it is possible to verify the inscribed date and season of probable construction.



Figure 6.23 - Fred Ballard (at doorway) and Jimmy Simpson trapping cabin c. 1903. Source: Hart 1993 (photo is in the public domain).

Tree-Ring Analysis

- Nine of 20 samples from Tangle Creek Cabin (Table 6.4) produced a minimum date of 1904 and the remaining samples clustered between 1895 and 1902, which is assumed to be the result of additional perimeter ring loss.
- All of the 1904 samples displayed latewood and bark, therefore it can be concluded that the timbers were felled after (fall to early spring of following year) the growth season of 1904.

While it could be suggested that the timbers were felled as late as the spring of 1905, it is unlikely. Lingering snowpacks at this elevation (1990 m) would make construction difficult during winter and spring periods. Therefore, the construction date for the Tangle Creek Cabin is most likely fall 1904, which coincides with Simpson's trapping activities in the area.

Table 6.4 - Summary of results for tree-ring samples collected from the Tangle Creek Cabin (1700R). Pearson's *r*-values represent a measure of correlation between the Tangle Creek Cabin cores (individual a/b pairs) and the living chronology (99KL900-cd.txt) at a 99% confidence interval. Crossdating lag unknown (assumed 50 lag 25) as results taken from UVTRL report #99-01.

SAMPLI #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSSDATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
98TCC W1	ES	SIDE D; WEST FACING	UNKNOWN	1682 - 1902	221	1902	0.626*
98TCC W2	ES	SIDE D; WEST FACING	B; LW	1699 - 1904	206	1904	0.701*
98TCC W3	ES	SIDE D; WEST FACING	B; LW	1703 - 1904	202	1904	0.645*
98TCCS 2	ES	SIDE C; SOUTH FACING	B; LW	1717 - 1904	188	1904	0.634*
98TCCS 3	ES	SIDE C; SOUTH FACING	B; LW	1771 - 1904	134	1904	0.553*
98TCCN 1	ES	SIDE A; NORTH FACING	UNKNOWN	1776 - 1902	127	1902	0.715*
98TCCN 4	ES	SIDE A; NORTH FACING	UNKNOWN	1778 - 1896	119	1896	0.649*
98TCC W2A	ES	SIDE D; WEST FACING	UNKNOWN	1777 - 1895	119	1895	0.565*
98TCCS 4	ES	SIDE C; SOUTH FACING	B; LW	1787 - 1904	118	1904	0.610*
98TCCN 3	ES	SIDE A; NORTH FACING	B; LW	1793 - 1904	112	1904	0.704*
98TCCN 5	ES	SIDE A; NORTH FACING	B; LW	1795 - 1904	110	1904	0.558*
98TCCE 3	ES	SIDE B; EAST FACING	B; LW	1807 - 1904	98	1904	0.537*
98TCCE 2	ES	SIDE B; EAST FACING	UNKNOWN	1804 - 1901	98	1901	0.595*
98TCCS 1	ES	SIDE C; SOUTH FACING	B; LW	1808 - 1904	97	1904	0.516*
MEAN PERSON'S <i>r</i> -VALUE							0.615

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

According to E.J. Hart (1993), the director of the Whyte Museum in Banff and author of *Jimmy Simpson: Legend of the Rockies*, Simpson was at the height of his trapping activities during the first decade of the twentieth century, which included an early trap line in the area of Wilcox Pass and Tangle Creek. It was part of the country Simpson knew better than any, as it provided ideal habitat for pine marten, lynx, fox, and bear. Around 1910 Simpson decreased his trapping activities in pursuit of outfitting and guiding (Hart 1993). This decrease in activity possibly accounts for the 1910 inscription above the doorway. It is possible Simpson left an ownership mark on the cabin knowing he would not be frequenting the cabin in the future.

6.4.3 Glacier Lake Cabin

The Glacier Lake Cabin (Figure 6.24) is located approximately 7.5 km SW of Highway 93 and the Saskatchewan River Crossing, at the north end of Glacier Lake. It is situated in a forest dominated by Engelmann spruce, lodgepole pine and subalpine fir. The cabin is approximately 3.4 m long, 2.6 m wide, and 2.2 m high (Figure 6.25), and consists of both lodgepole pine and subalpine fir logs connected by saddle notch joinery. Side C (SE-facing) contains a single doorway offset towards corner C/D and side D (SW-facing) includes one centrally located window. A small log table is attached to the exterior of side C (SE-facing) and a neighbouring tree. The majority of logs exhibit attached bark and axe marks –mainly evident at the corners. Overall there appears to be minimal decay. The interior of the cabin includes three main structural crossbeams running the length of the roof. A bed platform consisting of a log frame and wood panel runs the width of side A. Above the bed, a wire cable suspends a foam mattress. A raised cupboard is attached to side B at corner A/B and a small shelf is attached to side D under the central window. Nails, presumably functioning as hangers, frame the top of doorway.



Figure 6.24 - Glacier Lake Cabin, BNP (photo orientation: northward facing). Photo: July 2001.

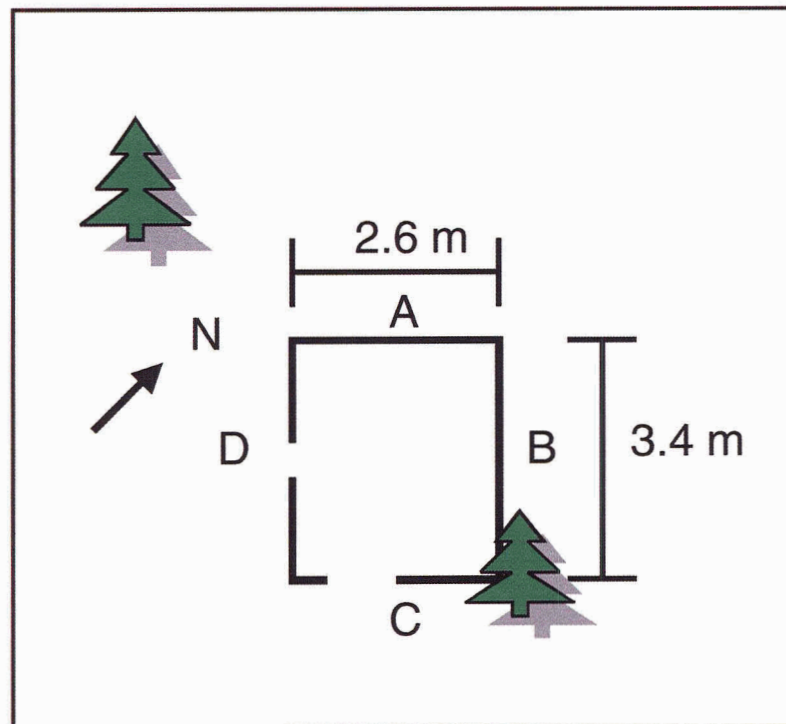


Figure 6.25 - Glacier Lake Cabin dimensional drawing.

The axe cuts and the saddle notch joinery suggest that this structure, like the Tangle Creek Cabin, was constructed in an efficient manner. However, the existence of a framed door and window, and the existence of an intact gable roof infer more time went into

construction. In fact, the following analysis and discussion reveal that the structure underwent at least two construction phases. This structure also shares similarities with the horizontal log building traditions of the French, Swedes, and Germans who all used round logs joined by saddle notching (Rempel 1980; Kalman 1994); this infers no commonality between Simpson's ethnicity and building tradition.

Structure Context

The 1993-1994 Archaeological Resource Management Programme attributed the cabin's construction to Jimmy Simpson (Francis 1996). This credit was contested in a 1983 interview with Jimmy Simpson Jr. who stated the cabin was not a Simpson Cabin, as his father's cabin at Glacier Lake had a flat roof (Mellen and Lee 1983). However, the Glacier Lake Cabin roof was replaced in the 1960s by park warden Frank Lyster (Francis 1996) and may have originally been flat.

Tree-Ring Analysis

- For the Glacier Lake Cabin, 3 of 4 samples (7 of 9 radii) showed a minimum date of 1924 (Table 6.5). All of these samples had latewood and at least one radius with bark. Therefore, the logs were felled for construction after (fall to early spring of following year) the growth season of 1924.
- Some of the sample radii displayed incomplete latewood, and therefore were cut towards the end (late summer/ early fall) of the 1924 growth season.
- Sample 01GLC03A/B is likely from a deadfall killed in 1923 with segment 03A undergoing some perimeter ring loss.
- Two samples (4 radii) did not crossdate and remain floating; this is likely a combined result of poor sample quality and tree-specific growth conditions. However, it is possible the logs were brought in when the roof was replaced in the 1960s.

Table 6.5 - Summary of results for tree-ring samples collected from the Glacier Lake Cabin (447R/ 1224R) (01GLC-cd.txt). Pearson's *r*-values represent a measure of correlation between the Glacier Lake Cabin cores (individual a/b pairs: 01GLC-fc.txt) and the living chronology (01GLC600-lc.txt) at a 99% confidence interval with 50 lag 25 (except 01GLC01A at 25 lag 12).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01GLC01 A	LP	SIDE C2	INC. LW; B	1878 - 1924	47	1924	0.667*
01GLC01 B	LP	SIDE C2	LW; NO B; B ON ORIG.	1784 - 1924	141	1924	0.695*
01GLC01 C	LP	SIDE C2	LW; D. B; B ON ORIG.	1791 - 1924	134	1924	0.709*
01GLC02 A	LP	SIDE B3	LW; NO B; B ON ORIG.	1783 - 1924	142	1924	0.662*
01GLC02 B	LP	SIDE B3	LW; B; PITH	1785 - 1924	140	1924	0.750*
01GLC03 A	LP	SIDE D6	LW; NO B; B ON ORIG.	1766 - 1921	156	1921	0.534*
01GLC03 B	LP	SIDE D6	LW; B	1769 - 1923	155	1923	0.555*
01GLC04 A	LP	SIDE B10	LW; B	1783 - 1924	142	1924	0.452*
01GLC04 B	LP	SIDE B10	INC. LW; B	1771 - 1924	154	1924	0.489*
01GLC05 A	SF	SIDE A10	LW; B	1874 - 2000F	127	NO DATE	N/A
01GLC05 B	SF	SIDE A10	LW; B; PITH	1853 - 2000F	148	NO DATE	N/A
01GLC06 A	LP	ROOF	EW; B	1844 - 2000F	157	NO DATE	N/A
01GLC06 B	LP	ROOF	EW; NO B; B ON ORIG.	1863 - 2000F	138	NO DATE	N/A
MEAN PERSON'S <i>r</i> -VALUE							0.613

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Construction timbers for the Glacier Lake Cabin were felled between the fall of 1924 and spring of 1925. The Parks Canada reports presented two plausible assessments; one report attributed the structure to Simpson, while another stated Simpson Jr. rejected the assumption on the basis that his father's cabin at Glacier Lake originally had a flat roof (Mellen and Lee 1983; Francis 1996). According to E.J. Hart (1993), Simpson was beginning to secure his outfitting Lodge at Bow Lake during the 1920s. He was also actively taking visitors on guided trips in areas around Howse Pass, Mt. Forbes, and the North Fork of the Saskatchewan River, all of which are within 10 -15 km of the Glacier

Lake Cabin. Hart even mentions Simpson guiding in the area of Glacier Lake (Hart 1993). In an interview with Bill Smyth, a resident of Banff, Smyth suggested that the structure was likely one of Simpson's trapping cabins and it may have been used to store supplies for outfitting trips (Brelsford 2002b). While this information does not place Simpson at the specific site, it does place him in the area during the construction time period.

6.4.4 Mistaya River Cabin

The Mistaya River Cabin (Figure 6.26) is located on the west bank of the Mistaya River, approximately 1 km south of its confluence with the North Saskatchewan River. The cabin is situated on the lowest river terrace in a forest that is currently composed primarily of young Engelmann spruce. The structure is approximately 4.5 m long, 4.2 m wide, and 1.2 m high (Figure 6.27) and is constructed from Engelmann spruce logs. It has experienced significant decay and extensive vegetative encroachment. While side D (SW-facing) is standing, the remaining three walls and the roof are partially to completely collapsed; this appears to be the result of a deadfall laying in a NW – SE orientation. Before being damaged by the deadfall, it was noted that the structure had a shed-type roof and a low door (Mellen *et al.* 1983). Construction techniques include saddle notching (Mellen *et al.* 1983). Some of the logs have been stripped of their bark, as noted by axe marks, while the majority exhibit partial bark. Artifacts found in and around the structure include small round-headed nails, hole-in-top cans, sheet metal fragments, and a lantern base with the label "Simplex". Previously, Mellen *et al.* (1983) noted the presence of a cable crossing the Mistaya River slightly north of the structure.

This structure is very similar to the Tangle Creek Cabin in form, specifically the shed-type roof, single doorway, rough axe cuts, and saddle notching. In addition to the latter two techniques, the existence of partial bark suggests the structure underwent quick construction. Furthermore, this structure shares similarities with the horizontal log building traditions of the French, Swedes, and Germans who all used round logs joined

by saddle notching (Rempel 1980; Kalman 1994). There are no commonalities between Simpson's ethnicity and the mentioned building traditions.

Structure Context

Parks Canada inventories state that the Saskatchewan Crossing warden Terry Damm believed the structure was built in the late 1940s by Arturo Letourneau (Mickle and Wallace 1996; Langemann and Perry 2001). The cable crossing the Mistaya River was likely used for gravel access during the construction of the Icefield Parkway in the 1940s (Mickle and Wallace 1996; Langemann and Perry 2001). However, other Parks Canada sources indicate Jimmy Simpson may have built the structure for trapping purposes



Figure 6.26 - Mistaya River Cabin, BNP (photo orientation: northward facing). Source: Brelsford 2001c.

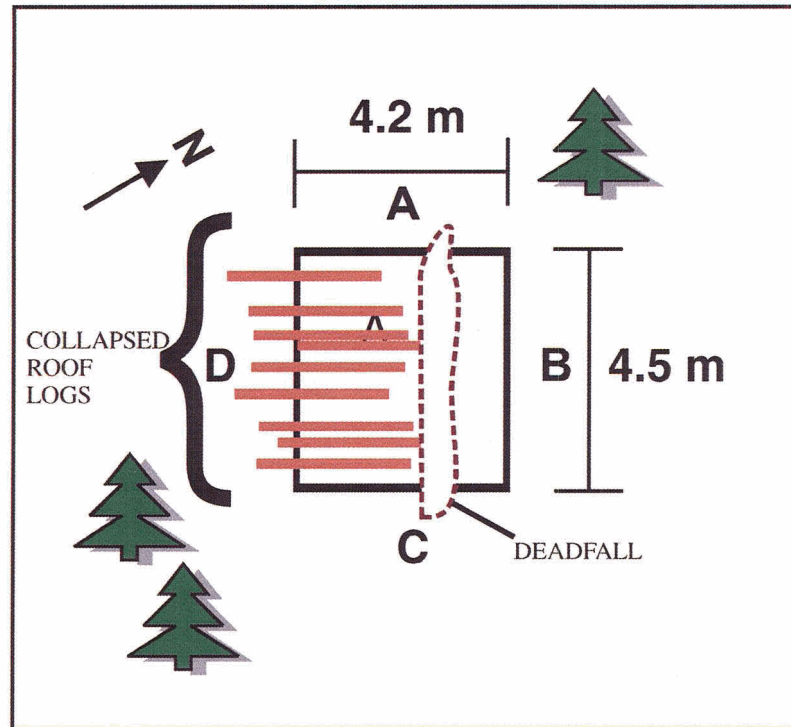


Figure 6.27 - Mistaya River Cabin dimensional drawing.

(Mellen *et al.* 1983; Langemann and Perry 2001). The 2001 report states the cabin has the low, secretive appearance of a Simpson cabin and hypothesizes that Letourneau simply fixed up the structure in the 1940s during road construction (Langemann and Perry 2001). This conclusion is supported by an interview with Jimmy Simpson Jr. (Mellen *et al.* 1983), who identified the structure as one included in his father's hunting photo album that is labelled 1903 – 1914.

Tree-Ring Analysis

- All 6 samples (11 of 12 radii) produced a felling date of 1904 (Table 6.6).
- Two of the samples (1 with bark) displayed incomplete latewood, while 4 of the samples displayed complete latewood (all with bark on the original samples). Therefore, timbers were cut towards the end (late summer/ early fall) or after (fall to early spring of following year) the growth season of 1904.

Table 6.6 - Summary of results for tree-ring samples collected from the Mistaya River Cabin (1443R) (01MRC-cd.txt). Pearson's r -values represent a measure of correlation between the Glacier Lake Cabin cores (individual a/b pairs: 01MRC-fc.txt) and the living chronology (01GLC600-lc.txt) at a 99% confidence interval (at 50 lag 25).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01MRC01A	ES	CORNER A/D	LW; NO B; B ON ORIG.	1634 - 1904	271	1904	0.490*
01MRC01B	ES	CORNER A/D	EW; NO B; B ON ORIG.; PITH	1634 - 1898	265	1898	0.468*
01MRC02A	ES	CORNER C/D	EW; NO B; B ON ORIG.; PITH	1649 - 1904	256	1904	0.434*
01MRC02B	ES	CORNER C/D	INC. LW; NO B; B ON ORIG.; PITH	1649 - 1904	256	1904	0.465*
01MRC03A	ES	SIDE A	LW; NO B; B ON ORIG.; PITH	1745 - 1904	160	1904	0.359*
01MRC03B	ES	SIDE A	LW; NO B; B ON ORIG.; PITH	1745 - 1904	160	1904	0.398*
01MRC04A	ES	SIDE D	LW; NO B; PITH	1677 - 1904	228	1904	0.466*
01MRC04B	ES	SIDE D	INC. LW; NO B	1697 - 1904	208	1904	0.452*
01MRC05A	ES	SIDE D	LW; NO B; PITH	1599 - 1904	306	1904	0.512*
01MRC05B	ES	SIDE D	INC. LW; NO B	1620 - 1904	285	1904	0.513*
01MRC06A	ES	SIDE D	INC. LW; B	1672 - 1904	233	1904	0.412*
01MRC06B	ES	SIDE D	EW; B	1639 - 1904	266	1904	0.441*
MEAN PERSON'S r -VALUE							0.451

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

- Sample 01MRC01B has undergone some perimeter ring loss and therefore dates to 1898 while its pair dates to 1904.

The Mistaya River Cabin logs were felled for construction between the late summer of 1904 and the spring of 1905. However, deep winter snow packs and the unsuitable condition of trees growing in the spring make the fall of 1904 the most plausible felling date. The Parks Canada reports presented two plausible builders, either Arturo Letourneau in the 1940s or Jimmy Simpson between 1903 and 1914 (Mellen *et al.* 1983; Mickle and Wallace 1996; Langemann and Perry 2001). It now seems evident that

Simpson is more likely the original builder, and that Letourneau reused the structure at a later date. Not only does the structure have the appearance of a Simpson cabin, as previously mentioned, it was also constructed when Simpson was occupying the area between 1903 and 1914 (Mellen *et al.* 1983). Simpson was actively trapping in the area of the Mistaya River with his partner Fred Ballard until 1903, when Simpson took on the trapline alone (Hart 1993).

A photo located in the Whyte Museum archives may depict the original structure (Figure 6.28). The photo is labelled as a Simpson structure on the Mistaya River and was taken by Mary Schaffer, who traveled in the area in the early twentieth century. Additionally, Hart (1993) describes that when Simpson and Ballard had time during the Outram expedition in July 1902 they would “take the opportunity to construct rough cabins for use on the planned winter trapline...One of these cabins, near the mouth of the Mistaya River, was used to cache the extra supplies...” (Hart 1993: p.33). This note corroborates a 1902 description of a trapline cabin documented by Collie and Stutfield (1903), who came down the Mistaya River and discovered a cabin belonging to “two young trappers from Banff, Ballard and Simpson” (Stutfield and Collie 1903; Hart 1993). If Simpson is attributed to a 1902 cabin at the mouth of the Mistaya River, it is likely that he is also the builder of a 1904 cabin as he did continue trapping in the area after his separation with Ballard (Hart 1993).



Figure 6.28 - Simpson structure on the Mistaya River photographed by Mary Schaffer [no date]. Source: Whyte Museum of the Canadian Rockies (image ID # V527 PS-200; photographer Mary Schaffer; photo is in the public domain).

6.4.5 Glacier Trail Cabin

Glacier Trail Cabin (Figure 6.29) is located near Glacier Lake Trail on the NE bank of the North Saskatchewan River, approximately 600 m NW of the confluence of the North Saskatchewan and House Rivers. It is located at the edge of a forest dominated by Engelmann spruce and subalpine fir. The cabin is built of Engelmann spruce logs and is approximately 4.6 m long, 4.1 m wide, and 2.7 m high (Figure 6.30) with a sod-covered medium gable roof, and has undergone minimal decay. Both sides A and D have centrally located windows and the SE-facing wall (side C) has a low door bordering corner C/D. Construction techniques include saddle notch joinery and narrow log limb chinking. Bark is present on the majority of logs, and multiple axe-shaving marks are evident on exterior log-ends and interior log sides. The interior consists of a dirt floor and a raised log bed platform flanking the NE-facing wall (side B); metal scraps and cable are scattered under the bed. Graffiti is evident on the cabin's exterior, including: 'MAC ANDERSON NORDEGG AUG 20, 1939' and 'BRYSH OCT 10, 1939'.

Knowledge of these persons has not been obtained at this time. However, the dates inscribed do suggest a minimum date of occupation.



Figure 6.29 - Glacier Trail Cabin, BNP (photo orientation : northwestward facing).
Photo: July 2001.

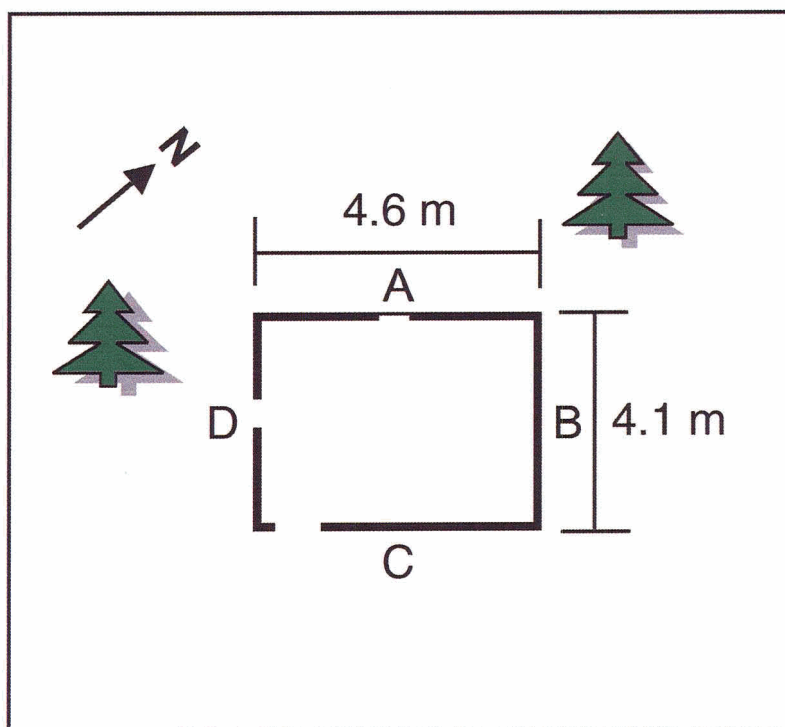


Figure 6.30 - Glacier Trail Cabin dimensional drawing.

While this structure includes the efficient saddle notch joinery, the craftsmanship that went into axe-shaving logs, inserting windows and a door, and constructing the roof suggest more time went into construction of this structure than in the Tangle Creek or Mistaya River Cabins. The use of horizontal logs and saddle notching infers a connection to the building traditions of the French, Swedes, and Germans (Rempel 1980; Kalman 1994). However, the use of a sod-covered roof is reminiscent of Ukrainian roofing techniques (Lehr 1976). The ethnic origins of these building traditions do not share commonalities with Simpson's ethnicity.

Structure Context

Parks Canada inventoried the site in 1983, 1996, and 1999 and identified the cabin as 'Simpson's Cabin' (Mellen 1983c; Mickle and Wallace 1996; Langemann 1999). The 1983 inventory does not indicate why the cabin is attributed to Simpson, however, the 1996 inventory states that a structure built low to the ground, with a low door in a low wall is typical Simpson building style (Mellen 1983c; Mickle and Wallace 1996). Nevertheless, additional tree-ring dating reveals the actual date of log felling for construction.

Tree-Ring Analysis

- Five of 10 samples (6 of 20 radii) from the Glacier Trail Cabin cluster at a minimum cutting date of 1907 (Table 6.7).
- The remaining samples cluster close to this date, specifically between 1901 and 1905, which is likely a result of more severe perimeter ring loss.
- The 1907 samples display both earlywood and incomplete latewood, 1 of which has bark (Smith 1999). Therefore logs were cut during (late spring to summer) and towards the end (late summer to early fall) of the 1907 growth season.

The Glacier Trial Cabin was constructed between the late spring and early fall of 1907. Simpson was at the height of his trapping career while working in the area, which includes the Mistaya River Cabin, during the first decade of the twentieth century. According to Parks Canada, the structure also has the definite low, secretive style of a Simpson cabin (Mellen 1983c; Mickle and Wallace 1996). In considering the date of construction and secretive style of this cabin it is likely that Simpson is the original builder.

Table 6.7 - Summary of results for tree-ring samples collected from the Glacier Trail Cabin (1445R). Pearson's *r*-values represent a measure of correlation between the Glacier Lake Cabin cores (individual a/b pairs) and the living chronology (99KL900-cd.txt) at a 99% confidence interval. The results are from UVTRL report #2000-04.

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
99KC00A	ES	EXTERIOR WALL	UNKNOWN	1748 - 1907	160	1907	N/A
99KC00B	ES	EXTERIOR WALL	UNKNOWN	1680 - 1904	225	1904	N/A
99KC001A	ES	EXTERIOR WALL	UNKNOWN	1690 - 1905	216	1905	N/A
99KC001B	ES	EXTERIOR WALL	UNKNOWN	1729 - 1907	179	1907	N/A
99KC002A	ES	EXTERIOR WALL	UNKNOWN	1622 - 1901	280	1901	N/A
99KC002B	ES	EXTERIOR WALL	UNKNOWN	1617 - 1873	257	1873	N/A
99KC003A	ES	EXTERIOR WALL	UNKNOWN	1668 - 1860	193	1860	N/A
99KC003B	ES	EXTERIOR WALL	UNKNOWN	1633 - 1894	262	1894	N/A
99KC004A	ES	EXTERIOR WALL	UNKNOWN	1687 - 1907	221	1907	N/A
99KC004B	ES	EXTERIOR WALL	UNKNOWN	1644 - 1907	264	1907	N/A
99KC005A	ES	EXTERIOR WALL	UNKNOWN	1691 - 1905	215	1905	N/A
99KC005B	ES	EXTERIOR WALL	UNKNOWN	1734 - 1901	168	1901	N/A
99KC006A	ES	EXTERIOR WALL	UNKNOWN	1685 - 1905	221	1905	N/A
99KC006B	ES	EXTERIOR WALL	UNKNOWN	1680 - 1907	228	1907	N/A
99KC007A	ES	EXTERIOR WALL	UNKNOWN	1632 - 1853	222	1853	N/A
99KC008A	ES	EXTERIOR WALL	UNKNOWN	1804 - 1904	101	1904	N/A
99KC008B	ES	EXTERIOR WALL	UNKNOWN	1670 - 1908	239	1907	N/A
99KC009A	ES	EXTERIOR WALL	UNKNOWN	1617 - 1887	271	1887	N/A
99KC009B	ES	EXTERIOR WALL	UNKNOWN	1601 - 1886	286	1886	N/A
99KC010B	ES	EXTERIOR WALL	UNKNOWN	1669 - 1904	236	1904	N/A
MEAN PERSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

6.4.6 Saskatchewan Crossing Teepee

Saskatchewan Crossing Teepee (SCT) (Figure 6.31) is also located near Glacier Lake Trail on the NE bank of the North Saskatchewan River. It is approximately 100 m E of the Glacier Trail Cabin, near the edge of the river terrace. The SCT is approximately 3.2 m high and 5.6 m wide and consists of 15 log poles stripped of bark and interlocked at a central peak with wire (Figure 6.32). The bases of the poles show the greatest signs of decay. Remnant materials were found near the teepee, including a sardine tin with “NORVEG” engraved, multiple cans (including a hole-in-top can), cooking utensils and a rock oven containing a tobacco can.



Figure 6.31 - Saskatchewan Crossing Teepee, BNP (photo orientation: eastward facing).
Photo: July 2001.

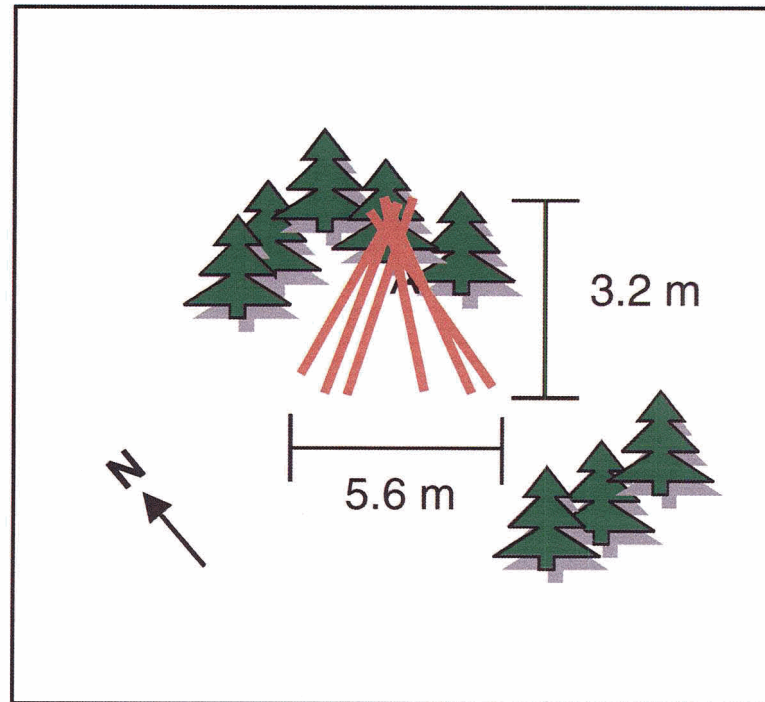


Figure 6.32 - Saskatchewan Crossing Teepee dimensional drawing.

This teepee, unlike horizontal log cabins, has roots in North American Native architecture (Lehr 1976). The structure is easily constructed and transported, and therefore is very suitable for the travel lifestyle of an outfitter or trapper. However, the ethnic origins of this building tradition do not share commonalities with Simpson's ethnicity.

Structure Context

Parks Canada reports mention the presence of the teepee in a site inventory form for the Glacier Trial Cabin. Therefore, it is likely that the teepee belonged to Simpson.

Tree-Ring Analysis Results

- Due to the presence of earlywood, a minimum felling date of late spring to summer of 1923 was acquired for the Saskatchewan Crossing Teepee (Table 6.8). While only one sample produced this date, it is still considered a minimum cutting date.

- It is likely the remaining samples have extensive perimeter ring loss. On the other hand, it is also possible that this site was reused multiple times by different groups. Sample 01SCT09 did not crossdate, likely a result of severe perimeter ring deterioration.

Table 6.8 - Summary of results for tree-ring samples collected from the Saskatchewan Crossing Teepee (1445R) (01SCT-cd.txt). Pearson's *r*-values represent a measure of correlation between the Saskatchewan Crossing Teepee cores (01SCT-fc.txt) and the living chronology (99KL900-lc.txt) at a 99% confidence interval (at 50 lag 25).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01SCT01	ES	STANDING	INC. EW; NO B	1632 - 1805	174	1805	0.588*
01SCT02	ES	STANDING	INC. EW; NO B; PITH	1650 - 1821	172	1821	0.522*
01SCT03	ES	STANDING	INC. EW; NO B; PITH	1635 - 1770	136	1770	0.475*
01SCT04	ES	STANDING	INC. EW; NO B; PITH	1635 - 1775	141	1775	0.530*
01SCT05	ES	STANDING	INC. EW; NO B; PITH	1726 - 1869	144	1869	0.613*
01SCT06	ES	STANDING	INC. EW; NO B; PITH	1708 - 1858	151	1858	0.680*
01SCT07	ES	STANDING	INC. EW; NO B; PITH	1673 - 1842	170	1842	0.434*
01SCT08	ES	STANDING	INC. EW; NO B; PITH	1793 - 1923	131	1923	0.619*
01SCT09	ES	STANDING	INC. EW; NO B;	1884 - 2000F	117	N/A	N/A
01SCT10	ES	STANDING	INC. EW; NO B; PITH	1817 - 1915	99	1915	0.608*
MEAN PERSON'S <i>r</i> -VALUE							0.563

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The log poles used in the teepee have a most recent minimum felling date between the late spring and summer of 1923. The proximity of the structure to the Glacier Lake Cabin (c. 6 km) and the temporal similarity (1924 vs. 1923) suggest that it is likely Simpson also used the teepee for his outfitting excursions. According to E. J. Hart, Simpson was one of the few outfitters who consistently used a teepee, rather than a tent (Hart 1993). Furthermore, in July of 1923 Simpson was outfitting a group from Bow Lake up to the northern reaches of the North Saskatchewan River (Hart 1993). It is

plausible that the group stopped at Simpson's site along the Saskatchewan, as Simpson would have known it to be a good camping spot, and he likely cut a new pole to add to his accumulating stack of teepee poles.

However, it was previously mentioned that different date clusters were acquired for the various teepee poles. While the 1923 and 1915 dates are likely Simpson related, it is possible that the eighteenth and mid-nineteenth century clusters are not simply a result of perimeter loss. Perhaps different groups reused the site. For example, the poles could date to the Stoney Natives whose principle dwelling was the teepee (Burley 1997).

6.4.7 Summary for all 5 Simpson Structures

In considering the 5 structures, it appears Simpson frequented the area of the North Saskatchewan River well into the 1920s. While it is possible to place Simpson within the regions of each structure during construction, it is clear that additional historical research could shed more light on the context of the 5 structures. Future resources to explore could include interviewing Simpson's relatives (i.e., Jimmy Simpson, Jr.), accessing additional archival records such as journals, outfitting records, and photographs, and investigating artifacts at each site.

6.5 Summary

This chapter clarifies the structure context and construction sequence for three log structure groupings in the National Parks of the southern Canadian Rocky Mountains: 1) Ewan Moberly Homestead; 2) Billy Carver Cabin; and 3) Jimmy Simpson structures: Tangle Creek Cabin, Glacier Lake Cabin, Mistaya River Cabin, Glacier Trail Cabin, and Saskatchewan Crossing Teepee.

Tree-ring analysis reveals that the Ewan Moberly Homestead was constructed between 1877 and 1906. The majority of logs for the main building were cut first (1903 to 1904) and the secondary building was constructed approximately two years later (1905 to 1907). These dates correspond with the occurrence of Métis year round settlement in the upper Athabasca Valley. The Métis of this area are known to have maintained a semi

nomadic lifestyle, until around 1905 when homesteads like that of the Moberly family were constructed (Wallace 2002a).

Tree-ring analysis reveals that the Billy Carver Cabin was constructed over two building phases: 1913 and 1933. Additional research exposes controversy over the habitant's name and sheds light on the structure's abandonment.

Tree-ring analysis highlights the settlement history of Jimmy Simpson in the area of the North Saskatchewan River. Simpson's presence is documented by the construction of three structures for trapping (Tangle Creek Cabin 1904, Mistaya River Cabin 1904, and Glacier Trail Cabin 1907) and two for the purpose of guide outfitting (Glacier Lake Cabin 1924, and Saskatchewan Crossing Teepee 1923).

7.0 Conclusions

The aim of this thesis was to undertake a dendroarchaeological-contextual assessment of 35 sites (44 log structures) in JNP, BNP, and KNP. Through the primary method of tree-ring analysis, including the interpretation of related chronological, behavioural, and environmental data, three main objectives were met:

- An architectural inventory and tree-ring analysis of structures located within the three parks.
- An exploration of remote construction activity in JNP, BNP, and KNP, in terms of functional, temporal, and spatial distributions, and tree species selection.
- A detailed dendroarchaeological-contextual investigation of three structure case studies.

Chapter 2.0 provided a literature review of topics related to the tree-ring analysis of log structures in the National Parks of the southern Canadian Rocky Mountains. The chapter included a review of dendrochronology, dendroarchaeology, a brief background of the history of key cultural groups and activities in JNP, BNP, and KNP, and vernacular architecture.

Methods followed in this thesis were presented in Chapter 3.0, including: study site selection, tree-ring analysis (dendrochronological sampling and dating), determining builders and structure functions, and interpretations and descriptions of results (construction activity, case studies, and summary appendices).

Chapter 4.0 described the characteristics, including date range and tree species, of the crossdated structure and living chronologies from 36 sites in JNP, BNP, and KNP. For all three parks, the Douglas-fir chronologies covered the longest time period (1560 – 2000 AD), the spruce chronologies included the oldest tree-ring date (1461 AD), and lodgepole pine was the most abundantly used species for construction, followed by

Engelmann spruce, spruce, Douglas-fir, and white spruce. Tree species at the sites were linked to broader ecoregions and it was determined that all of the log structures in this thesis are located in the Montane and lower Subalpine ecoregions.

Chapter 5.0 explored remote construction activity at 35 sites (44 structures) in the three parks. All of the dated structures were constructed from 1882 to 1933, with a prominent building episode between 1903 and 1915. Structures were assigned to one of eight functional classes: railroad construction (11 structures), homesteads and outbuildings (10 structures), trapper or outfitter structures (8 structures), an unknown function category (6 structures), warden service (3 structures), multiple use (3 structures), burial sites (2 structures), and mining (1 structure). Structures were related to specific events or people in park history and compared to park boundary changes, specifically whether the structures were inside established boundaries, outside of established boundaries, or incorporated into boundaries after construction.

Chapter 6.0 explored the tree-ring analysis, structure context (builder and purpose) and construction sequence (tree-ring dates) of three log structure groupings:

- The Ewan Moberly Homestead was constructed between 1877 and 1906: main building (1903 to 1904) and secondary building (1905 to 1906). These dates correspond with the occurrence of Métis year round settlement in the upper Athabasca Valley (Wallace 2002a).
- The Billy Carver Cabin was constructed over two building phases: 1913 and 1933. Additional research exposed controversy over the inhabitant's name and shed light on the structure's abandonment.
- The Jimmy Simpson structures (Tangle Creek Cabin, Glacier Lake Cabin, Mistaya River Cabin, Glacier Trail Cabin, and Saskatchewan Crossing Teepee) highlighted the settlement history of Simpson in the area of the North Saskatchewan River. Three of the structures relate to trapping (Tangle Creek

Cabin 1904, Mistaya River Cabin 1904, and Glacier Trail Cabin 1907) and two for the purpose of guide outfitting (Glacier Lake Cabin 1924, and Saskatchewan Crossing Teepee 1923).

Appendix A summarized site and tree-ring dating results for all 35 structure sites (44 structures) and Appendix B included interview transcriptions for six interviews conducted between June 15 and July 2, 2002 in BNP, JNP, and the town of Brûlé.

Cumulatively, the chapters contained in this thesis contribute to the understanding of the settlement history of the parks. Whether homesteading or other economic pursuits, the structures reveal the diversity of activities and cultures imprinted on the landscape of the southern Canadian Rocky Mountains from the late-nineteenth to the early-twentieth centuries. This temporal cluster of building activity is reflective of the larger settlement boom occurring in Canada over the same time period. In particular, the Laurier government was encouraging immigration into Canada between 1896 and 1911. This succeeded with the arrival of over two million people, many of whom settled in the four western provinces (Finkel and Conrad 1998). While the abundance of structures dating to this period reflects this population boom, the difficult environment of the southern Canadian Rocky Mountains did not attract many settlers. Settlement was primarily limited to those willing and able to endure these conditions, including, but not limited to, the settlers linked to the eight functional classes discussed in this thesis (i.e., trappers and outfitters).

The contents of this thesis also facilitate a broader understanding of the capabilities of dendroarchaeology in western Canada and provide a template for additional dendroarchaeological research. The dendroarchaeological analysis applied in this thesis was guided by the dendroarchaeology model developed by researchers at the Laboratory of Tree-Ring Research at the University of Arizona, that promotes the investigation of log structures through an integrated review of related chronological, behavioural, and environmental data (Dean 1996; Towner *et al.* 2001; Nash 2002).

The result is the creation of a template for the integrated analysis of multiple log structures, comprising of:

- A thorough description of crossdated structure and living chronologies used in the study, including crossdating parameters, chronology date ranges, tree species selection, and relating sites to specific ecoregions.
- An exploration of construction activity by relating structure function to temporal distribution and spatial distributions.
- In-depth case studies that describe site and structure condition, and explore structure context and tree-ring analysis.

While it is hoped that other researchers in the field of dendroarchaeology will adopt this template for an integrated dendroarchaeological approach, it is also expected that the information contained in the thesis will be relevant to other related fields. In particular, the crossdated living and structure chronologies will be available for collaborative research in the related fields of dendroglaciology and dendroclimatology. The summarized tree-ring dating results and structure descriptions in Appendix A will hopefully assist other researchers, including researchers of vernacular architecture, in additional settlement history studies.

To disseminate the results of this thesis, it is expected that Parks Canada personnel will create educational pamphlets and informational signboards at structure sites. I plan on publishing sections in related journals and producing a version that may act as a guidebook for visitors interested in the historic log structures of the southern Canadian Rocky Mountains.

While this thesis is the first representative dendroarchaeological manuscript for structures in the National Parks of the southern Canadian Rocky Mountains, additional research is recommended, including:

- Artifact dating where tree-ring dating, functional class, and/or builder assignment was not possible.
- Additional in-depth case study investigations, as in Chapter 6.0, of structures presented in Appendix A.
- Interpretation of structure architecture, including form and joinery, in relation to geographical distribution (temporal and spatial) and structure function.
- Reconnaissance surveys for log structures found in the Upper Subalpine and Alpine ecoregions and described in Appendix B interviews.

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Appendix A: Tree-Ring Results and Site Descriptions

The following section provides summarized site and tree-ring dating results for 35 structure sites (44 structures) sampled in Jasper, Banff, and Kootenay National Parks. The structures are ordered by corresponding National Park.

The following structures are included:

1) Bedson Ridge Cabin [?R].....	122
2) Fiddle River Camp [?R/ UVTRL 99T].....	124
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7) Celestine Lake Road Railroad Construction Camp [256R/ UVTRL99P].....	134
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18) Indian Meadow Crib [928R].....	164
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21) Tangle Creek Warden Cabin [1700R].....	171
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23) Saskatchewan Crossing Teepee [1445R].....	175
24) Glacier Trail Cabin [1445R/ UVTRL 99K].....	177

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26) Glacier Lake Cabin [447/ 1224R].....	181
27) Indianhead Creek Crib [1755R].....	183
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30) Billy Carver Cabin [61R].....	189
31) Bill Peyto Cabin [1920R].....	192
32) Turtle Tom's Cabin/ Brewster Creek [1699R].....	195
33) Fatigue Creek Cabin [2030R].....	197
34) Dog Lake Cabin [1031T].....	200
35) Kootenay River Cabin [368T].....	202

1) Bedson Ridge Cabin [?R]

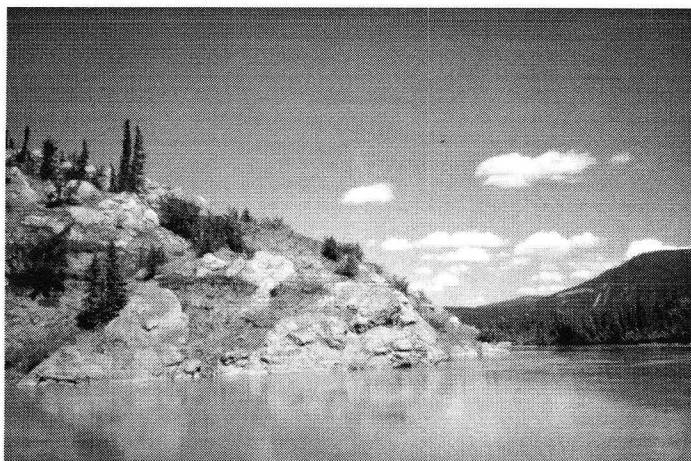


Figure A.1 - Bedson Ridge Cabin: Located on south side of a bluff along the Athabasca River (photo orientation: eastward facing). Photo: July 2001.



Figure A.2 - View of southwest-facing corner (photo orientation: eastward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0442393E, 5898085N (11U); 1000 M	1	ENGELMANN SPRUCE (STRUCTURE)	6.8 M LENGTH, 5.8 M WIDTH, 1.4 M HEIGHT	NORTH WALL: BURIED, EAST WALL: 2, WEST WALL: 6, SOUTH WALL: 4,	RAILROAD CONSTRUCTION

b) Site description:

The Bedson Ridge Cabin is located on an exposed south-facing bluff along the Athabasca River at the JNP northern boundary. A small cluster of living white spruce border the south wall of the structure. No stumps are visible. A Canadian Northern Railway (CNR) track and tunnel are located approximately 200 m north of the structure.

c) Structure description:

All of the walls are exposed, except for the north facing wall which is covered by sediment and vegetation. The beams lack bark and are undergoing decomposition; the beams ends display both axe and saw marks. Large wood wedges are used for chinking. Iron spikes and smaller round-headed nails are imbedded in the beams.

d) Tree-ring dating results:

Table A.1 - Summary of results for tree-ring samples collected from the Bedson Ridge Cabin (01BRC-cd.txt). Pearson's r -values represent a measure of correlation between the Glacier Lake Cabin cores (individual a/b pairs: 01BRC-fc.txt) and the living chronology (99Spruce.txt) at a 99% confidence interval at 50 lag 25 (except 01BRC01B at 25 lag 12).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01BRC01A	ES	SIDE C	INC. EW; NO B	1780 - 1896	117	1896	0.411*
01BRC01B	ES	SIDE C	INC. EW; NO B	1775 - 1891	117	1891	0.297
01BRC02A	ES	SIDE B	INC. EW; NO B; PITH	1645 - 1907	263	1907	0.450*
01BRC02B	ES	SIDE B	INC. LW; NO B; PITH	1645 - 1907	263	1907	0.440*
01BRC03A	ES	SIDE B	INC. EW; NO B; PITH	1743 - 1894	152	1894	0.313
01BRC03B	ES	SIDE B	INC. EW; NO B; PITH	1743 - 1885	143	1885	0.427*
MEAN PEARSON'S r -VALUE							0.390

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction of the Bedson Ridge Cabin is between the late spring or early summer (beginning of growth season) and early fall of 1907. Although the logs may have been cut early as the summer of 1891, the lack of bark infers the possibility of missing perimeter rings and the assignment of a minimum outermost date.

e) **Function:**

The 1907 minimum cutting date corresponds to the beginning of railroad surveys in the area (1908 -1910) (Brelsford 2001b); however, it is possible that the dated samples are missing perimeter rings and actually date between 1908-1911. According to Tom Peterson, a local Jasper historian, the CNR built their railroad on the Bedson Ridge side of the Athabasca River around 1911. He suggests that the structure was used to store dynamite for blasting the nearby railway tunnel (Brelsford 2002d). Bob Hallam, another local Jasper historian, agrees with Peterson's statement and rules out the possibility of it functioning as a trapper cabin, believing that the site is too exposed and too far for hauling water to be a trapper cabin (Brelsford 2002e).

