

***Kâ Isinâkwâk Askîy*: Using Cree knowledge to
perceive and describe the landscape of the
Wapusk National Park Area**

By

Maria M'Lot

A Thesis submitted to the Faculty of Graduate Studies
of the University of Manitoba in partial fulfillment of the requirements
of the degree of Masters of Natural Resource Management Degree

Natural Resources Institute

Winnipeg, Manitoba

March 2002



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-76814-7

Canada

THE UNIVERSITY OF MANITOBA
FACULTY OF GRADUATE STUDIES

COPYRIGHT PERMISSION PAGE

Kâ Isinâkwâk Askîy: USING CREE KNOWLEDGE TO
PERCEIVE AND DESCRIBE THE LANDSCAPE OF THE
WAPUSK NATIONAL PARK AREA

BY

Maria M'Lot

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University
of Manitoba in partial fulfillment of the requirements of the degree
of
Master of Natural Resources Management

Maria M'Lot © 2002

Permission has been granted to the Library of The University of Manitoba to lend or sell copies of this thesis/practicum, to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film, and to University Microfilm Inc. to publish an abstract of this thesis/practicum.

The author reserves other publication rights, and neither this thesis/practicum nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

Abstract

The Cree of northern Manitoba possess extensive knowledge and expertise about the land on which they have lived through many generations. In collaboration with community elders, this study aims at presenting the landscape of Wapusk through the eyes of the Cree. These are the areas of York Factory, the Nelson River, the Churchill River and Wapusk National Park. Through their use and occupancy of the area, the Cree have come to understand the landscape, which is evident in their naming of landscape features and places. Their knowledge provides a different descriptive “map” of the area.

Through the building of relationships characterized by trust, respect and reciprocity, knowledge can be shared and learned. With the consent of the Cree people from Churchill, York Factory First Nation and Fox Lake First Nation, a variety of techniques were used to gather and document information, namely semi-structured interviews, participant observation, mapping and photographs. These techniques were used for both the naming of places and the naming of landscape features. Collaboration involved individuals and groups, and involved both male and female collaborators.

Along the western shore of the Hudson Bay, people attributed names to waterways, rivers and creeks, points of land, island and camp areas. More detailed names were obtained around York Factory depicting the intensive use of the area for hundreds of years. The Cree names were different from the English names and were associated with seasonal activities, physical description of the land, or the presence of certain animal species. A map of Cree place names provides a different presentation of the land area, each place name carrying rich and descriptive information.

The descriptive detail of each landscape term was captured as the Cree terms were translated into English, thus making it possible to examine how the Cree view the land. Cree naming of the various landscape features seems to be based on descriptions of physical appearance, habitat, activities or human uses. Physical descriptions are used by the Cree to establish working landscape terms that provide practical and descriptive information about the appearance of the land. Some landscape terms are habitat descriptions that name various species according to the environment in which they live. In some instances, the landscape terminology developed and used by the Cree displays a link to certain land use activities and different human uses of the land.

Although the Cree have no term for 'ecosystem', they do express the concept when they talk about landscape or land. All aspects of land are present in the knowledge of the Cree when they speak about landscape, including landscape structures, flows across the landscape and key functions and processes. Cree landscape terminology can provide understanding on how the Cree view and describe the land.

The richness of Cree knowledge has been illustrated only in part through this documentation of local place names and Cree landscape terms. Although this is just one area covered by Cree knowledge, the knowledge is rich and provides information on a wide range of topics. The knowledge of the people needs to be learned by devoting time and showing a great deal of respect for the culture and to those who hold the knowledge. At the same time, it is important to compile this specialized terminology since some knowledge of naming is slowly being lost.

Preamble

It is with great pleasure that I have been given the opportunity to work with the Cree language that I have known since childhood. I hope that this research helps others see Cree for the beautiful language it is, with all its richness of expression, and the role it plays in the cultural identity of the Cree people. With this work I hope to contribute to the overall existence of the Cree language, so that it is not soon forgotten. As this research was a learning experience for myself, I hope it broadens the Cree vocabulary of others as it did mine. While quite a few names and terms were obtained throughout the course of this research, it is important to realize that this compilation of names and terms is not exhaustive and that this is just a start of something much larger.

Acknowledgements

The start of this research goes back to the spring of 2000 when I set out to offer society a different perspective of the land, a Cree perspective. With much apprehension and eagerness, I entered a strange, yet familiar, part of northern Manitoba; ready to delve further into a culture I was close with. After many months of listening, talking and sharing, I not only learned a great deal about the land, but also a great deal about myself. To me this is my greatest achievement. Thanks to all who had a part in it!

First I would like to extend my regards to the people of Churchill, York Landing, Fox Lake and Gillam, without whom this project would never have taken flight. Your patience, acceptance and trust were overwhelming and showed the true spirit of a people.

To the elders and all the people who generously shared their time and knowledge with me, I owe a great debt of gratitude. Your spirit and passion was compelling and full of life. Listening and learning from you was very rewarding. *Kinanâskomitin*.

Many thanks to Flora Beardy and her family in York Landing for opening your home to me. Flora, thanks for your companionship. In Churchill, a big thank you to Jodi and Dahlton Grosbrink for giving me a place to call home. Jodi, thanks for the many talks and laughs we had, it was good for the soul.

To my academic committee, your patience and support throughout this undertaking was greatly appreciated. Thanks for giving me room to grow with the project.

Dr. Fikret Berkes, thanks for inspiring me to pursue the area of traditional knowledge, it has always intrigued me. By challenging me you helped me keep my determination throughout the research.

Dr. Micheline Manseau, your friendship and guidance throughout this project was out of this world. Special thanks for providing the idea to work with the Cree and helping to focus my work. The many lengthy conversations/discussions we had helped me keep my sanity at times. By showing your true spirit, I was able to use mine.

Mrs. Flora Beardy, I will always remember you for your jolly nature, it was very comforting and I commend you on this gift. Thank you for making this project easier and introducing me to the many wonderful people I had a chance to speak with.

Dr. Stephane McLachlan, thanks for adding a different twist to my work. Your many questions and concerns about the project made me think harder about what I wanted to see in the end.

A huge thanks to all the Parks Canada staff who helped me along the way, especially the Wapusk National Park staff in Churchill. Thanks for making me feel welcome and supporting me. Hats off to those who provided materials and photographs of the study area. I owe you one!

I am grateful to Parks Canada who saw the need and the promise for my research and provided such generous funding. I hope I do not disappoint. Thanks as well to the Northern Scientific Training Program for providing additional support.

Last but not least, my family. Thank you to my parents for broadening my horizons early on, it is because of you that I know who I am. To my brother and sister, thanks for putting up with me through this research, I know it could not have been easy. Also, to Greg, a great big hug for being my outlet, my friend and much more.

Table of Contents

ABSTRACT	2
PREAMBLE	4
ACKNOWLEDGEMENTS	5
LIST OF FIGURES	9
LIST OF TABLES	10
CHAPTER 1: INTRODUCTION	11
1.1 BACKGROUND	12
1.2 ISSUE STATEMENT.....	14
1.3 OBJECTIVES.....	15
1.4 SIGNIFICANCE.....	15
1.5 TERMINOLOGY	16
CHAPTER 2: THE LAND, THE PEOPLE AND THE COMMUNITIES	18
2.1 CREE LAND USE AND OCCUPANCY	19
2.1.1 <i>Past</i>	19
2.1.2 <i>Present</i>	24
2.2 IMPORTANCE OF LAND AND KNOWING THE LANDSCAPE	26
2.3 THE WAPUSK STUDY AREA	28
2.3.1 <i>York Factory Area</i>	28
2.3.2 <i>Nelson River Area</i>	30
2.3.3 <i>Churchill River Area</i>	30
2.3.4 <i>Boundary Areas</i>	30
2.4 PHYSICAL DESCRIPTION OF THE WAPUSK STUDY AREA.....	31
CHAPTER 3: RESEARCH APPROACH AND METHODS	34
3.1 RESEARCH APPROACH.....	35
3.1.1 <i>Respect and Reciprocity</i>	35
3.1.2 <i>Building Relationships</i>	36
3.2 RESEARCH METHODS	39
3.2.1 <i>Community Liaisons</i>	39
3.2.2 <i>Additional Visits</i>	40
3.2.3 <i>Semi-structured Interviews</i>	40
3.2.4 <i>Participant Observation</i>	42
3.2.5 <i>Mapping</i>	43
3.2.6 <i>Photographs</i>	44
3.2.7 <i>Historical Research</i>	45
CHAPTER 4: CREE KNOWLEDGE OF PLACE NAMES	46
4.1 PLACES NAMED AFTER ACTIVITIES.....	48
4.1.1 <i>Hayes River Area</i>	54
4.1.2 <i>Area East of York Factory</i>	55
4.1.3 <i>Port Nelson Area</i>	55

4.2	PLACES NAMED AFTER PHYSICAL DESCRIPTIONS	56
4.2.1	<i>Rivers and Creeks</i>	58
4.2.2	<i>Water Related Features</i>	59
4.2.3	<i>Settlement Areas</i>	61
4.2.4	<i>Distance</i>	62
4.3	PLACES NAMED AFTER SPECIES DESCRIPTIONS	63
4.3.1	<i>Dominant Species</i>	63
4.3.2	<i>Uncommon Species</i>	64
4.4	PLACE NAMES AND THE ISSUE OF TRANSLATION	65
4.4.1	<i>Cree into English</i>	65
4.4.2	<i>English into Cree</i>	66
4.4.3	<i>Co-naming of Places</i>	67
4.4.4	<i>Names with No Commonality</i>	68
CHAPTER 5: CREE KNOWLEDGE OF LANDSCAPE TERMINOLOGY		69
5.1	LANDSCAPE AND PHYSICAL DESCRIPTIONS	72
5.1.1	<i>Trees</i>	73
5.1.2	<i>Berries</i>	74
5.1.3	<i>Landscape Features</i>	75
5.1.4	<i>Land Cover Types</i>	77
5.2	LANDSCAPE AND HABITAT DESCRIPTIONS.....	80
5.3	LANDSCAPE AND ACTIVITY DESCRIPTIONS.....	82
5.4	LANDSCAPE AND HUMAN USE DESCRIPTIONS	83
5.5	LANDSCAPE TERMINOLOGY IN REVIEW	85
CHAPTER 6: SYNTHESIS OF CREE KNOWLEDGE AND LANDSCAPE		90
6.1	CREE KNOWLEDGE: HIGH USE AREAS AND LOCAL SCALE KNOWLEDGE	91
6.2	CREE LANGUAGE AND THE RICHNESS OF LANDSCAPE: EXAMPLES OF A FEW THEMES	93
6.2.1	<i>Rivers</i>	93
6.2.2	<i>Species and Their Habitat</i>	95
6.3	CREE KNOWLEDGE: EVERYTHING IS ALIVE AND CONNECTED	97
CHAPTER 7: CONTRIBUTIONS OF CREE KNOWLEDGE TO UNDERSTANDING LANDSCAPE		100
7.1	RICHNESS OF CREE KNOWLEDGE	101
7.2	CREE KNOWLEDGE WITHIN COMMUNITIES	102
7.2.1	<i>Building within</i>	102
7.2.2	<i>Use and Sharing of Knowledge</i>	103
7.3	OVERALL IMPRESSION.....	105
REFERENCES.....		106

