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MANAGING OUTSIDE:

An Ethnographic Study of a Cree Tallyman of Eastern James Bay

by

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A thesis submitted to the School of Business, Department of Management

in conformity with the requirements for the degree of

Doctor of Philosophy

Queen's University

Kingston, ON

November, 1999

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*In memory of my dearest aunt and godmother, Ann
1936-1999*

*And in recognition of the love and support from my parents, Basil & Jeanette, my sisters Allison & Dawn,
and of course, the new leaves – my nieces, Kate & Victoria.*

Happy trails...

ACKNOWLEDGEMENTS

This dissertation gratefully recognizes the support and encouragement of Freddy and Annie Jolly. Freddy, you were one of the best teachers that I have ever had, and Annie you gave me the space that I required in order to learn the lessons that I needed. I would also like to thank Lillian Diamond for her friendship given so generously. I hope that our path together will be a long one. Meegwetch!

Barry, what can I say that I haven't said before? You were an amazing man to follow to an amazing place. What a wonderful life we had. I'll always remember the poetry of it all and 'a black dog on blue ice...' In addition, I would like to make a special acknowledgment of my clan – one heart, many lives. Thank you for everything, but you already know this.

Many other people, both Cree and non-Cree, helped me with this at times overwhelming project. In James Bay, these include: Lillian Moses, Edward Gilpin Jr., Walter Jolly, William Mianscum, George Wapachee, Lawrence Jimmiken, Sam & Nancy Blacksmith, Darlene & Clarence McKenzie, Mark, Catherine, Karel, Julie, Stuart, Nadine, Judith, Mehta, Max, Jake, Bessie, Silas and Jasmine. Also, sincere gratitude must go to the Eastmain police officer who drove 200 km to pick up an envelope filled with grant money that I dropped at the corner of the Eastmain access road. Meegwetch!

I would like to pay special tribute to my supervisor, Bill Cooper, who encouraged me to take risks and pursue my dreams while at the same time pushing me farther than I had wanted to go. Thanks Bill. I've enjoyed our journey, *especially* the last summer. Of course, from Queen's, I would like to pay tribute to the input and unwavering support of John Dowling who inspired me to pursue ethnographic research and organized my first bout of field work in Guyana. Also, I would like to thank Dan Monieson, Professor Emeritus at Queen's, who supported my philosophical journey in so many ways. Dick Preston – I was so lucky to benefit from your anthropological expertise. Maybe we should journey to James Bay together sometime...who knows but why don't you think about it? In addition, I would like to thank Rick Cuciurean and Fikret Berkes for their valuable advice and insight on the James Bay Cree. Thanks must go out to many others: José Barreiro, Alan Richardson, Ida Berger, Merv Daub, Norman MacIntosh, Peter Taylor, Nigel Roome, Andy King, and Doug Snetsinger. Meegwetch! Thanks also to Drew Harris, Nancy Maruscak, and Doug Harper for design input on the photographs, and a big thanks to Carolyn Smart for teaching me how to write and workshop my creative thoughts. I loved your classes. I would especially like to commemorate the help and support given to me by Amy Segal -- I miss you Amy and I will never forget your compelling belief in the need for artistic approaches to research.

And not to underestimate the value of friendship, I would like to say thank you to Lady Tinor for reminding me that I had to get outside even though I now work in an office. Also, to my die-hard friends, Barb, Beth, JAM, and Bruce – thanks for always believing that I would make it. Also a special mention goes to Susan and Tony who took me to Cuba for some fun and relaxation when I was really down and out. Muchos gracias amigos!

Also a great deal of thanks goes to Thaddeus Müller, a sociological wonder that came at the end but also at the beginning – thank you for improving Chapter 2, looking after me when Ann died, and in general, for making me believe that chapters can be rewritten. See you in Berlin...

I would also like to gratefully acknowledge the ever-important financial support of the Northern Scientific Training Program, D. D. Monieson, the Ontario Graduate Scholarship Program, Queen's University, Queen's Creative Writing Award, and the Queen's PhD student research fund. Also, I sincerely appreciate the flexibility shown by The North-South Institute, a busy office that allowed me to take numerous unpaid absences to finish what seemed unfinishable. I would also like to thank Dr. Peter & Jennifer Waight for providing me with "free digs" on numerous occasions as I wrestled with it.

Finally, I would like to thank Rennie Wapachee for fixing my truck in the dead of a James Bay winter. Meegwetch!

Abstract

My dissertation presents ethnographic findings on the *Cree tallymen* of eastern James Bay, Canada. Tallymen are the senior hunters in charge of the family hunting ground. A leader of the family hunting group, this is a grassroots traditional managerial role within Cree culture. By living and working with my key informant, Freddy Jolly, I discovered that the tallyman's approach stemmed from a different 'cosmology' of management (Weick, 1993), one that was focused on making managerial sense of the natural environment. Through participant-observation, I discovered that the tallyman was ecological-embedded in the natural environment, and that this was a critical dimension of his management practice.

Simply put, tallymen 'managed outside.' The bush was not a place that Freddy or any other tallymen visited -- it was a place where they lived and worked. From the ecological location of the bush, tallymen developed and enacted their management practice. 'Managing outside' can be conceptualized as a form of ecological embeddedness. Tallymen believed that their management approach emerged from the bush and their managerial perceptions. beliefs, and practices reflect this form of ecological embeddedness. Research findings describe this approach. During my field work , ecological-embeddedness was demonstrated by tallymen through at least six dimensions: 1) the ecological location of the management practice, 2) the style of management, 3) the seasonality of management practice, 4) a reliance on environmental sense-making in management, 5) the belief that management wisdom came from the land, and 6) the need for ecological legitimacy among leaders. A discussion of how the

tallymen's ecologically-embedded approach may have application within modern management practice and theory is also presented.

While potentially a powerful template for sustainable management, my findings also indicate that the tallymen's approach is not a perfect system -- conflicts between managers may happen. In addition, gender relations may be an important area for future research. On a personal level, my field relations were occasionally fraught with conflict over gender roles and future work may wish to examine the generalizability of such experiences among Cree management. Research findings present a critical look at the tallymen's approach, including a discussion of gender and the animal rights debate. In addition, research findings also examine the impact of economic development on the tallymen which has resulted in a loss of control over resources, a degradation of existing natural resources, and ultimately a loss of respect for the tallymen. This has further created a schism within Cree culture, as the regional and local band councils make decisions affecting the tallymen's traplines.

My dissertation makes three contributions to management studies. First, it is one of the first empirical examinations of indigenous management practice. Second, findings indicate the central importance of ecological embeddedness to the tallymen's management practice. This work contributes to the organizational literature by introducing the concept of ecological embeddedness. Finally, my dissertation argues for the legitimacy of creative forms of discourse within academia. By presenting poetry, prose, and photography alongside more standard academic text, I hope to present a case for the creative expression of research. By doing so, my intention is to provide richer and more emotional insights into indigenous management.

PROLOGUE

The woman was like an indoor cat. She sat inside, reading papers, typing notes, making phone calls. She was organizing herself; organizing her thesis. Trying to gain access. From inside. Occasionally, as she sat in her office, she looked outside and saw crows flying. She envied them a bit. Eventually, she decided that she really must get out. So she tried -- every day, or almost every other day, or quite a few times a week. Mostly, she went running outside. But after her hip started to act up, she went biking. Climbed onto that old mountain bike, and zoom, off she went. 16 km, right down the middle of the new Eastmain road, the one that eventually leads into the James Bay Highway. It was an all-weather road. A filled-in road.

One time, the women stopped and had a long look round. She looked up at the black spruce and down at the muskeg. She took in the electric orange of the tamarack as its world turned dormant in the late fall. Breath-taking, her thoughts went silent and she quietly watched a bird. A crow rose up from a pond, squawked out her arrival and circled back to see if she was gone. She kicked herself for not bringing her camera.

As she pondered this, she realized that she could see the imprint of the old road -- a curving swath of landscape, glowing with yellow straw in the fall, glimmering with whiteness in the winter. No gravel. Not a permanent road but a managed trail just the same. One day, a local man told her a story about the road. Two years ago, when they were building it, the all-season road, they had to add a lot of gravel filler. They had to lay in a serious amount just to fill it in so that the road would be stable even when there wasn't ice. Now, the old winter road didn't mess with the muskeg. It just let the ice fill it in, fill it out. Nothing permanent. But that meant that Eastmain was cut off in the

summer, except by boat or plane. And now that they wanted economic development, they had to have a permanent road.

Anyway, the construction crew spent a lot of time filling in the landscape in order to build the new road. One day, they came to a spot where the muskeg just wouldn't fill in, kept drinking up the gravel. A Cree man on the crew told the foreman that they should change the plan, go around the deep spot. But the foreman was bound and determined and in the gravel went. Pouring and filling, disappearing and sinking. They spent the whole day at it. "Could have poured the whole of James Bay in there and still not had a road," she heard later. "Muskeg's revenge." The crew kept trying but the sphagnum moss was boundless and indeterminate. Finally, the foreman relented. They were spending too much time, too much money. "Just move the damn road," he said.

It took nearly two years but now the road was permanent as planned, with an extra curve or two. The new road was wide and ugly-grey but the woman liked being on it because it took her into the wild outdoors, into the bush. Well, it took her alongside it anyway. And off she went, dressed warmly, cycling, cycling, cycling.

On these trips, she often wanted to go into the forest. But she was always a little intimidated by the muskeg, scared of slipping into the whole. But the more she went out, the more she wanted to do it. Go out into nature, get off this road. Next time, she would bring her boots. Next time.

A few days later, she asked her male companion, "Hey, let's go out!" She said it like it was a big treat, which for her, it was. He didn't understand this.

“Go on your own,” he replied. “I want to drink my coffee and listen to the news.” The CBC was on the shortwave. She paused for a moment and then said, “But I don’t know how to get *there*.”

“Get where?” he asked vaguely.

“Get out into the bush. Get out there. *I don’t know how to do it!*” Her voice cracked at the end. He looked up. “What?,” he asked, his curiosity getting the better of him. So she tells him a story about how, when she was a kid, her family used to visit an uncle who lived in Parry Sound.

“The closest I got to the woods by myself,” she said, “ was when we’d all go snowshoing up there as a family. Bundled up warm, with a flask of hot chocolate, one two three ten!, off we’d go.” She told him about how the forest was thick and white with silence, how the pine boughs were all laid out like Christmas. How the three German shepherds would bound ahead, blazing a trail through the snow.

“It was beautiful..., you know?” she paused as she took a sip from his cup, “But somehow, I’d always try to lag behind, stand still for a moment while everyone else moved on without me.” She explained how she would turn to the left or maybe the right and walk on for a bit until there was no more path in front of her, just the snow, just the trees, just a girl alone in it. She told him how she’d hold her breathe, after she’d sucked in all that nature.

“I’d stand there until I heard my name called,” she said. “Then I’d catch up.” The story was finished. They were both quiet for a moment. Then he told her how he’d grown up like Huck Finn. “Lucky you,” she whispered.

“OK,” he said. “Let’s go.”

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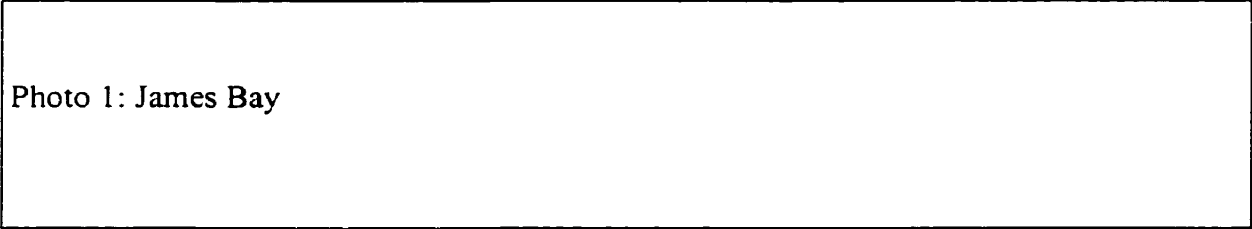
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CHAPTER ONE: INTRODUCTION

"The role of the tallyman has always been to look after the land, the animals, the fish, the birds and the Cree people." Freddy Jolly, Cree tallyman, (1997: 13).

Photo 1: James Bay



1.1 James Bay

I moved to James Bay in the Fall of 1995. Just before Moose Break, with only a mild wind, I arrived in Nemaska before the snow came. My partner Barry had been teaching in the local Cree village since early August and I had moved there in solidarity. While I did not know what I would end up studying, I perceived it to be the start of a great learning adventure. I was not disappointed.

Unexplored by most Canadians, I discovered James Bay as a land of boreal forest, muskeg and long expanses of black spruce. It was, and still is, a place of rivers and lakes, of rapids, and of ice. For a large part of the year, there was snow and lots of it. In my first experience with the subarctic, I found that winter arrived in October and did not leave before May, that the Bay itself was so large that it could not fully thaw until the end of June. In the short summer, I also found sandy beaches and wave upon wave of black fly and mosquito. I slowly learned that James Bay was the place that the Cree call *Eeyou Astchee* – the people's land.

In geographer's terms, the eastern James Bay coast encompasses three major geographical zones: the coastline along the Bay; the lowlands (a coastal plane stretching

inland); and an elevated plateau. Six major rivers are located on the east coast and on the southern tip of Hudson's Bay: Great Whale, La Grande, Eastmain, Rupert, Broadback and Nottaway (see map for details). In addition, the Caniapiscau River flows farther inland and to the north. Within James Bay, there are extensive populations of fish, birds, and mammals. On a more informal basis, the Cree refer to this ecosystem as '*the bush*' (Ohmagari & Berkes, 1997).

Very early on, when I was still trying to figure out my way around a village of five hundred, I met a tallyman on the main street of Nemaska. Unlike many Cree who were shy at first, Freddy Jolly came right up to Barry and I as we walked towards the store. Weighing over 250 lbs., with no front teeth and dressed in rubber boots and hunting khakis, Freddy seemed huge and a little threatening. Fresh back from moose hunting, Freddy was in a good mood. He wasted no time on introductions. With a big smile, Freddy loudly assured us that he had been responsible for hiring Barry as a teacher. We smiled back and said thank you. He also told us that he was a tallyman and that we should visit his trapline. "Come to the bush!" he said. We smiled again and politely thanked him.

But initially, we did not take Freddy up on his offer, though he continued to repeat it each time he saw me. Certainly, the bush sounded interesting. But what I really wanted to do was to get on with my research. I was worried about focusing too much on leisure. I wanted to confirm my dissertation topic before I went out to enjoy the wilderness. And practically speaking, it was difficult to get out from the village; that first year, we had no vehicle and neither did Freddy.

At that time, I had no idea that a Cree tallyman was the traditional manager of the land. I had no idea that this was even interesting. I did not realize that in the future I would choose to physically relocate myself into the bush. In the Fall of 1995, I had no idea that Freddy, in his self-proclaimed ambassadorial role, had just provided me with rare and unusual access for management research.

1.2 The James Bay Cree

Academics date Cree occupancy in James Bay from shortly after the glaciers melted, roughly five thousand years ago (Feit, 1995). Historically nomadic, the Cree now live in nine communities throughout the eastern coast of James Bay (see map): Nemaska, Mistassini, Ouje-Bougoumou (OJ), Waswanipi, Waskaganish, Whapmagoostui, Chisasibi, Wemindji and Eastmain (GCCQ, 1995). Nemaska, the main village where I lived, is located inland on the north bank of Lake Champion, part of the Rupert River's watershed. Freddy's bush camp was located about an hour south-west of Nemaska. Eastmain, my third residence, was located on the coast.

The Cree Nation is currently composed of approximately twelve thousand aboriginal people (GCCQ, 1995). While many Cree live in these permanent villages, a sizeable proportion still pursue a traditional lifestyle based on hunting, trapping and fishing. In some villages, over 30% of people live in the bush full-time (CTA, 1996). People who live in the village also continue to regularly hunt, trap and fish; village life is organized around the fall Moose Break and spring Goose Break, where nearly all inhabitants go to the bush. The Cree identify themselves as a hunting, trapping and fishing people (GCCQ, 1995). In contrast, the harvesting pattern of the Western James

Bay Cree is less traditional -- few families live in the bush and most hunt and trap during camping trips of a few days, and usually less than one month (see Ohmagari & Berkes, 1997).

The vast territory outside the villages is sub-divided into two hundred and ninety one traplines, which are designated family hunting grounds (CTA, 1996). Each trapline is managed by a Cree tallyman with other hunters and their families living and working in the area. Traplines range in size from approximately 230 sq. km to several thousand, with an average trapline size of 1200 sq. km (Feit, 1985) -- an area larger than many urban areas. Within Cree culture, the *tallymen* are recognized as the senior hunters in charge of the traplines. Tallymen are the grassroots leaders who are responsible for both the economic and environmental welfare of their hunting grounds (Feit, 1985).

'*In the bush*' is a phrase used by the Cree to designate this living/working environment -- that is, being physically located on the trapline. While somewhat generic, the bush can also refer to specific stretches of land. When a Cree says that he or she is going to the bush, they usually mean to a specific site, typically the family trapline. '*Bush*' can also be used to describe the type of people who live on the trapline -- e.g., bush-Cree.

1.21 Successfully managing the ecosystem

James Bay is a land of extremes. As a subarctic region, it is a complex environment that demands sophisticated management. Like all boreal regions, ecosystem dynamics have the potential to oscillate dramatically (Resilience Network, 1997). Perhaps most obvious to a visitor like myself, temperature fluctuates severely: winter

lows range from -30 to -50° C, while summer highs can quickly climb to +25°. Deep cold, followed by a short growing season, are the dominant environmental factors (Aber & Melillo, 1991). But unpredictable population dynamics are also a common characteristic of boreal ecosystems (Resilience Network, 1997). Inappropriate resource decisions can result in sudden ecological collapse (Resilience Network, 1997). Managerial error can also lead to human death. While I was in James Bay, two trappers went through the ice on different occasions and died. While captivating, James Bay is not a land for the faint-hearted or unskilled.

Yet Cree hunters and trappers have successfully lived within this vulnerable and harsh ecosystem for at least five thousand years. As Francis and Morantz (1983) explain, the Cree developed both a technology and social organization that was suited to the demands of land surrounding them. Instead of changing or attempting to control variability in the natural environment, the Cree learned to adapt successfully despite such extremes (Berkes 1995, 1999). In order to do so, the Cree rely extensively on traditional ecological knowledge (TEK) as a cultural framework for management (Berkes, 1999). Cree TEK incorporates the complementary local knowledge from both men and women (e.g., see Berkes 1999; Ohmagari & Berkes, 1997). However, Cree management roles typically follow gender lines, with the hunting decision-making role usually reserved for men with the bush camp decision-making role usually reserved for women (Ohmagari & Berkes, 1997). My dissertation focuses on the male role of the Cree tallymen. For these managers, the bush is home.

1.3 An Emergent Research Opportunity

As an environmentalist searching for a dissertation topic, I originally conceptualized James Bay as a powerful site to study the impact of economic development from the local community's perspective. More specifically, I hoped to examine the human experience of living next to one of the world's largest hydro-electric dams. This was my 'foreshadowed' research question (Hammersley & Atkinson, 1995).

Prior to the 1970s, this remote subarctic region had seen little Western-style economic development aside from the fur trade. But starting in the 1970s, James Bay has experienced large-scale development and has become the "jewel" in Quebec's northern economic development plans, most notably with the infamous James Bay Hydro-electric Project. A true mega-dam, James Bay I is capable of producing over twenty-five thousand mega watts of power and was the model for the even larger Three Gorges Dam in China.

I felt that this could be a study in contrasts. For many people, the hydroelectric project is a source of irreversible environmental destruction (e.g., Berkes, 1990; McCutcheon, 1991). But to Hydro-Québec, it is a "development in accord with its environment" (Gorrie, 1990: 21; also see Guertin, Demers & Perusse, 1993). While living in Nemaska, I intended to interview the local people to discover Cree perspectives on economic development. I thought that this would be useful from an applied perspective particularly since the region continued to be a ripe candidate for hydro-electric expansion given the large, free-flowing rivers within its boundaries (Beyea, Rosenthal, & Hansell, 1990).

After my field work began, I realized that discussions about development inevitably broadened. By 1995, economic development of the region had expanded into mining, forestry, tourism, as well as hydro power. These activities seemed to have cumulative and inter-related effects on both the Cree culture and the natural environment, at least from the perspective of the Cree. Anthropological research confirmed that Cree elders viewed the James Bay Project as just one example of an ongoing relationship with ‘white men’ (Feit, 1985). In addition, discussions about the impact of development tended to be framed against the ‘way it used to be’; that is, the way the land was traditionally managed.

In time, it dawned on me that I had no real conceptualization of this traditional management approach and that perhaps this was a critical research question in itself.

1.31 Study Overview

As I have suggested earlier, my field work began slowly. I started out in the village but eventually relocated to the bush. Over time, I realized that I needed to get off the road and move into the wilderness in order to effectively understand the tallyman’s traditional management approach. In total, I was in James Bay for nearly 18 months over a two year period, with the majority of data collected during the Winter, Spring, and early summer of 1997. Data was collected through participant-observation and in-depth ethnographic interviews and followed an iterative design (Hammersley & Atkinson, 1995). During this time, I spent two and a half months living and working on a Cree bush camp, trapline R-21 during the winter of 1997. From this location, I ‘shadowed’ Freddy Jolly¹, as he enacted his traditional managerial role. A daily study provided a

first-hand appreciation of the tallyman's management practice. It also allowed me to document the inside perspective of the hunting group.

In addition to participant-observation, I also undertook a series of in-depth ethnographic interviews with Cree trappers, elders, tallymen, and key members of the local Band Councils, the Cree Trappers' Association (CTA), and the Cree Regional Authority (CRA). The CTA, CRA and the Grand Council of the Cree are regional organizations that emerged as a result of the James Bay and Northern Québec Agreement (see Salisbury, 1986 for a more detailed discussion). In total, 31 interviews were conducted. Participation in all interviews was strictly voluntary.

While the opportunity to study a Cree approach to indigenous management emerged from the field, in hindsight I would describe it as follows:

- (1) Go into nature.
- (2) Find a traditional form of indigenous management. Study it.
- (3) Come back and share this traditional ecological knowledge with the field of management studies.

1.4 An Unstudied Site for Management Theory

In the late 1950s, management theorists Roy Lewis and Rosemary Stewart (1958:17) suggested that: "We know more about the motives, habits, and most intimate arcana of the primitive peoples of New Guinea or elsewhere, than we do of the denizens of the executive suites in Unilever House..." But this is clearly not the case. While anthropologists have extensively studied native peoples, management scholars have not. Our field has only occasionally explored such approaches (e.g., Egri, 1997; Moore, 1998;

Weick, 1979: 262-263). Instead, the field focuses on managers who are part of formal organizations, most often corporations.

Yet indigenous peoples encompass approximately 5.8% of the world's population and are comprised of at least 5,000 peoples (See URL: <http://isa.dknet.dk/~pip1917/>). Many, if not all, of these remain unstudied by our field. I believe their absence from management studies makes us poorer. In particular, indigenous management may offer important insights for sustainable management (Berkes, 1995, 1999; Deloria, 1992; Warren, Slikkerveer & Brokensha, 1995). As King (1995) suggests, the theory and practice of modern management can benefit from the study of communities that successfully avoided ecological collapse over the long term. Furthermore, Shrivastava (1994) notes that indigenous cultures may provide a living example of "nature-linked pre-industrial societies [which] were in more harmonious relationships with nature than modern industrial societies" (p. 719). Much can be gained by examining indigenous ways-of-life and management practices (Berkes, 1995, 1999). However, empirical work by management scholars is largely non-existent.

In contrast, indigenous approaches to management have already been examined in the fields of health, agriculture, geography, natural resource management, and development studies (Warren et al., 1995; see Grenier, 1998). International policy makers have also recognized the importance of traditional knowledge in the management of development and of natural resources within Agenda 21, and the UN Biodiversity Convention (Barreiro, 1998). For example, Agenda 21 (Chapter 26) supports indigenous management of development and links such approaches to the preservation of the environment. Article 8 of the UN Biodiversity Convention stresses the need to respect

indigenous practices. Domestically, the Canadian Royal Commission Report on Aboriginal Peoples stresses the value and importance of traditional knowledge in natural resource management (Berkes and Henley, 1997). The Canadian government has also explicitly incorporated 'traditional knowledge' into federal guidelines for environmental assessment (Stevenson, 1997), though its practical impact is as yet unclear.

Nevertheless, it is not surprising that management studies has ignored native approaches. Given the conventional image of the manager as executive (e.g., Drucker, 1995), it may not be immediately clear to some scholars that a native hunter is, in fact, a manager.² Yet, the boundaries between these groups are not so distinct. Management can be defined broadly as a specific approach or practice to organize humans and other resources to effectively achieve a goal (Drucker, 1986). Thus, indigenous approaches to subsistence can be viewed as an important yet unstudied cultural approach to management.

My dissertation begins to address this research gap by presenting ethnographic findings from an 18-month study of a Cree *tallyman* of eastern James Bay. A brief overview of my research findings is outlined below, followed by a summary of the anticipated contributions, implications, direction for future research, and conclusions. Other chapters are organized as follows. Chapter 2 presents a discussion of research methodology, including a rationale for creative research tools such as photographs, poetry, and story, which I use throughout the dissertation. Chapter 3 provides background information on the James Bay Cree. Chapter 4 provides an in-depth discussion of research findings. Finally, Chapter 5 presents a dialogic discussion of the implications of this research for management theory and practice.

1.5 Overview of Findings – “Managing Outside”

As the leader of the family hunting group, a Cree tallyman is in charge of the traditional pursuits of hunting, trapping and fishing. Such traditional pursuits are based on a distinct cultural approach to subsistence living and working within the subarctic. By living and working with Freddy, I discovered that the tallyman's approach stemmed from a different 'cosmology' of management (Weick, 1993), one that was focused on making managerial sense of the natural environment. At a fundamental level, Freddy was an environmental sense-maker. Through participant-observation, I discovered that the tallyman was ecological-embedded in the natural environment, and that this was a critical dimension of his management practice.

Simply put, tallymen ‘managed outside.’ The bush was not a place that Freddy or any other tallymen visited -- it was a place where they lived and worked. From the ecological location of the bush, tallymen developed and enacted their management practice. While some Western managers adhere to ‘management by walking around’ (Peters & Waterman, 1982), tallymen utilized ‘management by walking outside’ which provided ecological and spiritual information which they believed was important for effective management. Thus, the ongoing use of ecological touring was a critical feature of the tallyman’s management practice. Tallymen also believed that the earth was alive and an active participant in teaching

Old Man Yearning for the Thaw

*Come to me Seal Woman
Come to the land and turn
upon the deep snow
And bask in the sun
of Eeno Astchee
The people's land*

*Come to me Seal Woman
and we'll dive under
the winter
Dance on the banks of black spruce
and frozen moss beds,
Swim through the slopes of spring
hiding*

*Come to me Seal Woman
And breathe in the ice and fog
of daybreak*

sustainable approaches. Furthermore, immersion in the bush was necessary in order to receive ongoing ecological feedback. Finally, a high degree of traditional ecological knowledge was identified by tallmen as a key criterion for leadership choice. Tallymen believed that they were chosen as leaders because "they knew the land best."

Moving towards a deeper level of analysis (Strauss & Corbin, 1998), managing outside can be conceptualized as a form of ecological embeddedness. Tallymen believed that their management approach emerged from the bush and their managerial perceptions, beliefs, and practices reflect this form of ecological embeddedness. Thus, the ecological embeddedness of Cree tallymen may be partially responsible for their ability to avoid the tragedy of the commons since ecological relations may constrain Cree individualism. Research findings describe this approach. During my field work, ecological-embeddedness was demonstrated by tallymen through at least six dimensions: 1) the ecological location of the management practice, 2) the style of management, 3) the seasonality of management practice, 4) a reliance on environmental sense-making in management, 5) the belief that management wisdom came from the land, and 6) the need for ecological legitimacy among leaders.

While potentially a powerful template for sustainable management, my findings also indicate that the tallymen's approach is not a perfect system -- conflicts between managers may happen. In addition, gender relations may be an important area for future research. On a personal level, my field relations were occasionally fraught with conflict over gender roles and future work may wish to examine the generalizability of such experiences among Cree management. Research findings present a critical look at the tallymen's approach, including a discussion of gender and the animal rights debate.

1.6 Anticipated Contributions

In my dissertation, I hope to make three contributions. First, an empirical examination of the tallyman's management approach helps close a gap in management literature. As one of the first empirical studies on indigenous management, I hope to encourage our field to undertake future studies in this area.

Second, findings indicate the central importance of ecological embeddedness to the tallymen's management practice. My work contributes to the organizational literature by introducing the concept of ecological embeddedness and suggesting that it may have importance for sustainable management. My fieldwork identifies a number of different dimensions of ecological embeddedness, though future work may wish to identify additional aspects.

Finally, this dissertation presents a case for creative work (poetry, photography, and story) to be accepted as a valid means of academic expression. By combining a variety of discursive forms, I hope to provide richer insights into indigenous management.

1.7 Implications and Directions for Future Research

"And so I say to America: I want you to remember our past. This past will give you direction for the future. Just as our people and our past – we are the spirit of the future. The spirit of this land lies rooted in the history of Native people." Dennis Banks, Anishinabe (1993)

Indigenous peoples have long been held as a romantic inspiration for the environmental movement, most obviously by Greenpeace's use of the "Rainbow Warrior" mythology (Herscovici, 1991). Yet native cultures have often been viewed as "exotic" or "primitive," primarily of anthropological not managerial interest. Managers

stereotypically have an MBA (Masters of Business Administration) not an FAC (Firearms Acquisition Certificate). A manager appears to be better equipped to carry a laptop and cellphone rather than an axe and shotgun. In all likelihood, Lewis and Stewart were not alone in their perception of indigenous peoples. Indeed, Mintzberg (1973) used this quote to highlight the need for field work with 'real' executives, who at that time were an important 'missing' link in management studies.

However, my field work of the Cree tallymen has demonstrated that indigenous peoples deserve serious study by management scholars, particularly those interested in sustainability. To foster this growth, I have attempted to outline a variety of implications and areas for future research. These are outlined below.

(1) How can management theory incorporate indigenous approaches?

Organizational theory typically has little to do with the management of an ecological and industrial biosphere, but a lot to do with human-centred details of production and consumption (Shrivastava, 1995a). The natural environment has remained somewhere off to the side, a silent input to a growing de-natured world (Shrivastava, 1994). Even organizational theories that are based on ecological approaches do not focus on the natural environment. For instance, 'population ecology' (Hannan & Freeman, 1989) does not look at the ecological 'life' and 'death' that stems from organizational activity (Shrivastava, 1994).

An empirical examination of the Cree tallymen provides an important counterpoint to these entrenched yet 'denatured' perspectives of management studies (Shrivastava, 1994). Such alternatives are important because Western management

philosophies continue to dominate business practices as they have done since the industrial revolution (Stead & Stead, 1992). But such practices have also contributed to widespread ecological damage (World Bank 1997a/b). Despite the dominance of Western management practices, they have not yielded sustainable results. As Robert T. Watson, Director, Environment Head, of the World Bank explains, “Since the Earth Summit in Rio... we’ve made little progress in addressing...global environmental issues” (World Bank, 1997a:1).

Unlike archival research on historical communities (e.g., King, 1995), the Cree are a valuable living example of a sustainable culture (Berkes, 1999). In the eastern coast of James Bay, tallymen continue to act as the sustainable managers of the local boreal ecosystem. More specifically, research on the Cree tallymen highlights the need for the management literature on embeddedness (e.g., Uzzi, 1997; Granovetter, 1985) to move beyond the social sphere and to consider ecological dimensions to an organization’s (or manager’s) degree of embeddedness. While this ethnography does not attempt to identify a causal relationship between managerial decisions and ecological embeddedness, findings indicate the central importance of this form of embeddedness to Cree management practices. Future work may identify additional characteristics. In particular, research which compares the perceptions and actions of managers under high and low conditions of ecological embeddedness may be useful in understanding the perceptual and behavioral impact of managing outside.

In addition, a related stream of research would be to see how key management theories are viewed through the lens of the tallyman, or put another way, how would an understanding of TEK reconfigure existing management theories such as population

ecology, resource-dependency theory or stakeholder theory? Management studies may benefit if scholars asked themselves how Freddy and other tallymen would react to existing theory.

(2) Managing outside – How can modern managers practice it?

Western management systems and industrial economies tend to lack ecological foundations (Shrivastava, 1994; Gladwin, Kennelly and Shelomith Krause, 1995). Modern managers, like their scholarly counterparts, continue to perpetuate the division between humans and nature by departmentalizing ‘environmental management’ as a function which is separate from (although potentially related to) the more traditional job of economic management. Or, in a broader sense, continuing to separate ‘economic-work’ from ‘green-work’. Instead, the natural environment becomes a physical site for leisure or an abstraction that may or may not enter into managerial decision-making. For most of us, our work is far apart from the great outdoors.

In contrast, the ecological anchor for the Cree tallyman is apparent. However, I am not arguing for a return to subsistence living, although I do suggest that management practice can learn from such approaches. In particular, the tallymen's use of 'managing outside' may have practical applications to modern business. My field experiences with Freddy and others suggest that the ecological location of Cree management practices is noteworthy and potentially related to sustainable management. Interestingly, Henry David Thoreau, one of the fathers of the environmental movement, was also a strong advocate of the value of walking outside (1863/reprinted 1968). My findings challenge modern managers to learn how to manage outside, to relocate part of their management

practice in order to gain first-hand experience with their 'economic biosphere' (Shrivastava, 1995a). In this way, Western managers may begin to develop their own traditional ecological knowledge. Research which explicates if, and how, 'management by walking outside' can be applied to Western organizations is required.

Before such prescriptions can be confidently made, there are a number of important questions that need to be simultaneously addressed. For instance, how much regular exposure to the natural environment is required in order for TEK to be developed by modern managers? What are the negative impacts of this increased traffic in wilderness areas? How can such impacts be sustainably managed?³ Management scholars can help determine these boundary conditions.

(3) TEK as an approach to natural resource management.

The value of TEK is perhaps most obvious within the field of wildlife or natural resource management (Berkes, 1995, 1999; Berkes & Henley, 1997; Deloria, 1992), or as a means of incorporating local knowledge as baseline data for environmental impact assessments. Indeed, indigenous knowledge systems have already been recognized as offering important insights for wildlife or resource management, which typically adopt a 'conservationist' approach (Berkes, 1995; Usher, 1987). However, TEK is not necessarily a replacement for existing natural resource systems – in fact, it can often be viewed in a complementary way (e.g., in co-management systems, see Berkes 1994; Berkes & Henley, 1997). Consequently more research is needed that discusses the conditions under which indigenous approaches to natural resource management are most effective. In addition, more research is needed in order to better understand the decision-

making process of indigenous managers. For instance, how are resource trade-offs handled?

(4) The need for cross-cultural dialogue between modern and indigenous managers.

In the past, Cree tallyman (like most indigenous peoples) did not often enter into dialogue with the modern manager, even when their worlds collided. For example, the late Robert Bourassa, premier of Quebec from 1970 to 1976, was the key political force behind the much-hated James Bay Project. While Bourassa had many supportive comments to make about indigenous culture in his book 'Power' (1973), the discussion between indigenous peoples and modern managers during this period was unequal at best. For example, Phase 1 of the James Bay Hydro-electric Project proceeded during negotiations and **"Canada made it clear that if we [the Cree] did not proceed with the agreement process, unilateral legislation would have been imposed on us in any case"** (Diamond, 1995 in GCCQ, 1995: 253, bold in original). Furthermore, "It is the firm view of the Crees that the Agreement was negotiated in 1974-75 under circumstances that were clearly inequitable, highly pressured and, in a number of key respects, unconscionable" (GCCQ, 1995: 252). Throughout most of the 1970s and 80s, cross-cultural dialogue was primarily through the court system or non-existent.

However, the intersection of indigenous and modern management approaches continues as development on indigenous lands increases. In addition, Canadian society is becoming less comfortable with colonial attitudes (see RCAP, 1997). Consequently, an empirical understanding of indigenous management approaches may have practical value to companies who are attempting to develop positive relations with indigenous peoples.

For instance, large mining companies like Placer Dome Inc. (1998) and Falconbridge Ltd. have recognized the importance of positive aboriginal relations to business performance.⁴

In addition, a recent Supreme Court of Canada ruling is a powerful catalyst for companies and governments to develop effective aboriginal relations. Specifically, the Delgamuukw decision has provided indigenous peoples with legal title for sub-surface rights within land claim agreements (Young, 1998; Mousely, 1999). In addition, Delgamuukw places traditional knowledge (TEK) on equal footing with scientific data -- environmental impact assessments of proposed development projects must value both types of managerial information. The implication of this is that natural resource companies (and governments) who wish to 'extract' natural resources will have a mandatory obligation to consult with aboriginal groups who hold title (or who may hold title in the case of unsettled land claims) and incorporate TEK into corporate decisions. Furthermore, the Delgamuukw precedent demands that companies and government officials undertake *meaningful* consultation with aboriginal groups which, at minimum, implies a series of deep and concerted dialogues and, in some cases, full aboriginal consent (Young, 1998; Mousely, 1999).

While Delgamuukw strengthens the aboriginal position in terms of providing legal impetus for dialogue, it cannot resolve the difficulties that modern managers may face when confronted with indigenous perspectives. How will a boardroom react to Freddy's stories about porcupine taste buds, or his poetry about the land? How will modern managers grapple with the spiritual dimensions of traditional ecological knowledge? A cross-cultural understanding of the tallymen's approach may help modern

managers better understand this divide⁵. However, future research will need to determine specific processes for effective consultation and conflict resolution between indigenous and modern managers.

(5) Other cultural approaches.

While the focus of this study is on a hunting and gathering native society in subarctic Canada, traditional ecological knowledge is not restricted to such approaches. Indeed TEK is a multi-cultural category that includes the management practices of traditional people from many countries or regions, including India, South America, Indonesia, China, Africa, Europe, etc The TEK of different cultures may differ significantly. Comparisons between different cultural approaches to management is an important area for future research. See CIKARD (1998) for a bibliography of international literature on indigenous knowledge.

1.8 Concluding Remarks

Near the end of my field study, I was living on the coast in Eastmain. At that time, Edward Gilpin Jr., President of the Cree Trappers' Association, challenged me to "become a tallyman" when I asked him what else I needed to know about traditional approaches. His statement caught me off guard because I had never really considered this, gender issues aside. Specialized knowledge is gained over decades of immersion in the bush. Many tallymen were born in the bush, while I was born in downtown Toronto. My apprenticeship was valuable, but I knew that it was incomplete.

Perhaps most troubling, I realized that I had taken up this research as a divided person, and in part so remained. I had not stayed in the bush. While I agree with Gladwin

et al. (1995) that we need to reintegrate humans back into nature, I also recognize the difficulty of repairing such a split. Not only does this division exist within organizations, or society at large, but it also permeates the individual, and operates within myself. While I intellectually and emotionally embrace traditional approaches, I have paradoxically inherited and perpetuate modernist divisions. I am not whole; I am not one with nature. I still have difficulty getting off the road.

As I finish this book, I recognize these limitations and acknowledge that I may not have gone beyond them. But even as I forego certainty, I find direction in the words of Henry David Thoreau who said that: “The highest we can attain to is not Knowledge, but sympathy with intelligence. I do not know that this higher Knowledge amounts to anything more definite than a novel and grand surprise on a sudden revelation of the insufficiency of all that we called knowledge before -- a discovery that there are more things in heaven and earth than are dreamt of in our philosophy. It is the light up of the mist by the sun. [Humans] cannot know in any higher sense than this” (1863/1968; 240). Yet Edward’s advice remains important. In particular, as I have re-entered the Western work environment, I believe that his comment has broader applicability than I had first thought. I believe now that he was suggesting that role playing or short term study of traditional approaches is insufficient. The tallymen are not merely interesting or exotic objects of study. They offer a concrete approach to managing outside. It is not enough to simply read or write about the tallymen. Managers and management scholars have to struggle to become one.

As the millennium ends, the need for alternative approaches to management will continue. But it is unclear how modern business managers and academics can ‘walk the

talk' of sustainability. I believe that Edward's advice can provide direction for the future. We need to get our heads out of our offices, our conceptualizations of management out of the organization – get our theories and our practice *into the earth*. As the millennium draws near, traditional ecological knowledge (TEK) may provide a powerful template for sustainability. But first, we need to take a lesson from the Cree tallymen.

We need to walk outside and learn.

CHAPTER 2: METHODOLOGY AND RESEARCH DESIGN

Photo 2:

Bush camp, Rupert's River, James Bay, 1997.

2.1 Gaining Access

Despite our initial reluctance, Barry and I became regular visitors to Freddy's bush camp during the winter of 1996. These weekend trips were usually organized by our Algonquian friends, Darlene and Clarence McKenzie. Clarence taught with Barry, and Darlene and I had become friends in the village. At first, these trips were leisure-oriented, a weekend excursion to fish, skidoo and experience the bush. Occasionally, we stayed overnight. Freddy, his wife Annie and their granddaughter Jasmine lived at their bush camp on trapline R-21 for roughly eight to ten months each year.

At the camp, male and female roles existed though 'rules' were never overtly communicated. Women (Annie, Darlene and myself) tended to cook, clean and look after Jasmine while the men (Freddy, Clarence and Barry) went out hunting or fishing. This was an unusual arrangement for me but I calmed my feminist edges and attempted to fit in. Sometimes I broke rank and went skidooing anyway. I would often go for a long walk to explore. I felt a great peace on R-21. I talked to Freddy and Annie at great length about bush life. It was extraordinarily interesting, like nothing I had ever seen or done, and I always wished I could stay longer. But I had to get back to my dissertation.

When I voiced these thoughts, Freddy would often say, "Come stay with us!" I would reply, "Really? Could I stay? For how long?," hoping to gauge his actual

receptivity. “Two years! Stay for two years!” Everyone would laugh. I left wondering about the possibilities but felt too shy to pursue what little truth that may lie behind the humour. It seemed highly presumptuous to me to move into someone’s home for a holiday. I also did not clearly realize that the bush camp contained the seed of a large research opportunity.

After we moved to Eastmain in the fall of 1996, I spent a lot of time inside our apartment trying to conceptualize what I actually wanted to study. I met with the band council. I weighed my options. I went running and cycling on the Eastmain access road. But nothing seemed quite right. Finally, one day when Barry came home for lunch, I announced: “I want to move to Freddy’s camp. That’s my research topic. To study the tallyman as a manager. To describe his management approach. That’s what I want to do.” I was relieved. Barry was impressed that I had finally settled on a topic. I had previously felt that I had to study management from within an organization or about the impact of an organization (such Hydro Québec and the James Bay Project) on a community. I had not conceptualized a management study without a 'manager' in the Western (i.e., corporate) sense of the term. I had viewed the bush camp as a distraction or as a place for leisure. It was a significant breakthrough to realize that it was actually a place of management. Soon afterwards, I tentatively approached Freddy and Annie to see if their offer was serious. Remarkably, it was.

The next step was to gain formal approval for my research from the Chief and Band Council of Nemaska. This took time and, more importantly, luck. The principal of the local school, Lillian Diamond, was also a member of the Nemaska band council. Over the years, Lillian and I have become very close but at the time, our friendship was

still in its infancy -- we had met when I started taking pictures of Lillian's children. But at the time of my request, I didn't know Lillian very well. In fact, I didn't even realize that she was a member of the Band Council. Later, she told me this story. When my letter requesting permission to conduct a research study on the tallyman was received by the Chief, he took it to the Band Council. The first thing he said was, "Does anyone know this woman?" Lillian, then only an acquaintance, replied, "Yes. She's OK." And that was that. I had formal access. It was by then November, 1996 – nearly a year after I had first journeyed to James Bay in search of a research topic.

While formal approval to conduct research is essential in any field site, it was a necessary but not sufficient condition for access to take place. In fact, in terms of sequence, formal access took place after, and possibly because, I had already gained informal access to community members such as Freddy and Lillian, among others. While I had been in James Bay (on and off) for eight months, it was not until my key informant, Freddy Jolly, adopted me as an 'apprentice,' and my friend Lillian Diamond vouched for my credibility that my research project became a tangible venture.

In general, meaningful access took time and a lot of ongoing effort. My skin was often not thick enough. At times, I suffered from acute insecurity and fear of rejection. And yet, meaningful access at a variety of levels was achieved, and a network of Cree friends and acquaintances was eventually developed. Indeed, the unique vantage point of the bush camp allowed me to gain ongoing access (and greater acceptance) by other bush Cree. For instance, the formality of village life was abandoned (in most cases), as Freddy and I arrived on skidoos for a visit to a nearby bush camp a few short (!) hours away. While I always remained a novel specimen, I no longer appeared as a complete outsider.

I had some credibility as a researcher because of my commitment to live in the bush during the winter. Furthermore, once I got back to the village life, my experiences in the bush gave me a tangible legitimacy and provided a common ground for developing an expanded research network. To break the ice, I now had something to talk about -- I had my own bush stories. And these proved particularly useful when Freddy introduced me to someone new, or someone that I hoped to interview -- he would always start with these stories about me. We would laugh together and then more easily talk together.

2.2 Research Design

My ethnographic study followed an emergent research design (Hammersley & Atkinson, 1995) where data collection and analysis are interwoven in an iterative spiral. Throughout the study, I utilized both ethnographic participant-observation and in-depth ethnographic interviews. Throughout this period, I undertook field work from the location of the village as well as from the bush.

I had visited the bush many times before I actually moved onto Freddy and Annie's trapline. While I had learned a lot about Cree culture from the village and overnight excursions into the bush, I realized that if I wanted to study the tallyman's management approach, I had to relocate into the boreal forest. As Edward Gilpin Jr., the President of the Cree Trappers' Association explained, there was only one way to gain a first-hand appreciation of the tallyman. I had "to be one" and that meant living in the bush. I needed to study the daily practice of a tallyman. Consequently, I moved into the bush for a 2-1/2 month period (Feb. 21 - May 6, 1997), where I lived on trapline R-21,

during the winter of 1997. Research findings are anchored in this data, though expanded through subsequent in-depth and semi-structured interviews.

From the bush location, I ‘shadowed’ Freddy as he enacted his traditional managerial role as tallyman. Similar in some ways to Mintzberg (1973) who shadowed corporate executives, my daily study of Freddy allowed me to develop a first-hand appreciation of the tallyman’s management approach. Such an approach fits with Cree approaches to learning and the transmission of cultural knowledge which emphasize participant-observation and apprenticeship (Ohmagari & Berkes, 1997). Yet my research methodology differs from Mintzberg (1973) in a number of important ways.

First, Mintzberg utilized “structured data” in addition to “anecdotal data” and collected patterns of activity throughout every minute of an executive’s day. In contrast, I utilize ethnographic data that is focused on capturing a thick description of managerial practice, and not on gathering minute-by-minute information that could be analyzed quantitatively. Throughout my time on R-21, I also adopted an apprentice role to Freddy to observe and to learn traditional harvesting skills such as hunting and trapping. In addition, from Annie I also learned more typically ‘female’ bush skills (Ohmagari & Berkes, 1997) such as the preparation of beaver and moose hides. While I was a ‘shadow’ to Freddy and to a lesser extent Annie, the purpose of such observation was not simply to record data about management but to learn how to act as a bush manager. In this sense, I moved beyond shadow observation into active and naturalistic participant observation.

Secondly, Mintzberg collected first-hand data over a relatively brief period -- one week per executive -- whereas I shadowed Freddy for a more in-depth period of ten

weeks. This apprenticeship period was also supplemented by an extensive period (approximately 5 months) of ethnographic interviewing, among other tallymen and local Cree. This helped to confirm data that I had gained at Freddy's camp that allows me to generalize findings across tallymen.

Thirdly, Mintzberg collected data primarily on the type of work activity and was not concerned with the content of the work. In contrast, I was concerned with both what Freddy was doing in terms of activity but also in terms of managerial content. In order to understand the essence of the tallyman's management approach, I felt it was important to study more than just the mediums of management activities. I tried to appreciate how and why tallymen managed in certain ways, and for what purpose.

Nevertheless, the concept of 'shadowing' is an appropriate one. Throughout my apprenticeship, I acted as if I was a tallyman's shadow. I went where Freddy went. I did what Freddy did. I shadowed him for probably ten to twelve hours each and every day. I went to sleep with Freddy talking to me from across the room. Annie and I woke up with Freddy starting again in the morning. I followed him up mountains, across rivers, and into the village. This pattern of behaviour became so ingrained that even when I returned to the village, to stay with non-native friends in order to do laundry and have some 'down time', Freddy would inevitably show up at their homes. He would laugh and say, "I missed my shadow."