2) **Fiddle River Railroad Camp [?R/ UVTRL 99T]**

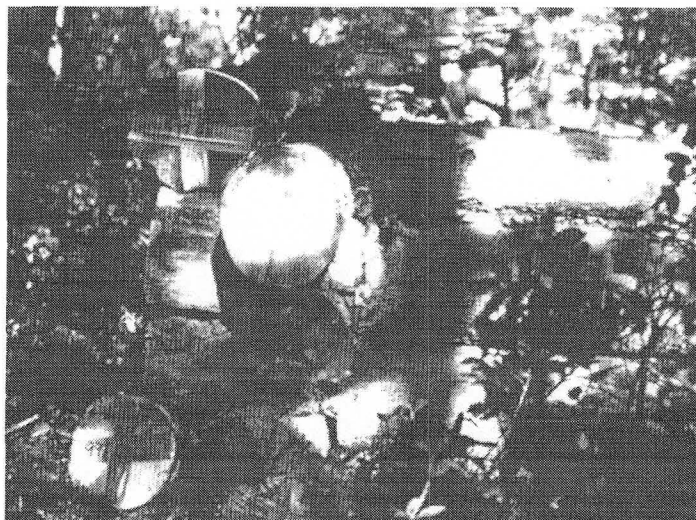


Figure A.3 - Fiddle River Railroad Camp. Source: Smith 1999.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0435290E, 5897920N (11U); 945 M	1	N/A	N/A	5 COURSES FOR EACH WALL	UNKNOWN: POSSIBLY RAILROAD CONSTRUCTION

b) Site description:

The Fiddle River Railroad Camp is situated near where the Fiddle River flows into the Athabasca River. It can be accessed through the abandoned railroad and is located between the river and the railroad (Smith 1999).

c) Structure description:

The structure is in ruinous condition: the roof is collapsed and two of the walls have caved in (Smith 1999).

d) Tree-ring dating results:

Table A.2 - Summary of results for tree-ring samples collected from the Fiddle River Railroad Camp (99T). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
99TCKE2A	N/A	EAST WALL	NO B; T.R.: EW OR LW ?	1867 - 1915	49	1915	N/A
99TCKE2B	N/A	EAST WALL	NO B; T.R.: EW OR LW ?	1866 - 1916	51	1916	N/A
99TCKW3A	N/A	WEST WALL	NO B; T.R.: EW OR LW ?	1783 - 1917	135	1917	N/A
99TCKW3B	N/A	WEST WALL	NO B; T.R.: EW OR LW ?	1783 - 1907	125	1907	N/A
99TCKS3A	N/A	SOUTH WALL	NO B; T.R.: EW OR LW ?	1828 - 1915	88	1915	N/A
99TCKS3B	N/A	SOUTH WALL	NO B; T.R.: EW OR LW ?	1826 - 1914	89	1914	N/A
99TCKN4A	N/A	NORTH WALL	NO B; T.R.: EW OR LW ?	1800 - 1902	103	1902	N/A
99TCKN4B	N/A	NORTH WALL	NO B; T.R.: EW OR LW ?	1797 - 1899	103	1899	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction is during (summer) or after (fall to early spring of following year) the growth season of 1917. All of the samples date from 1899 to 1917, and 5 of 8 samples cluster from 1914 – 1917.

e) Function:

The proximity to the abandoned rail line and associated debris (i.e., roughly constructed oven), suggests this site may have been a temporary railway encampment (Smith 1999).

However, the date post-dates railroad construction activity in the area and, therefore, its function remains uncertain (Lothian 1987).

3) Disaster Point Cabin [?R/ UVTRL 99U]

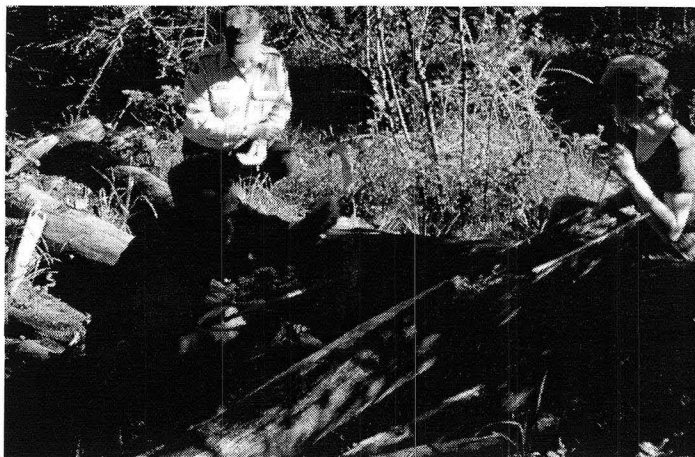


Figure A.4 - Disaster Point Cabin. Source: Smith 1999.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0442620E, 5890560N (11U); 1000 M	1	N/A	N/A	2 TO 3 COURSES FOR EACH WALL	UNKNOWN: POSSIBLY RAILROAD CONSTRUCTION

b) Site description:

Disaster Point Cabin is situated directly west of where Highway 16 passes Roche Miette on a rocky outcrop above the abandoned railroad (Smith 1999).

c) Structure description:

The structure is in ruinous condition; the roof has collapsed and there is no evidence of original windows or door openings. The logs are rotting and indicate fire scarring (Smith 1999).

d) **Tree-ring dating results:**

Table A.3 - Summary of results for tree-ring samples collected from the Disaster Point Cabin (99U). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
99UC00A	LP OR SPR.?	UNKNOWN	NO B; T.R.: EW OR LW?	1760 - 1868	109	1868	N/A
99UC00B	LP OR SPR.?	UNKNOWN	NO B; T.R.: EW OR LW?	1763 - 1881	119	1881	N/A
99UC01A	LP OR SPR.?	UNKNOWN	NO B; T.R.: EW OR LW?	1677 - 1858	182	1858	N/A
99UC02A	LP OR SPR.?	UNKNOWN	NO B; T.R.: EW OR LW?	1651 - 1782	132	1782	N/A
99UC03A	LP OR SPR.?	UNKNOWN	NO B; T.R.: EW OR LW?	1697 - 1870	144	1870	N/A
99UC03B	LP OR SPR.?	UNKNOWN	NO B; T.R.: EW OR LW?	1713 - 1837	125	1837	N/A
99UCKS2A	LP OR SPR.?	SOUTH WALL	NO B; T.R.: EW OR LW?	1668 - 1877	210	1877	N/A
99UCKS2B	LP OR SPR.?	SOUTH WALL	NO B; T.R.: EW OR LW?	1668 - 1879	212	1879	N/A
99UC05A	LP OR SPR.?	UNKNOWN	NO B; T.R.: EW OR LW?	1699 - 1795	127	1795	N/A
99UC05B	LP OR SPR.?	UNKNOWN	NO B; T.R.: EW OR LW?	1667 - 1794	128	1794	N/A
99UCKW1 A	LP OR SPR.?	WEST WALL	NO B; T.R.: EW OR LW?	1706 - 1882	177	1882	N/A
99UCKW1 B	LP OR SPR.?	WEST WALL	NO B; T.R.: EW OR LW?	1701 - 1837	137	1837	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction is during (late spring to summer) or after (fall to early spring of following year) the growth season of 1882. The entire group of samples date from 1782 – 1882.

e) **Function:**

The proximity of the cabin to the railroad suggests a railroad construction connection. However, the dates assigned to the cabin predate railroad construction in the early twentieth century (Lothian 1987) and the function of this structure remains uncertain.

4) Ram Pasture Structure [251R]



Figure A.5 - Ram Pasture Structure (photo orientation: northward facing). Photo: July 2001.

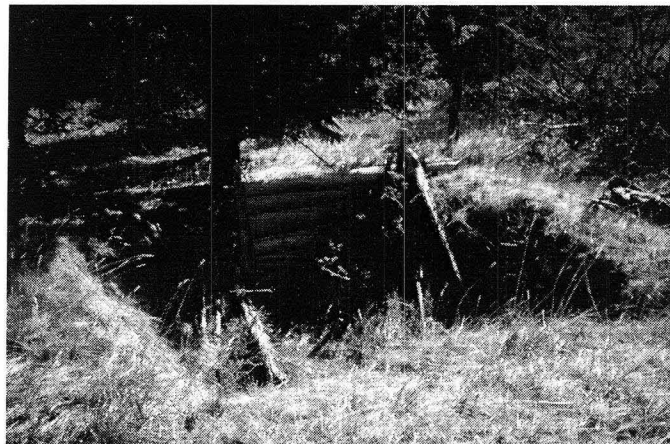


Figure A.6 - Ram Pasture Structure (photo orientation: northeastward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	#OF STRUC-TURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0432501E, 5887074N (11U); 1055 M	1	WHITE SPRUCE (LIVING AND STRUCTURE)	3.1 M LENGTH, 2.5 M WIDTH, 1.3 M HEIGHT	NE WALL: 7 SE WALL: 6 SW WALL: BURIED NW WALL: BURIED	RAILROAD CONSTRUCTION

b) Site description:

The Ram Pasture Structure is located on the east side of a ridge, along Devona Cabin Road, approximately 600 m from the Celestine Lake Road junction (Vivian and Flaherty 1983).

Grasses and white spruce trees dominate the landscape. Approximately 50 m down slope to the east is the present CNR track.

c) Structure description:

The structure is built into the northeast side of a ridge. The surrounding earth supports three of the decaying walls. An entrance way faces down-slope (northeast); a door with flat planks and round-headed nails is found 1 m away. Saw and axe marks are notable on multiple logs.

d) Tree-ring dating results:

Table A.4 - Summary of results for tree-ring samples collected from the Ram Pasture Structure (01RPS-cd.txt). Pearson's *r*-values represent a measure of correlation between the Ram Pasture Structure cores (individual a/b pairs: 01RPS-fc.txt) and the living chronology (99Spruce.txt) at a 99% confidence interval and at 50 lag 25 interval.

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01RPS01A	WS	NORTHEAST WALL	EW; NO B; PITH	1756 - 1884	129	1884	0.708*
01RPS01B	WS	NORTHEAST WALL	EW; NO B; PITH	1756 - 1895	140	1895	0.678*
01RPS02A	WS	NORTHEAST WALL	EW; NO B; PITH	1752 - 1886	135	1886	0.591*
01RPS02B	WS	NORTHEAST WALL	EW; NO B; PITH	1752 - 1879	128	1879	0.547*
01RPS03A	WS	NORTHEAST WALL	EW; NO B; PITH	1770 - 1893	124	1893	0.779*
01RPS03B	WS	NORTHEAST WALL	EW; NO B; PITH	1770 - 1894	125	1894	0.837*
01RPS04A	WS	NORTHEAST WALL	LW; NO B; PITH	1737 - 1894	158	1894	0.806*
01RPS04B	WS	NORTHEAST WALL	EW; NO B; PITH	1736 - 1895	160	1895	0.708*
MEAN PEARSON'S <i>r</i> -VALUE							0.707

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The date range for the logs sampled is from 1879 – 1895. The minimum cutting date for construction of the Ram Pasture Structure is during (late spring to summer) the growth season of 1895. As no bark was found on the samples, however, the perimeter tree rings may be missing and the structure may be younger than the assigned date of 1895.

e) **Function:**

The structure's close proximity to the railroad and the minimum construction date of 1895 infer that it is linked to railroad construction. Bob Hallam and Tom Vinson support this claim (Brelsford 2002e). However, Tom Peterson states that a lot of people traveled through the area during railroad construction and, therefore, its function is difficult to discern. Nevertheless, he mentions that if it is railroad related, it would be connected to the CNR and likely provided food storage rather than dynamite storage. He claims that this is not a spot that would have required dynamite blasting (Brelsford 2002d).

5) **Railside Cabin [?R/ UVTRL 99Q]**



Figure A.7 - Railside Cabin. Source: Smith 1999.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	#OF STRUC-TURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0431760E, 5885677N (11U); 945 M	1	SPRUCE (STRUCTURE)	N/A	8 TO 9 COURSES FOR EACH WALL	RAILROAD CONSTRUCTION

b) **Site description:**

The Railside Cabin is situated along Celestine Lake Road, overlooking Jasper Lake. It is approximately 50 m upslope of the Canadian National (CN) mainline and can be accessed by continuing downslope from the Celestine Lake Road Railroad Construction Camp (256R) (Smith 1999).

c) **Structure description:**

The roof of the cabin has collapsed but the walls remain predominantly intact. The structure is square in form, with two symmetrically placed windows on the downslope facing side and a doorway on the lateral side (Smith 1999).

d) **Tree-ring dating results:**

Table A.5 - Summary of results for tree-ring samples collected from the Railside Cabin (99Q). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r- VALUE
99QC00A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1703 - 1865	163	1865	N/A
99QC00B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1699 - 1849	151	1849	N/A
99QC01A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1739 - 1873	135	1873	N/A
99QC01B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1728 - 1866	139	1866	N/A
99QC02A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1740 - 1889	150	1889	N/A
99QC02B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1737 - 1868	132	1868	N/A
99QC03A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1762 - 1879	118	1879	N/A
99QC03B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1753 - 1888	136	1888	N/A
99QC04A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1724 - 1800	77	1800	N/A
99QC04B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1727 - 1886	160	1886	N/A
99QC05A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1748 - 1886	139	1886	N/A
99QC05B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1746 - 1877	132	1877	N/A
99QC06A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1751 - 1891	141	1891	N/A
99QC06B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1753 - 1890	138	1890	N/A
99QC07A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1748 - 1886	139	1886	N/A
99QC07B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1721 - 1839	119	1839	N/A
99QC08A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1773 - 1893	121	1893	N/A
99QC08B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1749 - 1890	142	1890	N/A
99QC09A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1758 - 1889	132	1889	N/A
99QC10A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1705 - 1875	171	1875	N/A
99QC10B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1711 - 1876	166	1876	N/A
99QC11A	SPR.	UNKNOWN	T.R.: EW OR LW ?	1748 - 1884	137	1884	N/A
99QC11B	SPR.	UNKNOWN	T.R.: EW OR LW ?	1752 - 1894	143	1894	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum date for construction of the Railside Cabin is during (late spring to summer) or after (fall to early spring of following year) the growth season of 1894. Remaining logs date from 1865 – 1894.

e) **Function:**

The proximity of the Railside Cabin to the Celestine Lake Road Railroad Construction Camp (99P) and the CN mainline infers that the structure could be related to railroad

construction. Although the Railside Cabin construction date is earlier (1894), it is possible that there are missing perimeter rings and that they were felled at the same time as those at 99P.

6) Rocky River Cabin [226R/ UVTRL 99V1]



Figure A.8 - Rocky River Cabin. Source: Smith 1999.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0434799E, 5888430N (11U); 985 M	1	N/A	N/A	5 TO 6 COURSES FOR EACH WALL	UNKNOWN

b) Site description:

The Rocky River Cabin is situated east of Highway 16 on a floodplain in a stand of cottonwood tree, close to where the Rocky River passes under the highway (Smith 1999).

c) Structure description:

The cabin has collapsed and only partial remnants of the roof remain. Notched joinery at the corners holds some of the beams tightly together. An earthen berm surrounds the structure and likely functioned as an insulator. A single door was noted and two platforms, likely for sleeping, were found within the cabin. Bark is notable on multiple samples (Smith 1999).

d) **Tree-ring dating results:**

Table A.6 - Summary of results for tree-ring samples collected from the Rocky River Cabin (99V1). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
99V1C00A	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	1774 - 1906	133	1906	N/A
99V1C00B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	1765 - 1899	134	1899	N/A
99V1C01A	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	82	N/A	N/A
99V1C01B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	59	N/A	N/A
99V1C02A	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	126	N/A	N/A
99V1C02B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	113	N/A	N/A
99V1C03A	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	114	N/A	N/A
99V1C03B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	129	N/A	N/A
99V1C04A	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	129	N/A	N/A
99V1C04B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	130	N/A	N/A
99V1C05A	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	149	N/A	N/A
99V1C05B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	132	N/A	N/A
99V1C06A	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	131	N/A	N/A
99V1C06B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	123	N/A	N/A
99V1C07B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	52	N/A	N/A
99V1C08A	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	100	N/A	N/A
99V1C08B	UNKNOWN	UNKNOWN	T.R.: EW OR LW?	F	100	N/A	N/A
99V1S3A	UNKNOWN	SOUTH WALL	T.R.: EW OR LW?	F	96	N/A	N/A
99V1S3B	UNKNOWN	SOUTH WALL	T.R.: EW OR LW?	F	96	N/A	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

While only two samples crossdated, the minimum cutting date for construction is during (late spring to summer) or after (fall to early spring of following year) the growth season of 1906. The other sample dated to 1899.

e) **Function:**

While the dates are close to the railroad construction period in the area, the primary function of this sleeping structure is unknown.

7) Celestine Lake Road Railroad Construction Camp [256R/ UVTRL 99P]

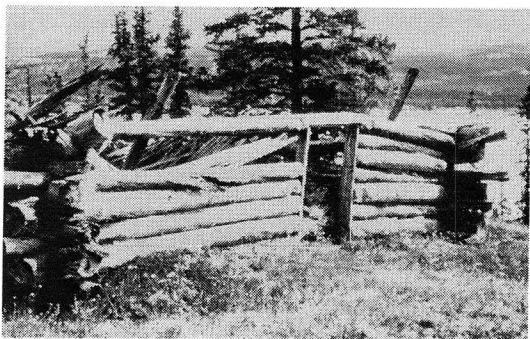


Figure A.9 - Celestine Lake Road Railroad Construction Camp structure 1 (99P1).
Source: Smith 1999.

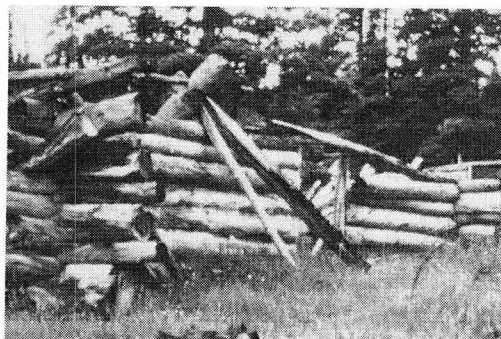


Figure A.10 - Celestine Lake Road Railroad Construction Camp structure 2 (99P2).
Source: Smith 1999.



Figure A.11 - Celestine Lake Road Railroad Construction Camp structure 3 (99P3).
Source: Smith 1999.



Figure A.12 - Celestine Lake Road Railroad Construction Camp structure 4 (99P5).
Source: Smith 1999.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0431421E, 5885677N (11U); 1020 M	4 (OF 5 LOG STRUCTURES AND MULTIPLE DEPRESSIONS)	SPRUCE (LIVING AND STRUCTURES)			RAILROAD CONSTRUCTION
		STRUCTURE 1: LARGE BUNKHOUSE		N/A	5 TO 6 COURSES FOR EACH WALL	
		STRUCTURE 2: LARGE BUNKHOUSE		N/A	5 TO 6 COURSES FOR EACH WALL	
		STRUCTURE 3: SMALL CABIN WITH ANNEX		N/A	9 TO 10 COURSES FOR EACH WALL	
		STRUCTURE 4: SMALL CABIN		N/A	COLLAPSED	

b) Site description:

The Celestine Lake Road Railroad Construction Camp is located along Celestine Lake Road, approximately 10 km northwest of the Snaring Warden station. It consists of five large log structures, multiple depressions and smaller outbuildings. A sloping grassy ridge characterizes the landscape (Flaherty 1983).

c) Structure descriptions:

Structure 1 (99P1) is a large rectangular bunkhouse with standing walls and a collapsed roof. The structure contains one doorway and multiple windows. The logs are weathered and lack bark. Structure 2 (99P2) is similar to structure 1 in shape, size, and condition. However, this structure has two doorways, and multiple windows. Structure 3 (99P3) is a small two-roomed rectangular building with standing walls and a collapsed roof. Logs are weathered and lack bark. Structure 4 (99P5) is a collapsed square building, with evidence of a doorway and a window opening.

d) Tree-ring dating results:

Table A.7 - Summary of results for tree-ring samples collected from the Celestine Lake Road Construction Camp (Structures 1-4). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

STRUCTURE 1							
SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUT- SIDE DATE	r- VALUE
99P1C00A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1702 - 1846	145	1846	N/A
99P1C00B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1751 - 1872	122	1872	N/A
99P1C01A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1685 - 1874	190	1874	N/A
99P1C01B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1689 - 1891	203	1891	N/A
99P1C02B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1820 - 1900	81	1900	N/A
99P1C03A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1737 - 1901	165	1901	N/A
99P1C03B	SPR.	UNKNOWN	NO B; LW	1760 - 1907	148	1907	N/A
99P1C04A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1775 - 1889	115	1889	N/A
99P1C04B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1774 - 1888	115	1888	N/A
99P1C05A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1820 - 1886	67	1886	N/A
99P1C06B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1745 - 1895	151	1895	N/A
99P1C07A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1792 - 1863	72	1863	N/A
99P1C07B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1825 - 1889	65	1889	N/A
99P1C08A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1840 - 1902	63	1902	N/A
99P1C09A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1713 - 1860	148	1860	N/A
99P1C09B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1714 - 1845	132	1845	N/A
99P1C10A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1797 - 1878	82	1878	N/A
99P1C10B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1824 - 1890	67	1890	N/A
99P1C11A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1799 - 1884	86	1884	N/A
99P1C11B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1792 - 1890	99	1890	N/A
99P1C12A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1806 - 1861	56	1861	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

STRUCTURE 2							
SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUT- SIDE DATE	r- VALUE
99P2C00A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1768 - 1867	100	1867	N/A
99P2C00B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1771 - 1861	91	1861	N/A
99P2C01A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1768 - 1900	133	1900	N/A
99P2C01B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1770 - 1907	138	1907	N/A
99P2C02A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1779 - 1887	109	1887	N/A
99P2C02B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1770 - 1888	119	1888	N/A
99P2C03A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1765 - 1881	117	1881	N/A
99P2C03B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1760 - 1879	120	1879	N/A
99P2C04A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1771 - 1910	140	1910	N/A
99P2C05A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1728 - 1856	119	1856	N/A
99P2C05B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1740 - 1815	76	1815	N/A
99P2C06A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1760 - 1885	126	1885	N/A
99P2C06B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1756 - 1888	133	1888	N/A
99P2C07A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1782 - 1827	46	1827	N/A
99P2C07B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1816 - 1899	84	1899	N/A
99P2C08A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1763 - 1899	137	1899	N/A
99P2C08B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1749 - 1906	158	1906	N/A
99P2C09A	SPR.	UNKNOWN	NO B; LW	1769 - 1911	145	1911	N/A
99P2C09B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1743 - 1908	166	1908	N/A
99P2C10A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1816 - 1896	81	1896	N/A
99P2C10B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1740 - 1871	132	1871	N/A
MEAN PERSON'S R-VALUE							N/A

STRUCTURE 3A							
SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUT- SIDE DATE	r- VALUE
99P3C00A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1748 - 1855	108	1855	N/A
99P3C00B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1742 - 1871	130	1871	N/A
99P3C01A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1754 - 1896	141	1896	N/A
99P3C02A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1737 - 1896	160	1896	N/A
99P3C02B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1734 - 1867	134	1867	N/A
99P3C03A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1759 - 1865	107	1865	N/A
99P3C03B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1764 - 1878	115	1878	N/A
99P3C04A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1762 - 1885	124	1885	N/A
99P3C04B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1758 - 1874	117	1874	N/A
99P3C05A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1763 - 1880	118	1880	N/A
99P3C06A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1764 - 1885	122	1885	N/A
99P3C06B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1861 - 1895	35	1895	N/A
99P3C07B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1768 - 1889	122	1889	N/A
99P3C08A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1746 - 1875	130	1875	N/A
99P3C08B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1752 - 1889	138	1889	N/A
99P3C09A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1748 - 1871	124	1871	N/A
99P3C10A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1752 - 1866	115	1866	N/A
99P3C10B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1768 - 1865	98	1865	N/A
99P3C11A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1744 - 1868	125	1868	N/A
99P3C11B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1740 - 1873	134	1873	N/A
99P3C12A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1744 - 1847	104	1847	N/A
99P3C12B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1735 - 1837	103	1837	N/A
99P3C13A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1748 - 1891	144	1891	N/A
99P3C13B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1803 - 1873	71	1873	N/A
99P3C14B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1730 - 1867	138	1867	N/A

STRUCTURE 3B							
SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
99P3C15A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1768 - 1884	117	1884	N/A
99P3C15B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1764 - 1860	97	1860	N/A
99P3C16A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1764 - 1883	120	1883	N/A
99P3C16B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1773 - 1885	113	1885	N/A
99P3C17A	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1758 - 1835	78	1835	N/A
99P3C17B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1765 - 1835	71	1835	N/A
99P3C18A	SPR.	UNKNOWN	NO B; T.R.: LW	1761 - 1909	149	1909	N/A
99P3C18B	SPR.	UNKNOWN	NO B; T.R.: EW OR LW ?	1762 - 1905	144	1905	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

STRUCTURE 4							
SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTNS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
99P5C00A	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1762 - 1895	134	1895	N/A
99P5C00B	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1764 - 1897	134	1897	N/A
99P5C01A	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1749 - 1826	78	1826	N/A
99P5C02A	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1778 - 1894	117	1894	N/A
99P5C02B	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1790 - 1897	108	1897	N/A
99P5C03A	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1782 - 1901	120	1901	N/A
99P5C03B	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1793 - 1902	110	1902	N/A
99P5C04A	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1701 - 1822	122	1822	N/A
99P5C04B	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1774 - 1878	105	1878	N/A
99P5C05A	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1738 - 1870	133	1870	N/A
99P5C05B	SPR.	UNKNOWN	WEATHERED; T.R.: EW OR LW ?	1757 - 1883	127	1883	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction for the structures at Celestine Lake Road Railroad Construction Camp are as follows: structure 1 (99P1) is after (fall to early spring of following year) the growth season of 1907; structure 2 (99P2) is after (fall to early spring of following year) the growth season of 1911; structure 3 (99P3) is after (fall to early spring of following year) the growth season of 1909; and structure 4 (99P5) is during (late spring to summer) or after (fall to early spring of following year) the growth season of 1902. Cumulatively, the samples dated at this site range from 1815 – 1911.

e) **Functions:**

According to Parks Canada, and as inferred by the name, this site is presumed to be an abandoned railroad construction camp (Pickard 1984). Railroad lines were being constructed through this area around 1911 (Lothian 1987), which corresponds with the most recent minimum cutting date found at the site (structure 2: 1911).

8) **Talbot Lake Foundation [?R/ UVTRL 99W]**



Figure A.13 - Talbot Lake Foundation. Source: Smith 1999.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0433460E, 5884170N (11U); 945 M	1	N/A	N/A	1 LOG FOUND	UNKNOWN

b) **Site description:**

The Talbot Lake Foundation is situated in a vegetated area of sand dunes, west of Highway 16 (Smith 1999).

c) **Structure description:**

Only one sample was found at the site: a partially rotted buried log (Smith 1999).

d) Tree-ring dating results:

Table A.8 - Summary of results for tree-ring samples collected from the Talbot Lake Log Foundation (99W). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTNS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
99VTL1A	UNKNOWN	BURIED	NO B; T.R.: EW OR LW?	1800 - 1908	109	1908	N/A
99VTL1B	UNKNOWN	BURIED	NO B; T.R.: EW OR LW?	1804 - 1908	105	1908	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction is during (late spring to summer) or after (fall to early spring of following year) the growth season of 1908.

e) Function:

The date of the foundation, which may be missing perimeter rings, is close to the Grand Trunk Pacific Railway (GTPR) construction period in the area (1910-1913) (Lothian 1987). However, a lack of additional supporting data leaves the log's original function unknown.

9) Edna Lake Structure [271R]



Figure A.14 - Edna Lake Structure (photo orientation: northeastward facing). Photo: July 2001.



Figure A.15 - Edna Lake Structure (photo orientation: southwestward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0431048E, 5881450N (11U); 1020 M	1 (DUGOUT)	ALDER SHRUBS; ENGELMANN SPRUCE (LIVING & STRUCTURE)	3.4 M LENGTH, 2.6 M WIDTH, 1.4 M HEIGHT	NE: 1 BURIED ROOF: C. 5	RAILROAD CONSTRUCTION

b) Site description:

The Edna Lake Structure is located approximately 50 m east of Highway 16, at the northeast end of Edna Lake. The site consists of vegetated sand dunes dominated by alder shrubs and Engelmann spruce trees.

c) Structure description:

The structure is excavated into the side of an old road cut (Francis and Porter 2000), resulting in three sides being covered with earth. The roof has collapsed and the sides are caving in. Round-headed nails are notable at the site.

d) Tree-ring dating results:

Table A.9 - Summary of results for tree-ring samples collected from the Edna Lake Structure (01ELS-fc.txt). Tree-ring dating was unsuccessful.

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
01ELS01A	ES	BURIED NEAR NORTHEAST WALL	EW; NO B; B ON ORIG.	1801 - 1999F	199	N/A	N/A
01ELS01B	ES	BURIED NEAR NORTHEAST WALL	EW; NO B; B ON ORIG.	1799 - 2000F	202	N/A	N/A
01ELS02A	ES	ROOF BEAM	EW; NO B; LAST 10 RINGS ESTIMATED; PITH	1875 - 2000F	126	N/A	N/A
01ELS02B	ES	ROOF BEAM	EW; NO B; LAST 15 RINGS ESTIMATED; PITH	1875 - 2000F	126	N/A	N/A
01ELS03A	ES	ROOF BEAM	EW; NO B; LAST 17 RINGS ESTIMATED; PITH	1876 - 2000F	125	N/A	N/A
01ELS03B	ES	ROOF BEAM	LW; NO B; LAST 15 RINGS ESTIMATED; PITH; ROT @ B	1890 - 2000F	111	N/A	N/A
01ELS04A	ES	ROOF BEAM	EW; NO B	1881 - 2000F	120	N/A	N/A
01ELS04B	ES	ROOF BEAM	EW; NO B; LAST 10 RINGS ESTIMATED	1880 - 2000F	121	N/A	N/A
01ELS05A	ES	ROOF BEAM	EW; NO B; PITH	1857 - 2000F	144	N/A	N/A
01ELS05B	ES	ROOF BEAM	LW; NO B; PITH	1857 - 2000F	144	N/A	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Crossdating was unsuccessful. Exploration of additional living chronologies is needed.

e) Function:

According to Parks Canada, the structure likely functioned as a storage cellar for cold storage or black powder storage during railway or highway construction (Francis and Porter 2000). Bob Hallam and Tom Peterson suggest the structure relates to the Grand Trunk Pacific Railway and believe it was likely used for storage in a railroad construction camp (Brelsford 2002d and 2002e).

10) Ewan Moberly Homestead [283R]



Figure A.16 - Ewan Moberly Homestead (main structure on left) (photo orientation: westward facing).
Source: Parks Canada Agency ID#283R-mh0014.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0425746E, 5878224N (11U); 1022 M	2				HOMESTEAD AND OUTBUILDINGS
		STRUCTURE 1: MAIN STRUCTURE	DOUGLAS-FIR, LODGEPOLE PINE & ENGELMANN SPRUCE (STRUCTURE)	6.8 M LENGTH, 6.2 M WIDTH, 3.2 M HEIGHT	12 TO 19 COURSES FOR EACH WALL	
		STRUCTURE 2: SECONDARY STRUCTURE	LODGEPOLE PINE & ENGELMANN SPRUCE (STRUCTURE)	5.4 M LENGTH, 4.7 M WIDTH, 2.7 M HEIGHT	10 TO 11 COURSES FOR EACH WALL	

b) Site description:

The Ewan Moberly Homestead is located in the Athabasca River Valley of JNP along Celestine Lake Road, approximately 600 m north of Cobblestone Creek (Sumpter *et al.* 1992).

c) Structure description:

The homestead consists of two buildings situated on a sandy ridge in an aeolian-capped alluvial fan landscape dominated by grass, spruce, and aspen (Sumpter *et al.* 1989; Sumpter *et al.* 1992). The logs have been hewn flat and joined by dovetail (main structure) and V-

notch joinery (secondary structure). Both structures are insulated with wood and mud chinking.

d) Tree-ring dating results:

Table A.10 - Summary of results for tree-ring samples collected from the Ewan Moberly Homestead (main structure: 01EMH1-cd.txt). Pearson's *r*-values represent a measure of correlation between the Ewan Moberly Homestead cores (individual a/b pairs: 01EMH1-fc.txt) and the living chronology (99Spruce.txt) at a 99% confidence interval and at 50 lag 25 interval (except 102 at 25 lag 12 and 105 and 106 at 15 lag 7).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTNS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01EMH102	DF	SIDE A; BOTTOM LOG	LW; B; D.B.	1920 - 2000F	81	N/A	N/A
01EMH103	LP	SIDE B; 3 RD LOG UP	LW; NO B	1861 - 2000F	140	N/A	N/A
01EMH104	ES	SIDE D; 5 TH LOG UP	INC. LW; B; D.B.	1782 - 1904	123	1904	0.326
01EMH105	ES	SIDE A; 10 TH LOG UP	LW; NO B	1970 - 2000F	31	N/A	N/A
01EMH106	ES	SIDE C; 10 TH LO UP	LW; NO B	1962 - 2000F	39	N/A	N/A
01EMH107	ES	SIDE A; 4 TH LOG UP	LW; NO B	1764 - 1899	136	1899	0.361*
01EMH108A	ES	REPLACE D BEAM	LW; B; SAMPLED IN PARKS COMPOUND; PITH	1758 - 1903	146	1903	0.322
01EMH108B	ES	REPLACE D BEAM	LW; B; SAMPLED IN PARKS COMPOUND; PITH	1758 - 1903	146	1903	0.325
01EMH109A	ES	REPLACE D BEAM	EW; NO B; SAMPLED IN PARKS COMPOUND	1754 - 1903	150	1903	0.463*
01EMH109B	ES	REPLACE D BEAM	EW; NO B; SAMPLED IN PARKS COMPOUND; PITH	1751 - 1901	151	1901	0.332
01EMH110A	ES	REPLACE D BEAM	LW; NO B; SAMPLED IN PARKS COMPOUND; PITH	1945 - 2000F	56	N/A	N/A
01EMH110B	ES	REPLACE D BEAM	LW; NO B; SAMPLED IN PARKS COMPOUND; PITH	1945 - 2000F	56	N/A	N/A
01EMH111A	ES	REPLACE D BEAM	LW; NO B; BG; SAMPLED IN PARKS COMPOUND; PITH	1814 - 1903	90	1903	0.703*
01EMH111B	ES	REPLACE D BEAM	LW; NO B; BG; SAMPLED IN PARKS COMPOUND	1814 - 1903	90	1903	0.657*
MEAN PERSON'S R -VALUE							0.436

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Eight of 14 sample segments taken from the main structure crossdated with the living chronology. Although the outermost dates cluster around 1903 and the most recent cutting date of 1904, it is apparent that the majority of logs for construction were felled either after (fall to early spring of following year) the growth season of 1903 or during (late summer to early fall) the growth season of 1904. The earliest log felled for construction had a minimum cutting date of 1899.

Table A.11 - Summary of results for tree-ring samples collected from the Ewan Moberly Homestead (secondary structure: 01EMH2-cd.txt). Pearson's r -values represent a measure of correlation between the Ewan Moberly Homestead cores (individual a/b pairs: 01EMH2-fc.txt) and the living chronology (99Spruce.txt) at a 99% confidence interval and at 25 lag 12 interval (except 023, 024, 03, 05, 06, 07 at 50 lag 25).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUT- SIDE DATE	r- VALUE
01EMH021	ES	SIDE D; 7 TH LOG UP	INC. LW; NO B; B ON ORIG.	1827 - 1903	77	1903	0.368
01EMH022	ES	SIDE D; 11 RD LOG UP	EW; NO B; B ON ORIG.	1834 - 1906	73	1906	0.402
01EMH023	ES	SIDE A; 4 TH LOG UP	LW; NO B; B ON ORIG.	1764 - 1906	143	1906	0.420*
01EMH024	LP	SIDE B; 8 TH LOG UP	LW; NO B; B ON ORIG.	1765 - 1877	113	1877	0.498*
01EMH025	ES	SIDE D; 10 TH LOG UP	EW; B; D.B.; PITH	1666 - 2000F	335	N/A	N/A
02EMH01	LP	SIDE A; 10 TH LOG UP	LW; NO B; BG; B ON ORIG.	1868 - 2000F	133	N/A	N/A
02EMH02	ES	SIDE A; 5 TH LOG UP	LW; NO B; B ON ORIG.	1818 - 2000F	183	N/A	N/A
02EMH03	ES	SIDE B; 3 RD LOG UP	EW; NO B; B ON ORIG.	1766 - 1901	136	1901	0.613*
02EMH04	ES	SIDE B; 4 TH LOG UP	EW; NO B; B ON ORIG.	1832 - 1905	74	1905	0.558*
02EMH05	LP	SIDE C; 7 TH LOG UP	LW; NO B; BG; B ON ORIG.	1859 - 2000F	142	N/A	N/A
02EMH06	ES	SIDE C; 3 RD LOG UP	EW; NO BARK; BG; B ON ORIG.	1787 - 1905	119	1905	0.447*
02EMH07	ES	SIDE D; 2 ND LOG UP	LW; NO B; BG; B ON ORIG.	1775 - 1905	131	1905	0.538*
02EMH08	ES	SIDE A; 10 TH LOG UP	EW; B; BG; D.B.	1852 - 2000F	149	N/A	N/A
MEAN PERSON'S r -VALUE							0.481

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

For the secondary structure, 8 of 13 samples crossdated with the living chronology. The crossdated logs felled for the secondary structure date between 1877 and 1907. The

minimum cutting date for construction was after (fall to the early spring of the following year) the growth season of 1906.

e) Function:

The Ewan Moberly family was one of many Métis families who established their homestead in the Athabasca River valley. With the creation of JNP in 1907, the family was relocated to the Grand Cache areas (Wallace and Meropoulis 2000). A more detailed analysis is presented in Chapter 6.0.

11) Morro Peak Structure [?R]



Figure A.17 - Morro Peak Structure (photo orientation: southwestward facing). Photo: July 2001.



Figure A.18 - Morro Peak Structure (view from above) (photo orientation: northward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0427167E, 5877244N (11U); 1030 M	1 (DUGOUT)	DOUGLAS-FIR (LIVING AND STRUCTURE)	3.3 M LENGTH, 2.3 M WIDTH, 3.3 M HEIGHT	N/A	RAILROAD CONSTRUCTION

b) Site description:

The Morro Peak Structure is located on a rock bluff on the east side of Highway 16 and is hidden by living Douglas-fir. Approximately 10 m northeast are the remains of another structure of similar dimensions.

c) Site description:

The Morro Peak Structure is built into a hillside, with earth supporting three of the walls. The entrance way faces downslope. Saw and axe marks are visible and the logs are joined by saddle and notch joinery.

d) Tree-ring dating results:

Table A.12 - Summary of results for tree-ring samples collected from the Morro Peak Structure (01MPS-cd.txt). Pearson's *r*-values represent a measure of correlation between the Morro Peak Structure cores (individual a/b pairs: 01MPS-fc.txt) and the living chronology (cana026.crn) at a 99% confidence interval and at 50 lag 25 interval (except 01MPS04a/b at 25 lag 12).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTNS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
01MPS01A	DF	SIDE C	EW; NO B; B ON ORIG.; PITH	1801 - 1904	104	1904	0.553*
01MPS01B	DF	SIDE C	EW; NO B; B ON ORIG.; PITH	1801 - 1902	102	1902	0.736*
01MPS02A	DF	SIDE C	EW; NO B; B ON ORIG.; PITH	1722 - 1896	175	1896	0.657*
01MPS02B	DF	SIDE C	EW; NO B; B ON ORIG.; PITH	1722 - 1899	178	1899	0.506*
01MPS03A	DF	SIDE C	LW; NO B; PITH	1728 - 1898	171	1898	0.783*
01MPS03B	DF	SIDE C	EW; NO B; PITH	1728 - 1899	172	1899	0.801*
01MPS04A	DF	SIDE C	EW; NO B; B ON ORIG.; PITH	1830 - 1909	80	1909	0.856*
01MPS04B	DF	SIDE C	LW; NO B; B ON ORIG.; PITH	1830 - 1909	80	1909	0.858*
01MPS05A	DF	SIDE C	EW; NO B; PITH	1807 - 1906	100	1906	0.790*
01MPS05B	DF	SIDE C	EW; NO B; PITH	1807 - 1905	99	1905	0.810*
MEAN PEARSON'S <i>r</i> -VALUE							0.735

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum date for construction of the Morro Peak Structure is during (late spring to summer) and after (fall to early spring of following year) the growth season of 1909. Samples dated range from 1896 – 1909.

e) Function:

Bob Hallam, Tom Peterson, and Tom Vinson all suggest a connection to the GTPR and agree that the two structures would have been used to store dynamite and caps separately for the purposes of bridge construction across the Athabasca River (Brelsford 2002d, 2002e).

12) Hoodoo Ridge Crib [1043R]



Figure A.19 - Hoodoo Ridge Crib (note original imbedded limb suspended by two living trees)
Source: Parks Canada Agency #ID1043R1t.
Date taken unknown.

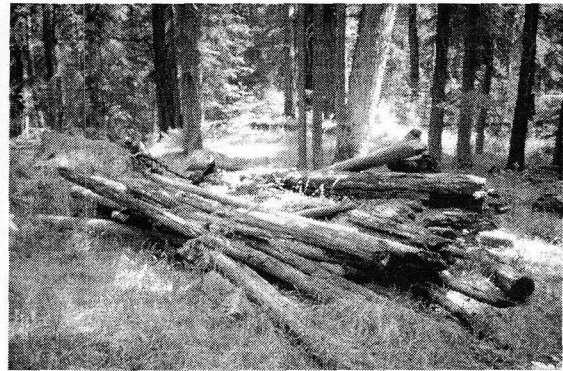


Figure A.20 - Hoodoo Ridge Crib. Photo: July 2001.

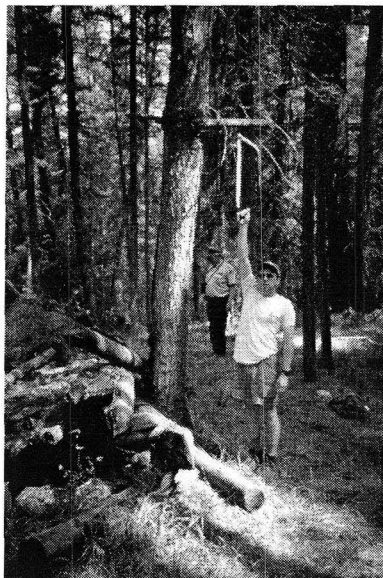


Figure A.21 - Hoodoo Ridge Crib (note imbedded limb broken suspended by one living tree). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0430810E, 5869647N (11U); 1170 M	1	DOUGLAS-FIR	4.4 M LENGTH, 1.3 M WIDTH, 2.8 M HEIGHT	NORTH WALL: BURIED, EAST WALL: 4 OR 5, WEST WALL: 4 OR 5, SOUTH WALL: BURIED,	HOMESTEADS AND OUTBUILDINGS

b) Site description:

The Hoodoo Ridge Crib is located on a ridge east of the John Moberly Homestead, in a forest dominated by young Douglas-fir and older lodgepole pine. A drainage ditch surrounds the structure (20 cm wide and 5-10 cm deep). An uprooted tree, marked by a large dugout, rests along the north side of the crib. The tree has been cut and was likely previously resting on the crib.

c) Structure description:

The longer logs have axe cut ends creating half-moon shapes, which insert into incised half-moons on the shorter logs. Although the longer (west and east facing) sides have toppled over, their original placement and height (4 or 5 courses) is reflected in scars on the

living tree located on the east side. The same living tree has a nailed marker stick, which it has begun to grow over, approximately 2.8 m above the ground. An older photograph shows that the stick originally went directly over top the crib and was attached to a living tree on the west side (Figure A.21). Bark is notable on multiple logs.

d) Tree-ring dating results:

Table A.13 - Summary of results for tree-ring samples collected from the Hoodoo Ridge Crib (01HRC-cd.txt). Pearson's *r*-values represent a measure of correlation between the Hoodoo Ridge Crib cores (individual a/b pairs: 01HRC-fc.txt) and the living chronology (01HRC300-lc.txt) at a 99% confidence interval and at 25 lag 12 interval (except 01HRC03B at 50 lag 25).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUTSIDE DATE	r- VALUE
01HRC01A	DF	CORNER A/D	LW; NO B	1828 - 1900	73	1900	0.434
01HRC02A	DF	SIDE C	LW; NO B; PITH	1784 - 1900	117	1900	0.483
01HRC02B	DF	SIDE C	LW; B; PITH	1784 - 1900	117	1900	0.477
01HRC03A	DF	SIDE B	LW; NO B	1790 - 1900	111	1900	0.583*
01HRC03B	DF	SIDE B	LW; NO B	1790 - 1900	111	1900	0.666*
01HRC04A	DF	GROUND; .5M FROM SIDE B	LW; B; PITH	1797 - 1900	104	1900	0.500*
01HRC04B	DF	GROUND; .5M FROM SIDE B	LW; NO B; PITH	1797 - 1900	104	1900	0.490*
01HRC05A	DF	SIDE A	1893 EW; NO B; PITH; 1893 EW NOT ORIG. COUNTED	1790 - 1892	104	1893	0.493*
01HRC05B	DF	SIDE A	LW; NO B; PITH	1790 - 1893	104	1893	0.516*
MEAN PEARSON'S <i>r</i> -VALUE							0.516

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The cutting date for construction of the Hoodoo Ridge Crib is after (fall to early spring of following year) the growth season of 1900. One log may have been cut as early as 1893, but the lack of bark infers that rings are likely missing.

e) Function:

In a 1996 report, Parks Canada inferred that the site was a burial crib and the limb imbedded in the tree (Figure A.21) was a grave marker in the shape of a cross (Francis 1996). However, an older photo (Figure A.19) shows that the limb was originally attached to two trees. It is possible that this limb was used to suspend a canvas, which

would have protected goods stored in the crib below. Bill Ruddy, a long time resident of Jasper and previous operator of Maligne Lodge, noted that this type of structure, with the suspended crossbeam, was used as a tent likely for wintering over. The canvas would be hung for protection and the crib foundation would provide insulation (Brelsford 2002f). Bob Hallam and Tom Peterson support this interpretation, suggesting that the structure is likely linked to the construction of the John Moberly family's secondary building approximately 1.2 km to the northwest (Brelsford 2002d, 2002e). According to Peterson, a large fire went through the valley around 1888 and apparently spared the Douglas-fir, a fire resistant species, on Hoodoo Ridge (Brelsford 2002d). Hallam and Peterson both claim that the Moberlys acquired their building materials from the ridge and subsequently built a tool cache to store their equipment (Brelsford 2002d, 2002e). The Moberly family occupied the area until 1909, which overlaps with the crib's date of construction (1901).