List of Figures

Figure 1: Current locations of communities and boundaries within the province of Manitoba as referred to in the research.....	20
Figure 2: Map of Wapusk Study Area, including the ecoregions and place name locations that fall within.	29
Figure 3: Locations of Cree place names in the Wapusk Study Area	50
Figure 4: Locations of Cree place names in the York Factory/Hayes River area only.	51
Figure 5: Locations of Cree place names using the English translations.	52
Figure 6: Locations of Cree place names in the York Factory/Hayes River area only using the English translations.....	53

List of Tables

Table 1: Names and information of collaborators who contributed to the project.	38
Table 2: Cree place names that are associated with types of activities; includes the definition (English translation) and the context (story/origin of the name).	49
Table 3: Cree place names that are physical descriptions; includes the definition (English translation) and the context (story/origin of the name).	57
Table 4: Cree place names that are based on the recognition of a certain species; includes the definition (English translation) and the context (story/origin of the name).	64
Table 5: List of Cree landscape terms and their definition (English translation); includes previous examples.	85
Table 6: Cree terms used to characterize the components of a river; includes the definition (English translation).	94
Table 7: Cree terms that contain 'extra' information about the habitat of a species; includes the definition (English translation).	95

Chapter 1: Introduction

1.1 Background

Parks Canada plays a leading role in establishing a comprehensive network of protected areas, in the form of national parks and national historic sites, representative of Canada's natural and cultural heritage. National Parks have the mandate to maintain the ecological integrity of representative areas of the Canadian landscape while providing opportunities for public enjoyment and education (Parks Canada, 1994). In order to achieve this mandate, cooperation and collaboration, among all concerned groups, are necessary to build the knowledge base of each park. Information pertaining to plant and animal life, land and resources, place naming and oral history is increasingly being gathered from aboriginal peoples who have extensively used parkland areas, and therefore possess a wealth of knowledge about their surroundings. This knowledge is referred to as traditional ecological knowledge (TEK) and provides a different approach to perceiving nature resulting in additional knowledge of an area. The use of different systems of knowledge will assist in the continual challenges associated with the management of national parks.

TEK, as described by Berkes (1999), contains components of local knowledge of species and land, a component of practice in the way people carry out their livelihood activities and a component of belief, in their role within ecosystems and how they react with natural processes. TEK is referred to as culturally transmitted learning since information is passed, from generation to generation, through oral or practical teachings that complement cultural practices (Inkpen, 1999). This type of transmission allows for comprehensive data sets that take note of a variety of co-varying environmental features

over long periods of time (Freeman, 1992). These data sets allow for the potential of TEK to improve management of resources beyond the local level (Berkes, 1994).

Management in national parks has not often included aboriginal teachings and traditional knowledge. Increasingly, however, national park management is becoming aware of the importance of TEK and its potential to help design more effective management strategies, especially in the area of co-management. In the newly designated parks, such as Wapusk National Park, information is currently being collected with the gathering of TEK, about existing resources, the local landscape and their significance to users. By accepting the use of TEK in park planning and management, alternate ways to perceive and describe the landscape, in a way that is meaningful to all users, will be possible.

Landscape perception of traditional peoples has been a fairly recent focus of research (Johnson, 1999). Research of this type deals with capturing the geographical identity of a region by recording landscape features and place names that have existed in traditional communities since the beginning of time (Müller-Wille, 1987). For example, amongst the Inuit in Nunavik (Quebec), it was found that place names were given according to their resources, habitability, dangerousness and quality of game (Müller-Wille, 1987). Place names are said to identify exact geographical locations and their spatial extent (Brice-Bennett, 1977; Müller-Wille, 1987; Johnson, 1999).

Furthermore, all landscape features and places are given names as shown by the work with the Inuit of Nunavik and Labrador (Brice-Bennett, 1977; Müller-Wille, 1987) and the Gitskan and Wet'suwet'en of British Columbia (Johnson, 1999). Place names are often associated with certain events, social events and seasonal activities, while landscape

features are usually named for their physical or ecological features (Brice-Bennett, 1977; Müller-Wille, 1987). Through the recording of these types of names, a descriptive record of the landscape can be provided in association with the construction of oral maps. Ultimately, a different mental “map” of the landscape will be provided with respect to the culture that utilizes the region, thus increasing the interest in park management by the people of the local culture (Hrenchuk, 1991; Johnson, 1999).

1.2 Issue Statement

There is an increasing need for Parks Canada to manage existing national parks by including local First Nations in designations, park planning and management. It is important for Wapusk National Park to continue to set a precedent for other new parks by ensuring that all aspects of planning and management include local First Nations whose traditional lands coincide with parklands. By agreeing to co-manage the park area with the First Nations of Fox Lake and York Factory as well as the community of Churchill and provincial government, full participation at the management table has been given to the First Nations. In addition, it is imperative that the Cree knowledge held by the associated First Nation people be further developed, used and shared with others. This will give recognition of the use of Cree knowledge as being beneficial to park management. Presentation of the landscape through the ‘eyes’ of the local Cree can contribute to their cultural vitality and contribute to the continued evolution of their knowledge.

1.3 Objectives

The purpose of this research is to use traditional ecological knowledge to perceive and describe the landscape of the Wapusk study area through the traditional naming of landscape features and places. More specifically, Cree knowledge will be used since the primary focus will be on the Cree people, who are the main users of the land in this area.

The main objectives are to:

- (a) Determine whether or not names and/or classes of landscape features and places are viewed differently by the Cree people, as compared with scientifically derived names, and if so,
- (b) Determine how landscape features and places are named/classified.

Along with the main objectives arise several additional questions:

- (a) Are landscape features and places named by the Cree according to their use in traditional activities or by some other criteria?
- (b) Are the names for landscape features based on dominant species in a plant assemblage?

1.4 Significance

There is limited published or written information on traditional aboriginal naming and classification of the landscape (Gottesfeld, 1994; Johnson, 1999). The use of traditional naming would facilitate the participation of local communities in the management of resources by contributing to the development of management tools which local peoples can readily understand and employ (Hellier et al., 1999). In addition, presenting TEK and culture in a positive way will enhance community self esteem and

cohesion (Berkes, 1999; Johnson, 1999). In turn this will lead to cultural revitalization and cultural preservation for future generations.

Furthermore, the use of traditional knowledge in parks planning, and the use of TEK as a cross-referencing tool, is a huge step in advancing traditional naming and classification. This approach has the potential of addressing traditionally significant areas with respect to their desired protection and whether or not they fall within the park boundaries. In addition, the use of traditional naming to describe and perceive the landscape will add a different dimension when it comes to discussing park issues. With respect to national parks, this is an important step in the further acceptance of TEK in co-management systems being developed within parks.

1.5 Terminology

The Cree language is the language of a Nation, and like all national languages exists in different dialects. In this thesis, I use the "n" dialect, which is spoken in the northern Cree communities of Manitoba. It is this dialect with which I am familiar with and able to speak. For this reason, the Cree words or terms used in this research reflect the "n" dialect in pronunciation and spelling and the choice of words. As an attempt to accommodate the different dialects, syllabic equivalents were used so that words can be pronounced as one desires. However, these syllabic equivalents are intended for those who have some knowledge of the Cree language, especially in pronunciation. For those who require assistance in pronunciation, the Cree terms are also provided with vowel lengths and aspirations, but it must be noted that these are done according to my perception of the words as they were spoken to me and from my knowledge of the

language. I have tried to convey as accurately as possible the original intentions of the Cree speakers.

As there is variation in the Cree orthography used by various authors, a standard orthography is not available. In the absence of a standard orthography, I have followed/adopted the orthography used in the Alberta Elders' Cree Dictionary by Nancy LeClaire and George Cardinal from 1998, as recommended by Dr. John Nicholls of the Department of Linguistics, at the University of Manitoba. The consonants used in this orthography are *c, h, k, m, n, p, s, t, w, y*. The vowel system consists of long vowels *â, î, ô*, short vowels *a, i, o* and the vowel *e*. The English sounding equivalents are as follows:

Short <i>a</i> as in but <i>i</i> as in tin <i>o</i> as in hood	Long <i>â</i> as in land <i>î</i> as in been <i>ô</i> as in host	Other <i>e</i> as in get
--	---	---------------------------------

Meetings were held with Dr Nicholls prior to and after the field portion of the research to discuss the issue of orthography. He suggested I use both the syllabic equivalent as well as the vowel lengths and aspirations in my work. The spelling of all the Cree terms were also examined by Dr. Nicholls to ensure accurate use of the adopted orthography. As well, other Cree speakers examined the Cree terms and their spellings, namely Loretta Dykun, a Cree teacher in Thompson, and her colleague William Dumas from South Indian Lake. Donald Saunders and Flora Beardy, both residents of York Landing, were also given the terms so as to examine the spelling. They also consulted with other members of the community.

Chapter 2: The Land, the People and the Communities

2.1 Cree Land Use and Occupancy

Understanding the history behind the Cree people, who occupy the three communities represented in my research, is central to gaining some understanding of their life and their experiences. It is these life experiences that are the fundamental principles in the process of learning, since individual experiences are ongoing and therefore continually add to the body of knowledge of a culture. This process of knowledge generation, through learning, is concerned with the mental, spiritual, physical and emotional being of individuals in a society and is rooted in personal experience (Inkpen, 1999; Simpson, 1999a). In other words, knowledge generation encompasses all aspects of a person's life. Looking at the past history of the Cree people will give insight into their lives today.

2.1.1 Past

The Wapusk study area (Figure 1) has never been intensively occupied, except by small, semi-nomadic groups of hunters and trappers whose societies depended upon the area for subsistence (Fast, 1996; Carroll, 2000). However, the seasonal resources available to them restricted occupation of the area by these small groups of people. Little is known about Cree land use prior to European contact, except that there has been a history of resource use in this area since the end of glaciation, about 8000 years before present (Hill, 1993; Carroll, 2000). While the history of the Cree and their land use extends beyond the written record, the history that is documented will be summarized, particularly the fur trade period, involving the arrival of Europeans into Cree territory.