Overall, my strategy of inquiry (Denzin & Lincoln, 1994, p. 14) emphasized observation, participation and informal, unstructured or semi-structured interviewing. I simply started to try to live my life in the bush and to document the tallyman's management approach from the inside perspective of the hunting group. I did not attempt

to maintain a 'professional' role as objective researcher; instead, I opted for a more humble 'student' role which was more appropriate given my complete lack of bush skills and total inexperience with subsistence activities like hunting and trapping. Field immersion in the bush was thus a critical means of gaining first-hand, personal understanding of indigenous approaches.

2.3 Field Sites

2.31 Trapline R-21 (see Photo 3)

The Jolly trapline, R-21, is located on the Rupert River, south of the village of Nemaska, at kilometre 241 on the Route du Nord. It is approximately 70 km away from Nemaska. The trapline covers approximately 546 square kilometres. The Route du Nord, a two-lane highway, splits the trapline in half (see Photo 4) and stretches 22.5km across the width of R-21. Freddy and Annie's bush camp was built on a bank of the Rupert River a few kilometres in from the Route du Nord, approximately an hour away from the village of Nemaska. The camp consisted of one main cabin, made of wood, a tepee, a shed, and two outhouses. Freddy and Annie lived there throughout the fall and winter with their 18-month granddaughter, Jasmine. Their children lived in the village where they went to school but visited the bush camp during holidays and occasionally, on the weekend. R-21 was also home to Freddy's mother, oldest brother, youngest sister and her family. However, the extended family lived at a separate main camp down the Route du Nord, at kilometre 258. In addition, the rest of the extended family visited the bush on a part-time basis, often to their own camps located throughout the trapline.

At the camp, there was no electricity, no running water, and only a bush radio for two-way communication. We got our water from the river, by cutting a hole through the ice and hauling it back in large plastic buckets. Three types of wood were used -- hard wood for night-time burning, green wood for really cold nights, and dry wood for easy lighting. Freddy and Annie's camp was accessible by snowmobile or by foot in the winter, and by canoe or boat once the ice melted.

The main cabin was a two-room structure, with the first room used for cooking. The larger room was our sleeping and eating area since it was more solid and had a wooden roof, windows, and a more efficient wood stove. In contrast, the cooking room had a canvas roof with plastic tarpaulin on top, which wasn't as warm but on a positive note, allowed you to hear the wind and the snow. On the down side, the canvas wasn't durable and in fact, it had caught fire one evening shortly before I arrived. Freddy had seen the flames from the next room, where he was sleeping, and had leapt up and doused the fire before it had spread to the plastic or onto the main room. The old 45 gallon drum which had been converted into a wood stove was identified as the culprit and it was moved to the tepee and replaced with a turn of the century 'proper' stove (see photo 5). Once the weather started to warm in the spring (-10 to -15° at night), I moved to a tepee which was made of black spruce trees as poles, with canvas and an outer layer of plastic tarpaulin as coverage. The floor was covered with freshly-cut spruce boughs which provided insulation from the frozen ground. As in the cabin, the tepee was also heated -- using that old 45 gallon drum.

The Jolly family has been on this trapline for many years, although exact dates are difficult to determine. When I asked Freddy this question, he answered, "It's been a long

time. My dad was 84 and his dad lived here. And it goes on and on.” (FJ1, text unit 95). Freddy’s father, Alan Jolly, was the previous tallyman on this trapline. Hudson’s Bay Company archives, which document the number of beaver pelts brought in by each trapper, indicate that Alan Jolly was trapping beaver in the area during the 1930s. It is likely, then, that the Jollys have been managing this trapline for an extended period of time.

2.32 Village Sites

In addition to trapline R-21, the villages of Nemaska and Eastmain were my primary field sites. Though remote, these permanent settlements have benefited from monies from the Department of Indian and Northern Affairs and from the compensation received from hydro-electric development, particularly in terms of infrastructure and housing. Villagers had modern houses with running water, electricity, and telephone lines. Many also had a tepee or wigwam in the backyard that was used for cooking traditional foods like goose. Each village had a local school, a youth centre, post office, band office, grocery store, nursing centre, hotel, restaurant, church and small airport. The local radio station also relayed news and conducted games of radio bingo -- a favourite pastime. Both communities were dry and alcohol could not be legally purchased anywhere nearby, although bootleggers had a brisk business. Employment in the village centred around the band office.

The choice of these villages was based on serendipity: from 1995-1997, Barry was a secondary teacher in Nemaska and Eastmain. I developed a research network in both villages, with the strongest linkages in Nemaska (our first village). In addition, I

undertook an in-depth road trip to Mistassini in order to interview trappers and tallymen whose bush camps had been affected by the Route du Nord. While I visited Chisasibi, I did not undertake interviews in the village.

Nemaska. Nemaska is an inland community of approximately 500 Cree. A large minority (over 30%) of the population follows a traditional way of life in the bush: hunting, trapping, and fishing six to eight months of the year. There are a total of ten tallymen in the vicinity (CTA, 1996). Nemaska is a relocated community on Lake Champion, with Old Nemaska (on Nemaska Lake -- about 80 km away) being the original site. The community 'voluntarily' moved in the late 1960's in order to escape flooding from the proposed NBR Hydro-Electric Project, and because the Hudson's Bay Company closed the village store (Preston, 1982; Jimmiken, 1977). While the Project was eventually put on hold, the community was already dispersed into surrounding villages. After a decade of social turmoil, members from the original community decided to relocate their village (see Preston, 1982). Nemaska has been inhabited since the late 1970's, with the community making an annual (sometimes twice yearly) migration to Old Nemaska. I have participated in Old Nemaska school trips for two consecutive summers in 1996 and 1997 (see Photo 6). The Cree Regional Authority, which is the administrative arm of the Grand Council of the Crees, is located in Nemaska.

Eastmain. The village of Eastmain is one of the oldest trading post in James Bay (Francis & Morantz, 1983). It is located on the east coast of James Bay at the mouth of the Eastmain River. Approximately 500 Cree live in Eastmain, and 16 tallymen manage

the band's traplines (CTA, 1996). In the Spring of 1997, the Cree Trappers' Association relocated from Val D'Or to Eastmain. A permanent access road has only recently (in the last two years) been built into Eastmain. Prior to that, Eastmain was accessible only by air or through a winter road. See photo 7.

Mistassini. In contrast to the smaller communities of Nemaska and Eastmain, Mistassini is the largest Cree village with over 3,000 inhabitants. It has traplines that range from nearby locations to those situated over 800 km away near the LaGrande dam complex. Within Mistassini, there are 82 tallymen. The village itself is located near the town of Chibougamau (100 km away) and sits on the bank of Lake Mistassini, one of Québec's largest lakes.

2.4 Freddy as a Key Informant

Like many key informants, Freddy Jolly, a 45-year old tallyman in Nemaska, self-selected himself for the job (see Photo 8). Freddy is the youngest boy in his family and has been a tallyman for over 15 years. Out of the five boys in the Jolly family, Freddy is the only full-time trapper. Freddy and his wife Annie have been married since 1979 and have four children, Ruth, Jonathan, Myra and Philip. Tragically, Myra was killed in a truck accident on the Route du Nord in the winter of 1998.

At the time I moved to trapline R-21 in February 1997, Freddy and Annie have lived in the bush for many years while their children lived and went to school in the village. Like many Nemaska residents, Freddy spent much of his youth away from the trapline, at residential school, and then in another Cree village, Mistassini, after Old

Nemaska, the original Cree site, was relocated (see Preston, 1982; Jimmiken, 1977). By 1974, Freddy had moved back to the bush to pursue hunting and trapping on a full-time basis. As he says, “We live here all winter, even spring, we call it Goose Break. We live here in our trapline. And then the summer, sometimes in the summer I come and stay here, one, two days, cleaning up outside, making picnic tables or going down the river, you know, fishing. Mostly, I come with teachers, or with a friend of mine. Doing work here.” (FJ1, text units 315-317).

The James Bay bush was central to Freddy’s sense of self and Trapline R-21 was an integral part of his family’s existence. Freddy took great pride in being “born in the bush” – we even made a special trip to view his birthplace (see Photo 9). Freddy also believed in the importance of sharing this identity: “I like to share it to people, people from France, students there, this summer they came. I share it. I share it with people because I wanted people to know where I was born. I was born in the bush.” (FJ1, text units 315-317).

Within the Cree community of Nemaska, Freddy is known as an ‘ambassador’ of Cree culture --Freddy often interacted with the non-Natives, trying to explain bush life and traditional ways to non-native teachers and medical staff. Prior to my arrival, Freddy and Annie had already had one college student living with them in the bush, Jen, a 19-year old student at Stirling College in Vermont, who was studying resource management at the undergraduate level.

Throughout James Bay, Freddy is highly regarded for his traditional skills and knowledge as a tallyman, as well as his willingness to fight for the land. In the early 1990s, Freddy launched a class action suit against the governments of Canada, Quebec

and Cree Construction for compensation for damages caused by the construction of the Route du Nord highway that dissected his and other tallymen's traplines. While Freddy's motion to engage in a civil action was hailed as an admirable effort by a section of Cree society, others (particularly those in power positions) may have viewed his approach as divisive (particularly since Freddy was attempting to sue a Cree-owned entity, Cree Construction). Consequently, Freddy's fight against development has earned him somewhat of a reputation as a 'radical' and he has often voiced concern over economic development decisions. Freddy's motion for a class action suit was declined in 1997 largely due to technicalities (i.e., the court ruled that there was not enough trappers affected in order to justify a class action). Nevertheless, in 1997, Freddy Jolly was voted to be the 'most outstanding tallyman' in James Bay (The Nation, September 26, 1997). While Freddy's willingness to stand and fight for his beliefs has undoubtedly ruffled feathers, his reputation as a tallyman remained largely intact.

Freddy also conducted his role as a key informant admirably: he sensitized me to Cree culture, allowed me to shadow him as he undertook his daily activities, introduced me to many other Cree informants, and personally provided me with in-depth training on trapline management. He also became my close friend. Since leaving the field, Freddy has been able to visit me twice down south in Toronto and Ottawa. He has met my parents, met my boss, and we still continue to talk on a regular basis.

Since my field work is firmly anchored in the ten week period spent on Freddy's trapline, it relies heavily on data collected on, or through, Freddy as a key informant. While this may introduce undue research bias, I believe that this approach is actually a strength of my study. The depth of findings is due, to a large part, to the depth of the

relationship that I developed with Freddy. By establishing a deep bond of friendship, we were able to move beyond a front-stage relationship and narrow the social distance created through culture, gender, age, and socio-economic background. The relationship between Freddy and I was, at times, tumultuous and emotional, but it was also, at a very basic level, filled with honesty and commitment. We believed in each other's work and worked hard to understand each other. It was not always easy, particularly because we were so different.

This reliance on a very powerful key informant is not without precedence. For instance, in Whyte's (1955) famous ethnography, *Street Corner Society*, Doc is the central key informant and collaborator.

2.5 Gail as Researcher (photo 10)

While it is normal to disclose information about participants, it is equally important to disclose information about the researcher since research emerges from a meeting between individuals. If I tell you about Freddy, I also need to tell you about myself. I entered James Bay as a 29 year old white urban professional, a newly formed environmentalist who was searching for a dissertation topic. I grew up in the suburbs outside Toronto -- I had never hunted or trapped. I had never imagined that I would ever hunt or trap. I was not 'outdoorsy'. But I wanted an adventure and in the past I had travelled to a number of developing countries. The remoteness of James Bay was enticing.

I wanted my doctoral research to change me, and it did. In fundamental ways, I entered James Bay with a romanticized, and sanitized, perspective of "Nature" with a

capital "N." I was looking for beauty and harmony. I found those qualities but also found danger and complexity. My romanticization of the Cree developed while I was in the bush -- when I began to learn about the depth of Freddy's knowledge. However, through time, self-reflection and painful personal experiences, I began to critically assess my own beliefs. From my experiences with the Cree, I learned that I was not used to the natural environment, that I had spent most of my life perpetuating a modernist dilemma that attempts to separate Humans from Nature. I also learned that this distinction was not a necessity. Instead, I believe that it can be viewed as a deeply ingrained belief structure that permeates my own theoretical lens, despite a commitment to environmentalism. However, I found that I could break through this dichotomy and pursue a more organic approach to managerial 'sense-making' after an immersion in the bush.

Freddy and Annie, among others, were trying to manage successfully. Bush life was practical and graphic -- there was no time or space for romantic notions. I lived in James Bay for 18 months (from 1995-1997). I lived with people and I learned from them. During my field work, I have seen animals die; I have been part of this activity. I have had blood on my hands; in fact, all the way up my arms and down my shirt front. I have cried about this on more than one occasion. Many shocking things happened. That is true but what it all means is debatable. My findings discuss many aspects of Cree management but I do not position myself as an objective expert. All I offer is an informed opinion, a narrative that is grounded in the reality of my research and my life experience.

I also believe that research which is grounded in local stories (local 'truths') has the ability to make compelling political statements. In fact, all research (whether it

admits it or not) has a political lens (Kirby & McKenna, 1989) through which it views the world and prepares its research design. For myself, I admit to strong political motivations: I want to highlight alternative forms of management, and to encourage Western managers to develop more sustainable approaches. In order to do so, I now believe that we need to study management from outside the organization's four walls.

I have tried to include glimpses of my original naivete in the prologue and other stories. (It would be easy to hide myself fully but since Freddy cannot hide, why should I?). While in the field, I found that I could not adopt a ready-made method, even one like ethnography that emphasized living and learning. If the researcher truly was to be the research instrument (Hammersley & Atkinson 1995), I felt that I had to search out and develop my own ethnographic approach, and ultimately, my own voice (for the discovery and presentation of this research). Denzin and Lincoln (1994) suggest that "the qualitative researcher-as-*bricoleur* uses the tools of his or her methodological trade, deploying whatever strategies, methods, or empirical materials as are at hand (Becker, 1989). If new tools have to be invented, or pieced together, then the researcher will do this." (p. 2) Methodology, in part, is a personal creation, one that may 'stand on the shoulders of giants', but is also formed as a personal expression, a tool for discovery that emerges from deep within myself. Methodology and representation must also be a reflection of the field site and the type of data utilized.

Also as an art-school drop-out and ex-marketing professional, I found that I needed to incorporate visual images into my academic text. I wanted to try to more effectively communicate my findings -- I did not want to bury them completely under academic language. Consequently, I have attempted to offer visual representations --

photographs and photo montage -- in order to disclose more aspects of the field experience. Taken together, this bricolage forms a non-absolute kind of truth, and its reality exists both outside and within me. (As a side-note, such 'bricolage' helps to close the dualistic gap between art and science -- see Clifford, 1988).

As I end this personal commentary, I realize that my PhD has been a journey to recapture much of what Modernity has divided -- Humans from Nature, Art from Science. However, I did not know this at the time. But I recognized the adventure of it all, and embarked upon this research with an open mind, a warm heart and a living body.

2.6 Field Relations

My relationships with the Cree changed dramatically over time. I entered the field as a white urban female outsider -- the spouse of yet another white male teacher in the north. By the time I left the field, I was still white and still female, but I had developed many different kinds of field relations. In some instances, with Freddy Jolly and Lillian Diamond, I was a friend, a confidant, a trusted researcher. With others, I was an interested student who was beginning to understand Cree ways of life and management. More broadly, I remained the spouse of a teacher but an unusual one who had spent a lot of time in the bush.

Generally, I attempted to maintain an egalitarian approach to research -- privileging the viewpoints of the participants. I did not perceive the Cree hunters and trappers as "simplistic" managers. Instead, I actively perceived them as experts in their field, which they indeed were. In order to cross the cultural divide between us, I largely abandoned the conscious distancing that is so strongly recommended in texts such as

Hammersley and Atkinson (1995). Even in brief encounters (such as during a short interview), I attempted to actively connect on a personal level. I tried to respect age and gender roles (while not always agreeing with them) and tried to simultaneously pursue my research objectives. I was highly conscious of the generosity of people and of the value of their experiences. In this way, I attempted to establish nonoppressive field relations. In particular, with respect to my relationship with Freddy, I believe that we successfully enacted the cultural role of apprentice and mentor. But it was not always easy to do.

According to the *Qualitative Research Handbook*, a feminist ethic “calls for collaborative, trusting, nonoppressive relationships between researchers and those studied (Fonow & Cook, 1991, pp.8-9). Such a model presumes that investigators are committed to an ethic that stresses personal accountability, caring, the value of individual expressiveness, the capacity for empathy, and the sharing of emotionality (Collins, 1990, p. 216)” (Denzin & Lincoln, 1994: 22). These research values were, and are, highly appealing to me. Yet, a commitment on the part of the researcher is only one part of a feminist research equation. Collaborative, non-oppressive relationships are also reliant on the attitudes, behaviours and expectations of participants.

Since much of my research was conducted with Cree men in what appeared (at least to me) as a paternalistic culture, I had to strive hard to avoid this obvious gender set-up. I was only partially successful. For instance, the teaching role of my partner Barry seemed to both help and hinder my ability to achieve access and manage field relations. On the one hand, he had the ability to introduce me to a number of local people, both Native and non-native. On the other hand, my ‘student’ status, lack of a tangible job, and

the simple fact that I was a woman quickly started to marginalize me into a 'house-wife' role. People did not initially take my research seriously. During the time I spent at the bush camp, many community members joked that Barry had lost his "cook" and seriously inquired about who was doing his laundry while I was away (though of course we had shared these tasks).

To some extent, I overcame this by identifying myself with, and through, Freddy. Thus, I avoided remaining "Barry's wife" by becoming "Freddy's student." In both cases, I recognize the humility of possession; however, on a practical level, the role of "Freddy's student" opened up many more doors than "house-wife." Yet it is important to note that field relations, including my relationship with Freddy, were often marked by sexism, clearly a form of oppressive behaviour. In the small Native communities of James Bay, there was a tangible barrier to be faced by a white outside female researcher like myself, particularly when my study focused primarily on an exclusively male cultural role: that of the tallyman. Field relations, then, occasionally erupted with intense emotional outbursts -- I did not remain neutral and on a number of occasions lost my temper over what I perceived to be a sexist incident. For instance, on a few occasions Freddy demanded that I get up from the table and get him salt and pepper, even though it was just as convenient (and equitable) for him to fulfil his own needs. Freddy perceived himself to be the "head of the household" and both he and Annie told me this more than a few times. Similarly, when Freddy visited me in Toronto, he demanded that I do his laundry (which I refused to do). On another occasion, Freddy tried to lend my skidoo to a young Algonquian boy who was visiting. Freddy initially felt that I should readily give

up a chance to go hunting (a male prerogative) and instead stay at home and cook for their return. Since I was renting this skidoo, I refused to accept this.

We fought heatedly about what I perceived to be hierarchical behaviour. Freddy argued that I was trying to be a man. When I replied that I was simply acting like a "free woman," he replied that I was "messing up" his head. We agreed to disagree but later I tried to utilize the eco-feminist argument that (some) men oppress women in a similar way in which (some) men try to dominate nature. I suggested that Freddy would not want to treat me in the same way in which southern developers mistreated the bush. While surprised, Freddy quickly agreed with this. He said, "I don't want to disrespect you, bush lady." Freddy ended the matter by apologizing. However, I found this environment challenging at times.

But it is important to note that my own feminist belief structure may have resulted in an overly negative perception of gender relations within Freddy's bush camp. However, since I did not focus my study on examining gender relations within traditional management, I cannot with confidence do more than suggest that this is an interesting area for future research. From my own field work, it is unclear how generalizable such beliefs are within Cree society and the impact this has on traditional management practices. Nevertheless, I think it is useful to describe this dimension of my relationship with Freddy. The point is not to determine whether Freddy was wrong or whether I was wrong (for instance, some scholars have remarked on the rudeness of my refusal to do his laundry since he was my guest in Toronto). But this is not really the point. I think that the more interesting question is to try to assess whether Freddy and I were able to resolve such conflicts. I believe that we were successful in this.

At times, field relations were also affected by the ghost of colonialism and inequitable interactions between the Cree and non-natives from the south. The Cree, as a nation and as individuals, are extremely well aware of past (and current) power imbalances. Many, including Freddy, have intimate experience with 'white' injustice and have survived abusive relationships such as those inherent in the residential school system. There was a certain general tension directed at non-Natives. In addition, the region continues to be significantly impacted by economic development activities that stem from outside forces that control resource use. Socio-economic and environmental impacts from mining, forestry, tourism, and hydro-electric dams all add to the emotional setting of James Bay.

Finally, the Cree had been extensively studied by academics and were not particularly open to new studies. Introducing my research could therefore be a little tricky. In response to one such introduction, a Cree administrator joked, "What do we need another anthropologist for?" We both laughed but I remained unsure for some time about the acceptability of my study, until I finally realized that his joke was a form of approval.

In the field, humour was often useful. In fact, the comedy of my last name often helped break this cultural barrier. It allowed people to joke about who and what we were, and then move beyond it. For example, when something went wrong and I was present, people would quickly say, "It's the whiteman's fault." And we would all laugh uproariously. In these situations, being a woman helped – Cree men could joke about the whiteman, connect it to my name, and not worry about really offending me – after all, it wasn't like they said it was the white-woman's fault.

Overall, my field relations can be characterized as personalized and reciprocal, even if difficult from a gender perspective. As I gained greater informal access, I developed a number of deep friendships as well as informal acquaintances. Most people that I interacted with were not particularly interested in me-as-a-researcher but in me-as-a-person. Was I trustworthy? Was I someone they liked? Did I like them? Did I help them? Could they help me? I had to be a person first, and a researcher second. However, the issue and degree of self-disclosure in field research is often problematic. According to Hammersley and Atkinson (1995): “There must always remain some part held back, some social and intellectual ‘distance’ for it is in the space created by this distance that the analytic work of the ethnographer gets done. Without that distance, without such analytic space, the ethnography can be little more than the autobiographical account of a personal conversion. This would be an interesting and valuable document, but not an ethnographic study.” (p.115)

But this strategy of field relations assumes that there are only two dichotomous roles available to the researcher: that is, either the researcher actively remains distant or ‘goes native’ (and thus compromises their research into an autobiographical story of ‘conversion’). Working with the Cree demonstrated a third path: to engage as fully as possible in order to connect on an empathic level and to avoid as much of the socio-cultural distance as possible. In support of this approach, Fontana and Frey (1994) stress the need to consciously engage in reciprocal, respectful interactions: that is, “...we all think we know how to talk to people...Yet, to learn about people we must remember to treat them as people, and they will uncover their lives to us” (p. 374). I believe that this also requires researchers to present themselves as ordinary people.

Consequently, I tried not to hold back some part of myself and to let go of as much of my 'front-stage' behaviour as possible given the insurmountable fact that I was white, female and urban. I felt that the professional distancing so highly recommended by methodological experts would actually be more unprofessional than the reverse. Hammersley and Atkinson (1995) acknowledge that in the maintenance of intellectual and social distance, the researcher may experience a "corresponding sense of betrayal, or at least of divided loyalties" (p. 114). However, my discomfort stemmed from more than divided loyalties (although I felt this on occasion). I felt uncomfortable maintaining an artificial distance when so many of the Cree did not professionally distance themselves from me (although many times I was certainly ignored). Instead, I chose to adopt a more egalitarian and personalized approach.

Hammersley and Atkinson (1995) also warn that "one should never surrender oneself entirely to the setting or to the moment" (p.116). A reflexive researcher should instead manage their degree of participation in order to maintain their analytical platform. However, this assumes that the researcher has the power to not surrender to the field. But, by undertaking research in the bush, I terrifyingly learned that I did not have control of my setting or my experiences. In fact, I often had little control. However, such surrender can be valuable. In fact, it allowed me to reach insights that could only be accessed by full participation in subsistence living. At times, I was not analyzing data; I was trying to survive. In these experiences (more fully discussed in research findings), I left the cozy certainty of my mind, and entered the intensity and reality of the bush.

In many ways, living on a bush camp was an overwhelming experience and one that actively informs much of my research and many of my field relations. In the end, I

do not believe that people (or a culture) are objects to study. My intensely personal and subjective relationship with Freddy (and other Cree) has brought me closer to my data, rather than more distant. Consequently, my analytic focus was in the reverse direction to Hammersley and Atkinson (1995): I tried not to overly remove myself from my data or from the field, but become more and more intimate with my environment and the local people. Because of who and what I am, conversion was an impossibility. I could not become Cree. So ultimately, there was always a cultural distance present; it just was not professionally-driven. Throughout my time in James Bay, my field relations were marked with informality and, in many cases, deep social bonding. I met and interacted with people, not participants. Nevertheless, in this dissertation I have taken these experiences and intellectually transformed them into a formal narrative.

2.7 Overview of Participants

Formal and informal interviews were undertaken across a variety of people, including Cree trappers, elders, tallymen and members and staff of Cree organizations such as the local Band Councils (including the Chief of Mistassini); the President, Vice-President, Special Projects Coordinator, and local administrator of the Cree Trappers' Association (CTA); the Director of Traditional Pursuits for the Cree Regional Authority (CRA); and the Youth Grand Chief. In addition, a large number of informal conversations across a myriad of local inhabitants (both Cree and non-native) contribute to this research. In total, 31 interviews were conducted.

While the majority of participants spoke English (and thus interviews were conducted in English), Cree elders often spoke insufficient (or no) English or French.

During such interviews, I used a Cree interpreter, often Freddy or a member from the interviewee's family. Participation in all interviews was strictly voluntary, with formal permission also received by Cree authorities such as the local Chief or President of the CTA.

Consent. Chief George Wapachee and the Nemaska Band Council provided written approval (see attached letter). Furthermore, Edward Gilpin Jr., the President of the CTA, provided oral approval to conduct research as did Chief William Mianscum of Mistassini. In addition, my research study was approved by the Ethics Committee at the School of Business, Queen's University.

Yet informed consent with ethnographic data collection often remains ambiguous. That is, with an iterative ethnographic design, full disclosure to participants prior to participation becomes difficult, if not impossible, since primary relationships are "jointly created, emergent, and not subject to prior planning" (Wax, 1980: 281). Consent is thus an ongoing construction which cannot be captured at one point in time. While in the field, I found that formal consent forms are viewed with suspicion and were seen as a symbol of 'lack of trust.' The concept of written, legal consent documents stems from a Western culture and is not typical of an oral culture such as the Cree. Such awkwardness had the potential to become a more serious issue since it imposes 'Western' notions of legality within an oral culture that relies on verbal commitments and statements of trust. Consequently, I did not feel that written consent forms are appropriate for many of the Cree participants. A more informal verbal approach was adopted. All participants in

ethnographic interviews were asked to provide verbal consent, often captured on tape or written in my notes.

However, with any ethnography, the very nature of participant-observation means that all lived experience has the potential to become part of the research. In some cases, during specific events, participants asked me to keep “this off the record.” I respected such requests and did not put these into my field notes. In other cases, I simply felt that some information (or experience) should not be treated as data and I have not presented it. All raw data has been kept confidential. Unedited transcripts (etc.) will not be available to any other researchers, or Cree organizations. All data has been stored in my apartment or office and is not accessible to others.

Anonymity. Many of my participants chose to identify themselves within the research -- that is, people chose not to use a pseudonym. For many of the participants, including Freddy, their preference has been to have their name alongside their words. However, in some cases, a preference for anonymity was voiced where people wished to be generically identified as a ‘tallyman’ or ‘trapper.’ Previous research within the Cree culture seems to support this approach. For example, in Preston (1975), the words of a Cree elder are explicitly identified as those of John Blackned. They are not cloaked under an anonymous name. In personal discussions with Richard Preston, he emphasized the participants’ right to forego anonymity. Thus, while I gave people the opportunity to choose anonymity, I respect their right to self-identify.

2.8 Data Collection and Data Recording

Data was collected across people and across sites. I collected data as both a participant-observer and in interviews (both formal and informal, including conversations). Data was recorded in field notes, taped interviews and through memory. While memory is not always reliable, it is arguably a reality in research. Life experiences become part of memory which interact with other forms of recording. In addition, some data is not captured in field notes, journals, or tapes but emerged at a later date from memory (i.e., it didn't seem important enough at the time to record, but gains prominence as data analysis evolves). I found that the overwhelming reality of field immersion meant that everything cannot be recorded in field notes. However, the majority of my interviews were taped, although some participants requested hand-written documentation (a tape recorder made them uncomfortable). In addition, I made extensive use of in-field photographs. For my own thoughts/feelings, I often utilized poetry or creative prose to effectively record my ideas and emotions.

With respect to interpreters, I generally followed a strategy whereby my questions were first presented to the interpreter (often prior to the interview but not exclusively). The interviews were then conducted in Cree, with some (but not always a lot of) translation at the time of the interview. English translations usually took place afterwards, as the translator (often the interviewer but not necessarily) prepared an English version of the Cree taped recording. This strategy seemed to be most appropriate since Cree elders (for whom translation was most important) tended to listen to the questions and then present a speech. It was not culturally respectful to interrupt these speeches for up-to-the-minute translation. For these interviews, I adopted the pattern of

listening in Cree and then receiving English translation after the fact. Consequently, such interviews did not have the same degree of interaction as other, more in-depth ethnographic interviews. Nevertheless, they often provided interesting and useful information.

2.9 Data Analysis

Data analysis occurred in an iterative fashion. Rough, broad categorization occurred during my field stay, and was refined by further data collection. A number of emergent themes and dimensions have arisen from the continual review of notes, interview data, field journal entries and comparison with other research. Detailed coding work was done outside the field site. However, my analysis has continually evolved over time.

As an aid to post-field work, I have used the qualitative data analysis software program QSR NU*DIST (Non-numerical Unstructured Data Indexing Searching and Theorizing) for particular purposes. Specifically, all interview data was transcribed and coded using NU*DIST. While QSR NU*DIST can be used for a variety of analytic purposes, ranging from theory testing to data storage and retrieval, I used it for convenient indexing and storage of interview data. Hand-written field notes (159 pages) were not transcribed but were coded by hand based on the same coding system. Hand written field notes were a field necessity due to technological constraints -- the trapline had no electricity to run a portable computer, recharge battery packs, or power a transcribing machine. Since data analysis started during my field work, the use of QSR NU*DIST for all aspects of data recording and indexing could not occur.

Indeed I am not sure if a greater reliance on computerized software would have been useful. Over time, I found that such coding tended to departmentalize research findings into text-bytes, and that a more useful approach was to go back to original (full) transcripts and field notes. I also found that data analysis was deepened after I received (and attempted to address) feedback from reviewers on a smaller paper that I wrote that summarized my research findings. In addition, a post-field literature review provided important insights into my analysis.

Respondent Validation. Throughout my field work, I tried to utilize respondent validation (Hammersley & Atkinson, 1995). In particular, I discussed many of my emerging thoughts with Freddy, who agreed, disagreed, or made fun of my evolving grasp of Cree culture. In addition, Rick Cuciurean from the Cree Trappers' Association and Lillian Diamond reviewed a first draft and provided useful comments. Freddy and Lillian also reviewed a number of my photographs and provided support for their appropriateness. I also sent copies of a journalistic article that I wrote for Native Americas (Whiteman 1998) to many of my Cree participants in order to gauge their response to my analysis. While I heard through the grapevine that there was good support for that article, nobody except Freddy directly communicated with me.

2.10 Textual Strategy -- Data Representation

The writing of ethnography is as important as the field work (see Denzin & Lincoln, 1994: 41-42). Some discussion of rhetorical choice is therefore useful. Within my dissertation, I have chosen to incorporate poetry, story and visual narratives in

addition to more typical 'academic-styled' discourse. This methodological commitment emerged from the field. I simply could not have created this ethnography without such expressions.

For instance, during my field work in the bush, a number of overwhelming events occurred (these are presented in my findings). At the time, I was incapable of writing about these events in a way that my field journal expected. But I dreamt about certain events for weeks on end. For some reason, I could not compress my new awareness into a logical, academic cage. In time, I wrote a poem called 'A Field Trip,' that seemed to capture some of my thoughts and feelings on one of these events. It was the first textual description of the event that I could manage. As such it was a breakthrough, not just creatively, but analytically -- by using creative expression, I was able to access ethnographic knowledge.⁶

The constructivist philosopher Nelson Goodman argues that "physics or painting or history" are different approaches to the same activity -- that of 'worldmaking' (Bruner, 1987: 12). If we add management studies to this list, it suggests that the type of research we undertake has the ability to shape the managerial world under study. Such an approach is not without precedent. Following the lead of colleagues in sociology (e.g., Ellis, 1993; Ellis & Bochner, 1996; Harper, 1994; Richardson, 1994), anthropology (e.g., Clifford, 1988; Clifford & Marcus, 1986; Tyler, 1986), and education (e.g., Eisner, 1993), management scholars are calling for breakthroughs in the way we discover and communicate knowledge (e.g., Barry, 1996; Golden-Biddle & Locke, 1993; Hatch, 1996; Jeffcutt, 1994; Jermier, 1985, 1992; Van Maanen, 1990, 1995, etc.). Indeed, Goldberg (1990) encourages writers to unleash the 'wild mind' -- to move away from the analytics

of our domesticated, rational mind. Normally, “[w]e put all our attention on that one dot [the object of study]. Meanwhile the wild mind surrounds us” (p. 32). Thus, new approaches, more creative methods, have the opportunity to provide new and different understandings.

My own experiences with field work in James Bay has demonstrated the value in this. Poetry, story, and visual narratives (such as photography and photo montage) have the capacity to access and capture an essence that is withheld by a rational analytic approach. In addition, creative representations fit with the world in which I found myself. The Cree are a storytelling culture: personal narratives help define Cree culture, convey important information, and are a primary vehicle for individual learning (Preston, 1975). Stories are thus a creative means for meaning-making and privilege contextualized information and personalized expression. As Preston (1975) notes: “Cree individuals often do not convey explanation in the form of simple, single facts, preferring instead to converse about events in narrative form. The context of narration (as contrasted with isolated facts) functions to convey to the hearer a whole and precise perception, sometimes almost a visual image, within the appropriate, inherent context. By conveying facts within their own context, then, the Cree attempt a precise understanding; or, on the negative side, prevent distorted or incomplete understanding” (p.10). Furthermore, Cree culture accepts the shifting nature of story (Preston, 1975). Truth, then, is not contained in a fixed format; instead, it emerges with an organic characteristic in a shifting and dynamic world. Thus, the creative role of ethnographer-as-storyteller is particularly appropriate in this culture.

Finally, the field site was intense in terms of climate, degree of wilderness, and environmental degradation. In such situations, creative or 'poetic' expression has the ability to convey the intensity of the research experience by not excluding strong emotions and physical sensations. Instead, it attempts to convey these hidden aspects of the research experience in a more intuitive fashion than does straightforward 'academese.' As Henry David Thoreau eloquently

suggested: "The earth is not a mere fragment of dead history...but living poetry like the leaves of a tree which precede flowers and fruits" (1965: 332). Octavio Paz (1990), a Nobel laureate in literature, also argues that the future role of poetry is to be a powerful voice to fight against environmental degradation. Consequently, the use of creative representations, such as poetry, is useful in terms of creative and political expression.

Despite this commitment, it is not my intention to argue for a replacement of academic discourse with more creative forms; rather, I argue for the coexistence of different discourses and acknowledge that each offers valuable and complementary meanings. Specific uses of creative approaches are discussed in greater detail below.

The Use of Poetry and Story

"Fiction is like a spider's web, attached ever so lightly perhaps, but still attached to life at all four corners." Virginia Woolf, 1929.

Box 1:

"Living (and working) here [in James Bay] makes me angry, but it has also awakened my understanding of what research on "an organization and the environment" can be about. As Octavio Paz once said, "Poetry is the antidote to technology and the market" (1990: 159), and I have found out that this is true. And that's why creative expression... has become such an important part of my research -- it lets my emotions, values, and political debates come through unedited and unresolved. By definition, a collection of poetry [or art] is not a linear debate, nor a rational argument: instead, it offers a creative voice that privileges emotional and intuitive knowledge -- content that is often missing from more objectively-styled texts." (Whiteman, 1997:192)

At a basic level, *any* ethnography is a work of creative prose (Van Maanen, 1988). Many ethnographers have been celebrated for their creative writing abilities (e.g., Geertz, 1972), particularly with 'realist' tales (Van Maanen, 1988). Furthermore, creative writing has a powerful history in related disciplines such as journalism (e.g., see Agar 1995). However, poems and story are not typical formats for academic papers, though storytelling as a form of discourse is receiving increasing attention within the field (e.g., Boje, Fitzgibbons & Steingard, 1996). Adherence to a rational text and an objectivist style is a dominant 'reality' in much of the published management literature (Hatch, 1996). In general, "[a]esthetic visions are downplayed because artful delights and forms are often seen by writers and readers alike to interfere with the presentation of what is really there in a given social world" (Van Maanen, 1995: 7).

Yet in any communicative account, the author is attempting to convey a message, a meaning to its audience. Through the construction of this message, the author both shapes and re-interprets, re-presents the original. As McLuhan (1967) aptly noted, the choice of the medium, in itself, conveys a message. By restricting ourselves to rational academic text, we convey only one type of understanding -- predominately logical and technical. While important, rational knowledge is not all-encompassing. Some knowledge defies straightforward rational text. These meanings cannot (and should not) exist apart from their emotional and sensory elements.

Cree culture also emphasizes the use of personalized story and individual voices. A creative focus on personal stories emphasizes the role and the experience of the individual -- that is, it privileges the actual lived experience of 'Freddy' or 'Abel' or 'Gail' and does not abstract these individuals into more generalized academic notions of

'stakeholder,' 'local inhabitants' or 'researcher.' Instead the knowledge that is embedded in individual experiences is conveyed through story and maintains both its emotional and personalized content in a dynamic fashion. Creative prose can increase reader empathy because of its reliance on emotional and intellectual intersubjectivity (Carrithers, 1990).

In Chapter 4 (findings), I rely heavily on story and personal narration in order to convey my apprenticeship experience. Based strongly on field notes, this section is not always a straight transcription of hand-written notes. In some cases, I have added in creative language in order to better convey the setting and scene in which these notes refer. For example, in the story "Porcupine Taste Buds", I have added 'thick description' after the fact -- the actual field notes document the main points of the story but sketchily so -- they do not fully describe the setting or the emotions. However, I wrote the story soon after leaving the bush and I believe it conveys an authentic account. Throughout the text of my dissertation, I have largely adopted a realist approach but have also mixed in a confessional tale, starting most obviously with the prologue. In this dissertation I have sincerely attempted to convey 'true' experiences in creative ways. All of stories and poems (with one exception) are based on field notes and lived experiences. Indeed, the only 'fictive' poem is "Old Man Yearning for the Thaw" -- it is not grounded in specific field notes.

Chapter 5 also veers away from the standard academic structure. Chapter 5 relies on imaginative dialogue to convey implications and concerns about traditional ecological knowledge. It uses both 'real' and 'imagined' conversations as a creative base. While unusual for management studies (for an exception see Jermier, 1985), other fields have acknowledged the complementary power of such forms of creative expression for some

time. For example, Agar (1995) points out that New Journalism (e.g. Wolfe, 1973) is an established journalistic tradition, an approach that places facts in fictional form -- that is, 'faction.'. And it does this in order to "convey the immediacy of experience and give it coherence and significance" (Agar 1995: 116), a textual quality that technical discourse alone cannot usually convey.

Engaging the Visual Mind: The Use of Photography and Photo Montage

The use of photographs and ethnographic film is not new in ethnographic research. In fact, visual anthropology has a long pedigree. In Bali, Margaret Mead and Gregory Bateson shot over 25,000 pictures (Worth, 1981) and used these ethnographic photos as a form of 'visual data' that were later analyzed for cultural content. Later on, scholars like Sol Worth (working in conjunction with Mead) broadened this into the anthropology of visual communication. Worth (1981) recognized that the manner in which a culture utilizes visual mediums -- its 'grammar of representation' -- could be used as a means to understand that culture. Visual sociology (see Harper, 1994) is a related discipline although it emerged from a desire to express social conditions, not solely as a means of capturing data.

"Any photograph has multiple meanings... The ultimate wisdom of a photographic image is to say: 'There is a surface. Now think -- or rather feel, intuit -- what is beyond it...'

Photographs, which cannot themselves explain anything, are inexhaustible invitations to deduction, speculation, & fantasy."

Susan Sontag (1978: 23).

Photographic analysis has occasionally been used in management studies as a method of capturing visual data (e.g., Dougherty & Kunda, 1990). Yet few researchers have capitalized on the power of photographs as a means of communication (for exceptions in sociology, see Harper 1987, 1982; Margolis 1998). In fact, Leslie Devereaux (1995: 2) points out that "it is extraordinary that in this final

decade of the 20th century, the immense importance of visual technologies in the production and distribution of knowledge...has still made so little impact on scholarly impact in the humanities... [We] remain dedicated wordsmiths, whose representations and ruminations rarely include the visual.”

Yet photos can be used in at least two ways in research: i) as data to be analyzed, or ii) as a tool for communication. This dissertation focuses on the second role -- on the use of photographs, and photo montage, as an innovative means of communicating research findings.

Photos as Evidence -- Photos # 1-26, 28-29, 32-33

At the most conventional end, photographs can be used as evidence, a kind of ‘visual proof.’ Historically, most ethnographic photographs and film were used as ‘evidence’ (I was there; it looked like this), or as visual data to be used alongside textual data (e.g. Photos #13-26, the hunting/trapping series). Visual anthropology grew out of these beginnings.

In general, photos used as evidence can be extremely helpful in trying to contextualize research, particularly among topics that may not be readily familiar to an audience. Consequently, cross-cultural research and anthropological studies of foreign cultures often use photographs in this manner. Most of the photographs that I have included in my dissertation are of this form.

Photos as Visual Narratives

- Photo #27 – Sometimes when I see a beaver house...
- Photo #30 – The best way to save the land...

- Photo #31 -- My trapline is like an office to me...
- Photo #34 -- The wisdom, it comes from the land
- Photo #35 -- Bear skulls
- Photo #40 -- When you sleep on spruce boughs...

Photos can also be used as visual narratives that attempt to convey realistic accounts of field experiences and research findings -- a sort of academic photo essay (e.g., Harper 1987). In my research with the Cree, I found that there were some messages that defied straightforward textual discourse. They could not exist as academic meanings stripped bare of emotions, values, spirituality or visual understandings. For instance, the natural environment was so integral to the Cree's perspective, that a straight textual representation lost much of this biophysical meaning. These visual narratives are an attempt to convey a richer insight into the tallymen's perspective on management.

Photos as Political Statements

- Photo #36 -- Since the white man disturbed the land...
- Photo #37 -- Crees sue over logging rights...
- Photo #38 -- If NBR goes through...
- Photo #39 -- It weakens the trapper...
- Photo #41 -- A tallyman's trees turn into wood chips

Research on indigenous groups is often a political topic, particularly with respect to the impact of development. While in James Bay I discovered that emotional and political perspectives emerged that could not be effectively captured by academic prose. In these examples, there is a shift away from 'objective realism' into a more 'subjective' form of advocacy. This is a more political form of visual narrative, which allows me to visually demonstrate my evolving political stance on the impact of development. These are not 'neutral' representations. However, visual sociology has much in common with

this approach as it sought to document and ultimately change social conditions (Harper, 1994).

Photo Montage

- Photo # 42 -- Changing the geography of our minds

At the far extreme is photo montage. With its roots in the art world of Dadaism and Constructivism (Arnason, 1986), photo montage seeks to present an impressionistic account achieved through the aesthetic and intellectual juxtaposition of images and texts versus the more linear documentary approach of the photo essay. Photo montage is not about 'reality' or 'truth', but rather, its focus is on visual and intellectual shock or impact. Marcus (1995: 46) identifies montage as a powerful means to "protest against... the domestication of the savage mind by the conventions of Western literacy and narrative production."

With photo montage, there is a complete shift away from 'realistic' representation and documentary style into creative interpretation. The montage moves research into the realm of art. In my photo montage, "Changing the geography of our minds", none of the images are my own. Some are not even from my field site though the main image is of the landscape in Nemaska. Yet at a basic level, the juxtaposition of images is a creative distillation of my field research. While the photo montage emerged from James Bay, it is no longer about my specific field site -- it a broader interpretation on management. While this piece may (or may not) be useful in conveying meaning to others, I found it useful in conveying unconscious meaning to myself -- photo montage, as an art-research hybrid, is an effective means of unlocking my own thoughts and feelings about my

research. “Ultimately,” as Roland Barthes (1980: 38) said, “Photography is subversive not when it frightens, repels, or even stigmatizes, but when it is *pensive*, when it thinks.”

Evaluation

In the 1950s, the French phenomenologist Merleau-Ponty recognized that the philosopher had much in common with the painter (Taminiaux, 1993). He probably was not the first. Merleau-Ponty believed that in the act of creation, the artist and the philosopher, accessed a ‘second degree’ of vision, an understanding which was the “carnal essence or the icon of the first” (Taminiaux, 1993: 180). By carnal, Merleau-Ponty suggested that the “painter brings in his [her] own body” in order to express the “manifold relationships of overlapping that the sensible realm weaves with our body” (p. 180). In this way, sensory and emotional knowledge can be embraced.

With the advent of postmodernity, there is no set ‘answer’ or unified approach to knowledge and knowledge creation (Sarup, 1993). I believe that this is a place of opportunity. As Wolcott (1995) argues, an ethnographer now has the responsibility to contribute to both the development of new methodological techniques (new ways of knowing), in addition to making substantive contributions. Thus, as researchers, we can be more open to alternative, or complementary, forms of representation. The carnal essence of research need not be ignored.

As a tool for communication, stories and visuals do not attempt to restrict the range of the academic message to one logical, rational conclusion. The message(s) in creative work are multi-layered and not uni-directional. With any creative work, the meaning that is communicated is highly dependent upon the reader’s response; thus,

meaning becomes an intersubjective fusion of horizons (Steeves, 1994). Furthermore, its communicative content is densely saturated with meaning, yet at the same time can remain ambiguous. In contrast, technical discourse attempts to direct the reader to the 'proper' meaning and attempts to resolve any ambiguities in favour of a clear answer. With creative discourse, these ambiguities can lead to powerful interpretations. In general, creative ambiguities invite greater reader response (Richardson, 1994) and expand a work's potential meaning. Incoherence, of course, is the potential downside of creative ambiguity. Consequently, an effective piece is one which 'resonates' with the reader (Ellis, 1993).

"Poetry is an approach to the out-of-range."

Dragland (1994: 10)

Unlike poetry, where the form may appear to be controversial, narrative story is more obviously linked to standard academic prose. In academics, a poetic representation strongly emphasizes the criticality dimension of convincing ethnographic texts -- it breaks through the standard format in order to provoke readers to re-examine their beliefs and assumptions about research and the world (Golden-Biddle & Locke, 1993). Similarly, photo montage is unexpected in academic presentations and thus acts on some level as a provocation.

Nevertheless, a controversial aspect of poetry, story and visual ethnography is whether it is 'fact' or 'fiction' -- can it be trusted ethnographically? In *Representations in Ethnography*, Van Maanen provides the following insights: "Because I have come to regard the breakdown of standard ethnographic topics, borders, and styles as something to celebrate, not mourn, I cannot take a very hard line on this matter. Suffice it to say that a text is axiomatically an ethnography if it is put forth by its author as a nonfiction work intended to represent, interpret, or (perhaps best) translate a culture or selected aspects of

a culture for readers who are often but not always unfamiliar with that culture" (1995: 13-14).

In my first reading of this quote, I focused on the non-fictional characteristic of ethnography as its defining quality. But this anchoring on 'non-fiction' presupposes that categories of fiction and non-fiction are stable, and they may not be⁷. With this in mind, I made a subsequent reading and focused instead on the words "put forth by the author" and "intended to represent." Van Maanen's definition of ethnography now seemed to hinge on the intention of the author and on what the dialogic community (of ethnographers and/or academics) agrees to hold as true, or what is widely, "axiomatically" held as true. So, Van Maanen is not saying that ethnography is non-fictional work; but rather that it is sincerely put forth as non-fictional, or is *symbolically non-fictive*. That is, the work is attempting to convey a 'local truth' (Denzin, 1991). Ethnography thus remains a 'serious fiction' (Clifford, 1988). Facts are recognized as forms of interpretations -- "constructed domains of truth" (p.10).