13) Athabasca Meeting Place [313R]



Figure A.22 - Athabasca Meeting Place, structure 1 (building footprint) (photo orientation: northwestward facing). Photo: July 2001.

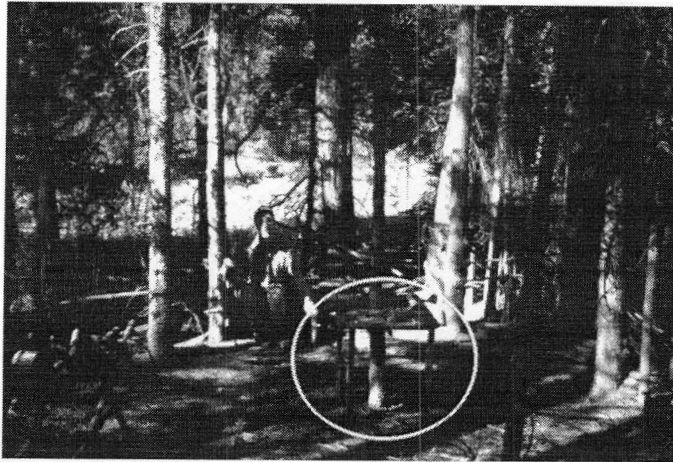


Figure A.23 - Athabasca Meeting Place, structure 2 (circle with table and benches). Table is circled in centre and a person is seated in one of the six seats (photo orientation: westward facing). Photo: July 2001.



Figure A.24 - Athabasca Meeting Place, structure 3 (dugout) (photo orientation: westward facing). Photo: July 2001.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0429234E, 5869302N (11U); 1020 M	3 (AND 22 ADDITIONAL FOOTPRINTS)	ENGELMANN SPRUCE (LIVING)			MULTIPLE USE SITE
		STRUCTURE 1: BUILDING FOOTPRINT	LODGEPOLE PINE (STRUCTURE)	9.0 M LENGTH, 6.6 M WIDTH, 0.3 M HEIGHT	N/A	
		STRUCTURE 2: CIRCLE OF BENCHES AND TABLE	LODGEPOLE PINE, DOUGLAS- FIR (STRUCTURE)	AVG. 1.7 M LENGTH, AVG. 0.7 M WIDTH, AVG. 0.2 M HEIGHT	N/A	
		STRUCTURE 3: DUGOUT CELLAR	LODGEPOLE PINE (STRUCTURE)	2.6 M LENGTH, 2.1 M WIDTH, 1.5 M HEIGHT	4 TO 5 COURSES ON EACH WALL	

b) **Site description:**

The site is located along Highway 16, on the west side of the Athabasca River. The forest is dominated by young Engelmann spruce (ca. 80 years). There are 25 structures and footprints visible at the site.

c) **Structure descriptions:**

Structure 1 (building footprint) is a large square shape surrounded by raised mounds, likely marking the original perimeter. Three depressions are notable in the middle of the footprint and rotted lumbered logs with round-headed nails outline the structure edge. Remnant materials include metal scraps, and broken glass (white, light blue, and brown). Structure 2 consists of a central table surrounded by a circle of six benches. Some of the seats are nailed to neighbouring living trees, which have subsequently grown over the nails. A living tree cutting through the centre of the tabletop supports the table. Remnant materials include metal scraps, glass, and animal bone. Structure 3 is a subsurface dugout partially imbedded in a raised bank. The exterior walls are covered with dirt. Each wall has approximately 4 to 5 horizontal logs resting on a lower wall of dirt, while the roof consists of 25 logs. All logs are stationed with saddle and notch joinery. Metal axe marks and bark are notable. Remnant materials include round-headed nails, a metal bowl, animal bones, and an interior beam stamped with "EDMONTON".

d) Tree-ring dating results:

Table A.14 - Summary of results for tree-ring samples collected from the Athabasca Meeting Place structure 1 (01AMP1-cd.txt), structure 2 (01AMP2-cd.txt), structure 3 (01AMP3-cd.txt)). Pearson's r -values represent a measure of correlation between the Athabasca Meeting Place cores (individual a/b pairs: structure 1 (01AMP1-fc.txt); structure 2 (01AMP2-fc.txt); structure 3 (01AMP3-fc.txt)) and the living chronology (99spruce.txt) at a 99% confidence interval and at 50 lag 25 interval (except 01AMP202B, 01AMP303B, 01AMP305B, 01AMP306A at 25 lag 12; 01AMP201A/B at 15 lag 7).

STRUCTURE 1							
SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUT- SIDE DATE	r- VALUE
01AMP101A	LP	SIDE D	EW; NO B; PITH	1776 - 1897	122	1897	0.530*
01AMP101B	LP	SIDE D	EW; NO B; PITH	1776- 1898	123	1898	0.423*
01AMP102A	LP	SIDE D	EW; NO B; PITH	1938 - 2000 F	63	NO DATE	N/A
01AMP102B	LP	SIDE D	EW; NO B; PITH	1952 - 2000 F	49	NO DATE	N/A
MEAN PEARSON'S r -VALUE							0.477
STRUCTURE 2							
SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUT- SIDE DATE	r- VALUE
01AMP201A	LP	N/A	EW; NO B; PITH	1857 - 1889	32	1889	0.724
01AMP201B	LP	N/A	EW; NO B; PITH	1857 - 1889	32	1889	0.806
01AMP202A	LP	N/A	LW; NO B; PITH ROT	1945 - 2000 F	56	NO DATE	N/A
01AMP202B	LP	N/A	EW; NO B; PITH ROT	1867 - 1914	48	1914	0.427
MEAN PEARSON'S r -VALUE							0.652
STRUCTURE 3							
SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUT- SIDE DATE	r- VALUE
01AMP301 A	LP	INTERIOR BEAM	EW; B	1931 - 2000 F	70	N/A	N/A
01AMP301 B	LP	INTERIOR BEAM	BROKEN & GLUED BACKWARDS	N/A	N/A	N/A	N/A
01AMP302 A	LP	INTERIOR BEAM	EW; NO B; BARK PRESENT WHEN SAMPLED	1783 - 1904	122	1904	0.497*
01AMP302 B	LP	INTERIOR BEAM	EW; B; PITH	1781 - 1904	124	1904	0.402*
01AMP303 A	LP	INTERIOR BEAM	1882 EW; NO B; 1882 EW NOT C. ORIG.; PITH	1768 - 1881	114	1882	0.242
01AMP303 B	LP	INTERIOR BEAM	EW; NO B	1775 - 1881	107	1881	0.369
01AMP304 A	LP	INTERIOR BEAM	LW; NO B	1786 - 1900	115	1900	0.551*
01AMP304 B	LP	INTERIOR BEAM	LW; NO B	1785 - 1907	123	1907	0.466*
01AMP305 A	LP	INTERIOR BEAM	EW; B; NARROW RINGS AT BARK; MAYBE +/-; PITH	1784 - 1869	86	1869	0.536*
01AMP305 B	LP	INTERIOR BEAM	LW; NO B; MAYBE +/- RINGS AT BARK END	1785 - 1866	82	1866	0.571*
01AMP306 A	LP	INTERIOR BEAM	LW; NO B	1782 - 1880	99	1880	0.333
01AMP306 B	LP	INTERIOR BEAM	LW; NO B	1779 - 1883	105	1883	0.283
MEAN PEARSON'S r -VALUE							0.425

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction of structure 1 is during (late spring to summer) the growth season of 1898. For structure 2, the minimum cutting date is during (late spring to summer) the growth season of 1914. Structure 3 has a cutting date during (late spring to summer) the growth season of 1904. However, a minimum cutting date for one log is after (fall to early spring of following year) the growth season of 1907. The logs sampled at this site show a date range from 1866 – 1914. It is possible that the site of the Athabasca Meeting Place underwent various building phases.

e) Function:

Local historians, Bob Hallam, Tom Peterson, and Tom Vinson believe that the site is linked to multiple functions: fur trade, railroad construction, logging, and a Jasper resident gathering place. According to Peterson, fur traders likely came through the area as early as 1825; the site is situated along the route from Jasper House to Henry House (Brelsford 2002d). The site was likely also used as a railroad construction camp between 1910-1913 (Pickard 1984; Brelsford 2002d, 2002e). This is the location where the GTPR and the CN crossed each other, with one of the lines constructing a trestle. The CN likely built the trestle, as they came through the area after the GTPR. Construction of the trestle would have required a large work force and as a result a large construction camp (Brelsford 2002e). A Jack Ladder for hauling ties out of the Athabasca was located just down stream from the site (Brelsford 2002e); it is possible that the site functioned as a tie camp when logging was active in the valley around 1919 (Brelsford 2002d). This site was also frequented by residents of Jasper, as an area for social gatherings around the 1950s (Brelsford 2002e). Parks Canada also suggests that the structure may have functioned as a warden cabin, a guide outfitter camp and a Métis occupation site, specifically the Swift family who had a homestead across Highway 16 at the present day Palisade Centre (Porter 1998). However, the most recent minimum dates for structures range from 1898 – 1914,

indicating the site likely corresponds to railroad construction and logging. Nevertheless, the site contains the remnants of various occupants and is classified as a multiple use site.

14) Keith Lake Cabin [1760R/ UVTRL 99R]



Figure A.25 - Keith Lake Cabin. Source: Smith 1999.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0431930E, 5861850N (11U); 975 M	1	N/A	N/A	3 TO 5 COURSES FOR EACH WALL	UNKNOWN

b) Site description:

The Keith Lake Cabin is situated on a terrace surface, east of Keith Lake in the vicinity of Lake Edith (Smith 1999).

c) Structure description:

The cabin consists of a roofless four-walled space with an internal crib-line structure. It can be entered through a single offset opening along the east wall. Most of the logs appear to have lost perimeter wood, however, bark is notable on at least one log (Smith 1999).

d) Tree-ring dating results:

Table A.15 - Summary of results for tree-ring samples collected from the Keith Lake Cabin (99R). Pearson's r-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUTSIDE DATE	r- VALUE
99RC00A	N/A	UNKNOWN	T.R.: EW OR LW ?	1791 - 1886	96	1886	N/A
99RC00B	N/A	UNKNOWN	T.R.: EW OR LW ?	1790 - 1879	90	1879	N/A
99RC01A	N/A	UNKNOWN	T.R.: EW OR LW ?	1789 - 1886	98	1886	N/A
99RC01B	N/A	UNKNOWN	T.R.: EW OR LW ?	1791 - 1883	93	1883	N/A
99RC02A	N/A	UNKNOWN	T.R.: EW OR LW ?	1796 - 1886	91	1886	N/A
99RC02B	N/A	UNKNOWN	T.R.: EW OR LW ?	1808 - 1887	80	1887	N/A
99RC03A	N/A	UNKNOWN	T.R.: EW OR LW ?	1765 - 1886	122	1886	N/A
99RC03B	N/A	UNKNOWN	T.R.: EW OR LW ?	1774 - 1885	112	1885	N/A
99RC04A	N/A	UNKNOWN	T.R.: EW OR LW ?	1791 - 1884	94	1884	N/A
99RC04B	N/A	UNKNOWN	T.R.: EW OR LW ?	1779 - 1885	107	1885	N/A
99RC05A	N/A	UNKNOWN	T.R.: EW OR LW ?	1785 - 1888	104	1888	N/A
99RC05B	N/A	UNKNOWN	B; EW	1803 - 1890	88	1890	N/A
99RC06A	N/A	UNKNOWN	T.R.: EW OR LW ?	1812 - 1884	73	1884	N/A
99RC06B	N/A	UNKNOWN	T.R.: EW OR LW ?	1813 - 1887	75	1887	N/A
99RC07B	N/A	UNKNOWN	T.R.: EW OR LW ?	1797 - 1888	92	1888	N/A
99RC08A	N/A	UNKNOWN	T.R.: EW OR LW ?	1857 - 1883	27	1883	N/A
99RC08B	N/A	UNKNOWN	T.R.: EW OR LW ?	1835 - 1887	53	1887	N/A
99RCKW 2A	N/A	WEST WALL	T.R.: EW OR LW ?	1799 - 1885	87	1885	N/A
99RCKW 2B	N/A	WEST WALL	T.R.: EW OR LW ?	1799 - 1884	86	1884	N/A
99RCKE3 A	N/A	EAST WALL	T.R.: EW OR LW ?	1789 - 1885	97	1885	N/A
99RCKE3 B	N/A	EAST WALL	T.R.: EW OR LW ?	1789 - 1882	94	1882	N/A
99RCKS3 A	N/A	SOUTH WALL	T.R.: EW OR LW ?	1792 - 1883	92	1883	N/A
99RCKS3 B	N/A	SOUTH WALL	T.R.: EW OR LW ?	1792 - 1884	93	1884	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The cutting date for construction of the Keith Lake Cabin is during (late spring to summer) the growth season of 1890. The dates for all of the logs sampled range from 1879 – 1890.

e) Function:

While it is possible multiple perimeter rings are missing, the 1890 cutting date predates railroad construction in the area. It is possible the structure functioned as a guide/outfitter shelter and canvas would have been laid across the top as a temporary roof. However, there is insufficient data to discern the function of this structure.

15) Derr Creek Mine Cabin [1171R/ UVTRL 990]

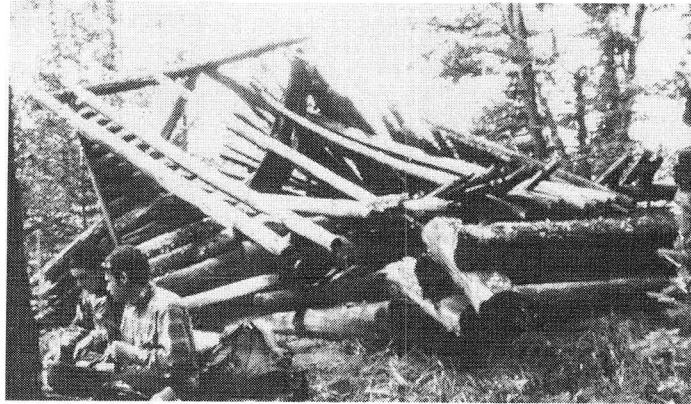


Figure A.26 - Derr Creek Mine Cabin. Source: Smith 1999.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0406587E, 5860690N (11U); 1150 M	1	DOUGLAS-FIR, SPRUCE, PINE (STRUCTURE)	N/A	N/A	MINING

b) Site description:

The Derr Creek Mine Cabin is located west of the Jasper townsite, in close proximity to the convergence of Derr and Miette Creeks. It is situated on a terrace 5 m above Miette Creek (Smith 1999).

c) Structure description:

The structure is rectangular in shape and consists of 3 rooms: a central room, a small room (likely functioning as a kitchen), and a root cellar structure (Smith 1999). When viewed in 1998 the roof had collapsed, pulling down the walls with it.

d) Tree-ring dating results:

Table A.16 - Summary of results for tree-ring samples collected from the Derr Creek Mine Cabin (990). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
99OC00A	DF	UNKNOWN	T.R.: EW OR LW ?	1796 - 1903	108	1903	N/A
99OC00B	DF	UNKNOWN	T.R.: EW OR LW ?	1783 - 1903	121	1903	N/A
99OC01A	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1866 - 1904	39	1904	N/A
99OC01B	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1867 - 1903	37	1903	N/A
99OC02A	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1867 - 1905	39	1905	N/A
99OC02B	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1852 - 1906	55	1906	N/A
99OC03A	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1871 - 1904	34	1904	N/A
99OC03B	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1874 - 1906	33	1906	N/A
99OC04A	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1793 - 1874	82	1874	N/A
99OC04B	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1850 - 1905	56	1905	N/A
99OC06A	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1878 - 1906	29	1906	N/A
99OC06B	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1876 - 1906	31	1906	N/A
99OC07A	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1860 - 1906	47	1906	N/A
99OC07B	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1803 - 1849	47	1849	N/A
99OC08B	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1875 - 1903	29	1903	N/A
99OCK26A	DF	UNKNOWN	T.R.: EW OR LW ?	1783 - 1906	124	1906	N/A
99OCK26B	DF	UNKNOWN	T.R.: EW OR LW ?	1783 - 1906	124	1906	N/A
99OCK27B	SPR OR LP?	UNKNOWN	T.R.: EW OR LW ?	1859 - 1906	48	1906	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for the Derr Creek Mine Cabin is during (late spring to summer) or after (fall to early spring of following year) the growth season of 1906. Although the samples have a date range from 1849 – 1906, 8 of 18 samples date to 1906 and 16 of 18 date from 1903 - 1906.

e) Function:

According to Parks Canada this structure was likely used as a graphite miner's cabin and is associated with site 1173R, a graphite mine (Perry 2003).

16) Miette Creek Railroad Construction Camp [?R/ UVTRL 99N]



Figure A.27 - Miette Creek Railroad Construction Camp structure 1 (99NA). Source: Smith 1999.



Figure A.28 - Miette Creek Railroad Construction Camp structure 2 (99NB). Source: Smith 1999.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0404265E, 5860646N (11U); 1160 M	2	DOUGLAS-FIR (LIVING); LODGEPOLE PINE, SPRUCE (STRUCTURES)			RAILROAD CONSTRUCTION
		STRUCTURE 1: LARGE 2 ROOM CABIN (STORAGE)		N/A	6 TO 8 COURSES FOR EACH WALL	
		STRUCTURE 2: SMALL 1 ROOM CABIN		N/A	2 TO 3 COURSES FOR EACH WALL	

b) Site description:

The structures are located within the Dominion Prairie/ Yellowhead Pass region on a terrace surface west of the Jasper townsite, approximately 50 m north of Miette Creek in an aspen and Douglas-fir dominated forest (Smith 1999).

c) Structure descriptions:

Structure 1 (99NA) is a large two-room cabin and structure 2 is a small one-room cabin. On both structures the roof and walls are caved in (Smith 1999).

d) Tree-ring dating results:

Table A.17 - Summary of results for tree-ring samples collected from the Miette Creek Railroad Construction Camp (99N). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

STRUCTURE 1 (99NA)							
SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
99NAC00A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1763 - 1856	94	1856	N/A
99NAC00B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1800 - 1902	103	1902	N/A
99NAC01A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1800 - 1884	85	1884	N/A
99NAC01B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1808 - 1892	85	1892	N/A
99NAC02B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1803 - 1902	100	1902	N/A
99NAC02A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1804 - 1892	89	1892	N/A
99NAC03A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1837 - 1897	61	1897	N/A
99NAC05A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1854 - 1879	26	1879	N/A
99NAC05B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1818 - 1846	29	1846	N/A
99NAC06A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1811 - 1902	92	1902	N/A
99NAC06B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1818 - 1902	85	1902	N/A
99NAC07A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1802 - 1896	95	1896	N/A
99NAC07B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1802 - 1895	94	1895	N/A
99NAC08A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1787 - 1897	111	1897	N/A
99NAC08B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1794 - 1901	108	1901	N/A
99NACK26 A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1774 - 1896	123	1896	N/A
99NACK26 B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1774 - 1896	123	1896	N/A
99NACK27 A	SPR. OR LP	UNKNOWN	NO B NO B; T.R.: LW	1804 - 1903	100	1903	N/A
99NACK27 B	SPR. OR LP	UNKNOWN	NO B; NO B; T.R.: LW	1803 - 1903	101	1903	N/A
99NACK28 A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1813 - 1902	90	1902	N/A
99NACK28 B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1810 - 1897	88	1897	N/A
MEAN PEARSON'S R-VALUE							N/A

STRUCTURE 2 (99NB)							
SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
99NBC01A	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1790 - 1872	83	1872	N/A
99NBC01B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1799 - 1874	76	1874	N/A
99NBC03A	SPR. OR LP	UNKNOWN	NO B; T.R.: LW	1795 - 1903	109	1903	N/A
99NBC03B	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1797 - 1902	106	1902	N/A
99NACKA	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1768 - 1868	101	1868	N/A
99NACKB	SPR. OR LP	UNKNOWN	NO B; T.R.: EW OR LW ?	1768 - 1864	97	1864	N/A
MEAN PEARSON'S R-VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction of the structures at the Miette Creek Railroad Construction Camp is after (fall to early spring of following year) the growth season of 1903. The samples dated at the site range from 1846 – 1903.

e) **Function:**

Based on the site's proximity to the railroad, it's minimum date of construction, and remnant materials found in the structures (ie. box labelled: *High Explosives, Dangerous*), it seems probable the structures were used for storage during railroad construction.

17) Side Pass Cabin [1657R]

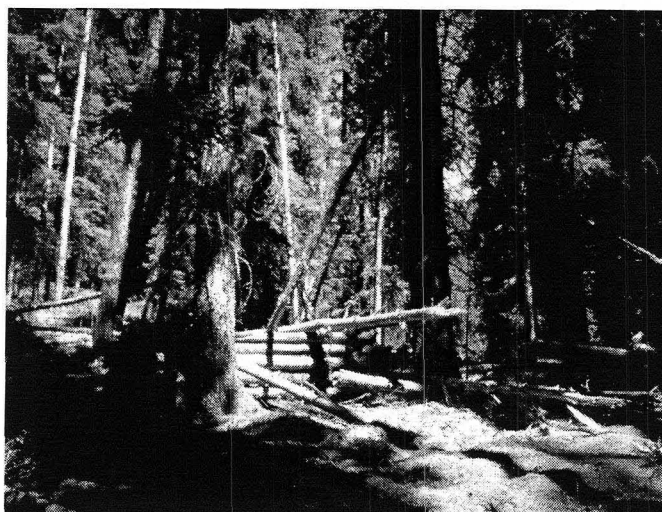


Figure A.29 - Side Pass Cabin located on south-facing slope (photo orientation: northeastward facing). Photo: July 2001.



Figure A.30 - Side Pass Cabin (west facing wall has collapsed) (photo orientation: eastward facing).
Source: July 2001.

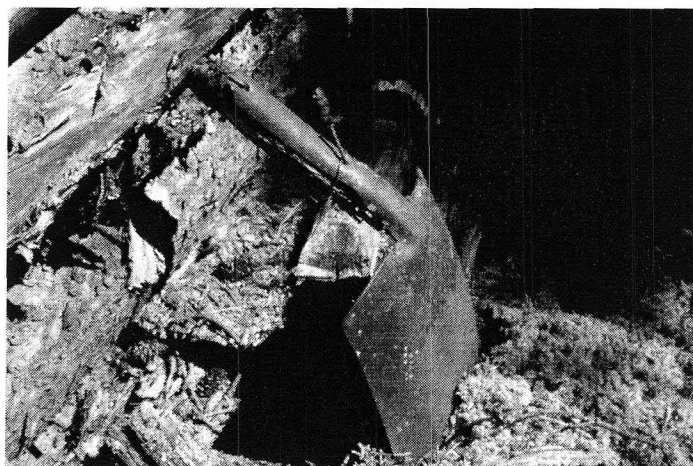


Figure A.31 - Square-headed shovel found in Side Pass Cabin. Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0399148E, 5921085N (11 U); 1670 M	1	ENGELMANN SPRUCE (LIVING AND STRUCTURE)	3.1 M LENGTH, 2.5 M WIDTH, 0.9 M HEIGHT	NORTH WALL: 6 EAST WALL: 6 WEST WALL: ? SOUTH WALL: 6	TRAPPER/ OUTFITTER

b) Site Description:

The Side Pass Cabin is located between Indian Trail and Mountain Trail in the Rock Creek Valley. The structure is situated roughly 10 m west of Side Pass Creek on a south-facing slope. Approximately 100 m south of the structure is a small lean-to at the edge of a willow shrub meadow. Six stumps were located near the structure.

c) **Structure description:**

Three walls remain standing, while the west-facing wall has collapsed. Approximately nine blow down trees are scattered on top and beside the structure. The only evidence of a roof are logs on the structure interior floor. Bark is visible on a few logs and axe marks are notable on log-ends. Moss chinking is located between some of the logs. Metal scraps inside the structure include: a stove pipe, a coffee can (“Seal Brand Chase and Sanborn”), squared shovel (“Guaranteed Jones Solid Cast Steel...”), and nails embedded in the door frame.

d) **Tree-ring dating results:**

Table A.18 - Summary of results for tree-ring samples collected from the Side Pass Cabin (01SPC-cd.txt). Pearson’s *r*-values represent a measure of correlation between the Side Pass Cabin cores (individual a/b pairs: 01SPC-fc.txt) and the living chronology (01SPC900-lc.txt) at a 99% confidence interval at 50 lag 25.

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUTSIDE DATE	r- VALUE
01SPC801A	ES	SIDE C	1869 EW; B; PITH; 1869 EW NOT ORIG. COUNTED	1734 - 1868	135	1869	0.042
01SPC801B	ES	SIDE C	LW; B; PITH	1734 - 1868	135	1868	0.392*
01SPC802A	ES	SIDE C	EW; B; PITH	1750 - 1898	149	1898	0.495*
01SPC802B	ES	SIDE C	LW; B; PITH	1750 - 1903	154	1903	0.355*
01SPC803A	ES	SIDE D	LW; B; PITH; D. B	1748 - 1919	172	1919	0.432*
01SPC803B	ES	SIDE D	LW; NO B; HARD TO SEE RINGS AT BARK; PITH	1748 - 1917	170	1917	0.464*
01SPC804A	ES	SIDE D	LW; B; D. B	1763 - 1919	157	1919	0.329*
01SPC804B	ES	SIDE D	LW; B; PITH	1763 - 1919	157	1919	0.276
MEAN PEARSON’S <i>r</i> -VALUE							0.348

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The cutting date for construction of the Side Pass Cabin is after (fall to early spring of following year) the growth season of 1919. Beams were cut for construction as early as 1868, suggesting either long-term use of the structure and resulting repairs or the incorporation of deadfalls during construction around 1919.

e) Function:

Bob Hallam and Bill Ruddy suggest that the squared-shaped shovelhead found in the structure is a coal miner's shovel (Brelsford 2002e, 2002f). Hallam postulates that some of the workers from the Blue Diamond coal mines out of Brûlé (established ca.1912) may have built this cabin for trapping during the wintertime and then went back to the mines in the summertime (Brelsford 2002e). This observation corresponds with a Parks Canada suggestion that the structure was likely built by a hunter or trapper in the early-twentieth century, likely before the inclusion of this area into JNP in 1929 (Francis 1994; Lothian 1976).

f) Post-analysis update:

A fire burned down the structure in the summer of 2003 (Wallace 2003).

18) Indian Meadow Crib [928R]



Figure A.32 - Indian Meadow Crib (photo orientation: eastward facing). Photo: July 2001.

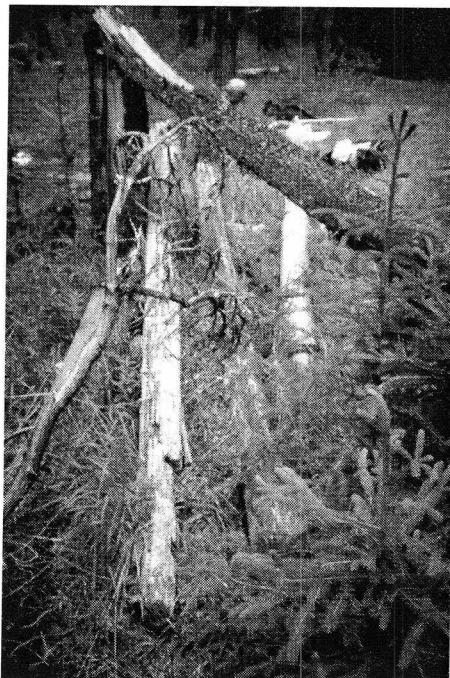


Figure A.33 - Length view of IMC (photo orientation: southward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0406218E, 5914775N (11U); 1390 M	1	LOGEPOLE PINE	3.9 M LENGTH, 1.7 M WIDTH, 0.8 M HEIGHT	NORTH WALL: BURIED, EAST WALL: 2, WEST WALL: 6, SOUTH WALL: 4,	BURIAL SITE

b) Site description:

The Indian Meadow Crib is located on a bluff approximately 120 m from Indian Grave Meadow and 30 m from the Willow Creek Telegraph Trail. The forest is dominantly by lodgepole pine with some young Engelmann spruce. Multiple blow downs are notable in the area including an uprooted tree, which has knocked over a squared-off support log.

c) Structure description:

The structure has collapsed, but it is evident that the longer logs running along the southeast and northwest sides were originally five logs high. The logs have axe marks at the ends creating half-moon shapes. Near the ends of the longer logs, incised half-moons

act as inserts for joining the logs, similar to that of the Hoodoo Ridge Crib. The logs are undergoing decomposition, however, some bark is still evident.

d) Tree-ring dating results:

Table A.19 - Summary of results for tree-ring samples collected from the Indian Meadow Crib (01IMC-cd.txt). Pearson's r -values represent a measure of correlation between the Indian Meadow Crib cores (individual a/b pairs: 01IMC-fc.txt) and the living chronology (01IMC600-lc.txt) at a 99% confidence interval at 25 lag 12.

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSSDATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01IMC01A	LP	SIDE A	INC. LW; NO B	1849 - 1901	53	1901	0.558*
01IMC01B	LP	SIDE A	EW; NO B	1841 - 1900	60	1900	0.576*
01IMC02A	LP	SIDE A	LW; B; PITH	1857 - 1901	45	1901	0.467*
01IMC02B	LP	SIDE A	LW; NO B; PITH	1856 - 1901	46	1901	0.677*
01IMC03A	LP	SIDE A	INC. EW; NO B; PITH ROT	1967 - 2000 F	34	N/A	N/A
01IMC03B	LP	SIDE A	LW; B; CLOSE TO PITH	1955 - 2000 F	46	N/A	N/A
01IMC04A	LP	SIDE A	1901 EW; B; PITH; 1901 EW NOT C. ORIG.	1840 - 1900	61	1901	0.544*
01IMC04B	LP	SIDE A	LW; B; CLOSE TO PITH	1850 - 1901	52	1901	0.678*
MEAN PEARSON'S r -VALUE							0.583

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The cutting date for construction of the Indian Meadow Crib occurred during (late spring to summer) and after (fall to early spring of following year) the growth season of 1901. All of the logs sampled date from 1900 – 1901.

e) Function:

While no human remains were unearthed, the crib form has been interpreted by Parks Canada archaeologists as marking a burial site (Heitzmann 1990). According to Bob Hallam and Tom Peterson, the Jasper House People, Métis of Iroquois and Cree decent, came to this area to hunt (Brelsford 2002d, 2002e). Hallam states that the area was likely used as a winter trapping area from approximately 1829, when the Jasper House was relocated inside the Park, into the 1900s (Brelsford 2002e). It is also possible that the crib was used for storage, however no remnant materials were found.

19) Evelyn Creek Cabin [?R]

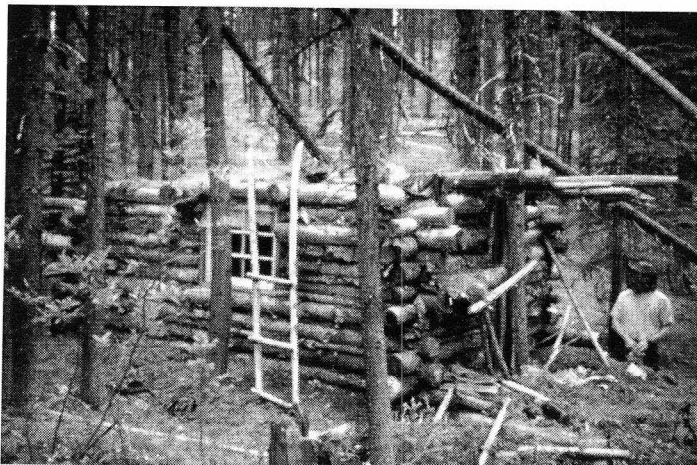


Figure A.34 - Evelyn Creek Cabin (photo orientation: southwestward facing). Photo: July 2001.



Figure A.35 - Evelyn Creek Cabin (photo orientation: northeastward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0454007E, 5844928N (11U); 1020 M	1	LOGPOLE PINE (STRUCTURE & LIVING)	4.3 M LENGTH, 3.2 M WIDTH, 1.8 M HEIGHT	NORTH WALL: 10 EAST WALL: 11 WEST WALL: 11 SOUTH WALL: 11	OUTBUILDING

b) Site description:

The cabin is located along the west side of Evelyn Creek, near the north end of Maligne Lake. The forest is dominated by lodgepole pine.

c) Structure description:

The cabin is of rudimentary construction consisting of saddle notch joinery, spiral gyp rock nails, saw and axe marks. The roof is covered in moss; one window, including frame and glass, is located on the east-facing wall. The interior consists of the remnants of a bunk bed with a ladder, a wooden table below the window, and various cans and plastic debris. Moss is used as chinking and bark is notable on the logs.

d) Tree-ring dating results:

Table A.20 - Summary of results for tree-ring samples collected from the Evelyn Creek Cabin (01ECC-fc.txt). Tree-ring dating was unsuccessful; need living lodgepole pine chronology from region of structure.

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
01ECC01 A	LP	CORNER A/D	LW; NO B; B ON ORIG.; PITH	1927 - 2000 F	74	N/A	N/A
01ECC01 B	LP	CORNER A/D	LW; NO B; B ON ORIG.; PITH	1927 - 2000 F	74	N/A	N/A
01ECC02 A	LP	CORNER A/D	LW; B; PITH	1933 - 2000 F	68	N/A	N/A
01ECC02 B	LP	CORNER A/D	LW; B; PITH	1933 - 2000 F	68	N/A	N/A
01ECC03 A	LP	CORNER A/D	LW; B; PITH	1941 - 2000 F	60	N/A	N/A
01ECC03 B	LP	CORNER A/D	LW; B; PITH	1941 - 2000 F	60	N/A	N/A
01ECC04 A	LP	CORNER A/D	LW; B; PITH	1941 - 2000 F	60	N/A	N/A
01ECC04 B	LP	CORNER A/D	EW; NO B; B ON ORIG.; PITH	1941 - 1999 F	59	N/A	N/A
01ECC05 A	LP	CORNER B/C	LW; B; PITH	1951 - 2000 F	50	N/A	N/A
01ECC05 B	LP	CORNER B/C	LW; B; PITH	1951 - 2000 F	50	N/A	N/A
01ECC06 A	LP	CORNER B/C	LW; B; D. B; PITH	1941 - 2000 F	60	N/A	N/A
01ECC06 B	LP	CORNER B/C	LW; NO B; B ON ORIG.; PITH	1941 - 2000 F	60	N/A	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Crossdating was unsuccessful. Exploration of additional living chronologies is needed.

e) Function:

According to Gordon Ruddy, son of Bill Ruddy, the Evelyn Creek Cabin was built between 1973 and 1976 by his brother and friends: Russell Ruddy, Doug [?], Robbie

Patty, Kevin [?], and Dale Simpson. The young men built the structure as a place for social gatherings while working at the Maligne Lake boathouse (Brelsford 2002f).

20) Maligne Lake Outlet Cabin [?R/ UVTRL 99S]



Figure A.36 - Maligne Lake Outlet Cabin. Source: Smith 1999.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0456280E, 5842330N (11U); 1665 M	1	LODGEPOLE PINE AND SPRUCE (STRUCTURE)	4.0 M LENGTH, 3.0 M WIDTH	5 TO 6 COURSES FOR EACH WALL	WARDEN SERVICE

b) Site description:

The Maligne Lake Outlet Cabin is located approximately 500 m north of Maligne Lake and west of the Maligne River. It is situated next to a sewage lagoon (Smith 1999).

c) Structure description:

The structure is similar to the Keith Lake Cabin in that it also contains an internal crib-like structure, lacks a roof, and is entered through an offset framed doorway (Smith 1999).

d) **Tree-ring dating results:**

Table A.21 - Summary of results for tree-ring samples collected from the Maligne Lake Outlet Cabin (99S). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUT- SIDE DATE	r- VALUE
99SC00A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW ?	1764 - 1898	135	1898	N/A
99SC00B	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1766 - 1897	132	1897	N/A
99SC01A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1770 - 1907	138	1907	N/A
99SC01B	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1767 - 1902	136	1902	N/A
99SC03A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1785 - 1913	129	1913	N/A
99SC04B	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1777 - 1910	134	1910	N/A
99SC05A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1763 - 1909	147	1909	N/A
99SC06A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1788 - 1910	123	1910	N/A
99SC06B	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1794 - 1910	117	1910	N/A
99SC07A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1779 - 1899	121	1899	N/A
99SC07B	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1800 - 1886	87	1886	N/A
99SC08B	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1798 - 1907	110	1907	N/A
99SCK14A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1788 - 1907	120	1907	N/A
99SCK14B	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1788 - 1909	122	1909	N/A
99SCK15A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1791 - 1911	121	1911	N/A
99SC16A	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1766 - 1912	147	1912	N/A
99SC16B	LP OR SPR.	UNKNOWN	T.R.: EW OR LW?	1766 - 1911	146	1911	N/A
MEAN PEARSON'S R -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction is during (late spring to summer) or after (fall to early spring of following year) the growth season of 1913. All of the samples date from 1886 – 1913, and 12 of 17 samples cluster from 1907 - 1913.

e) **Function:**

According to Parks Canada, the structure is an old warden cabin used into the 1930s and 1940s (Perry 2003). Considering it was built in at least 1913, it had a functioning life of about 27 years.

21) Tangle Creek Cabin [1700R]

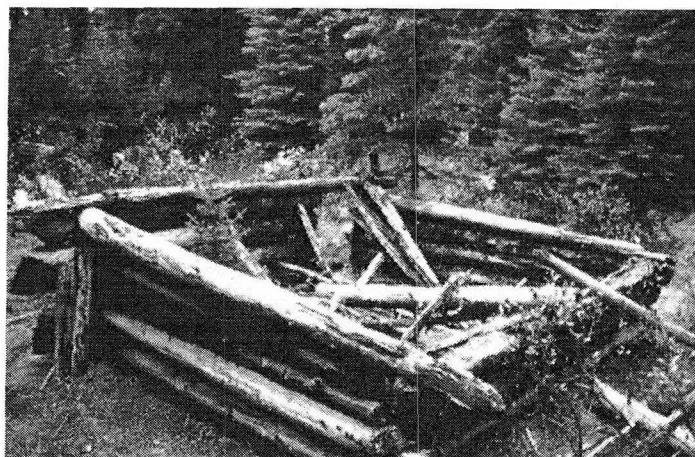


Figure A.37 -Tangle Creek Cabin. Source: Smith *et al.* 1998.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
JNP	0481000E, 5790600N (11U); 1990 M	1	ENGELM ANN SPRUCE	4.4 M LENGTH, 4.4 M WIDTH, 1.5 TO 1.0M HEIGHT	4 TO 5 COURSES FOR EACH WALL	TRAPPER OR OUTFITTER

b) Site description:

Tangle Creek Cabin is situated on a stream terrace approximately 50 m east of Tangle Creek and borders the hiking trail connecting Highway 93 with Wilcox Pass. The environment is dominated by an undulating terrain of Engelmann spruce and lodgepole pine with sphagnum and wildflower undergrowth (Wesbrook 2003).

c) Structure description:

The structure consists of undressed Engelmann spruce logs and the existence of multiple stumps in the area suggests the logs were cut on-site. The four walls are standing but have undergone moderate decay. Construction techniques appear to be saddle notch joinery with axe shaping, which is predominantly evident at the log ends.

d) Tree-ring dating results:

Table A.22 - Summary of results for tree-ring samples collected from the Tangle Creek Cabin (1700R). Pearson's r -values represent a measure of correlation between the Tangle Creek Cabin cores (individual a/b pairs) and the living chronology (99KL900-cd.txt) at a 99% confidence interval. Crossdating lag unknown (assumed 50 lag 25) as results taken from UVTRL report #99-01 (Smith *et al.* 1998).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
98TCCW1	ES	SIDE D	UNKNOWN; WEST FACING	1682 - 1902	221	1902	0.626*
98TCCW2	ES	SIDE D	B; LW; WEST FACING	1699 - 1904	206	1904	0.701*
98TCCW3	ES	SIDE D	B; LW; WEST FACING	1703 - 1904	202	1904	0.645*
98TCCS2	ES	SIDE C	B; LW; SOUTH FACING	1717 - 1904	188	1904	0.634*
98TCCS3	ES	SIDE C	B; LW; SOUTH FACING	1771 - 1904	134	1904	0.553*
98TCCN1	ES	SIDE A	UNKNOWN; NORTH FACING	1776 - 1902	127	1902	0.715*
98TCCN4	ES	SIDE A	UNKNOWN; NORTH FACING	1778 - 1896	119	1896	0.649*
98TCCW2A	ES	SIDE D	UNKNOWN; WEST FACING	1777 - 1895	119	1895	0.565*
98TCCS4	ES	SIDE C	B; LW; SOUTH FACING	1787 - 1904	118	1904	0.610*
98TCCN3	ES	SIDE A	B; LW; NORTH FACING	1793 - 1904	112	1904	0.704*
98TCCN5	ES	SIDE A	B; LW; NORTH FACING	1795 - 1904	110	1904	0.558*
98TCCE3	ES	SIDE B	B; LW; EAST FACING	1807 - 1904	98	1904	0.537*
98TCCE2	ES	SIDE B	UNKNOWN; EAST FACING	1804 - 1901	98	1901	0.595*
98TCCS1	ES	SIDE C	B; LW; SOUTH FACING	1808 - 1904	97	1904	0.516*
MEAN PERSON'S r -VALUE							0.615

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Nine of 20 samples from Tangle Creek Cabin produced a minimum date of 1904 and the remaining samples clustered between 1895 and 1902, which is assumed to be a result of additional perimeter ring loss because of the tight cluster at 1904. All of the 1904 samples displayed latewood and bark. Therefore, it can be concluded that the timbers were felled after (fall to early spring of following year) the growth season of 1904.

e) **Function:**

The construction date of fall 1904 for the Tangle Creek Cabin coincides with Jimmy Simpson's trapping activities in the area. According to E.J. Hart, Simpson was at the height of his trapping activities during the first decade of the twentieth century, which included an early trapline in the area of Wilcox Pass and Tangle Creek. It was part of the country Simpson knew better than any as it provided ideal habitat for pine marten, lynx, fox, and bear (Hart 1993). A more detailed analysis is presented in Chapter 6.0.