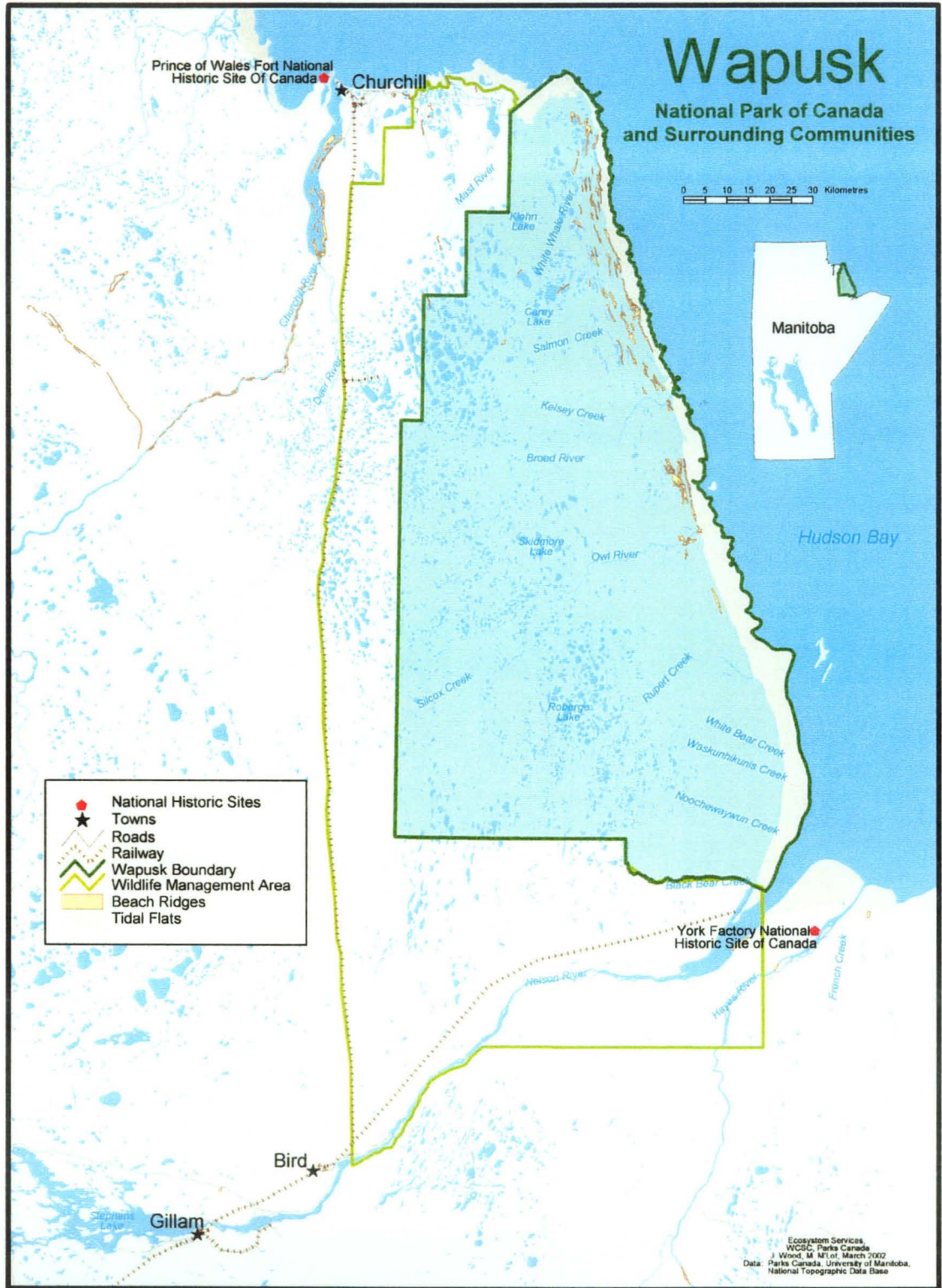


Figure 1: Current locations of communities and boundaries within the province of Manitoba as referred to in the research.

According to fur trade documents, the fur trade played a major role in Cree land use in the study area from the 1600s through to the 1900s (MKO NRS, 1994; Carroll, 1998). The early part of the 1600s reflected a normal seasonal pattern of Cree land use and occupation in the area. However, starting in 1682 what was considered normal Cree land use changed as permanent trading posts were established, with York Fort trading post being constructed in 1684 (MKO NRS, 1994; Beardy and Coutts, 1996). York Fort, which was called York Factory in the nineteenth century, became an important location for encounters between the European traders and the Cree, as well as other aboriginal nations. It was the goal of the merchants at York Fort to attract trade with the interior groups of aboriginal populations, which became largely dominated by the Cree. Control of the fur trade and the posts changed hands a number of times between the French and English. It was not until 1713, with the signing of the Treaty of Utrecht, that English control over the posts was restored (Payne, 1989; MKO NRS, 1994; Beardy and Coutts, 1996). With the increasing success of the fur trade, the Hudson's Bay Company (HBC) established Prince of Wales' Fort at Churchill in 1717, as a rival partner to York Fort (MKO NRS, 1994; Beardy and Coutts, 1996).

Throughout the fur trade, York Factory was the most important post, and played an expanding role as storage, manufacturing and distribution centre for the HBC (Beardy and Coutts, 1996; Tough, 1996). For many aboriginal people, York Factory became a crucial supply source of European trade goods. Many aboriginal groups were involved with the fur trade, including the Cree, Assiniboine and the Ojibwa, and had roles as traders, provisioners, consumers and employees of the HBC. By the eighteenth century, the Cree had established themselves as the middlemen in the fur trade and controlled the

trade of pelts for European goods with other interior aboriginal groups (MKO NRS, 1994; Carroll, 2000). In addition, the Cree became the main provisioners for the HBC, particularly at York Factory and Prince of Wales' Fort in Churchill. In other words, they supplied the forts with wild foods, such as fish, fowl and game. Those Cree who were regularly employed in York Factory and the Fort in Churchill became known as the Homeguard Cree and were said to be directly dependent on the posts (MKO NRS, 1994; Carroll, 2000). However, there were also many Cree and other aboriginal people who lived independently on the resources in the surrounding region and came to trade at York Factory and other posts, particularly during the spring and summer.

As trade began to control the local economy, the HBC expanded and so did the overall land use and occupation in the area. At this time, aboriginal land use was largely shaped by the seasonal needs of the fur trade. The area of the present day Wapusk National Park was used as a source of natural resources for the HBC and other people, particularly the Nelson and Hayes River areas and the Cape Tatnum area. According to Patrick Carroll, the fur trade dominated land use in a north/south pattern, with the Wapusk area being used as a travel corridor between York Factory and Churchill (Carroll, 2000). Hunters commonly travelled north from York Factory to the Owl River, where they hunted, mainly for fowl, at many of the rivers and creeks along the way. Those people in Churchill utilized areas around the Churchill River and the creeks, rivers and lakes located on the way towards Cape Churchill.

By the 1870s, there was a decline in the trade at Churchill and York Factory due to the decrease in the populations of fur-bearing animals and the depletion of game (MKO NRS, 1994; Tough, 1996). In addition, there was a restructuring of the HBC

operations in the north, which led to a decrease in the amount of seasonal labour required at the posts, particularly at York Factory (Beardy and Coutts, 1996). As a result, York Factory was not able to sustain the many aboriginal employees, including the Homeguard Cree whose lives depended on the needs of the fur trade. For many it meant finding alternative employment and subsistence, most often resulting in relocation to other areas.

The earlier part of the 1900s brought new developments, most importantly the construction of the railway to Churchill to service the port facilities being constructed there (Carroll, 2000). These new developments provided employment, during their construction and operation, for many of the Cree from York Factory. By the 1950s, the majority of the aboriginal community that was present at York Factory had moved away, but some people chose to remain there, even after the official closure of York Factory in 1957 (MKO NRS, 1994; Carroll, 2000). Many of the Cree families associated with York Factory moved inland to the present day communities of York Landing, Gillam-Bird, Shamattawa, Split Lake and Churchill (Figure 1). The majority of these communities settled on reserve lands established under the adhesion to Treaty 5.

The present day York Factory and Fox Lake First Nations, as well as those members who reside in Churchill, all have a close connection to the York Factory area through their history. Many individuals return seasonally to hunt and trap in the areas that were traditionally used. In the end, the direct association of the Cree people with York Factory ended after approximately three centuries, but their association with the land did not. Their continued attachment to the land is evident in the present day use of the area.

2.1.2 Present

The Cree of northern Manitoba, who use and occupy areas within the boundaries of the Wapusk study area, belong to the Manitoba Keewatinowi Okimakanak (MKO) Incorporated. In particular, the members of the York Factory First Nation, the Fox Lake First Nation and the Churchill Cree, who are not yet a recognized First Nation, are included in the research. There are other First Nations, as well, who use the study area. The interest in these three communities stems from the role they all played in the signing of the park establishment agreement in 1996. In addition, all three communities have members who currently sit on the Management Board of Wapusk National Park.

All these communities, hereafter referred to as the Cree, are direct descendants of the Homeguard Cree, who worked at the Hudson Bay Posts since the 1700's. As their ancestors did before them, the present-day Cree utilize fish and wildlife for subsistence and rely on the land for their cultural survival (MKO NRS, 1994). Many of the traditional land uses are considered significant for social and cultural reasons, as reflected in kinship relationships that still remain today (Hill, 1993; Fast, 1996).

Cree land-use typically occurs in an integrated fashion throughout the year within the boundaries of the Wapusk study area. Multiple harvesting activities are carried out during hunting trips throughout the year, but the degree of importance of each activity is seasonally determined (MKO NRS, 1994). Harvesting activities include hunting, trapping and fishing, each having significant areas recognized by the local Cree people. Many of the land use areas and patterns reflect traditional family use areas that have been established over time (MKO NRS, 1994).

Hunting areas of family groups typically overlap, especially in the northern portion of the study area, in the region south of Churchill and east of the Churchill River. This is the area used extensively by the Churchill Cree, as it is easily accessible to them (MKO NRS, 1994). Another important hunting area is around the York Factory-Port Nelson area and along the north shore of the Nelson River, as it is easily accessible to both the Fox Lake and York Factory First Nations (Hill, 1993). Both caribou and moose hunting occur in these areas. Waterfowl hunting peaks during seasonal migrations with coastal areas being hunted extensively.

Fishing is a major activity for the Cree, as fish are the next important source of nutrition after caribou and moose (MKO NRS, 1994). Although fishing is often incidental to hunting and trapping on longer trips, people do go on special trips just for fishing (Fast, 1996). The York Factory area, at the mouths of and along the various creeks, is utilized by the York Factory and Fox Lake First Nations as it is part of their traditional use area (Fast, 1996). In the northern portion, fishing typically occurs at the mouths of rivers along the coast, but also occurs in many of the waterbodies within the study area.

With respect to trapping, the Churchill Cree primarily trap in the eastern portion of the Wapusk study area, in the Hannah Lake-Whale River area and the Thompson Creek-Salmon Creek area, as well as south along the Hudson Bay coast to Wapinayo Creek (MKO NRS, 1994). The Fox Lake Cree utilize the Limestone Registered Trapline Block with which the park boundaries overlap. The boundaries of WNP also overlap the Churchill Registered Trapline Block (MKO NRS, 1994). The York Landing Cree

typically do not trap within the boundaries of the park, but utilize areas around Shamattawa and Split Lake.