In *'Actual minds, Possible Worlds'*, Jerome Bruner (1986) differentiates between two modes of cognitive processing: the paradigmatic or logico-scientific mode, and the imaginative-narrative mode. Most management research is based on the first mode, and our preferred rhetorical style is one of technical rationality (Hatch 1996). The use of creative forms of representation in research (such as poetry, prose, and photographs), is an attempt to evoke the imaginative-narrative mode of cognitive processing and to convey emotional and sensory knowledge (Bruner, 1987). Creative representations are well suited for this goal because they can convey emotions, senses, values, and morals as well as rational thought. Unlike rational discourse, the arts "follow the path of the

emotions” (Frye, 1964: 68). In this manner, I hope to utilize both creative and rational forms of discourse in my dissertation; that is, I intend to present a collage of rational and creative appeals.⁸ By doing so, I hope to present a richer text.

CHAPTER 3: THE JAMES BAY CREE

“We are *Eeyouch*. We are a people. We have our own land, *Eeyou Astchee*.”
Grand Chief Matthew Coon Come. Nemaska, Eeyou Astchee, October 1995

3.1 Introduction

Historically, the Cree were nomadic hunters and trappers who roamed the James Bay region in family hunting groups throughout the course of the year (Salisbury, 1986). Archival evidence indicates that the Cree hunted in local co-residential groups that may have comprised up to five families or fifty people (Francis & Morantz, 1983), although hunting groups now consist usually of two to three families, with children usually living in the village in order to attend school. Currently, the Cree live in nine communities spread down the eastern coast of James Bay and south-eastern Hudson’s Bay, and hunt throughout 375,000 sq. kilometres of land that they have ‘traditional’ rights as outlined in the James Bay and Northern Quebec Agreement (JBNQA) (Feit, 1995). The JBNQA was negotiated in 1974-75 following a land claims battle over hydro-electric development.

Within the region, there are extensive populations of fish, birds, and mammals. Large animals include moose, caribou, black bear, seals, beluga whales and lynx. Small mammals include beaver, otter, marten, weasel, porcupine, and squirrel. Fish populations of walleye, pike, sturgeon, whitefish, and trout abound. James Bay is also an important area for shorebirds (Beyea et al., 1990: 2), such as Canadian geese and a variety of duck species. In the spring, the coast is visited by millions of birds every year (Beyea et al., 1990). In addition, there are a number of other species, including the owl, osprey, eagle, raven and whiskeyjack or bluejay.

It is difficult to talk about the James Bay Cree without describing the subarctic land that they inhabit. The Cree connection to the land is so frequently mentioned by articles and books, that it seems almost a cliché. But it is also mentioned frequently by the Cree themselves, especially when they try to explain their culture to outsiders. The ecosystem appears as a central metaphor in their lives and culture. For instance, there is not a corresponding word for "Cree" in the local language; rather, the Cree have a "variety of designations which identify groups of people according to geographic and ecological considerations" (Francis & Morantz, 1983: 11). While many Cree live in villages, a large portion live in the bush and the majority identify themselves with their traditional way-of-life; they are a hunting, fishing, and trapping people (GCCQ, 1985). Such traditional pursuits are socially, culturally, and economically integral to the Cree world (Feit, 1995; Iserhoff, 1997 in conversation). Furthermore, traditional Cree spiritual beliefs are tied in with the land itself, and their kinship with the bush (Tanner, 1979).

To non-natives, eastern James Bay may be viewed as "an inhospitable country" (Francis & Morantz, 1983: 3). Or it may be perceived as an undeveloped and empty. But these negative perceptions are based on an external understanding, an imported perspective that is acclimatized to a less-extreme, less natural environment. For the Cree, the land is not undeveloped or inhospitable. James Bay is home.

Like many native peoples, the Cree's bush diet relies heavily on the consumption of wild meat such as moose, caribou, fish, geese, duck, beaver, rabbit and bear. The Cree's reliance on hunting and trapping for food fits with the subarctic environment in which they are situated. Agriculture as a subsistence strategy is impossible (Francis & Morantz, 1983). Boreal systems do not easily provide much edible vegetation beyond

blueberries, which the Cree also consume. Consequently, given a subarctic ecosystem, meat-eating is an appropriate and ecologically-based means of subsistence. See my discussion of the animal rights debate in Chapter 4.

3.2 An Historical Review

The first recorded meeting between the Cree and Europeans was in 1611 when Henry Hudson wintered in James Bay (Francis & Morantz, 1983). However, the environment was harsh and the fur trade did not start in James Bay until the mid-seventeenth century. (Francis & Morantz, 1983). The Hudson's Bay Company (HBC) laid claim to the region under royal charter in 1668 (Francis & Morantz, 1983). While historical accounts of the fur trade often position native peoples as passive victims, the fur trade, in many ways was a partnership of mutual benefit with the Cree displaying economic independence and shifted trade advantageously between the HBC and the French traders (Francis & Morantz, 1983). However, this is not meant to imply that it was an equal partnership.

Historically Cree leadership was egalitarian and informal (Feit, 1985). Following nomadic hunting patterns, the Cree lived in large groups only when fishing was plentiful in the summer. Traditionally, the chief became the person who oversaw this 'summer settlement.' While the chief was granted certain powers and responsibilities, it was a role that dispersed with the hunters when they separated into smaller hunting groups, 'micro-bands' (Salisbury, 1986), in the Fall. At this point in time, the hunting group leader (later to be called the tallyman) was in charge most of the year, with the chief exercising influence over a shorter time period and geographically-specific area. Preston notes that

many of these chiefs would have, in all likelihood, also been hunting group leaders during the rest of the year (personal communication, 1997). With the advent of the fur trade, these summer settlements became located at the trading posts. Prior to 1947, the majority of the Cree still lived in the bush and these settlements were not inhabited year-round except by a small minority (Salisbury, 1986). After 1947, however, more and more Cree settled into village life. However, by 1971 still over half resided primarily in the bush, though many had accommodations in the village as a secondary residence.

The fur trade resulted in a number of changes in Cree culture and society. Francis and Morantz (1983) suggest that "the fur trade in the seventeenth and eighteenth centuries probably underscored the development of smaller social groups and more individualized ownership of resources among the Indians" (p.97). While historically it appears that the Cree spent the winter hunting and trapping in groups up to 50 people, the fur trade tended to reduce group size since "since they required less food resources in a given area and provided a higher per capita yield of furs" (p. 97). In addition, the fur trade appears to have more concretely delineated family hunting territories, although the existence of hunting territories does not appear to be a fur trade invention (Francis & Morantz, 1983).

While the development of the fur trade meant that the Cree operated under a dual-form of economy (i.e., subsistence and market economies), the subsistence approach continued to permeate bush life. The fur trade did not shift Cree culture away from a reliance on subsistence activities. According to Francis and Morantz (1983: 170) "subsistence activities for all the Indians still were of far greater significance than were hunting or trapping activities associated with exchange." Tanner (1979) confirms that the traditional beliefs tended to guide all activities that occurred in the bush, including those

related to the fur trade. Thus, "the Indians still brought in as many pelts as they wanted, not the number the company would have liked. European technology continued to be used, but hunting was still (as it is even today) based on age-old methods...The political, social, and religious life of the James Bay people continued outside the direct influence of the Europeans, though it was not unaffected by occurrences in the economic sphere" (Francis & Morantz, 1983: 170). In contrast, the Christian missionaries who arrived at the trading posts in the nineteenth-century (Feit, 1995; Francis & Morantz, 1983) actively attempted to change Cree ideology by positioning Cree beliefs as 'witchcraft'.

Despite these inroads, there was little external government influence in James Bay until the 1930's and 40's (Feit, 1995). During this time, the government established the chief and band council system – the federal Department of Indian Affairs now required one band for each fur trade post and the need to elect a chief and council (Feit, 1995). Beaver Preserves were also established by the Hudson's Bay Company and the Department of Indian and Affairs to combat a severe reduction in beaver populations. By the mid-1930s the provincial government had outlawed all killing of beaver. The origins of this ecological collapse are not fully clear although they can be attributed in part to the influence and aggressive activities of white trappers in the area (Feit 1995). However, Cree trapping activities were also a factor which points to the fallibility of Cree methods. Yet the Cree were in support of the conservation strategy and some communities had already reached a consensus decision to stop trapping prior to the government's actions (Feit 1995). Furthermore, there is historical evidence that the Cree practised beaver conservation in the mid-1800s (Francis & Morantz, 1983). One historical strategy

utilized by the Cree was to leave a portion of their lands untrapped. This strategy continues today on many traplines.

After the Indian Act was implemented, Chiefs and Band Councils became a requirement of every Indian community and were sanctioned by the government to act for the band as a whole (Feit, 1985). However, “this distribution of authority did not reflect Cree political culture” (p. 35). While most bands already had some form of chief, this became a more formalized position. Still, out on the trapline, the tallyman system of management continued, largely unimpacted by outside organizations/institutions. In contrast, the leadership role of the chief has changed significantly over time.

In general, Salisbury (1986) notes that Cree chiefs and band managers tended to be younger, more educated, and English-speaking in comparison with the more senior hunting group leaders, who typically spoke only Cree. In most cases, the chiefs were well respected community members. They were competent at dealing with external, ‘white’ institutions and organizations and were valued as community leaders. While the tallymen had the opportunity to become more involved in community affairs through the Council, their inability to speak English resulted in little ongoing involvement (Salisbury, 1986).

With increased pressure from external agencies, the role of the chief intensified. Finally, during the James Bay negotiations, it was the young, English-speaking chiefs (and administrative elite) who rallied together and successfully led the fight against unapproved hydro electric development by Hydro-Québec. Their leadership role at this time continues to reflect the Cree respect for competence -- these leaders were extremely competent at negotiating with the white world. During this time, these young leaders also

sought the advice of older hunters who were competent in the traditional ways (e.g., the tallymen) (Feit, 1985). For the first time, a Cree regional council was born: The Grand Council of the Crees.

After the JBNQA, Cree regional organizational structures became institutionalized with the Grand Council of the Crees (GCCQ), the Cree Regional Authority (CRA), and the Cree Trappers' Association (CTA), among others. Since their main impetus came as a reaction to the white infrastructure, their organizational structure tended to mirror those of their southern counterparts. In many ways, this made sense since the Cree had to deal with the 'imported' administrative issues of health care, social services, education, and economic development. After the settlement, each village became recognized as a municipality (Salisbury, 1986) and became the permanent home to many of the Cree. The chief and community life became a dominant reality. However, for the people who lived in the bush, the traditional system of trapline management (with the tallyman at the lead), continued. It is the practice of these grassroots managers that is the subject of this dissertation.

3.3 The Tallyman

The Cree tallyman is recognized as the head of the family hunting ground. This is a gendered position for men – a female tallyman is a rare occurrence and in the past, tends to occur only during times of transition (Berkes, personal communication, 1999; Cucuorean, personal communication, 1999). The tallyman, or steward, occupies this role for several decades and is typically a senior hunter between 40 and 60 years of age (Feit, 1985). If possible, a tallyman is chosen by the previous tallyman of a given trapline. In

the event of sudden death (without an identified successor), the successor will usually be chosen by the group of tallymen who hunt in the surrounding areas, or by the family. While a father often chooses his elder son, the role is not necessarily inherited. It is a practical decision that is based on a high level of competence and an in-depth understanding of the land, the animals, and the Cree traditional way-of-life. Male gender is another implicit criteria for leadership choice (see my discussion on gender in Chapter 4).

Cree conceptions of land ownership reflect a strong, intimate, and biocentric connection with the bush. This concept of land ownership is not parallel to our Western conceptions (see Berkes, 1995, 1999; Feit, 1985, 1995); instead, Cree land ownership reflects a 'stewardship' orientation, rather than a 'private property' orientation, where land can be disposed of as the owner sees fit (Feit, 1985). Sharing is an integral part of the system. As literature from the Cree Trappers' Association explains: "In the traditional Cree sense, the 'ownership' (*nitibaihtaana*) of the land and animals is different from the 'ownership' (*nitibiwaawsiin*) of personal property of things that can be bought and sold. To 'own' (*nitibaihtaana*) land and animals may be more accurately translated into English as being the steward or the custodian of the land and the animals" (CTA, 1989: 10, emphasis in original).

While the Cree do not adopt a private property mentality, "[t]he ownership of the land rests with the tallyman, the senior trapper who knows the area best and who is also recognized by Provincial law as the person in charge of a registered trapping territory (trapline)" (CTA, 1989: 10). Thus, the three hundred and twenty-five tallymen in the James Bay territory are the traditional 'owners' of the land, in the Cree sense of the term.

As the leader of the family hunting group, a tallyman is in charge of traditional pursuits. The term 'traditional pursuits' refers to a traditional Cree 'way-of-life' that is based on subsistence in the subarctic. Traditional pursuits encompass a distinct cultural approach to living and working within the boreal ecosystem. However, it is important to note that the term signifies more than specific historical techniques or activities. Such pursuits are not dependent upon stereotypical native artefacts like the bow and arrow or the dog-sled. Instead, Cree traditional pursuits are those activities that are essential for survival in the bush. As such, current practices remain culturally 'traditional' despite an ongoing evolution and adaptation to 'modern' technologies such as the snowmobile, rifle, and truck. In the 1990s, tallymen utilize modern technologies, including rifles, steel traps, skidoos, trucks and motorized boats.⁹ But the pressures of the dual economy continue. As the Cree have faced ongoing pressure to settle in permanent villages, the need for a cash economy to sustain traditional bush life has increased -- e.g., the Cree need money to pay for gasoline and motorized equipment to transport people from the village to the trapline. This has resulted in an ongoing reliance on fur trapping. However, the goal of such trapping is not for 'profit' but rather to sustain subsistence activities.

Tallymen remain responsible for both the economic and environmental welfare of their hunting grounds. Indeed, for the Cree, these two functions (economic and environmental management) may not be a meaningful distinction (Feit, 1985; Cuciurean, personal communication, 1997). As a general rule, the tallyman is under a strong 'cultural obligation' to ensure the productivity and sustainability of his trapline (Feit, 1985). Furthermore, "[t]he main principle in the ownership of the land is to keep traditional law and order in that area, to ensure that the land is not abused, and to oversee the sharing of

the wealth of the land.” (CTA, 1989: 10). Thus, tallymen have the responsibility to redistribute the wealth of the land throughout the family group (CTA, 1995, 1989). Furthermore, “Land and animals cannot be bought and sold, they cannot be personal property. Land will still be there after people die. Land really belongs to God, and he put the animals there” (CTA, 1989: 11). As a caretaker of the land, a tallyman does not attempt to maximize its output. Instead,

The main principle in the ownership of the land is to keep traditional law and order in that area, to ensure that the land is not abused, and to oversee the sharing of the wealth of the land. (CTA, 1989: 10).

Control over resources is an important aspect of traditional law. According to Cree culture, “no [other] trapper can trap in a trapline unless he has been given permission by the owner of that trapline” (CTA, 1989: 12). Control over resources is culturally based and is not legally institutionalized. While the literature from the Cree Trappers’ Association (CTA) states that Cree traplines are registered, this is not a registration in the same sense as southern systems of land registry. Instead, the CTA keeps a list of tallyman registration but it is not a legal recognition of land rights. Control is primarily based on cultural tradition. However, the James Bay and Northern Quebec Agreement (JBNQA) also recognizes the tallyman as “a Cree person recognized by a Cree community as responsible for the supervision of harvesting activity on a Cree trapline” (Section 24.1.8 JBNQA). The JBNQA also states that tallymen can be appointed auxiliary conservation officers (in Section 24.10.4) which would give the tallymen legal

control over conservation measures. Indeed, tallymen used to enjoy this privilege although it was revoked some years ago. Currently, the provincial government has chosen not to appoint tallymen as auxiliary conservation officers. This has become a source of contention particularly as the tallymen struggle to contend with non-native sports hunting and fishing (Thomas Coon-Come, personal communication, 1997).

The Tallymen and the Hudson's Bay Company (HBC).

The word '*tallyman*' is English for the Cree word '*amiskuchimaaw*', which can be translated as Beaver Boss or steward. The tallymen's name is related to Hudson's Bay Company (HBC) requirements from the 1930s and 40s that a bush leader 'tally' (count) beaver houses within his hunting area. Under the Beaver Preserve system, these tallies were then used to assign annual trapping quotas back to the tallyman (who distributed them across his hunting group). The tallyman's job was also to ensure that the quotas were met but not exceeded.

During the 1930s, a system of 'Beaver Preserves' was institutionalized by Western organizations such as the HBC and the provincial government, but appears to have been built upon a pre-existing indigenous framework (Feit, 1995). Yet, there is some debate over the influence of the fur trade on the Cree system of land management (see Bishop & Morantz, 1986). However, Berkes (1995) demonstrates that the management practices of the tallyman could not have arisen from a Western worldview. While the English designation may come from the HBC, the form of management is not a 'white' invention (Berkes, 1995). HBC (1947) archives confirm this: "...our organization [of beaver preserves] is based on Indian tradition and custom, it meets with approval among the

limited number of Indians to whom we have been able to bring its benefits. The main reason for their appreciation is that once the white man's practices of written leases and agreements are disposed of we revert to Indian custom, pattern our organization after their sound, well-established practice and divide our preserves according to the aboriginal plan of land tenure that from time immemorial has served the Indian population." (1947: 689)

That is, while the Hudson's Bay managers 'appointed' a tallyman, this person was usually a recognized leader in an indigenous system of *trapline management*. The appointed person, now formally called a tallyman for Hudson's Bay's purposes, was a senior, experienced hunter who was *already* in charge of his family hunting ground. A role he continued to enact despite the overlay of the Hudson's Bay Company designation.

The tallymen's management sphere also appears to extend beyond the beaver population, to include all the animals and the land itself. Nevertheless, the current system appears to be a mix; that is, while based in indigenous ways, it has also adopted some Western approaches such as the quantification of animal populations (see Berkes, 1995). However, the purpose of this paper is to focus on general management practices rather than specific management techniques such as counting animal populations.

In addition, it is not my intention to examine whether the tallyman system of management is culturally 'pure' or not; that may (or may not) be a more appropriate goal for anthropology. Instead, I wish to emphasize Cree perspective of how *they* view and enact the tallyman role. For the purposes of my work, I will rely on how Cree tallymen describe themselves along with observations of their practice. According to Freddy, "the role of the tallyman has always been to look after the land, the animals, the fish, the birds

and the Cree people" (Jolly, 1997: 13). As Edward Gilpin Jr., President of the CTA, pointed out, "It's a big job."

3.4 The Sustainability of Cree Subsistence

As a region, James Bay has distinct bioregional vulnerability (Beyea et al., 1990). However, the Cree have lived survived in the subarctic for over five thousand years without facilitating long-term ecosystem collapse (see Berkes 1995, 1999) despite periods of overhunting (e.g., see Berkes, 1998).

Long-term ecosystem health is not simply a result of low human population figures – i.e., the Crees' success is not simply a result of low population stress on the environment. Feit (1995) indicates that the Cree are skilled enough at hunting and trapping that they could deplete game if they so chose. However, through the ongoing development and application of TEK, the tallymen appear to manage the ecosystem in an appropriate manner. Berkes (1999) provides quantitative support for Cree claims of sustainability with respect to fishing practices and provides a compelling description of the power of Cree approaches. With longitudinal data for the Cree fishery in Chisasibi, Berkes presents Cree traditional knowledge as an effective yet alternative resource management system. The Chisasibi fishery is shown to be sustainable over the long term, yet Cree fishing practices do not follow established 'conservationist' approaches. In fact, "Cree fishermen violate just about every conservation or management practice used elsewhere by government managers. Yet records going back to the 1930s show that *Coregonus* fisheries in Chisasibi have been sustainable" (Berkes, 1995: 106). The Cree

fishery achieves ecological sustainability by following traditional management beliefs and practices.

Instead of following Western approaches that attempt to maintain population equilibrium within a system, Cree fishermen use adaptive management techniques that incorporate the oscillating and non-equilibrium nature of the James Bay region. Fish catches are carefully monitored to determine population levels and Cree fishermen rely heavily on ecological feedback -- that is, they carefully monitor the environment and use this feedback to adapt their fishing approaches. By relying on (and contributing to) traditional knowledge that has been developed by past generations of fishermen, the Cree have an in-depth understanding of their environment. They are also fully prepared to adjust their methods according to oscillations in the system. By doing so, the Cree help maintain the resilience of the fish population. By not concentrating their catch on large fish (and conserving young fish as per popular conservation techniques), the Cree harvest more naturally -- that is, they take a mix as any natural predator would.

My study uses Berkes work as a foundation that demonstrates the sustainability of Cree approaches. However, I do not attempt to replicate or extend this work (although it would be a worthy undertaking). Instead, I attempt to describe the tallymen's general approach as opposed to specific resource practices.

3.5 Economic Development in James Bay

In the 1970s, large-scale hydro-electric development entered James Bay (see McCutcheon, 1991). Prior to this period, the land had remained largely undeveloped and inaccessible, with outside access restricted to planes and boat transportation (Salisbury,

1986). When the native populations discovered that the James Bay Project was going to be built on their land, the Cree and Inuit banded together and launched a large legal and public relations battle against Hydro-Québec. The Cree and Inuit were partially successful in their fight against economic development -- in a joint legal action, the native peoples in the region brought Canada, Quebec and Hydro-Quebec to the bargaining table. Land claim rights were subsequently recognized and a large compensation package was provided. However, these efforts were also unsuccessful in that development continued to proceed and became institutionalized (and legalized) in an Agreement that the Cree view as questionable (GCCQ, 1995). See photo 11 for a picture of a typical hydroelectric substation.

Following hydro-electric development, there was a rapid movement towards permanent village residency (Niezen, 1993). This swift cultural and geographic shift resulted in high frequencies of suicide, neglect of children, vandalism, and drug and alcohol abuse (Niezen, 1993: 510).

Infrastructure developments, such as a road network, have also increased the availability of drugs and alcohol. Furthermore, roads have opened the region to further developments in mining and forestry, as well as an increase in non-Native sports hunting, fishing, and poaching. In addition, centralization may have increased the need for a cash economy, as motorized transportation became a necessary part of bush life (see Wenzel 1991 for a discussion of the same point with respect to the Inuit).

Environmental impacts were also significant. All told, at the end of James Bay I, five hydro-electric reservoirs covered over eleven thousand square kilometres; the

RIVERS

Tears are like rivers;
they never stop flowing.
Rivers are like tears;
they become dry.

Margaret Sam-Cromarty
1990

seasonal flow pattern of the LaGrande River had been reversed (and the estuary changed from saltwater to fresh); large dead zones had been created around each reservoir with a significant loss of wetlands and increased soil erosion; animal migration routes had been affected (including the drowning of ten thousand caribou in September 1994); and perhaps most quietly, there has been a serious increase in methyl mercury levels in fish and human populations (Berkes, 1990). In one of the villages where I lived, the mighty Eastmain river has been diverted (along with the LaGrande and the Opinaca), with 90% of its natural flow disappearing (Messier et al., 1987 in Berkes, 1990) into the production of hydro-electricity. Mining, forestry and hydro expansion bring additional environmental impacts.

However, there have also been positive impacts from development economic (Feit, 1995; Salisbury, 1986). The Cree have become unified and strengthened politically. With the regional transfer of education, housing, medicine and social services, the Cree have become more autonomous. Hunting rights and provisions have become protected under the Income Security Program (part of the compensation package) which has helped to economically support traditional activities (Feit, 1995). The Income Security Program (ISP) provides basic income to trapping individuals and families, provided they stay in the bush for a specified period each year. Overall, Salisbury (1986) notes that the Cree were able to positively control much of their social evolution following the James Bay Project and the JBNQA.

However, the focus of regional political and administrative structures, particularly with the Grand Council of the Crees of Quebec, the Cree Regional Authority, and the Cree Trappers' Association, is towards the management of outside forces. As a Cree

hunter explained to me, these entities were largely developed to more effectively deal with 'us,' large Western institutions, corporations and governments from the south. But within Cree culture itself, the grassroots leadership of the tallymen continues.

3.6 The Impact of Development on The Tallyman

There has been very little research that has examined the impact of economic development on the Cree tallymen. In general, environmental and social impact assessments treat the Cree as one large homogenous group. The perspectives of (and impacts on) the tallymen are not emphasized, or identified as a distinct subgroup, despite their cultural importance. Notwithstanding this research gap, implications for the tallyman might be drawn from work that has been done with a broader lens.

Niezen (1993) suggests that a major shift from bush life to centralized village life has occurred as a result of hydro-electric development. If this is correct, then some decrease in the role of the tallyman may be expected as an unacknowledged side-effect of such development (since the tallyman's role as trapline manager is located outside of the village and in the bush). However, the implementation of the Income Security Program (ISP) may have mitigated some of these impacts. For instance, Scott and Feit (1992) suggest that more Cree are engaged in traditional pursuits than in the past, and that the structure and implementation of the ISP has had only minor impacts on the tallymen. Consequently, the role of the tallyman may be reinforced or maintained. However, the focus of this research was very targeted: the authors examined the socio-cultural impacts of the ISP, not those of economic development activities. Therefore, the ISP may positively affect the tallyman's cultural role yet at the same time, other economic

development activities like hydro power, forestry, mining and tourism, may have serious negative effects that have not been examined.

While the primary objective of this dissertation is to describe the tallyman's management practice, findings also provide some insight into the impact of development on this practice.

CHAPTER 4: RESEARCH FINDINGS

Photo 12:

Rapids.

On the afternoon of November 11, 1996, I began my field study of the bush. Although I had been in James Bay for some time, this was the first day that I was going to Freddy's trapline to record data. It was not a social visit -- I had arrived alone, without Barry, to see if I could 'shadow' Freddy as he worked and to determine if this would provide adequate data for an ethnographic study in management. In a sense, it was a test to see if my study had value. On that same day I fell in to a large, cold river and nearly died. On the bank of the Rupert's River, in Canada's great north, I followed Freddy into what would have been a surprising end to the beginning of my research study. On that day, with temperatures well below zero, I learned a lot about indigenous management in the subarctic.

It was the single most important event of my field work.

Weick (1993) describes a cosmology as "the ultimate macro perspective, directed at issues of time, space, change, and contingency as they relate to the origin and structure

of the universe" (1993: 633). Managers and philosophers alike adhere to a cosmology, though often a different one -- as do researchers. Our cosmology is "reflected in what [we] take for granted" (p. 633). While often stable, cosmologies, like people, can slip. Luckily for me, Freddy was adept at dealing with such events.

On Remembrance Day

I was following Freddy on what seemed like a straightforward task: we were to go to his hidden cache of gasoline, located down an arm of the Rupert's River, and bring back 10 litres. The cache was below a set of large rapids a few kilometres from the camp. They weren't the largest rapids on Freddy's trapline, but they were sizeable. Freddy and I took the boat because it was still before final freeze-up, although the water had already gone cold. As we approached the rapids, Freddy called to me, "Bush lady, grab the paddle. If the motor stops, paddle us to shore while I try to start it again." I was shocked. Paddle it to shore if the motor stops?! I thought he was kidding at first but he wasn't -- if the old motor chose to conk out, we'd better be prepared. If the boat went down the rapids, it was unlikely that we would survive the fall, or if we did, it was unlikely we'd survive the hypothermia.

I nervously held the paddle, a cheap plastic emergency model, and started to sweat: I had grave doubts about my ability to paddle our combined weight of over 400 lbs (plus the boat) over to shore against a strong current and the pull of the rapids. He must be just testing me I thought.

"Don't worry! It probably won't happen," he said. Freddy started to laugh. But I didn't relax until he had safely steered the boat into a cove away from the drop-off. We got out and started walking along the edge of the river, down towards the cache at the bottom of the rapids.

Freddy, as usual, was in the lead, walking and carrying his gun, looking out for possible game. I followed, carrying the backpack and an empty box to put the gas can in. It was below freezing but I was dressed fairly lightly -- down vest, big wool sweater, gortex mitts, rain pants, and my mid-size Sorel boots (it was not cold enough for the big moon boots yet). We were walking across an inclined rockface and we stayed pretty far back from the edge -- probably six feet or more. It was a clear day and I watched Freddy intently, watching how he behaved in the bush, thinking about how at home he was, how he knew the terrain. I was busy thinking about how my thesis work had finally begun when I slipped. Before I knew what happened, my legs shot out and I fell down the rockface. I hadn't been watching my feet partly because I was carrying a box that blocked my view, and partly because I hadn't really thought to. I hadn't known about the very real possibility of black ice on the rocks, and so, not knowing, I slipped.

Freddy told me later that I started screaming like crazy. All I know is that I started clawing at the rocks, trying futilely to stop my decline. Damn the gortex -- I couldn't get my mittens off and they had no grip on the ice. Despite my efforts, I sank into the winter current. Very quickly I was hip-high in water and

being pulled by the moment. I knew in that instant real fear. The current was starting to pull me away from the rocks, closer to the rapids. They were about 30 feet away. I wasn't in all the way, but I could feel that I didn't have the strength to hold on to the rocks for long. I had forgotten about the analytic assessment of the ethnographic experience. I had forgotten that I wanted to write a Tale from the Field. I yelled out. But I don't remember screaming. I don't remember that at all.

Later, Freddy told me that if I hadn't been screaming so loud, he'd never have heard me over the roar of the water. He would never have seen me fall. He was too far out front to notice. But I don't remember screaming. I don't remember that at all. All I remember are his big hands grabbing at me -- and missing, the first time. All I remember is that, on the second try, he caught my wrist and hauled me out, telling me to grab for his rifle as it fell. I remember the shock of the cold and the shock that I could have died. I certainly didn't remember that I was only a participant-observer, a researcher trying to remain marginally outside the moment. I didn't remember any of this. All I remember is being very cold, and everything seemed to go slowly.

Once out of the water, Freddy shouted at me, "Where are you wet?! How wet?! GET THOSE PANTS AND BOOTS OFF! NOW BUSH LADY NOW!" Freddy seemed like he was still in crisis mode while I was suddenly calm, very much in shock. I remember too, that I was embarrassed to take off my leggings and stand

in front of a Cree hunter in just my underwear, which I kept on. But he kept yelling and I did as he said, took off my rain pants, my tights and my boots, and stood on the bare rockface. My legs were so incredibly red. Freddy took out the insoles of my boots and rang them out. He took off his own boots, gave me his woolen socks, and put his boots back on. "Here, put these plastic bags over the socks...put them on quick. Warm up." I put my rain pants back on. Now let's get home, I thought.

Freddy sighed. "Come on bush lady, let's go get the gas."

I was shocked again. I wanted to go back to the bush camp. I wanted to go inside and sit by the warm fire. Have some hot tea. After the accident, I had assumed that we'd leave immediately. But Freddy needed that gas. "Come on," he said. I was amazed that we were not leaving. But I was too numb to argue. So we continued our journey and made our way slowly and carefully to the cache. Freddy talked non-stop, about his father, about other accidents, about life in the bush. I have little recollection of any of these stories, except that his father had liked the blueberries that grew nearby in late summer.

When we finally reached the bottom, we stood looking up at the rapids. The rockface was flat at the bottom and Freddy stood near the edge. I stood well back. "Take a picture," he said. "Take a picture." For once, I didn't want to. "Come on bush lady. I'll take your picture. Stand in front."

As he photographed me, he said, "I was going to jump in. When I missed you the first time. I was going to jump in front...to block your path and maybe throw you out." Freddy looked at me. "I'm heavier," he said simply. "Maybe I could fight the current better." We were quiet then. I knew that he couldn't swim.

Afterwards, I helped Freddy lift up a heavy old canoe, grab the big gas can, and then load it up on his back. He used a head tie to balance the weight. I was so tired I was nearly dropping. But I was warm. On the way home we were silent. As we neared the camp, Freddy said, "Bush lady... I was thinking...I was thinking about what it would be like if I had to take this journey home by myself."

"I was thinking that too," I said. There was nothing left to say. We anchored the boat.

Back at the camp, Annie and Freddy's youngest brother Tommy and another Cree hunter were there. Some white teachers were visiting too. We walked into the front room and I just stood there, saying nothing. I moved towards the stove while Freddy explained in Cree what had happened. Everyone was upset. Annie got me some tea. I think the teachers left.

Tommy and the other man came over and stood by me. The man who I didn't know started talking slowly in English. He told me about the time he had fallen near those rapids, how he'd gone in wearing hip waders, no knife, how he had managed to keep one leg up, on the rockface, while the left wader started to fill up with water. He told me how he'd hung there, with his bare hands and one foot, clinging, pulling

himself up. He'd made it. I nodded. I knew how he felt. He told me to always carry a knife if I wore hip waders -- so that I could cut a drainage hole before they became lead weights in water.

That night, I refused to stay over in the bush camp or in the nearby village. Instead, I drove back to my apartment in Eastmain, driving seven hours through a blizzard. I did not think that I would go back to the bush. I did not ever want to wear hip-waders. I wanted to go home.

Part 1: Rapidly Learning About Cree Management

For most of us, November 11 is Remembrance Day, a Canadian holiday to remember veterans who died in war. It is ostensibly a day for heroes. Coincidentally, it is also the day that the Cree signed the James Bay and Northern Quebec Agreement in 1976, the day that economic development legally entered the region, though arguably under duress (GCCQ, 1995). In Cree culture, it is also a day to remember those who have lost a great deal. It is perhaps ironic that on such a day, I learned of the delicacy of my own existence. The experience also changed my perspectives on management and allowed me to gain insight into the tallyman's approach.

Weick describes such an event as a 'cosmology episode,' an experience "when people suddenly and deeply feel that the universe is no longer a rational, orderly system" (1993: 633). Shortly after the rapids incident, I came down south to Queen's University. Over dinner, I was telling this story to some colleagues. As I finished, someone who had lived in the Arctic said, "Many of them die out there on the land, you know. It's very uncompromising." And someone else joked, "Better get a teaching job down here -- it's

safer!” While we laughed, I wondered if they were right. And then it hit me: If our modern work life shields us from dying in the land, *then it can never really let us live on it either*. My cosmology of management was deeply shaken.

In comparison, the tallyman utilized a management system that was steeped in the earth, rooted in the life and death of the Cree people. Cree tallymen like Freddy did not operate under the dualistic cosmology that separated work from life, humans from nature. At a very basic level, Cree management was not sheltered from the natural environment. It was embedded.

Research findings focus on this aspect of the tallymen’s approach. Findings are organized as follows. Part 1 examines Freddy’s managerial resilience, a characteristic that is demonstrated in the rapids story. Part 2 presents Traditional Ecological Knowledge (TEK) as the tallyman’s cultural framework for management. Included in this section is a narrative on my 10-week apprenticeship in the bush as well as a discussion on TEK training. Part 3 presents an analysis of the tallyman’s management beliefs and practices, including a discussion on the ecological embeddedness of this approach. Part 4 presents a critical look at TEK. Finally, Part 5 discusses the impact of development on the Cree tallymen.

Crisis management and managerial resilience

“Very quickly I was hip-high in water and being pulled by the moment. I knew in that instant real fear. The cold river current was pulling me away from the rocks, closer to the rapids. I wasn’t in all the way, but I could feel that I didn’t have the strength to hold on to the rocks for long. I kept screaming. I had forgotten about the analytic assessment of the ethnographic experience. I had forgotten that I wanted to write a Tale from the Field. I yelled out. But I don’t remember screaming. I don’t remember that at all.”

Trapline R-21, like most parts of James Bay, is a complex and unpredictable environment. Inexperienced management can quickly lead to disorganization and death. Although accidents happen to hunters, Cree tallymen are successful grassroots managers (Berkes, 1995; 1999). They are typically highly effective managers of crisis situations.

In a similar vein, Weick (1993) analyses the Mann Gulch fire disaster in Montana, which is the basis of Norman Maclean's (1992) book 'Young Men and Fire.' In this true story, thirteen young firefighters perished in an unexpectedly large blaze after a lightning storm started a fire in the Mann Gulch area in the summer of 1949. From a historical perspective, Weick examines why team members perished despite the fact that the crew foreman, Wagner Dodge, had an 'effective' solution to prevent death -- that is, Dodge "lit a fire in front of them and ordered them to lie down in the area that it had burned. No one did, and they all ran for the ridge. Two people, Sallee and Rumsey, made it through a crevice in the ridge unburned, Hellman made it over the ridge burned horribly and died at noon the next day, Dodge lived by lying down in the ashes of his escape fire, and one other person, Joseph Sylvia, lived for a short while and then died." (p. 629).

Weick describes the tragedy as the result of a loss of organizational resilience -- the group fell apart and many died as a result. In general, Weick (1993) suggests that organizational resilience can stem from four sources: improvisation/bricolage; an attitude of wisdom; virtual role systems, and; respectful interaction. Using this structure, the rapids incident demonstrates how Freddy, as a tallyman, has a 'resilient' approach to management. Consequently, this field experience provides empirical support to Weick's theory of how organizational resilience has the ability to prevent fatalities -- in this case, my own.

Improvisation/bricolage

Like the Mann Gulch foreman Wagner Dodge who survived the fire, Freddy was able to effectively manage unpredictability -- so much so that he was able to compensate for my lack of attention (why was I not watching the rocks in the first place?). Weick (1993) suggests that 'improvisation and bricolage' are a key source of managerial resilience in a cosmological crisis: "Bricoleurs remain creative under pressure, precisely because they routinely act in chaotic conditions and pull order out of them. Thus, when situations unravel, this is simply normal natural trouble for bricoleurs, and they proceed with whatever materials are at hand" (p. 639). In addition, resilient managers do not panic in the face of such crisis.

Weick (1996) also suggests that firefighters may not always be effective crisis managers because they do not know how to "drop their tools" -- that is, they continue to carry heavy or cumbersome tools during a crisis even though this may impede a successful resolution. Firefighters, like many managers in a crisis, simply don't have enough skill at "dropping" what they don't need. Consequently, this baggage gets in the way of survival. Yet Freddy was highly resilient in a concrete sense. He dropped his tools (e.g., his rifle) quickly, in order to use both hands to pull me out. But Freddy was so resilient that he had the wherewithal to simultaneously order me to grab his gun as it slid down the rocks. He continued to adapt his actions and direct my own throughout the crisis. While Freddy was unquestionably frightened during my fall, he did not panic. As a tallyman, he had experienced similar life-threatening situations, including one time when he fell through the ice and directed his children how to pull him out.

In contrast, Freddy's practicality seemed totally inappropriate to me -- I could barely comprehend that he wanted me to catch his gun while I was busy being saved, nor could I believe that we were going to finish our task instead of going home where it was safe. (However, I was proud afterwards that I did manage to grab the gun.) Freddy's practicality was a good demonstration of his management expertise and resilience. And this resilience significantly improved the effectiveness of his management practice -- Freddy knew how to drop his tools and he also knew how to pick them back up.

An attitude of wisdom

Weick (1993) suggests that an "attitude of wisdom" can provide managerial resilience because "[i]n a fluid world, wise people know that they don't fully understand what is happening right now, because they have never seen precisely this event before" (p. 641). Thus, resilient managers are neither extremely cautious nor extremely confident.

As a manager, Freddy was cautious and confident but did not behave in either extreme. In contrast, I was overly confident at the beginning (not watching the rocks) and then overly cautious (wanting to go immediately back to camp). Either approach was unwise. For instance, getting into a boat and facing the cold wind for even ten minutes may have had serious repercussions after such a cold encounter. It would have been a highly risky management strategy because hypothermia sets in quickly. By not going home, and continuing our journey, I walked and recaptured much of my natural body temperature -- this was cautious but still carried some risk. In this case, managing outside was good 'medicine.' As I said to Freddy later, "For me, when I'm outside and

there's danger, I want to go inside where it's safe. But for you, you can find safety outside, on the land." He nodded in agreement (field notes, p. 169).

Such a perspective fits with the general belief structure of the Cree – a tallyman is trained to be humble and to respect the environment in which he operates. An extended apprenticeship also teaches a tallyman to be cautious and competent. While the tallymen's knowledge and skill may be extensive, they are not exhaustive. Tallymen believed that they were highly competent managers, but recognized the dangers of over-confidence. Later, during an interview, tallyman Robert Jimiken discussed this approach:

"Just like when my father tells me: 'When you're in the bush, you're not just there to learn about how to set a trap, how to hunt moose or caribou. Or how to set a net. It's about how you take care of yourself, and how you deal with yourself in your life.' When you're crossing a lake, for example, especially in the spring or early fall, it used to be very dangerous. You know there's thin ice. But you're able to almost dictate where you're going after a while, because you've been taught that. You have to be cautious all of the time. It's better to go around a shore, than cross a lake. Otherwise you may never get there. At least you ensure yourself, that if you go around that lake, you'll eventually get to the point of where you want to go. That's the direction that I've been trying to teach my children. Never try and take shortcuts in life. You know?"

You may have to go around, and take the long route and gain from that experience. Sometimes there will be obstacles along the way. It might be a small little river that you have to cross but you have to learn how to cross that river. It's not by jumping in there, and wading up to here in the winter time or in the fall. It's too cold. Again, you're exposed to danger, you know? Those...that's the kind of knowledge I

picked up. This is what I've used when I raised my kids and also dealing with my work through the community. And also when I work with non-Natives.” (RJ, text units 92-111).

This attitude fits with the natural environment in which the tallyman operates. If mistakes are made, tallymen risk injury or death and so have learned to be cautious. But they also need to survive and must actively engage in subsistence activities. They do not try to 'go inside' at the first sight of danger. This attitude of wisdom, as Weick (1993) suggests, may increase a manager's ability to adapt to crisis or opportunity. In my case, this bush-wise attitude certainly paid out -- Freddy was able to save me despite the surprise.

Virtual role systems

Weick (1993) suggests that when a crisis occurs, people may quickly lose sight of their roles and no longer attempt to organize solutions as a group. However, a 'virtual role system' implies that group members can continue to operate as if they were a group, even though a crisis has shattered their cosmology. It is easy to see how a crisis negatively impacts roles. The experience of slipping down the rockface quickly forced me away from any pretence at role-playing. During the initial fall, if I could have spoken, I would probably have said, as Weick would imply, "I have no idea where I am, and I have no idea who can help me" (1993: 633-634). I was no longer a student; I was no longer a researcher. I was just terrified.

However, Freddy continued to enact his role as 'teacher' and 'tallyman' -- he may have dropped his tools but he did not drop his role identity. As a resilient manager,

Freddy was able to continue to enact his 'leadership' role and he continued to forcefully direct my actions. He did not forget who he was 'suppose to be' -- a manager in a harsh environment. By maintaining this virtual structure, I was able to regain some of my own resilience and re-adopted the most appropriate role for the crisis situation -- that of 'avid follower.' I did exactly what he told me to do. And I am here to tell the tale from the field.

Respectful interaction

Weick also suggests that the ability to maintain an intersubjective relationship between group members is critical to resolving crisis situations. In addition, intersubjectivity depends upon "trust, honesty and self-respect in moment-to-moment interaction" (p.643). If these qualities exist in a group relationship, then "new options, such as mutual adaptation, blind imitation of creative solutions, and trusting compliance, are created" (p. 643).

Freddy and I had been friendly acquaintances for almost a year before the accident. I had watched him operate in the bush on a number of occasions though never in a crisis. However, I trusted and respected him but I had never had to rely on his managerial ability. Yet during my accident, I was able to trustingly comply with his direction, partially because his resilience was obvious. He knew what he was doing and this increased the successful resolution of the accident because it was quickly clear to me that I should trust him. Furthermore, Freddy had experienced managerial crisis before. Freddy had been trained to operate on an intersubjective basis -- as a tallyman, he felt responsible for others in his 'care.' He did not operate with an individualistic worldview

and he did not expect others to do so. It was natural for him to consider "jumping into the river" in order to physically block my path towards the rapids, even though he could not swim. Without expressly communicating a plan, we worked implicitly as a team -- he pulled me out; I grabbed his gun as it fell.

Discussion

Wren (1987: 9) describes management as "the activity which performs certain functions, in order to obtain the effective acquisition, allocation, utilization of human efforts and physical resources in order to accomplish some goal." With traditional pursuits, the tallyman organizes his work and that of his extended family in order to successfully hunt, trap and fish. However, Drucker (1995) emphasizes that management is not a "bundle of techniques", but rather "the essence of management is to make knowledge productive" (p.250). For the Cree tallymen in my study, knowledge was made productive through practical ecological use that ensured survival. Weick (1996) notes that the criterion of 'life or death' is a useful means of evaluating the effectiveness of organizing, particularly in crisis situations. Against such measures, Freddy's management effectiveness was high.

Freddy's cosmology of management was ecologically-based. In contrast, my cosmology of management (and of research) was socially-based. On Remembrance Day in the subarctic, this difference nearly cost me my life. In hindsight, it certainly cost me my cosmology, which is perhaps a useful thing. Yet cosmologies are resistant to change. For a while I continued to have a polarized view of the natural environment -- the cosmological episode simply caused me to swing from one extreme to another without

switching to another cosmology. For instance, until the accident, I had a sanitized or romantic view of the natural environment (safe, beautiful) until I realized its dangers. Then I had a strong and immediate opposite reaction and perceived the bush as the 'dangerous outside' -- after my rescue, I wanted to go back to camp, to move away from the natural environment as quickly as possible. At that particular moment, the 'downside of outside' appeared to be unreasonably high to me, particularly since I felt that the 'upside of inside' was a better and safer location. However, neither of these perceptions were balanced. I had moved to the boreal forest without knowing, or respecting, the characteristics of this environment. I had to begin to build my own ecological cosmology before this became apparent.

Yet for Freddy, the bush was neither necessarily safe nor dangerous. It could be both of these things -- at any given time -- and he understood and respected this. The bush accident forced me, a denatured and abstracted researcher, to surrender both to the moment and to the natural environment. For a brief period, I left my conceptual, analytical cage, a box that had caused the dilemma in the first place: I was simply trying to survive and make sense of an ecological environment. And in that one experience, I left the cozy certainty of my mind and joined (for a short time) the intensity of the bush and the tallyman's management approach.

In addition, the stress of this moment had a tremendous impact on my field relations -- from that moment on, Freddy and I were bonded in a deeply human way. He saved my life and we both recognized the emotional commitment of this. Our future relationship was shaped by this event -- while in the bush, I began to seriously enact an apprenticeship role that was based on an intense relationship with Freddy as the tallyman.

However this too was methodologically useful -- such intense and respectful interaction is not unusual among a hunting group.

Part 2: The Essence of Management: Traditional Ecological Knowledge (TEK)

The rapids story highlights a number of important dimensions of the tallyman's managerial abilities. However, the tallyman is not simply an example of a resilient manager. A tallyman is an indigenous manager and thus operates with a distinct cultural worldview which provides a framework for management that is different from Western perspectives (Deloria, 1992). While Freddy and Wag Dodge from Weick's (1993) review of the Mann Gulch disaster have similarities -- i.e., they are both experienced 'bush men' -- they also stem from different cultural roots. Consequently, it may be useful to step back and examine the cultural framework that gives rise to the tallyman's approach.

Traditional ecological knowledge (TEK) can be viewed as an overarching cultural framework for native management. For the Cree, TEK is the manifestation of 'earthly wisdom', an iterative mixture

A Field Trip (For Freddy Jolly)

*I didn't realize it at the time
Not when my boots slipped
and I careened down the rockface
Not when I screamed
and clawed about
to no effect
And not even when my body
turned to ice
numbed as I moved
from granite into river*

*I didn't realize it when
I heard the rapids
calling out nearby
Not when he hauled me out
yelling about hypothermia
and to catch his gun as it fell
from his pack*

*I didn't realize it in the field,
not at all
though there was one moment
when I stood half-naked on the rock
wringing out my clothes,
wondering in amazement
that I could die from participant-
observation*

*I only realized it later
When someone back home said:
"Many of them die out there on the
land, you know
It's very uncompromising."
And someone else said,
"Better get a teaching job down south --
it's safer!" And I knew
that they were right.*

*And right then, that was when it hit
me:
If our organizations never let us die
on the land,
then they can never really let us live on
it
either.*

of management knowledge, beliefs and practice (Berkes & Henley, 1997). TEK has been defined “as a cumulative body of knowledge and beliefs, handed down through the generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment” (RCAP 1997, 4: 454; from Berkes, 1995: 100). TEK focuses on the complex relationship of all living beings with each other and the environment (RCAP, 1997). TEK systems are a mixture of management knowledge, beliefs and practice (Berkes & Henley, 1997). These three elements operate in an iterative and holistic system that emerges over time, and across generations, and are embedded in the lived experience of traditional pursuits, on activities or ways-of-life that take place in the natural environment.