22) **Owen Creek Warden Cabin [1483R/ UVTRL 99M]**

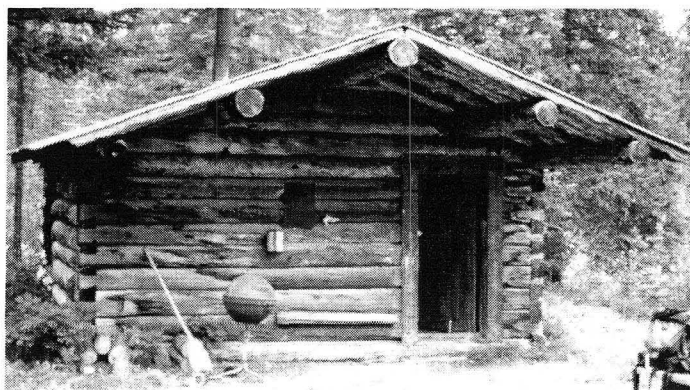


Figure A.38 - Owen Creek Warden Cabin. Source: Smith 1999.

a) **General description:**

PAR K	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0522900E, 5760700N (11U); 1400 M	1	N/A	3.7 M LENGTH, 2.8 M WIDTH, 2.1 M HEIGHT	WEST WALL: 10, EAST WALL: ?, SOUTH WALL: 9, NORTH WALL: ?	WARDEN SERVICE

b) **Site description:**

The Owen Creek Warden Cabin is located along the north side of Owen Creek within the North Saskatchewan River valley. It is accessible by travelling approximately 150 m south of where Owen Creek flows under the David Thompson Highway (Smith 1999).

c) Structure description:

The structure is solidly constructed with dovetail joinery and all four walls and the roof remain intact (Smith 1999). Notable features include: two windows, a door, and an axed beam floor. Graffiti is evident in multiple spots, including the inscription "1916" on the fourth beam up on the northwest corner. This may be a remnant of the original builder. Parks Canada repaired the roof in 1985 and 1988 (Perry 2003).

d) Tree-ring dating results:

Table A.23 - Summary of results for tree-ring samples collected from the Owen Creek Warden Cabin (1483R). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
99MC00A	SPR.	UNKNOWN	T.R.: EW OR LW?	1658 - 1840	182	1840	N/A
99MC00B	SPR.	UNKNOWN	T.R.: EW OR LW?	1662 - 1911	250	1911	N/A
99MC01A	SPR.	UNKNOWN	T.R.: EW OR LW?	1643 - 1899	257	1899	N/A
99MC02A	SPR.	UNKNOWN	T.R.: EW OR LW?	1657 - 1910	254	1910	N/A
99MC02B	SPR.	UNKNOWN	T.R.: EW OR LW?	1663 - 1908	146	1908	N/A
99MC03A	SPR.	UNKNOWN	T.R.: EW OR LW?	1682 - 1911	230	1911	N/A
99MC03B	SPR.	UNKNOWN	T.R.: EW OR LW?	1673 - 1911	239	1911	N/A
99MC04A	SPR.	UNKNOWN	T.R.: EW OR LW?	1636 - 1889	254	1889	N/A
99MC05A	SPR.	UNKNOWN	T.R.: EW OR LW?	1661 - 1910	250	1910	N/A
99MC05B	SPR.	UNKNOWN	T.R.: EW OR LW?	1656 - 1908	253	1908	N/A
99MC06A	SPR.	UNKNOWN	T.R.: EW OR LW?	1679 - 1886	208	1886	N/A
99MC07A	SPR.	UNKNOWN	T.R.: EW OR LW?	1702 - 1911	210	1911	N/A
99MC07B	SPR.	UNKNOWN	T.R.: EW OR LW?	1708 - 1911	204	1911	N/A
99MC08A	SPR.	UNKNOWN	T.R.: EW OR LW?	1644 - 1888	245	1888	N/A
99MC08B	SPR.	UNKNOWN	T.R.: EW OR LW?	1655 - 1889	235	1889	N/A
99MC09A	SPR.	UNKNOWN	T.R.: EW OR LW?	1647 - 1910	264	1910	N/A
99MC09B	SPR.	UNKNOWN	T.R.: EW OR LW?	1555 - 1814	260	1814	N/A
99MC10A	SPR.	UNKNOWN	T.R.: EW OR LW?	1675 - 1891	217	1891	N/A
99MC10B	SPR.	UNKNOWN	T.R.: EW OR LW?	1660 - 1878	219	1878	N/A
99MC11A	SPR.	UNKNOWN	T.R.: EW OR LW?	1669 - 1890	222	1890	N/A
99MC11B	SPR.	UNKNOWN	T.R.: EW OR LW?	1675 - 1897	223	1897	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum date for construction of the Owen Creek Warden Cabin is during (late spring to summer) or after (fall to early spring of following year) the growth season of 1911. However, the lack of bark suggests multiple perimeter rings could be missing. All the samples date from 1814 to 1911; however 10 of 21 samples cluster from 1908 - 1911.

e) **Function:**

According to Parks Canada this structure is an abandoned warden cabin that was built in 1915 (Perry 2003). This corresponds with the tree-ring results, as only a minimum date of 1911 was supplied; it is possible perimeter rings are missing and the logs were actually procured in 1915. It is also possible that the logs were cut and stockpiled until construction occurred in 1915.

23) **Saskatchewan Crossing Teepee [1445R]**

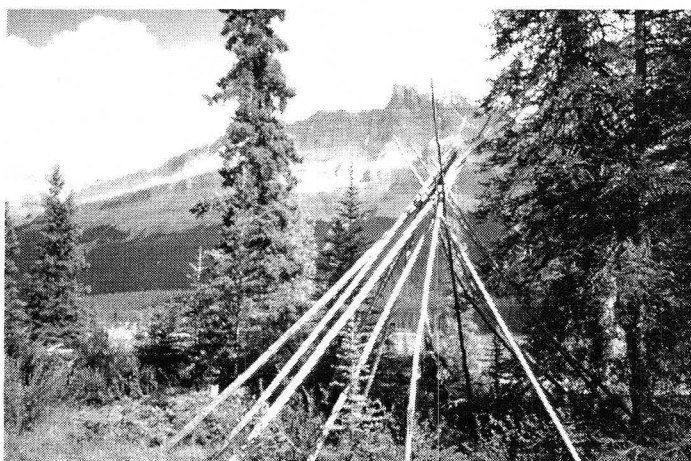


Figure A.39 - Saskatchewan Crossing Teepee (photo orientation: eastward facing). Photo: July 2001.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0517022E, 5756558N (11U); 1400 M	1	LOGEPOLE PINE (STRUCTURE)	5.6 M WIDTH, 3.2 M HEIGHT	15 POLES	TRAPPER OR OUTFITTER

b) **Site description:**

Saskatchewan Crossing Teepee (SCT) is located near Glacier Lake Trail on the NE bank of the North Saskatchewan River. It is approximately 100 m E of the Glacier Trail Cabin, near the edge of the river terrace.

c) **Structure description:**

The SCT consists of 15 log poles striped of bark and interlocked at a central peak with wire.

d) **Tree-ring dating results:**

Table A.24 - Summary of results for tree-ring samples collected from the Saskatchewan Crossing Teepee (1445R)(01SCT-cd.txt). Pearson's *r*-values represent a measure of correlation between the Saskatchewan Crossing Teepee cores (01SCT-fc.txt) and the living chronology (99KL900-lc.txt) at a 99% confidence interval (at 50 lag 25).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01SCT01	ES	STANDING	INC. EW; NO B	1632 - 1805	174	1805	0.588*
01SCT02	ES	STANDING	INC. EW; NO B; PITH	1650 - 1821	172	1821	0.522*
01SCT03	ES	STANDING	INC. EW; NO B; PITH	1635 - 1770	136	1770	0.475*
01SCT04	ES	STANDING	INC. EW; NO B; PITH	1635 - 1775	141	1775	0.530*
01SCT05	ES	STANDING	INC. EW; NO B; PITH	1726 - 1869	144	1869	0.613*
01SCT06	ES	STANDING	INC. EW; NO B; PITH	1708 - 1858	151	1858	0.680*
01SCT07	ES	STANDING	INC. EW; NO B; PITH	1673 - 1842	170	1842	0.434*
01SCT08	ES	STANDING	INC. EW; NO B; PITH	1793 - 1923	131	1923	0.619*
01SCT09	ES	STANDING	INC. EW; NO B	1884 - 2000F	117	N/A	N/A
01SCT10	ES	STANDING	INC. EW; NO B; PITH	1817 - 1915	99	1915	0.608*
MEAN PERSON'S <i>r</i> -VALUE							0.563

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Due to the presence of earlywood, a minimum felling date for the Saskatchewan Crossing Teepee is during (late spring to summer) the growth season of 1923. While only one sample produced this date, it is still considered a minimum cutting date.

e) **Function:**

The structure is attributed to Jimmy Simpson who was one of the few outfitters who consistently used a teepee rather than a tent (Hart 1993). Simpson likely cut the logs for the teepee in July of 1923, while outfitting a group from Bow Lake up to the northern reaches of the North Saskatchewan River (Hart 1993). A more detailed analysis is presented in Chapter 6.0.

24) Glacier Trail Cabin [1445R/ UVTRL 99K]

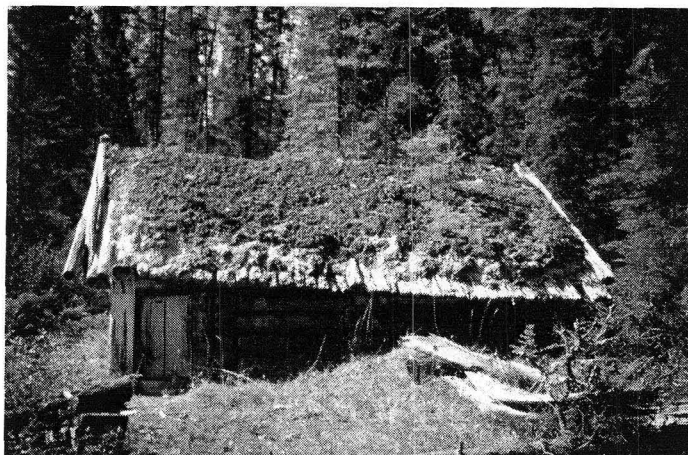


Figure A.40 - Glacier Trail Cabin (photo orientation: northwestward facing). Source: July 2001.

a) General description:

PAR K	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0517022E, 5756558N (11U); 1400 M	1	ENGELMANN SPRUCE (STRUCTURE)	5.6 M WIDTH, 3.2 M HEIGHT	10 TO 13 COURSES FOR EACH WALL	TRAPPER OR OUTFITTER

b) Site description:

Glacier Trail Cabin is located near Glacier Lake Trail on the NE bank of the North Saskatchewan River, approximately 600 m NW of the confluence of the North Saskatchewan and Hause Rivers. It is situated at the edge of a forest dominated by Engelmann spruce and subalpine fir.

c) Structure description:

The cabin is constructed of Engelmann spruce logs and has a sod-covered medium gable roof that has undergone minimal decay. Construction techniques include saddle notch joinery and narrow log limb chinking. Bark is present on the majority of logs, and multiple axe-shaving marks are evident on exterior log-ends and interior log sides.

d) Tree-ring dating results:

Table A.25 - Summary of results for tree-ring samples collected from the Glacier Trail Cabin (1445R). Pearson's r -values represent a measure of correlation between the Glacier Trail Cabin cores (individual a/b pairs) and the living chronology (99KL900-cd.txt) at a 99% confidence interval. The results are from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
99KC00A	ES	EXTERIOR WALL	UNKNOWN	1748 - 1907	160	1907	N/A
99KC00B	ES	EXTERIOR WALL	UNKNOWN	1680 - 1904	225	1904	N/A
99KC001A	ES	EXTERIOR WALL	UNKNOWN	1690 - 1905	216	1905	N/A
99KC001B	ES	EXTERIOR WALL	UNKNOWN	1729 - 1907	179	1907	N/A
99KC002A	ES	EXTERIOR WALL	UNKNOWN	1622 - 1901	280	1901	N/A
99KC002B	ES	EXTERIOR WALL	UNKNOWN	1617 - 1873	257	1873	N/A
99KC003A	ES	EXTERIOR WALL	UNKNOWN	1668 - 1860	193	1860	N/A
99KC003B	ES	EXTERIOR WALL	UNKNOWN	1633 - 1894	262	1894	N/A
99KC004A	ES	EXTERIOR WALL	UNKNOWN	1687 - 1907	221	1907	N/A
99KC004B	ES	EXTERIOR WALL	UNKNOWN	1644 - 1907	264	1907	N/A
99KC005A	ES	EXTERIOR WALL	UNKNOWN	1691 - 1905	215	1905	N/A
99KC005B	ES	EXTERIOR WALL	UNKNOWN	1734 - 1901	168	1901	N/A
99KC006A	ES	EXTERIOR WALL	UNKNOWN	1685 - 1905	221	1905	N/A
99KC006B	ES	EXTERIOR WALL	UNKNOWN	1680 - 1907	228	1907	N/A
99KC007A	ES	EXTERIOR WALL	UNKNOWN	1632 - 1853	222	1853	N/A
99KC008A	ES	EXTERIOR WALL	UNKNOWN	1804 - 1904	101	1904	N/A
99KC008B	ES	EXTERIOR WALL	UNKNOWN	1670 - 1908	239	1907	N/A
99KC009A	ES	EXTERIOR WALL	UNKNOWN	1617 - 1887	271	1887	N/A
99KC009B	ES	EXTERIOR WALL	UNKNOWN	1601 - 1886	286	1886	N/A
99KC010B	ES	EXTERIOR WALL	UNKNOWN	1669 - 1904	236	1904	N/A
MEAN PERSON'S r -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Structure logs were cut for construction during (late spring to summer) the growth season of 1907.

e) Function:

During the first decade of the twentieth century, Jimmy Simpson was at the height of his trapping career in the area of the Mistaya River (Hart 1993), approximately 2 km from the Glacier Trail Cabin. The structure also has the definite low, secretive style of a Simpson cabin (Mellen 1983c; Mickle and Wallace 1996). In considering the date of construction and "secretive" style of this cabin it is likely that Simpson is the original builder. A more detailed analysis is presented in Chapter 6.0.

25) Mistaya River Cabin [1443R]



Figure A.41 – Mistaya River Cabin (photo orientation: northward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0519415E, 5756358N (11U); 1410 M	1	ENGELMANN SPRUCE (STRUCTURE)	4.5 M LENGTH, 4.2 M WIDTH, 1.2 M HEIGHT	NORTH WALL: 0, EAST WALL: 4, SOUTH WALL: 4, WEST WALL: 5	TRAPPER OR OUTFITTER

b) Site description:

The Mistaya River Cabin is located on the west bank of the Mistaya River, approximately 1 km south of its confluence with the North Saskatchewan River. The cabin is situated on the lowest river terrace in a forest dominated by young Engelmann spruce.

c) Structure description:

The structure is constructed from Engelmann spruce logs. It has experienced significant decay and extensive vegetative encroachment. Construction techniques include saddle and big barn notching (Mellen *et al.* 1983). Some of the logs have been stripped of their bark, as noted by axe marks, while the majority exhibit partial bark.

d) Tree-ring dating results:

Table A.26 - Summary of results for tree-ring samples collected from the Mistaya River Cabin (1443R) (01MRC-cd.txt). Pearson's r -values represent a measure of correlation between the Glacier Lake Cabin cores (individual a/b pairs: 01MRC-fc.txt) and the living chronology (01GLC600-lc.txt) at a 99% confidence interval (at 50 lag 25).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01MRC01A	ES	CORNER A/D	LW; NO B; B ON ORIG.	1634 - 1904	271	1904	0.490*
01MRC01B	ES	CORNER A/D	EW; NO B; B ON ORIG.; PITH	1634 - 1898	265	1898	0.468*
01MRC02A	ES	CORNER C/D	EW; NO B; B ON ORIG.; PITH	1649 - 1904	256	1904	0.434*
01MRC02B	ES	CORNER C/D	INC. LW; NO B; B ON ORIG.; PITH	1649 - 1904	256	1904	0.465*
01MRC03A	ES	SIDE A	LW; NO B; B ON ORIG.; PITH	1745 - 1904	160	1904	0.359*
01MRC03B	ES	SIDE A	LW; NO B; B ON ORIG.; PITH	1745 - 1904	160	1904	0.398*
01MRC04A	ES	SIDE D	LW; NO B; PITH	1677 - 1904	228	1904	0.466*
01MRC04B	ES	SIDE D	INC. LW; NO B	1697 - 1904	208	1904	0.452*
01MRC05A	ES	SIDE D	LW; NO B; PITH	1599 - 1904	306	1904	0.512*
01MRC05B	ES	SIDE D	INC. LW; NO B	1620 - 1904	285	1904	0.513*
01MRC06A	ES	SIDE D	INC. LW; B	1672 - 1904	233	1904	0.412*
01MRC06B	ES	SIDE D	EW; B	1639 - 1904	266	1904	0.441*
MEAN PERSON'S r -VALUE							0.451

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Logs were cut for construction during (late spring to summer) and after (fall to early spring of following year) the growth season of 1904.

e) Function:

The structure is attributed to Jimmy Simpson, who was actively trapping in the area of the Mistaya River with his partner Fred Ballard until 1903, when he took on the trap line alone (Hart 1993). A more detailed analysis is presented in Chapter 6.0.

26) Glacier Lake Cabin [447/ 1224R]

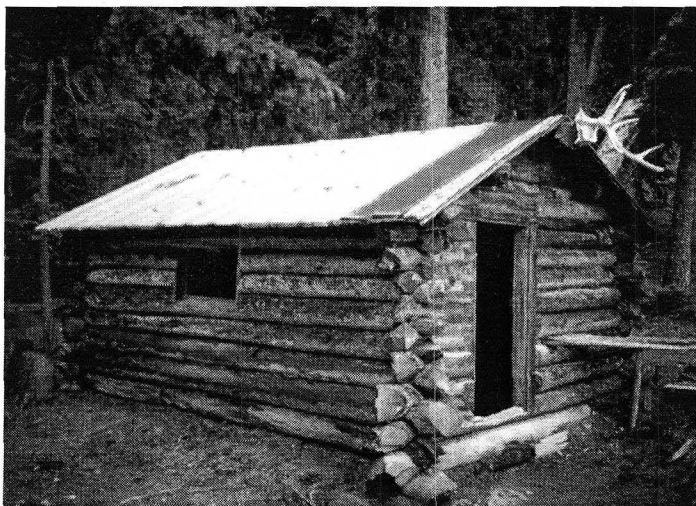


Figure A.42 – Glacier Lake Cabin (photo orientation: northward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0511348E, 5752721N (11U); 1400 M	1	LOGEPOLE PINE, ENGELMANN SPRUCE (LIVING); LOGEPOLE PINE (STRUCTURE)	3.4 M LENGTH, 2.6 M WIDTH, 2.2 M HEIGHT	NORTHWEST WALL: 13, NORTHEAST WALL: 9, SOUTHWEST WALL: 10, SOUTHEAST WALL: 13	TRAPPER OR OUTFITTER

b) Site description:

The Glacier Lake Cabin is located approximately 7.5 km SW of Highway 93 and the Saskatchewan River Crossing, at the north end of Glacier Lake. The cabin is situated in a forest dominated by Engelmann spruce, lodgepole pine and subalpine fir.

c) Structure description:

The cabin consists of both lodgepole pine and subalpine fir log beams connected by saddle notch joinery. The majority of logs exhibit attached bark and axe marks –mainly evident at the corners. Overall there appears to be minimal decay.

d) Tree-ring dating results:

Table A.27 - Summary of results for tree-ring samples collected from the Glacier Lake Cabin (447R/1224R) (01GLC-cd.txt). Pearson's r -values represent a measure of correlation between the Glacier Lake Cabin cores (individual a/b pairs: 01GLC-fc.txt) and the living chronology (01GLC600-lc.txt) at a 99% confidence interval with 50 lag 25 (except 01GLC01A at 25 lag 12).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSSDATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01GLC01A	LP	SIDE C2	INC. LW; B	1878 - 1924	47	1924	0.667
01GLC01B	LP	SIDE C2	LW; NO B; B ON ORIG.	1784 - 1924	141	1924	0.695
01GLC01C	LP	SIDE C2	LW; D. B; B ON ORIG.	1791 - 1924	134	1924	0.709
01GLC02A	LP	SIDE B3	LW; NO B; B ON ORIG.	1783 - 1924	142	1924	0.662
01GLC02B	LP	SIDE B3	LW; B; PITH	1785 - 1924	140	1924	0.750
01GLC03A	LP	SIDE D6	LW; NO B; B ON ORIG.	1766 - 1921	156	1921	0.534
01GLC03B	LP	SIDE D6	LW; B	1769 - 1923	155	1923	0.555
01GLC04A	LP	SIDE B10	LW; B	1783 - 1924	142	1924	0.452
01GLC04B	LP	SIDE B10	INC. LW; B	1771 - 1924	154	1924	0.489
01GLC05A	SF	SIDE A10	LW; B	1874 - 2000F	127	NO DATE	N/A
01GLC05B	SF	SIDE A10	LW; B; PITH	1853 - 2000F	148	NO DATE	N/A
01GLC06A	LP	ROOF	EW; B	1844 - 2000F	157	NO DATE	N/A
01GLC06B	LP	ROOF	EW; NO B; B ON ORIG.	1863 - 2000F	138	NO DATE	N/A
MEAN PERSON'S r -VALUE							0.613

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

For the Glacier Lake Cabin, 3 of 4 samples (7 of 9 radii) show a minimum date of 1924. All of these samples have latewood and at least one segment had intact bark on its perimeter. Based on this evidence, it is concluded that logs were felled for construction after (fall to early spring of following year) the growth season of 1924.

e) Function:

The structure is attributed to Jimmy Simpson (Mellen and Lee 1983; Francis 1996), who was actively taking visitors on guided trips during the 1920s in areas around Howse Pass, Mt. Forbes, and the North Fork of the Saskatchewan River, all of which are within 10 -15 km of the Glacier Lake Cabin. A more detailed analysis is presented in Chapter 6.0.

27) Indianhead Creek Crib [1755R]

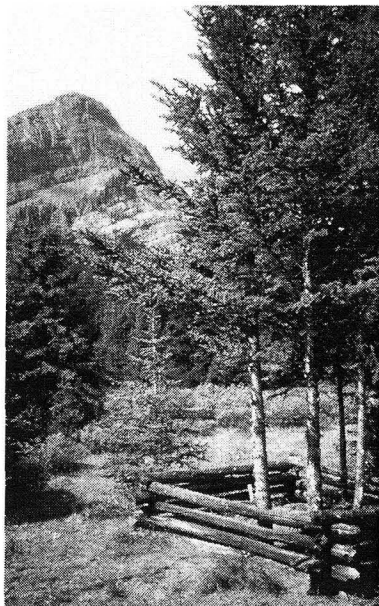


Figure A.43 - Indianhead Creek Crib. (photo orientation: northwestward facing). Source: Parks Canada Agency ID#1755R-a.



Figure A.44 - Indianhead Creek Crib: detail of double grave. (photo orientation: southward facing). Source: Parks Canada Agency ID#1755R-b.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0568795E, 5743800N (11U); 1785 M	1	LOGEPOLE PINE, ENGELMANN SPRUCE (LIVING); LOGEPOLE PINE (STRUCTURE)	3.1 M LENGTH, 2.6 M WIDTH, 0.7 M HEIGHT	NORTH WALL: 5, EAST WALL: 5, SOUTH WALL: 4, WEST WALL: 4	BURIAL SITE

b) Site description:

The crib is located approximately 100 m from Indianhead Creek and 200 m west of the Indianhead warden patrol cabin on a low terrace in a forest dominated by lodgepole pine and Engelmann spruce.

c) Structure description:

The Indianhead Crib consists of two burial mounds (1.5 m and 0.9 m in length) marked by a Christian cross and surrounded by four rotting log walls connected by saddle notch joinery. It is possible the cross was added at a later date. Axe marks and bark are notable

on multiple logs. In 2001, Parks Canada wardens cleared the undergrowth from around the *in situ* living trees (Mickle and Wallace 2001).

d) Tree-ring dating results:

Table A.28 - Summary of results for tree-ring samples collected from the Indianhead Creek Crib (1755R) (01ICC-cd.txt). Pearson's *r*-values represent a measure of correlation between the Indianhead Creek Crib cores (individual a/b pairs: 01ICC-fc.txt) and the living chronology (01ICC600-lc.txt) at a 99% confidence interval and at 25 lag 12 crossdating interval.

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMETNS	CROSSDATED INTERVAL	AGE	OUTSIDE DATE	r- VALUE
01ICC01	LP	SIDE C	EW; NO B; 01+02 (A/B PAIR)	1744 - 1890	147	1890	0.542*
01ICC02	LP	SIDE C	EW; NO B; 1884EW (NOT ORIG. C.)	1756 - 1883	128	1884	0.596*
01ICC03	LP	SIDE C	EW; NO B; 03+04 (A/B PAIR); 2001EW	1901 - 2000 F	100	N/A	N/A
01ICC04	LP	SIDE C	LW; NO B; MISSING C.8 RINGS @ BARK	1898 - 1973 F	76	N/A	N/A
01ICC05	LP	SIDE C	EW; NO B; 05+06(A/B PAIR); 2001EW	1871 - 2000 F	130	N/A	N/A
01ICC06	LP	SIDE C	EW; NO B; 2001EW	1874 - 1939 F	66	N/A	N/A
01ICC07	LP	SIDE D	EW; NO B; 07+08(A/B PAIR); 2001EW	1875 - 1999 F	125	N/A	N/A
01ICC08	LP	SIDE D	EW; NO B; + RINGS @ BARK?	1857 - 2000 F	144	N/A	N/A
01ICC09	LP	SIDE D	EW; NO B; 09+10(A/B PAIR); 2001EW; PITH	1863 - 1990 F	128	N/A	N/A
01ICC10	LP	SIDE D	EW; NO B; 2001EW; PITH	1865 - 1999 F	135	N/A	N/A
01ICC11	LP	SIDE A	LW; NO B; 11+12(A/B PAIR)	1900 - 1987 F	88	N/A	N/A
01ICC12	LP	SIDE A	EW; NO B; + RINGS @ BARK?	1904 - 1999 F	96	N/A	N/A
MEAN PEARSON'S <i>r</i> -VALUE							0.569

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction is during (late spring to summer) the growth season of 1890.

e) **Function:**

As denoted by the Christian cross, the crib appears to be a burial site. The size of the burial mounds suggest smaller adults or children were buried here. Parks Canada suggested it may be the grave of a mother and child (Mickle and Wallace 2001).

28) **Hector 9 Mile Warden Cabin [1747R/ UVTRL 99L]**

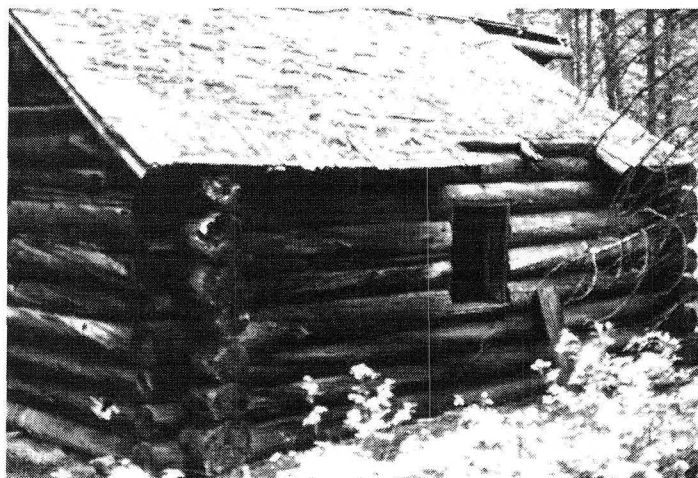


Figure A.45 - Hector 9 Mile Warden Cabin. Source: Smith 1999.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0549791E, 5710418N (11U); 1850 M	1	N/A	5.5 M LENGTH, 4.9 M WIDTH,	WEST WALL: 14, EAST WALL: ?, SOUTH WALL: 9, NORTH WALL: ?	WARDEN SERVICE

b) **Site description:**

The structure is located approximately 100 m above (east) the Banff-Jasper Parkway, on a subalpine slope below Mt. Hector. It overlooks Hector Lake (Smith 1999).

c) **Structure description:**

The Hector 9 Mile Warden Cabin is solidly constructed of logs joined by saddle notch joinery. All four walls and the shingle roof remain intact. Fire damage and surface rot are notable on various logs (Smith 1999). The structure consists of three windows and a

door; the interior retains beds, tables, and boxes. There is also evidence of a telephone line and signs of a previously mounted wall phone (Perry 2003).

d) Tree-ring dating results:

Table A.29 - Summary of results for tree-ring samples collected from the Hector 9 Mile Warden Cabin (1747R). Pearson's *r*-values unavailable. Dating results from UVTRL report #2000-04 (Smith 1999).

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSSDATED INTERVAL	AGE	OUTSIDE DATE	r- VALUE
99LC00B	SPR.	UNKNOWN	T.R.: EW OR LW?	1523 - 1849	327	1849	N/A
99LC01A	SPR.	UNKNOWN	T.R.: EW OR LW?	1513 - 1838	326	1838	N/A
99LC01B	SPR.	UNKNOWN	T.R.: EW OR LW?	1476 - 1852	377	1852	N/A
99LC02A	SPR.	UNKNOWN	T.R.: EW OR LW?	1526 - 1850	325	1850	N/A
99LC03A	SPR.	UNKNOWN	T.R.: EW OR LW?	1508 - 1865	358	1865	N/A
99LC03B	SPR.	UNKNOWN	T.R.: EW OR LW?	1600 - 1864	265	1864	N/A
99LC04A	SPR.	UNKNOWN	T.R.: EW OR LW?	1554 - 1835	282	1835	N/A
99LC04B	SPR.	UNKNOWN	T.R.: EW OR LW?	1516 - 1843	328	1843	N/A
99LC05A	SPR.	UNKNOWN	T.R.: EW OR LW?	1461 - 1806	346	1806	N/A
99LC06A	SPR.	UNKNOWN	T.R.: EW OR LW?	1531 - 1779	249	1779	N/A
99LC06B	SPR.	UNKNOWN	T.R.: EW OR LW?	1567 - 1796	230	1796	N/A
99LC07A	SPR.	UNKNOWN	T.R.: EW OR LW?	1673 - 1905	233	1905	N/A
99LC07B	SPR.	UNKNOWN	LW; NO B	1665 - 1915	251	1915	N/A
99LC08A	SPR.	UNKNOWN	T.R.: EW OR LW?	1686 - 1913	228	1913	N/A
99LC08B	SPR.	UNKNOWN	LW; B	1692 - 1915	224	1915	N/A
99LC09A	SPR.	UNKNOWN	T.R.: EW OR LW?	1547 - 1846	300	1846	N/A
99LC09B	SPR.	UNKNOWN	T.R.: EW OR LW?	1564 - 1855	292	1855	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The cutting date for construction of the Hector 9 Mile Warden Cabin is during (late spring to summer) or after (fall to early spring of following year) the growing season of 1915. All samples date from 1779 to 1915.

e) Function:

According to Parks Canada, this structure is one of a string of patrol cabins utilized by the warden service before vehicle travel (Perry 2003).

29) Silver City Cabin [80R]



Figure A.46 - Silver City Cabin (photo orientation: northward facing). Photo: July 2001.

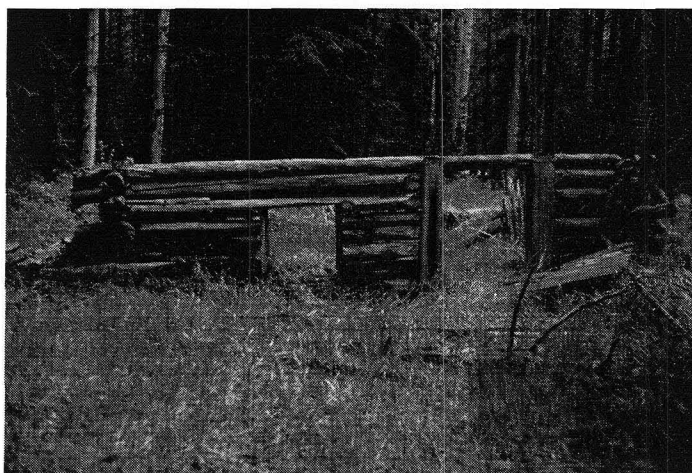


Figure A.47 - Silver City Cabin (photo orientation: northward facing). Source: Parks Canada Agency #ID 80R-1M.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0576291E, 5679551N (11U); 1420 M	1	ENGELMANN SPRUCE, LODGEPOLE PINE (LIVING & STRUCTURE)	5.5 M LENGTH, 4.9 M WIDTH, 1.0 M HEIGHT	NORTH WALL: 3, EAST WALL: 7, SOUTH WALL: 8, WEST WALL: 4	UNKNOWN

b) **Site description:**

The Silver City Cabin is located approximately 1 km east of Castle Junction, where Highways 93 and 1A meet within BNP. The structure is situated within the grounds of

the abandoned Silver City mining town. Lodgepole pine, Engelmann spruce, and trembling aspen dominate the landscape.

c) Structure description:

The structure has collapsed and appears to be afflicted by a combination of vegetation overgrowth and structural subsidence, as depicted in the height change between figures A.46 and A.47. An entrance and window are evident on the south facing wall and saw marks, square-headed nails, and bark are visible on multiple logs. Large refuse pits and scattered materials are found within 100 m of the structure, including: a car frame, metal barrels, cans, and glass. Within the refuse pits multiple items are identifiable: Johnson's Floor Polish (can), Klim Powdered Whole Milk/ The Borden Company (can), Empress Jam (can), Roger's Golden Syrup (can), Peerless Oil (can), and a leather boot.

d) Tree-ring dating results:

Table A.30 - Summary of results for tree-ring samples collected from the Silver City Cabin (80R) (01SCC-fc.txt). Tree-ring dating was unsuccessful.

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUT-SIDE DATE	r-VALUE
01SCC01A	ES	SOUTH WALL	EW; NO B; PITH	1834 - 1999 F	166	N/A	N/A
01SCC01B	ES	SOUTH WALL	EW; NO B; PITH	1834 - 2000 F	167	N/A	N/A
01SCC02A	ES	SOUTH WALL	LW; NO B; PITH	1858 - 2000 F	143	N/A	N/A
01SCC02B	ES	SOUTH WALL	LW; NO B; PITH	1858 - 2000 F	143	N/A	N/A
01SCC03A	LP	SOUTH WALL	EW; NO B; PITH	1792 - 1989 F	198	N/A	N/A
01SCC03B	LP	SOUTH WALL	LW; NO B; PITH	1792 - 2000 F	209	N/A	N/A
01SCC04A	ES	SOUTH WALL	EW; NO B; PITH; B ON ORIG	1802 - 1999 F	198	N/A	N/A
01SCC04B	ES	SOUTH WALL	EW; NO B; PITH; B ON ORIG	1802 - 2000 F	199	N/A	N/A
01SCC05A	ES	WEST WALL	EW; NO B; PITH	1895 - 2000 F	106	N/A	N/A
01SCC05B	ES	WEST WALL	EW; NO B; PITH	1895 - 1999 F	105	N/A	N/A
01SCC06A	ES	EAST WALL	LW; NO B; PITH	1825 - 2000 F	176	N/A	N/A
01SCC06B	ES	EAST WALL	EW; NO B; PITH	1826 - 1999 F	174	N/A	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Crossdating was unsuccessful. Exploration of additional living chronologies is needed.

e) **Function:**

Parks Canada suggests the structure is associated with the construction of the Banff-Lake Louise Highway (1A) between 1912-20 (Mellen 1983a; Langemann 1997b). However, the presence of square-headed nails suggests the structure could date earlier. Dating of artifacts found at the site could help clarify the date of occupation. However, the lack of a confirmed construction date leaves the structure function unknown.

30) **Billy Carver Cabin [61R]**

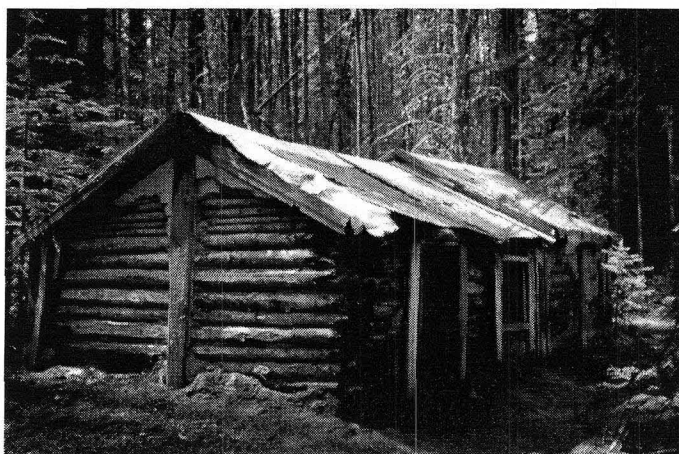


Figure A.48 - Billy Carver Cabin: view of north corner. Room A is in the foreground and room B in the background (photo orientation: southward facing). Photo: July 2001.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0606209E, 5672403N (11U); 1430 M	1 (2 SECTIONS)	LOGEPOLE PINE (LIVING & STRUCTURE)			HOMESTEAD
		SECTION 1 (ROOM A)		3.7 M LENGTH, 2.9 M WIDTH, 2.1 M HEIGHT	NORTHWEST WALL: 10, NORTHEAST WALL: 17, SOUTHWEST WALL: ?, SOUTHEAST WALL: 7	
		SECTION 2 (ROOM B)		2.3 M LENGTH, 3.5 M WIDTH, 2.3 M HEIGHT	NORTHWEST WALL: 9, NORTHEAST WALL: ?, SOUTHWEST WALL: 15, SOUTHEAST WALL: 7	

b) Site description:

The Billy Carver Cabin is a hermit structure located at the SE corner of Johnson Lake, approximately 100 m from the lakeshore (Porter and Mellen 1983; Langemann and Lesich 1992) and above the remnants of the Anthracite coal-mining town that closed in the late 1880s (Trono 1996). It is situated in a forest dominated by lodgepole pine with Engelmann spruce, Douglas-fir, and trembling aspen.

c) Structure description:

The cabin consists of two distinct sections, defined as room A and B and is constructed with undressed lodgepole pine beams with stick chinking connected by saddle notch joinery and reinforced with nails (round and square headed; wire and machine cut (Steer and Porter 1981). Weathering has revealed additional sequences of building materials over the exterior log walls, including tarpaper and a perlite-like plaster. Around the exterior of the structure remnant materials were noted, including: scrap metal, cans, wood boxes, a stove, and a cache box with rubber rainseal hanging from a tree (Mellen 1983b).

d) Tree-ring dating results:

Table A.31 - Summary of results for tree-ring samples collected from the Billy Carver Cabin (61R) (01BCC-cd.txt). Pearson's *r*-values represent a measure of correlation between the Billy Carver Cabin cores (individual a/b pairs: 01BCC-fc.txt) and the living chronology (01BCC600-lc.txt) at a 99% confidence interval and at 15 lag 7 interval (except 07a/b at 25 lag 12).

SAMPLE #	SPECIES	PROVEN-IENCE	TERMINAL RING & COMMENTS	CROSSDATE D INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01BCC01A	LP	SIDE C	LW; NO B; ROOM A; PITH	1881 - 1905	25	1905	0.542
01BCC01B	LP	SIDE C	LW; NO B; ROOM A	1979 - 2000F	22	N/A	N/A
01BCC02A	LP	SIDE C	LW; NO B; ROOM A	1880 - 1913	34	1913	0.555
01BCC02B	LP	SIDE C	LW; B; ROOM A; PITH	1877 - 1913	37	1913	0.603
01BCC03A	LP	SIDE B	LW; B; ROOM A	1896 - 1934	39	1934	0.753*
01BCC04A	LP	SIDE B	LW; B; ROOM A	1886 - 1913	28	1913	0.679*
01BCC04B	LP	SIDE B	LW; B; ROOM A	1878 - 1913	36	1913	0.780*
01BCC05A	LP	SIDE D	LW; D; B; ROOM A	1886 - 1912	28	1912	0.830*
01BCC05B	LP	SIDE D	LW; B; ROOM A	1886 - 1913	28	1913	0.617
01BCC06A	LP	SIDE D	LW; NO B; ROOM A	1883 - 1913	31	1913	0.806*
01BCC06B	LP	SIDE D	LW; NO B; ROOM A	1884 - 1913	30	1913	0.710*
01BCC07A	LP	SIDE A	LW; NO B; ROOM B	1882 - 1933	52	1933	0.737*
01BCC07B	LP	SIDE A	LW; NO B; ROOM B	1880 - 1933	54	1933	0.574
01BCC09A	LP	SIDE A	LW; NO B; ROOM B	1898 - 1933	36	1933	0.679*
01BCC09B	LP	SIDE A	LW; NO B; ROOM B	1897 - 1933	37	1933	0.650*
01BCC10A	LP	SIDE B	LW; B; ROOM B	1895 - 1933	39	1933	0.783*
01BCC11A	LP	SIDE B	LW; NO B; ROOM B; PITH	1897 - 1933	37	1933	0.768*
01BCC11B	LP	SIDE B	LW; NO B; ROOM B	1897 - 1933	37	1933	0.782*
01BCC12A	LP	SIDE B	LW; B; ROOM B	1893 - 1933	41	1933	0.695*
01BCC12B	LP	SIDE B	LW; NO B; ROOM B; PITH	1885 - 1933	49	1933	0.692*
MEAN PEARSON'S <i>r</i> -VALUE							0.697

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The 1913/ 1933 dating distribution corresponds to the two rooms (A and B). Room A clearly dates to 1913, while room B dates to 1933. It can, therefore, be stated that room A was built before room B. One log in room A (side B) dated to 1934; it is likely a replacement log procured in response to damages during the construction of room B.

e) Function:

The structure is attributed to Billy Carver, who lived a recluse life at the site until he was transferred to a retirement home in 1938 (Mellen 1983b; Trono 1996). A more detailed analysis is presented in Chapter 6.0.

31) Bill Peyto Cabin [1920R]

Figure A.49 - Bill Peyto Cabin (photo orientation: northeastward facing). Photo: July 2001.



Figure A.50 - Bill Peyto Cabin interior: remnant materials. Photo: July 2001.

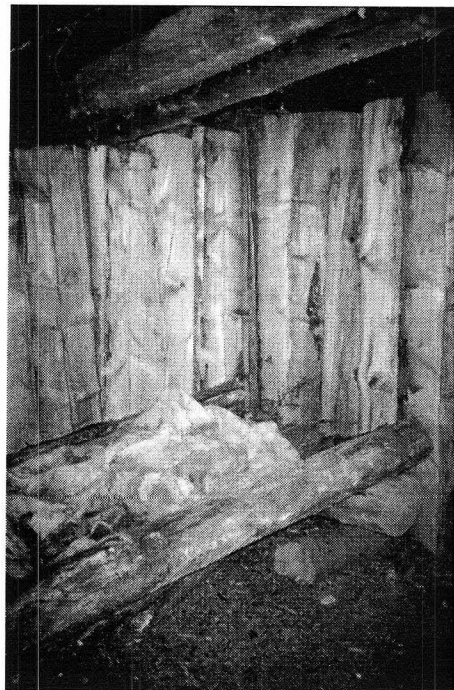


Figure A.51 - Bill Peyto Cabin interior: bed. Photo: July 2001.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0589989E, 5668088N (11U); 1480 M	1	ENGELMANN SPRUCE, LODGEPOLE PINE (LIVING), LODGEPOLE PINE (STRUCTURE)	3.7 M LENGTH, 2.8 M WIDTH, 2.1 M HEIGHT	NORTHWEST WALL: 8, NORTHEAST WALL: 13, SOUTHWEST WALL: 11, SOUTHEAST WALL: 9	HOMESTEAD

b) **Site description:**

The Bill Peyto Cabin is located along the Trans Canada Highway approximately 10 km west of the Banff town site and southeast of the eastern most animal overpass. It is situated at the top of a steep terrace in an Engelmann spruce and lodgepole pine dominated forest.

c) **Structure description:**

The structure is constructed with split vertical logs with smaller beam chinking and metal wire reinforcements. It is standing in stable condition with four walls and a roof. The southwest-facing wall has a laterally displaced door and two windows. The interior includes various remnant materials: a pole bed, stove, stovepipe, broom, wooden crate, and metal fragments.

d) Tree-ring dating results:

Table A.32 - Summary of results for tree-ring samples collected from the Bill Peyto Cabin (1920R) (01BPC-cd.txt). Pearson's r -values represent a measure of correlation between the Bill Peyto Cabin cores (individual a/b pairs: 01BPC-fc.txt) and the living chronology (01BPC600-lc.txt) at a 99% confidence interval and at 50 lag 25 interval (except 01BPC03b & 01BPC05a at 25 lag 12).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSSDATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01BPC01A	LP	SIDE A	LW; B	1834 - 1931	98	1931	0.460*
01BPC01B	LP	SIDE A	LW; B; D. B	1836 - 1932	97	1932	0.672*
01BPC02A	LP	CORNER A/B	LW; B	1836 - 1932	97	1932	0.489*
01BPC02B	LP	CORNER A/B	LW; B	1828 - 1932	105	1932	0.638*
01BPC03A	LP	CORNER B/C	LW; B	1827 - 1932	106	1932	0.474*
01BPC03B	LP	CORNER B/C	EW; B; D. B	1896 - 1952 F	57	N/A	N/A
01BPC04A	LP	SIDE C	LW; B	1841 - 1932	92	1932	0.624*
01BPC04B	LP	SIDE C	LW; NO B; PITH; B ON ORIG.	1836 - 1932	97	1932	0.474*
01BPC05A	LP	SIDE C	LW; B; PITH; D. B	1826 - 1932	107	1932	0.641*
01BPC05B	LP	SIDE C	LW; B; D. B	1830 - 1932	103	1932	0.716*
01BPC06A	LP	CORNER C/D	LW; NO B; B ON ORIG.	1831 - 1915	85	1915	0.582*
01BPC06B	LP	CORNER C/D	LW; NO B; B ON ORIG.	1832 - 1932	101	1932	0.443*
MEAN PEARSON'S r -VALUE							0.565

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r -value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The cutting date for construction of the Bill Peyto Cabin is after (fall to early spring of following year) the growth season of 1932. Remaining samples dated to 1915 and 1931, however 9 of 12 samples date to 1932.

e) Function:

This structure is attributed to Bill Peyto, trapper and Park warden. According to Parks Canada, the upright log building style is his characteristic building style (Langemann 1997a). Local Banff historian Gordon Burles, stated that Peyto was residing at Healy Creek as a warden during the 1930s, which is within 3 km of the structure. Burles, however, questions why, if he did, Peyto would build two cabins so close together. There were a lot of poachers in the area during the 1930s, so it is possible the structure could be attributed to someone else (Brelsford 2002c). Ted Keith, another local historian, suggests that Peyto built this structure as a residence after he retired from the warden service in 1936 (Hart 1995; Brelsford 2002a, 2002c). However, the date of construction (1932) suggests he

built it while still acting as a park warden. It is possible he was simply preparing a cabin where he could live after his warden service, as Peyto was known for his admiration of privacy and the wilderness (Hart 1995).

32) Turtle Tom's Cabin [1699R]

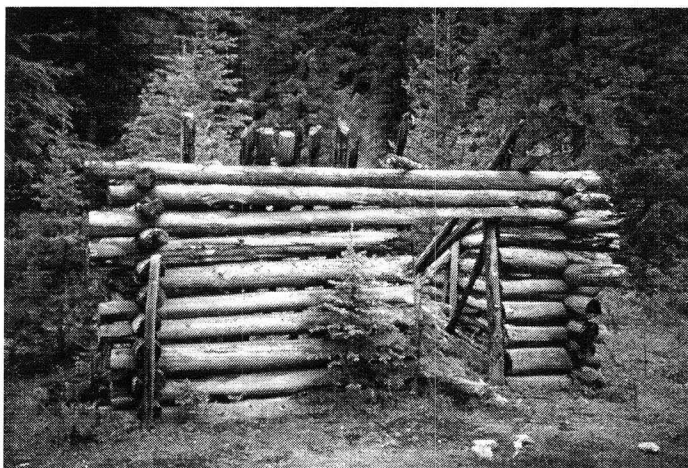


Figure A.52 - Turtle Tom's Cabin (photo orientation: southward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0595727E, 5658123N (11U); 1670 M	1	ENGELMANN SPRUCE, LODGEPOLE PINE (LIVING) ENGELMANN SPRUCE (STRUCTURE)	4.4 M LENGTH, 4.2 M WIDTH, 2.0 M HEIGHT	NORTH WALL: 10, EAST WALL: 10, SOUTH WALL: 2, WEST WALL: 10	TRAPPER OR OUTFITTER

b) Site description:

Turtle Tom's Cabin is located approximately 4 km south of Brewster's Sundance Lodge, along the east side of Brewster Creek in an open grassy meadow (Langemann and Mickle 2000). Young Engelmann spruce grows in and around the structure. Approximately 70 m east are the remains of a fenced corral and outhouse that may be the remains of a larger outfitter's camp (Langemann and Mickle 2000).

c) Structure description:

The structure consists of four standing walls with a sloping shed-type roof. The logs are connected by saddle notch joinery. An entranceway with door hinges is present on the east-facing wall. Along the north and south facing walls are logs that run half the length of the wall, suggesting the previous existence of windows. Logs display saw marks, nails, and lack bark. Remnant materials include: cans, a stove vent, and a face carving on a small post nailed to the south side of the entrance wall.

d) Tree-ring dating results:

Table A.33 - Summary of results for tree-ring samples collected from the Turtle Tom's Cabin (1699R) (01TTC-fc.txt). Tree-ring dating was unsuccessful; need living Engelmann spruce chronology from region of structure.