The majority of habitation sites, such as camps and cabins, are located in the northern portion of the study area (MKO NRS, 1994). Cabins and camps are also present around York Factory and areas north of the Nelson River (Hill, 1993). Camp and cabin locations typically follow the seasonal land use patterns that have been reinforced through traditional knowledge. Cabins act more or less as base camps, representative of highly productive areas designated as primary harvesting sites (MKO NRS, 1994).

Ultimately, the land use of the Wapusk study area is tied to the seasonal migrations of animals and birds, just as it was in the past. Those areas that are the most productive for harvesting activities are visited during the peak times of the year. Many of these areas are the same areas that were visited by past generations, thus showing the importance of land use patterns to the Cree today.

2.2 Importance of Land and Knowing the Landscape

Many Cree societies depended on a certain land area to provide them with a wide variety of resources. Their ability to transform local resources through manufacturing was limited, along with their ability to supplement locally available resources with imports (Gadgil et al., 1993). Therefore, there were strong incentives for Cree people to nurture and sustain diversity in their environment, through cultural management. This led to an intricate and intimate relationship between the people and the land.

In the case of the Cree, their survival was dependent on a subsistence lifestyle, which is ultimately reliant on a land base. They used their knowledge and experience, accumulated over centuries, to reinforce a pattern of land use that had been previously

developed. It is their traditional knowledge that provides continual knowledge of sites, areas and resources and is indicative of seasonal land uses of each area by the Cree for subsistence. Prime sites are productive areas selected for maximum access to wildlife, water and timber (Wissink, 1993). Knowing these productive locations was important, but of even greater significance was knowing how to get there without the use of a map and compass.

Travel, therefore, was a part of the daily lives of the Cree people. Many important activities, like hunting and trapping, required the people to travel, either on land or water, to the many sites they seasonally used. Knowing the landscape was essential for easier travel and overall survival. With the use of landmarks and landscape features, people were able to develop travel routes to prime hunting sites. By knowing the lay of the land, people were able to avoid unsafe areas and choose campsites, rest areas and travel routes that provided the best shelter and protection from the elements. Landscape knowledge was important in every aspect of Cree life, and is the result of the continued use of and attachment to a place.

2.3 The Wapusk Study Area

For the purposes of the research, the study area is defined by the extent of the area known by the Cree people of Churchill, York Landing, Gillam and Bird. Those land areas used, travelled and visited by the people throughout their history, both written and oral, represent the area known. The majority of the Cree people, who occupy the said communities, have a common ancestry and sense of place, therefore the knowledge of the area is shared amongst them. The land had no boundaries and none were recognized by the Cree people, therefore the study area attempts to cover as much of the cultural area of the Cree people as possible, namely an area without borders (Figure 2).

The study area includes all the areas frequented by the Cree, resulting in quite an extensive area, as shown in Figure 2. Included in the study area are the York Factory area, the Nelson River area, the Churchill River area, and two areas with boundaries, Wapusk National Park (WNP) and Cape Churchill Wildlife Management Area (CCWMA).

2.3.1 York Factory Area

The York Factory area consists of the lands west, south and east of and including the York Factory site. However, the area east does not go as far as Kaskatamagun, but ends just after Nonhkanakow Creek for research purposes. Also included are the numerous rivers and creeks present, especially the Hayes River and its many tributaries, Ten Shilling Creek and the Pennycutaway River.

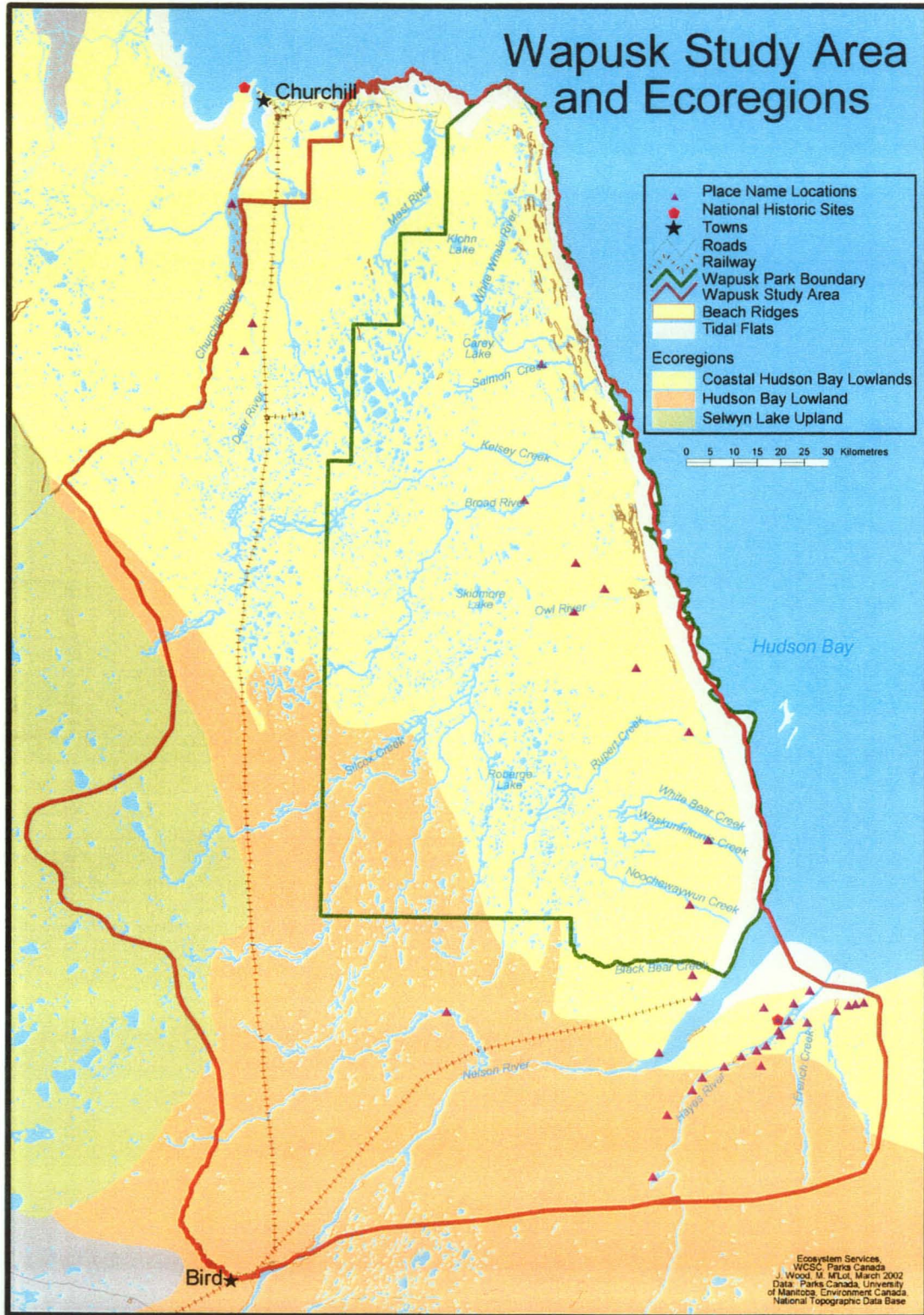


Figure 2: Map of Wapusk Study Area, including the ecoregions and place name locations that fall within.

2.3.2 Nelson River Area

West of the York Factory area lies the Nelson River area, which includes Port Nelson and areas along the Nelson River. Gillam and Bird are located near the Nelson River, making the river an important transportation corridor for access to the study area, especially the land around York Factory and Port Nelson. This area shares land with the adjacent York Factory area, creating a continuous land region.

2.3.3 Churchill River Area

Covering the northwest portion of the study area is the Churchill River, including the estuary. The river is the northwestern border for the study area, incorporating both the Deer and Dog Rivers which were used and travelled on by the Cree.

2.3.4 Boundary Areas

Included in the study area are two areas permanently established by boundaries (Figures 1 and 2), namely Wapusk National Park (WNP) and the Cape Churchill Wildlife Management Area (CCWMA). The land for WNP was formerly part of the CCWMA, thus with the creation of WNP the remaining CCWMA lands surround the park along its western and southern boundaries (Figure 1). WNP extends south and inland along Hudson Bay towards the Nelson River with its western border not extending to the railway tracks. Together, the two areas make up the majority of the study area and allow for a diverse landscape that includes many rivers and lakes, peat areas, forest areas and areas of tundra. Two major rivers are located in this portion, the Owl River and the Broad River, with the study area incorporating their entirety.

2.4 Physical Description of the Wapusk Study Area

The study area is representative of the Hudson-James Lowlands Region which includes two ecoregions as shown in Figure 2: the Coastal Hudson Bay Lowlands extending along the southern coast of Hudson Bay, from the Seal River in Manitoba east to James Bay in Ontario and the Hudson Bay Lowlands extending from Herchmer in northern Manitoba to James Bay (Parks Canada, 2000). The study area is mainly within the Coastal Hudson Bay Lowlands ecoregion, but the southwest corner lies within the Hudson Bay Lowlands and Selwyn Lake Upland ecoregions. Together the ecoregions make the area extremely diverse with the presence of an estuary, a marine coast, a large peatland, forested areas and tundra (Scott, 1998).

Alongside the Hudson Bay coast lie several regional features that are typically covered by water. First, there are the tidal flats that extend far out into the bay during low tide, the intertidal zone (Dredge and Nixon, 1992). The exposed flats consist of various materials such as limestone rock, mud, sand, clay and boulders (Parks Canada, 2000). Inland from the coast lie the dry, raised beach ridges of exposed marine sediments that run parallel to the Hudson Bay coast (Dredge and Nixon, 1992). Adjacent to the coast lie the wetlands, that are covered by water either permanently or periodically (Scott, 1998). These wetlands include the coastal salt marshes and freshwater sedge meadows that tend to concentrate around the rivers and streams entering the Bay (Jefferies, 1977). The coastal salt marshes are adjacent to the tidal flats therefore are regularly flooded by tides while the sedge meadows are commonly found on shallow, poorly drained peat (Parks Canada, 2000).

Dominating much of the study area is the extensive peat plateau that is underlain largely by continuous permafrost, which becomes discontinuous in the southwest corner of the park (Parks Canada, 2000). The peat plateau possesses a great deal of surface water captured in sedge meadows, bogs, fens, lakes, ponds and creeks either from precipitation, springs, snowmelt and/or melting permafrost. Peat deposits become deeper from east to west, but are typically about 2 meters thick (Scott, 1998). The peat plateau is comprised of peat, ice wedges, numerous thaw ponds lying completely within the peat and a few larger shallow lakes whose bottoms lie on mineral soil (Dredge and Nixon, 1992). The predominant vegetation cover supported by the sphagnum and sedge peatlands is a treeless lichen-heath complex (Dredge, 1992).