-- insert Figure 1 about here --

Native spirituality is a fundamental element of TEK (Berkes & Henley, 1997). TEK is more than a symbolic description of a native spiritual worldview – it is also the managerial manifestation of this worldview. Through daily management practice, traditional ecological knowledge helps to produce and maintain native spirituality. Consequently, TEK can be viewed both as a managerial practice as well as an information and spiritual base from which decisions are made (Warren et al., 1995).

TEK belongs to a broader base of indigenous knowledge, what Warren et al. (1995) define as “local knowledge that is unique to a given culture or society” (p. xv). It can be contrasted with Western knowledge and the “international knowledge system which is generated through the global network of universities and research institutions”

(p. xv). Berkes (1993) suggests that indigenous knowledge is qualitative in nature, uses an approach that is spiritual, subjective, holistic and relies on trial and error.

Furthermore, the primary focus of indigenous knowledge is to build collective wisdom, symbolic meanings and to develop principles that are personal and moral (p. 9). In contrast, Western knowledge systems often rely on quantitative data, use an approach that is mechanistic, objective, reductionist, and rely on systematic experimentation. The primary focus of Western knowledge is to accumulate facts, verify predictions and to develop general principles of theory building (p. 9). While culturally distinct, indigenous knowledge systems such as TEK are not incommensurable with modern scientific approaches (Agrawal, 1995). In addition to TEK, other types of indigenous knowledge might include mid-wifery, medicine, and divination, though some categories may overlap (for example, divination may be used in TEK-based activities like hunting).

TEK is culturally diverse with many different geographic and cultural examples. It is not restricted to hunting cultures. However, as Lee and Devore (1968) note: “the hunting way of life has been the most successful and persistent adaptation [humans] have ever achieved...” (p. 3). While some scholars may object to hunting (and meat-eating) on personal or political grounds, indigenous hunters should be distinguished from sporting hunting – the Cree are a hunting, trapping, and fishing people (GCCQ, 1995) and pursue these activities out of survival motivations and not for pleasure. In addition, the Cree have a well-developed spiritual basis for respectful hunting which includes a strong commitment to reciprocal action between the hunters and the animals (see Tanner, 1979 for more details. Also, see the Cree Trappers Handbook, 1995).

Cree TEK incorporates the complementary local ecological knowledge of both men and women (e.g., see Berkes 1999; Ohmagari & Berkes, 1997; S. Preston, 1982). As the hunting group leader, the tallyman's TEK covers the male dimensions of traditional pursuits – that is, hunting, trapping and fishing activities.

A TEK Apprenticeship

After the rapids episode, I did not go back to Freddy's camp until February of the following year -- nearly three months later. However, Freddy and I were in regular contact -- each time he left his camp for Nemaska, he would call me in Eastmain (about 5 hours drive from his village). In each call, he would provide detailed weather and hunting updates. He would also ask me when I was planning to start the bush study.

"When are you coming back, bush lady?" he would say. "When are you coming to my camp?"

"Soon, Freddy, soon," I would answer. "After Christmas, I think."

"Don't come in January," he would reply, "it's too cold. Let me talk to Barry... Tell her to come in February. I'll be trapping a lot by then and it won't be as cold. But is she eating? She has to put on some weight!"

Then the next call, he would say, "Me, I don't think you're coming bush lady. I don't think you're coming because of the rapids."

"I am. I am coming back. I'm just waiting for funding...Did you trap any beaver?"

"If you don't come back now," he would warn, "you'll never come back to the bush..." Freddy was right. There was no more delaying: I moved to trapline R-21 on February 22, 1997.

It was the end of a cold February but temperatures had warmed by 5 to 10 ° since January. I lived on R-21 until the first week of the Goose Break in mid-May, 1997. By that time, it was spring and we had passed a successful hunting season. Over the season, we trapped 23+ marten, numerous beaver, shot 2 moose (Freddy and his brothers got an additional 3 on a separate trip which I did not attend), caught many fish (using nets and night-lines), two porcupine, and a number of geese, partridge and duck. In addition, Freddy shot a black bear two weeks prior to my arrival. We also received gifts of caribou and moose meat on different occasions. Similarly, much of our wild meat was shared within the local community, with a particular emphasis on giving to the elders. Most beaver pelts were sold to the Cree Trappers' Association (CTA) although some were kept for clothing (e.g., mittens). All marten pelts were sold through the Cree Trappers' Association. The moose and caribou hides were cleaned and kept for family use. Freddy tanned the black bear hide and sent it to me after I had moved to Ottawa in 1997.

Despite my first gut reaction, I did not stay home. Over time, I discovered a great deal about the tallyman's management practice. By shadowing Freddy, I believe that I collected data that could not be accessed through interviews alone since TEK is best discovered through participant-observation (Grenier, 1998). This section presents a number of excerpts from my field work, followed by discussion of key research findings.

Bush Management -- Hunting and Trapping

Sunday, February 23, 1997 (field notes, pages 13-14)

It's Sunday afternoon and Annie and I have just finished doing the lunch dishes. Freddy and another hunter are out checking traps. Barry is also at the camp although he is only here for a day or so in order to drop me off.

For lunch, we had boiled beaver with rice and fresh bannock that Annie made on the wood stove in a frying pan. There's nothing quite like seeing beaver feet, boiled, lying in a pot, skin and claws still on. The image is graphic, curled black toes lying in broth. I have already been told that the bones of the beaver are to be burnt, not thrown out. Although Annie also tells me that she burns the garbage so maybe we could throw the bones there for the time being.

This morning, I did my first solo task -- getting water. Six large plastic containers, pulling 3 at a time, nestled together on the sled. The water hole is not far from the bank of the Rupert's river, very near the camp, maybe 25 feet away and marked with a small tree. Each night it freezes over so I took an ice pick to break the new layer formed over the hole. I enjoyed it. I was a little nervous at first about getting close to the water but I got over that. There's something about standing out in the whiteness, trimmed with black spruce, to get my favourite drink -- water.

Blood Poems

I

As I slash through its
stomach
going right into the
bird
I think, "this is real."
"This is the bush."

But I am only talking
to myself
so I can take my mind
off the smell

I try to follow her
My fingers slowed
with tiny bits
of down
duck feathers under
my nails
and between my
fingers
My knife cuts
and I put my hands
inside
Pull
and out it comes
The guts
I'm suppose to pull
again
but I see the intestines
my one hand on them,
the other holding the
head -
and stop
Blood washing both
palms
I back out then
and stop
right at the guts
thinking
worms.

I'm discovering quickly that there's something inherently conservationist about living in the bush. For instance, last night when I was going to do the dishes, I took water from a large pot that was on the wood stove. We had used it for dishes earlier. But when I went to do more dishes, the water was cold. Down south, I'd just throw it out, but up here Annie reheated it in another pot. As much as I enjoy getting the water, when you're hauling six bins out at a time, you re-use it.

Last night Freddy told me some very interesting things. He was recounting a discussion from a meeting held with the Nemaska community. The Grand Chief had been talking about how the youth need hockey arenas and youth centres, how they need these sorts of structures in order to heal. But Freddy had said that he'd got up and said that these are the things that keep the youth from healing. He said that when it's the weekend, his children don't want to come out to the bush. They want to stay in the village in order to go to the youth centre. The Grand Chief had been saying that the Crees had to protect their culture but Freddy had said that these are the things that stop the youth from learning their culture.

Freddy also told me that when the Route du Nord was being built, it was as if an outsider was at the door, softly knocking, and Freddy was trying to hold the door closed with the

help from his mother and his brothers. Now that the road is here, Freddy said, the government wants to start letting in forestry and mining. A large part of the land by the road is eventually to be clear-cut, probably for pulp and paper. Freddy explained that this was the motivation behind the class action suit that he had tried to organize, on behalf of himself and other trappers, in order to get compensation for damages resulting from the road construction.

Same day, evening (field notes, p. 17)

At night we all slept in the same room. Freddy told ghost stories, tales about elders who had power and used witchcraft to curse people. He liked telling stories and it was to become a regular entertainment. Freddy ended with a story about a bear hunt that had happened a few weeks before I arrived. He said that he talked to the bear and asked him to come out. He said, "That's what my father used to do. He'd talk to the bear and the bear would come out. He had the power."

"Did it come out for you?" I asked.

"No!" he laughed, "Not enough power yet. Not old enough." He laughed again. Instead, Freddy and the other hunter had dug through the snow and gone in after the bear. They had given the bear to the elders at Mountain Lake, for an upcoming birthday celebration of Sam Blacksmith.

In the dark, with the lights out and wood stove crackling, Barry asked Freddy if he would kill a mother bear if the cubs were young.

"I don't know," Freddy replied, "...that would hurt me. Maybe not."

"And then next year, there would be three!" Barry reasoned and Annie agreed. Then Freddy talked about a bear cub that he had once raised. "What were you going to do with it?" I asked.

"Let it go. When there's lots of blueberries, the bear would just go. We let him."

Friday, February 28, 1997 (field notes, pages 33-36; see accompanying photos: checking beaver traps, 13-14; setting marten traps, 15-16)

It was a slow start. This morning, we left at 10 am to check beaver traps. That was later than normal, he told me. The day was magnificent. A deep blue sky and bright sunlight. The snow was deep. We went out by skidoo, with me riding in the back in the sled (later I will learn how to ride my own skidoo). Freddy kept stopping so I that I could clean my skidoo goggles. "I want you to see the land," he said each time we slowed down. And I did: vast expanses of snow, clearings and small lakes, rivers, trees. Beautiful. Pristine. But interrupted in places by the structure of hydro-transformers dwarfing the natural landscape. Huge, filigree statues of iron and intrusion. Incongruous.

We didn't have a thermometer but it was probably - 35 ° Celsius today. I worried about frost bite, especially as we sped along on the skidoo. The wind chill factor made it even colder. Next time I would remember to put petroleum jelly on my face as a barrier against the cold, but at least today I had a gortex face mask.

It took us a few hours to get to the beaver traps near the mountain where Freddy took Barry, and some other male teachers last year. With this in mind, I realized that it had actually taken me over a year to get here -- gender figured prominently in the bush. Men hunt and women manage the bush camp. Given that, I guessed that I was lucky to

get here at all. A section of the lake was marked with long tree poles, sticking up through the snow, and down through the ice. At first, I didn't know what they meant but Freddy explained that the trap was between the two poles which were positioned on either side of the passage way into the beaver dam. The dam was under the ice and snow, not obvious at all from where we stood. Freddy told me that we had to dig out the fresh snow. It was a good job that the snow is dry (and light) because I found the shovel heavy.

After I'd finished digging, Freddy got the ice chisel and broke a hole through the ice to where he had set the trap a few days before. He told me to clear away the ice from the opening. I cleared it away with the shovel. I tried to shovel fast but I couldn't get all the ice away. Then Freddy told me, "Go slow, collect it all [in the shovel] and hold it there until the water drains away." I was trying too hard to be competent. In my mind competence meant speed. I hadn't realized that I'd have to learn to be slower.

When I was done, Freddy poked through the hole with a long spruce branch. He said that he thought he'd caught a beaver. It was my turn to check. I poked around and felt a large mass that moved slightly as I poked at it. It gave a bit where the pole touched it. Freddy slowly brought out the trap but it was empty. The beaver had eaten around the bait of twigs and branches. Freddy said, "*Very smart beaver!*"

He told me that it must be a big one, a full grown beaver, in order for it to be so smart. Freddy also said that he thought the beaver had built another passage-way, another opening into the den. "*Very smart.*" He explained that this is the second time the beaver has built an opening around the trap. "If I don't catch him this [next] time, I'll move the trap. He wins."

I asked Freddy why. “The old people, they say that if you set a beaver trap and you can’t catch him, then it isn’t his time yet. You move the trap somewhere else. He wins.”

Freddy wanted to identify where the beaver had built its new entrance, so he started to bang on the ice with the ice chisel, listening to the sound. Bong. Bong. “It’s like a drum,” he said. “It sounds like a drum. The ice is very thin where the opening is.” Freddy explained that he could hear the difference in the thickness of the ice by the different tones. “Where the beavers come and go, it’s very thin.” Freddy demonstrated and banged around for a while. Finally he heard a sound that sounded right. He compared it to another place, and asked me if I could distinguish the drum sound. For the life of me, I really couldn’t, but we kept going back and forth. Finally, I convinced myself that yes, I had the sound. But by the time I wrote my field notes, I was sure that I didn’t.

Freddy then told me to dig up the snow from around this new area. It was hard work. I had to dig through four feet of snow right down to the ice. Eventually, I was finished but Freddy took the shovel and cleared away a bunch more snow. He asked me, “You want to make the hole this time?” I nodded and picked up the ice chisel. It was heavy too but gravity helped this time. After a few tries, water gushed through like the oil patch in the Beverly Hill Billies, only slower. But I was just as excited. Making light of my accomplishment, Freddy said, “It’s very thin there!”

“No,” I said, “I’m just very strong.” We both laughed.

Freddy made the hole bigger and then got a long curved branch to see where the opening was. He couldn’t find it. So he took up the ice chisel again and made the hole

bigger. Water bubbles came out at one edge. “Must be the hole,” he said. “Oxygen is escaping,” I added. But still we had difficulty finding the entrance so I dug out more snow to find another hole. “Always be careful when you dig,” Freddy said. “Watch out for where the hole is.” Falling through the ice could be dangerous. Freddy should know – it had happened to him.

Freddy broke more ice. This time, we were quite near the first trap. Freddy said, “*VERY* smart beaver! I think he builds an opening out from the first, like a fork.” This time Freddy found the new passage way immediately. It was time to set another trap. Freddy sent me over to the woods to get some dead trees to mark where the new trap was. As I chopped them with the axe, they broke into large pieces but Freddy said that they were still OK. He marked the trap.

Freddy wondered aloud about how the beaver will respond to the trap, “Maybe he will go a third way. [If he does] then we take it out. Because he knows [about the trap]. He knows. We take it out. That’s what my dad told me. That’s what my brothers do too. Why burn gas coming over here? Because he knows. When he sets off the trap once, he knows. That’s what some of the big ones do. They move a big branch to see if it sets off the trap.”

Afterwards, we set three traps at another lake, one that was very close to the camp. Then we made a wide sweep around the mid-section of the trapline, checking marten traps. Eventually, we arrived home, skidoing through a fusion red sunset. It was 6:30 pm. I was exhausted -- 8 and a half hours outside. I was dropping on my feet as I took off my frozen clothes. My eye-lashes were covered in ice and felt heavy.

11

I'm cleaning fish, me
cleaning Pike.

She's showing me how
standing right in
front,
we face each other
sharing the cardboard

I tell her I don't like it
when the fish move
I don't like it
when I'm holding
them
and they move

It happens.
Every so often, they
move.
Even after all the
scales
are gone
And the fins are cut
off
And I'm half way
through
the head
They move,
one last swish
And I scream and let
go
until she hammers it
on the head
3 times

After supper, I tried to skin a marten but had to stop. I was so tired that I couldn't really focus. Annie took over before I made the wrong cut. A marten fur is worth \$60 a head. I was so tired.

Then Annie told me, "He thinks you're a man!" "What?!" I replied, almost asleep.

"He thinks you're a man," Annie looked over at Freddy.

"No," he said. "He does," she replied. "Women don't go out for so long. Only men." We left it at that. I slept soundly until daybreak.

Saturday, March 1, 1997 (field notes, pp 39-41; see photos of bear hunting, 17-20)

It was amazing to be inside a bear cave. Crawling inside, lying there, smelling the tree boughs, the moss, the wetness of the snow, the cozy indentation of where the bear would lie. I was at peace. I could have stayed there for hours.

Everybody was up early today, at about 7:25 am. Freddy and I went to set marten traps and to see if the black bear was in a new den that Freddy has discovered. Another family joined us on the hunt. When we got to the spot, Freddy and I dug out the den. It was covered in deep snow and it was hard work. We were not

sure if there was a bear or not, but Freddy said, "Well, there's only one way to know for sure..." He indicated that I was to go down the cave first with my miner's head lamp. I

was the smallest. I was not sure if this is a joke but he gave me the stick to prod the bear with.

"Don't worry," Freddy said, "The bear's sleeping. When you get close, the bear will start to smell you but don't worry, he'll be sleepy. When you see him, shake your legs. I'll hold them and pull you out fast. Then I'll call the bear out. He won't react quickly."

"OK," I said, holding the branch. I crawled down wearing the miner's light and trembling slightly. This couldn't be dangerous, I thought to myself, he wouldn't let me do this if it was dangerous... Then I saw the den, on the under side of the boulder we'd dug out. I could see that there was a den, with lots of branches, but I couldn't see a bear. I yelled back.

"Poke around with the branch," Freddy instructed. "Make *sure*."

I tried to get farther in but it became a tight squeeze. My heart was pounding. I poked for a while with the branch. "No bear," I yelled back. "Pull me out!"

After I got out and brushed the snow off, Freddy said, "Well done bush lady, but too bad there was no bear." Everyone nodded. "Too bad." My heart was still pounding - I was glad there was no bear. Afterwards, we went to a second den, the old one from the previous hunt a few weeks earlier. At the second den, Freddy showed me branches that were broken off from the top. He then said that he'd looked for moose tracks and when he couldn't find them, he said he knew that it was a black bear. Gagoush, in Cree. It was amazing to sit inside.

Amazing. After I sat for a while, I heard voices calling for me. "Are you okay?" Freddy yelled in, checking, making sure I wasn't stuck. This brought me to my senses

and I started to leave the den. I wondered about the original inhabitant, lying even more peacefully, and for a greater length of time, then shot through the head or the neck and pulled out by skidoo, two Indian hunters. A cause for celebration. A gift to an elder. It's amazing how I didn't get any sense of the violence.

Earlier in the week, I'd asked Annie if bears broke into the tepee. She said, "No! They stay clear of you! Of the hunters." They only come when they're called. Only certain hunters were good at this, she explained. It took me a very, very long time to realize that this whole day had been a test.

Tuesday, March 4, 1997 (field notes, pp 43-45)

In the morning, I went outside to help Freddy who is chainsawing down wood from the forest right behind the cabin. This is for daytime wood that is taken from trees that were burnt in a big forest fire in 1983. The scorched trees are dead and dry -- very good for fast heat.

Freddy cuts the forty-foot trees, planting them near the path through the snow. My job is to de-branch the wood. As I chop the branches off, the to-be-done pile gets bigger and bigger. I wonder if I'm too meticulous, cutting off really small branches. Freddy comes over. He looks at my work and then explains that he usually cleans off the bark too or it'll blacken the wood stove pipe. I ask him if I should do this.

"Maybe you could do it," he says in the indirect way of the Cree. But he definitely means that I should. Not meticulous enough, I guess.

Same day, in the early afternoon (field notes, pp 45-46; photos, trapping a beaver, 21-22)

We're off to check the new beaver traps that we set on Saturday on a lake that is near the camp. We had set two traps, one by Freddy, and one by me. When we get to the lake, the beaver dam is hard to spot. If it didn't have the tree markers, I wouldn't know where it was, even though I'd already been there. It was perfectly covered with deep new snow. Freddy had said that he tried to catch a beaver there last year, but removed his traps when the beaver proved too resilient. This year we're trying again.

It was another bright day and we snowshoed across the lake and over to the den. Freddy looked at the markers. "That one is yours?" he pointed with his lips to the far right. "Yep," I replied. "Are you sure?" "Yep."

He paused. "I think you got a beaver," he said. We haven't even started digging, so I was unconvinced (especially since he was wrong last time). He then explained that the pole that holds the trap that I set was not frozen in, covered in snow. It was loose, like it had been moved in a fight. "Dig out the hole," he directed and then he broke through the ice with the chisel. It was very shallow ice.

Freddy got on his knees, peered through the water, then stood up and asked, "Do you see a beaver?" I got down and looked through the dark, brackish water. "Nope," I said.

"You don't?" He sounded surprised. But I really didn't see anything. I looked again searching hard for a beaver. Finally, I saw something that looks like fur under the water. "Ya!! I see the beaver!" I tried to sound excited but a very large part of me wished that I hadn't. "I'm very happy for you!" he said. "Your first beaver." Freddy

pulled the pole out with the trap and the beaver attached. It was too heavy for me to lift. The trap had caught the beaver by his right hand. I felt sick.

“It’s the first time I’ve seen that!” he said and pointed to the hand. “These traps, they usually catch him on the head or the body. The first time I’ve seen it catch a beaver by the hand... The first time ever!” Freddy laughed. Later it became a joke -- must be the way the whiteman traps!

The beaver was very large, probably 40 pounds. Once out, Freddy dragged the beaver back and forth through the snow to get off the excess water and dirt. He put a small branch through the beaver’s nose and wraps a string around the wood to attach it. The string was long and acted as a harness. Freddy insisted that I transport the beaver the way they used to, with the string around my chest, pulling the beaver behind me on the snow, like it was a sleigh. Freddy told me to carry the axe and he took my picture.

Back at the bush camp, we hung the beaver by the rafters to let it thaw. Afterwards, Annie cleaned it. Since it was my first, we gave it to an elder, Sam Blacksmith, for his birthday feast.

Saturday-Sunday, March 7-8, 1997 (based on field notes, p. 56-57)

This weekend Barry visited the camp. Freddy used this as an opportunity to show off how much I had learned -- I was sent to check nearby beaver traps with Barry. There was no beaver although I managed to check all three traps on my own. In addition, we were also 'assigned' the task of getting more firewood from the forest behind the camp.

Freddy and I had done this task often, a number of times a week, and I became quickly focused on debarking and de-branching fallen trees. Barry, an experienced

outdoorsman, operated the chainsaw. It was a beautiful day and I was happy and engrossed with my work. Suddenly, the 30-foot tree that Barry was chainsawing got caught in a cross-wind and fell upwind: I was dangerously unprepared. I had not been listening to the Husquavarna. I had not been paying much attention to anything but myself. Barry yelled but I had only seconds to respond and it was difficult to run in deep snow. I made a last ditch choice of direction and leapt as the top branches clipped my shoulder and dropped me to the ground. I lay there and listened to the sound the wind makes as it rustles through the trees.

Freddy, who had been working a kilometre or so away, showed up shortly. He said he knew something was wrong when he heard the chainsaw stop and stay stopped. I was lucky, though shaken, scraped and bruised. Afterwards Freddy took to calling me the 'wounded hunter' after one of his own poems. It was a joke to remind me to be careful.

Wednesday, March 12, 1997, evening (field notes, pp. 67-69).

We're sitting in the cooking room, Freddy and I. The propane lamp is on, hissing away and spreading a thick light. I start talking about roads, about how when I first moved to Eastmain, I used to go outside and either cycle or jog. I tell Freddy about how I couldn't get off the road, how I couldn't get out into the bush. I just didn't know how. I didn't know if I should wear boots or if the swampy bog was deep enough to swallow me up, if I'd drown in it. So I tell Freddy how I stayed on the road, looking out. "As an urban person," I said, "I need roads....And that's what amazes me about you guys. You grew up here when there were no roads, out in the land, and you look at the road

differently. You don't need a road to get to the land." After my outburst, I was quiet for a while.

III

Blood stings
as it dries
on my hands
It
Starts off hot
but cools quickly
on the skin

IV

Picking cranberries
I try to do it well
without bruising the fruit
but they are too small
Round and dark
purple next to the ground

I pick them anyway
pluck them between
my right index finger
and my thumb
Dropping each
into the ice cream
container
ping

The sun is hot
and I eat one,
watching its juice
squeeze
onto my hands
watching it run down
red
watching it
clot like
a small cut
gone sour

A few minutes later, I added, "You're in it. You're in the land Freddy."

"Me, I was born down the river," he replied as if this explained everything. "Annie, she was born in Amos in a hospital." This set me off again. "And," I continued, "that amazes me about your mom. She had her children out here on the land, no roads!"

"No doctor, no nurses," Freddy chimed in. I was continually shocked by this. I told him then how I'd like to interview her, to try to understand what it was like, this perspective, embedded with children being born in the land. The outdoors. In the boreal forest.

Then I said, "You know Freddy, I really only realized it when I looked at the map of your trapline the other day. Before that, I'd always saw it... I'd always sort of seen your trapline as extending from the road. But when I saw the picture, it was pretty obvious that the road cut through it.... Must be pretty weird for you to see the road when you grew up without it."

Freddy said nothing. "You don't need it...." I paused. "Me, I need the road. It's like the road is the focus from where I view the bush. Standing there on the road, looking out, while

you're in the land, looking out at me on this road! Pretty different!"

Freddy giggled and nodded. The wood stove burned softly. "I'll tell you something else," I said and looked over at him. "When I had that accident... with the rapids?" He nodded and I continued, "Afterwards I was telling people down south and they said that people up here die on the land, like that was something strange and that I should get a safer job back home. But when you're in an office, down south, they're right. Yeah, they're right. You don't die on the land. You live and work inside four walls."

I paused again. It was Freddy's turn to look over. "But," I said slowly, "you don't live in it either..." A few days later, Freddy told me that he'd been thinking about what I said, about people working inside all the time. He told me that he felt sorry for them, for being inside four walls.

Porcupine Taste Buds

Thursday, March 20, 1997, based on field notes, pp. 93-94.

The sun was hot, shining, but the air was very cold still, crisp over the snow. A blue sky surrounded us. There was a slight wind, but we were sheltered as we work. Freddy and I were getting wood from the burnt forest behind his camp. Most of the trees were old, lifeless carcasses, standing straight, silver and black. We often came here to get 'morning wood', that dry wood we used to start the stove. Freddy used a chainsaw to cut down the blackened husks. He cut as much as he could, until there was no more gas left in the Husqavarna. That was his measurement -- one full tank to an empty one. Me,

I still tried to count how many we got, how many trees, how many logs, approximately how many cords.

As Freddy cut the trees down and into lengths, I de-barked and de-branched, cutting the branches so they would stack neatly in the stove. I now knew to strip the blackened bark so it wouldn't build up soot in the pipe. Freddy worked fast, dropping trees all around me, but mostly on the snowshoe trail so I could reach them easily. I didn't always wear snowshoes because I wouldn't sink when the snow had a hard crust, but today I did because the snow was deep and fresh. It took me forever to do my job. I never caught up to Freddy's rhythm. After four weeks, I still found the axe heavy on the wrists.

As always, when the gas sputtered out, Freddy snowshoed over and knelt down beside me on the bark debris. He always said he was 'helping out'. As we worked, we talked. Freddy often told me stories and I lapped them up: Native wisdom. My eagerness embarrassed me sometimes.

"You see those trees bush lady? Those small ones?" "Yeah," I looked around, focusing on how the new growth is peeking up between the black and white. Green. Freddy had told me before that the snow was deep here, deceptively so. What looked like a small tree sprouting -- under a foot high -- actually turned out in the spring to be a six-footer. But for now, only the tip showed, like an organic iceberg. I marvelled at how a forest replenished itself after a forest fire. All with a little help from Freddy as he slowly cleared away the dead.

“So our land, bush lady...” he said to me, “It’s been burned since 1983. I was here. It burned 3/4 of my trapline and I lost my old camp. Plus two skidoos,” he added for effect. I knew the story. I knew how the women and kids, how the elders and asthmatics were airlifted out, how Nemaska made the evening news down south as the men fought the fire until they could only, at last, retreat into the airport for an emergency rescue. Wait and watch the tree line burn, black spruce erupting into yellow and then charcoal.

But Freddy wasn’t telling me this part of the story again. Today, he was talking about trees and how a forest grows. “You see it bush lady? The new plants are growing. The new trees. That’s what the elders used to say, ‘When there’s forest fire, it means in the future the animals will come.’ Like Beaver... you know? When the new plants grow, the beaver will come. The Beaver will swim to our trapline. That’s what the elders used to say.”

Cool, I thought. Freddy took a break and I put the axe down, grateful for a few moments of relaxing. “I’m sweating, me,” he said as he took off his face mask.

“Me too,” I answered and we sat quiet for a bit, and listened to the trees crack in the cold. I put my mask back on.

v

We leave the heads on
Ducks
and only pluck up to the
neck
Singe the body down

If it was Karl's first goose
well, we would keep the
head then
and he would pin it
up

But it isn't
and as a joke,
we keep the feet

vi

Annie tells me to wash
my
hands in water
First.

Tells me that the blood
needs to come off, in
water
First.

Says that when blood
mixes
with water and Ivory
it gets, how do you say
it?

In English?
Thick. The water,
it gets sticky, like
coagulated
soap
suds

“You get cold quick when you stop working,” Freddy said but I sat for a few moments longer, and rested on the wood pile. It was about 30 below.

“But now,” he continued, “in Waswanipi, in O-J, in Mistassini, when they cut, like clearcutting... they plant the trees. And for me, it’s the worst way to do it. Cause when they plant a tree, I think it’s going to taste different.” He paused. I looked up. ‘What the hell is he talking about?’ I thought. I found this taste-bud twist a little hard to swallow.

Freddy started branching again. “Like when Porcupine eats it, when man plants something. It’s going to be a different taste.”

“Really...,” I replied unenthusiastically, and felt mean as my science brain reacted strongly against this far-fetched piece of Native lore. At other times, I was thrilled at the newness of Freddy’s traditional ways. But right now, I reverted to a non-believer.

“Yeah,” he said, “When God, when God... with a forest fire, when it burns, it grows back. It grows back. And forestry, clearcutting, these big machines... I’m sure they spill a lot of oil.”

Oh, Freddy, I thought, will you give it a rest? But instead I said, “Tree planting is at least an attempt to reforest.”

“It’s no good,” he said. “If the plants... what man is doing, planting the trees, one kind of tree mostly, to me it’s no good. It would be a different taste for the animals.” His voice was loud, definitive. He stopped and looked at me.

“Well,” I tried feebly, “maybe the porcupine gets used to it. I mean, if there are trees there, then at least there’s food...”

“No! I don’t think so,” he said. I kept quiet. “That’s what I see,” he added, looking for my tacit agreement. I was silent. “And here on our trapline, it was burned in 1983.” He was getting a little irritable. He knew I didn’t believe him. “Mhmm...,” I murmured. “Freddy, I’ll take these back now,” I said, looking at the sled full of wood. He nodded. I started the skidoo and took off. All the way to the wood pile I thought, no way, no way was taste a reason for game stock depletion. I was not buying this one!

After a big lunch of moose meat, I was suddenly very tired. I decided to stay inside to do some reading. “I’ve been outside all morning,” I explained out loud. Staying in, reading my mail, sounds just about right. But Freddy wanted me to come with him to check traps. He was less irritable now, but still not quite happy but I felt like I needed a break. Again, I repeated, “It’s too cold.” For once, he would have to go without his shadow. It was the first time that I’d stayed behind.

“Ok bush lady. You do your reading,” Freddy said. “I go check our traps.” “But no cheating,” I teased, trying to liven things up a bit. We had an ongoing bet. If I got a marten and he didn’t, then I got the skidoo. If he won, he wanted my Nikon. “If my trap has a marten, you better tell me!”

He laughed, “Ok bush lady. You get the Tundra!” It seemed that we were friends again.

After he left, Annie piled on the wood as she made a stew. We joked about me having a “Freddy-free hour”. Then I lay down on my bed in the back room, reading. The stove in the front room was hot, so hot that the back room, where we all sleep, was the only place I could comfortably read. I went through my field notes and then opened some mail from the university. They’d sent me some articles that I ordered from the

library. 'Prospects for Restoration on Tribal Lands' by Vine Deloria, Jr. -- neat, he was a professor of law, religious studies, history, political science and American Indian Studies. He was also a member of the Standing Rock Sioux tribe. Looks good, I thought. Just what I need, an academic insider.

On page 49 I found that *"In devising the proper style of grasslands, and indeed even forest management, American Indians have a great deal to contribute..."* Yeah, absolutely I thought, and continued. Near the end, I read that: *"Adopting the Indian manner of living on lands and treating them properly could be called 'spiritual management' -- that is, treating land as the womb of all forms of life and according respect to all creatures. A tenet of the Indian belief is that lands, left to themselves, invite the compatible creatures to live on and with them. Therefore whatever kinds of creatures begin to inhabit reserved lands within an ecological restoration project should be allowed to prosper. They should be closely observed so that their role in the restoration and recovery of land can be discovered."*

What a great article! I thought about the elders' belief that the beaver would come to the burnt forest...I wondered if the beaver had a specific ecological restorative function. Then I picked up another pile of papers and went through the rest... Hey, what was this: CARBON BOMB, BOREAL FORESTS, CLIMATE by Greenpeace International...June 1994. I started flipping through it until something caught my eye: *"Clear-cut logging should be halted in temperate and boreal forests..."* Right on! And then: *"Logging should proceed only on ecologically-defined principles which preserve the forest ecosystems. Clear-cuts followed by planting monoculture tree farms do not preserve the forest or biodiversity."*

Oh! I suddenly thought of Freddy in the wood pile. I thought of those porcupine taste buds. I thought again about the elders. I considered the dangers of monoculturing... I considered the advantages of spiritual management...

Hours later, when Freddy came back in, he was white. It had been snowing heavily again and his clothes melted with the heat of the stove. He and Annie talked for a while in Cree. He was hungry and she had supper waiting. I was still in the other room, but I was listening, waiting to talk to Freddy again.

“No marten today,” he called out, “No wapistan, bush lady. Only my bait got taken. Very tricky those marten.” He came into the room where I’d been studying. He looked down at my articles but said nothing.

“Freddy...,” I said. “Maybe you’re right. Maybe the porcupine wouldn’t be happy with only one type of tree...”

“You read that in there?,” he pointed to my pile of articles.

“Well... yeah, sort of...” He laughed. I started to apologize, “Sorry about...” He cut me off and said, “Those elders, eh, they never get books, never read books about animals. All they see is the land. The tracks of the animals, that’s their book.” He laughed again.

“Well bush lady, do you understand me? Or, do you have to do some more reading first...?” He went over and poured himself a cup of tea.

Sunday, March 23, 1997 (based on field notes, p. 109)

Spirituality was part of daily activities. Often, Freddy and others perceived meaning in events to which I would not normally attach much value. Annie and Freddy

were quite troubled over some broken beaver traps. Freddy had recently used two new beaver traps and the first time he checked them, each of the traps had snapped and broken. Freddy felt this was highly unusual. We discussed it at great length. I said that I thought the new metal must have been tempered incorrectly and in the cold water had gone brittle and broke.

Annie said, “No, it’s a sign.” Freddy then asked Barry who had the same production-related thoughts as me. Freddy disagreed, “Maybe it’s a sign? Something bad might happen.”

When the first trap broke, Annie had said, “Maybe an elder is going to die.” I thought their interpretation seemed unnecessarily grim. It seemed to me to be just another example of declining workmanship in consumer products.

A few weeks later Annie, Freddy and I went on a road trip to the town of Chibougamau. That week two elders died. Freddy quickly told the son of the second elder about the occurrences on R-21. The man, who was a tallyman in his 50s, agreed that the broken traps were definitely a sign. Since the two elders were men, it made sense that beaver traps, if broken, would signal a upcoming death since such traps were a key symbol for male work. It appeared as a circular system.

Moose Hunting

Saturday, April 12, 1997 (based on field notes, pp 124-129)

This was the third day of the moose hunt and I was ‘resting’ today. My shoulders and thighs were stiff, arms ached from 8 hours per day of solid snowmobiling through the bush, bending round trees, throwing my weight to steer, leaning, arms quivering to make

the turn. Down mountains, Freddy took me places that I never thought I could go. Moose hunting -- the big challenge. Freddy also asked me not to take pictures of the hunt.

On the first day, we spent most of the time searching for tracks, trying to find where the moose had been, trying to figure out where they'd go. It was almost dark, almost time to go home when we saw them -- fresh tracks. I could feel the blood seriousness of it, right then, as Freddy looked in to the wind and then down at the tracks, eyes moving up to scan the moose yard in the nearby bush. I knew it, when his skidoo speeded off and I knew when I watched him, poised, a natural part of the landscape.

I had actively pushed to go moose hunting and now, there it was. Freddy had told me that we would go hunting as soon as it warmed up and then went cold again -- that way, the softened snow would form a thin crust that the moose would break through as it walked, slowing it considerably. Thomas Coon at the CTA had told me that the wolves would start hunting moose at the same time for the same reason.

I tried to follow him, speeding up my machine as we echoed across the end of a winter day. When I first saw the moose, I had been so intent on following Freddy's trail that I wasn't actually hunting, only following. I wasn't hoping to see the moose. I hoped instead that my beating heart and rising panic were misplaced. But I had known deep down. I had known as soon as we'd seen the fresh moose tracks -- the dusted snow around the print pronouncing its newness, its freshness so late in the day. I knew then that we'd find it, that Freddy would kill it.

Then it hit me. The reality of hunting careened into my head as soon as I saw the moose emerge from the trees. She was huge and lumbering. Her reality shocked me,

made me lose my balance on the skidoo and it nearly threw me off. The hunt was no longer surreal, no longer participant-observation. The living enormity of the moose hunt became a slow inescapable actuality. Freddy had been tracking her for about fifteen minutes when I finally saw the elegance of her grey and white neck against the grey and white of the forest. She was living magnificence, on top of a snowy mountain. “She was just so beautiful,” I would later say.

When I first saw her, I was surprised by two things: the sheer size and the slowness of her gait. The soft snow had given us the advantage. Her weight broke through the hard top snow, the crust rendered its stride into a slow eventful death. God how slowly she went, trying to move, to outrun the hunter.

“Freddy!” I screamed, not realizing he was already in place. But then he shot, a little boom. More like a cap gun, I thought, than a big, ugly death sound. Freddy was close but his first shot missed, possibly because I screamed, possibly because he always tried to aim for the neck, a tougher shot. A tallyman doesn’t like a hole in the middle of the hide. And so the moose got another chance but Freddy, his gun and snowmobile, were already turning.

He quickly took off again, following her through the trees. I lost them. I circled around and down the mountain and then up again. I stood up, one knee bent on the seat, the other on the side in order to steer with my body weight. Then as I zoomed down a hill, the Tundra II reeled on its side, perpendicular almost, and quickly moved over onto its right and broke through the deep snow. I was stuck. I struggled a bit through rising tears but the skidoo seemed very heavy and I was shaking, frazzled by the last movements.

I looked into the forest on my left. The hill rose with dense spruce and I knew that somewhere, deep inside, there was a moose hunt still going on. Pow! Another shot and I turned my machine off and wept. Silence.

A few minutes went by and then the sound of another skidoo. Freddy drove up behind me and stopped his machine beside mine.

“It’s dead?” I asked quietly. He looked at me. “I don’t know,” he said, “I shot it.” It was a subtle telling, the Cree way. Indirect. But I nodded and then put my head down, my face in my hands. The *loss*, I thought. The loss. We were quiet.

“So now you know,” he said finally. His great hulk loomed over my skidoo. “Now you know how it is with us. How we hunt so we can eat.” He paused. I knew that he was thinking that the basic whiteness of me couldn’t understand this but he was wrong. I did understand. I understood as soon as the blood beat thickened in my veins, as soon as I saw that the hunt was on. I understood, but I didn’t *know* it. Didn’t know how it was with them, or with any of us who are trying to survive.

We were silent again. Then he said to no-one in particular, “You have to clean the moose right away.” And I knew that the signal had been given. Enough of the daydream of grieving.

He looked at me, “You’ll cry again, I think.”

“No I won’t,” I answered, hoping that I’d become inured to dead carcasses. When Freddy and I were finished cleaning, a few hours had passed.

“It was the first time I ever saw a moose,” I told him.

He replied, “This is the first time I ever had a whiteman with me when I killed a moose. The first time.” I smiled weakly and then helped him drag the moose onto the

sled. It was hard work -- the moose weighed a ton. Eventually, we had it loaded and packed. It was dark and well past 9:30. We had been out hunting for nearly 12 hours.

Slowly, we headed for home.

When we got there, I dug a deep hole through the snow and we buried the moose overnight in order to relax the muscles. After I was finished, I sat outside with the dog, and watched the Northern lights. Finally, Freddy called me in. "It's late," he said, "It's cold. Come in now."

On Gaining Competence

Tuesday, April 14, 1997 (field notes, pp. 132-135)

Freddy and I went to Walter Jolly's camp today. Freddy told me that he wanted to show them how I can skidoo. That's why we were going on this visit -- it was a long distance and Freddy rode ahead. The bush was beautiful, not quite spring but the weather was warm. Eventually we crossed the Rupert River and went back through dense bush and another section that had been burnt in a forest fire. It was tricky to skidoo through the carboned husks -- burnt branches don't bend when you hit them so you have to be careful. As we crossed a lake, I noticed bear tracks -- big round tracks walking onto the ice.

When we got to Walter's, his family were excited. They laughed at me skidooing by myself but Freddy was proud. The ride had been a long one. Walter's sister Dinah gave us fresh moose meat and I wolfed down my portion. I got so hungry in the bush.

Walter got out a map and showed me his trapline. He showed me all the places where he had set traps. I told him about the bear tracks. Freddy looked up and questioned me strongly.

“No, no. I saw tracks when you were up ahead before we got into the last section of the burnt forest. The bear must have been walking out from the bush and went down across the lake.”

VII

I try again
queasy
it's gotten so slimy
fish scales cream
across my hands,
slippy

I don't like the blood
dripping
out from its gills
But I don't tell her that

"Hold it in the eyes
next time,"
she tells me,
"to make it stop
moving."
But the next time I
can't and instead
watch Phillip pick up
the heart
from the first one
Still beating, it
moves out and in,
lying on
his middle finger
dead.

“I think it's too early for bear,” he said.

“NO. I SAW them Freddy! You were up ahead looking into the bush. They were on the right.”

He looked surprised and then started laughing. “Me, I didn't see them!”

Walter laughed too and asked me to try to locate the place on the map. That task was more difficult but eventually I found the general area although there were too many lakes to be sure. After lunch, I went out with Walter's sister to check her night lines -- an ice fishing technique that the Cree use to catch fish overnight. All in all, we had a wonderful day at Walter's camp.

When we got home I told Freddy about a dream I had before I came into the bush. A dream about catching a very big fish. I told him I have never caught a fish so big in real life. I asked him if we could set night lines like Dinah. He agreed and we started making the hooks.

On Thursday, Freddy and I went out to set the lines. I was going to set two and Freddy was going to set three, he said -- one for Jasmine, one for Annie and one for him. Digging through the ice with the chisel was very hard work. 2 plus feet of ice. I had not anticipated how difficult it would be.

After a long while, I looked over at Freddy -- even he hadn't gotten through one hole yet. "I don't think I can do it," I said. I wanted Freddy to take over.

He looked at me and shook his head. "No. I'll steal your fish from your dream if I do," he warned. I was so TIRED. I lay down on the ice and took a little break. Then I got back up and kept working. Maybe a half an hour later, I broke through the black ice, the last layer. Yahoo! After I had made a tiny little hole, Freddy came to help. With a few smashes with the ice chisel, he widened the hole considerably. I set the first nightline but I was too tired to set the second. Freddy set the rest and set my extra one for an imaginary "Morningstar." It was meant as a joke because I couldn't set my second.

That night as I wrote my field notes, my wrists and hands ached deep down in the bones. My elbows hurt too. In comparison, Annie was unbelievably strong. Exhausted, I went to bed early but noticed that the Halle-Bop comet was still with us, glowing in the night sky.

Sunday, April 20, 1997 (field notes, pp. 136-140; photos, fishing 23-24)

We checked the night lines every day but so far there has only been one fish in 'Annie's' spot. Freddy and I usually checked the lines early and then went moose hunting. But we hadn't seen any tracks and we've only got one fish.

Now that it had warmed up a bit, only -15 at night, I moved into the tepee. It was great to sleep on spruce boughs, a mattress and the bear skin. That night I even went to the trouble of having a bath -- bringing up extra water, building up the wood stove, slowly heating the water until I could fill the old tin tub. I had Willie Longchaps singing Country and Western music on my little tape recorder. It was truly an experience.

The next morning, I got up late and didn't go into Annie and Freddy's cabin until 9. I had a good sleep and was not so exhausted. Before I went out I cleaned up because Freddy was expecting guests -- students from the recreation centre and band council. They never arrived but Freddy was right, the tepee looked better after a good spring clean.

After breakfast, we went to check the night lines. I was almost getting discouraged. From the shore where we park the skidoos, Freddy said, "Something's been moving your stick." I couldn't see that well but wondered if it was a fish or if Conway, an Algonquian boy who had visited yesterday and checked the lines, just didn't put it back the right way. I walked over to my line and jiggled it. It seemed pretty light to me. But as I pulled it, I realized that there was a fish! A very big pike! I was extremely excited. Freddy helped me pull it through the hole in the ice. Must have been over three feet long!

"I'm very happy for you," he said, "Where's your camera?"

"I didn't bring it," I said, "It's back at the camp."

"Go get it!" And so I did. When I returned, Freddy took my photo with the fish. "It's the fish from your dream," he told me, "That's why I made you do the hole. It's from your dream... tell Barry, dreams come true."

Back at the camp, it was time to clean my prize fish. But this time, I wasn't totally daunted by my task. This is a big change because fish cleaning has been an ongoing hurdle for me. "I need to clean it myself," I told Freddy. He nodded. "Yes," he said, "it's from your dream. You have to do it."

Cleaning the fish properly was tough work and Freddy took more pictures while Annie directed me. She occasionally stepped in but I did it mostly myself. I also managed to cut my finger quite deeply. Blood mixed with fish guts. So it goes. Annie got me a bandage. I've come a long way baby, I thought to myself, or at least some part of the way. After I was finished, Freddy told me to take this fish to my dad. "It's your first. You have to give it to an elder. Give it to your dad." I was very happy. My father had been ill and Freddy knew that this will mean a lot to me. I took it out and hung it in the shack to freeze so that I could take it down south when I leave. I was going in a few days.

Just before dinner, I read the preface and introduction of 'Black Elk Speaks,' a book my friend Lillian had lent me. I was lounging on a chair, when Freddy came in from the other room and went over to the counter. He rummaged around for a while and then came over to my chair with a moose antler. It was from a moose that had been taken without asking by hunters from Lake Magoose, a nearby Cree camp. One of the few things Freddy had got from the 'stealing' incident. He had found it at the scene of the crime. He had been quite annoyed at the time.

"Give this to your dad," he told me. My father had cancer and I was very touched.

"Are you sure?" I asked.

“Yes bush lady, give it to your dad.” Freddy, at that point, had never met my father.

I paused. “It’s very powerful...,” I started tentatively, knowing the Pentecostal nature of the house.

“Yes,” he said, “it is.” He looked at me and then Annie came in. “What are you doing with that?” she asked Freddy.

I felt suddenly nervous. “He’s given it to me for my father,” I said quietly.

“What’s he going to do with it?” she said.

“Put it up,” I said, “like on a table.” Freddy nodded.

Then Annie surprised me, “It’s sharp on the bottom. Maybe file it down.” She looked at Freddy and he went to get a file.

After dinner Freddy and I went up to Route du Nord, up to the bridge to fish with our rods in open water. The thaw had started. There was nothing biting but we fished for a bit and then heard an owl call -- wuhoomshoo. Freddy told me that he and Annie used to have a baby owl for a pet. Then he started talking about what different animals eat, different kinds of trees. “Not the green one,” he said, “the other one.” I didn’t know what he meant. The evergreens all looked the same to me.

Then we put down our rods and walked down the road, then climbed up a hill by the side. We sat for a while on a large rock. Then Freddy said suddenly, “The hill, even a small one, is like binoculars to a hunter.” He paused then continued, “He climbs it and he can see all around...looking for something to kill.”

I remembered Annie saying yesterday to Clarence, another hunter, about the scope on his rifle: "It's cheating!" she had said, and how everyone had laughed. Tonight I wondered about the loss from technology. I thought suddenly of Galileo.

Then I asked Freddy, "Freddy do you remember this spot before there was a road, even the temporary one?"

"Yes," he said, "It was very quiet. No transmission lines. No roads."

I continued, "Before the road, were you ever lonely?"

"Lonely?" he looked at me surprised, then said, "No!" His voice was loud and clear. "Even when I was alone, I still had the trees..."

He paused and then added, as practical as ever, "Like the tree, we use it for firewood or to make paddles."

We were quiet for a while. Soaking up the night air. "Freddy," I said, "where do people get their power from?"

"From the land," he replied, "from the spirit that is out there. When people meet that spirit, then they have the power, from how well they know the land."

Monday, April 21, 1997 (from field notes 144-152)

Last night I had a long involved dream about a bear. I dreamt that I was back in Eastmain. I dreamt that a bear had gotten into our apartment while Barry and I were away. The first thing I noticed was that he had left the sliding doors open. That was the first thing I saw. But the bear hadn't made a mess or disturbed anything. All it had left were huge tracks in my bathtub -- up and down the tiled walls, big black prints. A funny dream. In the morning, I mentioned it to Freddy, mostly for its novelty value -- who ever

heard of bear opening sliding doors or taking a bath? I had never dreamed of a bear before.