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSSDATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01TTC01A	ES	SOUTHEAST CORNER	EW; NO B; PITH	1945 - 2000 F	56	N/A	N/A
01TTC01B	ES	SOUTHEAST CORNER	EW; NO B; PITH	1945 - 1999 F	55	N/A	N/A
01TTC02A	ES	NORTHEAS T CORNER	EW; NO B; PITH	1831 - 1996 F	166	N/A	N/A
01TTC02B	ES	NORTHEAS T CORNER	EW; NO B; PITH	1831 - 2000 F	170	N/A	N/A
01TTC03A	ES	NORTHWES T CORNER	LW; NO B; PITH	1828 - 2000 F	173	N/A	N/A
01TTC03B	ES	NORTHWES T CORNER	EW; NO B; PITH	1828 - 1999 F	172	N/A	N/A
01TTC04A	ES	SOUTHEAST CORNER	EW; NO B; PITH	1829 - 1995 F	167	N/A	N/A
01TTC04B	ES	SOUTHEAST CORNER	EW; NO B; PITH	1828 - 2000 F	173	N/A	N/A
01TTC05A	ES	NORTHEAS T CORNER	EW; NO B; PITH	1832 - 1997F	166	N/A	N/A
01TTC05B	ES	NORTHEAS T CORNER	EW; NO B; PITH	1832 - 2000 F	169	N/A	N/A
01TTC06A	ES	SOUTHWES T CORNER	EW; NO B; PITH	1882 - 2000 F	119	N/A	N/A
01TTC06B	ES	SOUTHWES T CORNER	EW; NO B; PITH	1882 - 1999 F	118	N/A	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = r-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Crossdating was unsuccessful. Exploration of additional living chronologies is needed.

e) Function:

As Parks Canada suggested, the structure may be a part of a larger abandoned outfitter's camp (Langemann and Mickle 2000). Another suggestion is that the structure belonged to a character by the name of "Turtle Tom". Rumor suggests he raised turtles for turtle soup at the Banff Springs Hotel (Brelsford 2001c). However, no substantial evidence has been found to support this claim and, therefore, it seems more likely that the structure's original function is related to an outfitter's camp.

33) Fatigue Creek Cabin [2030R]



Figure A.53 - Fatigue Creek Cabin (front and side view) (photo orientation: eastward facing). Photo: July 2001.



Figure A.54 - Fatigue Creek Cabin (backside view) (photo orientation: southward facing). Photo: July 2001.

a) **General description:**

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
BNP	0594326E, 5659545N (11U); 1660 M	1	ENGELMANN SPRUCE (LIVING & STRUCTURE)	4.0 M LENGTH, 2.9 M WIDTH, 1.8 M HEIGHT	NORTHEAST WALL: 7, SOUTHEAST WALL: 7, SOUTHWEST WALL: 7, NORTHWEST WALL: 1	TRAPPER OR OUTFITTER

b) **Site description:**

The Fatigue Creek Cabin is located approximately 1.5 km southeast of Brewster's Sundance Lodge. It can be accessed by following Fatigue Creek Trail for about 500 m from the Brewster Creek junction. The structure is situated on a rising terrace of Engelmann spruce on the west side of Fatigue Creek (Langemann and Mickle 2001).

c) **Structure description:**

The structure contains three standing walls and a sloping roof, which appears caved in. Logs are notched together and reinforced with large nails and insulated with hay and mud chinking. Burn marks were noted on some of the logs. A doorway with attached frame and widows provide access to the interior. Remnant materials found at the site include: round-headed nails, cooking pots and pans, a coffee pot, stove and pipe and multiple cans.

d) Tree-ring dating results:

Table A.34 - Summary of results for tree-ring samples collected from the Fatigue Creek Cabin (2030R) (01FCC-fc.txt). Tree-ring dating was unsuccessful; need older living Engelmann spruce chronology from region of structure.

SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMETNS	CROSSDATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01FCC01A	ES	SIDE D	EW; NO B	1868 - 1994 F	127	N/A	N/A
01FCC01B	ES	SIDE D	EW; NO B; 2001 EW	1871 - 2000 F	130	N/A	N/A
01FCC02A	ES	SIDE D	LW; NO B	1811 - 2000 F	190	N/A	N/A
01FCC02B	ES	SIDE D	LW; NO B; PITH	1774 - 1995 F	222	N/A	N/A
01FCC03A	ES	SIDE D	EW; NO B; 2001 EW; PITH	1785 - 1993 F	209	N/A	N/A
01FCC03B	ES	SIDE D	EW; NO B; 2001 EW	1796 - 2000 F	205	N/A	N/A
01FCC04A	ES	SIDE A	EW; NO B; 2001 EW	1878 - 1991 F	114	N/A	N/A
01FCC04B	ES	SIDE A	EW; NO B; 2001 EW; PITH	1858 - 2000 F	143	N/A	N/A
01FCC05A	ES	SIDE A	EW; NO B; 2001 EW	1827 - 2000 F	174	N/A	N/A
01FCC05B	ES	SIDE A	EW; NO B; 2001 EW	1825 - 1996 F	172	N/A	N/A
01FCC06A	ES	SIDE A	EW; NO B; 2001 EW	1823 - 2000 F	178	N/A	N/A
01FCC06B	ES	SIDE A	EW; NO B	1820 - 1998 F	179	N/A	N/A
MEAN PEARSON'S <i>r</i> -VALUE							N/A

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

Crossdating was unsuccessful. Exploration of additional living chronologies is needed.

e) Function:

The existence of cooking equipment suggests that the structure was used for habitation and its hidden location infers a secretive function; therefore, it is plausible that it functioned as a trapper cabin.

34) Dog Lake Structure/ Barn [1031T]



Figure A.55 - Dog Lake Structure (photo orientation: westward facing). Source: Parks Canada Agency #ID1031T.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
KNP	0574950E, 5626517N (11U); 1070 M	1	DOUGLAS-FIR, LODGEPOLE PINE, ENGELMANN SPRUCE (LIVING); ENGELMANN SPRUCE (STRUCTURE)	8.7 M LENGTH, 7.9 M WIDTH, 2.5 M HEIGHT	NORTHWEST WALL: 11, NORTHEAST WALL: 11, SOUTHWEST WALL: 11, SOUTHEAST WALL: 11	HOMESTEAD AND OUTBUILDINGS

b) Site description:

The structure is situated 300 m north of the footbridge at the north end of Dog Lake. It is positioned on a flat terrace on the east side of the Dog Lake drainage creek. Douglas-fir, lodgepole pine, and Engelmann spruce dominate the forest (Francis 1995).

c) Structure description:

All four walls of the structure remain standing and are joined by saddle notch joinery. Axe and saws marks are evident on log sides and ends; bark is notable in multiple places. Joist cuts-outs are present on the northwest and southeast facing walls, possibly evidence of original inserts for roof logs. Entranceways framed by nails are present on the northeast and southwest facing walls. Remnant materials include a single hole-in-top can and inscriptions, one reads “John Abrahams May 13, 1942” (Francis 1995).

d) **Tree-ring dating results:**

Table A.35 - Summary of results for tree-ring samples collected from the Dog Lake Cabin (1031T) (01DLC-cd.txt). Pearson's *r*-values represent a measure of correlation between the Dog Lake Cabin cores (individual a/b pairs: 01DLC-fc.txt) and the living Engelmann spruce chronology (01DLC900-lc.txt) at a 99% confidence interval and at 25 lag 12 interval (except 02a/b, 03a/b, 05a/b at 15 lag 7).

SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMENTS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01DLC01A	ES	CORNER C/D	EW; NO B; PITH	1941 - 2000 F	60	N/A	N/A
01DLC01B	ES	CORNER C/D	EW; NO B; PITH	1855 - 1914	60	1914	0.420
01DLC02A	ES	CORNER C/D	EW; NO B; PITH	1862 - 1914	53	1914	0.498
01DLC02B	ES	CORNER C/D	EW; NO B; PITH	1862 - 1914	53	1914	0.517
01DLC03A	ES	CORNER B/C	EW; NO B; PITH	1884 - 1914	31	1914	0.611*
01DLC03B	ES	CORNER B/C	EW; NO B; PITH	1884 - 1914	31	1914	0.506
01DLC04A	ES	CORNER B/C	EW; NO B; PITH	1865 - 1914	50	1914	0.448
01DLC04B	ES	CORNER B/C	LW; NO B; PITH	1867 - 1914	48	1914	0.488*
01DLC05A	ES	CORNER A/B	LW; NO B; PITH	1835 - 1890	56	1890	0.463
01DLC05B	ES	CORNER A/B	EW; NO B; PITH	1858 - 1914	57	1914	0.354
01DLC06A	ES	CORNER A/B	EW; NO B; PITH; B NEAR ORIG	1871 - 1912	42	1912	0.321
01DLC06B	ES	CORNER A/B	EW; NO B; PITH; B NEAR ORIG	1957 - 2000 F	44	N/A	N/A
MEAN PEARSON'S <i>r</i> -VALUE							0.463

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The minimum cutting date for construction is during (late spring to summer) the growth season of 1914. All samples date from 1890 to 1914, with 8 of 12 samples clustered at 1914.

e) **Function:**

According to Parks Canada, the structure functioned as a barn and was likely built during the homestead period (1900-1920) (Francis 1995). The tree-ring dating results confirm this temporal placement. According to Bill Smyth, a local Banff historian, the inscription "John Abrahams May 13 1942" may be linked to the Abraham Métis family who occupied the area around Jasper townsite and the North Saskatchewan River (Brelsford 2002b).

35) Kootenay River Cabin/ W.A. Dillon Homestead [368T]



Figure A.56 - Kootenay River Cabin: front of section 1 (photo orientation: northward facing). Photo: July 2001.

a) General description:

PARK	UTM COORDINATES & ELEVATION	# OF STRUCTURES	TREE SPECIES	DIMENSIONS	COURSES	STRUCTURE FUNCTION
KNP	0583855E, 5609619N (11U); 1070 M	1 (2 SECTIONS)	DOUGLAS-FIR, ENGELMANN SPRUCE, LODGEPOLE PINE, (LIVING & STRUCTURE); HEMLOCK, TREMBLING ASPEN (LIVING)	SECTION 1: 4.5 M LENGTH, 3.8 M WIDTH, 1.7 M HEIGHT SECTION 2: 4.4 M LENGTH, 3.2 M WIDTH, 0.9 M HEIGHT	SECTION 1: NORTHWEST WALL: 5, NORTHEAST WALL: 10, SOUTHWEST WALL: 11, SOUTHEAST WALL: 12 SECTION 2: NORTHWEST WALL: 5, NORTHEAST WALL: 5, SOUTHWEST WALL: 4, SOUTHEAST WALL: 8	HOMESTEAD

b) Site description:

The site is on the west bank of the Kootenay River, approximately 500 m north of the mouth of the Cross River (Mitchell and Choquette 1971). The structure is situated on a flat terrace in a multi-species forest of Douglas-fir, trembling aspen, Engelmann spruce, lodgepole pine, and hemlock trees.

c) Structure description:

Both sections of the structure, which may have had separate functions, are collapsing and the sod-covered roof has caved in. The logs are connected by saddlenotch joinery and insulated with moss chinking. Axe marks and bark are visible on multiple logs.

Remnant materials found in the area include: metal scraps, cans and a fire pit with surrounding log bench.

d) Tree-ring dating results:

Table A.36 - Summary of results for tree-ring samples collected from the Kootenay River Cabin (368T): structure 1 (01KRC100 samples: 01KRC1-cd.txt), structure 2 (01KRC200 samples: 01KRC2-cd.txt). Pearson's *r*-values represent a measure of correlation between the Kootenay River Cabin cores (structure 1: 01KRC1-fc.txt and structure 2: 01KRC-fc.txt) (individual a/b pairs: 102a/b, 103a/b, 104ab, 105a/b, 106a/b, 201a/b) and the living Engelmann spruce chronology (01DLC900-lc.txt) and the Kootenay River Cabin cores (individual a/b pairs: 101a/b, 202a/b, 203a/b, 204a/b, 205a/b, 206a/b) and the living Lodgepole pine chronology (01DLC600-lc.txt) at a 99% confidence interval and 25 lag 12 interval (except 104a/b at 15 lag 7).

STRUCTURE 1							
SAMPLE #	SPECIES	PROVENIENCE	TERMINAL RING & COMMETNS	CROSS-DATED INTERVAL	AGE	OUTSIDE DATE	r-VALUE
01KRC101A	DF	CORNER A/B	LW; NO B; PITH	1869 - 1940	72	1940	0.488*
01KRC101B	DF	CORNER A/B	LW; NO B; PITH	1869 - 1939	71	1939	0.526*
01KRC102A	LP	CORNER A/B	LW; NO B; PITH	1856 - 1920	65	1920	0.369
01KRC102B	LP	CORNER A/B	LW; NO B; PITH	1856 - 1920	65	1920	0.419
01KRC103A	ES	CORNER A/B	LW; NO B; PITH	1831 - 1913	83	1913	0.659*
01KRC103B	ES	CORNER A/B	EW; NO B; PITH	1831 - 1913	83	1913	0.619*
01KRC104A	ES	CORNER A/D	LW; NO B; PITH	1866 - 1912	47	1912	0.392
01KRC104B	ES	CORNER A/D	EW; NO B; PITH	1966 - 1913	48	1913	0.430
01KRC105A	LP	CORNER A/D	LW; NO B; PITH; B ON ORIG.	1860 - 1918	59	1918	0.300
MEAN PEARSON'S <i>r</i> -VALUE							0.467

STRUCTURE 2							
SAMPLE #	SPECIES	PROVEN- IENCE	TERMINAL RING & COMMENTS	CROSS- DATED INTERVAL	AGE	OUTSIDE DATE	r- VALUE
01KRC201 A	DF	CORNER A/D	LW; NO B; PITH	1845 - 1912	68	1912	0.417
01KRC201 B	DF	CORNER A/D	EW; NO B; PITH	1845 - 1913	69	1913	0.430
01KRC202 A	LP	CORNER A/D	LW; NO B; PITH	1841 - 1907	67	1907	0.536*
01KRC202 B	LP	CORNER A/D	LW; NO B; PITH	1928 - 1987F	60	N/A	N/A
01KRC203 A	LP	CORNER A/D	LW; NO B; PITH; B ON ORIG.	1834 - 1913	80	1913	0.573*
01KRC203 B	LP	CORNER A/D	LW; NO B; PITH; B ON ORIG.	1833 - 1913	81	1913	0.430
01KRC204 A	DF	CORNER A/D	LW; NO B; PITH; B ON ORIG.	1920 - 2000F	81	N/A	N/A
01KRC204 B	DF	CORNER A/D	LW; B; PITH; D. B	1831 - 1913	83	1913	0.360
01KRC205 A	LP	CORNER A/D	LW; NO B; PITH; B NEAR ORIG.	1842 - 1913	72	1913	0.533*
01KRC205 B	LP	CORNER A/D	LW; NO B; PITH; B NEAR ORIG.	1842 - 1913	72	1913	0.479*
01KRC206 A	LP	CORNER A/D	LW; NO B; PITH; B NEAR ORIG.	1845 - 1912	68	1912	0.625*
01KRC206 B	LP	CORNER A/D	LW; B; PITH; D. B	1845 - 1910	66	1910	0.639*
MEAN PEARSON'S <i>r</i> -VALUE							0.502

EW = earlywood; LW = latewood; NOT C. = not counted; inc. = incomplete; D. = detached; F = not crossdated; BG = beetle galleries; T.R. = terminal ring; Sp? = Species unknown; Spr. = Spruce; LP = Lodgepole pine; CK = cookie; ES = Engelmann Spruce; WS = White spruce; PITH = pith present; NO B = no bark; B = bark; * = *r*-value significant at 99% confidence interval; N/A = not available; B on orig. = bark on original sample; T.R.: EW or LW? = terminal ring EW or LW unknown; bolded font = final cutting date.

The cutting date for construction of the Kootenay River Cabin is after (fall to early spring of following year) the growth season of 1913. One sample produced a date of 1940 and is likely a replacement log. All samples date from 1907 to 1940, however, 12 of 24 samples dated to 1913. Other samples did produce more recent dates (i.e., 1940), however the tight cluster of samples, one of which has bark, suggests a main building episode in 1913. Some of the samples produced more recent dates, but are rejected on the basis of low Pearson-*r* values.

e) Function:

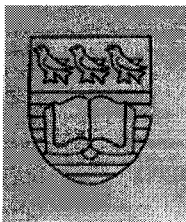
According to Parks Canada, the structure is a homestead registered by W.A. Dillon in 1913 (Mitchell and Choquette 1971). This corresponds with the tree-ring dating results.

Appendix B

Interview Transcriptions

This document contains interview transcriptions for six interviews conducted by the author Karen J. Brelsford, between June 15 and July 2, 2002 in BNP, JNP, and in the town of Brûlé. Interviewees were selected with the guidance of park wardens Don Mickle and Rod Wallace. Each interviewee was shown a summary [similar to Appendix A] of structures, with photos and mapped locations. Interviews were conducted with the approval of the University of Victoria Research Ethics Committee. Copies of the *Certificate of Approval* and signed consent forms are included. Original interview audiotapes are stored at the University of Victoria Tree-Ring Laboratory.

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University of Victoria - Human Research Ethics Committee

Certificate of Approval

<u>Principal Investigator</u> Karen Brelsford Graduate Student Co-Investigator(s):	<u>Department/School</u> GEOG	<u>Supervisor</u> Dr. Dan Smith	
Title: Dendrochronological Dating of Historic Structures in the Rocky Mountain National Parks			
<u>Project No.</u> 026-02	<u>Approval Date</u> 25-Feb-02	<u>Start Date</u> 25-Feb-02	<u>End Date</u> 24-Feb-03

Certification

This is to certify that the University of Victoria Ethics Review Committee on Research and other Activities Involving Human Subjects has examined the research proposal and concludes that, in all respects, the proposed research meets appropriate standards of ethics as outlined by the University of Victoria Research Regulations Involving Human Subjects.


J. Howard Brunt
Associate Vice-President, Research

This Certificate of Approval is valid for the above term provided there is no change in the procedures. Extensions/minor amendments may be granted upon receipt of "Request for Continuing Review or Amendment of an Approved Project" form.

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026-02 Brelsford, Karen

Dendrochronological Dating of Historic Structures in the Rocky Mountain National Parks

You are being invited to participate in a study entitled **Dendrochronological Dating of Historic Structures in the Rocky Mountain National Parks** that is being conducted by Karen Brelsford. Karen Brelsford is a graduate student in the department of Geography at the University of Victoria and you may contact her if you have further questions:

Karen Brelsford, University of Victoria Tree-Ring Laboratory (250 472-4733)

Dr. Dan Smith, University of Victoria (250 721-7328)

Associate Vice-President, Research (250-472-4362)

As a graduate student, I am required to conduct research as part of the requirements for a degree in Geography. It is being conducted under the supervision of Dr. Dan Smith. You may contact my supervisor at (250 721-7328).

This research is being funded by NSERC, Parks Canada, the Royal Canadian Geographic Society, and the University of Victoria Tree-Ring Laboratory.

The purpose of this research project is to document a part of human settlement in the Canadian Rocky Mountain Parks before it disappears. The objectives include tree-ring dating the structures in order to determine their construction dates and to conduct historical research (archival data, interviews) to determine who built the structures and why.

Research of this type is important because many of the structures under investigation are disappearing. However, by dating the structures using dendrochronological techniques (tree-ring dating) and researching their historical origins, it is possible to document a part of Canadian history before its physical remnants disappear.

You are being asked to participate in this study because of your potential insight into to the history of the log structures under consideration. Your name was either acquired through Parks Canada, residents of Jasper, Banff, or Kootenay Parks, and/or through research of historical documents (ie. archives).

If you agree to voluntarily participate in this research, your participation will include the option of being interviewed individually or in a group. You may be requested to share records or personal materials related to the history of the log structures, which you may decline. Participation time per interview may range between 1 to 3 hours; additional meeting times may be requested. Participation will occur at a Parks Canada office, the home of the participant, at the log structure under consideration, or a neutral meeting place suitable for the participant.

Participation in this study may cause some inconvenience to you, including fatigue. If you suffer from fatigue at any time during the interview, you may stop the interview and if desired arrange another time to resume the interview.

There are some potential risks to you by participating in this research and they include physical fatigue and emotional stress. To prevent or to deal with these risks you may stop the interview at anytime and if desired arrange another time to resume the interview.

The potential benefits of your participation in this research include benefiting Canadian society by contributing to the knowledge of the history of the Canadian Rocky Mountain Parks.

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be used in the analysis if you agree to this. This agreement will be obtained at the beginning of the interview. It will be noted in the consent form and confirmed by your signature on the consent form. If you do not agree, the consent form will be destroyed and turned over to you, the participant.

**If you withdraw from the study do you agree to allow your data to be used in the analysis?
(check one box)**

Yes No

To make sure that you continue to consent to participate in this research, I will have you sign a new consent form at the beginning of each interview.

In terms of protecting your anonymity, I will provide no protection. I want to provide references for the historical information provided so that future researchers can attempt to interview the same participants.

Your confidentiality and the confidentiality of the data will not be protected. I plan to use the information gathered from participants in my Master's thesis, which will be available to the public and will therefore not remain confidential.

It is anticipated that the results of this study will be shared with others in the following ways. They will be disseminated in my thesis, and possibly as a published article in an academic journal, and through presentations at scholarly meetings.

The data will be preserved at the University of Victoria Tree-Ring Laboratory.

In addition to being able to contact the researcher and the supervisor at the above phone numbers, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Associate Vice-President, Research at the University of Victoria (250-472-4362).

Your signature below indicates that you understand the above conditions of participation in this study and that you have had the opportunity to have your questions answered by the researchers.

Name of Participant

Signature

Date

A copy of this consent will be left with you, and a copy will be taken by the researcher.

JIM DANIELS
Name of Participant

[Signature]
Signature

JUNE 15, 2002
Date

Ted Keith
Name of Participant

[Signature]
Signature

JUNE 15, 2002
Date

[Signature]
Name of Participant

[Signature]
Signature

JUNE 16/02
Date

BILL SMYTH

Gordon Burles
Name of Participant

[Signature]
Signature

JUNE 20/02
Date

W. R. RUDDY
Name of Participant

[Signature]
Signature

JUNE 23/02
Date

TOM. W. PETERSON
Name of Participant

[Signature]
Signature

JUNE 24/02
Date

[Signature]
Name of Participant

[Signature]
Signature

JUNE 27/02
Date

Robert C. Hallam

Tom Vinson
Name of Participant

[Signature]
Signature

JULY 2 - 2002
Date

Interview #1: June 15, 2002, BNP

Interviewer: Karen Brelsford (KB)

Interviewees: Jim Davies (JD), Ted Keith (TK) , and Gordon Burles (GB)

Tape #1: Side A (000)

Topic: Billy Carver Cabin

TK: I was on the party that found him when he was dying. It was 1937; we were out there snowshoeing and there were no roads in there. We found him when he was out of his mind. The fellow I was with thought we'd go see if we could pass him up for a cup of coffee.

KB: To warm up?

TK: Yeah, and he was completely gone.

KB: Do you know how old he was?

TK: No, couldn't tell you. He was an old man. I think so; he retired in 1901. He was a miner at Anthracite and when the mine closed he'd just moved back into the bush.

JD: Did he live in the Anthracite townsite?

TK: I think so.

JD: Have you seen the mine? There's still a lot of evidence there. It's just below Johnson Lake, where the creek comes down. It looked like there were two shafts at one point.

TK: Yeah, there were two separate mines.

JD: The coal was taken down right beside the Trans Canada highway. It's still there. It's all blown over, but a lot of material came out of there.

TK: There were two different companies at that mine site. One accused the other of trespassing on their property and they sent for a land surveyor from DLS in Ottawa to come out. And in the meantime the one that was being accused went back in and gutted the whole set up out. They knew if they went back one way there, the mine would flood out from Johnson's Lake.

JD: So they diverted the creek?

TK: Yeah, they flooded it out and they were never convicted.

Tape time (058)

TK: They got him [Billy Carver] into the hospital in Banff. And he stayed I'm not sure how long and he recovered and they got him into Woods Christian Home out in Calgary. He was an old man and died there a couple years later. In the 40s, somewhere in there.

KB: He did a lot of work on the structure.

TK: Yeah, he plastered it all over and put it all along the concrete. What he'd done it himself; mixing in a bucket I guess and patching it on.

JD: Winterizing it.

TK: Yeah, he made it more bear proof. With a window that barely let any light in. When we went in the door was partly open and partly closed. It was in the winter. We found him and he was completely out of it. And he said [Carver], "I want you and you and that other guy" and there were only two of us you know, but he could see three of us. He was out of it all together, but it was so dark you could hardly see anything, except for the light from that little window.

KB: What do you remember seeing inside? I noticed a chimneystack.

TK: There was a stove in the corner. And on top of the stove, he had a little cast iron stove, was a box of matches spread all over. No fire going or anything. He couldn't even get a fire. I guess he tried to get the fire going. And the door was partly open. It was cold. He hadn't been up in several days.

KB: Did he have a cold or flu when you found him?

TK: Oh no, you couldn't tell.

JD: Did he have a dog?

TK: No.

KB: So I assume the A side was his living room side.

TK: Yep, and then the B had been added on and that's where he was.

KB: Oh, and when you found him he was laying on his bed?

TK: Yeah.

Tape time (126)

TK: Now that's the one thing I really only known anything about.

Topic: Bill Peyto

TK: He [Peyto] wouldn't stay in any of the warden cabins. He wouldn't stay in them; he'd build his own. He wouldn't trust the government with anything.

Topic: Mistaya River Cabin (185)

KB: I've been told it could be a Jimmy Simpson cabin.

JD: It probably was. I don't think I've ever seen this one. Yeah, that would be Jimmy Simpson's trapping cabin.

Topic: Glacier Lake Cabin (203)

JD: Did you see that one on Glacier Lake?

KB: Yeah [shows pictures].

JD: I moved a camp in there around 1975. An alpine club camp. It was probably Jimmy Simpson's. Simpson probably had it fixed up to be in pretty good shape because of the fishing at Glacier Lake.

KB: Good fishing there?

JD: Yes, very good fishing. And they would also go to other lakes there up the Howse River. He had cabins on Hector Lake too for fishing. I wouldn't be surprised if he had this for guests.

(256)

JD: It wasn't very far into Glacier Lake. A one hour ride on a horse, hour and a half. Flat all the way. But most of his cabins were never of this quality. I think that's why he used it as something.

Topic: Saskatchewan Crossing Teepee (279)

JD: I've never seen it. So this could have been used by Indians.

TK: Oh yeah, could be anyone; trail riders. I don't think Jimmy would [use a teepee].

JD: The Natives lived in there (Saskatchewan Crossing area). Because when I was 5 years old they would come into out warden station: Silus Abraham and his wife. They were at Kootenay Plains; they would come up to see my Dad. And if there was a moose in the Park they would make a deal to shoot the moose. And one month later he would come back with a beautiful pair of beaded gloves. Still got them. My mom had a beautiful jacket; still got that.

KB: What group of Natives?

JD: They would be Stoneys. The dam is now called Abraham Dam, after Silus. He was just a little guy; about 5ft.

TK: [regarding SCT] I think it was trail riders. I've seen these in different places in the Park, back in the bush. I use to do a lot of hiking way back in and over night camps. You see all kinds of those. Trail riders of the Canadian Rockies; they use to have a trail ride out every year. And they'd go spend a week. They'd leave them [poles] and use them again another time. The skyline trail hikers, they use to do that same thing only they didn't take horses.

KB: Were any of those groups associated with Jimmy Simpson?

TK: No, he was strictly independent. I think we built the bridge [across river] in 1930. And I never saw that and we used to go swimming.

Topic: Indian Creek Crib (346)

JD: I've seen those. By the warden cabin there. There is a creek between the cabin and the graves. There's a creek coming down here called Malloch Creek. Mallock Creek's further up. They were probably hunting in there. It's a terrific sheep hunting area.

KB: Who do you think would have been doing it.

JD: Probably the Stoneys

Tape #1: Side B

KB: So if somebody died they would just bury them where they died?

JD: I would think so. It's easy to get in there too, up the Clearwater.

Topic: Fatigue Creek Cabin

JD: They logged up there didn't they?

TK: Yeah, I was up there fighting forest fires in 1934. There was a big fire between Fatigue Creek and Howard Douglas Creek. This fire burned out in between. That's when I met Bill Peyto. Spent the night with him on that fire. It was his district. He was the warden in charge at that time. [regarding FCC]: Is that another one of Bill Peyto's?

KB: Well maybe; Don Mickle was suggesting it was a trapper. He thinks it was a poacher.

JD: Yeah, there'd be poaching in there. Lots of goats and sheep.

TK: Bill Peyto he wouldn't want to stay in any warden cabin. He was a real eccentric guy.

Topic: Turtle Tom's Cabin (452)

JD: Yeah, this is right on the creek. I've seen this. It's right by the trail. I think that would have been built for the logging guys. They logged in there.

TK: The O'Clare lumber logged that whole area.

KB: What do you think about the carved face?

TK: Somebody like Johnny Romanson. He was always carving faces on tree stumps and things like that. He was a warden. He liked to carve these heads. But somebody stole them all. They were so good that the next guy going through would chop it off. There was one right by the Mistaya Canyon on the Mistaya River. A beautiful one there. I think it was done by Ted Fuller (Sr.). It was beside the creek. We were working up there and it just disappeared.

JD: I think it was used by O'Clare lumber.

TK: We actually slept in the mangers of the O'Clare lumber company. When we were fighting fires up there. They had to fly camps in the summer and they'd have tents for the horses and the men. But they had built mangers to throw the hay for the horses. And they'd have a big fly over top to protect the horses for the rain. We had no where to sleep of course. When you're out fighting fires you don't have anything. We bedded down the mangers, which gave you a little protection you know. They were made of logs. And that was the O'Clare lumber company campsites. On Brewster Creek between Howard Douglas and Fatigue. They actually logged all that area and floated them down the river and down to Banff and to Calgary. When they built the dam I think that ended it.

JD: There's a lot of log piles still left in here. Rotten piles. Probably in the 1930s.

Topic: Silver City Cabin (553)

TK: That was Joe Smith. He was like a hermit too. My dad use to drive his truck and bring him into town quite often. He was blind finally. He knew his way around. He was still living there in the 1930s.

KB: Have you seen a KLIM can before?

JD: That was powdered milk; we use to have that at the Crossing.

TK: It was still available wartime [WWII]. Milk spelled backwards.

KB: There was an old car there. Do you know anything about that?

TK: There were several cars along there at one time. The old warden Ullis LaCasse would go out and he hauled most of those away back in the bush out of sight. He was a warden there for Castle Mountain District. People had wrecked their cars on the old road and abandoned them. There was a lime kiln across from Smith's [other side of highway #1A].

Topic: Bill Peyto Cabin (617)

TK: He had cabins everywhere [Bill Peyto].

JD: I think Gordon Burles found it or knows about it.

KB: Don Mickle said something about Peyto was a warden at this time in the area [1932]. He'd gone to the war and came back.

TK: In '34 he was still the warden there. We spent the night putting out fires. Trying to keep it from crossing Brewster Creek.

(659)

GB: I don't know if that's Bill Peyto's or not. I don't think anybody knows for sure. I think Ted Hart found a newspaper clipping in there, 1934. But I mean I don't think there's anything to prove that it was his. He lived at Healy Creek. He lived so close to this one. I don't know why he'd build a cabin so close. There were lots of poachers around here in the '30s. It could have been a poacher. You see the Trans Canada highway wasn't there. The old highway [#1A] was the main highway. So it was more isolated. You see Peyto retired in '33 or around there, '34; yeah around there.

KB: Maybe he liked the area around Healy Creek but he couldn't stay in the warden cabin after he retired, so he built this one?

GB: It's possible. His symbol was the owl and there's no owl around there. He had an owl painted on the window of some of his cabins.

JD: He would normally carve it with an axe [i.e., on the door of the Simpson Pass Cabin; JD has a slide of it].

GB: You know a guy from Pincher Creek talked to my Dad and he said, "Oh yeah Banff, in the '30s while people were celebrating the winter carnival I was out west of Banff poaching, making money and martin".

TK: When I found Billy Carver I was looking out for poachers.

GB: It does look like a winter cabin. It's so strong and heavy.

End of interview

Interview #2: June 16, 2002, BNP
Interviewer: Karen Brelsford (KB)
Interviewee: Bill Smyth (BS)

Tape #2 Side A (006)
Topic: Mistaya River Cabin

BS: Yeah, I hiked in and I found this one.

KB: The Mistaya River Cabin?

BS: First, time I tried I came down the trail from the bridge towards the North Saskatchewan and then cut over and it was hell. And then I rode in; tied the horse up when it got a bit tough going and walked another 100 m and there it was.

KB: I've got pictures of it...(describing book **015-022**).

BS: It was that far from the Mistaya?

KB: 30 m.

BS: Actually the old Jasper Highway is right here, so when I was there I had brought a paper with my lunch in it and hung it over one of these logs figuring it would soon rot and disappear. The next time I was driving up the highway, I walked down the old road here and there you could pick out right from the old Jasper Highway. And you had cut a cookie off one of the logs and placed something over it to cover it up.

KB: We did some cores too, but when it's rotten we have to take cookies. So the Mistaya River Cabin, do you know anything about it?

BS: Not a thing. I talked to a retired warden before I went there, Larry Gilmore; and he said that if it's within 5 miles of the crossing I've seen it. Because he was stationed there for a few years. So I came back and showed him some pictures and told him where it was. Yeah. So I think you've got that one pretty good.

KB: **(045)** We think it might be Jimmy Simpson.

BS: There was one other guy who trapped up it that country down here, Coleson.

KB: Coleson, down near here, Freshfield Creek and Conway Creek.

BS: He, 1923 I think it was, the winter that Simpson was trapping up here.

KB: Okay, the North Saskatchewan River.

BS: From this cabin.

KB: The one by Saskatchewan Crossing Teepee?

BS: Yeah.

KB: Okay.

BS: **(054)** Coleson, who was from Rocky Mountain House, was trapping up the Howse and Simpson had trapped in here. You know Simpson's cabin in right here?

Topic: Glacier Lake Cabin

KB: The Glacier Lake Cabin?

BS: Yeah, you've got it the wrong place (drawn on map), but that's alright.

KB: Is it further?

BS: No it's right there (now redrawn correctly).

KB: Yeah, that's right.

BS: Very few people find this trail, down the Glacier River.

KB: Is this, where you put the mark, where all the picnic tables are now?

BS: Well they're all about here, just about 50 yards away. This is the cabin, that about 1960, I think I told you, I found a little hand carved jar. It was about 2 inches high and maybe 2½ inches in diameter and the lid screwed off.

KB: It was wood?

BS: Wood, hand carved. It only took about a 1/3 of a turn to tighten and we had it at the lodge at Maligne at the time and I put it on display in a bookcase there with a little card beside it. And you had to get a key because it was all alpine journals and old climbing books and that which we were starting to collect. And one day I walked by and it was gone. So somebody went and got a book and looked at it for a minute and may have showed giving the key back and there's the book. [K: They took it.] I was really annoyed. And that was from this dinky little cabin here.

KN: Glacier Lake.

BS : Yeah.

KB : So just to confirm is it this Glacier Lake Cabin [shows picture]?

BS: Yep, that's the one. Very small. 2.6 x 3.1 [reading book], well the smaller the cabin the less firewood you needed; the more time you spent trapping. Did I ever show you a picture of a blaze on the way to Glacier?

KB: Bridgland?

BS: Yeah, Bridgland.

KB: We saw it when we walked by it. You see that's the thing, we can date those blazes too. We can date the scar.

Topic: Saskatchewan Crossing Teepee (084)

BS: [referring to SCT] And this teepee, I never did; 100 m east of the Simpson cabin. Well next time I'm by there I'll have to have a look. How is it tied? Is there a wire?

KB: Yeah, there's a wire around it.

BS: So it's probably Simpson or one of those parties.

KB: That's what I'm thinking. Here's his cabin right here; do you recognize it?

BS: No.

KB: [describes location].

BS: I think I may have missed this one.

KB: And found another one?

BS: And found the other one, because the other one has...he had taken some old wooden crates and nailed them to an outside wall to use for storage. And this gave nice smooth wood. And somebody had written; the last date written on it was 1930. But, in one, a book about a trip that Harmon was on; he wanted to get pictures on a pack train crossing the North Saskatchewan. And he didn't get any pictures as they went over. So I'm sure, from this cabin or it was two cabins, the next day they repacked them all. And for top packs they cut a whole ton of spruce branches to make great big impressive looking top packs for these horses.

KB: (110) What's a top pack?

BS: Well you have the pack boxes on each side of the pack horse; then you almost always put something on top; something bulky, you know a mattress, blankets that sort of thing. So they made great big top packs. And Harmon got across first. Somebody took Harmon across and he got his camera all set up. Then they brought this pack train of about, I don't know, 10 to 15 horses across. And they were swimming and Harmon got some great pictures of it. And description of it, he took his last pictures as they got fairly close to the shore and after he'd taken his last picture some of them got into an eddy and got swept down the stream and rolled over and all that. But Harmon would never have printed those pictures anyway if he got any because he was trying to sell pack trips.

KB: (123) Did the horses die?

BS: I don't think so. But I think they you know ran down stream a few hundred yards before they got the last one ashore.

KB: Are they all usually connected when they go across?

BS: They would have been. Maybe not. If it was at all dangerous you wouldn't nose to tail them because if one loses footing then rolls over then why the one in front and behind there they go. So it could be they weren't, but then again some pack horses stay together so you might tie them because the one at the rear wouldn't want to come unless the one in front went, then you'd tie them. Would be my guess. I have pictures of the cabin. I can look them up when we're not wasting your tape. I think it may be the same one, but I think it's different. But maybe not.

Topic: Glacier Lake Cabin (137)

KB: I just wanted to go back to this one quickly, Glacier Lake. Who do you think it belonged to? Do you know?

BS: I'm sure it was Simpson.

KB: Simpson, yeah, for trapping?

BS: Yeah.

KB: Do you think he would have been doing any guide outfitting because of the good quality of the cabin? Do you think he would have had guests stay there?

BS: Too small. They might, what they would do is sometimes; during the 1930s these guys were broke. So Jim would try to take a party out with as little staff as possible. If possible, just him: guide outfitter, cook, bottle washer, everything. So he would've, if he was taking a party around the Glacier Lake he may have gone in by himself first and put a bunch of staples in the cabin. Then he could use less packhorses and that.

KB: Yeah.

BS: **(150)** Did we discuss his cabin on the Freshfield? Right about here.

KB: At the end of this trail [marked on map as 1JSC: ca. 0510000E, 5739000N].

BS: In 1935, young Jim; do you plan to go up to Rocky Mountain house to visit young Jim?

KB: No, I might have to go do that. He'd be the one to talk to?

BS: Gee, there's no second or third hand with him. He was there. But Parks found this cabin a few years ago. How the hell they found it I don't know. It was somebody like yourself that you don't expect to find cabins. If it was some rough tough guy like Don Mickle, well that's his job. But they found this cabin and went and saw young Jim and young Jim told them in 1935 old Jim had had a family staying at Bow Lake for a while and the guy wanted to come back next summer and go into the Freshfields. And he was only willing to pay so much, eighty dollars or something for the trip. So old Jim figured what he had to do was handle the trip all by himself. So according to young Jim, the old man left Bow Lake on a Monday morning with, he had a saddle horse and 5 pack horses which was all he owned and he rode down to the Crossing and up the Howse and took the horses up to a spot on the trail here and tied them up and in on day he built **(172)** the cabin which is 2 x 3 m sort of thing and dumped off about 6 or 8 pack boxes of staples he carried in a door which had lots of spikes driven out through it [K: to keep the animals away]. And was back to Bow Lake by Friday night.

KB: Wow.

BS: Yes. The next spring the guy wrote and said can't come. And Jim had got a deposit out of him and spent the whole deposit on the food that's sitting up here at the Freshfields. So about the end of June in 1936, big fires started about Howse Pass and Parks wanted to send a crew in, so Jim (old Jim) got a hold of them and said I got a pile of grub in there, I'll haul it up to the fire and sell it to you right then and there. And they said fine. So he nipped in there and emptied his cabin and hauled everything up to somewhere near Howse Pass. And sold it. Maybe he made \$20, maybe he didn't.

KB: But he had to do something with it.

BS: **(188)** Yeah, so if you want to see pictures of it I have pictures of the cabin. There's also this Coleson Cabin that I spoke of that's right about here [ca. 0516000E, 5742000N]. I don't know how much, who all you can play this tape to, but the assistant chief warden at Lake Louise for many years was Dale Lowen and Lowen spent half of his career looking for old cabins on company time. It's quite true. Lowen also didn't get along with one of the assistant chief wardens in Banff, Cliff White; I don't know if you've met him. But about oh I don't know, 8 -10 years ago, Lowen used to take Parks people up to, especially when they got the new cabin built; it was a good long day ride; they'd spend a day and maybe go to the Freshfield and back. And Lowen went in one time knowing

young Cliff was going to be bringing some friends in. You know you've seen warden cabin log books, where they write what they did on the trip. So Dale wrote who he was in there with and what they did and mentioned they went over and had a look at Coleson's cabin which you bastards will never find. So when young Cliff's dad, Cliff Sr. and I and a gal went in a month or so later. As soon as Cliff Sr. read this 'wrrwrwr!' So this gal Wendy and I spent the day clearing; we'd gone in to clear trails. The warden at the Crossing that summer was a girl and she felt there were only 2 things she couldn't do, that she should be able to do: one was run a chain saw and the other pack a pack horse. So Wendy found out about this and said I know a couple of guys that would go in there for a couple of days who would go in there a few (213) days and clear trails just for the hell of it. So about the second day we were in there, Wendy and I worked on this trail down to here and Cliff spent the day looking for this cabin and it's not 6 feet from the trail. But, it was a dugout; he dug down a couple of feet; and then put about 4 courses of logs and pitched roof; you'd guess it had been a pitched roof, even at that it would have only been 5 feet high. But it was a line cabin. You know you only stayed there for a couple or 3 nights, once every 2 or 3 weeks. Cliff Sr. searched around and found it and put in the thing [book], of course we found Coleson's cabin, it's right by the trail; you don't have to be an assistant chief to spot it. I have pictures of that, but you have to take my word that it's a cabin [footprint]. Dale was great he'd tell you where cabins were and give you instructions that would get you within about 2 or 3 hundred yards of them (230). Then you had to go back and say I couldn't find it and he'd snicker and give you a little better directions. There are ones up the Pipestone here. This is Point Camp area in here and old Jim has a little cabin in here. I looked for that about the third time and found it. You had to come 11 miles from Lake Louise to start looking and there's another one up here; this is called the singing meadows area. And it's, I would say right about in here and it's called the Dance Hall. I looked for that about 3 times before I found it. Lowen would say you're riding along about a mile or so about such and such and pretty soon you see some stumps and anybody with any brains knows that that means there's a cabin there. And you just ride around for a minute and there it is. You do this about 3 times. And the thing is that, I have some pictures of it, it's almost the size of this kitchen (3 x 4?) and I think it was Bill Harrison that built it; he was a outfitter in Banff; and he sent a crew of 2 or maybe 3 guys up there and expected them back in Banff in about 5 days and they took about 8 days. And when (246) they showed up at Harrison's place, he said what the hell did you build, a dance hall? So to much of his annoyance it was known as the dance hall. So that would be down Pipestone River.

KB: [Bill pointing on map] On the Pipestone River, near Fish Lakes.

BS: Heck of a thing to give directions to. This creek comes down quite a waterfall here and this is all a big meadow. A beautiful place. Once you start to leave the meadow and go up the main branch of the Pipestone, I forget, 2 or 3 hundred yards, if you cross the Pipestone which isn't very big by then and start roaming around there pretty soon you can see old trails and if you follow it pretty soon you see stumps and then pretty soon you see the ruins of the cabin, but no particular historical value. Something, and this is off the track, if you guys may wish to have a look for sometime. In David Thompson's journal he tells about coming (260) up the North Saskatchewan. They were able to come up to

where the river from Glacier Lake flows in and it was frozen above that. So they camped right near, if I remember right in his journal he mentions a knoll on the river flat and they camped near that for 3 weeks. And every few days somebody would go up and see if they could get over Howse Pass yet. And they couldn't and in that time a pack train came up from Rocky Mountain House and brought them more supplies. So there was quite a number of people camped somewhere in right here for about 3 weeks. And it was about the end of June when they finally left and went over the Pass. So I went in to look around and see maybe; those guys when they got back to Montreal had every cocked eyed thing they'd signed for when they left, but I thought maybe they split an axehead or something. But once I got to the area that I was sure was within 100 yards of where they camped you could see that it had been burned maybe 50, 75, 100 years ago. So what they had done there, they had brought in all the supplies by canoe and then later the horses came up and while they were there they built tack boxes; dozens and dozens of, I think it was 18 inch long x 8 inch wide x inch thick boards; you know one for the bottom, one for each end, 2 for each side, and one for the top; all with a broad axe. If the area burned there wouldn't be anything. A couple of years later we went up in here looking for an old flint rifle I told you about.

KB: (282) Oh, in Howse Pass?