Tundra and forested areas reflect the three vegetation zones that occur in the area. Tundra is found in the extreme northeast and is defined by the extremely low density of dwarfed trees, as well as the presence of arctic flora and continuous permafrost (Scott, 1998). In the extreme southern regions of the study area, the boreal forest is established and defined by the high density of tall trees and the absence of continuous permafrost (Scott, 1998). Forested areas north of the boreal forest but within treeline, are much more open than the typical closed boreal forest, and are characteristic of the Woodlands Transition zone which is reflective of the treeline and runs diagonally across the region, from northwest to southeast (Dredge, 1992).

Overall, the study area is characterized by a low-lying, poorly drained landscape that rises gradually, at a rate of about 1.5m/km, inland from the coast of Hudson Bay (Dredge, 1992). Extensive muskeg, beach ridges, eskers, permafrost and low Arctic and sub-Arctic vegetation characterize the landscape (Parks Canada, 2000). The Wapusk

area experiences an ocean-modified continental climate with a dynamic mixture of Boreal and Arctic climates, which tend to vary from year to year. Summers are typically short and cool with temperatures around 12°C, while winters typically have a lengthy period of cold (below -25°C) with little snowfall, unless it happens to be a boreal-type winter with warmer temperatures (Dredge and Nixon, 1992).

Chapter 3: Research Approach and Methods

3.1 Research Approach

Being of Cree descent and growing up in a Cree community taught me a great deal about Cree culture and instilled in me many aspects of Cree culture, including the Cree language. I learned to respect all things and learned how important it was to listen, especially when elders spoke. I also learned how important it was to go out on the land, for the land was a good teacher too. Listening to oral teachings and participating in activities became important ways for me to learn about Cree history and knowledge. At a young age, I knew what it was like to live in a community where everyone is considered family and everyone knows you.

When I began this project, I wanted to take what I learned as a child and apply it to how I conducted my research and myself. I knew that relationships, characterized by trust, respect and reciprocity, were essential in order to truly learn and share knowledge with others. By sharing knowledge, I mean that you have to share what you know or have learned. A real relationship will be formed when knowledge is shared rather than taken. In true experiences with sharing knowledge, the mind, body and spirit will all participate.

3.1.1 *Respect and Reciprocity*

My research was conducted with a great deal of respect for the people and the knowledge that they were most willing to share. I believe that any traditional knowledge research, should be done "by persons with respect for, and understanding of, language, culture, and customs" (Assembly of First Nations and the Inuit Circumpolar Conference, 1994, p.62). Each collaborator was approached with humility, because I was the guest and I should respect the wishes of each collaborator. During interviews, not too many

questions were asked, just enough to keep people on track, but at the same time it was easy to just sit and listen. If collaborators wanted to stop or I could tell that they were getting tired, I would not hesitate to end things. Respect is so important because when you respect others, they will also respect you.

While I was visiting and learning, I tried to give back to the communities because I knew it was important and would reflect on my character. During interviews, I took with me photographs to show people, especially of York Factory and Port Nelson, because I knew it would interest those that have not visited these sites in some time. Whenever possible I helped the communities set up for gatherings or other activities. For example, in York Landing, I helped Flora Beardy set up for the Treaty Days feast and gathering. I also helped judge the traditional dress contests. Anything I could do to help, I did.

3.1.2 Building Relationships

As a newcomer to the communities, I knew it was important to establish a degree of trust with the communities. Trust was established by spending time in the communities and getting to know the people. This way, I would become a familiar face and become accepted by the people. One immediate advantage I did have was the ability to speak Cree. Once people knew this, my status with the Cree people was heightened. This was a critical point in gaining the initial trust and respect of people.

Throughout my research, I lived in Churchill and became a local, after spending about six months there, minus the times I went to York Landing, Gillam and Bird. It felt good to fit in, develop friendships and miss the place when I left. In York Landing, I was fortunate enough to live with Flora and her husband, Edwin Beardy. It was nice to be

part of a family and be able to meet people through them. In Gillam and Bird, everyone was so friendly and helpful. In all the communities, I was able to be myself and really enjoyed all the laughter that took place.

The relationships made with the collaborators in Table 1 were very important and the information shared was reflective of the trust and respect held between them and myself. Their contributions to this research were amazing and of great value, especially those who have already passed on. The information they shared with me will continue on as part of their living memory. Those who still remain with us will continue to possess a great deal of knowledge that can be shared with those of us who want to know and learn about the Cree and their knowledge.

Table 1: Names and information of collaborators who contributed to the project.

Collaborator	Gender/ Birth Year	Community	Activity	Area of Knowledge
Anderson, Catherine	F-1908	Split Lake, MB	wife and mother; passed away	Most familiar with Shamattawa area, also York Factory and Port Nelson areas
Beardy, Fred	M-1919	York Landing, MB	retired hunter/trapper	York Factory area, Hayes River and east to Kaskatamagun
Beardy, Richard	M-1915	York Landing, MB	hunter/trapper; passed away	York Factory area, mainly Nelson and Hayes Rivers
Beardy, Robert	M-????	Bird, MB	trapper/hunter	York Factory area, especially Nelson and Hayes Rivers
Beardy, Thompson	M-1929	York Landing, MB	hunter/trapper/fisherman	Area south and east of York Factory
Chapman, Abel	M-1922	Churchill, MB	hunter/trapper, CNR employee; passed away	Port Nelson area and north to Owl River (travelled extensively between)
Chapman, Douglas	M-1924	York Landing, MB	hunter/trapper/fisherman	Area south and east of York Factory
Gordon, Barbara	F-????	Churchill, MB	wife and mother	York Factory, Port Nelson and Weir River areas
Massan, David	M-1915	Gillam, MB	retired trapper	York Factory area, Cape Tatnum, Port Nelson north to Owl River and centre of Wapusk National Park
Morand, Dorothy	F-????	Churchill, MB	wife and mother	York Factory, but travelled extensively to Churchill as a child
Neepin, John	M-1916	Thompson, MB	hunter/trapper, CNR employee; passed away	Most familiar with the Port Nelson area, especially Rupert Creek, also York Factory
Ouskan, Roderick	M-1925	York Landing, MB	retired hunter/trapper	Area around Owl River and Port Nelson
Redhead, Archie	M-????	York Landing, MB	retired hunter/trapper	Area south and east of York Factory
Redhead, Mary	F-1920	Bird, MB	wife and mother	York Factory area
Saunders, Donald	M-????	York Landing, MB		York Factory area, mainly south of Nelson River
Saunders, Joseph	M-1907	York Landing, MB	retired hunter/trapper	Kaskatamagun area (east of YF) and around York Factory
Saunders, Tommy	M-1961	Churchill, MB	hunter, Parks Canada employee	York Factory area, railway line (west side of tracks)
Wastesicoot, Obediah	M-1940	York Landing, MB	hunter/fisherman	York Factory area
Wavey, Dorothy	F-????	Bird, MB	wife and mother	York Factory area, but most familiar with Kaskatamagun and Shamattawa areas

3.2 Research Methods

3.2.1 Community Liaisons

Local community liaisons were an integral part of the research project. Without their valuable help and overall knowledge, the research would have taken much longer and most likely ended with variable results. The liaisons were an important guide in the selection of collaborators, as they ensured that people, known to have prolonged experiences in the study area and respected in the communities, were interviewed. Local liaisons were also a great asset when it came to planning visits to the communities. They were able to give information on the best time to come, make arrangements for a place to stay and transportation, help plan activities and help set up and assist in meetings.

Flora Beardy was a community liaison for both York Landing and Churchill. She was born at Kaskatamagun and was raised at York Factory. She now resides in York Landing, but has ties to Churchill where she lived with her family for many years before moving to York Landing. The number of interviews conducted in the two communities was largely a result of the work of Flora. In York Landing, she introduced me to people in the community at which time she explained the research I was doing. After a couple days of meeting people, we then went to the households of the different collaborators she had selected and started the interviews. Flora is well known and liked in the community and her previous work with the Cree people from York Factory was invaluable, since I interviewed many of the same people she did. Through her work, she was also able to give me guidance and recommend other collaborators in Churchill and Fox Lake.

Donald Saunders was a second community liaison chosen for York Landing. He is a resident of York Landing with family members living also in Churchill. With Flora

having a busy schedule, she was not always available to help me. Donald was willing to accompany me to interviews and take me around the community. He was able to provide me with lots of insight into the Cree landscape vocabulary through his own knowledge. He was also able to arrange activities that involved going out on the land.

Franklin Arthurson was a community liaison for Fox Lake. He resides in Gillam and works with Fox Lake First Nation, therefore was able to arrange transportation to Bird and introduce me to the community. Introductions started at the Band Office and from there, arrangements were made for me to visit different households and hold interviews. In some cases, the people came to the office to speak with me. Franklin proved to be an important link to the community and things got even better when he knew my mother.

3.2.2 Additional Visits

Additional visits to the communities were made throughout the project. Two visits to York Landing and Fox Lake were made at which time information was shared and documented. This ensured that any additional information that was not remembered the first time was shared. Having additional visits allowed for the opportunity to go out on the land as often as possible. It also gave me an opportunity to see people again and visit the communities in a different season.

3.2.3 Semi-structured Interviews

Semi-structured interviews were the main method used to gather and document Cree knowledge. This method is an informal, flexible, listening technique that allows the collaborator, and not the researcher, to play an active role in guiding the interview

(Huntington, 1998). Open-ended questions were used in order to permit new topics to be pursued as the interview developed. Although the primary focus of the interviews was aimed at traditional Cree naming of landscape features and places, interviews were not formally structured, allowing for better communication and information flow (Huntington, 1988; Inkpen, 1999). Instead, a few predetermined questions and topics were prepared to serve merely as a checklist for the types of information being sought. Quite often, interview discussions were started by mention of good hunting areas or travel routes.

Semi-structured interviews took place with key collaborators, including elders. Key collaborators were chosen from those who were and are active in bush life and acknowledged by the community to be experts (Ohmagari and Berkes, 1997). Although the older generation is often considered the better source of Cree knowledge, anyone who spent much of their life on the land would have accumulated much valuable knowledge about the natural environment and its landscape (Johnson, 1992). For this reason, a wide range of collaborators, both men and women of different ages, were interviewed in order to capture as many different perspectives of the landscape as possible. The number of people interviewed depended on the selection of collaborators by local community liaisons, but not always. Interviews would often conclude by the collaborator referring me to another person whose knowledge and experience was superior to their own or related to a different area. Ultimately, the people interviewed were in agreement with the Cree names and terms used for landscape features and places.

Most interviews were conducted in the homes of the collaborators to maintain familiar surroundings and allow for a more relaxed setting in which knowledge could be

shared. In some instances, interviews took place out on the land during participatory excursions and activities. A number of individual and group interviews were done, i.e. individual, two men, two women and three men. In most circumstances, a local community liaison was present at the interviews and assisted in leading discussions. Many of the collaborators were more comfortable having a familiar person present during interviews. Information from semi-structured interviews was recorded by taking detailed field notes of the Cree names given to the various landscape features and places and any stories associated with the naming.