Freddy was working hard on scraping the moose hide. It was back breaking work. But he looked up quickly and said, "There's a bear not far from us." I asked him to explain. He repeated his comment -- "A bear is close." As always, he was very confident but I found his certainty confusing. I had a hard time believing that my dream was a message.

"But how could there be a message in a dream?"

"When you've been in the bush, it follows you," he said simply, still scraping away.

"But *how*?" I asked again.

Freddy stopped working and looked at me. He replied slowly, "Remember yesterday when I told you about the spirit... I'm sure that bear have walked here before I was even born. Bears walked here and so did other animals."

"And their spirit reaches me?" I asked, only semi-convinced.

He paused. "Do you know?" I probed farther. My time at the bush camp was nearly up -- I needed answers!

"All I know," he said finally, "is that when people stay in the land, they dream of the animals." He was quiet for a few moments. Then he told me, "You should tell people that you're dreaming about the land now."

"What people?" I asked, again confused.

"Anyone that asks." He went back to cleaning the hide.

Sunday, May 4, 1997 (field notes, p 150-151).

I sat outside sipping coffee, looking at some new growth in the forest. I wasn't really looking for anything in particular but suddenly focused on an evergreen that seemed marginally different from the ones we used to lay on the floor of the tepee. Yes, this other tree was green too but of a slightly lighter hue with longer needles that grew in bunches near the ends of tiny branches.

After finally awakening my visual skills, it became clear that there were two totally different species of evergreens. The lighter tree had very loose bark that seemed to curl and come away from the tree. The tree that we used for boughs, the 'green one', had bark with small pieces that lay close together like scales on a dry skin or a snake. The 'green one' -- which I think was black spruce -- also had branches that seemed to grow almost directly down, to form a giant arrow-head shape. The other type had big cones and branches that grew upwards first to form an arc. Once I could see the difference, I saw that these two types of trees were heavily interspersed throughout the bush even though I had never noticed that they were different.

Although I thought that I came from a 'visual' culture, I had never really seen these trees properly. Delighted with my 'discovery,' I lay down in the bush, on clumps of Labrador Tea. Then it happened again. I suddenly noticed that there were 2 types of similar yet totally different bushes. One, yes, was Labrador Tea but the other, while sporting a very similar reddish colour, was a different species. The other plant grew with its leaves pointing up while Labrador Tea grew with its leaves pointing down! Totally different! And yet, to my old eyes, misleadingly the same because I relied too heavily on one dominant characteristic (colour).

That afternoon, I told Freddy about my discoveries when he took a break from cleaning a moose hide. I said, “Freddy, I taught myself something today...about the trees.” I told him about the two types. “And then there’s also a yellow smooth-barked one which is small, plus the tamarack.” He nodded. “Remember yesterday,” he said, “When you asked me how many trees I saw in the landscape? I said four.”

“Those are the four,” I replied. He nodded and then paused. “Keep looking,” he added, “and *smelling*.” I was shocked again.

Just before I left, Freddy and I went out tracking. We were not really hunting, just looking around, touring the trapline one last time. Then we saw bear tracks down the river. This time, Freddy pointed them out. I looked at him and smiled.

Learning the Tallymen’s Approach -- TEK Training

Throughout my field study on R-21, I enacted the role of junior apprentice and worked daily with Freddy while he conducted his daily tasks. In addition, other tallymen shared their own experiences with me during formal and informal interviews. While Freddy often operated alone (or with me acting as an apprentice), many tallymen led larger groups of experienced hunters. Freddy occasionally did as well, particularly for moose hunting. Throughout the apprenticeship, Freddy’s approach was directive and he clearly viewed himself as the leader who was in charge of the trapline. Yet he often conveyed instructions in an indirect manner -- e.g., “You could do it like that.” The subtleties of this approach highlight Cree beliefs in autonomy and independence (Preston, 1975). While I am clearly in an apprenticeship role -- there is no doubt that I should follow Freddy’s lead -- we also share an informal, humorous relationship. Indeed, jokes

are an important part of the learning environment and teasing is often used for social guidance.

In a way, family hunting groups may be viewed as 'intense work groups'. In the organizational literature, Murnighan and Conlon (1991) studied the dynamics of intense work groups – in this case, British string quartets – and found that the groups were most successful if disagreements were not directly confronted. Similarly, tallymen (and the Cree in general) made decisions known but did not always hash out differences in order to directly 'resolve' issues. For instance, when I asked why Freddy's brother had given away land to another family, Freddy replied, "I don't know." They had never discussed it even though the act resulted in Freddy replacing his brother as tallyman. Over time, the issue had been somehow resolved enough so that his brother joined Freddy (and myself on one occasion) on hunting excursions and the issue was no longer a source of conflict. However, such resolutions did not tend to occur through direct confrontation. Like the management tactics of successful leaders of string quartets, tallymen often chose to 'lead quietly,' and emphasized the independence of group members, independence being highly valued by Cree society (Preston, 1975).

Despite its relative brevity, my sojourn as an apprentice critically informed the rest of my ethnographic study -- I could not have fully understood the tallyman without working alongside one. Bush training for the Cree is based on participant observation and apprenticeship -- you watch, try and learn (Ohmagari & Berkes, 1997).

TEK was a daily part of Freddy's management practice. For example, Freddy showed me how to tell if a bear or a person has passed through a certain area in the past (after the tracks are gone). One way was to look at the branches of the trees. Both

humans and bears use branches -- people use spruce boughs to line the floor of their tents while bears line their caves. Freddy showed me the difference between how a bear breaks off branches and how a human does. The bear would cut the branches off, first up and then down, while a human just breaks them down. Freddy explained, "My dad told me that. He said that when *gagoush* [bear] breaks the branches, it doesn't show. But when man breaks them, you can see it." (field notes, p. 89). Freddy also showed me how to tell the direction a moose is traveling in by placing my hands in the tracks in order to determine the angle made through the deep snow (field notes, p. 41). He knew what type of vegetation various animals eat, that moose prefer one type of tree while partridge prefer another. He watched for signs of porcupine by looking for trees that had been stripped of bark from bottom to top (field notes, p. 152). He also knew how to deal with different weather conditions and how best to hunt and trap given these ecological conditions.

Training was based on both first-hand experience and apprenticeship, and through oral tradition. For instance, one morning in the spring, Freddy showed me how to set rabbit snares. While we worked, we talked. On this particular occasion, he told me about how he learned to be a tallyman from his father: "I'll tell you a story about me, my dad. I listened to my dad, to what he says. Like for example when I went alone portaging, paddling, looking for beaver lodges, that was in the fall, even moose hunting, he would tell me where to go when I portaged. He knows where the ground [is], the level of the ground, and where [it] is swamp. Then I would follow that, where my dad used to tell me [to go]. And there I learned the easy way to walk, not in the swamp.

When I [went] out with my dad, together, sometimes [for] one week, here in our trapline, trapline R-21, he would tell me when is the best time to go out for beaver. At sunset he [the beaver] would come out. ... Things like that. Even setting the fish net, he taught me [how], even in the winter. In the winter, it's very hard, especially when you find a spot where you're going to set a net. My dad knew the [best] spots, where he used to set his nets. And ... for an easy way to set a net in the winter is you tie those two sticks of your line, [the length of] your net, make a line and then tie another stick and then leave it. Then it freezes. Then it would be easy because you would need only two holes...

Things like that. My dad used to teach me. Even... what the land is going to do [for] you. My dad used to say, "You get everything in the land what you need at the store, you could get everything." Like the elders... [Remember] when we were talking to the elders in Mistassini? They were saying [that when] they run out of food, they had everything from the land. So I believe the Creator when he builds, when he creates the earth, the animals, the fish, the birds, even the earth what he plants, and that's how we learn, the Crees. And non-Natives. If you look at the land, if you stay in the land, hunt and fish and trap, you're gonna learn so many things" (FJ2, text unit 79).

Freddy's narrative demonstrated how he perceived his training to come from the past, from elders and previous tallymen like his father who passed down their own wisdom, but also through 'staying in the land' and 'hunting and fishing'. TEK was handed down through generations, but was also learned through apprenticeship and reinforced through daily enactment.

Mistassini tallyman Robert Jimiken provided a similar story on how he learned to become a tallyman after residential school: "Maybe just to give you some background of

how it all began for me. I was with the children...I was taken out from the community on the road to Residential School. I first went to Moose Factory, Ontario. I must have stayed there for a couple of years and then after that I was moved to Brantford, Ontario. And so in Brantford, Ontario I stayed for one year and then after that they eventually built a residential school within Quebec. That's where they had La Toque, Quebec. So I spent about four or five years in La Toque and then I decided that I wanted to learn more about my...about my people and their way of life at that time.

I was hearing a lot of stories from my parents, my mother especially. We used to go to bed, of course we lived in a tent in the summer time. There was no house at that time. And it was the only way they could entertain me in those days. There was no radio. There was no TV. It was through storytelling. Right? She used to tell me a lot about the experiences they had while they were in the bush. And through these stories, that's where I had the...[idea that] I wanted to go back and really experience these things. I really wanted to learn the traditions as we people, the Cree people had. So anyway, I decided to drop out from school.

I was still quite a young guy at that time and I went in the bush with my parents. We didn't use any plane. Everything was packed into an 18-foot canoe. All the winter gear, the food. We had a couple of dogs. Dogs were very important in those days. There was no skidoos of course. And we took off. We took off from this lake and we traveled all the way up to where our trapline is, which is just north east of where Freddy is. It took about two weeks to get there. But of course there were days where we, you know, stopped and had to do some hunting, fishing in order to supply ourselves with food as we

went. All we took was the basics. Only the basics. So out there I learned a lot from my parents.

I think it's where I really learned who I was. You know? When I was in school, I was all confused because I was brought up in a Native environment at home to a certain extent but when I went into the schools, it was a total different society. A total different way of doing things. I had rules to follow, and discipline was very harsh. There was a lot of things we had to wear. Like Sundays we had to wear Sunday clothes. Stuff like that. Something that... it just created confusion for me in those days. But when I was out there in the bush, I was on my own and I learned to appreciate who I was and I could do almost anything. Nobody to tell me: this is how you're suppose to dress and this is how you're suppose to say things to certain people at a certain time. None of that. It was all general. It was everything about life, I guess, in the Cree world. So I must have spent about a total of fifteen years in the bush.” (RJ, text units 19-61).

Training approaches emphasized the importance of 'traditional ways.' In the bush, there was a strong respect for, and link to, the past as well as the future. Parents and elders teach the younger generation. Tallymen did not seem to view the past as a time of 'lesser' knowledge and the present as a time of 'progress.' Instead, many tallymen tried to manage as their fathers and grandfathers have done before them: “The job [of the tallyman] is... to stay in the bush and to do what his dad used to do. His dad passed to him and he has to keep it on. I think it's very sad if you turn away from what your dad taught you. He passed it onto me. He told me to keep on trapping.” (WJ text units 54-57). Consistently, tallymen emphasized that Cree society was a valuable and integral part of the training process. Mistassini elder and tallyman, Charlie Etapp discussed this

during an interview: “When my dad taught me, he was old and not able to do some things for himself. He told me, ‘the way I’m teaching you, it’s just like the way you teach a young child. And when you’re a good teacher, teach it to a young child. Don’t keep it to yourself, tell it to the child. If you’re strong enough to go out there in the hunting ground, take the child with you. You walk ahead.’” (CE, text units 47-55).

Unlike the careerist push for promotion in many organizations (e.g., Jackall, 1988), the tallymen that I met were very conscious of the broad scope and high skill level of the leadership position, and certainly some, like Robert Jimiken, were prepared to postpone their appointment for years until they really knew the land. According to Jimiken: “Usually it’s the father that decides. I guess through watching his sons and being able to determine which has more leadership skills and looking after those responsibilities. You don’t become a tallyman overnight. It took many years for me to understand what my role was. And about ten years ago, my stepfather told me, “I think it’s time that you take the responsibility.” And I said, “No.” I told him, “I don’t think I’m ready yet. I still have a lot of things I need to learn, about the land itself and what the roles are.” And by watching him in the bush, how he conducts himself. You know, he doesn’t hunt in the same place every year. He changes. There’s a lot of things he does. And from there I had the confidence eventually to say to him, “Yes, I’m ready.” That was four years ago. And that’s the process. I have two sons. Eventually, one of them will be the tallyman. And...in a way, I’ve almost chosen in my mind and in my heart who will be. It’s my oldest. And I’ve also taught him over the years everything that I have learned from my parents I have passed on to him. And he’s now able to go in the bush by himself. He knows what to do.” (RJ text units 254-270)

Experiential learning

Crucial dimensions of TEK were gained experientially, through first-hand management practice and an extensive apprenticeship period – participants often undertook an apprenticeship covering more than a decade. Walter Jolly explained that training takes time: “My dad taught me how to survive in the bush. You can’t be a trapper right away” (WJ, text units 10-11). During my brief apprenticeship, Freddy spent days teaching me the same task over and over. Such hands-on training was valuable and learning was a tangible venture. For instance, in our preparation for Goose Break, Freddy gave me an old 410 shotgun (which had been Annie’s father’s) and taught me how to shoot (see photos 25-26, target practice). Eventually, I developed enough skill to participate in the hunt. While I did not shoot any geese, I did manage to shoot a duck. Freddy then insisted that I clean and cook it and I shared it in a small ‘feast’ with our group.

The tallymen’s approach is continually developing as a dynamic system. As Freddy told me repeatedly, “We never get books, never read the books about animals. All we see is our land. The tracks of the animals, that’s our book.” (FJ3, text units 50-52). Cree tallymen understood their trapline as a unique ecological entity. “Here in our land, our trapline, we know the hills,” said Freddy, “we know where the lakes are, we know where to go in our trapline.” (F2 text unit 41). Consequently, management expertise stemmed from in-depth, practical experience of the natural environment, not from abstract concepts or imported management techniques.

Knowledge and experience of the natural environment was developed through a daily, intimate, and tangible interaction with the ecology of the trapline. Freddy told me another story about his father: “My dad used to tell me about his trapline. He never used a map. One time he showed me this map. He draw every lake, every lake he goes, the mountains, the hills. Then comparing the map I have, with his map, they look like the same. Yeah! Because the elders in the olden days, they used to walk, paddle, walk. Before there was any skidoos or a motor, they paddled, portaged. They used to be strong. Slim.” (F2, text unit 54). Some tallymen still felt that they had similar abilities. For instance, a tallyman in Old Nemaska told me that he could “draw all the creeks, the lakes, all the hills, all the valleys... all the swamps” on his trapline (WW text unit 73). An amazing feat considering his trapline was about 45 km long and 20 km wide. While I was not able to ‘test’ such abilities, research on other indigenous groups has indicated that they often have more accurate information than geographical maps (e.g., see Grenier, 1998). At a minimum, such comments demonstrate that tallymen perceive their own ecological knowledge to be extensive.

In a variety of ways, the pre-eminence of the bush was demonstrated in my own short apprenticeship. By becoming physically situated in the midst of the boreal forest, I began to pay more attention to it. An interesting example of this can be found in an analysis of my field notes. When I was at the bush camp, I started to record details about the natural environment -- I described the Northern lights, my first experience with night shadows, the daily weather, and most impressively, the amazing appearance of the Halle-Bop comet which was visible from our bush camp for nearly four weeks. In contrast,

field notes taken outside of the bush camp do not contain daily ecological references although I occasionally mention a particularly bad weather development.

Over time, by working on the trapline, I learned the value of such eco-experiential learning. Here's one example: Near the end of April, Freddy and I had set some night-lines -- ice fishing lines which we kept in overnight for fish. I was to check them each day for fish. I usually went in the morning but one day after lunch, I went out to check the lines. But the snow was soft from the day's sunshine and the skidoo runners kept getting stuck in the wet, heavy snow. By this time, I had learned quite a bit about skidooing and was fairly adept at getting myself 'unstuck.' However, the machine was heavy and after several different episodes, I admitted defeat and was almost ready to snowshoe back to the camp when Freddy drove up on his skidoo. After setting the runners free, he asked me what I'd learned. I started to describe how I'd learned techniques on how to get myself unstuck. He asked me what else I'd learned. When I shrugged, he said, "When you get stuck, you should learn a lot... you should learn that you have to work early [when the snow is still hard] and then sleep in the afternoon." (field notes, p. 152). The nature of the environment -- in this case, heavy wet snow -- was supposed to teach me about how I should manage my activities, if I paid sufficient attention to its teachings.

Storytelling

The tallyman's TEK was experiential but was also built upon the experience of previous generations, passed down through previous tallymen and elders via story and myth (Preston, 1975). Bush stories, in particular, were used by tallymen as a tool for

training others. While the use and value of traditional ecological knowledge (TEK) can be discussed in small bite-size pieces, its power can best be described by story -- see for example, the story 'Porcupine Taste Buds' in the excerpts from my field journal.

Traditional stories also reinforce knowledge gained in first-hand experiences and tend to be experiential in nature. Such knowledge may also be encoded in customs and religious traditions (Colchester, 1994). Knowledge from elders is viewed as particularly useful. For instance, during an interview with Charlie Etapp, a tallyman in his 80s from Mistassini, Freddy voiced his appreciation of Charlie's views: "It's just like binoculars, when an elder says something. Vision." (CE, text units 83). Charlie, in turn, identified his own father, the previous tallymen as his source of vision: "[For] me to go out [on the land] by myself was decided by my dad. I have to be careful on the land and act as my father does. That's how my dad was -- he was careful on the land because there was danger. Now, I know that I could be by myself, going out hunting to make a living and to help the other members of my family. I remember what he taught me about [the land] that he looked at. It worked on me. Everything that my dad had said, had taught me, I listened to him. That's the truth. It's not me who learned this when I first started [it's my dad]." (CE, text units 8-17).

However, it was difficult to contextualize these stories without previous experience. For example, before my wet snow incident, Freddy had already told me a story about his father, one that conveyed the same management knowledge. Back in March, he had told me, "My dad used to tell me that the time he walks at night is when there is a full moon. He walks...all night. Mostly, in the spring, the snow gets soft around dinner time [lunch] and he waits and then walks all night. He'll make a fire

around dinner time [lunch] and sleep in the day time. Then walk all night. That's how the elders used to do it when there was no plane, no skidoo." (field notes, p. 88). At the time of Freddy's story, I had not really understood the information that it contained -- that travel in the springtime is best done at night or very early in the morning.

While story may be useful as reinforcement or as a precursor to first-hand experience, I found that the experiential knowledge was the most powerful tool for learning -- i.e., I experienced some things that I could never forget. However, in such an extreme climate, the value of TEK inherent in stories cannot be emphasized enough. While the above example did not prove to be dangerous, the rapids accident had taught me that the natural environment was potentially life-threatening. Yet generational, cumulative TEK conveyed through story was an effective shortcut towards experiential knowledge. As Freddy told me when I was learning to trap beaver, "Always be careful when you dig. Watch where the hole is." (field notes, p. 35).

In general, many indigenous peoples use stories to convey important information. Yet, it is easy to marginalize such forms of communication and this is illustrated in my initial reactions and rejection of 'Porcupine Taste Buds.' Steeped in a Western mindset, I had quite a conceptual problem with the management value of "Porcupine Taste Buds." In fact, I rejected the value of such indicators outright. I felt that Freddy was being ridiculous and over critical. Needless to say, Freddy got angry with me for rejecting his story -- which was akin to rejecting his beliefs and knowledge about management. Yet I was more open to learning about the dangers of 'mono-culturing' -- that is, when only one type of tree is planted, forest resilience was endangered. (A forest requires a sophisticated mix of trees in order to ensure ecological resilience.) After reading this, it

occurred to me that what Freddy was saying about the Porcupine Taste Buds was essentially the same message as the messages of mono-culturing. But I had rejected his knowledge because it was not conveyed in a way I perceived as appropriate -- to me, porcupine taste buds were not a valid benchmark nor was the 'story' format a legitimate medium of communication (in comparison with the legitimacy of a published article). But for the Cree, stories are a critical part of cultural learning (Preston, 1975).

While I was predisposed to the value of traditional knowledge, I had difficulty in appreciating its meaning especially when it was conveyed in such a different fashion. The hurdle of cross-cultural understanding was a steep one.

Part 3: Management Beliefs and Practices

Cree cultural beliefs form the ethical context in which the tallymen's management practices occur. As with any culture, management beliefs exist on both a cultural and individual level. While individual tallymen may differ somewhat on the degree to which they internalize and enact cultural beliefs about management, most voiced similar beliefs about management. For example, the tallymen that I interviewed voiced a common commitment to the fundamental need to share resources; to respect the local ecosystem, including the proper treatment of animals; and to engage in reciprocal practices – that is, tallymen must always “give back” to the land, as they take from it. For the tallyman, this “image of the competent hunter serves...as a goal of the good life” (Feit, 1995: p. 189). In this way, managerial beliefs of respect and reciprocity, satisficing, and the need for social responsibility can be viewed as forming an ethical narrative that guides the tallymen's management practice.

Respect and Reciprocity

Ecological respect is central to the belief structure of TEK and the Cree do not “radically separate the concepts of ‘humans’ and ‘animals’ (Feit, 1995: 183). Indeed, Cree culture believes that “man and animals are related, they share the same creator. Just as one respects other person, one respects animals” (CTA, 1995: 19). Ecological identification extended beyond animals. As Willie Iserhoff, Director of Traditional Pursuits for the Cree Regional Authority (CRA) told me: “Life is the land. And the land is the people.”

Tallymen perceived animals and fish to be active agents in subsistence living. The Cree believe animals “give themselves” to hunters (CTA, 1989; Tanner, 1979). Cultural norms also dictated that hunters should respect ecological 'gifts' and should not engage in wasteful behaviour (Feit, 1995). Waste, particularly of meat, was considered a serious cultural taboo. Furthermore, recycling or reusing tools and technology was also considered important. Freddy re-used engine parts, converted 45-gallon gas drums into wood stoves, and used old shotguns passed down from previous generations. Like most bush Cree, Freddy and Annie did not waste meat and cleaned animal fur and hides for future clothing or trade.

Managerial actions are governed by Cree spiritual beliefs that value ecological and social reciprocity -- that is, giving back to others and to the ecosystem (see Berkes, 1995, 1999; and Feit, 1995 for a more detailed discussion). Hunters and animals are involved in a interactive relationship, with each party 'looking after' the other (see CTA, 1995: 21). As part of this relationship, tallymen also believed that hunters must respectfully dispose of bones and fur by burning or by placing bones in trees (or in the

case of beaver, putting bones back in the water). Such practices continue. For example, on R-21, we never threw away animal bones (field notes, p. 13). Other tallymen continued to hang certain moose or bear bones up in trees, although Freddy did not. However, when Freddy came across a dead bird, he would place it in a tree.

Freddy's management practices reflected his belief on the importance of ecological reciprocity -- on trapline R-21 we removed our traps when we did not succeed in trapping a beaver on the third attempt. Tallymen also believed that they should attempt to 'call' a bear out from the den and gained managerial respect by attempting to do so. In my apprenticeship, I was also expected to follow these practices. Ecological reciprocity is a managerial technique by which the tallymen believed they can engage in constructive dialogue with other living creatures. For instance, if a trap does not catch a beaver after a few attempts, this signals that the beaver does not want to be captured; in turn, the tallyman's management practice must respect this 'message.' In contrast, Berkes (1995) suggests that modern management systems "have no room for respecting the wishes of the beaver and whether or not 'it' wants to be captured" (p. 105). Tallyman Robert Jimiken explained how this is a central element in hunting education: "[When] you train him...you look at how he responds to different kinds of situations. He's got to have that way of thinking. And he has to learn to respect the land and he has to learn to respect the animals and to respect other people." (RJ, text units 279-286).

Polanyi (1944) identified the importance of reciprocity within traditional native communities (see Baum, 1996). However, Polanyi's concept was focused more on the social dimension of reciprocity -- that is, the economic need for tribal peoples to share among their extended families and local society. While my findings indicate that

tallymen believed in sharing among community members, the notion of reciprocity had a broader ecological anchoring. For the tallymen, an equally important aspect of reciprocity was to give back to the bush, to the boreal ecosystem and the animals upon which the Cree depend. Through a commitment to ‘ecological reciprocity’, the tallymen acknowledged and honoured their belief in the mutually dependent condition between the Cree and their natural environment. That is, the tallymen believed that they could not successfully ‘take’ from the environment unless they consistently ‘gave back’ to the same environment. My friend Lillian Diamond, a local Cree principal, explained that this is crucial because the earth itself is living and this life must be nurtured: “The land is everything, everything that's living. My parents taught me to always give back something when you take something from the land.” (LJ, text unit 3).

The tallymen’s traditional ecological knowledge rested upon the notion of ecological reciprocity: the need to give back to the ecosystem in order to live sustainably. Cree beliefs acknowledged anthropocentric needs but also transcend these in order to view the local ecology as a sacred site that must be treated with respect and humility.

Satisficing

Photo 27: Sometimes when I see a beaver house...

The tallymen in my study were committed to satisficing, in only taking what they needed in order to live on their traplines over the long term. According to Walter Jolly, a tallyman from Nemaska, waste or maximized output was a sign of 'poor' management. That is, "Some people, they slaughter the land and then they go to another trapline. They were never taught to take just what you need, not too much. That way, the land will keep on and will have animals. Sometimes, when I see a beaver house, I go and touch it and then save it for next year. Just take enough for that year. You just take what you need. Even the moose." (WJ, text units 63-66).

The Cree practice of satisficing differs from March and Simon's (1958) conception of simplified models of problem solving. March and Simon (1958) suggest that optimizing is replaced by satisficing due to cognitive limits on rationality -- that is, "[b]ecause of the limits of human intellectual capacities in comparison with the complexities of the problems that individuals and organizations face, rational behavior calls for simplified models that capture the main features of a problem without capturing all its complexities" (p. 169). In contrast, Cree adhere to satisficing out of moral and ethical reasons in addition to the practicality of subsistence living where waste or short-term maximization appears to be unwise. Satisficing did not arise out of cognitive limits -- the tallymen in my study simply did not wish to extract maximum value *away from* the natural environment and the local social system. Instead, they wished to maintain ecosystem health and inherent value. In general, the Cree do not separate economics and environmentalism (e.g., Feit, 1985).

Cree management beliefs combined short and long-term self-interest with respect for the earth and for Cree society, as well as a rejection of the need for maximizing

production and consumption. For example, “We’ll let one side of our trapline, you know, grow. We only trap on one side for one year, maybe two years, then we’ll go back to the other side, let the other side grow. To manage.” (WW; text unit 59). For the Cree, to selfishly maximize current consumption was not an acceptable part of the tallyman’s management belief system. The health, and wealth, of future generations and the ecosystem also shaped the tallyman’s managerial beliefs. This behaviour did not stem from bounded rationality -- in fact, Feit (1995) has indicated that the Cree have sufficient skill at hunting and trapping such that they could seriously erode animal populations if they so chose. Instead, satisficing behaviour stems from a moral and spiritual commitment to protecting the health and well-being of the inhabitants of the ecosystem in addition to ensuring human survival.

For example, on R-21, the demands of the marketplace did not drive management output, even with trapping activities that were directly linked to market prices. For example, even though Freddy could receive \$60 per marten pelt, we did not attempt to maximize the number of martens we trapped. We only attempted to trap ‘enough’ martens -- a qualitatively determined amount that Freddy felt he needed as supplementary income to support his subsistence lifestyle. It was not a maximized decision. Also, our trapping activity was linked into Freddy’s attempts to rebalance the rabbit population. In the winter that I was on R-21, there were little rabbits but marten populations were still large and in fact, such large populations had contributed to the dwindling rabbit population (martens eat rabbits). Thus we could effectively trap lots of martens if we wanted. However, we only trapped ‘enough.’

In contrast, we did not set any rabbit snares because the rabbit population was low on R-21. Even though we eventually found one or two sets of tracks, Freddy felt that it was not yet time to trap -- the rabbits had to fully recover first -- even though with scarcity, the desire for rabbit had increased. In fact, we once purchased two rabbits from the grocery store as opposed to trapping the ones we had discovered. While Freddy demonstrated how to set a rabbit snare (photos 28-29), he made sure that I did not leave the trap out in the trapline. The year before, Freddy trapped less marten because the marten population had not yet outrun the rabbit population. In neither year did he attempt to maximize his catch, despite the fact that each marten fur was 'worth' a sizeable amount of money in the marketplace. Such behaviour was reinforced by Cree cultural beliefs about the value of 'satisficing.'

However, tallymen were pragmatic and self-interested. The Cree are practical hunters: they want, and need, to succeed in their managerial endeavours. Bertie Wapachee, Grand Youth Chief, provided a common metaphor of the tallyman and the trapline: "A tallyman and his trapline... his trapline is like a garden. Some tallymen, they say when they walk into the trapline, it's like a store. Like everything is there. The water is there. The trees are there for shelter. The animals are there for food. And all that. Even the medicine is there." (BW, text units 22-23). The trapline, as a garden or a store, had an important utilitarian function -- the Cree survive from its sustenance. The tallymen believed that self-interested practices must be tempered by a commitment to ecological reciprocity and a belief in satisficing versus maximization. While self-interest is essential in subsistence living, the Cree hunter believes that it must be balanced by respect for ecology and the broad community.

At a basic level, the Cree believed that the tallyman should be trained to reflect the following managerial philosophy: “[H]e’s able to share what he has, not just to go out there for himself without considering other people. He’s taught to do that. You’re always taught whenever you have a stranger come to your trapline, or a house anywhere, you always offer them something -- coffee, tea, whatever you have. And that’s something we always cherished.” (RJ, text units 286-290). But in the tallyman’s management ethic, utility of natural resources was not restricted to human utility; rather, it is the garden or store for all species. In general, respect for living entities, and for their natural interrelationships, is a central tenet of traditional practices (Deloria, 1992). While some species (including humans) may dominate an ecosystem, the earth exists for the benefits of all living entities. The overall health of the system, and thus each species, is the managerial ethic of the indigenous manager (Deloria, 1992). Furthermore, tallymen believed that they should be “humble to the land that he [is] responsible for.” (RJ, text units 235-236).

Social responsibility

Tallymen tended to recognize shared destiny and Cree management was not usually individualistic in a competitive sense. Field work suggests that Freddy, along with other tallymen, felt a strong responsibility to provide meat (moose, bear, beaver, porcupine) to his extended family and to the community at large. Freddy would invite his brothers (and many others) to participate in hunting activities. Whenever we had a successful hunt, we would share the meat with other community members, especially elders. On more than one occasion when I was there, Freddy sent a porcupine 700 km

north by car, to an elder he had stayed with as a youth in Chisasibi. While Western society may value an ethic of sharing (particularly among family or community members), a competitive ethic usually prevails in business culture (Jackall, 1988).

Unlike many corporate managers (Barnard, 1938; Jackall, 1988), tallymen did not believe that they should operate with a managerial ethic that separates business decisions from personal or societal decisions. In general, the tallyman's management approach encompassed his family life. As one tallyman explained, "I learned that...from trapping and hunting, that it's a family life together. Being together all the time...I guess you can call it 'unity' -- family being together. That's the way the Cree have always been living in the past." (WW, text unit 130). As a bush leader, the tallymen felt that they had the ultimate responsibility for ecological and social survival. "The role of the tallyman," explained Bertie Wapachee, Youth Grand Chief, "is first of all to protect the land and preserve it for his family, for his people, for his children. To protect it, preserve it so that he can pass it on to the next generation, whether it be his son or his grandson" (BW, text units 18-19). In this way, the Cree tallymen had a strong trans-generational basis to their management activities.

Tallymen did not operate in a social vacuum. Their approach was culturally bound and Cree society played a role in managerial governance. An emphasis on the need for sharing is a primary example. Cree culture recognized that human and ecological survival needs a system of communal governance in order to manage risk appropriately. Tallymen operated under an implicit form of communal governance, primarily through social sanctions. Stories of community hardship reinforced the need for tallymen to manage with a community ethic. Charlie Etapp provided this example: "In the fall we

kill beaver. Sometimes we kill ten beaver with my son -- a lot of meat. We also give away bear grease. Then we give them all away. That's what we used to do all the time. I was helping in the olden days. The hard times. The times of famine. I was there and I saw it. It's not very easy when you're hungry, when there's a lot of kids and you see them, plus the elders. The elders who cannot go out and cannot help out because they're old. It's not very easy... I saw it three times when there was no food at all. I was feeling very sad for the young children when I see them with the families. There were eight families. I was still a young man and I was not married yet." (CE, text units 102-112). Although famine has not occurred for many years, a fundamental belief in social responsibility still pervaded Charlie's management approach. Other younger tallymen like Freddy also remembered times when food was scarce and similarly display a communal approach to management. The Cree belief in the value of sharing is so ingrained, that Freddy also believed that it was one of the best strategies for preserving his trapline from development. As he told me on R-21: "The best way to save the land... [is] to share the land." (FJ2, text unit 85) (see photo 30).

An Embedded Practice

Polanyi (1944) emphasized the importance of embeddedness to pre-industrial economies. That is, the economic relations of indigenous groups were fundamentally embedded in the larger social system. In contrast, 'the great transformation' of the industrial revolution reversed this relationship such that social relations became defined by economic transactions. More recently, Granovetter (1985) stressed that social

relations are critical to both pre-industrial and industrial economies, but to different degrees.

My field work with the Cree supports the idea that tallymen operated from within a socially embedded system -- that is, the economics of traditional pursuits were strongly embedded in the larger system of Cree society (see earlier discussion on social responsibility). Such results are perhaps not surprising. For instance, Usher (1987) suggests that indigenous approaches offer a good template for natural resource management and avoid the 'problems of the commons' because indigenous approaches rest on communal property arrangements with local control over access -- the hunting group leader manages by consensus but use without permission is considered trespass. Thus, social relations can effectively constrain individualism (Usher, 1987) through communal governance and social sanctions. Such an approach is an example of Granovetter's concept of social embeddedness. Indeed, Banuri and Apffel-Marglin (1993) agree that the embeddedness of indigenous knowledge is a key difference from the objectiveness and distance of scientific knowledge.

My findings suggest that the ecological anchoring of the tallyman's management practice is also noteworthy. Tallymen manage outside. Their managerial action is continually and intrinsically embedded in concrete, ongoing interactions with the local environment. Moving towards a deeper level of analysis (Strauss & Corbin, 1998), managing outside can be conceptualized as a form of ecological embeddedness. This section focuses on the ecological embeddedness of the tallymen's approach.

-- insert Figure 2 about here --

The ecological-embeddedness of the tallymen's management practice was demonstrated through at least six dimensions: 1) the ecological location of the management practice, 2) the style of management, 3) the seasonality of management practice, 4) a reliance on environmental sense-making in management, 5) the belief that management wisdom came from the land, and 6) the need for ecological legitimacy in TEK leadership. These are discussed in detail below.

1) The ecological location of management practice

Photo 31:

My trapline is like an office...

Tallymen, as managers, were not artificially removed from the natural environment. For instance, one day while Freddy and I were out in -30° C weather, we stopped our skidoos and looked out over a lake. As always when we stopped, we started talking. Perhaps more than any other time, Freddy's comments in the midst of the subarctic shocked me. He said, "Like me, as a tallyman I travel. I travel all over my trapline in winter and in the summer and in the fall and in the spring. Because I know. I see. I have five senses. My trapline is like an office to me. You know?" (FJ3, text units 23-25).

“That’s...” he looked across the snow and ice and into the boreal forest, “that’s our, our... like I say, that’s my office. Trapline R-21.” (FJ3, text units 55-56). I looked at him sharply and then back across the frozen lake. I was shocked.

Freddy’s statement caught me by surprise. While compelling, it seemed out of context. Coming from an urban organizational background, I had worked in many offices. Nothing about trapline R-21 or the subarctic ecosystem reminded me of an office. Yet for the tallyman, the bush was the location of his management practice and the use of the word ‘office’ was a metaphor to signal this. I suddenly realized that Freddy and I had different ways of perceiving the natural environment – he saw the local ecosystem as “the place where business is carried out” (Funk & Wagnalls, 1980: 549). I did not.

Morgan (1997) emphasizes that metaphors shape the way we experience the world, and “imply *a way of thinking* and a *way of seeing* that pervade how we understand our world generally” (p.4, italics in original). For instance, corporate managers often discuss the natural environment in abstraction -- e.g., X millions of hectares of wood, Y litres of waste water, Z tonnes of toxic emissions – yet remain physically situated in an office tower. In contrast, Freddy discussed the *office* in abstracted terms yet remained physically situated in the natural environment. While it is unclear whether the tallyman’s ecological-embeddedness would necessarily lead to different decisions from an office-bound manager, this possibility exists. Certainly, in the case of Freddy and I, it often led to a fundamental difference in perception.

The ecological or biospheric location of a manager’s practice is not a characteristic that is often analyzed. In fact, managerial location is more often used to refer to professional location (as represented in an organizational chart), to signify

regional control of multinational operations (e.g., manager of North American operations), or, at the most micro level to convey a street address. But in each of these cases, a manager is typically located inside. Location does not typically refer to an ecological setting – management almost always occurs in a denatured setting. In fact, there is an implicit assumption that management is an ‘indoor’ activity and the natural environment can be viewed as an ‘unnatural’ place for a manager’s office. However, TEK is tied directly to the ecological location of the manager -- the place of work is the local ecosystem. In this way, the tallyman’s TEK is intrinsically ‘natured’ in both a mental and physical sense. In contrast, Western managers (and theorists) often perpetuate a ‘denatured’ practice (Shrivastava, 1994) -- that is both the mind and body of Western management is not rooted in the natural environment.

On a daily basis, tallymen interacted with the natural environment. Indeed, the tie between a tallyman and a specific ecological location was an overwhelming force on the trapline. Tallymen like Freddy were often born in the bush and took great pride in this fact: “Where I was born [on the bank of the Rupert’s River], it’s called [after] a frog. They saw a big frog... That’s why I like staying in the bush, because I was born in the bush. I was raised in the bush. So that’s why I like staying out here, where there’s peace, quiet. So that’s why.” (FJ2, text unit 54). In personal example, when I moved from the village to the bush camp, I quickly developed the nickname ‘bush lady.’ I didn’t read too much into this until after I left the bush. Immediately, my name changed again -- this time I became ‘young-old lady’ and Freddy rarely called me bush lady again -- probably because I wasn’t.

In addition, when Freddy came to Toronto (which he referred to as 'Gail's trapline'), he wanted me to show him my birth place. I found this an odd request and unintentionally dismissed it. But as we whizzed down University Ave. on a double-decker Toronto tour bus, I suddenly remembered. "That's it Freddy!" I said quickly, "That's my birth place!" and pointed at Mount Sinai Hospital, a large concrete and chrome institution. He laughed.

The tallyman's physical interaction with the bush is potentially one of the most powerful dimensions to his management practice. When I asked another tallyman how long he'd been in the bush, he replied with surprise, "All my life! I only went to school for two years. I was about ten or eleven years old. And then at twelve years old I started being in the bush [again] with my parents, and learned everything about how to be a trapper, how to survive in the bush, what to do when I don't have a canoe or a gun or anything to use... to catch animals, without a gun, a canoe, without a trap." (WW, text units 8-10). In another example, in the face of pressure from external economic development, Freddy lamented: "They're [the forestry companies] destroying our classroom!" (field notes, p. 93). Or similarly, another time, he told me that "It [my trapline] will be flooded [in the wake of a proposed hydro dam]. All my tools will be under the water." (field notes, p. 99). Tools, in this case, being the land itself¹⁰.

Throughout their lives, tallymen had strong attachments to their traplines. Tallymen were known to leave their sick beds in order to go back to die on the land. Freddy's father was a case in point -- after a serious illness, he left the village to go back to R-21 where he died shortly after his return. Indeed, Freddy himself probably suffered a mild heart attack while I was on his trapline. After lifting a 45 gallon drum by himself,

Freddy later told me that he felt pain and a tingling sensation numb down his left arm and chest. He also nearly blacked out while driving back on the skidoo and had difficulty breathing. He did not make any attempt to go to the village and in fact, did not tell me about his symptoms (or about his existing heart condition) until the bush radio service had safely closed for the evening (after 9pm). Freddy was not going to leave his land and that was that. Freddy slept soundly while I stayed up most of the night clutching nitroglycerin from the medical box, frightened that I would not be able to lift him into the skidoo sled if he had actually had a more serious attack. We were at least a half an hour skidoo ride away from another bush camp that had a vehicle. He would not leave the next day either. There was no need: the bush was home. Living, working and potentially dying in the bush was not perceived as abnormal; it was a natural state of affairs. For many indigenous peoples, such distinctions do not make sense: the environment is understood as a 'place to live' (Deloria, 1992) and as 'home' (Gomez-Pompa and Kaus, 1992 in Colchester, 1994).

Livingston (1994) suggests that the domestication of human beings (which he equates with civilization) has resulted in a fundamental loss of 'ecologic place'; that is, "an amputation of the fundamental skills required to play a co-evolved, healthy, contributory role in interspecies relationships" (p.99). Furthermore, "[f]or the individual within that population there is the parallel loss of ...the awareness of 'being-a-place.' ... All that it is left with is its self." (p. 99). Livingston concludes that this results in the individual manifestation of the Human/Nature dualism. While Livingston includes native peoples within his domestication scheme, my field work suggests that the Cree tallymen have maintained a strong, first-hand and practical sense of ecologic place. Their sense of

identity includes the local ecosystem. Tallymen in particular felt a strong identification with the natural environment. According to one tallyman: “Well, I feel that the bush is... you know... I don’t know how to put it but it’s Cree. You’re Cree, you’re bush.” (WW, text unit 146). On another occasion, Freddy said that: “When you live in the bush all year long, watching over it, the land speaks to you. So when the tallymen speak, it is the land speaking.” (FJlet, text units 19-26). Indeed for the tallymen, the local ecology was a central defining metaphor for both work and life.

As my key informant would often say, “This is Freddy-Bush talking...”

2) Style: ‘Management by Walking Outside’

In the Peters and Waterman's (1982) book, *In Search of Excellence*, a key aspect of organizational fluidity was the ability of managers to build rich, informal exchanges throughout the organization. “Getting management out of the office” (p. 122) was an important contributor to such exchanges. Ed Carlson at United Airlines termed this approach “MBWA – Management by Walking About” (p. 122) and Hewlett Packard also viewed this approach as an important dimension of the “HP Way.” Previously, Mintzberg (1973) had identified the use of organizational 'touring' as a management technique that senior managers identified as valuable (though few had time to practice). 'Excellent' managers, then, were those who 'managed by walking about' (MBWA).

Tallymen adopted a related, yet ecologically-embedded, form of MBWA. A core element of the tallymen’s practice was 'managing by walking outside' (MBWO). Unlike Mintzberg’s (1973) managers who spent only a small amount of time touring the organization, tallymen spent a much larger portion of their work day using this

management style. Furthermore, touring or 'walking about' was not an indoor activity; instead, the key focus is on interacting with the natural environment in order to gain rich information about the ecosystem. While a tallyman may trap only half of the trapline each year, tallymen told me that they usually visited each part every year: "To see if it's growing." (WW, text unit 81). This required that tallymen physically traverse their local ecosystem on a daily or regular basis. In addition, touring was utilized as a social medium to collect information or to build social relations across trappers by visiting nearby camps. Information gained from touring was also shared across hunting groups each evening by bush radio.

Like the managers in Mintzberg's (1973) study, tallymen recognized that "important discoveries [can be] made during strolls through their organizations" (p. 44). However, tallymen felt that such discoveries were best made by walking through the bush, not through hallways. Indeed, it is difficult to pick up first-hand ecological information without traversing the ecosystem. For example, while we were touring the trapline, Freddy actively checked for tracks and other signs of the health and size of animal populations. Touring or 'managing by walking outside' allowed the tallyman to gain rich ecological information and to identify ecological feedback quickly. For instance, at the micro level tallymen were well informed about the impact of development (e.g., mining, forestry, hydro, and sports hunting) on their individual traplines.

Unlike Mintzberg's chief executives who appeared "hesitant to leave their offices unless they [had] specific reasons for doing so" (p. 44), tallymen tended to become uneasy when they could not tour. For example, after being in the village for a few days, my key informant would start to get restless and cite the need to go and check his traps,

to travel throughout R-21 to see what was going on. By emphasizing the use of ecological touring, the tallyman established informal relations with the natural environment, the spiritual world, as well as with other bush Cree.

Furthermore, most tallymen felt that this practice provided a solid basis for managerial legitimacy: “The tallyman is chosen for this job because he has proven that he has these skills. He knows his land because he walks and talks with it all year-round. He is a full-time trapper.” (FJlet, text units 19-26). While most participants appreciated that ‘Western’ education had some benefits, tallymen did not believe that ‘school’ could replace first-hand ecological experience gained through ‘walking outside’. Murray Neeposh, a tallyman from Mistassini who also studied business at Lethbridge University, explained: “I can accept education being in four walls. I can accept that. But for us, up here, to be *properly* trained is to be out also in the bush. You can talk about it in a room but if you really want to do it, if you really want to... you’ve got to go out there and do it. You’ve got to go out and experience it. You’ve got to go *out* and *be* a manager.” (MN, text units 379-383). However, tallymen did occasionally attend training sessions on trapping and fur management offered by the Cree Trappers’ Association.

Insight into the basis for cultural legitimacy can also be found in an analysis of what appears to be ‘illegitimate.’ For example, the following type of commentary was common when tallymen were faced with decisions from external ‘bureaucratic’ managers who were not located in the bush: “We’re the ones who are suppose to decide whatever the government wants to do up here, up north, because we know our traplines. We walk on our traplines all winter. We hunt. We fish. We trap. So it’s very hard for them to decide [on economic development activities] because they only sit in their office. Like

me, as a tallyman, I travel. I travel all over my trapline in the winter and in the summer and in the fall and in the spring.” (FJ3, text units 20-23).

The tallymen in my study felt that anyone who did not regularly traverse the local ecosystem had no right to make managerial decisions. During one interview, a tallyman challenged the dominance of Western denatured practices: “How can you control when you just sit in your office? When you’re not walking around on the land?” (FAJ, text units 197-198). Government decisions were criticized for similar reasons: “The government says that it’s their land but I’ve never seen their tracks on the land.” (field notes, p. 99). Such criticism was not simply a cultural reaction to ‘outsiders’ – Cree tallymen made the same complaint about some Cree politicians who were identified as “briefcase-Cree”, as opposed to “bush Cree” because they no longer spent extended periods on the trapline.

Managing outside also allowed tallymen to gain spiritual understanding. At a fundamental level, hunting and trapping are a spiritual practice for the Cree (Tanner, 1979; Speck, 1935). While the spiritual dimensions of TEK can be culturally transmitted through story and myth (Tanner, 1979), spiritual beliefs also arose from daily management practice, from intimate, experiential moments in the bush. Freddy described it this way: “The land teaches me some things. One time I went out and I was walking. I think it was the Fall. I was walking in the woods. Then I was tired and I just knelt at the tree there. And it was windy. I was moving at the same time as when the tree was moving. It was very windy. And then I began to think, ‘It’s God. It’s God everywhere. This tree is *living*.’ ... You go out there and there’s God. There’s God. He’s all over. So I learned something from it. I learned something when I look at the tracks of the

animals...When I hear the waves splashing, when I hear the rapids, I learn. God is the one who's doing it." (FJ1, text units 343-350). This type of revelation cannot easily occur inside if a manager is sequestered away from the natural environment.

The Walking Out Ceremony (photos 32-33).

The practice of 'walking outside' has important symbolic and spiritual meaning in Cree traditional culture. This is most readily apparent in the childhood rite of passage known as the 'Walking Out Ceremony,' or '*ewiwiithaawsunaauh*' which can be translated as 'they make him go outside' (Tanner, 1979)¹¹. For the Cree, an important stage of development occurs when a child reaches the age when she or he can walk outside unaided – at this point, the child begins to participate more fully in bush life. The Walking Out Ceremony is the formal celebration of this rite of passage.

During the ceremony the child walks out from the tepee over a path made of spruce boughs. The doorway marks the dividing line between the internal and external, between shelter and the natural environment. S/he then walks around a small tree clockwise and then returns to the tepee walking around the fire (again clockwise). Throughout this 'first' walk, each child ritualistically enacts subsistence activities – girls carry an axe to mimic chopping wood and boys carry a gun or bow and arrow to mimic hunting activities. In this way, the Walking Out Ceremony is symbolically linked to the development of male and female TEK. After the ceremony, a celebration is held, and community members praise the child for their skill and development (Tanner, 1979).