BS: Yeah, and I rented a pin finder which surveyors use looking for lot pins. And there is a surveyor supply place in Calgary rents a lot of this equipment. So I rented a pin finder and practiced out on the lawn here and practiced up 40 Mile Creek; throwing pipe in the creek and finding it. And why I didn't talk, when Cliff and Wendy and I were up there, why I didn't talk them into spending an hour or so in here with the pin finder. I don't know, but I didn't. If they didn't leave anything out of metal then you're out of luck, but they left a flint lock rifle right about here because Herb Ashley saw it in about 1938 [ca. 0518000E, 5737000N; Howse Pass area]. This was 2 years after the 1936 fire and the trees up there were quite big because it's a low altitude pass, 4300 something like that. So the trees, a lot of them are foot and a half, 2 foot, so they stood for a few years so when Herb was up there and it had burned, but the trail was still useable by him and (296) poachers and whoever. But you were in the middle of a burn area, but since then they've just fallen down like pickup sticks and I'm pretty sure we just stood within 10-15 feet of the thing, the old flint lock, but we were on top of these trees that had fallen across. Wendy had tried climbing down through the trees and reaching down in. And I'm thinking jeez lady, if you drop that I'm out 400 bucks or something. It's up there somewhere, but I think if within a very few years of when Herb saw it, if it hadn't been taken out why its impossible to find. We had looked a couple of times before because Herb had said, I went down the west side of the pass to the first place I could get enough water to make tea. So I walked up and down that first half mile 2 or 3 different trips. Then it dawned on me, he was there Thanksgiving weekend so the springs up near the pass wouldn't have been running. So you had to go down to the first, what looked like an almost permanent spring. And sure enough there's a little waterfall right at the spring; the spring comes on the waterfall and goes into quite a big pool with trees crisscrossed all over. So I don't know if we'll find much. I don't know if we'll ever be back.

Topic: Glacier Lake Cabin (313)

KB: Glacier Lake Cabin.

BS: Something else, the first time I went in I got a couple of little stretcher boards, you know when they skin an animal and they have to stretch the skin. And if you're catching, these looked too small for marmot, I don't know whether he caught a few weasels or what but they were about or it was about 9 inches by 2 inches. And kind of like a surf board. You know rounded at the ends and smooth and all that. And I guess he would have tucked it in and got it in there good and tight while the thing dried.

KB: And you found the jar in there too.

BS: And the jar. And I think the surf board, the little stretching board disappeared about the same time.

KB: Do you know if Jimmy Simpson carved? Would that have been his jar?

BS: Oh, I'm 99% sure it would be because he was very talented when he decided to be an artist; they can show you his stuff in the archives, he was pretty good. I think they even have one he was working on and Rungus stopped by to visit and Rungus said "here give me that brush and I'll just, this is what you should have done". Jim said oh yeah, fine and then I'll do this and this. So I think the archives have this. I think it's a watercolour that was done by both old Jim and Carl Rungus (326).

KB: [describing location of Glacier Trail Cabin and SCT]

BS: (232) You were telling me about the Jimmy Simpson cabin on Tangle Creek, on the other side of the Icefields.

KB: Yes.

BS: Above a ways is a teepee.

KB: Yeah we sampled that.

BS: Yeah, so you told me. And above it a ways is a blaze, a very good blaze. I don't think I wrote who it was, but I had come hiking down from Wilcox Pass by myself and there's a fellow standing by the trail looking around and looking around. So I stopped and said what are you looking for? An old horse camp. So we introduced ourselves. He's from Jasper; his name's Wayne Wacko. He and his wife own the theatre in Jasper. So we wandered around there for a while and found this blaze and I told him about the teepee poles. You know we went down and found the teepee poles, which are about half a mile above the cabin. And he'd seen the cabin a few times like I had, but didn't know who's it was.

KB: It's supposed to be Jimmy Simpson. It's similar to this style [Glacier Trail Cabin] if you take the roof off. It's low wood work.

BS: Yeah.

Topic: Indianhead Creek Crib (345)

KB: So this is the Indianhead Creek.

BS: The graves?

KB: Yes, it's a double grave.

BS: We roamed around in there last summer. I was on a Ron Warner trip and the guide, it was his first year in the areas, he was more interested than the dudes. And then when we got to Malloch Creek I had to go up and show him the big wolf den. And man was he excited about that. But the night before we had camped at Tyrell. Yeah we had come over Divide and Peters and the night before we had camped at Tyrell. Was it you who told me there was a cabin in here?

KB: I'm not sure.

BS: It's along the Red Deer River; you know this use to be a road, but it's not anymore. And somewhere right in here is a cabin [ca. 0585000E, 5726000N], which I couldn't find. And up here is the grave.

KB: Oh, another grave.

BS: Yeah, this is the one, well this is a white woman from Olds(?) I think. In the 1920s she was on a horse trip and died. She was a big woman, about 5'10", 200 and something pounds. They couldn't see hauling her out so somebody rode back into Olds and brought the doctor out to sign a death certificate. And some of her family still come up every few years. There's four posts with chain between them and they paint it with aluminium paint every 10 years or so. The last time I was up there we searched for an hour and couldn't find it. And I remember riding up Tyrell Creek one day and we rode right to the hill grave. And then last summer we searched there for about half an hour, about 10 of us and couldn't find it. But I told you about the trapper cabin up in here with the horse skeleton's (384) beside it? Johnny Nylins (sp?) went to Ya Ha Tinda 5 years ago and Marie (Nylin) was surprised about how little history was known of the area. Until a few years before, the wardens didn't even know where the Brewster's Ranch used to be there. And they took old Pat Brewster up when he was about 90 and he walked and said here you see a line there and a line there and this was the house and there was the barn. So Marie was very interested in this and on days off she started interviewing people in old folks homes that had one time had worked for or their father had worked or something at the Ya Ha Tinda. She ran across a lady, I think in High River, I think, who, very old, had been there and had (399) just got married about the early 1920s. And her husband

worked there for 3 years or so. He went a year and half, if I remember right, without leaving the Ya Ha Tinda, but one thing that happened every fall a trapper that lived in Sundree, I think, would come in with horse and t (?) and had a cabin somewhere about here. About 4 miles up stream from Scale or Bighorn Creek on the South side and her husband would ride over and have a look at the cabin before his last trip into Sundree in the fall and get in touch with this guy to see if everything was alright and do such and such. And one fall they found the little ranch house and could see 2 horses, and this wagon heading up the river. And a couple of hours later the husband was outside and he heard 3 rifle shots. And he thought maybe he'd run across a griz. So just to see what he'd shot the husband rode up there the next day and there's the 2 horses laying there dead and he's laying there dead in the cabin. Got there and didn't even unpack. Good weather, they couldn't see any reason. And it took maybe 3 days to get there from Sundree and he just got there and in a very short time of getting there he shot the 2 horses. So family came out from Sundree and Mountie (?). And they got the harnesses off the horses and they took everything of value including the grub (?) of the team and towed the wagon back. It's little snow area and apparently the cabin, it's starting to collapse but it's not bad, and out front Marie says are side by side 2 back bones of horses. [Marie and Johnny still at Ya Ha Tinda].

(445)

KB: So this one is a grave; what do you think it might be?

BS: I think it's still Indians who died right after the first World War. A rumour that told me, first time Barb (Bill's wife) and I were up there was before we got horses. Jim Davies flew us up by helicopter. He was going up to Martin's Creek (Leek?) to pick up the Geologist party and I'd been after the chief warden; there had be an article in the paper about how there'd be a shortage of backcountry wardens because a couple of guys got killed in a car accident. So I got a hold of Andy Anderson and said "You want a buck sheep patrol done, you just haul us off somewhere and we'll hike out." And he said fine, I'll phone ya. So we went up. That would have been '78, somewhere in there. And maybe it was Jim who told us. Because, we didn't. The only warden we saw on the whole trip was down here, the old Fish Lake's cabin. And he didn't know it either. He was new. But I think it was probably flu epidemic. Now did the flu epidemic hit Western Canada?

KB: Yeah it did. I think it killed a lot of Natives actually.

BS: Whoever told me suggested that they died in the 1919 flu epidemic. Yeah.

KB: Some ideas that I've been told is that it could be Stoney. What do you think?

BS: No idea there.

KB: And it's Big Sheep country. That's what Jim was saying (Davies). And that the Natives had gone through that area following sheep and then two, probably kids because

of the size of the graves, right there quite small. Only about under 1 m for this one and maybe 1.5 for the other. And that's the entire mound.

BS: Mind you the Indians would take kids with them. But I'd never heard kids. But I think probably the only thing we had heard was that they were two Indians.

KB: Yeah, so if they were on this trip hunting sheep. You would bury them where they died.

BS: Yep. Son of a gun.

KB: Actually since, a couple of park wardens went up there and cleared some of the under brush. They left the trees in place, not to disturb the graves. They trimmed it so now you can see it better. There's a Christian Cross in there too.

BS: (486) The only other thing I've heard about the Indians along there, on the Red Deer were the pit-houses. Which are probably a little before your time. The interesting thing is one of them or two of them are right about here, above the 'e' on Deer [ca. 0575000E, 5724000N]. They're right on each side of the Cockeyed Trail, that a couple hundred people a summer go on. And they're about 4 ft deep. It looks like the Department of Public Works were digging up gravel samples for the highway and it must have been the third or fourth time I'd been by there and was riding by there. And I look and I thought somebody's been laying sod. That's ridiculous, so I called the (Tut?) senior and (Tut?) junior I was with and they came back and said Mickle had been in here. And I don't think, he probably takes archaeologists out and I don't think that he makes a big fuss around the warden coffee room about what they found. You know, he's pretty good. But from a horse, once you got down on the ground you couldn't see. They were about a foot by 2 feet, the pieces of sod they had lifted and then (504) put them all back. And we were in there twice in the last 5 years or so. And you can't tell that there's ever been any sod out of there. And there's another spot where Drummand Creek flows in...(pithouses)...

Topic: Fatigue Creek Cabin (523)

BS: Yeah, this Fatigue (FCC) one was an interesting one. Warner's crew take dudes in there now. Yeah, Ron Warner has a guide and outfitting.

KB: Is that the lodge out there?

BS: Yeah, that's the lodge, so they take people in there. Sundance Lodge.

KB: So you visited this one last summer?

BS: Yeah, after you told me about it.

KB: Did you see the stone stove they had?

BS: I'm not sure I saw that. That'd make sense to have it where if it caught fire it wouldn't burn the cabin.

KB: What's your idea about its function?

BS: They logged up there. Did you come up with a name? No person?

KB: No person. Don Mickle suggested it could be a poacher, that's his idea. He thinks it's a poacher because its kind of hidden off the trail a bit. And when I was talking to Ted (Keiths) and Jim (Davies) yesterday they were talking about it being a logging area.

BS: Yeah, I would think. Could well have been. What is this about, you say "hay used as chinking in corners; area used as bailing highway post-1940s".

KB: Oh yeah, with a question mark. That's because my assistant wrote that in my book. I have to ask him about it.

BS: There's nowhere to grow hay. I think it's a spelling mistake. The highway is very unlikely.

Topic: Turtle Tom's Cabin (545)

BS: Turtle Tom's, well if you think he grew turtles.

KB: For turtle soup at the Banff Springs.

BS: Turtles, why good for you.

KB: So you saw that one? (Yeah) Did you see that face carved on the post out front?

BS: Yeah, I think so. I recall having a picture of it. It's another one that Warner's groups stop at.

Topic: Billy Carver Cabin (550)

BS: Billy Carver, that was his name, eh? When we were in high school, what he'd of course only been out gone ten years, we were kind of scared to go in case he came home. You know when you're 15...

KB: Ah, lets go check it out, I'm not going...

BS: Yeah.

KB: We got dates on it too. The first section was built in 1913 and the next section 1933.

BS: Son of a gun. I wonder if he took in a partner? You know if somebody else came in to live with him. Because they were working at the coal mine. You know down...

KB: Anthracite?

BS: Yeah...you know where the power house is, beside the Trans Canada highway and you see this big (mungle?) rock power house about a mile and a half east of the traffic at the Minnewanka interchange. And down right by the highway is the big rock power house. Well, there was a family called Wheatly(?) from Banff who had a mine about a quarter of a mile this side of the power house, oh until probably 1951. That's when natural gas came to Banff. But there were other mines in there. Like Wheatly's wouldn't have been in there in 1913, but they might have been there in 1933. But there's quite a town in there. When I was in high school a guy I knew, he got me a job for a couple of weekends working with an old land surveyor named Gourly (?) from Calgary. Somebody had thought that they could get title to the lots in the old Anthracite townsite because just up the road from there Captain French had got some freehold land right about here and they had to built a big log lodge. So they thought the old townsite was right in here. The interesting thing for me was we went out there and he had one kin (kiln?) to go by. That he was able to find and he had an old site plan. And he would measure out and he'd say dig right here. And you'd dig down a few inches and then he'd say and now just start and just scrap the dirt off because right about here should be something. And you'd be scraping the dirt off and there was a one-inch square wooden survey peg. Oh that time about 70 years ago. And we found quite a few of them. Whoever it was who hoped to get title and build houses there was out of luck. Parks had built a house. The old road from the campgrounds used to come down here and join up with the old highway. And Parks had found quite a bit of an old cemetery and there was also a house in there. Into the 60's or so...

Topic: Silver City Cabin (603)

KB: The Silver City Cabin, did you find that?

BS: Yeah, I did.

KB: I was told that could be Joe Smith's.

BS: His house was out in the main part of the town because there were old pictures that show the town with oh 50 buildings and then finally in the 1930s just his and a bunch of you know rotted logs like this (SCC). He wasn't too far out from that (SC site info sign) I would say he's within 50-80 m towards the tracks. The tracks actually run this way, just about parallel with the highway. But nothing, nothing left. There's lots of pictures of guys the day they went out and took him up to the Lacombe(?) home near Edmonton, 1936, he fell blind...

KS: (623) So what do you think this structure (SCC) was from then?

BS: I think it was just one of...Silver City was you know just kind of a farce really. You know the main mine just up on the side of Castle Mountain there, was salted. There were others like across the river up here on Copper. There was enough copper up there that if it was outside of the park there would have been an open pit mine up there in the last 40, 50 years...This one that's still there (SCC) I think somebody just didn't want to haul logs as far as the other guys were hauling them out into the clearing. And built his, maybe it was built by one person and he didn't have a horse or something. So if he was dragging those logs and putting them up on by himself, you know.

KB: And you've got Kilm powdered milk.

BS: How old would that be? Did you ever ask Ted Hart? Because I can remember Kilm cans.

KB: I think since WWII, is what Jim Davies and Ted Keiths said.

BS: But how far back? Because 1883 is...

KB: Yeah, see that's the thing. Because I think this site was reused by a military training group.

BS: Well I don't know about that, but. Now if this is roughly where the cabin is, Parks used to have a road camp in here about 40 odd years ago. And they had quite a number of buildings. So somebody may have used it, but it would have been pretty collapsed by then. I would guess that somebody during the depression may have lived there. Mind you he was buying big cans of Kilm for one person? I would bet this has something to do with the road camp.

Topic: Dog Lake Structure (657)

B: Nope I've never been to that one.

Topic: Dog Lake Structure (673)

BS: I found the one up at Dog Lake that you told me about. Shortly after that I ran into a fellow that used to be in Banff and then he went to work with the United Nations helping some United Nations department set up parks around the world. His name's Jim Forsell (sp?). He's retired now and living in Radium. He was here over next door for dinner one night and I ask For if he knew this, "Oh yeah, I know the one, used to be a barn." He knew all about it.

KB: What else did he tell you?

BS: Well as far as he was concerned it was dead easy to find. The old road that they used went right by it. I didn't find it dead easy. He may have been in there 25 years ago.

But he felt it was built by the people who had homesteaded here before the first world war... (reading Karen's notes on DLS) "May 1943 John Abraham". Son of a gun. The Abraham's are a half-breed clan from around Jasper and Saskatchewan River and that. Could have been the same family...(686)...You know what I thought from looking at it was that they took the cabin down somewhere else and hauled it and set it up here.

KB: What makes you think that?

BS: Well some of the logs are squared, some aren't, the notches are different. So maybe it was different guys on the crew. One guy made one kind of a notch and the guy on the other side of the cabin made a different kind. If he saw it many years ago (Jim Forsell), then maybe it was quite evident. Because they had built the road up from Canal? Flats before there was ever a Banff-Windermere Highway, I believe there was a homesteader at the McLeod Meadows who was probably a McLeod. And there were two or three more up here, what is now out of the Park. And one of them about here, there's a 2 story cabin. But the second story is only about 10ft by 10ft. But it is left from the, I think these guys all went to the first world war and maybe some of them got killed and when they came back they decided you just couldn't make a living there. You know the growing season was too short (701).

End of tape (705)

Tape #3: Side A (000)

Topic: Side Pass Cabin

BS: Oh, way up there. That's right near, oh what do they call it...Little Heaven. Malloch, I think that would be the Little Heaven cabin maybe. Yeah, because then you go from there over McLaren's Pass... We rode up to here, Glacier Pass. We rode up to there once. And we came down and camped here...and then I hiked down one evening past the Park boundary here a little ways. An idea about a cabin here.

KB: It was hard to find. It took us a couple hours to locate it.

BS: What was interesting there was the Guide said there's wolves. Like down more in this area. Because they have a grazing lease here, all the local outfitters for the horses in the winter and they'd lose a few horses. When we were camped up here. Yeah, there's Eagle's Nest. We were camped right here and he said if you just hiked down the river a ways you'd probably come to wolves...(039)

BS: (SPC) Well there was a lot of activity up there. (051) You know, Curly Philips talks about trapping up in there and there being other trappers and that sort of thing.

Topic: Indian Meadows Grave (054)

BS: Indian Meadows Grave.

KB: This is near the Willow Creek Warden cabin.

BS: Oh yeah, we stayed here for about four days one time and then rode up Blue Creek and over Hardscramble Pass...Son of a gun, so that's where (IMC). Because the big attraction here at that time was right here the warden's had built a corral that must have covered 2 or 3 acres of logs. Hundreds of logs. And they were going to have buffalo run wild in the part of the Park. So they hauled them down from Wood Buffalo or somewhere in the fall because it was still a usable fire road up the Snake Indian. And they got them into this big corral and fed them all winter and there was a couple of wardens who stayed there. But they had brought down a few young males, but mostly 2 year old or so females. They figured 2 or 3 males could breed the dozen or so females. But somebody thought they should bring an old cow. Who could I don't know whether she could tell the girls what it was all about. Then in the spring, end of May or so, they let them out and they said that old cow just kind of looked around then 'vmmmp' due north away she went. Heading back up to Wood Buffalo. And the farmers around Grande Prairie and Hyde? and in there shot them all on the way by. This had been maybe the late 70s somewhere in there. (083)...

Topic: Hoodoo Ridge Crib (089)

No data.

Topic: Ewan Moberly Homestead (104)

No data.

Topic: Athabasca Meeting Place (108)

BS: (118) Is there still a lob stick tree there. That's the ones that the fur traders used to take and cut all the branches up for a certain height on a tree. So the top was quite noticeable. And there was a lob stick tree somewhere not to far from the turn off into Jasper Park Lodge. Within the last 20 years it was still standing there.

KB: So it's still alive? They would just trim the bottom?

BS: Yep. They trimmed up however far the dumbest guy would climb and chop the branches off as he came down (129).

End of Interview

Interview #3: June 20, 2002, BNP
Interviewer: Karen Brelsford (KB)
Interviewee: Gordon Burles (GB)

Tape #4: Side A (079)
Topic: Fatigue Creek Cabin

GB: You know that may have been part of Bill Peyto's District. It's possible...it could be a trapper, a poacher, it's so hard to know. I'm not exactly sure where Bill Peyto's District was but it just might have covered that.

KB: I was talking to Ted Keith and he was saying there was a big forest fire in here and he worked on it with Bill Peyto.

GB: Right. I think he said he was out there in '34. I think he said he was out there with Peyto in '34...I figure Peyto retired the same year, '34, from what I remember because you see he was born in 1869, so he would have been 65 in 1934. So he would have had to of retired. So maybe later in the year or whatever. I can't remember when his birthday was. But then he died in about 1943.

Topic: Turtle Tom's Cabin (106)

GB: Yeah, maybe I did see that one. It's right by the trail. Yeah, that's right. I didn't know the name of it, Turtle Tom's. Why do they call it Turtle Tom's?

KB: Well Don (Mickle) told us this story about this guy nicknamed Turtle Tom who lived there and raised turtles for Banff Springs Hotel, for Turtle soup. It's a neat story, but there's no actual factual backing to it.

GB: The thing I associate this cabin with is that I think somebody committed suicide there one time. Some fellow went out there. They found the remains of something or other. There was some strange story like that. This was in the '80s or 70's or whatever. It sounded like it was a suicide.

KB: The cabin also has a carved face.

GB: Oh I didn't see that (130).

Cabin's Gordon knows (not in inventory)...

Topic: Billy Carver Cabin (145)

GB: Most of the ones I'm aware of you haven't sampled. This is the only one that I am well...It was probably to do with the mining and logging at Anthracite. There's logging roads all through that area...which would have been around the turn of the century. I think the nails are round there, so it's not really old. There's an outhouse there, and a

cabin and a stable... Well we call it Inglismaldie Creek, but I don't know. It's not really an official name.

KB: So this one (BCC) do you know much about it?

GB: Basically about Billy Carver, I guess all I really know is that he apparently came there about 1911. Or came to Banff about 1911. Although the Walter Petyo's journals seem to indicate he came there about 1908, but that might be a mistake. I don't know. As I said, Billy Carver apparently worked at mines in the Nordeg or Brazeau area in the I guess it would have been the summer time. And lived here in the wintertime. He was English, he was from London. He did talk to people of course; he wasn't a total hermit. I believe possibly the Chinese people that lived down below may have, for part of the time that he was there, may have helped him bring food from town. They may have taken his food part way up the hill and then he came down and got it.

KB: So they (Chinese residents) lived closer to the highway?

GB: **(174)** They lived where the highway is, exactly. More or less exactly where the highway is. Or between the highway and the face of those yellowish cliffs there. Yeah they had market gardens there, I believe starting about 1927. I think it was about 1927. Sidney Vallance. There is an interview in the Whyte Museum archives published by or typed up by Sidney Vallance who interviewed Billy Carver about 1937 and you'd probably find that pretty good. It should be in his file. That's probably the main source of information I'd say that I've ever come across.

KB: Other people suggested that Billy Carver worked at Anthracite. Do you know if he worked at Anthracite? Didn't it close down?

GB: No, it closed down by 1904. He may have been here in 1908, possibly 1911. He was here by 1911 I would say. Of course you have a date of 1913 on the door... There's a couple of articles in the Crag and Canyon about Billy Carver. One when they found him and he was sick and the other when they took him to Gleichen or maybe when he died or something... He died soon after he went to Gleichen, it wasn't very long, I believe **(210)**. It wasn't long after they brought him into town that he went to Gleichen. It was sometime, '37, '38. That's pretty much all I know. It seems to me it was about February 1938, somewhere around there, they took him to Gleichen...

GB: **(242)** An old timer told me that he did work up around Nordeg.

Topic: Silver City Cabin (256)

GB: Did it have any nails in it?

KB: Yes (refer to inventory notes).

GB: Square headed nails, yeah. Silver City age then, yeah...

(264) Other cabins...Healy Creek...

GB: There's cabins everywhere, everywhere. No matter where you go you'll stumble into a cabin. You know people were poaching, and living off the land basically. All over the place.

KB: How many cabins do you think are out there?

GB: As I say there's just no way of telling because there's just so many...I mean literally they are scattered everywhere. You'd never ever be able to sort of account for them all...

(290) Boundary problems, Bill Peyto...

KB: Do you know if hunters had trapper licenses?

GB: I'm not sure to be honest. I don't know...I think since even since about 1905 I believe there was such a thing as poaching in the Park. You know you couldn't really kill any animal necessarily. For example in Walter Peyto's diaries some fellow shoots a Lynx. Just shot it. And my impression was they didn't know really what to do with him, you know whether to charge him or what. There was a long period there...You see I think Jimmy Simpson was prosecuted for killing sheep. Now whether it was out of season or just the fact that it was in the Park I'm not really a 100% clear what the rules were in the Park. But I mean I know there were people being taken to court for poaching even in '15, '16, '17, '18 they were being taken to court for poaching, usually sheep. I have it in my mind that after 1905 they were stricter about things like that. And of course 1930 was the watershed date where from then on they had an idea of what a Park should be. More or less the modern idea of what a Park should be as of 1930. So poaching after then...again unless there was such a thing as a trapper's license. But I doubt it, from everything my father said people were poaching around here in the 1930s. I mean it was strictly illegal. You had to hide. And there was a guy called Johnny Muskco who was poaching up here...and martin was very pricey and people didn't have much money so martin were selling a very good price. I think a lot of the cabins are explained by that **(325)**. As I say logging was a big part of it too. There was a lot of logging even up into the 1930s they were still logging in the Parks. There's cabins on the road to Rockbound Lake; there was logging there...In Walter Peyto's dairies talk about logging up Brewster Creek, up Stoney Squaw. And logging around Howard Douglas Creek. And this is all in '17, '18, '19 in there. So they were logging way late.

KB: **(322)** Walter Peyto, how is he related to Bill Peyto?

GB: He's Bill Peyto's brother. He was the town warden. Most of the time he was the town warden. And his warden dairies are being published by his grandson, Dave Peyto. It's interesting reading if you're familiar with the area and it confirms a lot of this that I suspected. Walter and Bill did a lot of things together and they were both wardens basically. Walter went out with Bill quite a bit I think out into the backcountry.

KB: (329) You mentioned poachers and how it was illegal to hunt sheep. Was there a season when sheep hunting was allowed in the Parks?

GB: See this is what I'm not sure, whether there was a season. Maybe before 1930 they might have had a season. Maybe not, I just don't know. Outside of the Park we have hunting season, but in the Park I'm just not sure. But I know George Harrison, Jimmy Simpson, and other local people were prosecuted. The wardens were constantly watching people for poaching and this is in '16, '17, '18, so I mean they were definitely watching people. I think around 1905 was a kind of a watershed maybe and then 1930 was the modernization more or less.

KB: Is 1930 when all the mining stopped too and forestry?

GB: Yeah, right. But there was mining after that in case of war. Like mining in Yoho Park went on til about 1954. Minnewanka was damned because of the war; if it hadn't been for the war, Minnewanka might never have been damned. It was done under the War Measures Act. Some of the other things in the Park were done under the War Measures Act. The mining in Yoho was...

Tape #4 Side B (352)

GB: ...because of the war.

Park boundary...(367). Cabin near Castle Mountain (378)...Scout cabins, barn...(406) (424) The most interesting ones (cabins) I think personally would be the ones at Taylor Lake...because as I say they are square nails and they are larch trees...There probably aren't that many cabins made of larches, but as far as I know these are larches. Again maybe I'm wrong...

(437) There's a couple of places with blazes that I'd like to have dated. I was telling Don the other night I found the old pack trail up the Spray here. The 1880s pack trail. On the 1889 map there's only one trail up the Spray River and it was 500 ft above the River on the Rundle side and I found it. And it's all blazes; I mean some places of the trail is good, some bad, but I found the actual trail. And the blazes are very old, I mean some of them have sealed up completely, but a lot of them are sunk back into the tree, quite a bit back into the tree and the tree's growing out around them. So I would be interested to have those blazes dated and I would be interested to have some survey line blazes dated out on the Prayer Home Bench. There are some old survey lines there. Township section line sort of thing that had survey blazes, which most of them have sealed up completely. I'd be interested to have them dated because I believe they were done in 1884, but I'd certainly like to find out...The survey line through the trees, they'd put 3 blazes on the tree adjacent to the line; 1 blaze facing up line, 1 blaze facing down line, 1 blaze facing the line itself. So that's a survey blaze, a triple blaze...As I say I think the pack trail was done about 1885 (463) as well, because I mean it's on the map in 1889. It's got to be established by that time. And I believe there were small trees growing by 1885. I believe the entire area was burnt over about 1870 and the small trees were here by about 1885. 1888 there were small trees they could blaze, that's my opinion. See a lot of the pine

trees and Douglas-fir survived the fire...I've seen so much of that. You can see the tree, it's got sort of a bare spot on the bottom where it's been burned. And the tree started growing again and grew up around and kept on going...(497)...park boundary blazes...(516)...Bank Head mine cabins...(520)...CPR cabins...

Topic: Bill Peyto Cabin (532)

GB: Again I don't know who's it is. It might be Peyto's, it might not be. I don't know.

KB: I'm wondering how much room or territory a poacher or someone with a cabin would want around their cabin.

GB: That's hard to say too. I don't know enough about it. It's really hard to say how that would work.

KB: Because during that time period (1930s) Bill Peyto was staying at Healy Creek.

GB: Well exactly, he was already there and he was getting ready for retirement. But as I say, all I know is, my Dad was from the Pincher Creek area and he talked to this fellow Revere (sp?) from down there and the guy said people in the 1930s in Banff were having a good time at the winter carnival and I was out west of town poaching. Getting martin. In fact I know a fellow in town it might have even have been his, a young fellow, I won't say his name, but he's dead now. It could have been his. His was young; he was a poacher. In fact I'm related to him. As I say there's just no way of knowing. But the highway wasn't there then...(560)...Ted Hart is a good source...he knows a lot about Bill Peyto...

End of Interview

Interview #4: June 23, 2002, JNP

Interviewer: Karen Brelsford (KB)

Interviewee: W.R. Ruddy (WR)

Tape #5: Side A (000)

Topic: Evelyn Creek

WR: My wife was named after Evelyn Creek or I think maybe Evelyn Creek was named after her.

KB: She's a long time resident?

WR: She was born in Jasper and her father was a big game guide and outfitter who operated out of Jasper.

KB: What was his name?

WR: Jack Hargraves (sp?). It's quite a popular name. He was quite a popular guide out of here for years and years and years. (019)

Topic: Bedson Ridge Cabin (030)

KB: We were thinking it might be related to railroad because a tunnel's located nearby.

WR: Oh yes, it probably would be.

KB: Do you know time periods of the railroad?

WR: Well yes, lets see. They were completed into Edson in 1913/12. The railroad railway engineers were in here in 1910, 11, 12. Coming through this valley doing engineering and so on. But the first of the rail was laid in about 1912 or 13 and there were 2 companies competing. They were building railroads side by side practically: the Grand Trunk Pacific and the Great Northern; were being built side by side. And you can still follow the other railroad off this one. Part of it's used for our highway; all the way from the east gate all the way through to the west gate. In 1915, of course there was a big war going on, so they shut it down and tore up one of the railway.

KB: Which one?

WR: Well no, I'm sorry, they did it in parts and pieces. They picked out the best. They were so close together, there was no difficulty in joining them however they needed to. So they picked out the best of the road and tore up what they thought should go. And they tore up the old rail and made guns and whatever out of it during the first great war, 1915, 16, from what I understand. (070)

R: (076) See there were fur traders through here and so on in the 1840s and so on. This was quite a regular route going right up through the pass that you can see from here and out to the Yellowhead pass which is to the west here.

Topic: Side Pass Cabin (113)

WR: I've been all the way out to the north boundary up in this country. [Regarding north boundary area] : There was a main route, a main trail, out through here that all the guides and outfitters took there people out. You had to be outside of the Park of course to hunt.

KB: (150) At this one (SPC) we had an interesting shovel: Guaranteed Jones Solid Cast Steel. And coffee tin: Seal Brand Chase and Sanbourne.

WR: Chase and Sanbourne coffee. We used to buy it in the grocery store all the time many, many years ago. But I'm not acquainted with the Jones Solid Cast Steel.

KB: Here's a picture of the shovel. It's squared off. We were thinking it could be a coal miner's shovel. I don't know.

WR: Probably coal miner's. Yes, yeah. It isn't the kind of shovel that a guide and an outfitter would carry on his pack to dig little holes whenever they had to. That's definitely for a purpose of probably shovelling coal. (167)

KB: Do know if there was anything like that going on up at the North boundary?

WR: Oh well all through that country; there's coal everywhere. And across on this side you see it quite easily. On this side of the highway. Brûlé...there was coal mining done from there and into the Park area. But then they kicked them out of the Park after because they put a boundary around it. But that wasn't until 1930 something like that. The original Park was set aside in 1907. And then in 1930 they added a whole bunch more to it. In 1907 Jasper Park was in the 20 square mile range sort of deal. And then in 1930 when they added the rest of it, we came up with 4200 square miles in Jasper National Park. So you know, it's a big park. Well it's the biggest developed Park on the continent. Wood Buffalo is larger in area and it's beginning to be some development. Wood Buffalo is right on Alberta's north boundary and into the Yukon, North West Territories as matter of fact.

KB: (186) Some of the dates that I was getting from the tree-rings said 1921 as the final ring and some of them are 1849.

WR: Well in the 1840s there were fur trappers going right through that country and they used to come down one side or this side. Because that's how these little communities got in here: Entrance and Brûlé and so on over on this side. They came from the fur trade industry that goes through there. There are still people, remains of homesteaders. There's a chap that I competed against at Williams Lake...Tommy Vinson is his name. And he's an old retired guide and outfitter, but he's still alive. He's a good friend of mine (Jasper Park Lodge paid him to build buildings). (204)

Topic: Indian Meadow Crib (235)

KB: This is the Indian Meadow Crib. It's also up is this area. Do you know where the Willow Creek Warden cabin is?

WR: Yes. I've been by it. As a matter of fact that's the trail we went in to the hunting country. There's Glacier Pass. That trail goes out of the park. Yeah, there's Rock Lake up there.

KB: This one is a crib... It's a long shape (showing photo) and it has pieces joining it across. A different type of joinery; not your saddle and notch. It's like if you pulled one piece out the entire thing would fall apart.

WR: No I don't remember seeing that. (249)

KB: Explaining tree-ring dating: **253-266**. (Young pine forest)

WR: **(267)** And that's the other thing that would have happened in that whole country as well. Every couple of hundred years, there's a fire that goes through that really take everything out. And when they're gone you'd have no traces back to living trees from that age. So you're only good for a 100 to 125 to 150 possibly at the most. Cause they tell the stories that that's what happened in this whole country, that it burned off. In fact we don't get many more because man puts them out before they go any place. It protects our homes and what not. But in the history of the place, before there were any communities. And this country by the way is pretty new of course as you are aware. The dates and timings here; there's only been people living in this area for a hundred years basically. This country hasn't totally burned off in that period of time. There are living trees; they may not be right close. And when you get trees like that they weren't hauled any distance. They were cut in the area. And I remind you that the logs for this house, we got them 12 miles out of town; 12 to 13 miles out at Snaring Creek, on the Snaring trail. But these people you know everything was pulled by hand. And they had no need (to pull from a distance).

KB: **(286)** Somebody has suggested that this might be an Iroquois grave site.

WR: Oh well, you should see signs that would tell you it's a gravesite.

KB: There was a marker post, which has fallen since. And I've been told that the Iroquois came through this area in the 1700s.

WR: Oh well, I wasn't here then. But you wouldn't find this type of structure in an Iroquois settlement of any kind; I don't think. That would be my best guess because they didn't build log buildings. Later they did. After the white man sort of got here and showed them how, I believe, the Indians copied the log buildings that were being built by other people who had come from other parts of the world. But the Native Indians, who had been born and brought up in this country, did not build log houses of any kind. I'm almost convinced. You know I'm only going on 80 years old; you know my time doesn't go that far back, but I have been here and I'm quite acquainted a lot of people. All of the old Moberly families and so on, I knew them all quite a bit. Eddie Wilson Moberly, he worked for Jack Hargraves as a packer and a guide and outfitter. He's one that I knew really closely. He's buried in our cemetery here. But then he had 2 or 3 brothers and his father and so on and his brothers well lived up into this valley. They came into this valley and hunted each year. Then of course when they made a national park out of it, they wouldn't let them come in anymore. And they kicked them all out. And there were a few who lived here. There was the Moberly Flats down here. And they did live there, but that was after the white man had been hauling furs in and out through here and showing them how to build log buildings. Eddie Moberly and his father and their gang sort of deal would have been into building log buildings, but not as an Indian trace of so on. They learned it from the boys going through.**(309)**

KB: That's a good point. You know, "where Natives acquainted with this tradition?"

WR: I would stand corrected, but I'm almost positive that the Indians didn't build any type of log buildings prior to the white man coming through here; through trading trips and so on. I'm sure the Moberly buildings they learned that from the white people they worked with and for. And of course it was a very sensible thing to do in so far as the logs were here. The supplies were here (317).

WR: Okay. I'm only giving you the benefit of my best guesstimates and so on. And I'm trying to think if at anytime; I've never ever heard a comment that that's an Indian style log building or anything of that nature. They were just log buildings; that's what people built in a certain time period as this country was being developed. Because your supplies were right at your elbows sort of deal. And this whole country of course, there's another sequence, well you should know the tree history in our country. That the evolution of the pine, the spruce and the firs. The fir will eventually take over, which it did previously. This whole country was totally covered with fir. But then when they burn down, the first trees to come back are of course the willows and then the poplar and the pine, and then the spruce and then the fir. But it's a long history of sequence of the development of trees. And so when you can find, over at Jasper Park Lodge and of course through Lake Edith and Lake Annette, there's a beautiful display of old Douglas-fir trees. And they're very old trees. (330) And up on this bench, as you go south out of here on the south highway, when you go pass Becker's Bungalow's (sp?) which is out about 5 or 6 miles, there's the Cavell Road that goes off (sp?). If you were to drive up Cavell Road to the top of the hill, oh a mile and a half to 2 miles, if you look to your right there's signs of an old road in there. Well back in there, up on that whole bench there's quite a string of old Douglas-firs in there. And they date back 400 or 500 years. As opposed to our Jack Pine and what not here, they're in the 10s and 20s years old. (336)

KB: So the IMC, you don't think it was by Natives?

WR: (344) Well they very likely could have, but it would have been within the last 100 to 125 years sort of deal.

KB: Not 18th century?

WR: No I don't think so.

KB: Yeah, you made a good point about that.

WR: But mind you, there were white people. And pardon me for using the colour for that name, but that's where the history of the fur trade business and so on. There were many Indians that lived in the country and this was there home. But they weren't out looking for trees, they weren't out looking for game until quite latish in their history when they started trapping for furs. Prior to that the only furs they needed was to make clothing with and so on. But until there was a market for their furs why they just didn't collect furs. And of course that only dates to the very earliest in the 1840s, 1850s. When

the very earliest of the trade structure was going on. When there was an interest in furs, which wasn't until I'm sure well into the 1800s. (354)

Topic: Hoodoo Ridge Crib (357)

KB: Well this one is called the Hoodoo Ridge Crib.

Tape # 5: Side B (000)

WR: Snow Mobile Tours history; Marmot Basin 1950s, then Columbia Icefields
Sold out the Columbia Icefield Snow Mobile to Brewsters (1968). Also operated at
Maligne Lake and Marmot Basin. (c.009 to 060)

KB: (066) Describing HRC location and structure form.

WR: (080) Well I wonder if they didn't have tents strung over those (wood crossbeam) and used them. That's they way they strung tents up. They would tie a pole like that on 2 trees and then hang their tents down. That way was done for many years.

KB: (085) And who would have used that style of tent?

WR: Fur traders, yes, to the best of my knowledge. I don't think the Indians would have hung their teepee material over a ridgepole like that. I'm not aware because I never saw it and was never told it, so I don't know. But what I do know that many of the fur traders and many of the white people driving through the country that's the way they set their tents up. With a smaller pole tied to one tree and to another tree and that was their ridge pole and they threw their tent material over that and cinched it down on the end and they had their tent up. Without having to cut a bunch of poles and get them all erected and so on and so on. So much of the country, of course the trees were placed you know, if you looked around just a few feet you would find the two you really needed, exactly the distance you wanted them and so on. (097)

KB: So all these beams at the bottom I gather were some sort of crib.

WR: Well oh yes. It's very possible that also any of them that wintered through here and so on they did built some foundations of logs. They didn't build a log wall, but they did built 2 or 3 or 4 layers of log up and covered it with canvas.

KB: (104) That would make sense because on the living tree next to it (HRC), you can see how it is scared with indents. Where the original beam was [shows in book photo].

WR: Yeah, I'm sure I've seen old pictures. Gosh I haven't even had time to look at what I've got. I'm sure I have seen pictures of log foundations, log frames, 3 or 4, maybe 5 logs high at the most. And there was no more structure built on that at all. So you knew they had something up higher. Oh here he is now [son: Gord(on) Ruddy]

GR: (116) There are some cabins which are not necessarily log that you don't have on this map.

WR: What do you mean 'not necessarily log'? What would they have been made of?

GR: The ski club, the Jasper Park Ski Club in the late 1920s, early 30s built buildings, 3 of them. One at Whistler Creek, second one Crescent Creek and one in Meadow Creek. And they were log up 3 feet and then they had wooden frames and they had canvas stretched over them. And in some cases they actually had a wall (?) tent stretched over that. They skied up through Marmot and Marmot had a hut of some sort, but I don't know what that was. And then into Whistler Creek and we found that one and we rebuilt it in '77, something like that and we slept in it one night and the next day rescue pilot, which is my own damn cousin, flew over it and saw it and turned it in. And the wardens came and cleaned it out. But we found the other two...(135).

Topic: Evelyn Creek Cabin (147)

KB: So you were saying the Evelyn Creek Cabin was built by your brother?

GR: Yeah, my brother and the boat house gang; the boys built that: Doug, Patty, Kevin Simpson, Dale Simpson. It's built in Wade Berry(?) Fashion.

KB: (155) [shows pictures in book].

GR: Those boys were pretty slick [hid cabin well]. Karen and Sheila found it, accidentally when they were looking to try to find out how you got up Evelyn Creek. Yeah and it's not actually on Evelyn Creek; it's a little ways up.

KB: There were hammock bunk beds in the back, a side table, old potato bags.

GR: Yeah.

WR: I heard Wade use to live up there.

GR: No, but I'll bet you [Dad/Bill] bought the gas for the chainsaw.

WR: Very likely.

GR: And I'll bet you bought the chainsaw too.

WR: Probably.

GR: Why use your own when there's the company saw handy.

KB: You think they used a chainsaw to cut down the logs for this one?

GR: **(170)** To tell you the truth I don't know. I was never part of the construction crew. They could have used big sweep(?) saws, you know.

WR: Like bow saws.

GR: And knowing those guys they would have preferred handsaws because chainsaws make noise.

KB: Yeah you wouldn't want to draw attention.

GR: And they played in that thing for 3 or 4 or 5 years and then all those boys moved from the boat house on to other jobs and it kind of got abandoned. Robbie Patty was back a couple of summers ago and he walked up there and showed his kids the place.

KB: So they were in their late teens, early twenties when they did it?

GR: Yep, just a guess it's probably '73 to '76. But that's just a guess. You can phone Russell.

WR: Well you'll find trees around that building that are in the age group.

GR: The stumps are not far.

KB: There were stumps up on the top of the ridge and I imagine they cut them and rolled them down.

GR: **(185)** But those were big strong outdoors boys, those kids; they lived outside yep. That whole crowd they're outdoor and they come from a long line of builders, poachers, and horse thieves. So they know how to work themselves when they're on the fly. [GR leaves].

WR: **(192)** Yeah, well I operated the Maligne Boathouse and the Maligne Lodge for 24 years up there.

KB: So that's where they were partying?

WR: Oh yes, I knew the kids were always off in the bush doing all kinds of little illegal things and I made a point of not chasing them to keep track of them.

KB: So we talked about the Hoodoo Ridge Crib and what it could have looked like.

WR: Yep.

Topic: Athabasca Meeting Place

KB: Then the next one we called Athabasca Meeting Place; it's right across from the Palisades.

WR: Oh yeah, okay.

KB: I have some information about the structures; you can read through it and look at the diagram if you wish (describing location on diagram). There are all these little structures and depressions.

WR: Oh there'd got to be. You see that was the main travel. Out in that part of the valley that was the main travel area for a hundred plus years. When people were walking and riding horses and so on. That was the main trails along through there. You'd go across the Athabasca River and along the ridge up here and you'd find deep trails that you can tell were walked for multi-multi years. If you go to the fifth bridge, sixth bridge along the Maligne River where it comes into the Athabasca. You can drive right in; it used to be the old fish hatchery; it's the warden headquarters now. They have the buildings out there. You drive in there and there's a little road that turns down to the left, where you can see you're right down to the river. And you drive in and there's a picnic and it's called the probably the sixth bridge picnic site or something in that neighbourhood. But anyway if you park there, there's a footbridge across the river. And if you walk in from there you can walk up on that side hill and you can walk all the way up to the Athabasca bridge; 12 miles out of town. That's one of the favorite hikes that we did years and years ago. Why you went from the sixth bridge, Maligne Canyon right out to the Athabasca Bridge at mile 12. But you'll find some very deep well worn trails up on that side, across from the sixth bridge and it's called on the Maligne River, the Maligne Canyon. Yes I'm sure there have been dozens of log buildings built through that whole area in years past. And if you look carefully you'll find a lot of foot prints of old, old buildings.

KB: Right, and here's some pictures of some of the structures (describing structure #1, 2, 3).

WR: (re: structure #3: dugout) Oh yes, that looks like an old one we came up on in our hunting country up there; same thing exactly. And of course what they did with those; that was to keep the animals from getting at food and so on. And they built a structure of that strength.

KB: It's like a root cellar.

WR: Yeah, basically a root cellar. It kept the animals from getting at their food and so on. You know the coyotes, the wolves, the gofers. Though gofers could get in that sort of thing; it didn't slow them down too badly.

KB: This would have had to be some type of main camp to have a structure like that?

WR: Oh yes, yeah. And often, as you realize, many of the fur traders traveled through here and they made caches. That would be referred to as a cache than whatever. And they would cache a part of their supplies and carry on through all the way through the pass and over til they were almost at the Pacific Ocean and trade for furs and bring them back; come back through here and here would be a nice little supply of left over groceries and so on that they didn't have to pack all they way out and all the way back.

KB: Do think it could have also been used for railroad construction? Do you think it was a railroad construction camp?

WR: Oh yes okay, yeah, because the railroad is marked on here and the other railroad is right beside it.

KB: On the other side of the river?

WR: No, right smack beside it. Oh yeah, you could spit from one to the other. They took little different routes and so on and went up over different hills and got different grades and so on where they thought there rock work would interfere with the other, they moved a part a little bit. But I could never fathom the closeness of the two railroad grades for many, many years.

(265) ...discussing Palisade Centre and staying there.

Bill is 77 years old.

Lived in Arizona.