Interviews were conducted in the language preferred by the collaborator(s), Cree or English. Cree was the language of choice, since the majority of interviews were with elders who spoke very little English. During these interviews it was beneficial to have a local community liaison present to assist with asking questions and to help with the translating during discussions. The liaison also presented a more relaxed atmosphere for the collaborators and was key in arranging these interviews.

3.2.4 Participant Observation

Participant observation, a form of learning-by-doing, was another method used during the project. It allowed for direct observation and experience with traditional activities, combined with the natural environment, in order to provide a natural stimulus for discussion and learning (Dene Cultural Institute, 1994). Active participation in different settings, like camping trips, fishing trips and hunting trips, was essential to provide some perspective and understanding of the nature of Cree traditional knowledge. Going out on the land with the local people was an ideal way to observe the land and provided a natural and comfortable setting for collaborators to share in discussions.

These outings also showed the intimate and enduring relationship of the people of this region to their land.

Since participant observation is a culturally more important mode for gathering Cree knowledge, every effort was made to secure opportunities for participation in field trips and traditional activities. These opportunities helped me to improve my bush skills and to establish rapport with the collaborators and other community members (Ohmagari, 1996). Getting out on the land also allowed me to become more familiar with the landscape vocabulary used by the Cree. Since landscape features could easily be made reference to when on the land, it was easier to ask questions pertaining to the naming of landscape features.

3.2.5 Mapping

Some of the research involved compiling maps of the area, showing the local naming of places and landscape features. Collaborators, based on their traditional knowledge and experiences on the land, were shown maps of the general area and asked questions relating to land use, such as travel routes and hunting areas, in order to depict their perception and description of the landscape. Collaborators were able to mark or write directly on the maps, if they wanted, otherwise I did it for them. Each collaborator contributed to an overall map that is a recording of the Cree traditional naming of landscape features and places that are of importance to their culture.

The mapping process utilized 1:250 000 scale maps of the National Topographic Survey of Canada. Many of the collaborators were familiar with these maps, but in mapping place names, a common difficulty was that the scale was too coarse. Therefore, many had problems seeing and following the maps. As a result, they preferred to just

explain the locations of places and talk about them. Quite often I was able to find the places on the map and show them the location of the place on the map. This allowed them to orient themselves on the map and follow the map as they talked.

3.2.6 Photographs

Photographs were used during the interviews as prompts and to aid communication, as it was not always easy to express everything verbally. This was very relevant when it came to asking about the names for landscape features. It was easier to just show photographs of different landscape features in the study area and ask the people what they called them, instead of trying to describe each one. Each photograph ensured that we were all talking and thinking about the same landscape feature. For example, it was much easier to show a picture of a tamarack swamp than to try and describe it, especially in Cree, for fear of not making sense to others.

Photographs were also used to trigger the memories of the collaborators, which allowed for a greater amount of information to be shared. As we all know, finding things in one's memory is not always easy, especially when it happened a long time ago. Sometimes all it takes to recall events is a certain trigger and photographs worked in this case. Many of the photographs took the collaborators back in time, to the days when they travelled and used the land regularly. Photographs of all sorts, like those of wildlife and their habitat, specific areas like Port Nelson and specific landscape features, proved useful.

3.2.7 Historical Research

To further understand the Cree people with whom I was speaking, I did historical research to gain an overall social, ecological, political, economic and cultural background of the communities and the region. I wanted to know what their lives were like long ago, where they had travelled, what their role in the fur trade was, how the fur trade changed their lives, what brought them to live where they are now, etc. Information of this type was obtained from library and archival sources and from people in the communities. The local people hold a wealth of knowledge about their history and the written sources provided a way to fill in the gaps and piece together many of the stories.

Chapter 4: Cree Knowledge of Place Names

The naming of a region conveys the knowledge, use and occupancy of the land by the people who utilize the land. Through the recording of place names, knowledge can be obtained about the cultural relationships and daily lives of traditional peoples (Müller-Wille, 1987). This technique often applies to land use and occupancy studies used to determine the traditional lands of communities (Hrenchuk, 1991; Hill, 1993). The ability to record this type of information, in reference to traditional cultures, is made possible by the close attachment that traditional peoples have with their land. Without this intimate link to land, place names would lose their purpose of carrying on the culture and history of a people and an area.

With place names, it is necessary to look beyond the simple words in the name of a place and ask why a particular name is chosen. By doing this, a great deal of knowledge about the physical and cultural relationship of a people can be obtained. Through the detailed examination of a place name, a story can be told about an event or activity that took place in that location which is representative of a cultural experience, whether by an individual or by a group (Brice-Bennet, 1977; Müller-Wille, 1987). Place names can also reflect the physical appearance of the land, or may indicate the presence of certain plant or animal species in an area (Inkpen, 1999; Johnson, 1999). Ultimately, with such a wealth of information being provided by place names, it is possible to gain some insight into different cultures and their perceptions of the land, which they have built a connection with.

As an attempt to gain some insight into the Cree perception of the land, in and around Wapusk National Park, place names were recorded along with the rationale behind why each name was chosen. The context or the story behind each place name is

available in the associated tables (Tables 2, 3 and 4) and the location of each name can be seen in Cree (Figures 3 and 4) and after being translated (Figures 5 and 6). Hearing the stories behind the names of the places will help discover the origin of place names and also provide a glimpse into the richness these names carry for the Cree who have lived and travelled on the land.

For simplicity sake, the place names were sorted according to what they were named after or what the stories behind the name related to. In this research project, all the place names fell into one of three categories: places named after (1) activities, (2) physical descriptions and (3) species descriptions. These categories are based on my own understanding of the information shared with me and reflect the translation of the Cree place names into English.

4.1 Places Named after Activities

Place names are associated with types of activities that took place in the area, usually at specific locations (Table 2). Place names for locations include rivers, creeks, islands and portages, each of which tends to be based in the York Factory area around the mouth of the Hayes River. With the growing importance of York Factory as a main trading depot, the area around York Factory was extensively used to help sustain the depot. The land was used to provide additional provisions for both people and domestic animals at York Factory and anything else that would benefit York Factory. For this reason, many of the place names reflect activities that directly relate to some of the jobs the Cree people were assigned at York Factory, in particular those jobs that required knowledge of the land such as hunting, fishing and any travelling on land or water.

At York Factory the Cree people were in charge of supplying additional food to those that lived and worked at the depot. In general, the Cree hunters often travelled up the Hayes River, east toward Cape Tatnum or north of Port Nelson to find food sources. Any places that provided an abundant and reliable food source or served an important purpose during travel were named accordingly.

Table 2: Cree place names that are associated with types of activities; includes the definition (English translation) and the context (story/origin of the name).

Cree Term	Definition	Context
Nâtahôtô Sîpîsis	a creek to go and get things from	Refers to French Creek; cargo and people were fetched from this location and taken to York Factory
Nôtâskosîwew Ministik	place where you make hay	Refers to Hay Island; grass/hay was cut here to feed cattle and horses at York Factory
Cîman Ministik	Schooner Island	Boats that came to York Factory were parked on this island so they were out of the wind and away from ice.
Pakitahwâw Ministik	island where fishing nets are set	Refers to Fishing Island; people used to set nets here. A small fishery on this island helped provision York Factory
Mistosomeskanâw	cow trail	Some people use Mr. Moat Road instead of Mostos Portage; mistos means 'cow' so was probably a cattle trail; Mr. Moat worked for the Hudson Bay Company
Askimayo Paskwâtahikanik	Eskimo Clearing	Could not get the exact location; halfway from Marsh Point to York Factory; Inuit camped here to hunt seals and whales
Mâcî Sîpîy	a river to hunt	Refers to Machichi River; people said name used on map is misspelled.
Pâskisikewisîpîsis	a creek to shoot from or fire a shot	Refers to Paskisikawe Creek; people said name used on map is misspelled.
Pônihkahtâwe Sîpîy	a river to build a fire or a campstop	Refers to Pennycutaway River which flows into the Hayes River 25 miles upstream from York Factory. It was said that during the winter, people would camp along this river and trap. English name made from the sound of the Cree name.
Nôchewan Sîpîsis	***	Refers to Noochewaywan Creek (also known as Sam's Creek); could refer to a good trapping area because <i>nocitakawin</i> means 'trapping around'.
Kîsemiciskan Sîpîy	a river with a big or wide weir	Refers to Weir River; in this sense, is a fishing weir where a dam is created using trees, poles, twigs in order to catch fish

***Blank indicates unavailable or inconclusive information.

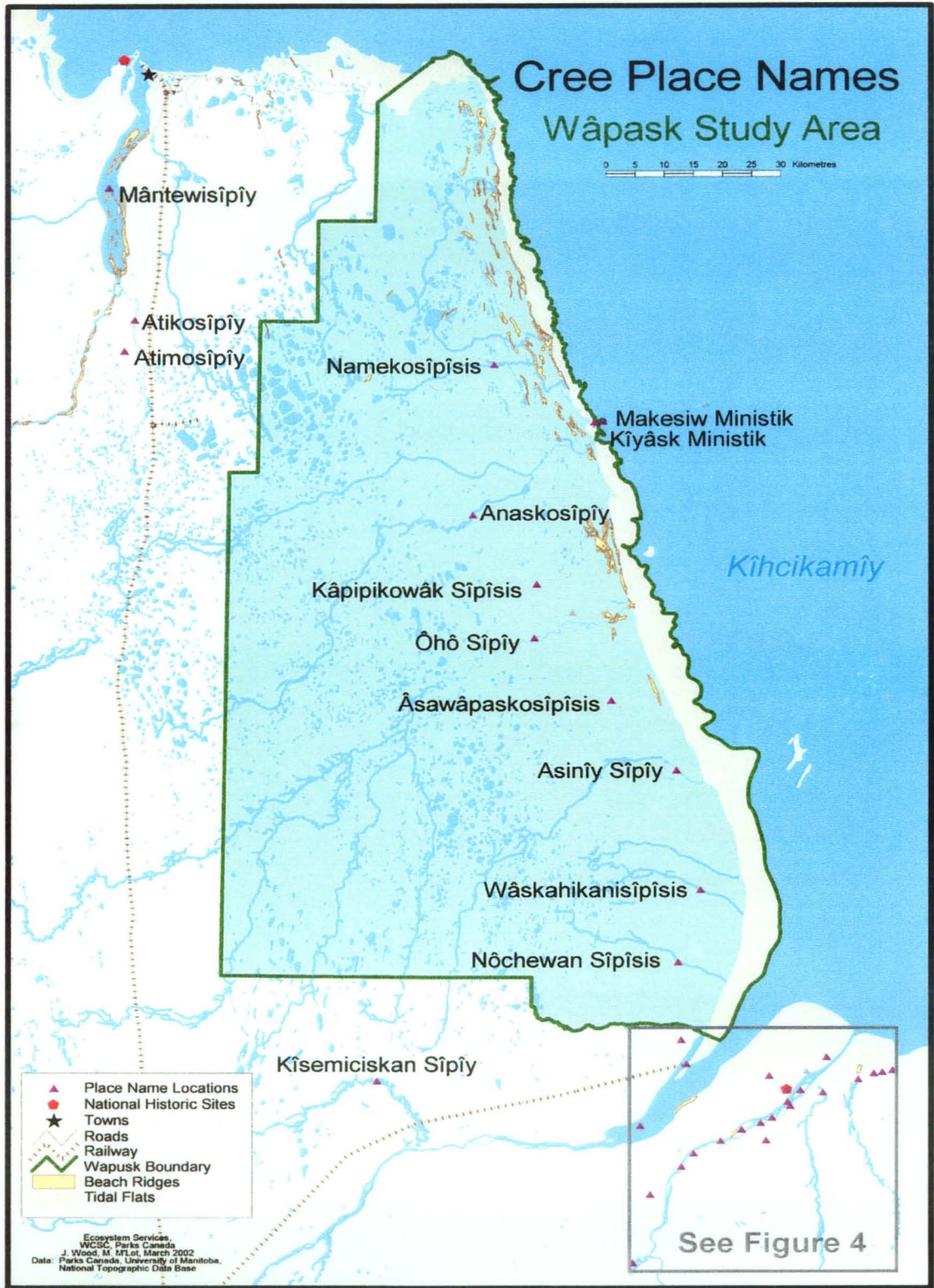


Figure 3: Locations of Cree place names in the Wapusk Study Area.