Tanner (1979) emphasizes how "the ceremony ... shows the significance attached by the Cree to walking and to the feet" (p. 92) – indeed in Cree ideology each body part

has a spirit attached to it, with the feet having special importance. In addition, clockwise movements for the Cree signify contact between the spiritual and human worlds (Tanner 1979). Furthermore, a single tree has strong spiritual connotations and in fact, can symbolize the place where a hunter first meets his *Mistaapew* or master spirit. Although it is unclear if the Cree concept of *Mistaapew* refers to one supreme being or many (see Tanner 1979), Speck (1935) suggests that the spirit is located in a person's heart (p. 42). In Cree hunting culture, the existence of *Mistaapew* was traditionally important. For instance, the Cree 'Legend of the lost man' tells the story of a hunter who does not have a *Mistaapew* (or his *Mistaapew* has forgotten him). Without *Mistaapew*, the hunter becomes 'lost' until and his spirit finds him again and helps him find his way in the bush (Rupert, 1996).

Such ritual practices are important to management studies because they emphasize how the tallymen's TEK is based on the physical interaction of humans, the environment, and the spirit world. Furthermore, managing by walking outside is one of the mediums by which Cree TEK is developed and enacted (ceremonies, myth and story are other mediums). However, not all Cree continue to practice the Walking Out Ceremony, nor would Pentecostal members of the Cree community likely embrace the concept of *Mistaapew*, which may be viewed as witchcraft. While fundamental Christian inroads are significant, a spiritual sense of ecology pervades the bush camp, regardless of denomination¹². Thus, in a broad sense Cree spirituality is an integral part of 'management by walking outside.'

3) Managing within the natural cycle

An external location forced a daily interaction with the natural ecological seasons and cycles. Tallymen worked in accordance with the natural cycle. Edward Gilpin Jr., President of the CTA, explained: “When I go down to the States, the Americans say: ‘You guys go out for a whole month!’ They think we shoot for a whole month. But in reality we actually only hunt about a week, a week and a half at the most, out of the four weeks. We’re not going there to hunt all the time. Sometimes the weather doesn’t permit. This is where people get... the elders got their knowledge. How to accept these things, by the way nature deals with situations.” (EG, text units 73-83).

On R-21, hunting and trapping activities were organized based on the seasons. This was a common approach. In the winter, when the animals fur was thick, trapping of beaver and marten was the main emphasis. When the season started to change, the colour and thickness of the fur also changed which in turn acted as an ecological signal to Freddy. For example, when one of our beaver skins showed a white hair it indicated to Freddy that it was time to stop trapping (field notes, p. 60). It would soon be spring, the time when the beaver young would be born. (In addition, the economic value of thinner and lighter fur was lower so it made no sense to continue on either an economic or ecological basis.)

In early spring, moose hunting became the main focus followed by fishing (field notes, p. 94). In addition to the large seasonal cycle, cyclical changes within seasons also impacted our work. That is, while early spring acted as a macro-signal that it was soon time for moose hunting, the actual activity depended upon small cycles within the season. For example, during early spring the snow started to melt which to me seemed like a

good sign that it would soon disappear completely. Yet Freddy knew that when the snow was too soft, he could not make a proper trail for effective moose hunting. Also, “the moose run faster in the soft snow.” (field notes, p. 94). What we waited for was a cyclical change within the season -- we needed a brief cold snap to form a layer of hard crust over the melting snow. This would facilitate solid trail-making. In addition, this crust gave the hunters another advantage -- the moose could only run slowly through a crusty snow because their weight made them fall through each layer and significantly slow their retreat. In the summer, the Cree did not hunt because it was identified as the time for the animals to have babies (FJ1, text units 124-131).

The seasonal rhythm of the tallyman’s management approach extended even into ‘non-traditional’ work. For example, Freddy wanted to help me organize a road tour so that I could interview tallymen from Nemaska to Mistassini. However, when I asked him when would be a good time to do this, he replied: “April. Mid-April, when there’s no hunting left. After I’ve got a moose. The snow will be too wet then and I’ll get stuck [if I continue]” (field notes, p. 71). The optimal time period was based on seasonal considerations not research deadlines.

As an urban person, I lived far less according to the rhythm of the ecosystem and more in line with social cycles. For example, in the Fall before I moved to the trapline, Freddy and I had a long talk about preparation, about getting ready to live in the subarctic winter. My emphasis was on bringing the right clothes (which was important), whereas Freddy emphasized biophysical preparation -- he wanted me to put on weight (say 40 lbs.) which would act as a buffer against the extreme cold. However, this was not something that I particularly wanted to do, and instead felt that I could compensate for

this with gortex technology. Freddy disagreed. So, unlike myself, who actively wanted to maintain my weight year-round (and especially for the socializing of the 'Christmas' season) Freddy wanted to fatten me up in the Fall -- he believed my eating regime should be similar to the natural one adopted by the animals. He said: "Like August, we start picking blueberries. That's when the animals eat blueberries. All kinds of animals. And they get fat in the Fall. So that's why I told you bush lady, you have to eat lots before you come and live with us! Cause the animals, when they're fat, they're preparing for the cold weather to come." (FJ1, text units 143-150). In contrast, my urban approach to living was preparing, not for ecological seasons, but for the social world. Once the winter started, Freddy was right -- I was often cold. I did, in fact, learn to fatten up on moose meat.

4) Environmental Sense-making

"It was a clear day and I watched Freddy intently, watching how he behaved in the bush, thinking about how at home he was, how he knew the terrain. I was busy thinking about the job of the tallyman when I slipped. Before I knew it, my legs shot out and I fell down the rockface. I hadn't been watching my feet partly because I was carrying a box that blocked my view, and partly because I hadn't really thought to. I hadn't known about the very real possibility of black ice on the rocks, and so, not knowing, I slipped."

The rapids story demonstrates more than the tallyman's ability to manage crises. Equally important, the story also highlights the way in which Freddy makes 'sense' of his management practice. In the bush, Freddy's approach relied on his ability to effectively interpret his natural environment. Critical sense-making was necessary in order to effectively adapt to unknown possibilities in the natural surroundings -- at any moment,

there could be danger, or a hunting opportunity may arise. Tallymen tried to be prepared for either eventuality. They paid critical attention to their ever-changing surroundings.

Sense-making in management is an important subject and one that has received increasing attention (see Weick, 1995). Often researchers look to sense-making within organizations as a means of understanding behavior without relying solely on analytic decision rules. However, sense-making often focuses on social environments -- how people make sense of human interaction. What is interesting about the rapids story is that it highlights a number of ways in which Freddy's approach to sense-making differs from a strictly social constructionist approach.

At a fundamental level, Freddy was an "environmental sense-maker" -- he was deeply aware of his natural environment, and was actively focused on making ongoing sense of environmental conditions as they were occurring. In contrast, I was busy watching 'him', trying to make sense of his job as a manager, without trying to make sense of the ecosystem that surrounded us. Freddy was paying concrete attention to his environment, while I was paying concrete attention to him. Freddy, as an indigenous manager, did not understand that I was not paying attention to the rocks -- it was something he took for granted and he didn't feel that he had to inform me of the need to do so. His cosmology of management was ecologically-based. In contrast, my cosmology of management (and of research) was socially-based. In the subarctic, this difference nearly cost me my life. In hindsight, it certainly cost me my cosmology, which is perhaps a useful thing.

As an apprentice to Freddy, I was forced to learn how to manage outside, whether I wanted to or not. I had to learn to leave the road behind. I also learned that

environmental sense-making was critical to my research design: I could not simply choose to study an indigenous manager without simultaneously studying the ecosystem that surrounded that manager (and now me). It was just too dangerous. Thus, a study of TEK became a study of the boreal ecosystem as well as a study of its traditional managers. However, I was sorely unprepared for this new dimension. Despite nine years of university, I had very little skill at interpreting the natural environment. I was a "social sense-maker" not an "environmental" one. Yet an immersion in the bush helped open my eyes, ears, hands and nose. Over time, I gained a small measure of ecological awareness. A number of field experiences demonstrate this development.

Throughout my stay at the bush camp, Freddy explained that he was trying to teach me to pay attention with all of my senses, to listen and see what's going on around me. He used to say: "A tallyman is the person who knows the land. He lives in the bush and has five senses: you see, hear, smell, feel, and taste the land." (FJlet, text units 18-19). Freddy was trying to explain that TEK is a multi-sensory management approach. Sometimes, this was easy to comprehend although hard to enact. For example, while going to trap beaver, Freddy demonstrated how he used a number of different senses as management tools. Important knowledge could be gained through a complex use of sensory information: Freddy looked, listened and felt for the right spot to lay his trap.

For instance, Freddy demonstrated the tapping technique for finding the opening to a beaver dam. "It's like a drum," he had, "[the right place] sounds like a drum" (field notes, p. 34-35). This was done in comparison with another place, where the ice was thick. However, the multi-sensory approach to the environment often proved daunting. For instance, by the time I wrote field notes on beaver trapping, I was no longer

convinced I had learned much through my senses. Like most things, I continued to learn environmental sense-making the hard way. My river experience was not the only means of accidental learning. Throughout my stay, Freddy continued to test my sensory skills: after the tree incident, when we needed firewood, Freddy used to purposely drop trees near me to see if I was paying attention with my eyes, ears, and body (field notes, p. 93). It was not surprising that after the tree nearly fell on me, my senses were significantly more attuned. The value of a 'cosmological' episode cannot be underestimated.

Yet even after ten weeks in the bush, my sensory skills were relatively low. For instance, I still could not differentiate between the 'green' trees and the other type of green trees. They were all just evergreens to me -- and I honestly thought that Freddy was making up some incredibly complex differentiation scheme. However, on my second last day, I finally began to 'see' the natural environment. However, Freddy's comment about 'smelling' the environment surprised me -- was he joking again? I often found him puzzling. But on a later occasion, I was out with a group of teachers while a Cree friend killed a porcupine. We were about 30-40 feet back from the scene when I said, "Whew. Smell the blood eh?" to which everybody looked at me in surprise. "No way," Barry said, "no way do you smell that." He walked closer. "My god, it does smell!" They looked at me strangely but I really could smell it from where I was standing. After ten weeks of hunting and trapping in the bush, my senses had begun to awaken. I had finally gained some ecological sense -- an important dimension of the tallyman's management approach.

5) Wisdom comes from the land

Photo 34:

The wisdom, it comes from the land.

Similar to the Gaia Hypothesis (Lovelock, 1989), the Cree believe that the earth is alive and self-regulating. Tallymen believed that managerial wisdom came from listening to the living earth and attempting to follow 'its lessons.' The perception of the 'bush' as a powerful teacher was common. On R-21, Freddy explained that his managerial knowledge stemmed directly from the James Bay ecosystem: "It comes from the land. The wisdom, it comes from the land" (field notes p. 96). This was not an abstract metaphor but rather a useful description of his learning experience. Unlike many Western management approaches, indigenous managers adopt the "idea that the natural world might have knowledge, feelings, and intelligence in and of itself" (Deloria, 1992: 49). In contrast, 'modern' scientific understanding has often viewed the earth as 'inert' (Oelschlaeger, 1991).

Tallymen perceived the bush to be an active participant engaged in an ongoing ecological dialogue with the Cree. For example, Walter Jolly, a tallyman from Nemaska, explained that: "The bush taught me how to trap, how to survive, how to raise my children, how to manage the land, how to harvest the land, not how to slaughter it, overharvest. To use wisdom and common sense." (WJ, text units 60-62). Other tallymen agreed. "I'm trying to live," said Murray Neeposh, a tallyman from Mistassini,

“I’m trying to survive. And it’s teaching me...[The bush is] showing me the things around me, the trees, the animals, the rain, the snow, that I have to learn.” (MN, text units 400-402). Under such a worldview, environmental sense-making is more like a fusion of horizons -- the tallyman and the bush acting together in dialogue, rather than one-way communication with the tallyman monitoring an inanimate earth.

Such understanding developed over long-term, regular interactions between the tallyman and a specific locale. The natural environment was not a place that a tallyman visited -- it was a place where he lived and worked. Consequently, tallymen felt a strong identification with the natural environment: “Well, I feel that the bush is... you know... I don’t know how to put it but it’s Cree. You’re Cree, you’re bush.” (WW, text unit 146). On another occasion, Freddy said that: “When you live in the bush all year long, watching over it, the land speaks to you. So when the tallymen speak, it is the land speaking.” (FJlet, text units 19-26).

Photo 35:

Bear Skulls

However, 'wisdom from the land' was not always immediately decipherable. According to one respondent: “Everything has meaning. Everything that you did out in the land has meaning. It didn't mean that you had to know the meaning. It would come to you. ... Asking why gets in the way, sometimes, of actual learning. If you're meant to

know, in time, you'll know. Even if you're told, you might not understand.” (LJ, 53-54). Since TEK is also handed down through generations, it is not surprising that the practical reasons for certain behaviours is sometimes unclear to indigenous peoples, and to outside researchers (Colchester, 1994). This lack of conscious understanding did not, however, remove the utility of the tallyman's TEK. In fact it emphasized the need for managerial humility -- unlike scientific approaches, a Cree manager did not need to understand everything in order to manage sustainably. Tallymen acknowledged and accepted the incompleteness of their managerial knowledge about complex ecosystem processes. Such uncertainty emphasized the need for careful risk management and ongoing managerial humility.

(6) Ecological legitimacy in TEK leadership

For the Cree, high levels of TEK were believed to be the basis for determining leadership. Freddy explained: “A tallyman's office is in the bush. He doesn't need to read reports and books about the animals. He already knows them. The tracks of the animals are his books. The tallyman is chosen for this job because he has proven that he has these skills. He knows his land because he walks and talks with it all year-round. He is a full-time trapper. When you live in the bush all year long, watching over it, the land speaks to you. So when the tallymen speak, it is the land speaking.” (FJlet, text units 19-26). Repeatedly, participants explained that tallymen were chosen as leaders because they had the greatest ecological, and thus cultural, legitimacy -- *they knew the land best*.

Although not legally recognized with property rights, succession was taken seriously within the community and by individuals.

In fact, one highly-respected tallyman delayed 'promotion' for several years until he felt that he was ready and had gained sufficient ecological knowledge (RJ text units 254-270). While leadership skills may have some innate characteristics, the tallymen strongly believed that leadership ability emerged from training and the gaining of TEK through apprenticeship. While I do not have data to confirm (or refute) the ecological basis for Cree leadership choices, it is interesting to note that Freddy's father had previously chosen another tallyman (before Freddy) but had effectively 'fired' the first choice after he gave away land – a cultural transgression. Freddy was chosen as the replacement because he appeared to better embody Cree cultural beliefs about the 'ideal' tallyman. According to Freddy: "When my dad chose me to be the tallyman of our trapline R-21, he told me to watch over the land. Watching means taking care of it for future generations and protecting it against anything that causes damage to the land." (FJlet, 11-14).

Tallyman Talking -- On Work and the Land

"You get it from the land
From how well you know the bush
You get the power
from living here
Not from taking it away."

"When I walk through this bush
I wonder how many times my
father walked here,
and saw the rapids shake
as the ice formed
I wonder how many times he tasted
the blueberries of late fall
and saw the geese
go out.

My father.
He used to work for the Post Office
it took him seven days
to get the mail
all the way down to Chibougamou.
In the winter
he took his dogs and walked."

"It was a long way, and each night
he was sleeping in the snow."

Experiential knowledge of the local ecology and traditional pursuits was highly valued as a leadership quality, since such expertise was difficult to gain. Freddy's

ecological knowledge was extensive: he could describe what different animals ate, how they built their shelters, and how to hunt and trap them. He also knew his land well -- he could travel throughout his trapline (nearly 600 square kilometres) without the aid of a map. Other tallymen displayed similar expertise – indeed they felt such knowledge was the basis for successful management. As Freddy explained, “A trapper knows his land. He knows where the beaver are.” (field notes, p. 16).

As leaders, tallymen tended to view themselves as personally representing the earth’s needs and desires. Walking out on the trapline, Freddy explained this perspective to me, “When you listen to a tallyman, you’re listening to the land. You’re listening to a tree. You’re listening to the birds, the animals, the fish, the spirits.” (FJ3, text units 87-89). Another field experience underscores this point. Near the end of the field visit, I was in the village helping Freddy write a letter to gather legal support for a lawsuit (to gain compensation for the ecological damages from a road, the Route du Nord, which was built through trapline R-21). Since Freddy was not computer literate, he talked and I typed. As the night progressed, I printed copy after copy for Freddy and I to review. After getting the gist of his argument, I kept asking him to review the letter to see if it ‘sold’ his case well -- did the letter convincingly convey all the important concepts? Was the argument strategic? Would the lawyer be convinced that this case had legal merit?

In response, Freddy kept asking me to add in a word here and there. “You forgot to say, ‘the birds’...” Or, “we forgot to say ‘the air’.” “You forgot ‘the rapids.’” It was one o’clock in the morning. He was driving me crazy -- I *had* put in the animals; I *had* put the river; I *had* put in lots of minute ecological details. *Enough was enough* -- I wanted to know if the argument was cogent! And then it hit me: Freddy’s main focus

was to adequately represent all of the ecology that as a tallyman he was responsible for. In contrast, my focus was on textual strategy and the social relations between Freddy as a tallyman and the recipient of the letter as a lawyer. Freddy was trying to deal with the 'ecology of the letter' because this is where he was anchored. I, on the other hand, was focused on conceptual and social details because that's where I was anchored. While environmentally committed, I was still not ecologically embedded. In contrast, Freddy, who was 'born in the bush,' never lost his focus on the local ecology. At the end of the day I belonged to the world of ideas while Freddy, as an ecologically-embedded leader, belonged to the earth (field notes p. 75-77).

Discussion

The organizational embeddedness literature is primarily focused on delineating the social embeddedness of organizations and institutions (e.g., Baum & Oliver, 1996; Uzzi, 1997). While clearly valuable, this stream of research remains another example of 'de-natured' management theorizing (Shrivastava, 1994). Little if any research has looked at the role that ecological embeddedness plays in economic behavior in either modern or subsistence economies. Yet the impact of ecological embeddedness on managerial behavior may be similar to the impact of social embeddedness.

Uzzi (1999) defines social embeddedness as "the degree to which commercial transactions take place through social relations and networks of relations that use exchange protocols associated with social, non-commercial attachments to govern business dealings" (p. 482). Furthermore, social attachments are identified as personal ties, not simply organizational linkages. This theoretical approach attempts to identify

why economic or managerial actions become embedded in social relations which in turn affect the allocation and valuation of resources (Uzzi, 1999).

Similarly, ecological embeddedness can be defined as the degree to which managerial actions take place through ecological relations and networks of relations that use exchange protocols associated with ecological, non-commercial attachments to govern business dealings. That is, an ecologically embedded approach to management studies seeks to explain how native management is embedded in ecological relations that differentially affect the allocation and valuation of natural resources. It is not restricted to social relations and social attachments.

Nevertheless, it is useful to link my exploratory data on ecological embeddedness to the social embeddedness literature. Research studies indicate that socially embedded relationships are characterized by trust, personal ties, 'thick' exchanges of tacit knowledge, satisficing behavior, and a shift from short-term rational exploitation to the long-term development of cooperative ties (see Uzzi, 1997, p.36-37 for an overview of the literature). In addition, Uzzi's (1997) research on the garment industry indicated that trust developed when voluntary reciprocal behavior existed. More recently, Uzzi (1999) argues that "embedding commercial transactions in social attachments benefits firms by promoting distinctive governance mechanisms and the transfer of private information" (p. 482). Furthermore, his results suggest that strong social attachments create an environment characterized by trust and "reciprocal obligations that actors espouse as the right and proper protocol for governing exchange" (p.484-485). Uzzi demonstrates that such an environment results in lower costs of doing business (in Uzzi's case, this is demonstrated by lower costs of capital by those firms with strong social attachment).

Finally, Uzzi (1999) concludes that the “governance arrangements of social embeddedness appear to come before, rather than follow from, the attributes of transactions” (p. 501). That is, social embeddedness is not a result of an exchange relationship; rather, it pre-exists and shapes exchange relationships.

Many of these findings on social embeddedness are echoed in my data on the ecological embeddedness of the Cree tallyman. For instance, tallymen adhere to management beliefs that emphasize ecological (and social) reciprocity -- that is, managers are trained to 'give back' to the earth as they continue to take from it. In addition, by managing outside Cree tallymen develop strong personal ties to their local ecology, similar to how socially embedded managers in Uzzi's (1997) study developed strong personal ties to other social actors.

Uzzi (1997) suggested that socially embedded relations were characterized by constant communication that facilitated fine-grained information exchanges. Similarly, ecologically embedded tallymen also emphasized the need to be in constant communication with their ecosystem in order to gather information about ecosystem conditions and feedback. Uzzi (1997) also found that joint problem-solving arrangements led to satisficing behavior that reflected the depth of social ties, rather than cognitive limits (e.g., March & Simon, 1958). That is, managers did not strive for straightforward self-interest; behavior was tempered by communal interest. Similarly, tallymen did not maximize resource use; rather, they sought to manage for both their own self-interest and the long-term interests of the ecosystem and future generations. Tallymen viewed the long-term health of the trapline as more important than short-term resource exploitation.

Uzzi (1999) identifies distinct social governance mechanisms and the transference of private information as key characteristics of such environments. Similarly, I would argue that the Cree approach utilizes distinctive ecological governance mechanisms that govern managerial relations. For instance, the Cree belief that the earth (the Creator) is an active and powerful participant in managerial decision-making is a distinctive and ecological form of governance. Furthermore, tallymen believe that long-term immersion in the bush provides valuable managerial information. That is, they believe that the land speaks to them – an ecological form of private and personalized knowledge.

Interestingly, Uzzi (1999) notes that private information cannot be accessed in arms-length relationships. This is paralleled by the Cree belief that managers who do not “walk” on the land do not have enough information to make effective decisions. That is, managers who have an arms-length relationship with an ecosystem will not receive important ecological information.

While my ethnographic approach does not test such propositions, the degree of ecological embeddedness may have important consequences on economic decisions, and on the sustainability of management approaches. Furthermore, a grounded theory approach suggests the following relationships. The ecological embeddedness of the tallymen's approach results in a high degree of personal identification with the natural environment, and in the emergence of a strong environmental ethic. It also leads to management behavior that is based on an increased understanding of ecological feedback and that attempts to adapt to natural cycles. In turn, these characteristics may be related to the sustainability of Cree approaches. My ethnographic findings suggest that the managerial behavior of tallymen are heavily influenced by their ongoing ecological

relations. Management originates from this ecological location and the managerial perceptions, beliefs, and practices of Cree tallymen reflect this form of ecological embeddedness. Thus, the ecological embeddedness of Cree tallymen may be partially responsible for their ability to avoid the tragedy of the commons since ecological relations may constrain Cree individualism.

Part 4: A Critical Look

It is misleading to view the tallymen's approach as an utopian system – such a discussion would only perpetuate the myth of 'noble savage' (Berkes, 1998). Consequently, this last section outlines some problematic areas of the tallyman's management approach.

Imperfections in daily management – learning through mistakes

Freddy's ecological knowledge was extensive: he could describe what different animals ate, how they built their shelters, and how to hunt and trap them. He also knew his land well -- he could travel throughout his trapline without the aid of a map. Other tallymen displayed similar expertise – indeed they felt such knowledge was the basis for successful management.

But even 'outstanding' tallymen make mistakes or may not always follow cultural ideals consistently. For example, Berkes (1998) presents a community-wide example in 1998, where caribou stocks were overhunted and meat was left to spoil – a direct transgression of ethical beliefs. In addition, Freddy (like other tallymen in my study) did not always operate with a 'higher' social or ecological ethic. Freddy laughed at what he

perceived to be 'environmental tree-hugging', occasionally boasted about hunting prowess (a cultural transgression) and engaged in paternalistic behaviour. However, as Berkes (1998) notes, ethics from any culture can be suspended on occasion at both the individual and community level. Thus, the issue is not to demonstrate 'ethical purity' of the Cree (in general or for each individual) – that would be an attempt to perpetuate the myth of the noble savage. Rather, a more interesting question is how do cultures and individuals learn from mistakes or ethical lapses?

Berkes (1998) provides some insight into this issue and suggests that social learning is a key mechanism. After a period of overhunting, Cree elders gathered the community together and shared a story from the past. While it was a well-known story, the elders' presentation emphasized that overhunting led to future shortages because the animals stayed away and were angered by such disrespect. The story was powerful because the community had noticed reduced caribou stocks following the previous period of overhunting. That is, "the lessons of transgression, once learned, survived for 70 years in Cree oral history, and it was revived precisely in time to re-design the hunting system" (p. 7-8) after the recent period of overhunting. Thus, social learning across generations was used to curtail 'bad' management practices of a group of hunters. Cree culture takes ethical behaviour seriously. For example, "[f]or Cree people, being a man (*naabaaw*) and being a good hunter (*naabaaw* with different emphasis) are related" (CTA, 1995: 13). However, more work needs to be done in order to understand how individual managers perpetuate and enact 'ideal' forms of management.

Thus, social learning across generations was used to curtail 'bad' management practices of a group of hunters. However, the ecological embeddedness of tallymen may

also improve their ability to learn from mistakes since the impact of ethical lapses may be more easily identified if it results in local ecological feedback.

Not a social utopia

Despite the embeddedness of the Cree approach, this did not result in utopian system. The tallyman's approach is far from perfect. Individual actors also deviated from social norms on a number of occasions. For example, Freddy made a distinct point of showing the tracks of hunters from an adjoining trapline who 'took' three moose from R-21. He repeated the story a number of times, and he always emphasized the lack of social protocol – the neighbouring hunters took moose on Freddy's trapline "without asking." Furthermore, the hunters had not offered Freddy's family moose meat or invited them to the feast. Freddy considered this a grave injustice and considered these actions as "stealing" (field notes, p 37). While Freddy discussed the incident with the elder male on the adjoining trapline, he was always friendly to the hunters who had 'stolen' the moose. Important social ties remained intact despite the infraction. In fact, two of these 'culprits' were active in helping to fix my truck when it broke down in the cold (perhaps this was why they helped out). In addition, Freddy and I often visited the neighbouring camp and were always offered bannock and tea, bush hospitality. So, while moose 'stealing' may be perceived as a managerial faux pas, it did not affect overall bush relations, particularly over the long term (although Freddy often brought the story up over a three month period).

While the tallyman was in charge of all activities affecting the natural resources of the trapline, his direction was not always followed, even on his own trapline. For

instance, during my field work, Freddy determined that partridge hunting should stop at a certain point in the spring. It was time for the partridge to lay their eggs. As tallyman, he indirectly conveyed this message through a 'suggestion' to his invited guests, other native (Algonquian) hunters. When the boy from this invited family ignored Freddy's 'request' and killed another partridge with his slingshot, Freddy was not pleased and made this displeasure known, albeit still in an indirect way, through a comment in the presence of the boy's father. The father, responding to the social chastisement, later disciplined his son and strongly emphasized the legitimacy of Freddy's authority. He did not want his son to repeat the infraction and jeopardize his ongoing invitations to the trapline.

In a sense, the tallyman's authority can be described as non-hierarchical -- the tallyman was also a hunter and trapper like the other men on the trapline. Furthermore, the tallyman did not hire the other trappers who were free to shift traplines if they were dissatisfied. Yet trappers accepted the tallyman's leadership because it made sense from a practical perspective (e.g. for a successful hunt) and from a social perspective (e.g. by respecting cultural tradition, you remain firmly part of Cree society). However, tallymen needed to be able to maintain control over activities that affected resources. On occasion, they operated in a directly authoritarian manner. "A tallyman is the one who gives orders to his family in their trapline." (ST, text units 75-76). Other tallymen held similar views: "The tallyman at times has to use that type of approach, to be very direct. He has to. Yeah. Because you always have certain families, even your own family...they all use the land, certain pieces of the land. One of them might decide: 'I'll do whatever I want, I won't listen to anybody. I'll bring ten of my buddies and we're going to wipe out all of the moose in this territory.' You know that type of approach. And he'll [the tallyman]

have to take responsibility and say, 'Look. You cannot do this. If you attempt to do this then we'll ban you from using that area.' But it doesn't happen very often. I mean a lot of it is try to sit down and rationalize and make people understand the purpose of...what their role is and the purpose of the land. It's not just for them. It's for future generations." (RJ, text units 317-333).

Such authoritarianism, however, may result in an unsuccessful resolution of a managerial problem. This can be seen from another example of a conflict on the Jolly trapline. When one of Freddy's brothers questioned his right to allow teachers on the trapline, Freddy felt empowered to be dictatorial. The older brother had taken exception to the fact that Freddy consistently invited non-native teachers to the bush camp. Specifically, the brother objected to these male teachers hunting during Goose Break, particularly since the number of geese was low that year (cold weather changed normal migration routes). Freddy and his brother fought over this, with Freddy demanding that he (the brother) accept whatever decision Freddy made as tallyman, *or else*. As a result, a government game warden was called (probably by the disgruntled party), and the non-native guests were charged with hunting out of season. Community members appeared to support Freddy's authority. However, there was a feeling that the issue should have been resolved without externalized bodies such as the game warden.

Gender Issues

While traditional female roles are respected (though, from my own experience, they currently appear to have less status than male tasks), the tallyman is part of a gendered system. This in itself may not necessarily be a cause for concern, given that historical

native beliefs stress the equality of female and male roles – different but equally useful. Indeed, research suggests that Cree gender roles act in a complementary rather than an oppositional fashion, with female and male managerial spheres mutually supporting each other (Ohmagari & Berkes, 1997). Furthermore, there is an overlap in skills with men and women often learning the opposite roles (S. Preston, 1982).

Yet my own field experiences suggested individual managerial actions may not always be socially equitable from a gender perspective. Freddy (like other Cree males in my study) saw himself as ‘the head of the household’ and got angry when I did not respect this male authority (see my discussion of these field relations in Chapter 2). Furthermore, current trapline practices may not reflect traditional gender divisions of work. For example, elder Cree women told me that women used to be responsible for hunting and trapping within the immediate area of the camp in order to feed herself and the children while the men were away on extended hunting trips. However, during my field work, women rarely hunted or trapped although this did occasionally occur. However, it is unclear if this behaviour stems from Western paternalistic influences of the Hudson’s Bay Company and Christian missionaries. On more than one occasion, I was told by a number of Cree women that the hierarchical position of men was appropriate because the “Bible” dictated that it was so.

Nevertheless, gender issues was not a key focus of my research study. Consequently, future research may choose to examine gender dimensions of Cree management and/or focus on specific practices. For example, previous research documents the sexual symbolism of Cree humour, particularly in “male talk about hunting” (see Tanner, 1979: 72, 178). Yet, gender issues are multi-dimensional and need to be analyzed in the broad

cultural context. For instance, “male organs of any animals (e.g., moose) belong to women” (CTA, 1995: 35). Further empirical research is required in order to determine whether such management practices still exist and how they may (or may not) be problematic from a gender perspective (e.g., see Adams, 1991, on the sexuality of meat).

Management by skidooning around?

Arguably, economic development and the James Bay and Northern Quebec Agreement (JBNQA) have impacted the tallyman’s ‘walking outside’ approach to management. As Chief William Mianscum explained, “Before the signing [of the JBNQA], the trappers, the hunters that harvested out there on the land, stayed out there on the land. They walked. They canoed. They did everything with their own physical bodies. And since the signing of the Agreement, there’s all kinds of subsidies that came out, financial subsidies for gas and ground transportation, air transportation. And since then, a lot of the trappers and the hunters that used to go out there started to, you know, be overweight. We have problems with diabetes.” (WM, text units 39-48).

Yet regardless of the mode of transportation, tallymen still spend a great amount of time ‘touring’ and extensively traversing their local ecosystem, including the use of snowshoes. However, it is unclear whether the ongoing use of motorized transportation, such as skidoos, reduces the range of ecological exposure, and whether this has an impact on the effectiveness of TEK. For example, I travelled on trapline R-21 for two and half months by skidoo and traversed many frozen lakes. Snowshoes, while still used, were not the prime method of transportation; rather, they were used to gain access to hills or worn while working (after we arrived via skidoo). However, it was not until I went winter

camping (post-field) and travelled exclusively by snowshoe that I realized the sound the ice makes when you walk over a frozen lake. It sounds like a drum¹³. When I asked Freddy about this, he replied that of course he knew the sound too but that you couldn't hear it over the skidoo. So while Freddy powerfully talked about how his management knowledge came from 'walking', he no longer practised this as fully as he had in the past. At the same time, Freddy acknowledged that the TEK from the elders was so powerful because it stemmed directly from this approach: "So whatever the elders say, it comes true. Because like I said, they have seen this. They have walked on this land – it's called James Bay territory." (FJ2, text unit 62).

While research exists to support the notion that traditional pursuits are not dependent upon specific historical technologies (e.g., see Wenzel, 1991), a deeper understanding of how different modes of transportation affects TEK may be an important area for future research. In particular, an examination of the physical and mental role of walking may be useful.

The animal-rights debate on hunting/trapping

The Cree are a hunting, trapping and fishing culture (GCCQ, 1995). Furthermore, Western economic development has meant that the Cree operate under a dual form of economic production -- one based on subsistence and the other tied to the marketplace (Tanner, 1979). As Tanner (1979) points out, "hunting is a form of subsistence, as is, to some extent, trapping; that is, in both cases the unit of production, the commensal family, consumes what it produces" (p. 48). However, the market economy permeates bush life, apparent in the purchase of food supplies and technologies (Tanner, 1979). Animal

trapping fulfils at least two functions – it operates as a form of subsistence (i.e., animals like beaver provide food and material for clothing) and also as a form of income – some animals, like marten, are only used for fur. However, rapid centralization of the native groups has often resulted in the need for a cash economy to support ongoing transportation to traditional lands (see Wenzel, 1991, or Keith & Saunders, 1988: p. 149, for further details on this argument). The goal of such trapping is not for ‘profit’ but rather to sustain subsistence activities.

Consequently, cash-motivated trapping activities can be viewed as an integral part of subsistence life. Furthermore, Tanner (1979) suggests that the ethical principles of subsistence and traditional Cree beliefs (including TEK) tend to dominate all other management approaches, particularly with respect to bush life. While resilient to Western assimilation, Cree culture is not untouched. Furthermore, activities by individuals may not be ‘pure’ all the time but that Cree culture provides an ideal for hunting and trapping which governs individual actions. Indeed, field work indicated that Cree management beliefs strongly emphasize the need to respect animals and their surroundings. In addition, Cree spirituality suggests that hunting is not viewed in terms of ‘dominance’ (see Feit, 1995; Tanner, 1979). Instead, power relations (inherent in any interaction) are dependent upon the Creator (or God). The Cree belief system also suggests that if management practices are not in accordance with principles of respect and reciprocity, the animals will retaliate – in turn, this will result in starvation and hunting failures (Tanner, 1979).

Yet animal rights proponents often do not accept such ‘cultural’ interpretations of hunting and trapping (e.g., see Keith & Saunders, 1988). However, a dismissal of TEK

on the basis of 'animal-rights' can be viewed, in itself, as problematic. Indeed, Wenzel (1991) suggests that the discourse of the animal-rights movement can be viewed as a continuation of the colonial process in Canada that attempts to 'change' or 'assimilate' native culture into a more 'progressive' Western (or Far-Eastern) ethic. To ask the Cree to no longer act as a hunting and trapping people (and to no longer eat meat), is to ask them to become another culture.

Yet the politicized issue of vegetarianism may make some scholars wary of native approaches. Indeed one reviewer commented that "... there is no reason to eat meat (see the Cornell studies, American Dietary Association, and more than half the world is vegetarian)." However, I disagree that the Cree, or other native peoples, should be criticized for not being vegetarian. In order for the Cree to adopt vegetarianism, they would have to rely solely on imported sources of food or would necessitate a migration to more southern climates since the boreal ecosystem does not support agriculture. In either case, this would result in a total de-coupling of the Cree with the local environment. A preference for vegetarianism should not be used to negate the ecologically-suited approaches of another culture.

In addition, it is important to note that a personal preference for vegetarianism often stems from an objection to urban, Western meat production (e.g., see Rifkin, 1992; Mason & Singer, 1990; Adams, 1991). However, native hunting and trapping practices do not rely on the often-criticized approaches of Western cattle or poultry production -- in many cases, native peoples would agree that such practices are abhorrent and not in keeping with native conceptions of respect. In addition, the Cree do not believe that animals are 'property.' Consequently, it is important to recognize that there is common

ground between native hunting ethics and animal-rights – for instance, both would position themselves as against ‘cruelty’ to animals (e.g., see Keith & Saunders, 1988: p.149).

However, positions can become overly polarized. For example, an external reviewer of a paper based on my dissertation stated that: “You claim that the Cree have respect for animals. I do not see how killing animals is respect for animals.” The answer, I suggest, is in different cultural manifestations of respect. The Cree, as a hunting and trapping people, have an extensive and spiritual ideology surrounding subsistence. This worldview requires a hunter to respect and honour the gift of life and to follow the larger purposes of the Creator. While scholars may or may not ‘like’ Cree hunting and trapping practices, the field must remain open to different cultural approaches to ecological management. However, an interesting case for future research would be to examine TEK that arises from within a vegetarian context such as Hindu farming and compare it with Cree TEK. Empirical research on many forms of TEK is thus required.

Part 5: The Impact of Development on the Tallymen

Photo 36: Since the White man came....

When I first arrived in James Bay, I wanted to study the impact of development, on the Cree people. Eventually, I re-focused my dissertation on an examination of

traditional management practices of the Cree tallymen. However, the impacts of development remained an important research question. This section presents findings on the impact of development on the tallymen and allows tallymen from my study to voice concerns about the future.

A Tallyman Talks:

I'm going to tell about what they're doing to my land now. How the whiteman enters our land. Before, in the olden days, there was no whiteman. It was like the stories I've told you about. Now... if you look at my land, our trapline is a huge size. There were a lot of trees during the time of my story. All kinds of trees, different kinds of trees, huge tall trees. Now if you look at my land, it's all flat -- clear cutting. Even the mountains.

Before they cut the trees we had a meeting with the forestry company and told them about places not to cut -- the moose yards. There's one place that moose used to hang around, where we used to get our food. That's the main part. That's the part we didn't want to be clear cut. They didn't even listen to us. They cut all the trees and took them. All over the place. There was a favourite spot for hunting and there were huge mountains but now they're gone. It's all clear cut. There's only one small part and that's the only place we can go for moose hunting, that's the last part where it's not clear cut.

The other places that are clear cut we cannot get anything, not even a moose. Where they were clear cutting and destroying the ground, taking even what the beaver eats [the branches]. The mess they make, they pollute the water, the lakes. It affects the beaver. The lakes are dirty. The damage they do, and the roads, it affects the animals. Even fish. There's a spot where we used to go fishing. It's really different now. When the lakes are polluted, it

goes through the rivers and streams. The fish are different. It affects them through the water, everything goes into the lakes. The beaver too. The beaver moves away, moves out to where it's not affected. ...

I'm the tallyman of my trapline. They don't listen to me even though I tell them...

What does Wahmschtickoosh [the white man] mean when he says that [the earth is not alive]? The earth is living. And still today, God is giving us life to live.

... There's one more thing that I want to say to her [the researcher]. Not to believe in what they [the whitemen] teach you. Believe in what I believe."

Charlie Etapp, Cree elder and tallyman, March 29, 1997 in Mistassini, James Bay, (CE, text units 265-376)

James Bay may be a beautiful land of boreal forest, muskeg and long expanses of black spruce. But it is also a place of aggressive economic development. Indeed, it is an environment in which a growing number of managers grapple daily with this extreme yet vulnerable ecosystem. From a corporate perspective, James Bay is the site of many large-scale hydro-electric, mining, forestry and tourism operations. However, there is little public recognition (or corporate understanding) of the impacts of this regional development on the tallyman.

However, my field research suggests that economic development has had a distinct cultural impact on the role of the tallymen. The tallymen have been particularly affected by development. Under the JBNQA, the provincial government of Quebec has the right to mineral and forestry development in Category 2 and 3 land (the Cree retain full rights to Category 1 land). Yet the majority of Cree traplines are located in Category 2 and 3 designated land, and each of these is managed by a tallyman. While part of the objective of the JBNQA is to ensure the rights of the Cree to pursue traditional activities

such as hunting and trapping, this has not prevented clearcutting activities on traplines, despite its negative impact on trapline management. In particular, the road network which was built to support hydro-electric development has made many traplines easily accessible to both sports hunters and fellow Cree.

Findings suggest that economic development in the region has resulted in tallymen losing control over resource management decisions. Furthermore, forestry, mining, and hydro-electric development have resulted in a significant loss of natural resources and environmental degradation. These impacts, in turn, have had a strong emotional impact on individual tallymen and to some degree have caused a schism within Cree culture. Furthermore, the tallyman's loss of control over resources appears to have resulted in a gradual lessening of respect for his traditional role. These are discussed in more detail below, followed by a brief discussion of the implications of these findings.

Loss of control

As economic development activities within the James Bay region continue, the tallymen in my study resoundingly identified the loss of managerial control as a serious byproduct. The tallyman's management function is now shared with the Cree regional and community leaders as well as with government and corporate decision-makers. The tallyman's ability to control and manage his resources is no longer systemic, partly due to lack of decision-making power and partly due to open access from roads. Robert Jimiken summarized this position: "Both in the Cree society and in non-Native society, I would say that. Yes. In the past, you know when a tallyman had...he had a piece of land and the tallyman had the sole responsibility. He had authority over that land. He was able to

determine which people can go there and which places they can go. He can put also, you know, a limit of what game can be killed. And today, that's almost impossible because so much development has been focused on the north. You know? No matter what the tallyman tries to do, somehow nobody seems to listen to them and they just go ahead anyway" (RJ, text units 207-214).

Furthermore, negotiations with the government and the companies typically occur at the regional level with the Grand Council or at the community-level with the Chief and Band Council. Thus, these 'formal' Cree leaders often act as the formal negotiators, leaving the tallymen with less control and in some cases, a marginalized voice. Freddy stated his concerns publicly in a letter to the Cree magazine, *The Nation*: "There has been a lot of destruction on our lands. Forestry, mining, roads, the hydro projects and more, these have all changed our lands and our way of life. As a Cree, I have cried when they destroyed our lands. As a tallyman, I have tried in so many ways to stop this but nothing has worked. The development and abuse of our lands continues, and the tallyman no longer has the power to save his trapline" (Fjlet, text units 3-7). Interview data indicated that this concern was widespread. William Mianscum, who was chief of Mistassini at the time of my interview, provided this general perspective, "Even though the tallyman are there, they give orders, they try the best way they can, whatever authority was handed down to them to look after that land, they're trying their best to control it. But because of access roads, and you know, skidoos -- now you can have skidoos leave here and head down at 200 miles [per hour] and no problem, they can... they're so economical. And you know, they're all over the place. Nobody can control them anymore" (WM, text units 267-273).

Admittedly, the impact of development on the tallyman may have had some positive impacts. With the introduction of the income Security Program, tallymen have maintained some economic clout -- since tallymen have control over who lives on the trapline, the tallymen indirectly have control over who receives Income Security (Cuciurean, personal communication, 1997). Since the ISP arose out of the JBNQA, this may, in one sense, have resulted in the tallyman having more monetary control. In addition, Scott and Feit (1992) suggest that the ISP has also resulted in more Cree pursuing traditional lifestyles that may culturally reinforce the leadership of the tallyman. However, results of my research indicate strongly that the most pressing impact from the Cree perspective is the tallyman's loss of control over resources which results in open access. Thus, while the tallyman may have had traditional authority over activity on his trapline, development and cultural shifts in Cree society have resulted in a significant loss of control and a decline in the tallyman's traditional managerial role.

Loss of resources

At a basic level, economic development activities such as mining, forestry, hydro and sports hunting, impact the natural capital of the trapline. Furthermore the influx of these activities means that the tallyman is no longer the sole manager, in full charge of this natural capital. As Sam Trapper explained, "They [the development companies] don't even think about Eenou, how they live in the bush. They destroy all the things that Eenou has. How will they survive in the bush when they destroy the land, the animals. They're destroying our money in our Cree bank in the bush" (ST, text units 228-230).

The loss of natural resources is a community wide problem for the Cree nation. The Grand Council of the Crees are engaged in a number of heated legal battles over resources. For instance, in 1998 the Grand Council of the Crees has initiated a large legal suit over logging rights.

Photo 37: Crees sue over logging rights....

While the loss of resources affects all Cree, the impact is magnified on the tallymen who are the traditional caretakers of the land. Invasive forms of economic development such as forestry, mining, or the by-products of hydro-electric development are perceived as distinct threats to the tallyman's cultural role. Tourism and sports hunting brings additional pressure on the natural environment. In addition, the loss of resources has a direct impact on the tallyman's place of work. In the face of pressure from external economic development, Freddy lamented: "They're [the forestry companies] destroying our classroom!" (field notes, p. 93). Or similarly, in the wake of a recent proposed hydro expansion, Freddy said: "[My trapline] will be flooded. All my tools will be under the water." (field notes, p. 99). Tools, in this case, being the land itself.

When natural resources are changed significantly through economic development, the tallyman's ability to practice traditional management is directly impacted -- his place

of work is destroyed or harmed, as is his ability to teach younger generations. In many cases, financial compensation cannot mitigate such impacts. “No wonder we want to keep our land and love our land,” said Cree elder and tallyman, Sam Blacksmith. “That’s how we survive -- from the land” (SB, text unit 42).

Photo 38:

If NBR goes through...

Trauma

Cree tallymen have strong personal identification with their land. A loss or degradation of resources appeared to be a highly emotional and potentially traumatic event. Walter Jolly, a tallyman from Nemaska, told me that: “[Development] weakened the trapper. He doesn’t have the full strength to go on...It’s like you wounded the man when he sees his land, all chopped. It’s like the tallyman doesn’t have any rights” (WJ, text units 73-75). More generally, development has had a direct impact on all trappers pursuing a traditional lifestyle. “There will be a lot of wounded hunters,” said Freddy, “looking back at where they used to live, what they used to do -- hunt, fish, trap” (FJ1, text units 383-385).

Photo 39:

It weakens the trapper...

While my dissertation did not examine the health effects of such trauma from a research perspective, Niezen (1998) discusses how the natural environment has deep medicinal properties for the Cree. In addition, Lillian Moses, a Cree culture teacher in Eastmain, voiced her concern that development was bringing more people into the village. She felt that the shift towards living in houses was one of the key aspects of her culture that was disappearing. She felt that living in the bush, and sleeping on spruce boughs in a tepee, has direct health benefits. I do not have data to support or refute these assertions. However, I spent three weeks sleeping in a tepee and can attest to the strong sensory qualities of this experience.

Photo 40:

When you sleep on spruce boughs

With respect to the direct impact of development, Freddy offered these thoughts in his poem, A wounded hunter, presented below.

A wounded hunter

All his senses will be wounded,

he'll be a wounded hunter.

He'll be looking back to his land where he was born and raised,

the hills and mountains will be turned into islands.

*He will look back to the rivers and lakes where he used to set his traps and fish nets,
as a wounded hunter.*

*A wounded hunter will have no more the sound of rapids or
the sound of the ice breaking as it floats down the river.*

*He'll now look back to his land where he had a good time
hunting and fishing, as a wounded hunter.*

Looking back to his land where his joy was.

Looking back to his land where he used to walk.

Looking back, watching his family laughing while roasting beaver.

A wounded hunter will only have the tears of his past,

a wounded hunter's mind will be different,

he'll be wandering around to a strange land,

a land that is flooded.

*A hunter who has been wounded will be wounded the rest of his life,
until he passes away.*

*-- by Freddy Jolly, Cree Tallyman, 1992 (First appeared in the Grand Council/CRA
report on the environmental, economic and social impacts of James Bay II.)*

A schism within Cree culture

One of the strengths of the Cree Nation of Quebec is their unified solidarity in the face of opposition. Cultural cohesion has provided the social infrastructure that has successfully supported Cree fights against ill-conceived economic development plans such as the Great Whale Project. However, ongoing economic development has created internal division within Cree culture. The JBNQA has shifted authority from the tallymen towards the chiefs and Grand Chief as regional negotiations are required in economic development activities. Since these Western-based organizations demand a

'formal' leader to negotiate with, the importance of the 'formalized' chiefs (and Grand Chief) have shifted spheres of responsibility and significantly impacted the traditional leadership control of the tallymen. This is currently a source of great debate within the Cree nation. A key impact of economic development has been a shift in traditional power.