KB: **(315)** But you've been to this spot, right across from the Palisades (AMP)?

WR: Oh yes, all through that country; I've hiked; not looking for holes in the ground; many times we did hikes through there, to the airfield, beyond the airfield.

KB: And there's lots of pits in there (AMP); [showing remnant materials in pit photo].

WR: Now there's a proper digging shovel; that's the kind people carried with them on their packhorses for digging. Round-nose, they're referred to as round-nose. But that other one you showed me, that's a different kind of shovel (square shovel at SPC).

Topic: Ewan Moberly Homestead (323)

KB: So the next one is the Ewan Moberly Homestead.

WR: Oh yes, we refer to that area as the Moberly Flats.

KB: I do have a date on the main structure: 1903-1904.

WR: Oh, okay.

KB: I'm going to take more samples of the secondary structure because I haven't got a clear date yet.

WR: That's interesting, 1903; that's what you got off the logs off this building.

{KB explains crossdating}

KB: 1907 would have been the time they had to leave.

WR: And then the rest of them further out they kicked out in 1930. But it was 1907 they set this area apart for JNP.

KB: So is there anything you know about this structure, the Moberlys in particular?

WR: Oh no, Eddie Wilson Moberly worked for my father in law; he only had one name, Eddie Moberly, but everyone else he worked with had a second name. So finally decided he had to have a second name; he picked Wilson because one of the other boy's names was Wilson. So from there on through he was named Eddie Wilson Moberly. Which was quite interesting. And he married a lady doctor from New York City who came out here and was so attracted to the country; she'd come out here to go on a holiday into the hunting country over horseback travel in the backcountry. But that was after Eddie worked for himself out of Hinton and out of Brûlé as a matter of fact. Anyway he took this lady out several times and they finally fell in love and they got married. And they're both buried in out Jasper cemetery down here. Eddie Wilson and his wife.

KB: Was Eddie the son or grandson of Ewan Moberly?

WR: Oh, he would be the son. If you were to go into the Jasper Library and asked about the Moberly boys; they're just likely to pull you down a book and say well here's something on the Moberly family, with the dates and times and so on and so on. It might be of great help to you.

End of Tape (359)

Tape #6: Side A (000)

Topic: Evelyn Creek Cabin

KB: So Evelyn Creek Cabin, we looked at that one. Your son built it. What was your son's name again?

WR: Gordon.

KB: The other one, who built it?

WR: Russell; yeah well Russell ran the boat house for oh nearly 20 years up at Maligne Lake. He stayed on for the new owner after I sold out.

Topic: Edna Lake Structure

KB: So the next one, Edna Lake Structure.

WR: Oh yes, I know where Edna Lake is.

KB: [describing location].

WR: Oh I was thinking of another Lake.

KB: It's a dugout style. [describing structure].

WR: I haven't any idea of what that'd be. They're new, and by new I mean since the turn of the century. But they had to do with fur traders, an awful lot of those. And you'll find the odd shenanigans, like the kids building up in the hills and they'd spend every weekend up there for a whole summer. Then they'd graduate and go work elsewhere.

KB: And it's really close to the highway. I don't know if it would have been used to store dynamite.

WR: They didn't put dynamite storage any place very close to roads or close to where other people were. There is one, dynamite storage, below Pyramid Hill up here. But as you go up to Pyramid Lake, when you get up top of the hill you can go back in, and a little piece and it's built in cement. But it's only a shed. But it could be, but not necessarily dynamite. It could have been fur; packs of fur that they would put in there and wrap carefully and cover them up and so on. But it was a cache of some kind, undoubtedly, it's a low building. It's a cache, that's what they called all those, a cache. And that's basically what they were, they were just caches of equipment, or supplies, or whatever.

Topic: Ram Pasture Structure

KB: The next one is really similar; built into the side. We called it Ram Pasture Structure. [describing location]. It's on a hillside and you can see the railroad down below.

WR: You're just a few years late, because if my father and mother in law were still here they'd tell you that that's a new building. (referring to fresh cut end)

KB: We cut that; we had to take samples that way.

WR: Okay, well I can appreciate that.

KB: [describing site].

WR: Well it'd be a cache of some kind, I'm guessing. Not sure who's or what or why. It sure is a shame that...hmmm. Tommy Vinson, the one that's down in Brûlé right now, would have a good knowledge of any of these places. You know he's really knowledgeable. He was born here in this country and brought up here and so on and his wife is a Moberly. I believe his wife is a Moberly; she's Indian; a beautiful little lady. And one of his daughters is a real prominent writer now and son on. Tommy Vinson's memory will be much better than mine because he lived those things. I didn't, I came into it; you know many years after sort of deal.

Topic: Morro Peak Structure (146)

KB: This is the last structure in Jasper, Morro Peak Structure.

WR: Morro Peak, oh yes, I know where that is.

KB: describing location.

WR: When you cross the Athabasca Bridge; right in here is a pull in area and you see vehicles in there all the time. And all the hikers go up on the rocks there for there rock work. That's where Hans Horts [sp?] takes all his customers out to teach them rock climbing. That's where he takes them, down Morro Peak.

KB: There is one structure and a footprint at this site. [describing location]

WR: Well that's where one of the major; if you leave here at the sixth bridge and hike along on the main trail there's a deep trail on a good part of the softer earth. And that's where it comes out. It down over Morro Peak and down onto the highway.

KB: So it's been used quite a bit, this area.

WR: Oh yeah, that's one of the main hiking trails there are in this country; from the sixth bridge and come out at Morro Peak and onto the highway.

KB: So do you think this would have been associated with a cache? It's very similar to the Ram Pasture Structure.

WR: Yes, oh yeah. Now let me see. If you go along up here a short piece (north of structure, along highway 16) you'll see white lime on the off side road. They had a lime kiln in there at one time and a cement kiln in there at one time. In the early days; they all got kicked out in 1907 when they made this into a park; but that might have been beyond that. They might have operated til the 30s, til 1930. Because I guess that was still outside of the Park, Morro. This was outside of the parks probably til 1930. But they would be caches of some kind in all likelihood; because people didn't go through the trouble, outside these silly kids that would spend weeks and weeks and weeks building a log cabin sort of deal. But all of these others that you are finding in other places were built for a reason. They didn't build them just for the heck of it. They built them for a

cache, for a shelter for a winter, some of them of them for a one-winter stand sort of deal. Some of the fur traders got caught in this country by winter coming on and they got stuck and had to spend a winter in some area. And that's what they did; they built little old bits of log shelters hoping the weather would round up again good enough so they could carry on and get back out again or whatever. In some cases they didn't; some of them were compelled to spend the whole winter in the area. And that (202) was a tough go for some of them. They had to go out and hunt up whatever game they could find. And they snow shoed at that time of course. All of those people snow shoed. So they weren't stranded, but they were on foot. And you couldn't hike back out 200 miles to Edmonton and so on.

KB: One idea that was suggested about this, because it has a pair, was highway construction. It could have stored caps and dynamite in two separate areas.

WR: Well that's possible. As I say, they did not put any of their dynamite and cap storage close [to roads]. It had to be back through the trees, 200 or 300 feet or more.

KB: I wonder if it was linked to railroad.

WR: Well yeah, railroad used an awful lot of dynamite and caps to do all their rock work with. I don't know what else they would use it for. I suppose there is a remote chance they had different types of caches they had; spikes, plates, so on. When they were going to quite for the winter. Although they kept working right through the winter when they constructed that railroad from what I understand.

[re: all structures] They are caches of some kind or very short-term shelters. Because if they were to be live in year in and year out for a number of years, they'd be out on a point, out with a view where they could see people coming down the valley; this sort of thing, and they'd be a little better built. A little more time put into the construction. But when they were building just a short haul shelter, well they'd just put in as little physical effort as possible in the cutting up (229) of the logs and putting it together.

End of Interview

Interview #5: June 24, 2002, JNP

Interviewer: Karen Brelsford (KB)

Interviewee: Tom W. Peterson (TP)

Tape #6: Side B (000)

Topic: Athabasca Meeting Place

TP: Oh, that's my favourite. I have many theories on that one.

Topic: Bedson Ridge Crib (067)

TP: Okay you have to realize this is the Canadian Northern Railroad you are talking about.

KB: So they built up on that side of Bedson Ridge?

TP: Yes, well you see the history of the railroad coming through here; when you read "Pack saddles to Tete Jaune [cache by James G. MacGregor]" which is about a person from Entrance, Shannon [?] Harvey, you get a lot of description of, he was working with the surveyors that came through before they decided where to build. So when they were just outside the Park gate, the Grand Trunk had the right to choose either side; which way they'd come through. They were first, about a year, year and a half. They knew the Canadian Northern was racing through. So in Shannon Harvey's description you realize they look very closely at which side they should be on. The tunnel; that rock right up there, which they learned later the Canadian Northern had to build a tunnel through was an obstacle. And if you know this terrain at all, it's terrible. The river comes right to the cliff; to go there on horses you have to take the horseshoes off the horses when you're coming through because there is so much loose limestone. And I got this right from Tommy Vinson who lives at Brule Lake. And he used to take, years and years later, his horses through there to Jasper Park Lodge and then back in the spring. And he told me that in here it was such that you had to take the horseshoes off. It's really a very difficult part to be building a railroad. So the Grand Trunk did look at it, but instead they of course stayed on this side Brule Lake [east side]; and then right down close to where the Fiddle Creek joins the Athabasca and they had a bridge and the abutments are still there. And what happened at Fiddle Creek apparently, they dammed up above the canyon and it broke and flooded down and tore out their bridge. So we know that the Grand Trunk came through here 1910/11, say 1910 and at the same time Pocahontas was being developed because they had coal to ship, as soon as the railroad was back there you see, so there was this certain amount of traffic. But because the railroad was going through here and hadn't been built yet, they immediately looked at that problem and built a dyke to protect a washout. And you can see that, it's built up. So this is where I can show you evidence of probably a camp right there; for a short while when they dyked it. You know they had to have big equipment to do it; the abutments are there and right now this corridor is used by the power company so the old Grand Trunk railroad bed is still visible. The other thing you should realize, the Canadian Northern came along the next year or so, but by 1916 they were having so many financial difficulties, both of them, and they needed need in the first WW and they tore up a lot of one of the tracks. So in 1916 they actually decided to leave just the Canadian Northern railroad bed from Obed Head/Hill to the Snaring, which meant that from Pocahontas to Hinton was closed completely. But you did have a tunnel at Pocahontas, it was a mining town; so they used it from Snaring from Pocahontas to Snaring was the railroad; so this carrier set [?] closed down completely and there was no traffic, so they used the Canadian Northern, both railroads; you see they didn't amalgamate until 1921. So okay what I have is the Canadian Northern came along in the lower town in Hinton. Down where the mill is right now; at that time in Brule, which is on the side of the Brule mines. Roughly at

Miette there's a mine, opposite Pocahontas. Don't forget, but maybe you don't realize, but the Park boundary until 1930 came right through Brule. So that's park of the park and then in 1930 they changed it to this (on 1985 map). So in my mind they had many obstacles. We have many pictures of them building this bridge; the first bridge. The (191) railway bridge is upstream now, but where the present highway is the one that was built in 1913. I would imagine they were working on this tunnel and down here right on the points here they had a camp; a construction camp in here [Jasper Lake]. So the Canadian Northern it almost looks like they used the Grand Trunk Railroad to Disaster Point. And we know from the records there's a ferry going across to Jasper House. And this is strictly railroad being built. All the traffic, the wagons, even people travelling would use the ferry and cross and they would use roughly this road here. So this was a very, very difficult construction. But because of the ferry they could work this way and most likely they had a camp there to blast that and another place to have the blast, Celestine Camp. And the other thing, I have a personal diary, or just notes of it for George Foley, who was a warden here for many years. But when he first came to the area he was here in 1910; a guy named Dr. Collie; on his second trip in 1909 say/10, one of the years; we'll say 1909; he first hit the area and went to Mt. Robson and did the north boundary and came out at Rock Lake and went to Hinton. The next year he came back and travelled through Hinton by train and that's as far as the train went in 1910; I think and he went by horse over to the Snake Indian and up past Snake Indian Falls. When he came back, and the reason I'm telling you this is this Mr Foley was with another climbing party; they went up to Mobe Lake and Collie tried to climb Mt. Cavell. But as they were (127) travelling from this area along here, Mr. Foley mentioned a construction camp and I think it was the other side of Windy Point. Probably just down here by the Ewan Moberly or Snaring warden station. But when you're on this side, you're a long way from the water because you are up high. So when you start coming down, oh there's springs, and there's a lot of history there.

KB: Do you think he was referring to this Celestine Camp?

TP: I think he mentioned going by because he would have been on horse and he did mention the construction camp. So for that short period of 1913, was a very busy year. There's evidence of the buildings up in here [Celestine Camp] which are in a drying area and the buildings are preserved. And when we first saw it there were snuff cans on the ground. So in my mind if there is evidence of the cabin there [Bedson Ridge] it's not part of an earlier period because it's so difficult to travel through here. You'd be better off to be on the east side of the river, so it'd only be for construction to want it there. This area, believe it or not, I was just reading it in another report; right around Brule just outside the Park and then over on the Snaring; this area is accepted as being very early stages of activity; we're talking 9000 years in this area and this area. They found evidence. So anyway, if you have a building there at all [Bedson Ridge], it's Canadian Northern...(170) It was a terrible area to be building so maybe do you think it would tie in with a dynamite shed?

KB: That's what I'm thinking.

TP: Because you'll find those in one or two places. And if you're going to be camping you wouldn't be there; you'd be on the other side...**(197)** I would certainly suggest it has to do with storage of dynamite. **(214)** You know it's so similar to the one on Disaster Point. We wondered about it; just a small log structure is all it is.

KB: We do have the Morro Peak structure, which is right here.

TP: You've got one in the woods there that's probably dynamite. Right in here, Morro Peak, the old, old trails see. You've got to realize that when they built; this is the Grand trunk to start with; they went through there; they had to keep the dynamite separated; cause they had to blast...I don't think they needed a fancy building **(230)**.

Topic: Side Pass Cabin (245)

TP: No I don't know this one at all; but what do you think it is? [reads description]. It's within the Park?

KB: Yes, but I don't know if the boundary's changed.

TP: No, it did change for a few years, in 1910 to 1914. It was just the Athabasca Valley and then in 1914 they enlarged it.

KB: The dates I got: 1921 and 1849.

TP: Okay, well. This is an area that my friend Bob Hallam would be interested in.

KB: He came up here with us.

TP: Okay well then you know anything you get from Bob is the best you'll get. What did think?

KB: He guessed the 1921 date before I dated it.

TP: Really? Why did he guess that?

KB: I have to ask him.

TP: Okay, so since then you found the 1849 date. You see what you have to realize, and Bob known this as well. 1849 is the end of the fur trade period. 1824 – 1849, spring and fall; well the spring brigade, the fur traders. From the Columbia River coming through in late April, heading east. So the people that serviced it would be the Jasper House Métis we called them with Iroquois background. And then in the fall, early October there was a brigade that came through. They'd travel by water from Fort Assiniboine to Brule Lake, and to Jasper Lake to this site here, Jasper House **(290)**. And this would be using water, but from here (Jasper House?), but in those days they would need to travel by land over Athabasca Pass. And we do know that in 184?, when Paul Kane, the artist was here

in 1846 and Wier (?) was here during the same time frame, as people were going through you had quite a few teepees, along Jasper House buildings you see. So what did these people do the rest of the year? They definitely trapped because the only furs going east came from this area and there's one big circle. By this time Lac St. Anne was a very important part of their history; because they're Roman Catholics. Father de Smet came through in 1846 and baptized the lot. They're Iroquois Métis who worked with the French fur traders. They were very strong Roman Catholics. And they came through here with the fur trade, 1812; they didn't see a priest until 1846. So 1846 this was when Lac St. Anne was important with the missionaries; so the Métis that lived in this area moved with the game; so they all lived in Grande Cache, along the edge of the mountains, and they'd be here this time of year (summer) probably and all the way to the Brazeau River maybe. This whole thing is probably a 10,000-year-old route.

End of Tape (324)

Tape #7: Side A (000)

TP: So anyway, in my mind I think something going back that far is great because it's such a route and would tie in with the Jasper House Métis.

KB: And furs?

TP: Well yeah, because that's where they hunted. By this time you had to go that far to get game. See they went through the headwaters of the Snake and the Smokey; you know that whole area. By this time, the records tell us there wasn't much game here. It was getting scarce; you had to go for...these people in between the gates, there'd be one trapper here who probably had a hunter just working for him all the time. So he'd be out getting food and stuff. And having to supply all the gatesmen (?). So this particular thing you have to also realize, we are coming across structures that can be caches for tools. Both the Park and the Alberta government need to have tools stored in the Parks.

KB: There was some remnant equipment.

TP: And Bob is quite familiar with the history of this area; he would be thrilled to know that you got a tree, 1849.

KB: Side Pass Cabin equipment included a stove pipe, coffee cans, and then there was a shovel.

TP: All the more reason that a trapper or tied in with Shan-Harvey (?), who was the first forester; Ted (?) was all over the place, so it was his job to fight fires. So we had over two books in Hinton of the history of the chief people who worked for the forestry.

KB: Here are a couple more photos of the site (SPC).

TP: That's a good-sized cabin. Does it look like it was lived in? Was there a chimney?

KB: Yes, there was a stovepipe, a shovel, coffee tins.

TP: This is so close to old Eagles Nest Pass. Before the Park boundary; a very well known name in Jasper is Curly Philips, he was an outfitter here. And he was trapping in this area before the Park boundary. The book that's written about him, "Tracks across my trail", there's one year missing, 1914 I think; it's the year he might have been up in this area. It's (SPC) quite easily a trappers cabin.

KB: There's a picture of the shovel, which is squared-off. Bob was saying it was a coal miner's shovel, as opposed to your regular digging shovel; you have to do a different motion. And this is the coffee tin.

TP: Again, I don't know this history, he (Bob) knows it. So I'm not going to make any comments at all. But I think you're talking to the best person possible on this. And then even talk with Tommy Vinson to follow up on things. As a matter of fact, Bob and I and a couple others were over seeing him just two weeks ago. We think we've got an area that may be David Thompson was set up in 1810. Because when Thompson came in the Valley; you know he had to come over through the Howse Pass, so he arrived in the Hinton area in late November and as he hit the Brule Lake area winter cold, but he did see a fountain of water. So right in this area, away from the lake, he saw a fountain of water, which means it'd be a spring. So we've been trying to figure out where that'd be. And Tommy Vinson's got property there and he's got some land that looks like it could be springs. And now the boys are checking his measurements very carefully because this really looks so. I mean David Thompson spent almost four weeks in that area, preparing for his trip.

Topic: Indian Meadow Crib (109)

KB: So the next one is called Indian Meadow Crib.

TP: Where's that know?

KB: [showing location on map]. Bob actually re-located it using divining rods.

TP: Oh, good for him [reading notes].

KB: Bob suggested possibly Iroquois.

TP: Well that's all we had in this area. They were a mixture; we called them the Jasper House Métis. So they are Iroquois mixed with Cree, Stony, and Shoeswap, and French and Scots. So we called them Jasper House Métis. When you talk about Métis in Alberta, these were the first ones that came in. You see with the fur trade, Northwest Company. So they were already Métis before they came into the Park. So if you look at the Métis story, as they crossed the prairies. They did stay closed knit though; and they're Roman Catholics with very good records. So what Bob is working on is the

Findley name. He has traced this thing way back. And the same thing could apply to Cardinal. We're talking about the 1700. And then of course the name Moberly. So there's no spirit house on that is there [IMG]?

KB: I don't know. What do you mean?

TP: (140) Well what's happening right now in these grave yards in Grande Cache, in particular Muskeg, the Jasper House Métis, you know the one's got moved away from here and went to Grande Cache. And even in Hinton there is a simple graveyard there now. A spirit house, what they are is little house over a grave with a cross at the top.

KB: There was no remnant of that at IMG. But there was a post, lying down, about 1.5 m, that was originally standing according to a previous archaeological report.

TP: Was it a cross?

KB: It could have been?

TP: Have you got a date on this?

KB: No, not yet.

TP: Okay, because what they had in this area up here are some very low grades.

KB: The Persimmon Range?

TP: Well, they're more in the, oh what do you call it...well you see in 1914 Fred Brewster left here and he went with a Smithsonian, Prescott Faye [?]. And they went up to Peace River Country and we have pictures from their photo album, on slides now. But as they went by this certain grave, died in 1905 and this is 1913. So we have a picture of that grave. We use it as a comparison. So as they go down here, they had to cross the Snake Indian and then they went up into Grande Cache. As they went through here they came across some graves in 1914, but these are some of these Jasper House Métis that just died. So this doesn't surprise me at all that you might have a cross. Because they almost all have. Bob could tell you a lot about those graves.

KB: So maybe Jasper House Métis then?

TP: In my mind, that's the way I always think because sure there were Métis here before, but they didn't live here full time. They came to this area to hunt. The same as the Shoeshwap came in here, you know. Especially when the fur trade came through. And I believe that when we talk about David Thompson heading in the Hinton area in 1810; he went over the pass in January of 1811. And then when you read the next journals after him, like 1814 is Ross Francher [?] and in 1817 is Ross Cox [?]; these are the ones that had been laid off by the American fur companies or back east. When they came through the pass they got to go all the way down through the Brule; overlands see; walking or by

horse is very difficult. But they talk about old dumpings [?]. William Henry is suppose to have built something there a year or two before, like 1811. So Bob and I definitely think the freemen were hunting in this area before David Thompson came through. (188) That's why the Indian Thomas guided him through; he knew the area. So when they looked at the landscape in here, why not; I mean [raincourt?] is the nearest fort. Why not go upstream this far and hunt and stay the winter here. So you could have evidence of buildings. Even David Thompson knows an old building there; when he came over the pass, an old building in this area; it's in his diary. So keep in mind these are still the freemen. Freemen are people who have no contract. If they had a contract, they're finished and they're on their own know and they go wherever they want. And it's good fur. So again, we're talking about these Jasper House Metis who have this Iroquois mix with eastern Canada.

KB: (200) Here are some details of the structure (IMC).

TP: Do you think a log structure like that is going to be anymore than a hundred years old? This is in an area where they deteriorate. It's not like we can look at buildings here that can last a long time [wet area]. But once again, it's in a very definite trapper area. Bob's researched the Drummond [sp?], the botanist, who was here in 1826. And we have his report; so we know he is the first white man in the area. He actually was using Jock [?] Cardinal; and this whole area is where he spent a winter. So we think we know where he was; Bob knows. That's a long time ago.

Topic: Hoodoo Ridge Crib (217)

KB: The next one we called Hoodoo Ridge Crib. [showing/ describing location].

TP: Oh I know that one. Yeah I sure do. You know, it's funny, when they found this thing and they recorded it and they told us about it, they gave us a map showing where it should be. They accidentally found this when the firefighters were preparing for areas to burn. So Bob and I have researched this quite a bit and looked at it carefully. Have you been there? [K: yes]. Is this the one that has the ditch around it? [K: yes]. Okay, well Bob and I have studied the John Moberly property quite carefully. You have to realize that the building that burnt down he was building when they bought him out. He wasn't finished. I mean that's straight from the horse's mouth; an interview with Ed Moberly who was born there said that. And it's in the government files. And I think I read it in another document. But if you accept that, then you've got to think of the landscape at that time, 1910 and they had the big fire through that valley in 1888 I think it was. It's right by a lot of timber along the river and we know that from Bridgeland's pictures. So in order for him to build his building and his fence, the most logical spot was up on that hill. And if you look at it carefully, there is a trail from that spot, down the hill to his property. So in our mind, we think that is where he stored his tools.

KB: So if the fire went through there those trees would have survived?

TP: Oh yeah, there's some big trees there.

KB: Big Douglas-fir.

TP: There are certain areas of the Park that were saved and had nice growth and would have made lovely building material. But not down where he lives. So it was just a very nice place to get good building logs.

KB: Why would you have a cache up on a hill, like that, away from everything?

TP: To keep the animals away. If you're going to keep them up there over night; you don't want animals chewing on them.

KB: So he [John Moberly] would have been working up there, doing something?

TP: Oh well, he had to go up there to get his building material. And haul them there. He was building structures and he had fences around there. But when you look at it, it had a floor; and one log moves out so you could look in. And you have drainage so it [water] would drain away. So in other words they left them [tools/ materials] there for quite a while. And there's a nice trail leading down. And you could pull it [wood] down by horses. Beautiful view. We had a fun time trying to find that thing; I was the one who found it.

KB: Bob mentioned too that you were out looking for a gravesite possibly.

TP: Well yeah, he's [Bob] been in touch with Alan Moberly; who is a grandson of John Moberly. And has some of the family records. And I work a lot with Lena Olette [?] who is also a granddaughter [of J. Moberly]; Lana's sister is a historian for the family; there's a lot in their heads that they may not think important, but now that they're asking questions it's rather interesting what they're finding out. You tell us what you want. But their have been a lot of deaths. And Alan has his grandfather's diary. It must be his grandfather's, John. And it's in Cree and there is a mention of a daughter dying in 1909. So we wondered where the grave would be. He's been in touch with the family in Grande Cache. But Bob and I are guests of the Grande Cache Muskeg family; four different co-ops up there and one Muskeg is in the Moberly family; one is a son of Adolphus [Moberly]. They made arrangements to cross the river in August; they're coming down from Grande Cache; we're going to eat our lunch and then we're going to take a couple canoes and go over to this site [John Moberly property] and look at it. So we are trying to find out as much as possible in the mean time. But this sort of thing [HRC] isn't mentioned, except that it's up the hill. There's no question that that's what it is.

KB: I did find some older photos from an archaeological report. And there are two trees on either side of the cache originally. And that beam was originally attached to both trees.

TP: Yeah, I remember that.

KB: Yeah, so it was attached to both trees. And I was talking to Bill Ruddy yesterday and he was saying that that type of structure you would hang a tent canvas over top. So you would have the two beams and a triangle sort of canvas over top. So that would make sense for a cache.

TP: (307) Well yeah, if you're up there working and it rains. Well all we found in there was a feather. But it's so fascinating to find a trench around there.

Topic: Athabasca Meeting Place (318)

KB: So the next one would be Athabasca Meeting Place.

TP: Well I'm so pleased that somebody is trying to do something about this because I have my own theories on it. Now we are talking about two civilizations almost. You must realize that there had to be some type of camp tied into the Jack Ladder. In 1919 the Parks allowed longing ties up to Whirlpool [River]. And during the winter of 1920, they cut a lot of ties laid in the bush and they came down the Athabasca River and they caught them; the first one, they built a boom right across from Moberly Flats. A boom was built there and it was a very, very bad spring and a lot of water came down at once and broke the boom. And the boom is now hanging up in the woods. And it's huge Grande Trunk base camps; it's like an accordion. You've got 200 ft of big timber in this chain that's come together like an accordion. It's still there. And that was the winter of 1920. So then they lost all the logs. The next year they went up stream to this spot; the river opposite John Moberly's. Right in that spot up stream is where the next log boom was. And Jack Ladder. So they continued their logging until 1924 and what they were doing up the Whirlpool; the Otto brothers; one contractor from eastern Canada subcontracted out; the Otto brothers subcontracted and cut ties right in the woods and then hauled those ties to the flat and then in the spring they came down. They did that until about 1924. So you have up the Whirlpool about a dozen buildings that were there visible until about the 1950s when they built a fire road between them all. So Parks Canada lost them. You have buildings up there that would have two structures opposite each other that would hold 24 men each. So that tells you a little bit about the Jack Ladder (356). Now that needed, as the logs came down, and they hauled them. The Jack Ladder was a means of getting them out of the River and then haul them over to the Grande Trunk Railroad, when it was amalgamated. The main railroad is close to the highway; continuing to the Northern Park, which was finished in 1921. So we do know that it needed buildings and those are quite recent there (AMP). But what I'm interested in is these down here. Many years ago I had a person working for me who was a friend of a chief Park warden. In the 1970s they were digging for artifacts. And in there you could see evidence of very old old buildings; the foundations. And they were digging down where the garbage would be and finding glass bottles and things like that. And that came to end; I squawked about it and said that's got to stop and it did. Anyway in my mind in early days, if you had travellers going through with the brigades and they were going to wait and go through at the same time. There are a lot of people that went through that we don't know about. This is an ideal spot because you could spend a

winter in here; this part of the Athabasca in spring, is part of the Maligne system, it's always open.

Tape #7: Side B (000)

Topic: Athabasca Meeting Place

TP: This spot is very interesting because animals I'm sure use this coming off the River to hike the land. If you were to think about it; if you could travel that far by canoe and from there on it spreads out upstream. But it is open, so this particular site in my mind could be tied into the fur trade as a stopping place. If you're waiting. The other thing I have in mind; I have researched this area quite a bit, but Henry House after 1821 to 1824/25 when Simpson took over and they started organizing their trips they would go by horse from either Jasper House 1 or 2 to Henry House, which is just upstream from the Maligne. Just a little bit beyond here, another a mile. In here it's too hard getting off the river. But upstream is definitely where you got off the water if you used the water, mostly was by horse anyway. But if you were using a canoe to move people, children, or certain governor sent George Simpson, he would use canoes as far as possible. And I think a place like that they could have left the canoes or upstream another mile in another spot. It's a definite stopping place. And especially if you were travelling through with a brigade. Why not. So this particular site I think warrants a lot of study; I've told the archaeologists about it. And they scratched around. But I know that people that took stuff out of there were looking at very old bottles.

KB: (038) We found Hudson Bay logos that were on glass bottles.

TP: Did you really? Did you dig into the ground?

KB: No they were just sitting on the surface. [Reading the description].

TP: Let's get this straight. Is this the spot [showing on map]?

KB: Yes.

TP: The circle of trees. Yeah, these are more recent. This ties in I'm sure to the Tie Camp. And don't forget, just down here on the airport you had the rodeos from 1926 to whatever period. It's another time frame. A lot of people travelled between the airport area for the rodeos. Keep in mind these earlier buildings, which are quite recent. But along the river, at one time I thought it was Jacque Cardinals encampment, but now I think it's over here at Suzanne/ Ewan Moberly's place. But you also, over here by the Snaring, you have a place that was Henry's winter camp. Which I think is a horse keepers, because we found one on the plains here at Jasper House there is a spot identified as a pile of rock in the middle of a grassy flood plain. A building. In my mind it's a horse keepers because you'd have to be near the horses; 200, 300, 400 horses. Jacque Cardinal. I think personally you could record this almost to the very beginning, why not. The Northwest Company did not leave any records to speak of. Most of the information we are getting is from people travelling through at the same time. There is

reference, again it's the Maligne River; it's where the fish hatchery is, along Lake Edith; that grassy area there. This is an important area here because this is where you crossed. This is Henry House in my mind; it's right in here. With the Maligne coming in. It's an ideal spot to stop for the night. If you had brigades carrying leather through here; in 1827 there were 30 that went through here. And quite a few took the Columbia trail, but they came together this far by horse from Jasper House. And in 1827 they were coming from Brule; and from Brule they'd come together by boat. So when you're looking at this area, if you have a lot of people; I mean if you've got 30-40 horses you can graze them here. You can have your tents here, but why not down here too. Another thing, there were certain times like the 1835 trips. I have a journal of that one; there were something like 40 people came though when there were normally only 13. There were women and children, but they were slow moving. So where are you going to stop? Not only that, but when you stop at that spot and you're going to start walking or riding a horse; up until this point if you've had a canoe you're going to dump. You're going to get rid of all you bottles or whatever. You're not going to carry a lot of things. You've got five days of the most difficult part of the trip. So I'm glad you found some evidence of this. So this is from digging around?

KB: (132) It (Hudson Bay glass bottle) was laying on the surface.

TP: We have Bridgland's pictures of those areas and there's no trees. Tree's used may have been brought in.

KB: By railway?

TP: Well that's the sort of thing you're running into all the time out there at the west gate. There was nothing there when the buildings were built because a fire had gone through. Those buildings, those logs to build the structures at a construction camp had to be brought in. I'd like to know what they did at Yellowhead Pass. When we were there testing those trees right beside the buildings they were a hundred years old and the big fire was 1888. Coming through. So they must have brought them (logs) from somewhere. The other thing you've got to realize about this area, I just thought of, there was a girl some years ago who studied the Palisades, the Swift property and there's a lot of information about the Swift property. Just by just looking at pictures and reading the stuff you realize that he had a camp [?]. See don't forget he lived in a very interesting spot; you have the Canadian Northern, you know that bridge over there; the Canadian Northern went underneath there. So we have pictures of them building this overpass. There's a tent camp right over on Swift Creek and overlooks the road. And from the detail we have Swift was right in the middle. And I'm pretty sure he operated one of the camps and was probably right in there. But again we're talking 1912.

KB: So it would have already been established (AMP).

TP: What we are looking at here (AMP) is something very old in my mind. And if you found this bottle, wow.

KB: Yeah, with an 1818 date etched on it.

TP: You have to realize many uses. And I'm sure my friend; who doesn't talk to me anymore since this is 30 years ago [took artifacts from site]; in the meantime some of this stuff is in their personal homes. And by the way the glass was coloured it was very old; so what he was doing was digging down in the pits, garbage and dug deeper. And if you look carefully over there you'll see evidence of moss-covered granules. In my mind it could go right back to the first few journeys through there. Especially starting 1825.

KB: The circle chairs. Do you think they would hold an adult; it would probably snap. What about the Swift kid's? Do you think they could have built that?

TP: Don't forget you're right beside some buildings. It's not too far from some houses.

KB: What do you mean? Footprints?

TP: Well, I'd bet you anything you'd have to have a cook shack. You're hauling logs out of the river in the spring; not a year round thing. And you're hauling over to the railroad. You're talking about 1000s of ties. You've got to have a work camp. You're not going to town. In those days you could travel that far by car. When the Grand Trunk railroad was closed in 1921, due to the Pocahontas mine closing, they had no reason for a railroad and the government purchased it, or got control of it because it's in a national park. And in a couple of years they're building a road all the way to the park gate and they get into the hot springs. By 1926, the Jasper people were coming down through this area and using the airport area for the rodeos. So lots of cars, lots of people. How they got from Hinton I don't know, but maybe by that time they had a dirt road. The park gate to Hinton was always a difficult journey. And you're not using a roadbed either. In my mind, that area was a popular place to go to.

KB: So families went to the rodeo; how long would families be there? Would the kids be able to roam around?

TP: Well you see we have pictures of the rodeo there and it was a huge event. Talk about a couple hundred. All the cowboys came there to be part, the best one's were Moberlys. I forget which ones, but they had a white horse. It was a real big thing. 1926 was the first one. But there's reason's for activity in here (Circle Structure) and why not the cook or somebody doing it. I don't think the Swift children would want to do it; their Métis and it's not the sort of thing they would do. And besides they live on the other side of the road.

KB: There was some remnant material on the table; there was some wire bent into a heart. And pieces of plastic.

TP: My theory about use going back to fur trade days is my thought, but I'm trying to prove to Parks Canada that they need to change their thinking on Henry House. I mean the fur trades days, anywhere from off of the mouth of the Miette to Lake Edith was

William Henry's place. But once the amalgamation took place the destination is Henry House. Which in my mind from the journals it's quite obvious, it's on the west side and upstream from the mouth of the Maligne. And you look at that layout there and it's an ideal spot. And it could be from there all the way up to the, roughly the cemetery. That's where they could cross. Just recently, this spring I've been looking at a possible site for William Henry's site; which is 1812 to 1824. There is a spring there on the south end of Lake Edith and it's an ideal spot for a hunter's lodge or whatever. And it's tied in with the trail system. So there's two phases to the Henry House; and I haven't got that clear. It's a shame because the same spot I'm talking about being Henry House is also where Athabasca Depot was and that's another untold story there.

KB: Describing dugout: flat beam with Edmonton stamped on.

TP: **(290)** This ties in with the fact that Swift may have had a camp there. You've got to realize that 1910 say to 1913 two railroads being built and maybe one's ahead of the other a little bit. But there is a time frame when they can't do anything, so you've got literally a couple thousand people, waiting with the horses rearing to go as soon as the rivers, you know as soon as you can start working west of Jasper. And this human history of Jasper by Gainer will tell you this area we are in right now, bypasses the Swift's property, their on either side of him. And Bridgeland's pictures show you evidence of a building or two. Just imagine, what would you do? You here and ready to go and you've got a horse or team of horses. There's lots of places for you to stop. So you wouldn't run into that. You're tied into that period of 1910 to say 1913. Just imagine that as being a place (AMP) where you could take your canoes out and then animals have used it. And remember it's always open. Eagles out here in the wintertime. This is an area to watch.

KB: The only other thing was in the dugout we found a dish pan/ plate in a modelled blue/grey speckled pattern. And a bone was in there.

TP: Well again you're looking at an area that since 1910 has had hundreds of people here. I strongly recommend a very serious archaeology study. When you understand the movement of people; I'm finding it constantly; I've got many journals of people travelling through and I follow their footsteps. And you know where they stopped and you know why they stopped there because you have to understand the riverbank and the time of the year. So you know they're not close to the railroad, this spot yes (AMP), then you (from railroad) don't get back to the river for another mile upstream. So that's an ideal spot. Almost for sure it's tied to one of the two railroads. They're so close; side-by-side.

Topic: Ewan Moberly Homestead (334)

KB: Here's the next one, Ewan Moberly Homestead and we have a date on that. The main structure dated to 1903 and 1907. [Explaining crossdating]. No date yet on the secondary structure.

TP: We know of course he was over in the corner here first. There's another hole that was his first building. It's near, when you're walking from the plaque you're walking towards. It's just after you get off the road there is evidence of a building. I mean that's his first building. You see he built this (EMH) after. But this one we can see evidence of a depression.

KB: Do you know what year?

TP: Oh lets say 1908. This is interesting. In 1860s, so he's 48 in these years. He's coming into the valley for a long time. And I personally think his mother was buried when he (Ewan) was he was 3 years old. Now if we can prove she is Jacque Cardinal's daughter and she was born in 1824. And he moved there in 1827; and known as Jacque Cardinal encampment; it would be really nice if we could prove it.

Tape #8: Side A (000)

TP: But this is something that I think is exciting and would interest people like you and the Métis people. One of the confusing things about this grave down here, of Suzanne Cardinal; the family put on, because they accessed the marriage certificate with Henry John Moberly, it has Karakonti on it as her name originally. Since then we pretty well proved that she was a stepdaughter and her mother was a Cardinal. So here's a person that had been coming here every summer. And I think John and Ewan finally decided, and Swift was here first. Swift was at Jasper House about 1892-93, so he moved into this part of the valley before those. And maybe they began to realize too that there was a lot of interest and got here. Who knows. But that didn't surprise me at all to know that that building was that date. I would like to know what the older one is. It would be great if we could prove this site was first used by Jacque Cardinal. Bob and I both agree on this that the journals of the people that had come through, saw here was this camp. And you'd travel up Celestine Lake Road you'd know where the first spring, I mean there are 2 or 3 springs, so it's from the Snaring cabin to this place. Where would you pick? Right there. The three, Aldolpus' and Ewan's are on a beautiful spot, water. Well we have pictures of the barn; there was a barn; 1911. What you're looking at is a scene of no trees because (069) don't forget the big fire. So right in here is the barn. And what you need to know is the possibility of irrigation. And then he had horses.

KB: There is a bridge out back.

TP: Oh yeah, Bob and I followed that trail. This isn't the time of year to do it. For 9 months of the year your trail system goes right across that bridge and continues.

KB: I was told that was one of the great safe areas to forge, to cross the Athabasca River. People would come by and fire a shot and the Moberly's would come and help them cross.

TP: Yeah, there would be two places, the other would be John Moberly's and the other places that ties in with Ewan here; he could bring his canoe and go over and help them

cross. I have pictures in a book; who is it Washburn? Washburn I think it is came through and the horses would swim, but the people went in the canoe. I know the exact spot; it's where they built the first boom that broke. What you had was a summer trail and late summer and the fall. In the fall you could just keep on going to Disaster Point. At Disaster Point you have a problem, but until then you could on this side. So again it's journals that tell you all this. When these people were bought out in 1910, there were about hundred others living in the valley. What were they living in? Lean-to or whatever. So there are one or two other spots down here you can see people lived there; what was there is all gone now. And if it's the Métis why not, it's a good place to fish and there are not that many people. So again I've got a carload of stuff; if this is the stuff you need, you need to realize that he had a barn here; you can still see evidence of it. And right behind this property here that road way down to the bridge; very important; because why go up through the woods, just cross that bridge then it's dry. Not now though. So again it's a very important site.

KB: (114) I was wondering where you got the copies of photos.

TP: Oh, through Rod (Wallace). Well yeah, I've got a collection. As a matter of fact the historical society [Jasper Yellowhead archives] have got files. The thing that I find fascinating is no information; nobody around understands it because they haven't been taught it. But my mother gave a very interesting talk here in 1967; and she was in touch with some of the people that worked with these Métis. Some were alive then. And George Camp, he was like a brother to Adam Joachim; both worked at the outfitters and Adam was a guide and all the Moberlys were very good anyway. You know you sit around a fire and talk; and George is married to a Métis too. He was alive and very active in this society; and my mother was a good researcher. And then you have others, Albert Norris, another one that's important. So we've got so much information. I have a copy of my mother's presentation that she made. And she made statements today that when I showed it to Lena Olette, the granddaughter, she said oh no, no that's not true. But now that she's looking into more it herself, she's agreeing. I'll let you read it. So what we have then is more of their history. It's very interesting.

Topic: Evelyn Creek Cabin (167)

KB: So the Evelyn Creek Cabin; for this one I found information.

TP: Let me have a look at this one; I know this Russell; I used to work for Bill. I was a bookkeeper; I did Bill's books and got to know him very well. But in 1960 he had a chance to have an airplane ride in the fall of 1960. And he's given me all these beautiful slides. So yeah, I know Russell very well; I've known he since he was just a kid. So you asked me a question here earlier, "Where did they get the material from?". Well when they built Athabasca Depot, which was 1872, it was three log structures. The diary says they built it in the area that they did because of the fir; they were close to the big fir, which is just by the Moberly Bridge; three miles from Jasper. So there are certain areas where there's good lumber and you can see what happened here; this is lovely stuff and

then up the hill there. Oh there's a lot of Douglas-fir. Just before we get to the Moberly place, there is a forest of Douglas-firs. So where would this be on Evelyn Creek?

KB: (198) showing location and relaying Ruddy story.

Topic: Edna Lake Structure (237)

TP: I've looked at this one; it's sort of a root structure. Along there don't forget you see evidence of telephone poles. Well there's no question about it that the Grand Trunk went right by it. It would be a good area to have a work camp.

KB: So this could have been some type of storage?

TP: Oh yeah; I was surprised, I didn't know about it until this. Edna Lake do you know, I have pictures, that can show you a station at Edna Lake. No wait that's not the one I'm thinking about. I'm thinking of Jasper Lake and you come around the corner. Yeah, okay, I'm pretty sure. That used to be called Interlaken; the Grand Trunk had a station called Interlaken; they had one here at Hause too, right here where the Rocky comes in. Right in this area here there was a station called Hause. It's a station, a water tank and house. And Interlaken, I don't know, the scene that I have of it looked like that it might have been two lakes. Interlaken, Jacque Lake, Jacque Creek. That's a very windy area and they would have sand problems there with the railroad too. I don't know if you realize or not, but when the railroad was (270) building through here along the Brule Lake a lot of sand problems on both sides actually. And if you were to go there today, and get right to the gate, you would see evidence of them trying to fence everything. It's piled up, sand dunes. I'm sure you could just relate that to is this is Grand Trunk on this side. And the Grand Trunk closed I imagine closed that down when Pocahontas mine closed down in 1921.

Topic: Ram Pasture Structure (290)

KB: This is the next one, Ram Pasture Structure. [describing location].

TP: Oh I've been there; I've seen it. Well it's rather interesting, like most of the points of the construction camps over here. Have you seen it?

KB: Celestine Lake Road camp? Yes.

TP: The big one. So did you see up on the road here; you know where the gate is?

KB: Yes.

TP: Just going a ways and on the left hand side is a taut wagon or a sleigh. It's a huge thing. It's like a heavy sleigh to carry things. My opinion is that if you look closely in certain areas you're going to find the horse trail, maybe before the road. And then now the road has gone through on the same path. But in certain area you can see where a

horse trail, especially in this area here. But in order to, those buildings, we have the barn, you know several structures; did you find the single house. The one all by itself. I think it's the bosses, the foreman's. Again if you were to utilize the road coming from Jasper House up, you got to get away from the river. All traffic, even the fur trade; just to give you a general idea, when they established the first Jasper House here in 1814 I think; and that was used until about 1830. They didn't use this side of the River. They were coming through in the spring and fall when there was hardly any water. So they crossed over here and stayed on this side all the way to Disaster Point. Now there are one or two journals that indicate that they might have gone across the river and come right back again and continued all the way to the Maligne. That was 1823. But even since this time, 1825, they realized they were better to continue doing the same thing but crossing over and staying high. And coming all the way down to Henry House. So before the Canadian Northern came through here and the Grand Trunk too; I don't know if I told you but when the Grande Trunk was building here they found it better to be using this side for room to haul supplies. So they would have a wagon trail. 1913 when they did that; you can almost see the way you access it right now you're coming down to the camp from a possible trail. Because you've got that big point there; it's a problem; just beyond that it's terrible; you've got to be really high there. You're right where the road is. But I would say that sleigh might have been used to carry stuff down to them. It's just up there on the road. So you're going to find evidence of whenever people are going through there. Maybe they got stuck and had to wait or something; who knows. Again we're looking at, you almost have to assume it [RPS] has to do with construction.

KB: (359) The railroads down below; maybe this was used for dynamite storage.

TP: It's a long ways from water isn't it?

KB: Yep, it's a good height from water.

TP: Well, they don't need much dynamite there. It's quite a ways from the corner isn't it? From where they need it. I mean the other places have dynamite, possible. There's one or places at the other site where they could store dynamite. Well maybe food, you know; let's face it you have work camps; and they had to store the food in the ground. Were there trees?

KB: Yeah, there were a lot of trees?

TP: How old were they?

KB: I don't know. Well, the trees didn't look that old. They were probably under a hundred years I think.