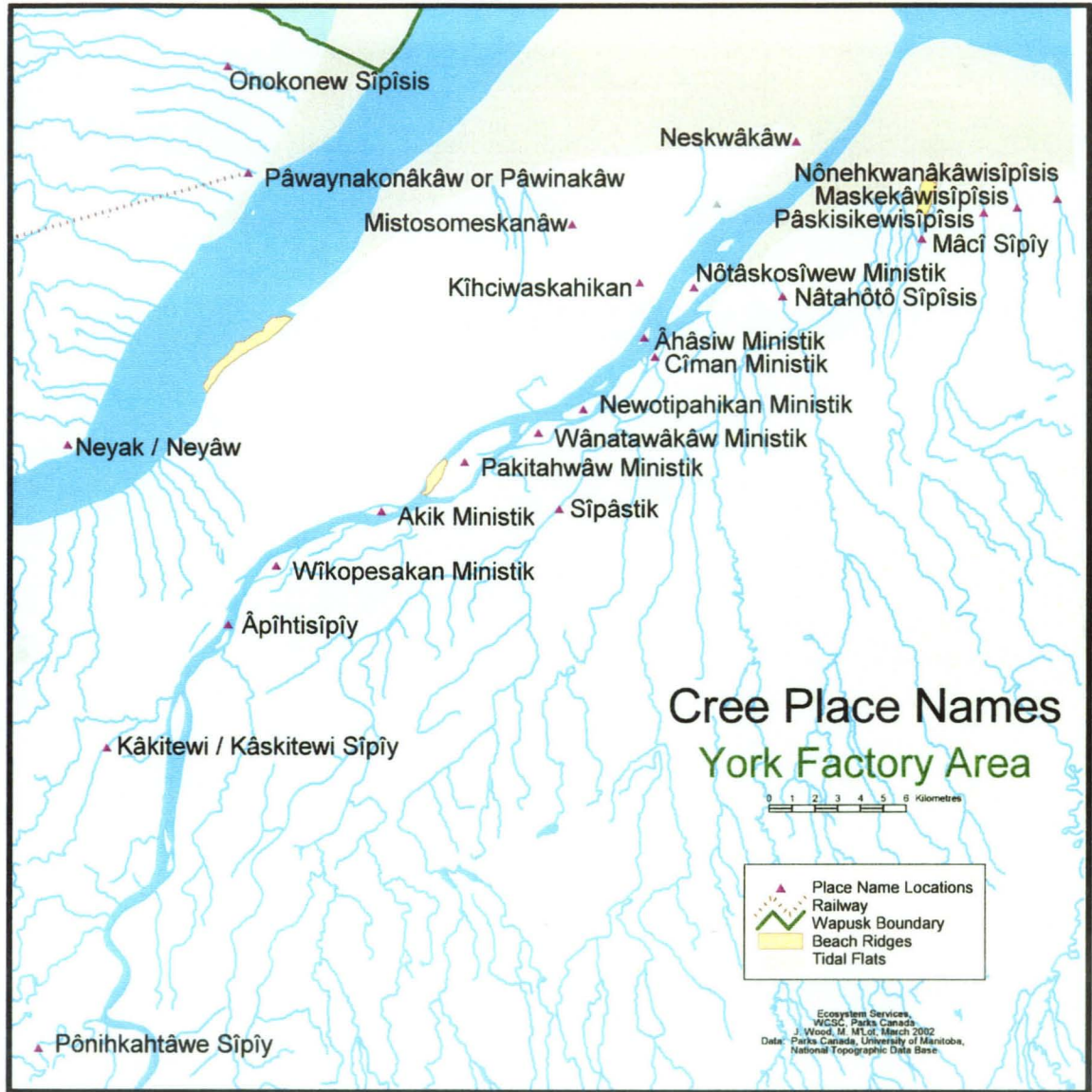


Figure 4: Locations of Cree place names in the York Factory/Hayes River area only.

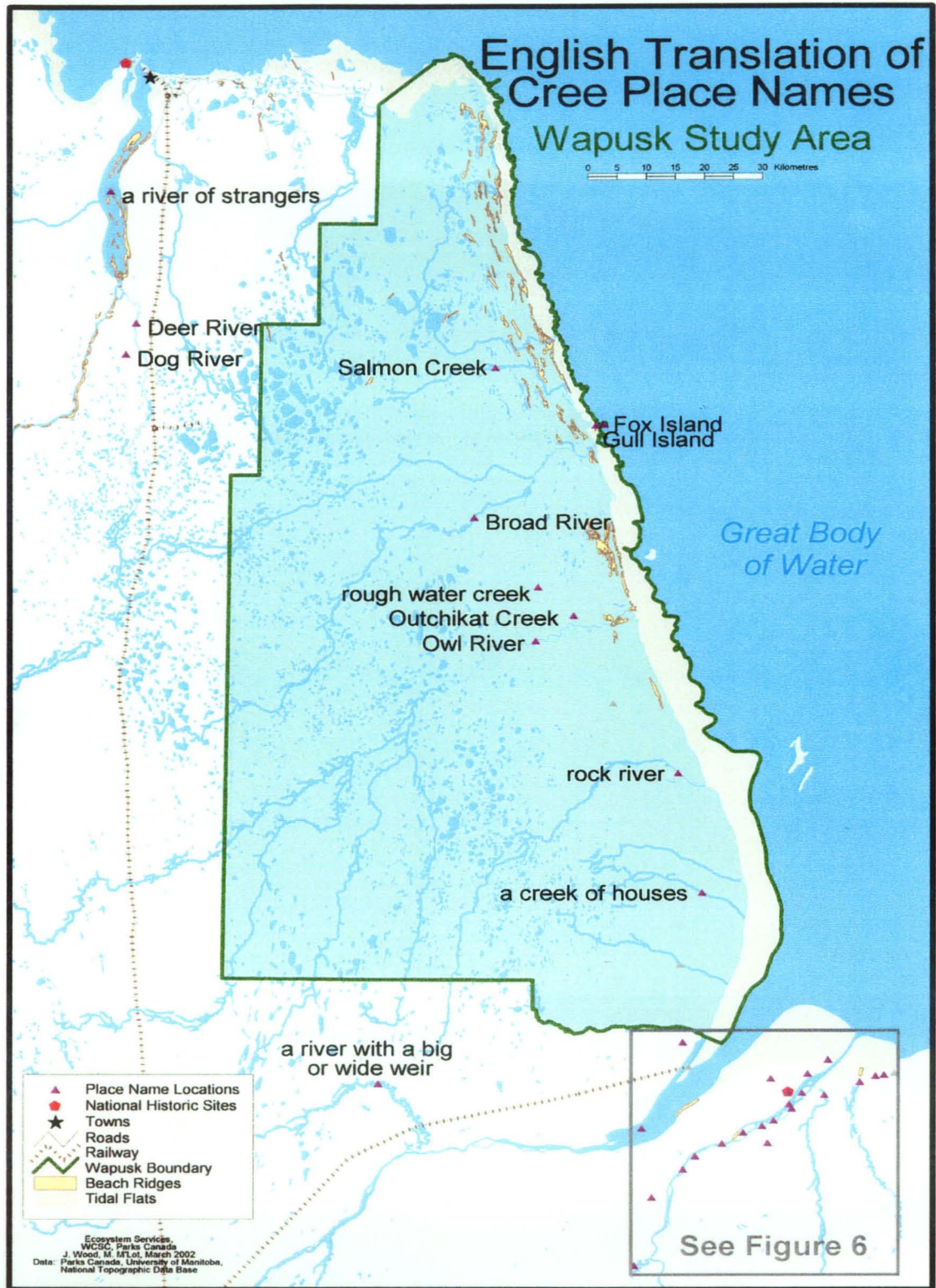


Figure 5: Locations of Cree place names using the English translations.