Currently, tallymen no longer have the authority to determine what happens on their lands -- in many cases the Chiefs and Grand Council make economic decisions which historically were under the tallyman's geographic sphere of control. In some cases, local band officials try to act as a bridge between development companies and tallymen. But these are not always successful, since companies often do not act upon the advice of the tallymen, even when consulted. "One time a chief came to me," explained one tallyman, "and

they were telling me to show [the forestry company] the good spots where you have big trees. Then they gave me a map and I drew circles where the big trees were. Then they asked me again, where are the moose yards? Also, where do they go for the mating season? There's only two things that they asked me about: the trees and the moose. Then they told me the meeting is finished, and they went. But after, the moose hunters came in. And then, the forestry company came in and cut down the trees" (X, text units 84-93). In such cases, the local band runs the risk of appearing to represent the interests of company officials rather than the tallymen. In part, this is because companies are

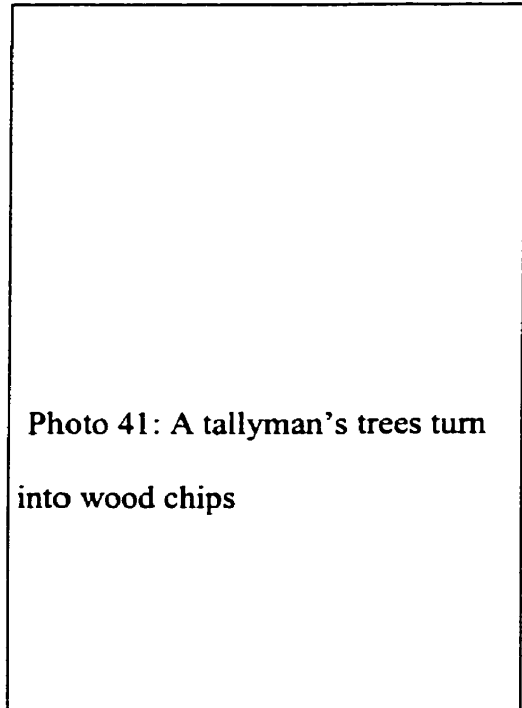


Photo 41: A tallyman's trees turn into wood chips

under no legal obligation to incorporate the tallyman's advice despite band efforts to gain tallyman input.

This shift in decision-making authority has caused difficulties. As Bertie Wapachee, past Grand Youth Chief explains, "Before there was a fight between the Cree and the government. Now there's a fight between the Cree, the government, and the Cree amongst themselves. So the people who will win -- I don't know who but somebody's going to win. And I feel it will be the people who want to bring back the role of the tallyman, have it recognized and bring back the laws of the trapline" (BW, text unit 14).

Tallyman Robert Jimiken also discussed this issue in detail: "I've always wondered to what extent do the chief and council have authority over the land, when they talk about the land? Because if you look at the political level, they look at the categories of land. You know, Category 1 lands under federal jurisdiction and most of their funding for government services come from that. But does it expand beyond that? You know? If there's development in my territory does the chief have the right to say, "Yes, they can go ahead with that." Or...does the tallyman? And I question that. And they say, "Well..." They always come back to the 'collective rights.' Will this affect the rights of all the Crees in the James Bay area. No tallyman can go and make a decision or make an agreement with a company, you know, a development company unless if it's a consensus reached by all the Cree communities. ... I was there in a meeting where there were a lot of other tallymen from other Cree communities and they were talking about the building of the road, the Route du Nord. And I guess the Grand Chief was there, the Chief, his Chief was there also, and they were all being pressured to come up with a decision on the

road. Of course [the tallyman] was opposing it. And then of course, the last person... you know said, "So, should we go ahead with this project? All in favour raise your hand.

That's the wrong system that's used in a lot of decision-making within the communities, that's a show of hands. [The tallyman] was saying, 'You know, I watched around and I see one guy look around and put his hand up. And the other people started looking around and put their hand up.' And he asked them, 'You're from Waswanipi. You have a trapline over there. Does it affect you, this road? What gives you the right to decide what's happening on my territory?' And that really hit me when he said that, and that's what's been happening a lot. Sometimes it's the chiefs and the councillors of these communities that pressure other people within the community to make a decision on somebody else's trapline or territory. And that's why I was saying we have to get approval from the tallyman. They know what their responsibilities are. They're not there to just go after money. Unless they'd be rich by now!" (RJ, text units 360-394).

However, the Cree Trappers' Association (CTA) attempts to incorporate the tallymen's perspective through a series of General Assembly meetings where the tallymen can give voice to concerns about trapline management. In addition, the local CTA committee works with the community Band council and tallymen can approach this committee with concerns. However, voice is not the same as decision-making authority and this currently remains an area of division. According to one tallyman, there is an urgent need "to bring out some... bring out something to awaken the chiefs to what the tallyman is facing in the bush. The hurts. I'm sure the tallymen are hurt a lot but they [the chiefs] don't seem to understand the hurt they're facing because their heart isn't in the bush. There's a trapper that told me that he has got nothing and they're chopping the

trees in his trapline. The chief said he was negotiating but he hasn't got anything. It's just words. You have to act upon your faith" (Y, text units 47-51). While the Cree Trappers Association and the Grand Council of the Crees consult with tallymen, the tallymen do not, either individually or collectively, make the ultimate decision on development.

According to past Chief William Mianscum: "Right now there is an organization in place, The Cree Trappers' Association. But, basically, as far as I know, and a number of people I've talked to, they only look after the interests of the trappers, the hunter. You know? And they don't single out the tallyman and put him up here. And that's what they need to do. And if the Cree Trappers' Association won't do that, then the tallymen themselves have to organize themselves and do that. Because it's difficult right now....I mean, I represent Mistassini at the regional government but I don't know if individual tallymen accept me to speak on his behalf about what happens in his territory...[The tallymen's] understanding is that 'we're the tallymen and whatever happens in our territory, our trapline, we should have a say in it. And the council, they should just stay back and run the community.' ... Then again, the regional government, the Grand Council of the Crees, have a mandate to protect the rights and interests of the territory, so *they* come in and say, 'Listen, you want to talk, discuss development, you talk to us.' So there's nothing in place that really clearly defines who talks, who has authority over development" (WM, text units 282-366).

Field work strongly suggested that the current organizational structure which includes local (band) government, individual tallymen, and regional authorities such as

the Grand Council of the Crees and the Cree Trappers' Association, may be ineffective and unclear.

Loss of respect

The loss of natural resources, combined with a significantly reduced control over the remaining resources, appears to have led to a loss of cultural respect for the tallyman. Tallyman Robert Jimiken, among many others, identified this impact: "Even with our own people, it's the same thing. Today, I see... it's just a title. It's just a title. It doesn't have the authority or the respect it had at one time. Although I'm hoping that by talking about it, and by bringing it to the attention of a lot of people, which I do a lot of the time, that eventually there will be a recognition again at a very high level that yes, if anything needs to be done to that land it has to go through the tallyman. Because it's the tallyman that looks after that land" (RJ, text 242-246).

Loss of cultural respect in turn further impedes the tallyman's ability to control access to resources because control is culturally enforced – conservation authority is not currently institutionalized through property rights or through auxiliary conservation powers. Thus, a loss of respect signifies a decline in the tallyman's cultural role as environmental steward. The road system is a case in point. While undoubtedly bringing the Cree numerous benefits (e.g., more convenient and cheaper transportation), the road system also opened the territory up to additional development and sports hunting and fishing. Native and non-Native hunters no longer need the tallyman's environmental expertise in order to successfully traverse a trapline. As a result, the traditional respect for the tallyman as a manager and leader has decreased within Cree society. This was

clear from trapline R-21 where the Route du Nord had significantly decreased Freddy's and other tallymen's ability to control access to resources.

Chief William Mianscum discusses the relationship between control, respect and economic development: "I'm going to ...point my finger at the signing of the James Bay and Northern Quebec Agreement. Because ever since then...before signing the Agreement, the tallymen were, had a...they had authority. They...they knew how to traverse the land. They knew all of...the whole territory. And they knew just exactly how many people they can allow to come in and hunt on their territory without damaging or impacting whatever animals that were in that territory. So, they had control, complete control over that territory in terms of harvesting, nurturing, and looking after the land basically and promoting respect for that land. And then the Agreement was signed and you know people had money... And basically, the authority of the tallyman started dwindling to the extent that... I think that it would be fair to say that we're starting to lose respect for the tallyman... within the Cree culture as well. It's not a fair statement to make but it's a fact" (WM text units, 251-264).

Discussion:

Before the construction of James Bay 1, the territory was relatively inaccessible to outside forces -- outside access restricted to planes and boat transportation (Salisbury, 1986). But during the construction of the James Bay Project, two main permanent roads were built along with numerous temporary (winter) roads (Salisbury, 1986). "By 1981 a major road traversed Cree territory, and all settlements were negotiating for their connection to a road to the outside" (Salisbury, 1986: 5). By 1999, all but two Cree

communities had a permanent road (excluding Waskaganish and Whapmagoostui). A main highway connecting Nemaska to Chibougamau -- the Route du Nord -- had also been completed in the early 1990's. As McCutcheon (1991) noted, the improved road access brought problems for the tallymen -- that is, uncontrolled trapping has occurred in areas adjacent to roads. Such activities increasingly occur without the permission of the local tallyman.

Interviews with tallymen along the Route du Nord confirmed that the road (while convenient) had opened their traplines to outsiders. While an environmental and social impact assessment of the Route du Nord was undertaken, it did not identify any possible cultural impacts on the tallymen. In the 'Environmental and Social Impact Assessment Summary of The Chibougamau-Nemiscau Road' (Cree Construction et al., 1990), the possibility of such impacts does not appear. In the assessment, there is no recognition of any negative socio-cultural impacts of the proposed permanent highway. While 'active native campsites' are identified as pockets of 'very high resistance' (and would thus oppose the project), there is no discussion of how the tallymen and other trappers will be affected by a permanent road. There is no discussion of why active campsites would cause trappers to resist road development. Such imbalance is not uncommon in environmental and social impact assessments. However, field research indicates that the road infrastructure had direct impacts on the tallymen.

More broadly, research findings indicate that economic development has resulted in significant social impacts on the tallymen, particularly with respect to a loss of control over resources and the loss of cultural respect for this traditional role. Furthermore, such social impacts may have environmental repercussions, since the tallymen operate as

grassroots environmental stewards. In the past, they have accomplished this job successfully (e.g., see Berkes, 1995, 1999). But without the tallyman's organized system of trapline management, the ecological sustainability of the remaining land may be questionable.

With lack of control over access, the ability of the tallymen to pursue their traditional management approach is limited. Tallyman Robert Jimiken explained his concern, "These days, you've got access mainly by roads, helicopters, planes, you name it. How is a tallyman able to control all this?" (RJ, text units 236-237). But without control, sustainable resource management becomes difficult. If tallymen cannot control access to resources, how can they continue to act as environmental stewards? This may result in a shift towards 'open access' resulting in yet another case of the 'tragedy of the commons.' The situation is complicated by the confusion about who has the right to negotiate with development companies -- the tallyman, the Chiefs, the Grand Council of the Crees, or some combination?

While it is unclear how the Cree regional authorities can or will resolve this issue, the James Bay and Northern Quebec Agreement is currently under review. As it stands now, the JBNQA requires environmental and social impact assessments to be undertaken and approved prior to economic development activities in the region. A joint committee of provincial, federal and Cree representatives oversees this process which is outlined under Section 22 and 24 of the JBNQA. However, the EIA process has not always worked effectively (Iserhoff, personal communication, 1997). Currently, the federal government is entering into discussions with the Grand Council of the Crees (GCCQ) and the Cree Regional Authority (CRA) in order to determine a means to more effectively

implement EIA's in the region. In particular, the inclusion of social impacts has been identified as a key consideration in these discussions. My findings suggest that it is important to specifically identify social impacts of development on the tallymen. Thus, a potential outgrowth of my research will be to address the following policy question: How can the implementation of Section 22 and 24 of the JBNQA be revised such that the social impacts of development on the tallymen are systematically addressed and mitigation plans are developed? In the meantime, economic development in James Bay continues.

A Brief Reflection

Studying tallymen was a challenge. It was also an inspiring opportunity to study a traditional approach to management. Studying the impact of development, on the other hand, filled me with anger and sadness. When Freddy first called me in Eastmain to tell me that he had discovered mining exploration on R-21, I felt sick. So did he. He more recently called me to tell me that Hydro-Québec has undertaken a feasibility study for hydro expansion along the Nottaway-Broadback river system. If this is approved, trapline R-21 will be under the water. My classroom will be filled, but not with students.

While the tallymen have much to offer both their own culture and the Western world, their ability to perform their managerial role is under direct pressure from economic development. As I left the field, I recorded these thoughts: “James Bay is an emotional place to be. It’s wild and cold, vast, and in places, seemingly untouched by ‘progress’ and ‘development.’ I have lost myself in sunsets and in the wilderness of black spruce and snow. It is a different life than the urban one I am used to. But in other

places, the sight and hum of hydro lines overpowers the senses. Standing on a landing near Old Nemaska, a village that was 'moved' to make room for hydro-electric flooding, I realize that development is just another word for destruction, depending upon which side of the environment you believe in." (Whiteman, 1997: 191).

CHAPTER 5: THE INTEGRATION – A Multi-Part Dialogue On TEK

In the dialogues, Plato demonstrated the art and value of philosophic discussion, of the necessary use of conversation as a tool for higher education and learning. Similarly, native traditions speak to the value of storytelling and the power of the pow wow – a dialectical and circular means of getting at the roots of an important issue. I believe that much can be gained by such narrative approaches. Dialogue as a narrative device combines a specific type of narrative form with substantive content and can best be read in a holistic, participatory manner. In this spirit, I ask the reader not to be passive – why not participate and write your own dialogue in the margins?

Chapter 5 relies on dialogue as a vehicle to explore an essential question about the implications of this dissertation – what would happen if we took TEK seriously? How would management scholars or business executives react to a discussion of TEK? Could they, would they, take TEK seriously? Furthermore, what are the conceptual problems or hurdles that must be overcome in order to incorporate TEK into modern management theory and practice?

Chapter 5: A Dialogue

Before the dialogue, there was a heated discussion on an earlier draft of the dissertation. In an email dated in early May, her supervisor had written, "The creative parts of the dissertation are very good. The stories and poetry are frequently moving. Some brought tears to my eyes (OK, just the one). The discursive and academic parts are not good. They are flat and repetitive and general and not engaging at all." At the time, her supervisor had written of his disappointment and said, "I am asking you to be an academic for two months. Leave the stories and poetry and photos alone."

When the girl received this email, she had been shocked. She had tried to be an academic now for 6 years. It was a long time and she was tired. Her father was ill and she was tired. She had no more money and she was tired. She knew that she had worked really hard. *She was tired* – but more importantly, she knew that she had discovered some really interesting things. Her supervisor's comments hurt and this made her snap. Her supervisor replied, "Stop acting like a victim." When the girl received this email, she had cried.

She had not understood. She could not understand how there could be no academic value in her 300 pages. She did not believe this. But her supervisor wanted a major re-write. They also bickered about who to have as the external. They argued about the need to actually read the latest work on population ecology. She was at the point where she thought nothing had any value.

Finally, in person, he had said, “Write the last chapter first. Why not write it as a series of voices, a conversation about what would happen if we take TEK seriously...? Do you remember Walter Nord’s piece in Cummings and Frost?”

She didn’t. But when he gave her the book she read it through and thought OK, fine. She was even madder now.

The creative use of dialogue was an extremely good idea and she knew it. She did not immediately say so. She realized that she hadn’t really counted on the fact that Bill, her supervisor, was as good as he was. She hadn’t realized that he would actually push her this hard and for the first time, she panicked. *My god, he wants me to be good enough to be in The New Yorker! Or to be in ASQ!* To say that this made her uncomfortable was an understatement. *I cannot do it*, she thought. Well, you have to do something, her practical side told her. Chapter 5 is missing.

Luckily, she was just still able to submit to a good idea when she heard it. She started writing again. But not like Cummings and Frost. She would not leave the artistic side alone (but then, to be honest, neither had Walter Nord). *For this exploration, I ask you to imagine a PhD thesis defense in the Management Program, in the field of organizational behaviour...*

Pip looked around the room. It was large and beige with the latest technology. She did not like it. She stood near the window and looked out at the wind. She looked at her dog Eco sleeping under a nearby tree. It didn't make her feel any better.

Slowly, the room began to fill. She saw two business executives arrive -- a manager from a hydro-electric company and an engineer from a large mining company. Her supervisor had also invited a manager from the northern territories who worked in economic development for a native council. Pip saw her slip in the back. It was unusual that such outsiders were there at all, but Pip and her supervisor believed that their perspectives were critical. Indeed, the rules for the defense had been opened – anyone could talk, ask questions, after Pip had made her opening gambit. There was also a speaker phone on a table with a long-distance connection to a retired professor in England. He was the first person to introduce her to ethnography and she was glad he could tune in.

Her supervisor Bill sat in the corner by the left. He ignored her. A few minutes later, another pair of academics arrived and then some students. Some more academics, but from outside the department, a mathematician and an anthropologist. Finally, the external examiner arrived and sat at the front. Then a crow settled on the window sill, black and singularly edgy.

Pip knew that this was the signal. The cast had finally assembled. But to postpone the inevitable, she turned and opened the window. She let some fresh air in and shivered slightly. The crow began hopping on the outside ledge. It

looked at her sharply. She nodded and then began, "I do not have many things to say but I am looking forward to hearing what you have to say." She paused, wondered if this was true, decided that it was and continued, "For me, this dissertation has been an epiphanous experience."

She paused for a sip of water. "When I first arrived in James Bay, I did not realize that Cree hunters, particularly the tallymen, were sophisticated managers. They didn't fit my pre-conceived notions of what a manager is. But over time, I realized that they have an ecological approach to management, one that is embedded in their local environment. I believe there is much we can learn from this approach. Consequently, my dissertation seeks to make one key contribution: to empirically describe the tallyman's approach to management focusing on the ecological dimensions of their management practice."

Quoting Berkes (1995), Pip continued, "Traditional ecological knowledge (TEK) has been defined 'as a cumulative body of knowledge and beliefs, handed down through the generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment'. TEK focuses on the complex relationship of all living beings with each other and the environment. Indigenous systems of knowledge such as TEK are not separated from management practice but are intrinsically intertwined. Consequently, TEK can be viewed both as an indigenous approach to management as well as an information base from which decisions are made."

Pip put up Figure 1 on the overhead machine. "Traditional ecological knowledge is a management system," she said. "A system that is a mixture of management knowledge, beliefs and practice. These three elements operate in an iterative and holistic system that emerges over time, and across generations, and are embedded in the lived experience of traditional pursuits, in activities or ways-of-life that take place in the natural environment. In many ways, this approach is conceptually similar to business management systems. Such systems also incorporate management knowledge, beliefs and practice. However, a key difference is that TEK is developed in accordance with local ecological needs whereas approaches to business management are often developed in isolation, or in accordance with the marketplace and then imposed upon the natural environment."

Then she said, "But Figure 1 is actually misleading." With that comment, Pip stopped and looked about the room. She wanted to know if people were paying attention. They seemed surprised at the pause. Her supervisor looked at her questioningly.

"What I mean is that Figure 1 is an abstraction, a two-dimensional sign which attempts to convey information about a management system which is rooted in an ecological reality. It cannot do so, and of course we all know that. But I worry that in my attempt to discuss TEK as an abstraction, I actually reinforce the necessity of speaking about management in abstraction. Why show Figure 1 at all? Why not show you a mountain range or better yet, take

you to the bush and say, here -- this is TEK, the living, breathing, smelling reality of a small piece of intimately traversed ecology, trapline R-21? Learn about it as I have learned about it. But instead, because of convention, we are here in this room, far removed from a biophysical experience with sustainable management (or with indigenous managers), and I am stuck showing Figure 1."

There was a murmur in the audience. "But surely Pip, we can all accept that a sign is *a sign of something*, and move on!" said one of the committee members.

"No, that's just it. A sign may be a sign but Figure 1, like most of our management theory and practice, has become decoupled from the natural environment even as it wishes to speak to it. In our academic culture, no, throughout our Western business culture, we have to speak about the natural environment through signs and not through experience. Our cultural grammar demands that we show the sign of the thing and not the thing itself, particularly if it involves being outside in the earth. The earth is not our office. But I truly believe that the earth has a hard time being transmuted into signs which can fit within the realities of our offices and within the non-ecologic language of our social interaction. The earth has a hard time fitting into the social abstraction of the marketplace. And I fear that the use of Figure 1 condones the denatured practice of management even as it wishes to bridge the gap between the biosphere and business." She stopped. No-one knew quite what to say.

"Ok Pip, you've made a point. But let's get back to the reality of today," said her supervisor. As usual, he was amazed at Pip's ability to almost talk herself out of her own dissertation. "Please continue."

She smiled and started again, "TEK is not an abstract creation of management theorizing. Traditional ecological knowledge is not static -- it is a dynamic approach that emerges from practical management experience with a local environment, gathered across generations, including the current one. TEK is a manifestation of ongoing ecological management practice. While dimensions of it may be discussed away from the ecosystem in which it was developed, we must be clear that the essence of TEK remains rooted in that very specific ecology. TEK is not simply a sign. TEK is survival on trapline R-21, successfully achieved over generations. TEK has retained its sense of what Livingston (1994) would call its ecologic place -- it has a biospheric and managerial reality. TEK is grounded."

"Well Pip," said another committee member. "Perhaps in this way, indigenous peoples have much in common with business executives -- both are focused on concrete management approaches that work successfully. TEK seems to be exclusively practitioner-oriented. It has none of the airy-fairy utopianism that those radical ecocentric scholars talk about!"

"True," said her supervisor, "But TEK is different from Western management practices and theories because the first has grown within the earth, while the latter has grown away the earth."

"And there is no away!" said Pip. "That's the trouble. While Western management believes that it can remain removed from natural systems, this is a fallacy. There is no away!"

"Right," said Bill. "And even ecocentric management scholars who may wish to go back to sustainable ways may miss the boat, because they often start with philosophy, with abstraction, and not with living things."

"So TEK starts and ends with living ecosystems – it never moves away from this ecological base?," asked a grad student.

"Right," said Pip. Her supervisor nodded.

"Now Pip, can you please give us an example of TEK in action?" asked a committee member. "Help us understand what you're talking about."

"Sure," said Pip. "I can try. Let's see... The use and value of TEK can best be described by story. In fact, Cree people use story to convey important information about their management approach. Unfortunately, such conversations can easily be marginalized by business executives and management scholars."

Her supervisor grimaced. Pip continued, "No, it's true. To illustrate this point, I want to offer a story of my own. Once when I was in James Bay, I was talking with my key informant, a Cree tallyman, who was telling me about his concerns regarding forestry. Freddy had a problem with the way the forestry company was re-planting trees. He said to me, "After clearcutting, when they plant the trees... it's the worst way to do it. Because when they plant a tree, I

think it's going to taste different. Like when Porcupine eats it... It's going to be a different taste." Freddy felt that the porcupines needed greater variety than such replanting programs would allow."

A number of people in the audience laughed quietly. The external examiner smiled.

Pip recounted how she had had quite a conceptual problem with the management value of Porcupine Taste Buds. "In fact, at the time," she said, "I rejected this story outright and felt that Freddy was being ridiculous and overly critical. Needless to say, Freddy got angry with me for rejecting his beliefs and knowledge. However, immediately thereafter, I read about the dangers of 'mono-culturing' -- that is, when only one type of tree is planted, forest resilience was endangered. Ecological science suggests that a forest requires a sophisticated mix of trees in order to ensure ecological resilience.

After reading this, it occurred to me that what Freddy was saying about Porcupine Taste Buds was essentially the same message as the knowledge conveyed in the article on mono-culturing. But I had rejected the tallyman's knowledge because it wasn't conveyed in a way I perceived as appropriate -- to me, porcupine taste buds were not a valid benchmark. But to Freddy, like many indigenous peoples, this may be an extremely valid indicator. What I also learned from this story was that even though I was predisposed to the value of traditional ecological knowledge, when push came to shove, I had difficulty in

appreciating its meaning, especially when it was conveyed in such a different manner.”

Her supervisor nodded and looked at the group, “Any questions?”

A hand shot up. It was the mining engineer. “So TEK is just a way of getting local baseline data on environmental conditions? Isn’t it simply knowledge about animal migration routes, habitat relationships, or maybe ice flow movements? I mean we’ve been trying to use TEK in our environmental impact assessments in the north but it’s pretty hard to benchmark...”

“Of course, it’s hard to benchmark! We shouldn’t be trying to bench it!” said the crow. The audience was surprised and thought they had misheard. Perhaps Pip had actually said this. Pip smiled and then said clearly, “Peter Drucker defined management as a specific approach or practice to organize humans and other resources to effectively achieve a goal. Consequently, TEK can be understood as a complete management system, a system that has been successfully developed over thousands of years. If we can learn from Japanese management styles, why can’t business executives learn from indigenous management approaches?”

The crow cawed and shook her wings.

Pip continued, “So what I’m saying here is that traditional knowledge is not simply something that can or should be included in an Environmental Impact Assessment. I am suggesting that traditional knowledge is a management approach that is on an equivalent level with modern business management -- it

not simply a tool to gain baseline data, although that may be a useful function. If traditional knowledge is to effectively enter the boardroom, mining executives must begin to appreciate that TEK is a cultural management system that can teach them a lot -- TEK is not only important to indigenous peoples. It has value beyond providing guidance on hunting and trapping, or in generating baseline environmental data. In general, TEK can teach a number of principles for sustainable business management."

Pip put up slide #2.

Overhead #2: TEK as a sustainable management approach

Key principles for sustainable management:

1. Humble pragmatism
2. Social/ecological reciprocity -- the fundamental need to give back to both society and the local ecology
3. Managerial leadership is based on ecological legitimacy gained through TEK.
4. Ecology is fused with economics, business with society, and self-interest with the needs of the community and the local ecosystem.

One of the executives interrupted. "Actually," said the Hydro-Quebec manager, "that's what surprised me the most. That TEK isn't simply about information, about knowledge. That it's really a complete management system

on par, well, at least comparable with our own..." His voice trailed off as he pondered this silently.

Pip added, "So it's not an issue of"

Then a senior academic jumped into the discussion, changing it's direction completely: "Well my dear, you've done a good job, but I really think that you could do just a little bit better if you related TEK to population ecology, resource-dependency theory, or all that work on stakeholders. I also think you must expand the literature on the tragedy of the commons, look closer at Hardin's work...." He went on for a while.

"I suppose you're right," said Pip without enthusiasm. "But I really think that the purpose of this dissertation isn't to fit TEK into the management literature. TEK already fits in with what's important. TEK stands in the earth. The more we try to link it to theoretical constructions which have largely been developed in social isolation, the less TEK remains rooted in the earth. It becomes linked to abstractions."

"Yes," said the crow. "The tracks of the animals, that's our book!" A committee member went over and closed the window.

"Yes," Pip said sadly, "Perhaps, we can't have it both ways. But maybe we should try to look at this another way – examine TEK as an outside force. But I do agree that an interesting area for future research would be to see how TEK would change population ecology, stakeholder theory and resource-dependency theory, among others. I mean how could these theories be re-worked so that a

tallyman would find them useful? Future research could look at how to take the rest of the literature outside.” One of her fellow grad students went over and opened the window again.

“Very interesting,” said the anthropologist. “In most business settings, the natural environment is an abstract concept. Boardrooms are not set outside in the woods -- in fact, such a physical location would seem odd to most of us. However, the de-natured setting of most offices may seem odd to indigenous peoples. Unlike the barren nature of the boardroom, traditional ecological knowledge and indigenous decision-making is rooted in the out-of-doors.”

Pip concurred. “That’s because indigenous managers spend a great deal of time working and living in the natural environment. It all has to do with where things actually happen! That’s the physical location where management occurs!”

“Maybe that’s why indigenous groups don’t show up at our meetings. I always thought they just weren’t interested,” said the hydro manager. People started nodding.

“But,” said one of the grad students, “you can’t expect business managers to actually appreciate the value of a porcupine’s taste buds... I mean, get realistic! What about shareholders?!”

“I disagree, at least under certain situations,” said Pip. “Good business is about learning the cultures that you operate within. If you want to operate in Korea, you learn cultural protocol and norms for communication. If you want to

operate on indigenous lands, you must learn and appreciate their distinct approach to management...”

“It’s like the stuff on joint ventures,” said the engineer, “understanding your partner’s organizational culture and approach. For mining companies like us who have to negotiate with aboriginal groups, we need to know and understand the stuff that Pip is talking about.”

“Especially after the Delgamuukw decision here in Canada,” said the lands manager. “Companies and governments are now under a legal precedent to meaningfully consult with aboriginal groups if they wish to undertake economic development on native lands. We’re going to have to learn to interact with TEK whether we want to or not.”

“But there is an important hurdle still to overcome. In many cases, business managers demand scientific “proof” before they can accept knowledge as valid,” said the grad student.

“Look, I agree,” said Pip. “I had problems accepting Freddy’s TEK until it became validated by scientific studies on mono-culturing. However, this taught me something. Traditional ecological knowledge doesn’t recognize or accept the Western need to demonstrate the scientific value of their knowledge and management approach. Instead, TEK already relies on cultural tradition, hundreds or thousands of years of trial-and-error practice, and yes, faith, to validate management approaches. Do we actually need to scientifically

substantiate TEK when indigenous peoples have already spent time empirically testing this knowledge? Does it need further validation?"

"Perhaps. Perhaps not," said her supervisor. "But I do like the idea about accepting uncertainty in management knowledge. I've always liked that quote from your field work: 'If you're meant to know, in time you will... Even if you're told you might not understand...'"

"But, what about other companies?" said the accountant. "Pip you're not restricting the value of TEK to just those companies who are operating on indigenous lands. You seem to be suggesting that TEK has value as a sustainable template for business managers, regardless of their industry."

"Yes, yes I am saying that."

"But you haven't demonstrated that TEK is sustainable. You haven't shown that it works."

"Well Berkes has. He's already shown that Cree approaches to the Chisasibi fishery was sustainable over a long term period. Sure, more work needs to be done to expand this but there is already data to support the sustainability of Cree practices. See Berkes 1995, or 1999."

"Sustainable in terms of subsistence, perhaps," said the accountant. "But what about modern economies?"

"I don't know," replied Pip. "I suppose the next step is to see what aspects of the tallyman's approach can be applied in a modern management context."

"Fine. Fine. All good points. But I think the whole thing has to be tightened up intellectually...," said the economist. "I mean stories are fine but what of academic discourse? Don't you think that your informality leaves something to be desired?"

"Well, yes, if I was playing Herman Hesse's (1934) game." Bill shook his head but she continued anyway. "But I'm not. Anyway, Van Maanen (1995) suggests that 'the breakdown of standard ethnographic topics, borders and styles [is] something to celebrate, not mourn...', see page 13 of *Representation in Ethnography*." Pip then turned to *Knowledge & Persuasion in Economics*. "On page 37, McCloskey (1994), an economist, says that: 'The poet and classicist A.E. Housman noted of textual criticism that 'accuracy is a duty, not a virtue'..."

At that point, the internal-external piped in, "In mathematics, too, logic is a duty, not a virtue. The mathematical idea is the virtue.' I believe that's how she finishes that quote."

Pip was impressed. The man continued, "So what you're saying Pip is that we should be examining the idea of TEK and not bickering over the duty of this particular form with this particular substance...? You may be on to something. BUT," said the mathematician, "you might be more diplomatic. Also, you can't really side-step the issue of form and substance by implying it's all just rhetoric anyway. Although you would like to, you can't. You've chosen a different form, so you have to expect a discussion and some challenge about this... Also, am I right that the *inclusion* of this story, of said Chapter 5, is relevant only to the

effect on the reader? If this is so you should point that out. Or, are you trying to convey additional information or a deeper appreciation of the implications of TEK?¹⁴”

Pip started to enjoy herself. She had always liked the mathematician. “Well, I guess you’re right. I need to be more explicit about why I include my stories and the photographs, about why Chapter 5 exists at all. I think though, that it exists more than just to demonstrate what Golden-Biddle and Locke describe as the ‘criticality’ of texts. I think this dialogue on TEK can hash out some additional dimensions or a deeper appreciation of TEK. Sort of like what Gaarder’s (1996) *Sophie’s World* does with philosophy, though on a much smaller scale...”

The mathematician nodded and continued, “Ok. Fine. Chapter 5 has meaning for the reader. But, is it also true that for the writer (in this case you), Chapter 5 has additional value? Aren’t you suggesting that it is important for researchers, in general, to be engaged in related creative work (story writing, painting, music, etc.) while doing their research? In effect, that such creations will help to produce better or at least richer findings?”

“Yes, I think I’m saying that.”

“But then is Chapter 5 really just the scaffolding required to build the building? You may have worked hard on the scaffolding and be quite proud of it, but does that mean you should leave it up against the finished building for everyone to see how in fact the thing was done? Should you have Chapter 5 in the final

version? Is there not a danger that it will get in the way? Maybe what I say is not true, but whether it is or isn't, well it's important to point this out."

Pip thought for a moment and then elaborated, "Perhaps we are in a time of transition. Perhaps we need to show the scaffolding, the Chapter 5, so that a new form, a new way of presentation can be followed and examined in its process. Perhaps we won't need scaffolding when we no longer have such rigid delineations between art and science, when we can accept, that 'the very distinction between form and substance is a modern myth, useful as myths sometimes are, but not to be elevated to a plan for the universe...' See McCloskey, page 35..."

"Let it go Pip," said her supervisor suddenly. "Your old fears are peeking through. Why do you always think that we are so stuck on the need for conventional text? Can't you believe that Queen's University is able to run the risk of a non-traditional dissertation or a non-traditional chapter? Using scaffolding is fine but let's look at the building or the idea behind both the building and the scaffolding. Let's get back to TEK. What would happen if organizational studies took native approaches seriously..."

"OK," said Pip. "Let's talk about this. Let's talk about the ecological embeddedness of TEK. Ecological embeddedness is something new to the management literature. And I think my findings demonstrate at least six dimensions of the tallyman's ecological embeddedness -- 1. The location of management is outside. 2. The style of management can be described as

'management by walking outside'. 3. Management practice is governed by ecological seasons and cycles. 4. There is a strong reliance on environmental sense-making in management. 5. The tallymen have a belief that management wisdom comes from the land. 6. TEK leadership is based on the degree of ecological legitimacy of candidates."

A professor who was an expert on environmental policy jumped in: "But what does any of this have to do about management and organizations? I mean you're not actually suggesting that we all move back to subsistence living?!"

"That's *not* what I'm suggesting," she replied. "I have simply tried to describe what Cree management is like. I think that's a contribution in itself. Just like how in the past business scholars have studied Japanese approaches to management..."

He cut her off, "But that didn't work! That was all bullshit! Are you saying that you're just doing the same sort of garbage?!"

Pip winced. She took a sip of water and then said, "Just because the conclusions and implications of Japanese management didn't pan out, doesn't mean that it wasn't an appropriate or useful topic of study. An empirical description of a cultural approach to management is valid, if you can cut through the bullshit. But what I will suggest, as a corollary, is that native approaches *are* different from modern Western management, in a number of important ways. And furthermore, that I *think* that Western management can learn a lot of useful lessons from the tallyman..."

"How?" said her antagonist, "what companies are hiring tallymen? Could you ever foresee that?" He looked at the two executives, "Can either of you?"

The Hydro manager shook his head slightly. But the mining executive seemed to ponder the question seriously. After a few moments, he said, "Well truthfully, it's not something that we are doing right now. But in the future I could foresee it, the interaction of TEK managers and business managers. For example, at companies like Falconbridge, there are co-management boards comprised of Western managers, engineers like me, and indigenous managers, sort of like the tallyman."

"That's right," said the northern lands manager. "In the north, under a co-management system, they have to manage jointly."

"Yes," said Pip. "But even with the progressive companies, like Falconbridge or Placer Dome Inc., which formally acknowledge the value of TEK, they haven't gone far enough... Understanding traditional ecological knowledge from a business perspective is not easy. In fact, even progressive mining companies tend to view TEK in a narrow manner."

"Yes," said the mining engineer. "For example, Falconbridge's philosophy on traditional knowledge states that: 'All peoples have a great deal of knowledge to offer Falconbridge about their local environment. Traditional Knowledge is a valuable source of information about animal migration periods and hunting patterns of indigenous people. It also provides us with guidance and helps us understand the culture and society we will be operate in. During the baseline

study at our operation in northern Quebec, Falconbridge learned the migration patterns of certain sea mammals could be affected by shipping during the months of March to June. As a result, Falconbridge did not ship during these months.¹⁵

Pip nodded. He continued, "While not a formal policy, I believe that the philosophy described by Falconbridge has been beneficial to indigenous peoples." Pip nodded again. "In particular," said the engineer, "with the Raglan Agreement, the Inuit were able to protect migration patterns and thus were better able to continue their traditional pursuits in the north. Falconbridge's mining operations were less detrimental than if the company had not acknowledged the importance of traditional knowledge. Yet if we take what Pip is saying seriously, then however beneficial, this philosophy is still limited in a number of key respects. For instance, the company views traditional knowledge as important to mining in terms of providing information on the local ecology and local culture. These are important issues certainly. But a philosophy on traditional knowledge can go farther and recognize that TEK can provide important lessons to mining companies as they struggle to find a template for sustainable management. TEK is not only valuable to mining companies in areas in which there are indigenous peoples. Traditional knowledge, as a general management approach, is valuable to a mining company *throughout its operations.*" He stopped there.

"Exactly," said Pip. "And Placer Dome's Sustainability Policy provides another example of a progressive company with a narrow view on traditional ecological knowledge. Specifically, Placer's policy states that the company will 'recognize and respect the importance of the land, and traditional knowledge to local indigenous or aboriginal communities and be sensitive to their culture distinctiveness.'"¹⁶ While Placer Dome should be congratulated on formally incorporating traditional knowledge into the level of corporate policy -- an achievement that few other companies have met -- the company could benefit by recognizing that TEK offers many important lessons for sustainable management."

Her supervisor added, "These comments should not be read as a criticism -- Pip is simply making an observation and suggesting that TEK offers an additional opportunity for mining companies over and above its inclusion in environmental impact assessments."

Pip nodded. "Yes," the mining engineer said, "Within the mining industry, there appears to be little formal recognition that TEK has value as a distinct yet equivalent management approach that could be utilized as a template for sustainable business. However, I believe that this is an important opportunity."

"But, what about all the other corporations? What do you have to say to Peter Drucker or Henry Mintzberg? You cite them don't you?" said the economist.

Pip swallowed and then said, "I mean, it's an empirical question isn't it? A good question for future research. I mean, what would happen if Rio Algom or Hydro Quebec or IBM for that matter started to incorporate some of the dimensions of TEK into their management systems? What would happen if they started to institutionalize ecological reciprocity or ecological legitimacy as a criteria for leadership? What would happen if managers just started to physically relocate into the natural environment? Would business management change if managers were outside, living and working and existing within the biosphere of their organization, if they had to physically experience the environmental byproducts of their actions? Would it make a difference? I don't know. But it is researchable, if a company would go for it, if Drucker or Mintzberg would choose to study it."

"In the meantime, and while I don't *know*, I do think that it would change the way we do business," she added.

Suddenly a voice from the crowd shouted out: "How can you stand there and present the Cree as an ecological group? The Cree's way of life is self-oriented, not animal oriented, and their practice of trapping and killing animals is ecologically unsound. Hunting with guns destroys the natural order (so much has been written on this)... You discuss the Cree as though they are Buddhists, Hindus, or Jains who do not eat animals but value them, respect them and try to learn from them. The Cree do none of this – they are very Western in their

approach. Thus the premise of the dissertation is false. This is not an ecological group."

Pip had not realized that this professor was an animal rights activist. She had thought she could avoid this issue. Through the open window, Pip could hear Eco start to bark loudly.

She replied slowly, "The Cree are a hunting, trapping, and fishing people. The boreal ecosystem will not sustain agriculture. If the Cree did not eat meat, they would not be able to survive in the local ecosystem. So, I don't think you can dismiss Cree TEK as non-ecologic because they eat meat... But, you do bring up an interesting issue, the issue of humane trapping. In fact, I think the Cree agree with animal rights activists that they need to respect animals. But, they also believe that they need to rely on animals for their own survival. In return, they are taught to always treat animals with respect and to give back to the land, an entrenched form of ecological reciprocity..."

"I agree," said the anthropologist. "A dismissal of TEK on the basis of 'animal-rights' is problematic. Indeed, Wenzel (1991) suggests that the discourse of the animal-rights movement can be viewed as a continuation of the colonial process in Canada that attempts to 'change' or 'assimilate' native culture into a more 'progressive' Western (or Far-Eastern) ethic. To suggest that the Cree should not eat meat is to suggest they should become some other culture."

"I TOTALLY disagree," said the ardent professor. "I think that we should be looking at the TEK of the Eastern cultures."

"Good point," said Pip, beginning to act in a conciliatory manner. "I think you're absolutely right. We should also examine the TEK of other cultures, from Africa, Asia, South America and Russia. Not all manifestations of TEK are with hunting cultures. More work needs to be done to see how vegetarianism and TEK differ from hunting-based TEK....Perhaps we could work on this together?"

The professor did not reply. Another committee member jumped in: "Now what about spirituality in management, Pip? You've successfully avoided talking directly about spirituality thus far, but I would like you to comment on it."

"Well," said Pip. "Tanner (1979) demonstrates how Cree spirituality is intertwined with the bush and within a hunting culture. The tallymen in my study believed that the earth was engaged in an ongoing discussion with them. 'The wisdom comes from the land.' Thus management knowledge and spiritual beliefs are fused, and are accessed and reinforced through daily management practice."

A senior professor interjected: "But you can't tell me that native people actually believe that the earth is talking to them! That it can teach sustainable management in some sort of conscious way!"

"Why not?" said her supervisor. "In the Gaia Hypothesis, James Lovelock seems to believe that the earth is a self-regulating system. Therefore, whether

he adheres to conscious dialogue or not, he would certainly imply that human actions can be part of such ecological self-regulation.”

Pip’s supervisor turned and winked at her. Pip looked at the crow who was still on the ledge and then said, “In many ways, modern Western business is anthropocentric -- that is, we focus on the needs of humans and more specifically, on the needs of the marketplace. Environmental concerns often come second. In contrast, indigenous peoples view non-human inhabitants as equally important participants in a local sustainable ecology. They do not understand why the “needs of the beaver or the porcupine” are not perceived to be important by corporate executives.”

The anthropologist suddenly spoke up. He had been silent for some time. “Certainly, as scholars, we must appreciate that traditional knowledge, at its very essence, is broadly ecologically-based. Indigenous managers operate from a subjective and personalized understanding of the natural environment. They do not view the environment as an inert object waiting to be controlled. This really is a cultural difference.”

“Yes,” said Pip, “and unlike modern business approaches, Vine Deloria Jr. (1992) suggests that indigenous managers adopt the “idea that the natural world might have knowledge, feelings, and intelligence in and of itself.”¹⁷ In contrast, ‘modern’ scientific understanding has often viewed the earth as ‘inert’. Modern business also tends to hierarchically value ‘natural resources’ above the ‘natural

ecosystem' and ignores or undervalues 'non-utilitarian green spaces' and complex ecosystem relationships."

"Thus," said the anthropologist, "business decision-making tends to be anthropocentric and depends primarily upon human use-value. In contrast, indigenous approaches value the roles and relationships between all life forms and do not put human use-value at the centre -- ecological relationships are valued, regardless of the degree of human interaction. Respect for living entities, and for their natural interrelationships, is a central tenet of traditional practices. While some species (including humans) may dominate an ecosystem, the earth exists for the benefits of all living entities. The overall health of the system, and thus each species, is the managerial ethic of the indigenous manager."

The external suddenly added, "It may also be useful to note that dialogue with indigenous peoples is not simply a 2-way street. In fact, for most indigenous peoples, effective dialogue must become a 3-way discussion with the earth itself playing a leading role."

Her supervisor nodded, "Yes, we agree. Pip, put up that overhead please." Pip put up overhead #4 – **A 3-Way Dialogue: The Missing Link.**

She said, "For the Cree, the earth is experienced as an active, living entity that conveys important management information -- if the manager is willing to listen and learn. Indigenous peoples, in general, are continually attempting to listen to the earth and learn from their local ecology. In such situations,

business executives would benefit by not only attempting to talk with indigenous groups, but also by starting a first-hand dialogue with the earth itself.”

The external, who was the only indigenous person in the room, nodded and smiled. “Please continue,” he said.

“What about you Pip? Did you experience this?” asked a grad student.

“Yes,” she replied, “ I did. But perhaps most importantly, my experiences with the Cree taught me about the need to reintegrate humans back into nature. I learned that the dualistic split between humans and a nature is not a necessity but is a learned preference, a deeply ingrained belief structure that permeates my own theoretical lens even as I struggle against it. As I end this, I realize that my Phd has been a very personalized journey, and a fight to recapture many of the things that Modernity has suppressed. The tallymen of James Bay offered me a path, a management approach which has helped to lead me out of the dualism.”

“Rather lofty Pip,” said a voice at the back. “And what about gender issues anyway? The tallymen may have helped you reintegrate back into nature, but they also tried to make you do laundry! What do you say to that? Should male managers be in charge? Is this ecologic?”

She saw another professor write down on his paper – 20 lashes for the PhD student. A joke but Pip didn’t like running gauntlets. She wondered if she was starting to lose the battle. She looked at the external. He held her stare for what seemed like a long time. The crow flapped her wings noisily.

"I mean, the tallyman's approach is not an easy one," she said, "And it's not perfect. I had a hard time with the chauvinism. I mean even Robert Jimiken, a tallyman from Mistassini, suggested that even their 'own people have a hard time trying to adapt to the Cree way, the Cree lifestyle.' He said that 'they spend too much time down south and they kind of lose touch with what's been happening at home and they cannot relate to the land like a lot of us do'. Just as we can learn from TEK, maybe TEK can learn from advances that Western management has made, particularly in terms of gender equality."

One of her fellow grad students jumped in, "If the Cree aren't perfect, why do you think we can be? Aren't you being romantic? Shouldn't this dissertation be in anthropology?"

The anthropologist smiled at the idea of romance but said nothing. He looked like he was about to laugh. Pip replied, "No. The bush isn't romantic. It's hard." Pip knew this wasn't much of an answer. She thought about all those blood poems...

Then, the other grad student offered her a bridge, "You know Pip, Shrivastava (1994) recommends that we stop looking at the environment from the organization, and instead, try to understand the organization from the perspective of the natural environment. You might consider how the tallyman helps to lead the way to this new perspective."

"Yes, you're absolutely right," Pip said thoughtfully, "And I think that in order to do this, we have to get off the road, metaphorically but also in a

tangible sense. We have to get into the natural environment in some sort of fundamental way..."

She was quiet now. The clock ticked. Suddenly, the crow flew in the room, made a swooping dive and then exited like a rocket into the courtyard. It settled momentarily in a pine tree, cawed twice and flew off. It was gone. Pip stood and looked for a few moments at the window ledge. Eco barked again and she saw that he was leaving too. These events seemed to give her inspiration.

"It's like something I read by Walking Buffalo," she said, "from the Stoney Nation. He said that: 'Hills are always more beautiful than stone buildings, you know. Living in a city is an artificial existence. Lots of people hardly ever feel real soil under their feet, see plants grow except in flowerpots, or get far enough beyond the streetlight to catch the enchantment of a night sky studded with stars. When people live far from the scenes of the Great Spirits making, it's easy for them to forget his laws.'"

Suddenly, a light went on inside her head. "Yeah, it's not about whether we can become *Indian*, but it is about going native! And I think we all have this capacity, this little bit of undomesticated DNA that can be re-accessed if we integrate ourselves back into nature. It's like what John Livingston, that professor emeritus at York, said: 'In theory at least, we all retain the capacity for wildness. In practice, we cling limpet like to the ideology of dualism, we deny the virtues of wildness, and we deny its accessibility to us.'"

"Hey! Maybe we can reorient ourselves" said a grad student. "Maybe we have to learn to describe the wildering of management!"

Pip was excited now too. "Yes, yes! I mean why are we inside talking about this anyway? Why aren't we outside, in the forest, or at least on the grass...? Why aren't we living and working out there where the crow flies? Why does a thesis defense have to be inside? Why do all our business meetings always happen inside?"

"But what if it rained Pip? What if we did your defense outside, and it rained?" said a committee member.

"Well, we'd have to adapt to the natural cycle, wouldn't we? We'd have to wear raincoats, or postpone it, or find shelter. If we were outside, we could no longer ignore ecological feedbacks about the state of the environment! We'd have to manage within them!"