TP: See there is a very slow growth in this area. So I don't know if the fires came though maybe it wasn't too serious because you've got grass and big fir. You have to realize that there were people moving through; some very interesting stories before the railroad. I forget the name of it; one of them, the MacDonald family. And they went

through in 1906; they stopped at Swift's. It was a man with four children. He was in his sixties I think and the youngest I think would be 14. And they went all the way to Little Fort (?) and then they went north of Little Fort and settled and made a ranch there. An they wrote a book called the "Rainbow Chasers". The youngest boy wrote it in later life. The details good because they came through. And other families would have done the same. And it was before the railroad.

Tape #8: Side B (000)

TP: It could be anything. But a lot of people travelled through that we don't know about in that short time. And in the railroad time I'm talking about, I'm not talking about fur trade time. 1910-1914.

Topic: Morro Peak Structure (011)

KB: The next one is Morro Peak Structure.

TP: This is up on the hill isn't it?

KB: Yes, at the parking spot. [describing location and footprint].

TP: Well I think what you need to realize is there's more to the stories. There's other buildings. When they built the road through there. I've told you already that they had to build a roadbed through there; right through a lake; there's a lake on one side when you come to Jasper. There's spring fed lake; the other side is effected by the river. You see it's high now. Of course the whole thing is a part of the same water source. So just before you get to this point there is also a sand hill that was removed completely. This is just a little east of that. And then you get to the lake and on the left as you're coming to Jasper, the spring, the clear water on this side, you've got to get a trail around there. You see there's buildings in there. There's another log structure that could be tied in with the dynamite.

KB: The lake that you are talking about?

TP: Well it doesn't show it [the map], but you get water on this side. This is affected by the river. This is clear spring fed beautiful water. See I'm tying it in to dynamite because it's separated. And they had to remove a lot of soil. I was told this. It was easy to remove; it wasn't rock, it was sort of dirt. And then you get close to the bridge and they probably had to dynamite there.

KB: There are two footprints near each other; do you think that was the pair?

TP: Maybe, I've never really carefully looked at it. I think the other thing that we need to consider is that there was quite a bit of traffic after the railroad. The people that had horses in the valley, the government and the outfitters. They all had to have certain areas to take their horses. So the Hargraves and Tom McCreehy (?) they had the Rocky River.

So in order to get there, especially if it was high water, you would be using that side. You know, this is definitely construction. They built a bridge there too.

KB: Do you think it's railroad construction versus highway?

TP: I guess you have to hope that when they start building a road they start cleaning up afterwards. But these days you'll find evidence of railroad construction all over the place. I don't think when it came to road building they'd have that. And like Rod has run in to already, evidence of men doing things on there day off. My personal opinion is that it's just storage. Others were left; they had no reason. Something like this was out of site too; once they got the road built. And this is Grand Trunk then. The Canadian Northern doesn't enter the picture until just a little past here, see it's quite a ways on. The Canadian Northern, that other building [RMP] would be Canadian Northern I would think. Because they built the railroad and once they amalgamated in 1916 it was done already.

Topic: Glacier Trail Cabin (129)

KB: This is the Glacier Trail Cabin; we sampled that one; I think that dated to the 1930s. I can't remember though.

TP: You see they didn't make this Park until 1930. Past Wilcox was not a part of Banff.

KB: It could be Jimmy Simpson maybe.

TP: Could be I mean its not Park.

End of Tape (220)

Interview #6: July 2, 2002, Brule

Interviewer: Karen Brelsford (KB)

Interviewees: Robert C. Hallam (RH) and Tom Vinson (TV)

Tape #9: Side A (000)

KB: [describing structure portfolio]. The first structure is Bedson Ridge Cabin. [showing/ describing location].

Topic: Bedson Ridge Cabin (010)

TV: It's in the Park is it?

KB: Yes, but basically on the boundary.

TV: Well the boundary is the top the ridge.

KB: It's not quite on the top.

RH: Fred Hallet [sp?] has been up there; you know him [TV: Yep]; and he thought it was something to do with the railroad, maybe during the construction of the tunnel or something like that.

TV: Yeah, I didn't even know that it was over there. There's no road to build a cabin until you get west of the ridge; cause the railroads running in there and there's water on both sides of it.

KB: [showing photo of location].

TV: Where did you cross the river?

KB: Just at this access road [showing map].

RH: You know that camping place along the river in the park, just opposite the point there? Bedson Ridge comes down and right across the river; people go down the river on their canoes. [TV: Oh yeah]. Parks has got a camp ground there. I don't think it's used that often.

KB: Do either of you have any ideas about what this structure was for?

RH: Well to tell you the truth I haven't actually been there before. My friend, Fred Hallet [sp?], who's also interested in history, he married a resident of Brule. And his wife took him up there. And he thinks it's a cabin related to the railroad, but he hasn't done any research. It's just that it would only make sense that whoever built the tunnel was here for a long time. You just don't build it in a week. You would have to have a camp and structures and that to accommodate the people. Whether it was just a dynamite cache or the living quarters it's hard to say. I can't see a trapper having a cabin up there, right on down on the end of the point. Pretty exposed. A long way to haul water too.

TV: On this side of the tunnel there's an old camp in there. You can still see the poles; they're all laying on the ground up there. Looks like what they had for the mules. And there's a big spring there; the only place there's good water. It's just down from the Ogre [?] Canyon. Where the creek hits it. Just down along the lakeshore.

RH: Dan Rooks [sp?] and I went in there about a week, week and a half ago. And I remember you telling me about his camp. We went right down to where Ogre Creek joins the lake, but we couldn't find any evidence of the camp.

TV: Down just below there, there's a big spring that comes out and runs into the lake. And it's gone up towards the head of that spring, but east of the railroad tracks. It's all laying in the ground there, but you can see there was a lot of poles cut there. Looked like a cookhouse, some old pots and pans. I figure they must have had a big camp there when

they were working on that tunnel. I don't know how they'd move that rock. When they were blasting out that rock on the other side for the railroad; over there around Rocky Point; these guys went broke with one shot; he had a contract for so many feet. And there was one outfit that had, I think he hit a car load or two car loads of dynamite in one shot. Two box carloads of dynamite.

RH: And it all went off in one big bang?

TV: It broke the windows in Pocahontas and shook the windows in Hinton.

KB: Were people hurt?

TV: No.

RH: It was a controlled blast.

KB: So that's the Bedson Ridge Cabin.

TV: I'm sure I'd go along with Fred on it because there would be no reason to build any cabin there to trap, to work out of, or wardens, except for the railroad.

Topic: Side Pass Cabin (068)

KB: [describing location]. It's about a 20-minute walk from the Starlight Ridge Warden cabin. [showing photos]. One of the dates we got was 1921, which Bob guessed right away. The other date was 1849. It's located inside the Park boundary. [describing remnant materials].

TV: It's inside the Park boundary?

KB: Yes.

TV: I've been up and down that trail a lot of times and never saw one there.

RH: It's off the trail. You've got to sort of leave the main pack trail. How far would you say it is?

KB: A 100 m, 150 m off the trail.

RH: It seems that somebody who built it, if the trail was there to be begin with when they built the cabin, it seemed like he wanted to be off the trail. Sort of hidden form the trail.

TV: The only one I know of that kind of sounds like that and has the roof still laying here ten years ago; Leonard Jackin and Johnny Zalin built that for a trappers cabin and it's up on a little bench.

RH: Yep, well this is up on a little bench.

KB: There's a little area that slopes up and there's a creek running right beside it, side pass creek.

TV: Yeah, little creek?

RH: Yep.

TV: Like a place to get water.

KB: It's a big valley though, the creek itself. It looks like a ravine and then there's just a little trickle.

TV: That sounds like the same place.

KB: Really?

RH: But that's outside the park boundary.

KB: Yeah, this one's inside.

TV: Just out of the Park boundary and it's off the trail and up on a bench away from the trail.

RH: In trees?

TV: Yep.

RH: Gee, everything fits except for this boundary location.

KB: Yeah, this one's [SPC] is definitely inside.

TV: But you can't miss the boundary there because they just re-cut it 10 years ago.

KB: It's in the same general area though.

RH: What was the second man's name, Leonard Jackin?

TV: John Zalin, he was trapping partner.

KB: They were trapping up there? Do you know what time they built the cabin you are referring to?

TV: Well I don't know how long it's been since they built that, 30 years, maybe 35 years.

KB: (098) So what do they two of you know about, in general the history of this area, the north Park boundary? What would have been going on up there?

TV: In the Park or out of the Park?

KB: In the Park.

TV: Not much going on in the Park.

KB: Outside?

TV: I know Mickey figured at one time they were going to build a road all the way around what they called the north boundary. And that's out of Devona, that's why they built up there in Willow Creek and stopped.

RH: Well they were going to build a railroad up there.

TV: At one time.

RH: Yep, at one time. The called it the Smokey River.

TV: But that railroad was going to; it went up past Rock Lake.

RH: And up by the Blue Diamond explorations up there. I was wondering when I was into this particular cabin with Karen, whether that shovel that's shown in the picture there sort of looks like a coal miners shovel to me and I was wondering whether maybe some of the fellows from Blue Diamond which is just over the head might have come up there just to have a cabin of their own. Or maybe trapped out of it in the wintertime and did their exploration in the summer or something. But that was just a guess on my part.

KB: So people doing activity outside of the Park and then having something inside the Park?

RH: Yeah.

TV: See that old railroad you're talking about went down to the Hopi [?] claims.

RH: Yep, it's marked on an old, old map that I have: Smokey Valley and Peace River Railroad it was going to be called. And it was going to go up past the Blue Diamond claims. Up through Grand Cache to pick up the Hopi claims and then I guess it isn't marked all the way to, I don't know where they were going to bring it out at; Grand Prairie probably. In fact I think it only goes up to where the Blue Diamond claims were.

TV: Yeah, the railroad stakes were still there when I came; they went up close to Rock Lake and then in the Park there and then up Rock Creek and the then it went up Mowitch Creek. And over Devilation [?] Pass. And down the Sulphur into the Smokey.

RH: So it didn't even go by the claims.

TV: No it bypassed them; but there was a big gypsum deposit in Devilation Pass. That whole mountain is solid gypsum. Old Pete Peterson, he staked a claim there I'm thinking about 1910 or something.

KB: (121) When were these area active? You were saying the Blue Diamond mine, when would that have been mined?

TV: Oh 1912, they started this one at Brule.

RH: Yeah.

TV: And then Prine Creek, they took that whole area up the north fork of the Hay (Wildhay River?). And they've still got that old steamer up there.

RH: What date would you give it?

TV: Oh I think Tommy Groat [sp?] was here; and I think he helped move that steam engine up by the Hay there; they couldn't run it themselves. So that would be well after the mine was running here [Brule]; it would be in the teens or early 20s.

Topic: Indian Meadow Crib (162)

KB: The next one I want to show you is called the Indian Meadow Crib [describing location and site]. It could be a cache, but we are pretty confident that it would be a crib. There are a lot of native remnants in the area. Archaeologists have found arrow heads.

TV: They may have died in the wintertime, you know, and buried him on top of the ground. Down the Sulphur there, an Indian that died there and they buried him on top of the ground.

RH: Yeah that's Pepé, at Little Grave; a Beaver Indian.

TV: Before you get to Little Grave. There is a little grave at Little Grave.

RH: Yeah, and these bones used to be right on the surface; like Leonard Jack had a picture holding the skull. He used to be the husband of Caroline MacDonald, didn't he? And then when he died she married, a white man, Donald MacDonald. Joe is the son of this relationship between Donald MacDonald and this woman who was previously married to Pape, I think.

TV: I talked to Joe MacDonald and old Albert Golshe [sp?] and told me that that was a B.C. Indian that had come in here hunting. They wintered here and they were out there hunting early in the spring and he got killed in a snow slide. In an avalanche and they

buried there. But they didn't know what his name was or anything about him. Just that he was a stranger. Willy Joachim told me that too.

KB: So where is the location of this one?

TV: Well it's just outside the Park boundary, down the Sulphur a ways here. But it reminded me because it was built, the logs were the way you described there [IMC]. So they get close together and then the others ones between them to keep the varmints the hell out of there.

KB: And the body would be wrapped in a blanket and buried above ground?

TV: Very likely, above ground for sure; I don't know if it had a blanket on it. Not likely.

RH: The story I heard: he died in the winter and they left his body there and then went back later in the summer and buried him. Probably built the crib.

TV: Why didn't they build a grave for him if it was in the summer?

RH: I don't know.

TV: That's the reason Joe and Louie told me they put him on top of the ground. They were going back to B.C. and they couldn't dig because the ground was frozen.

KB: That would make sense.

RH: That's the one thing I never understood about these crib burials and I know quite a few of them around here. I don't know whether the body was left on top of the ground inside this crib or whether it was buried in the ground and the crib erected above the ground. I haven't been able to figure that one out yet.

TV: I'd think that he's on top of the ground; that's the only reason why they put him there. They couldn't dig the grave. They generally put something over the grave, like a roof.

RH: Yeah, the spirit house.

KB: There is one that we also found in Banff. It's a double crib. It has a Christian cross in it, but it has two mounds. That would probably suggest that it was buried above ground.

TV: That's what I think would be there at Mud Creek [IMC]. I camped there at Mud Creek a couple of days once.

KB: So what Natives would have been through this area; that would build a grave site?

RH: I would attribute it to what I call the Jasper House People; who are summarized in the modern way as the cross between the Iroquois and the Cree. In fact with all of the evidence that I've been able to find; I got a lot of it from Rod [Wallace]; like there's wikiups and other graves and stumps and that up in that Willow Creek area. That same general area, but going over to Willow Creek and including those Indian Grave Flats. I think that was their wintering trapping area.

KB: Do you what time period?

RH: Well in the subsequent to Jasper House being relocated up into the Park, which was 1829. I would say it's probably from that time up into the 1900s. But that is just a guess on my part.

TV: You see if it was Indians here; for a hell of a long time those Indians. And as this fur trade becomes more aggressive the Plains Indians started moving in here. And they moved these other Indians back into the mountains. And eventually killed them all. You know about that. And that was over the fur trade. They were going to take over and they did take over. And then during the white mans travel, most of these people who had settled in Jasper were halfbreeds, quarterbreeds. They all had white man names: Findley, Golshe, Moberly, you know. There were no true Indians up there really. Well there were true Indians but.

RH: Well they were Métis when they came to the country. Like Yellowhead; he had blonde hair. And when the Iroquois were down east they used to raid the colonies there and took in white captives into their tribes. And in fact there was a white woman captive; I'm not sure which of the tribes in the Iroquois confederacy, but she was captured and she rose to great status in the tribe. She stayed with the tribe the whole time. I can't put a name on her now, but I read the story. When these trappers were coming out here, a lot of them had a lot of white blood in them. And not only the Iroquois, but what they call to Sotoe, or the Nipising, the Chipewyans; they were all of the Ojibwa confederacy.

TV: From the east?

RH: From the east. The reason they were brought out here was they knew the use of the steel trap for trapping. Whereas the local just used old snare methods or deadfall method, which wasn't quite as efficient as the steal trap method.

TV: See that's what old John Moberly said, that old Sir Henry John when he had established Rocky Mountain House trading post there; that they were pretty well American Indians and they come up there to trade. And it wasn't a strange thing at all to see a white woman that they'd picked off some wagon train. And brought her up in the groups. And he didn't have a dam thing to trade with them but 5 barrels of rum, which he watered down.

RH: Paul Kane, when he was at Fort Edmonton, on his way through to the coast, dances with a very pretty woman who's got blue eyes. She came into the Fort with some of the

Blackfeet and they had this dance. I think it was in the Christmas, New Years area. And she was dancing and he couldn't understand the blue eyes with a native woman. But you know, you're explanation probably fits that too.

TV: That's what he said in his book. But that's what happened to these mountain Indians that were here; they disappeared. There wasn't much country here in the end, without killing each other, but they fought all the time. Run each other out of the country.

RH: I find it a fascinating study of eastern Indians coming into this country in the fur trade and developing their own culture.

TV: I can see them coming because it was a job and they were good watermen; canoe people; they had the canoes. If it wasn't for them, those guys wouldn't have got this far west; David Thompson and all those big fur traders.

RH: If there hadn't been French voyagers and Indian guides the fur trade wouldn't have existed. If they left it to the white fur traders they would have been lost this side of Winnipeg. But this crib burial here, the one we are talking about, the monument pole; I assume that's what it is; we found it laying down; but it's got a squared off top. How long was it Karen?

KB: The top was only about a foot long if that and half a foot wide.

RH: There's no evidence of a cross; no evidence of it having a cross bar. But it squared off about 4 inches by 4 inches, which to me sounded like a monument to stand up by the crib. In fact, the information that Rod had with him, that the archaeologists had provided him with when they found it years ago, indicated that when they found it it was still standing.

KB: That's right, it was largely intact. And then when we found it this large tree had fallen over top it and crushed it.

TV: But again it could have been another person who died in the winter. Because there were Indians all over the country, trapping.

RH: A lot of the Indians that don't get much of play in the history books came over here to trap. Even the Carriers from B.C., from around the Prince George area. And Shuswaps, there were Shuswaps in this area right into the 1930s; people don't know about it (155).

K: Anything else you can think of related to the crib?

TV: I don't know, but that's what I'd guess it would be [a crib]. Some of them even stripped those cracks from the logs; like to keep everything out of there. And they some more of those things, like to cache meat in. Hunters would go up and kill a bunch of game and skin them. And then in the fall, when it was cold, they pack them in there; and

build them to keep anything out of there. And then go home and get their horses to come back and pack them out of there.

KB: How long could you keep fresh game in something like that?

TV: Well in the fall it's cold; maybe it'd keep all winter. But they didn't do that. They'd come back and got them.

RH: This crib you went up to behind John Moberly's, up on the ridge.

Topic: Hoodoo Ridge Crib (166)

KB: The Hoodoo Ridge Crib.

RH: Yep, the archaeologists thought it was another crib grave, but the only thing is it's too big and it's got a floor in it. I maintain it's a tool crib and if you read Shan Harvey. He mentions building a tool crib up somewhere around mile 58 on the Sulphur River, too store tools in. You know they'd use them and then they keep the porcupines from chewing on all the handles and all that. Karen will show you later this crib up in the Park there. And it's not a grave I'm sure that it's something other than a grave.

KB: Well that's this one here [describing location and condition] The pole nailed to the tree used to be attached to a tree on the other side of the crib; this is shown in Park archaeologist photo. Do you know anything about that style?

TV: So a pole between two trees?

KB: Yeah, you'd have that pole and then your crib down below. And I think that pole may have been used to put a canvas over top; so you would have had a triangular covering.

TV: So what's on the bottom?

KB: It's wood, the beams. They've fallen in together.

TV: Where's that at?

RH: Just up behind John Moberly's Flats; right across from the Palisades. Just up on the ridge to the southeast. Tom Peterson and I heard about it from the archaeologists; Rod gave us the information that there's a grave up there. In fact he gave us a picture of it that the archaeologists had taken back in '85. And we spent about 2 weeks looking for the darn thing before we finally found it. But the family history that Lena Olette was that when MacLaggen [sp?] came along to buy them out of the Park, they were just putting their roof on their newest building that they'd built on the flats. So I guess they were getting their materials from back on the hill. Because when you look at the Bridgeland pictures of 1915, taken from the Palisades in the valley, there are no big trees in the

valley. And the only place where there are big logs suitable for construction is further back up on the mountain side. So they'd have to go there for their material.

TV: (181) Well I've looked at a quite few of those cribs in different places. Now that I've seen them I'm sure they were moose caches.

RH: Although if they're really serious about preserving their game they generally like to put their caches up high for the big predators; because the bears could tear one of those things apart in no time.

TV: Oh yeah they would. That's why I think they chinked them up with moss, so that they could smell the fresh meat.

Topic: Athabasca Meeting Place (190)

KB: Athabasca Meeting Place is the next one [describing location and structures].

TV: It's right up close to the river?

KB: Yeah, right at the river there is a slope down; like an access point.

TV: Well that's where they took out a 100,000 ties.

KB: Out of the river.

RH: Are you talking about the Jack Ladder?

TV: Yeah.

RH: It's not quite there Tom; Jack Ladder is a little bit down river from there. But I interpret this as being a railroad construction; this is where the Canadian Northern crossed the Grand Trunk and they would have had to build that overpass there. And it's just opposite where these two railroads crossed. My own interpretation is that it's a work camp for the people constructing the trestle.

KB: So it would be two different companies?

RH: Oh no, well I don't know, but since the Canadian Northern came through after the Grand Trunk, I would assume it's a Canadian Northern. I think they were the ones that had to build the trestle.

KB: So they would have camped there because it would have taken longer?

RH: Yeah, for a period of months to build the overpass. Like Tom Peterson took me there years ago. He thought it was the camp of Jacque Cardinal. And I think the camp belonging to Cardinal is down at Ewan Moberlys. The documentary evidence is Edward

Hermitinger's [sp?] York Factory Express and he describes leaving Jasper House and going through the hills, which are the hills just to the west of Jasper Lake. And they leave the hills and by the end they're at what he calls the Second Lake; Brule Lake is the first lake. And he says there is a little creek coming in there; whether that's Cobblestone Creek or that little spring by Devona, the warden station there, and he says that's campment de Cardinal. And Tom's mother, Constance, she was quite a historical researcher. She thought that campment de Cardinal was right where Ewan Moberly's place is. But Tom had thought otherwise. But I think some of the stuff in this is too sophisticated to be campment de Cardinal.

KB: There are some interesting structures too. [showing site map]. There are trails that go through here. It almost seems like there could have been horses going through this area too. It seems that this site could have been used over and over by different generations. There are big mounds of dirt pile up.

TV: And that's in the same location?

KB: Yes, all these different structures, depressions.

TV: Oh course they would have camps along there when they built the railway.

RH: The Grande Trunk used to cross the Athabasca. The present highway in the Park is the Grand Trunk and where the bridge is across the Athabasca at Mount Morro used to be a railroad bridge. And the Canadian Northern came down the west side of Jasper Lake. And they were running side by side by the Snaring River there. And right by the Palisades they crossed one another. And the old Canadian Northern grade is for a while you follow the Grand Trunk grade right where the present highway is, but you get to this overpass at the Palisades all of a sudden the highway becomes the old Canadian Northern grade. It goes around, you know that big seeping bend, just where the Maligne comes into the Athabasca. There's that big bend when you head into Jasper. I found a Canadian Northern survey pin there, just last year, that I showed Rod [Wallace]. It says CNR on it, but the CNR grade is way, way back up and I don't think that means Canadian National Railroads, I think it means Canadian Northern Railroads.

TV: **(216)** That's where they were shooting those big dynamite holes [?] for the railroad, because they stayed on the south side all the way up. And then they crossed the Athabasca up there at mile 12.

KB: This is a photo of structure #1 (footprint), structure #2 (circle of seats) [giving description]

RH: [regarding structure #2] I would say this is early 1900s. That's my own interpretation.

TV: Those chairs would be there that long?

RH: I don't know. These chairs are up off the ground so they are not rotting as fast as something like a cabin foundation that is right in the dirt. And where they made of pine or spruce, or willow maybe.

KB: They might even be willow; they're quite small. I'm not sure yet, they could be baby pines.

TV: Is there a fireplace there?

KB: Not at that spot. In the middle is a table. These chairs go right around in a circle and right in the middle is a small square table, maybe at most 2 ft by 2 ft. It's pretty small.

TV: It sounds like you were down there where they had the corn roast.

KB: The corn roast?

TV: Yeah, they used to have corn roasts there all the time and drink beer.

RH: Who's this?

TV: People in Jasper.

RH: Residents from Jasper?

TV: Oh, 50 years ago.

RH: Maybe it's later than we think.

KB: Because that's near the rodeo grounds too, the original.

TV: Yeah, they used to be right out there on the flats. I have some pictures of them, but I lost them.

RH: Maybe what you are saying is right Tom because I can't see the railroad contractors building sort of a sophisticated structure with chairs.

TV: They had the corn roast down at the Jack Ladder. They called it the Jack Ladder and that's where you went to party. For somebody's birthday or something.

RH: The Jack Ladder is a little further down steam from where this is.

TV: But you went in on the same road.

RH: Yep.

TV: Well I don't know what else it would be.

KB: (234) Another idea we were thinking was that the Palisades, where the Swift family was living across the way. And maybe the Swift kids went over there and found all these remnants and decided to build a fort or place house. On the table, there is a tree growing out of the middle and on the tree is a wire heart shape, made out of water. It sounds like kids.

RH: Somebody went down to drink their beer at night.

TV: There use to be some great old parties going on down there.

KB: Okay, so maybe a party place. The other structure located at this site is a dugout. [describing location and structure].

TV: With all those construction camps, that's the first thing; they'd dig a dugout. Put something in to stay cool; like your meat.

RH: What did they use to call them, root cellar. That's it.

KB: When we found it there was a dish, like a dog dish with stone speckle colouring.

Tape #9: Side B (000)

RH: Tom told me an interesting story about his site we're talking about here, across from the Palisades, there was a warden in the park. He used to go down there digging bottles and cans right in that site. I guess he found a garbage dump. Oh course that's a no-no; it's an archaeological site. I guess some people that were interested in history, like Tom's mother Constance Peterson got pretty upset with him doing that. So they told him he better cut this out or we'll turn you in.

KB: We did find some glass bottles there with a Hudson Bay symbol on them. About the size of a mickey. Small bottles. The bottle top had 1818 on it. I don't know if that's the establishment of Hudson Bay Company.

RH: Oh no, that was May 2, 1670.

KB: Oh okay, so maybe this bottle was produced 1818.

RH: Or else it's not related to the date.

KB: Maybe a code number?

RH: Yeah.

KB: It say's "Pro Pelle Cutem". What does that mean?

RH: Means skin for a skin.

KB: That's etched on the bottle. And then there are bottle codes, just numbers.

RH: Was the bottle complete or broken?

KB: It was complete. So that's the AMP site and it looks like it could have been occupied for multiple periods.

Topic: Ewan Moberly Homestead (020)

KB: So the next one is the Ewan Moberly Homestead.

RH: It's pronounced "A-van"; in the documentation that goes with their removal from the Park, they call him Evan. And this creek up here at Moberly Creek, there's a creek they call Evan's Creek. And that's where he moved his family up to Grand Cache. But it's one in the same, Ewan and Evan.

KB: Why would you spell it with a 'w'?

RH: I don't know. A lot of people say "E-wan".

TV: I wonder where old Bill Moberly's place was, up there.

RH: It was close to the Palisades, according to historic documentation. Just as you come in under the railway trestle, going in to the Palisades there, you turn immediately to you left and it goes down to the Palisades. And it makes a turn down and starts down towards the Celestine. You go down there about 300 or 400 yards and there's a trail that goes up the bank of the road there. And there's sort of a little flat area in there. And Tom Peterson and I think we found the outline of a cabin. Because historic documentation states Billy Moberly, William, used to work together with old Swift on a 101 different business deals. And apparently Donald MacDonald, the same guy I was referring to earlier, related to Caroline MacDonald, up there in Grand Cache; the cabin at one time belonged to him. He must have sold it or traded it to William Moberly. Adolphus was over at the airport, right across from Isadoor Findley's; because we've got Bridgeland's pictures of 1915 show Adolphus' cabin sitting out at the airport. Unfortunately we haven't got the right angle to catch William's.

TV: I often though it was funny that John Moberly was building over there across the river. Pretty tough forging that river.

KB: I've found lots of information about the Moberly's. I don't know if there are any interesting little stories you know about the Moberly family.

TV: Well no, I just always figured that old John Moberly he pulled out and left that woman there with a whole bunch of kids. And went back to some women over there in

Saskatchewan. And never even mentions he had a family when he wrote the book. Never mentioned his family. And I know all these guys; I worked with them for years. All good people. That sure disappointed me. That old Queen Victoria knighted the guy, Sir Henry John Moberly, for the work he'd done with the Hudson Bay.

RH: [regarding EMH] Lena Olette can remember her grandfather talking about digging and digging and digging. But she couldn't remember what he was digging. When I showed Lena these are his barns, she said that's what my grandpa was talking about. They dug and they dug and they dug the barns. You know where this cabin is, back on the flats [homestead]? Well if you go right straight down towards the river only slightly off to you right of these buildings. Right beside the river or maybe back 50 yards, there is sort of a big prominence there. And they went there and they just dug the face of this hill out all by hand and then they laid logs and that across it to bridge it. To form the roof. Of course now all the logs are rotten and collapsed in. To build barns. I guess they kept their cattle in and their horses and whatever in barns because MacLaggen mentions when he bought them out that there were barns included and I often wonder; you can see where the buildings, the house and that was, but where the hell are the barns; and I was up there about two or three years ago and I started going further and further away from the buildings and all of a sudden I stumbled on these dugout areas. And these have got to be the barns.

TV: They lived in dugouts for a while. That might have been something you were looking at.

RH: Maybe they started as dwellings and then finally they built their sophisticated houses.

TV: I think they lived in dugouts for quite a few years.

RH: The thing that got me about the one house there is it's just like the Ewan Moberly house, that sophisticated log work with the dovetail joints. That's just a bought as sophisticated log work you can come up with. It takes a long time to fit those.

RH: (110) When Frank Camp and Constance Peterson sort of started the Jasper Yellowhead historical society, they went to the Palisades. And I have a list of the inventory of all the stuff they took out of the Palisades, all supposedly belonging to Louis Swift. And I said to Tom Peterson, "where is all of this stuff now?" It's just disappeared. No one knows where it went to.

TV: Fred Brewster, he had two 40 inch Rams; big heavy head in his house and he really admired them because they shown the two extreme examples of the same species of sheep. And I found out where they were and he took them out of the Palisades and put them in the compound. And they took them out to the regional office to Calgary. And it's just like pulling teeth, it took them a law suit. They didn't return them. They're back in the museum, but they haven't put them up yet I don't think.

Topic: Evelyn Creek Cabin (138)

KB: I can show you the next cabin, it's called the Evelyn Creek Cabin [describing location]. Supposedly it was built by the Ruddy brothers, Russell and Gordon. I don't know if you know them at all.

TV: What would they build a cabin there for?

KB: When they worked at the Maligne boathouse in their early 20s; they'd go up there on weekends. I guess it was a party spot. So we found their secret hide out.

Topic: Edna Lake Structure (170)

KB: The next one is called Edna Lake Structure [describing location and structure].

TV: I would guess it would be construction; when they were doing the railroad there.

RH: That's my interpretation as well. Because there is a picture taken from almost that location of the Grand Trunk Pacific and the old Lucerne station is sitting there beside the present highway; right off the opposite end of the lake. And there's some railcars sitting on the tracks. And there's a little cabin just sitting on the south side of the tracks, which is probably for maintenance. But there is evidence just down from this cabin; do you know of this cabin just below this site? It's east and slightly down hill from Edna Lake. And there is evidence of a building in there. This just below the root cellar, which I interpret it as.

KB: We didn't see that other one. How far is it away.

RH: Oh, in a direct line about 300 or 400 yards.

TV: Construction camps in the early days, that's the first thing they would have done, making a root cellar.

Topic: Ram Pasture Structure (193)

KB: There is a similar structure across the highway, off Celestine Lake Road. It's called Ram Pasture Structure [describing location].

TV: Is that dug in the back too?

KB: Yes.

RH: That's a new one to me.

TV: Yeah, I don't know that one either. How old does it look like it might be?

KB: We're thinking it might have something to do with railroad. Like if you had stored something like dynamite in the bank. It's north-facing slope; it's not going to get a lot of sun. It's going to stay cool.

TV: Well that's what it would be for sure.

RH: I tell you, if that is related to the railroad and is fairly modern, this past century, Bud Kilns [sp?], might know. He was station at Miette and another place along the railroad in his early days. Long before he went to work for the mill.

Topic: Morro Peak Structure (312)

KB: The next one is very similar to the Ram Pasture Structure, it's called Morro Peak Structure [describing location and structure].

TV: Yeah, that would be all construction days.

KB: Railroad?

TV: Yeah.

KB: We figure, because it's in a pair, that it's probably for dynamite and caps; stored separately. Bob, you'd say the same thing, railroad construction?

RH: I would say so, that'd be my guess.

Topic: Brazeau Structures (322)

KB: The remaining structures are in Banff, but we could discuss the one's we just visited in the Brazeau. There is the wikiup at Isaac Creek. Bob suggested it belonged to Isaac.

RH: Well if you look in geographical place name books, they attribute the name to Isaac Plant. Just on that along I would associate the wikiup with him.

KB: That makes sense. Do you know when he was down there?

TV: Oh that'd be 80 years since Isaac was down there. It'd be before the '20s. He'd be in the Park there.

RH: the Park boundary on the Brazeau River was established in 1930. That's when Charlie Matheson went down there as the first warden. So it would be previous to 1930 because they wouldn't let them trap in the Park.

KB: So what would you store in a wikiup? What would you use it for?

RH: For living; you'd live there.

TV: If he lived there, he'd have a better outfit than a wikiup. He'd of built a house; you know he was married. Had a family.

RH: Well it's hard to say you know. Maybe this was just an over night stop. Maybe he had a cabin he called his permanent structure there and as he did his trap line he stopped here and stopped here.

TV: If I had known you guys were going down there I would have got you to investigate another place down there. You know that cabin at Arête; well we were down there a long time ago with a bunch of people. And they went fishing in the falls. And Bart [?] was telling me he was down there with Tom McCreedy [?] at a little lake up there on the right hand side of Arête. And he said they went up there and caught a bunch of fish for supper. He said lets go up there. There's better fishing than up at the falls. So we rode up the trail there and back up to the left of that cabin there; a trail goes up in there. It'd be about a quarter of a mile or less; there's an old cabin there. We looked it all over; a funny little old cabin; it was really old.

KB: We would have walked by it.

RH: Yeah.

TV: There is kind of a creek where that cabin is; and it's up that creek; on the right hand side. It looked like there was a trail cutting up to it, years and years ago.

RH: Maybe that was Isaac Plant's cabin.

KB: How far up the creek would you say? Maybe a mile?

TV: No it wasn't that far. Maybe quarter or half a mile.

Topic: Bear Tree Meadows Cache and Grave (348)

KB: Then between Isaac and Arête we sampled 2 structures at Bear Tree Meadows. One was a cache.

TV: Bear Tree Meadows?

KB: Does that sound familiar?

TV: No.

KB: Supposedly it's named that because a bear was snared up there.

RH: Yeah, they had some biologists up there tagging grizzlies and they caught on there.

KB: Yeah, it was attached to a tree with a snare and it got so upset; it was running around the tree and had this big dugout he created. Right in the middle of the meadow, so it's called bear tree meadows. There was an equipment cache off the trail; we had had to go about 500 m off the trail to the east; there was a cache. No roof; maybe 2 m by 1 m.

TV: Trial crew.

KB: Trail crew up there.

TV: Yep.

KB: Then there was another one about 100 m south of it. And it was smaller diameter beams; on a bluff. Rod Wallace was saying it could be a crib, like a burial site. And there is no evidence of a cross. These two structures were really close to each other. So I don't know if someone maybe on the trail crew had died and they buried him up there.

RH: I attribute them to Natives. The Stoney were all in through that country. I would call them Native graves.

TV: Yeah, that's what I'd guess it would be.

KB: Then after Arête, between Arête and Brazeau, about half way again, there's Mount Aztec and Aztec Meadows. A structure was just off the trail (362).

Tape #10: Side A (000)

KB: So just in the meadow and right by the river; a beautiful spot too; 10 m off the trail a little bluff and there's a crib site there.

RH: Frank Camp told me about this crib. It's a very large crib, dimension wise.

KB: I'd say it's 1.5 m by 2 m. It was bigger than the Bear Meadow crib.

RH: I was picking Frank's brain about 5 years ago about all the historical stuff along the Brazeau River. And he told me about this crib burial and at the time he was down there, just after the war, when he got out of the service, he said it was marked with a cross. And I had never heard of a crib burial being marked with a cross. But something clicked in there; at the time I used to go up to the Jasper Historical Society meetings when Rory Flanagan was the president of the group; with Agnes and Mark. And we'd start talking history back and forth. And Agnes said to me that there was a crib burial down on the Brazeau River that was the burial place of a young Catholic priest. And that stuck in my mind. What the heck would a young Catholic priest be doing down on the Brazeau? So anyway when Frank told me about this and showed me a picture of it, I asked him if this could be the young Catholic priest burial that Agnes had told me about. And Frank wrote back and said, "Well she probably knows because his brother-in-law, Charlie Matheson, had been the first warden down there. And she probably got that information from

Charlie". So on my own I was getting more frustrated that this was not documented in history. So I sent some money into the Edmonton provincial archives; all the Catholic records are written in French; and I can't read French, so I had to get an archivist who could. I told them my suspicions based on what I'd hear from various people and I said "is there anything in the Catholic archives that would tell us who this Catholic priest was?". And they went through it; I gave them only about \$25; the only had about an hour to go on \$25, but the archivist who did the research said there was nothing she could find in the Catholic records about this young Catholic priest dying.

TV: And that grave is between Arête and Brazeau?

RH: Yeah, this is what they call Aztec Meadows; and I'd imagine that was a Native camping ground. Beautiful place to keep horse. There's just a bit of a rise off the meadow.

KB: It's just to the southeast, along the river, and the trail is to the west side of the river.

RH: This ridge comes down to the River and this grave is right up on the open ridge.

TV: Yep, I know where that's at; I saw it.

RH: The cross isn't there anymore.

TV: There was a cross there when I saw it.

KB: Yeah, I was telling Karen that I was sure Frank told me there was a cross associated with it, but we could find no evidence of the cross.

TV: You've got to come down the river, before you get to Arête, and you look across the river there and there's a campsite there. Did you notice that; across from the south side of the river?

RH: **(038)** Rod was pointing out where these campgrounds were. I saw some of them, but some of them I didn't.

TV: Just down below there, there is a trail that goes pretty close to the river and looks like a good forge there. I didn't cross it, and you climb up and there's a trail up there and there's a grave there; that's the one I'm talking about. It had a cross on it. I don't know, 3 or 4 miles above Arête. But that's where that grave was with the cross on it.

RH: That pretty well describes it.

KB: When were you there?

TV: A long time ago.

KB: I'm just trying to think when the cross was there.

TV: Oh, it was when we were outfitting down there; 50s or 60s or something like that. But some of them crosses were put up by outfitters you know.

RH: I was speculating if he was a Catholic priest where would he have come from: Rocky Mountain House, St. Albert, or Lac St, Anne. You know, if there is a large group of Native people, he'd be there to spread the word; they would pick a younger fellow because he was going in the mountains; rugged living. And he may have gone there; and whether he drowned in the river or had some had some sort of an accident it's hard to say. But the source, Agnes Strutsford [sp?], the source of my information. When I told that to Frank, he didn't argue with it at all.

Topic: Brazeau Junction Cabin (137)

KB: There's also a structure near the Brazeau warden cabin; it might be a Jimmy Simpson cabin. It's quite a big structure; just behind Brazeau cabin; outside the fence area. By Brazeau River before the bridge to cross. It has a hearth built off of it; it's about 7 m by 5 m. It's pretty big. A low door; it's about 5 beams high [describing location].

RH: 10 minute walk from Brazeau cabin.

TV: I think it's the original.

KB: The original Brazeau cabin?

TV: Yep.

KB: Do you know when that one was built?

TV: Well we had come through there in 1940, from Sundree, with a bunch of horses; 39 head of horses. We camped there and the Brazeau cabin was an old cabin. I think they took it down when they built the new one. Real old cabin. And there was another one back against that far fence. The back over here was an old building, looked like a barn, pretty much where that one is, but it was pretty well rotted down. I figure that that was maybe the original.

KB: This is all trees now, where the cabin is.

RH: I'd never seen anything like it because what I call the north wall has a hearth built into it. They sort of dug the earth out about two feet deep and they've lined it with rocks. But above that, the chimney is just like a crib burial. They've taken logs and I take it that was to take the smoke out. Must of kept a pretty small fire in that hearth.

TV: A lot of them old people that were there originally they knew how to do those sort of things. If it was an over night and you had no stove, they had to build a fire anyway in the wintertime. Like them wardens used to stay out in that area winter and summer. Rod Wallace, you know the first job he had when he came out from Ottawa to the Park was a survey of the early outfitters in the Park. So he set up a meeting here, with Red Craten [sp?], Jed Groat [sp?], a bunch of us down here. And that's when they started moving the horses out of the Athabasca valley. So Rod was making notes, he had a young fellow with him. And old Red [?] told him that one time there would be at least 200 head of horses in the Athabasca valley all winter. They wintered here. And that was hard for Rod to believe, but the government wintered their horses up Buffalo Prairie and the outfitters had both sides of the Athabasca right down to the Park gate. And there would be easy 200 head of horses there, but he couldn't visualize it I don't think. That's the only time I ever saw him. He must of went back with that report to these people that were demanding they had to move their horses before they eat up all the grass and grain. And they must have just looked at this report and threw it out.

RH: (174) Arvin Hillworth [sp?] told me that Red Craten used to pasture, I don't know if he wintered the horse there, at Mushroom Patch.

TV: Yeah, he had a corral there. And he'd run the horses up the Rocky. And Jack Hargraves had his horse down near Pocahontas, along the lake there.

RH: I forgot I have these pictures; they were taken just last year by Frank Camp and the young warden. There's the wikiup behind Isaac Creek. And the grave sites.

TV: You know a wikiup like that looks like these ones down in the Selkirks.

KB: Who would have built them?

TV: To trap; to poach out of. Which might have been what these are too. Because I can't see old Isaac living in a place like that when he could build a house.

Topic: Four Point Lean-to (195)

KB: The last structure is right next to Four Point Cabin, a lean-to/ wikiup. What do you think that would have been for?

TV: I think they were shelters for the wardens when they were travelling in the winter there. Some place they could get into if they got laid out in a big storm or something.

KB: So maybe it was built before the Four Point cabin; it's really close.

TV: Yeah, well that Four Point cabin wasn't built until the '50s.

KB: Okay, so maybe that was used first.

RH: We found the remains of a wooden box in there; when it was sort of fallen apart.

KB: There were some stones in a small circle; probably for a fire pit.

TV: You'd get smoked out by these things; you had to put a fire in to keep from freezing.

RH: But you'd choke to death by the smoke.

End of Interview

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23 March 2004

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University of Victoria
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March 22, 2004

Don Bourdon
 Whyte Museum of the Canadian Rockies
 111 Bear Street, Box 160
 Banff, Alberta, T1L 1A3

Dear Don Bourdon [Whyte Museum of the Canadian Rockies]:

This letter will confirm our recent telephone conversation. I am completing a master thesis at the University of Victoria entitled "Dendroarchaeological and Contextual Investigations of Remote Log Structures in Jasper, Banff, and Kootenay National Parks, Canada." I would like your permission to reprint in my thesis the following photographs:

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By: DJ Bowdler

Title: Head Archivist

Date: March 29/04

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March 26, 2004

Bill Perry
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 Email: bill.perry@pc.gc.ca

Dear Bill Perry [Parks Canada Agency]:

This letter will confirm our recent telephone conversation. I am completing a master thesis at the University of Victoria entitled "Dendroarchaeological and Contextual Investigations of Remote Log Structures in Jasper, Banff, and Kootenay National Parks, Canada." I would like your permission to reprint in my thesis the following photographs:

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By: Bill Perry

Title: Archaeologist

Date: April 14, 2004



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29/03/2004

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April 20, 2004

University of Victoria Tree-Ring Laboratory

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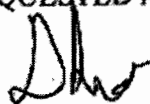
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[University of Victoria Tree-Ring Laboratory]

By: Dan Smith

Title: Director

Date: April 21/04

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April 2, 2004

Ole Heggen
 Department of Geography
 University of Victoria
 P.O. Box 3050, Victoria, BC
 V8W 3P5

Dear Ole Heggen:

I am completing a master thesis at the University of Victoria entitled "Dendroarchaeological and Contextual Investigations of Remote Log Structures in Jasper, Banff, and Kootenay National Parks, Canada." I would like your permission to reprint in my thesis the following map:

1) Map: Base Map of Jasper, Banff, and Kootenay National Parks, 2003.

Description of original work: Map depicted park boundaries, major roadways, and townsites.

The excerpts to be reproduced are: A modified version of the map that includes the addition of my study site locations.

The requested permission extends to any future revisions and editions of my thesis, including non-exclusive world rights in all languages, and to the prospective publication of my thesis through the National Library of Canada and its agents, including UMI (University Microfilms International). These rights will in no way restrict republication of the material in any other form by you or by others authorized by you. Your signing of this letter will also confirm that you own [or your company owns] the copyright to the above-described material.

If these arrangements meet with your approval, please sign this letter where indicated below and return it to me at the address included at the beginning of this letter. Thank you very much.

Sincerely,



Karen Brelsford

PERMISSION GRANTED FOR THE
USE REQUESTED ABOVE:



Name: Ole Heggen

Date: APRIL 2/2004



Natural Resources
Canada

Geomatics Canada

GeoAccess Division
850 - 615 Booth Street
Ottawa, Ontario
K1A 0E9

Ressources naturelles
Canada

Géomatique Canada

Division GéoAccès
850 - 615, rue Booth
Ottawa (Ontario)
K1A 0E9

PERMISSION TO REPRODUCE MAPS

April 1, 2004

Ms. Karen Brelsford
University of Victoria
Department of Geography
P.O. Box 3050
Victoria, B.C.
V8W 3P5

Dear Ms. Brelsford,

This is in response to your letter requesting permission to reproduce portions of two National Park's maps.

Geomatics Canada (GC) of Natural Resources Canada (NRCan) authorizes you (the End-User) to reproduce portions of the Maps of Jasper National Park (1985) and Banff, Kootenay and Yoho National Parks (1985) for the sole purpose of showing study sites locations for a master's thesis and for no other purpose whatsoever and subject to the following conditions:

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- 3) That this authorization applies solely to Ms Karen Brelsford;
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- 6) The End-User will maintain adequate records in case of audit to confirm compliance with the conditions herein;
- 7) That no royalty fee will be payable by the End-User to NRCan;

...../2

Canada



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This authorization will come into effect upon receipt of a copy of this letter signed with an acceptance by Ms Karen Brelsford.

Sincerely,



Douglas O'Brien
Program Manager
Geomatics for Connecting Canadians

Contact person: Claire Gosson
Tel.: (613) 992-4134
Fax: (613) 947-2410

THE CONDITIONS STATED HEREIN ARE ACCEPTED:

Ms Karen Brelsford


Karen Brelsford

M.Sc Candidate
Title

April 20, 2004
Date



ANNEX 1

Copyright to be printed on the map or in an acknowledgements section

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