"Maybe we can't understand Deep Ecology by simply reading and writing about it," said the speaker phone. "For God's sake, Arne Naess lives it – he lives in the mountains of Norway!"

Pip nodded enthusiastically. "Yes, yes, Drengson (1992) talks about that."

"Perhaps," said Bill, "This is the main point. That at a very basic level, this is the very thing that TEK would make us change. TEK would make us go outside. And by doing so, maybe we would have to change the geography of our minds. Show your photo montage Pip."

She brought out her collage. (See Photo #42). She repeated slowly, "I think we all have to change the geography of our minds..."

From the speaker phone, the voice from England jumped in, "That's right! That's right! We can't learn ethnography by reading about Gadamer in the library! We have to go there! We have to go to the field! Indigenaity!!!"

"Well Pip," said her supervisor, "what about the future?"

"I mean, I'm scared about the future. About the pollution and global warming and all that stuff. I'm scared. I don't want my grandchildren to have to start the battle without me..." Her voice trailed off.

"I meant Pip, what should we do as academics?"

"Well for starters Bill," said Pip, "I think that we need to get our heads out of our books. We need to get our conceptualizations of management out of the organization, get our theories and ourselves *into the Earth*. If we're going to use population ecology or any theory, then we better stop denaturing it. And if we're going to study management, we have to study the content as well as the roles. We have to ask ourselves why Mintzberg doesn't even begin to explain why he isn't green. I think, I think... I think we need to get outside and learn."

Her supervisor nodded. "Yes Pip, but it's like Lily Tomlin said, 'The trouble with the rat race is that even if you win, you're still a rat.'"

The room went silent. For a few minutes no-one moved. Then Pip walked over to the window. She heard Eco barking in the distance. He seemed a long way off. The crow was nowhere to be seen. Pip hesitated a moment and

then seemed to make a decision. Pip looked back once, smiled at her supervisor and climbed out the window. She was gone.

ENDNOTES

¹ Many of my participants have requested that their real names be used which is in keeping with other anthropological work with the Cree (e.g., see Preston, 1975, 1982). Consequently, when a name is listed it is a 'real' one; however, for those who have chosen to remain anonymous, I have respected these wishes.

² For instance, at a number of Academy of Management meetings, I have personally encountered such confusion. As one professor succinctly put it, "What does a study of a hunter have to do with management studies?"

³ Thanks to Monika Winn for pointing out these important questions.

⁴ See Placer Dome's Sustainability Policy, 1998, and Sustainable Development at Falconbridge, p. 7.

⁵ I would like to emphasize the importance of this point with a personal example. In March, 1999, I made a presentation at the Minerals, Economics and Management Society conference (Ottawa) entitled "The Difficulty in Dialogue: When Traditional Knowledge Enters the Boardroom." The audience was largely practitioner-based with mining executives and government policy makers. I received very solid feedback from this group and one government policy maker told me that he understood Voisey Bay (which he had been involved in) much better after my presentation. However, increased understanding is only one step. Future research will have to determine how to best cross this cultural divide.

⁶ In the summer of 1993, I had a similar, though less dramatic, experience while undertaking field research on the cross-cultural adjustment of volunteer aid workers in Guyana. While I struggled to analyze my field notes, I discovered that a short story that I

had written while in Guyana held my key theoretical insight -- an insight that was hidden in nearly 500 pages of notes. It was then that I realized that once I freed my mind and senses from an analytic (academic) framework, I made discoveries which were valuable and worthy of research discussion. My story, a creative and organic activity, held information that had sociological and organizational merit. Ah-ha.

⁷ Even within the literary world, the traditional genres of fiction and non-fiction are colliding. In an interview that I conducted with the Canadian non-fiction writer, Marilyn Simonds (1996), she explained how she used rich evocative language (and literary techniques) previously utilized exclusively by fiction writers. Simonds utilizes 'imaginative recreations' -- creative prose that imaginatively recreates a scenario that rings true but cannot be fully substantiated (e.g., dialogue inside a historical person's head). Simonds fervently believes in the 'truth' of her product, despite her acknowledgement of its non-exclusiveness. On its jacket, the book is billed as a true story. Yet, "Someone else ferreting about in these words and phrases for seven years might have discovered another story. This is what I found" (p. xiii). So, *The Convict Lover* is a true story but it is not the only true story. In such a world, it becomes increasingly difficult to separate fiction from the non. The delineation between fiction and non-fiction is not whether the prose is truthful or untruthful but instead, resides in the intention of the author. That is, how and why the author utilizes and presents the material, the data.

⁸ Admittedly, I have not attempted to creatively argue for creative methods and the bulk of this text remains decidedly rational.

⁹ See Wenzel (1991) for a detailed discussion on the traditional culture of the Inuit in a “setting that includes television, high-powered rifles, wages and welfare” (p. 5-6).

¹⁰ Under an indigenous worldview, invasive forms of economic development such as forestry, mining, or the by-products of hydro-electric development are perceived as distinct threats to the tallyman’s TEK and their personal sense of being. When the land is changed through economic development, then so is the tallyman’s ability to practice traditional management because his ‘office’ is destroyed or harmed. In many cases, financial compensation cannot mitigate such impacts.

¹¹ Although Christian practices of baptism are very prevalent in James Bay, walking out ceremonies still continue although not as frequently as in the past. However, when a ceremony is held it is attended by many inhabitants.

¹² However, there was a pervasive rejection of the notion of ‘shamanism’ which was often deemed to be a bad thing since many of the Cree, now Pentecostal, perceived this to be ‘witchcraft.’

¹³ Interestingly, the drum was an important historical divination tool used by the Cree to determine animal location (see Tanner, 1979).

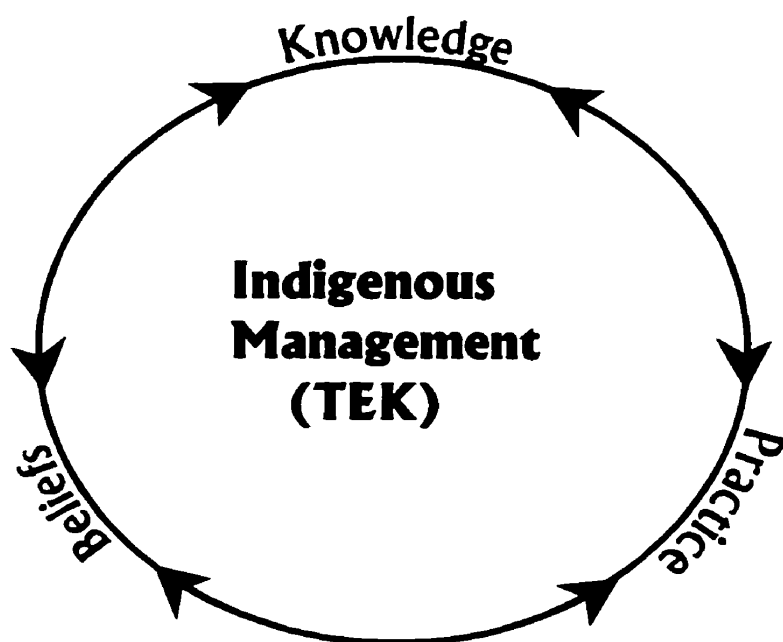
¹⁴ From a commentary on an early draft from Dr. Peter Taylor, Queen’s University.

¹⁵ See Sustainable Development at Falconbridge, p. 7.

¹⁶ See Placer Dome’s Sustainability Policy, p. 3.

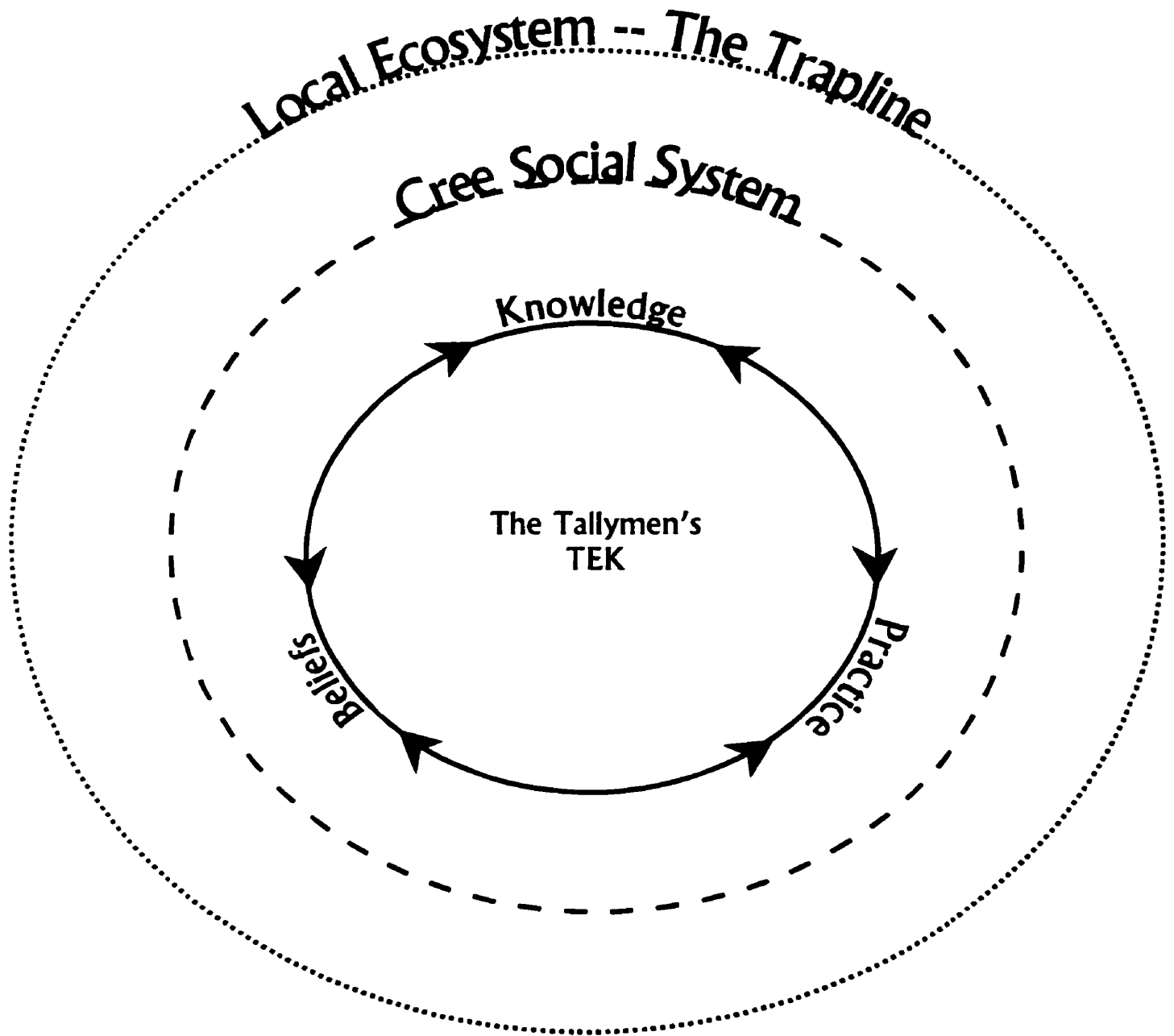
¹⁷ See Vine Deloria Jr., (1992). Spiritual management: Prospects for restoration on tribal lands. Restoration and Management Notes, 10 (1), p. 49.

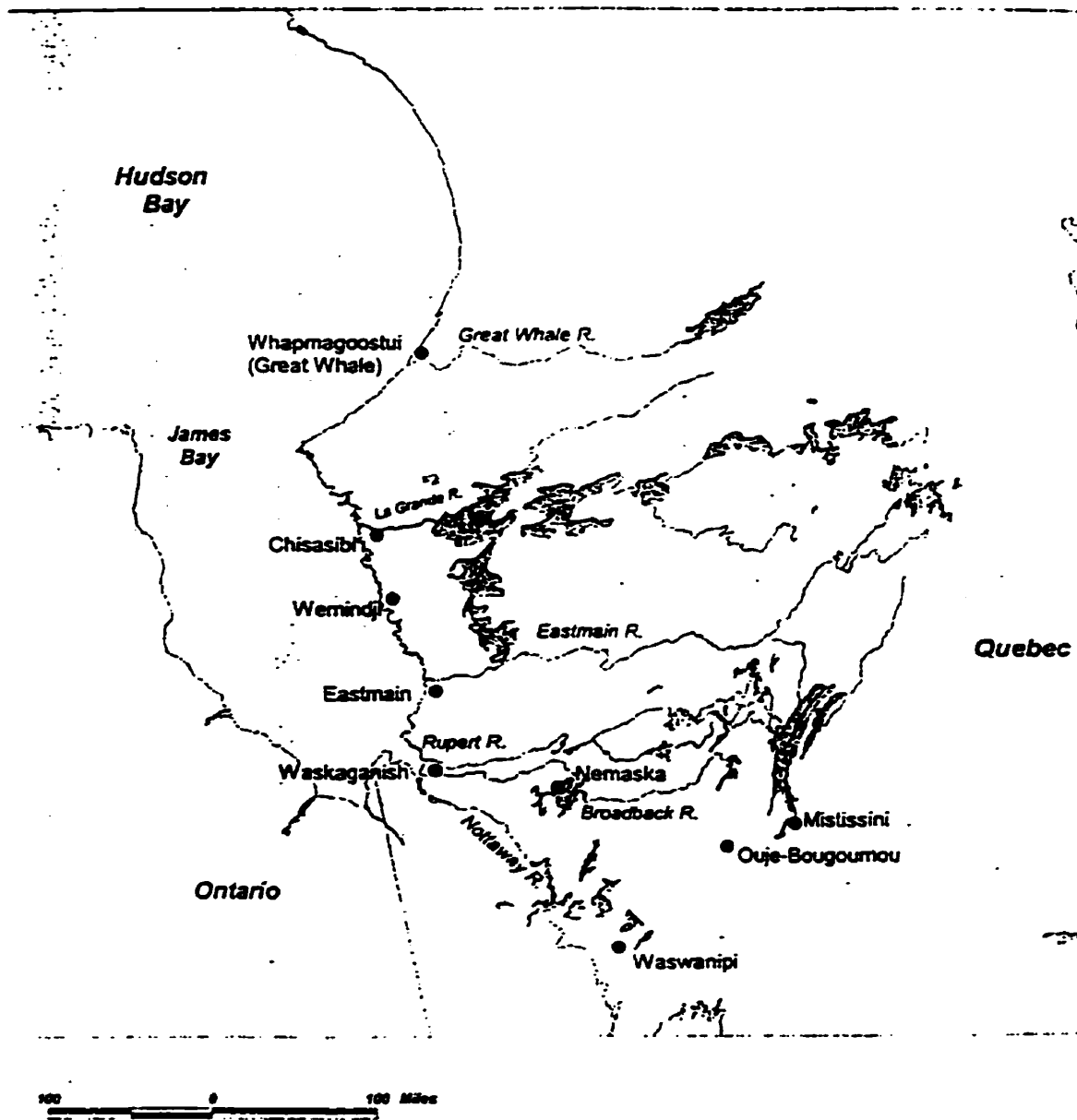
Figure 1: Traditional Ecological Knowledge (TEK)



Based on: Berkes & Henley (1997)

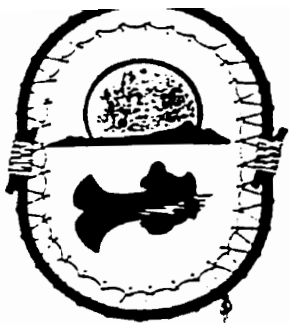
FIGURE 2
CREE TEK IS ECOLOGICALLY & SOCIALLY EMBEDDED





Cree Villages and Major Rivers of the James Bay Region.

Source: Niezen (1998)



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January 8, 1997

Ms Gail Whitman
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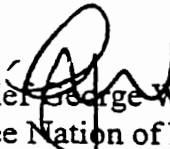
Subject: Research Project

Dear Ms Whitman,

This is to inform you that, on December 2, 1996, the Council of the Nemaska First Nation has reviewed and approved your request to do field research with one of the local trappers from our community towards your academic pursuits.

I am certain you are familiar with most of the local people in our community and I leave to your discretion as to how the necessary arrangements can be made, good luck and enjoy your stay, I remain

Sincerely,


Chief George Wapachee
Cree Nation of Nemaska



1996
THE YEAR OF THE CHILD in NEMISCAU

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PHOTOGRAPH ANNEX

Photo1: James Bay



Photo 2: Bush camp, Rupert's River.



Photo 3: Trapline R-21



Photo 4: Route du Nord



Photo 5: Wood stove

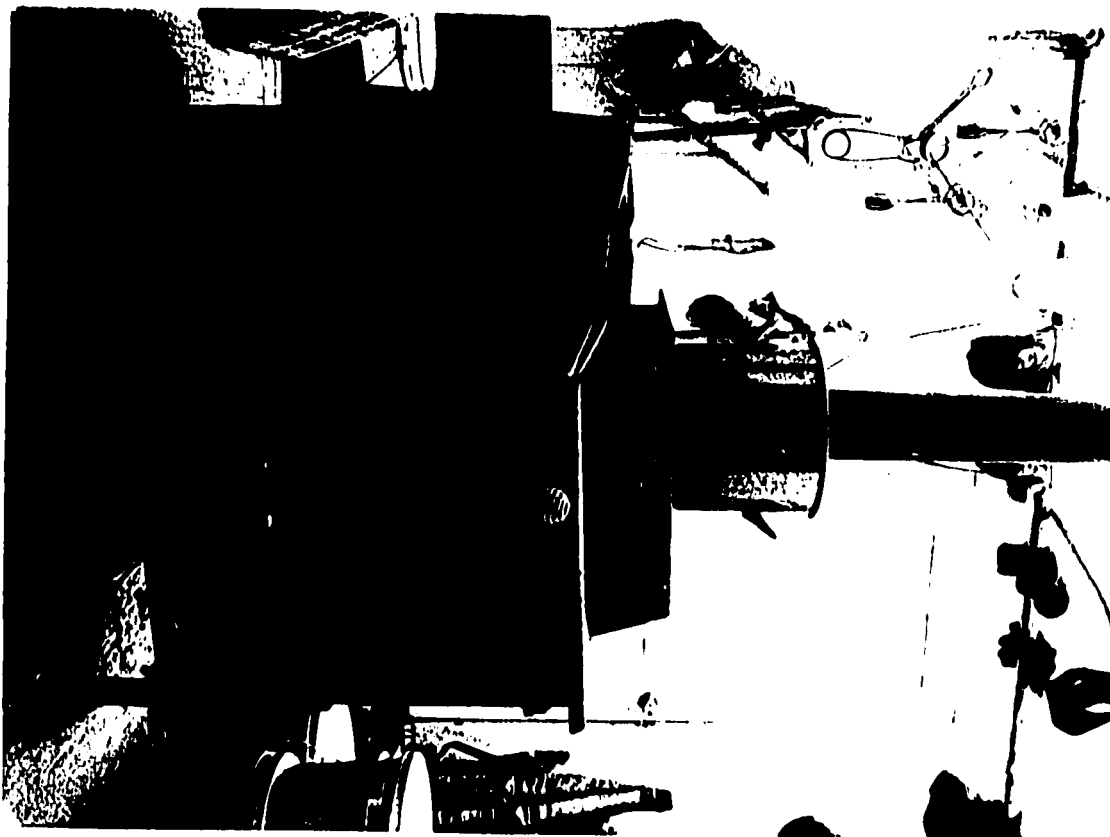


Photo 6: Annie & Freddy, Old Nemaska
(taken by Metha Bos)

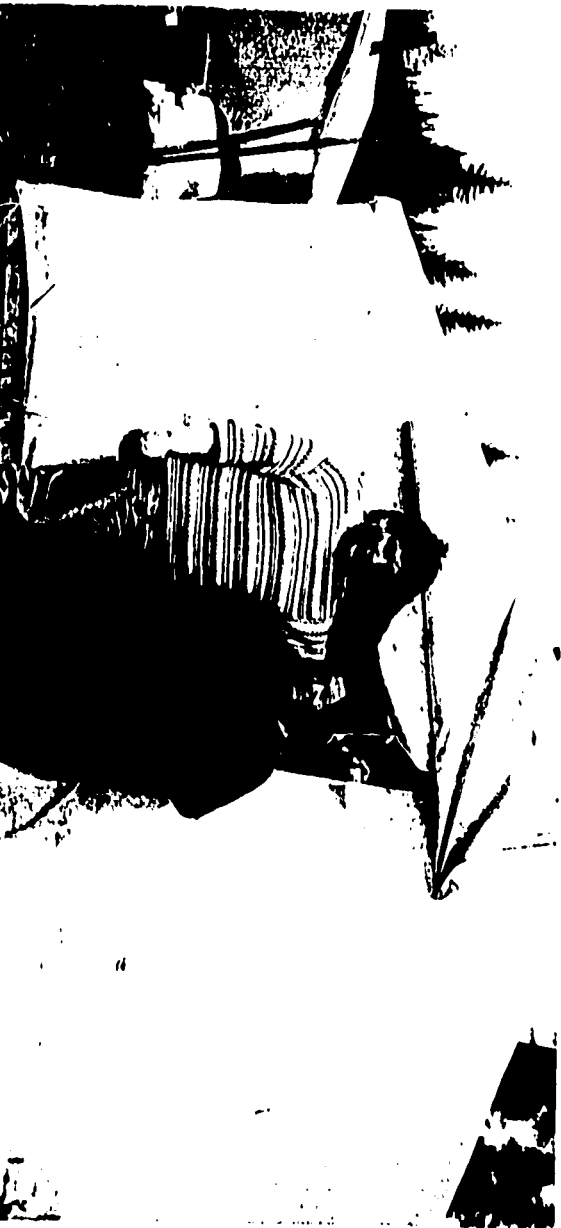




Photo 7: Eastmain radio tower



Photo 8: Freddy Jolly

Photo 9: Freddy's birth place, Trapline R-21



Photo 10: Gail as researcher

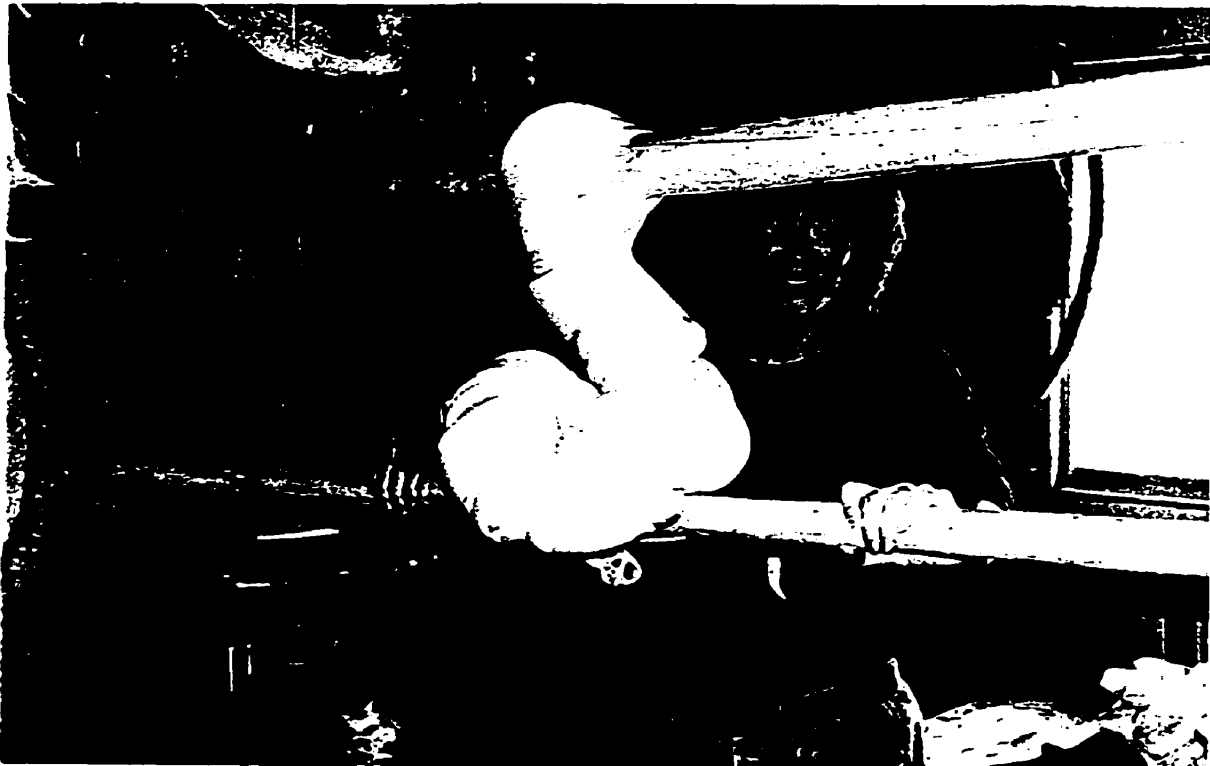


Photo 11: Hydroelectric Substation

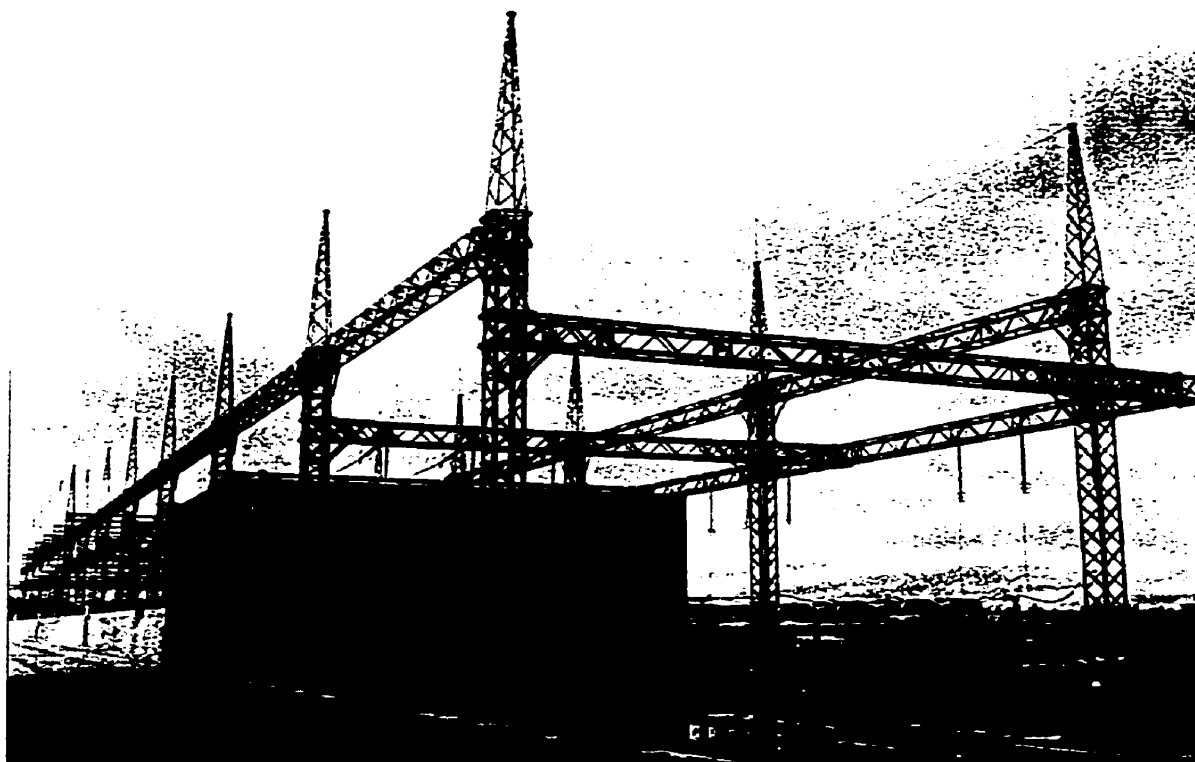


Photo 12: Rapids
(not the ones I fell in...)



Photos 13-14: Checking beaver traps



Photo 15-16: Setting marten traps



Photo 17: Digging out a bear den



Photo 18: A view from inside the bear's den





Photo 19: Bear skull hung up on tree

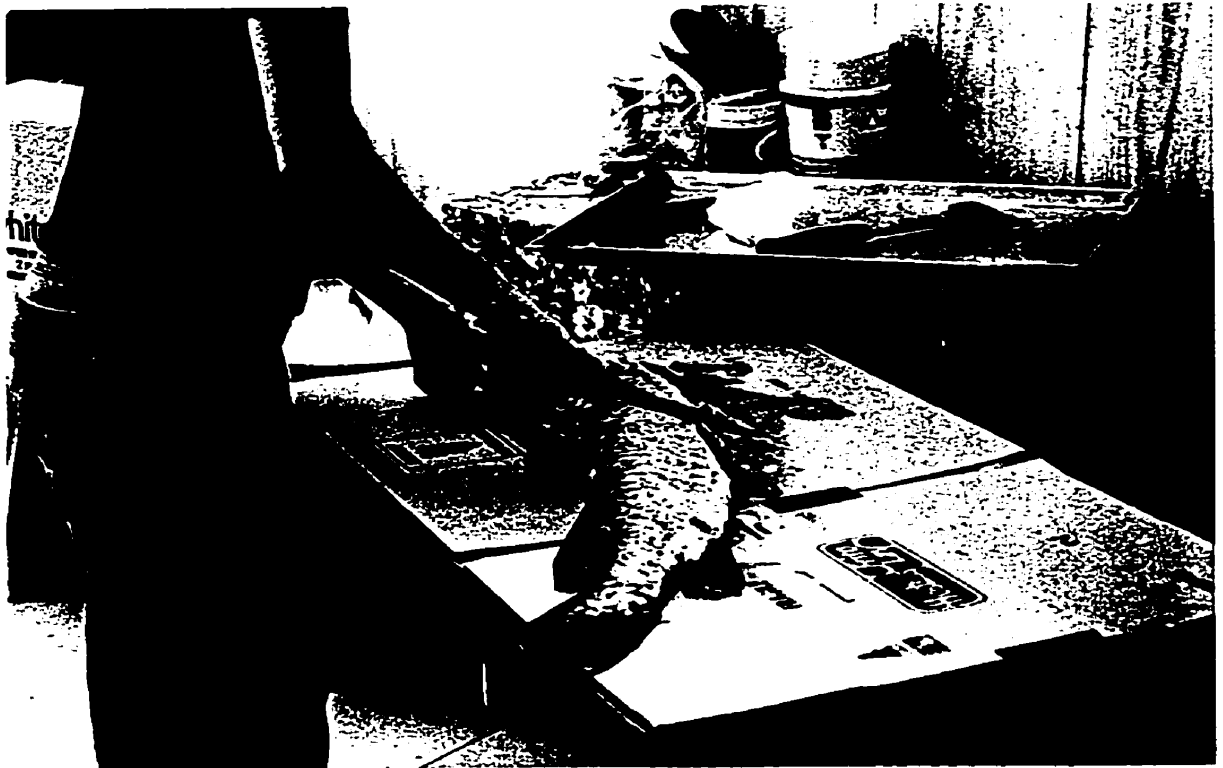


Photo 20: Bear markings

Photos 21-22: Trapping a beaver



Photo 23-24 Fishing with night-lights





Photos 25-26: Target practice



*"Sometimes when I see
a beaver house,
I go and **TOUCH** it
and then **SAVE** it..."*

*You just take
what you
need.*

Quote: Walter Jolly, Cree Tallyman, June 11, 1997
Photo: Beaver Lodge on the Trapline

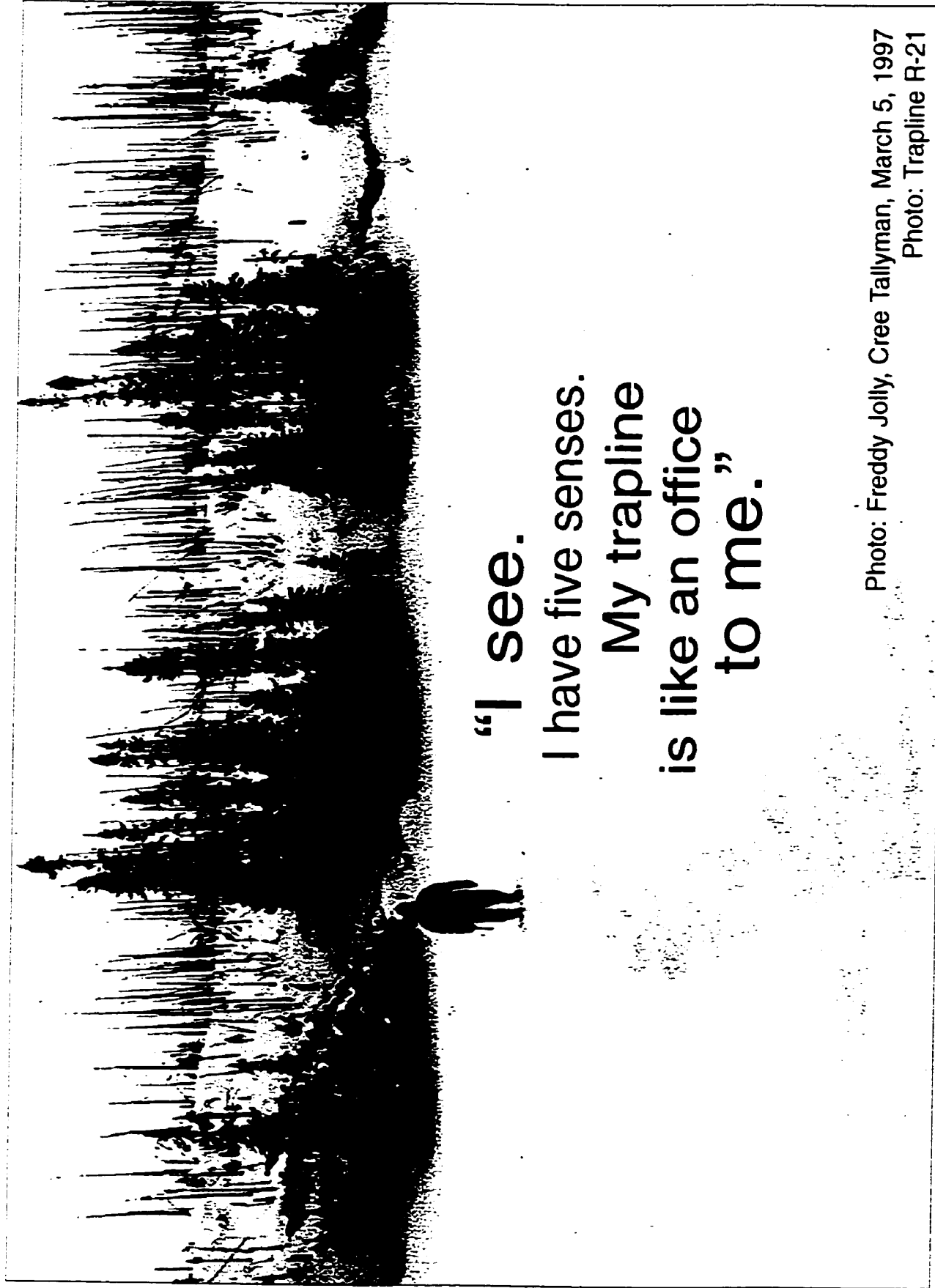
Photos 28-29: Rabbit snares



**“The best way to save the land
is to share the land.”**



Quote: Freddy Jolly, Cree Tallyman
Photo: Trapline R21



“I see.

I have five senses.

**My trapline
is like an office
to me.”**

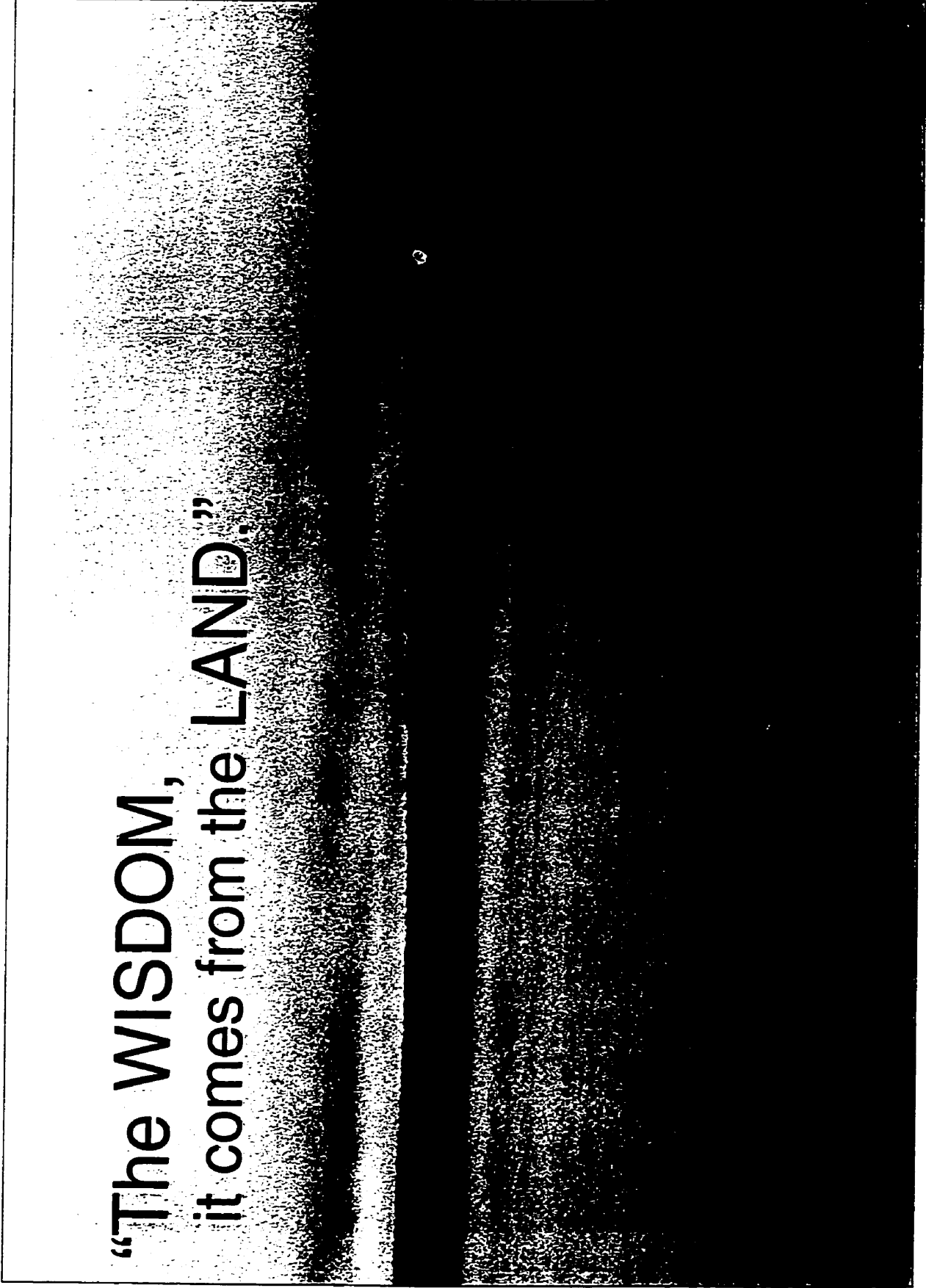
Photo: Freddy Jolly, Cree Tallyman, March 5, 1997

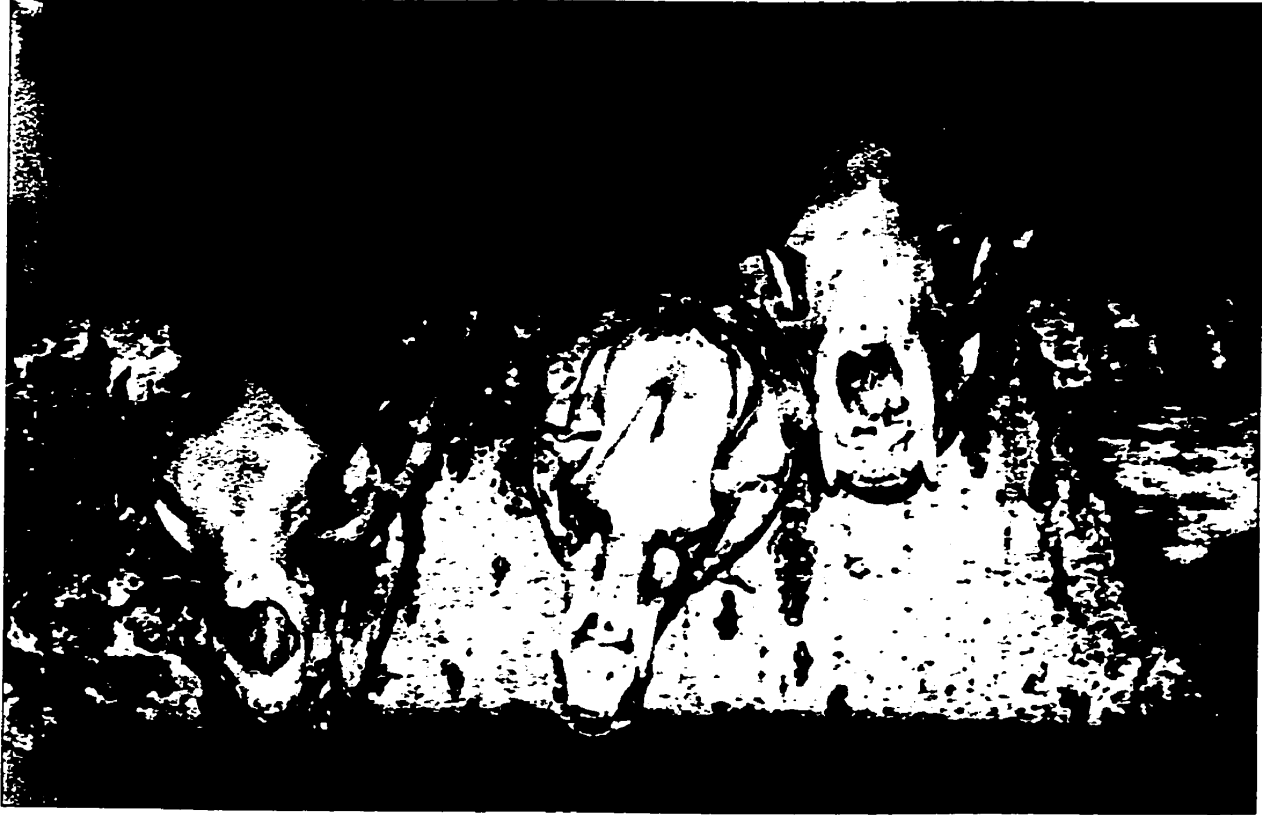
Photo: Trapline R-21

Photos 32-33: Walking Out Ceremony



**“The WISDOM,
it comes from the LAND.”**





**“If you’re
meant
to know,
in time
you’ll know.”**

**Even if you’re told,
you might not
understand.”**

**Quote: Lillian Diamond,
Principal & Band Councillor,
Nemaska, April 3, 1997
Photo: Bear Skulls, James Bay**



“Since the white man
disturbed the land

**THERE’S
HARDLY
ANYTHING.**

This I see.

Even the trees,
they changed...
what they looked like
in the olden days
and what they
look like now

IS DIFFERENT.”

Quote: Sam Blacksmith, Cree Elder & Tallyman, March 5, 1997

Photo: Domtar Back Lot, Val D’or, June, 1997



A MOUNTAIN MADE OF
WOOD CHIPS

Crees sue over logging rights...

“We are left with nothing”

Grand Chief Matthew Coon Come

Quote: The Gazette, Thursday, July 16, 1998 A6
Photo: Dornier Lot, Val D'or, Québec, June 1997



“If the NBR [Hydro Project] goes through,
then my trapline will be under the water.

There will be nothing
for my grandchildren.”

Quote: Abel Jolly, Cree Tallyman, April 7, 1997
Photo: Seagulls, James Bay



“It weakens the trapper.

He doesn't have the full strength to go on...

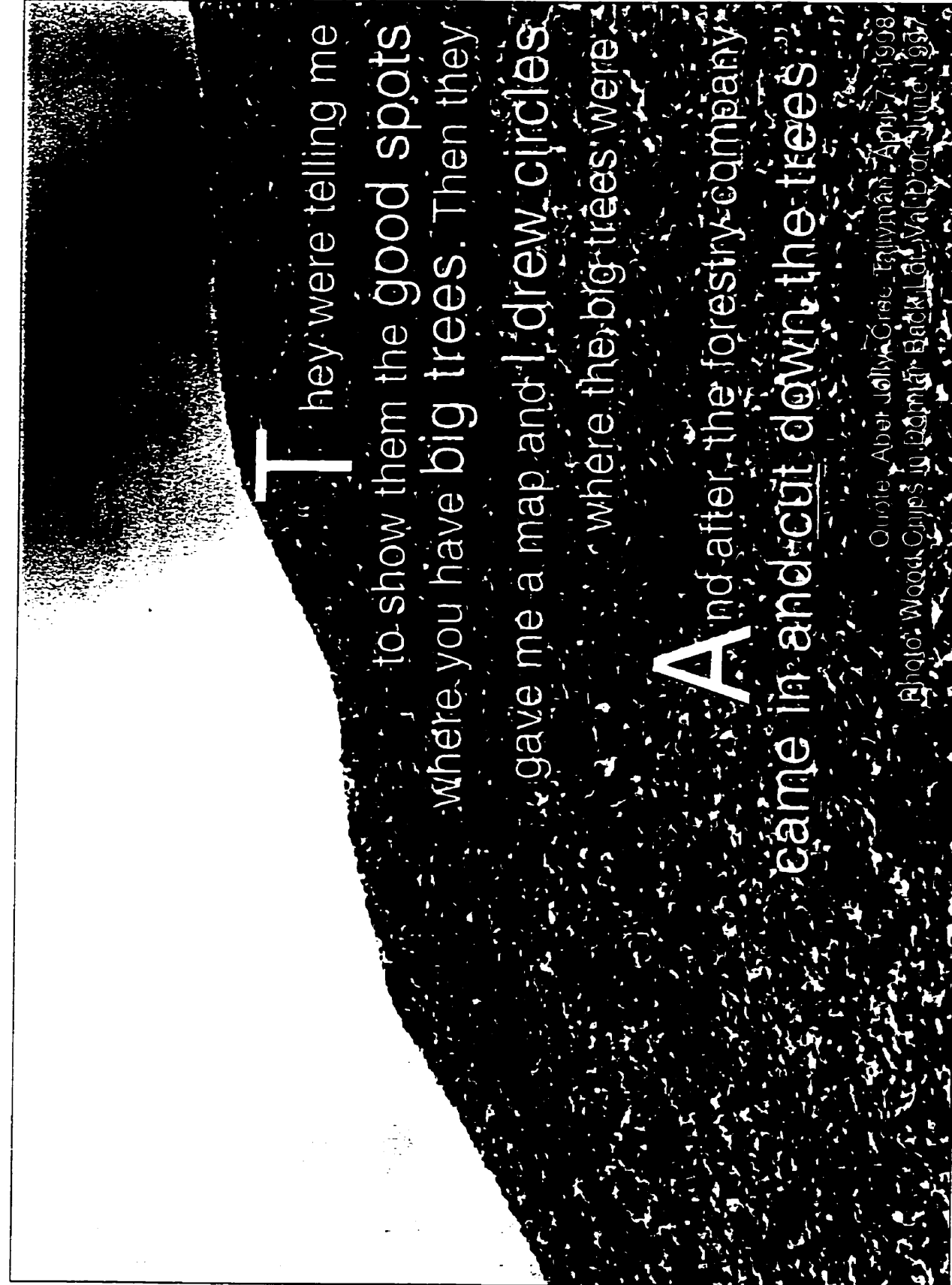
It's like you wounded the man

when he sees his

land all chopped.”

Quote: Walter Jolly Cree Tallyman, June 11, 1997

Photo: Dentar Back Lot - Val Dor, June 1997



They were telling me
to show them the good spots
where you have big trees. Then they
gave me a map and I drew circles
where the big trees were.

And after the forestry company
came in and cut down the trees.

Quote: Aber Jolly Crise, Tallyman, April 7, 1998.
Photo: Wood Cries in Dornier Back Lot, Wald on June 1997.

*“When you sleep on
SPRUCE BOUGHS,
you sleep on
MEDICINE”*



Quote: Lillian Moses, Cree Culture Teacher, Eastmain
Photo: Double teepee, Chisasibi, James Bay

Management

CHANGING THE GEOGRAPHY OF YOUR MIND.



Without Nature We Go Mad

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