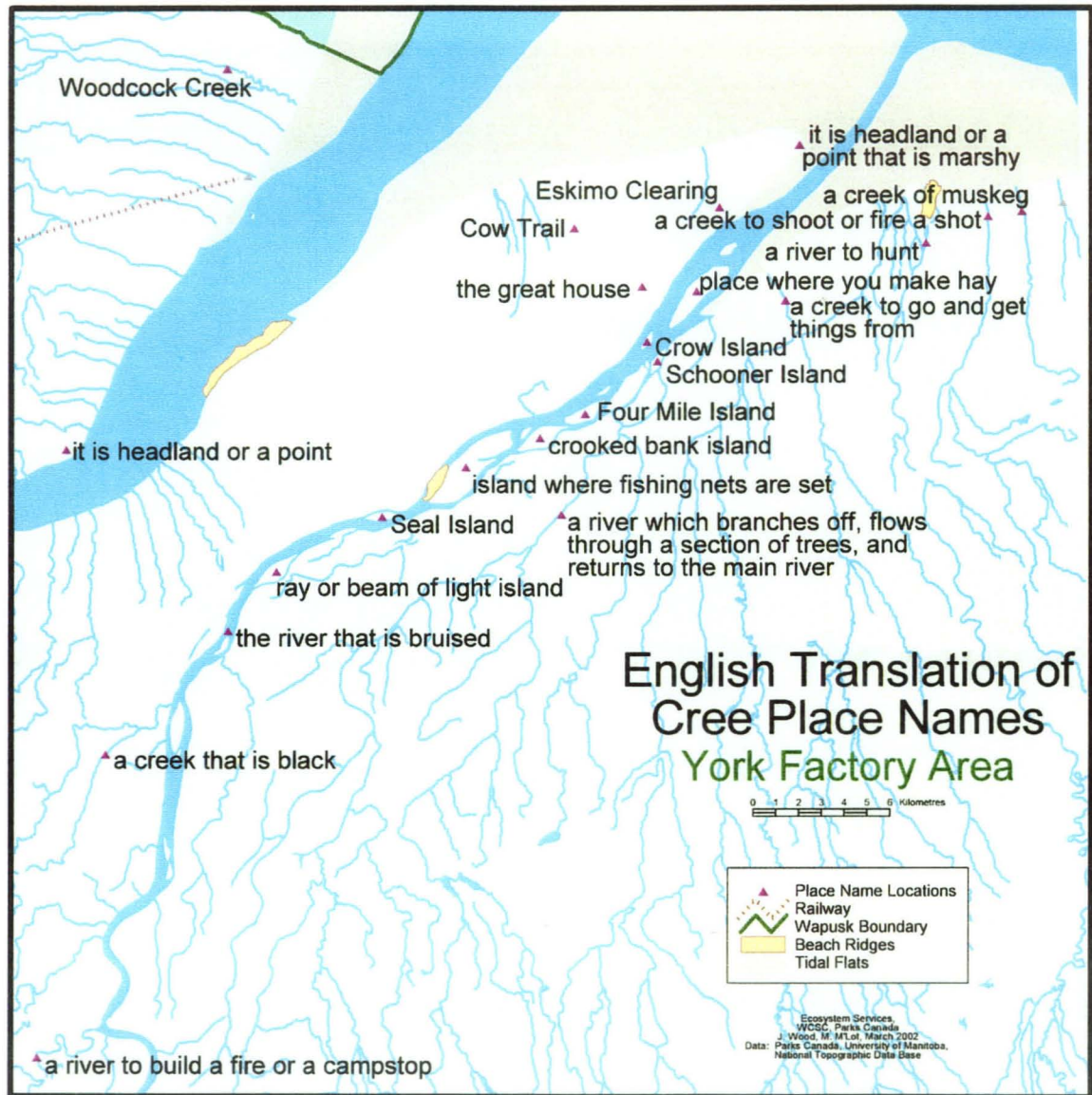


Figure 6: Locations of Cree place names in the York Factory/Hayes River area only using the English translations.

4.1.1 Hayes River Area

In the Hayes River there are many islands present, some of which possess a Cree name relating to a hunting and gathering activity (Figure 4). Fortunately, for the most part, the connection of the name to the activity is kept in the English name used today. For example, what is called Hay Island on the topographic maps today, is actually *Nôtâskosîwew Ministik* or "the place where you make hay". The Cree name is accurate in its meaning because this island was the place where grass or hay was cut to feed the cattle and horses kept at York Factory. Further up the Hayes River is an island called *Pakitahwâw Ministik* or "island where fishing nets are set". This island was used as a base for a small fishery that supplied York Factory with additional provisions. Hence, it is known as Fishing Island on maps today.

Additionally, Cree place names can apply to land use activities often associated with travel and the search for food. To the Cree, the place name *Pônikkahtâwe Sîpîy* or "a river or place to build a fire or a campstop" reflects the significance of this river as a preferable place to camp and trap along during the winter. The name also reflects the use of the river as a travel route inland since it flows into the Hayes River and is not far from York Factory. This river, better known as the Pennycutaway, is not so lucky in its English name, because the connection to the activity is lost. The Cree name has a meaning behind it, while Pennycutaway is the English corruption of the Cree name.

Although most Cree place names apply to land use activities relating to hunting and gathering, there are some names that do not. For example, the Cree named French Creek for its use as an additional dock where cargo and people could be picked up and delivered to York Factory. The people said this location was important because ships

could access it easier than York Factory during periods of bad weather. In Cree, French Creek is named *Nâtahôtô Sîpîsis* or “a creek to go and get things from”. Once again the Cree name exemplifies the attachment of the place to an activity which is lost in the English name.

4.1.2 Area East of York Factory

The area east of York Factory toward Cape Tatnum, but within the study area, is comprised of various creeks and rivers that empty into the Hudson Bay. As told in many stories, this area was a common travel route for Cree families going to winter camping areas such as Kaskatamagun or travelling on to Fort Severn. Quite often, during travel, food was obtained along the way, so some of the rivers and creeks were named after hunting activities, especially those they most often made use of. For example, the creek known as Paskisikawe Creek is named *Pâskisikewisîpîsis*, by the Cree, which means a "creek to shoot from or fire a shot". The Cree name suggests some form of hunting activity, probably some sort of fowl, but nonetheless is indicative of subsistence lifestyle. Likewise, the Machichi River, better known by the Cree as *Mâcî Sîpîy*, is known for hunting since the Cree name means "a river to hunt".

4.1.3 Port Nelson Area

During the operational period of York Factory, a small town was established at Port Nelson where some Cree families and other families lived. As a result, the area was travelled quite extensively in the search for food and furs, especially the rivers and creeks since they made for easier travel. One such river, Weir River, which flows into the larger Nelson River, exemplifies the association of a place name with an activity. In this case,

the activity is related to a method of fishing involving the use of fish weirs. The Cree name for the river means "a river with a big or wide weir" or *Kisemiciskan Sîpîy*, which relates to stories, told of the use of fish weirs instead of nets to catch fish.

"...I don't remember seeing too many people with fishing nets. Maybe just a few. People depended on weirs for their fish. They would build weirs and trap the fish. That's what they survived on. Oh, there used to be lots of fish caught in these weirs. People would just throw the fish out onto the riverbank!..."

David Massan, Gillam, MB.
(Beardy, F. and R. Coutts, 1996)

4.2 Places Named after Physical Descriptions

With the natural environment playing an overwhelming role in Cree existence, it was necessary for the people to attach themselves to the land and know their land use areas intimately. Quite often, a descriptive record of the landscape would be established using place names in order to construct mental and oral maps by which travel routes and areas could be recognized and/or visualized (Ames, 1977). Place names were given to lakes, rivers, islands and various other landscape features. In this way, important hunting and travel routes could be noted and shared within families. Also, areas could be qualified according to resource availability, accessibility and distance. Ultimately, these mental and oral maps, based on descriptive place names, were crucial to the traditional subsistence lifestyle of the Cree people (Table 3).

The Cree people who utilize or have utilized the Wapusk area possess many descriptive place names for rivers, creeks, islands and other landscape features related to water. This indicates that river systems were the main transportation corridors of the Cree, making it crucial to know and describe rivers and the features along the

Table 3: Cree place names that are physical descriptions; includes the definition (English translation) and the context (story/origin of the name).

Cree Term	Definition	Context
Asinîy Sîpîy	stony or rocky river	Refers to Rupert Creek, which is often called Stony River by the people.
Kîhcikamîy	great body of water	Used when referring to Hudson Bay.
Mântewisîpîy	a river of strangers	In brief, refers to the 'strange' clothing worn by the dead crew of Jens Munck in 1619; the natives saw these 'strange' bodies
Sîpâstik	a river which branches off, flows through a section of trees, and returns to the main river	Refers to Ten Shilling Creek, the people say the creek was named after the time when alcohol was sold here for ten shillings.
Âpihtisîpîy	the river that is bruised	Used when referring to Hayes River due to the blue/black colour of the water and mud.
Maskekâwisîpîsis	a creek of muskeg	Refers to Maskakowan Creek; people said name on map is misspelled; lots of muskeg around this creek.
Kâkitewi or Kâskitewi Sîpîsis	a creek that is black	Refers to Blackwater Creek as the water is said to be black in colour.
Anaskosîpîy	Broad River	***No Information Available***
Kâpipikowâk Sîpîsis	rough water creek	Refers to Kapipikowak Creek; rough water in the creek most likely due to the shallow rocky bottom which made it difficult to boat through.
Wânatawâkâw Ministik	crooked bank island	Refers to Wanatawakaw Island; used to be a settlement here.
Neyak or Neyâw	it is headland or a point	Refers to Flamborough Head which is the last head of land or bend in the Nelson River before it enters into Hudson Bay.
Wikopesakan Ministik	ray or beam of light island	Refers to Rainbow Island
Ocicâhkopasew Kîskatinâw	a cliff like the breast of a crane	Refers to Wachichakapasew Cliff; people said name on map is misspelled; the high slope of the land takes the shape of a crane's breast.
Neskwâkâw	it is headland or a point that is marshy	Describes the large marsh on the point; people say to stay away from this point when boating, unless familiar with the area, due to the tide and shallow areas.
Kîhciwaskahikan	the great house	Used when referring to York Factory due to its sheer size.
Wâskahikanisîpîsis	a creek of houses	Refers to Waskunhikunis Creek (also known as Duck Creek); there used to be cabins along the creek.
Newotipahikan Ministik	Four Mile Island	Name given because island is four miles from York Factory.

banks. Through the place names, a wealth of information is provided about things such as distance, orientation and the physical appearance of rivers and other features. With this type of information being provided by a place name, orientation and safety was made possible while the Cree travelled and hunted on land and water.

4.2.1 Rivers and Creeks

To the Cree people, river systems were vital not only as travel routes, but also as landmarks used for orientation. For these reasons, it was imperative for rivers and other associated waterbodies to be named in a manner that would allow for easy recognition and transferability amongst the people. Through their own way of assigning names, the Cree used descriptive naming in order to provide as much information as possible about a river or other waterbody. This way information could be obtained about water colour, ease of travel and possible dangers, and the path the water follows and various other things. For example, the Hayes River is named by the Cree in relation to the colour of the water that flows through it and the colour of the mud. The Cree name, *Âpîhtisîpîy*, means “the river that is bruised” which describes the colour of the water and mud as being blue/black like the colour associated with a bruise. While the Cree place name describes an attribute of the Hayes River, the English name does not. In fact, the English name is a dedication of the river in honor of Sir James Hayes, a Charter stockholder and later Deputy Governor of the Hudson Bay Company (Morton, 1973).

In addition, place names can describe the path a waterway takes as it flows across the land. This is the case with Ten Shilling Creek. The Cree refer to it as *Sîpâstik*, which means “a river, which branches off, flows through a section of trees, and returns to the main river”. On a map, Ten Shilling Creek does exactly that, it branches off of the Hayes

River upstream and then returns to the Hayes closer to York Factory after flowing through a forested area. Information of this type would be useful for establishing alternate travel routes and camping or stopover areas. The English name, Ten Shilling, does not possess this type of information.

Furthermore, place names can communicate details relating to safety of a river or waterbody, especially where travel is concerned. Information relating to safety can come in the form of water conditions, flow conditions, water levels, obstructions and other features such as shape of the riverbed and route of the river. An example is Kapipikowak Creek or as the Cree call it, *Kâpipikowâk Sîpîsis*. The Cree name means “rough water creek” which is indicative of the rough flow of the water in the creek, most likely due to the combination of shallow water and a rocky creek bottom. These conditions would make for difficult and unsafe travel, as communicated by the name given to the creek. Interestingly enough, the Cree name has been adopted by the English and is presented on the maps used today.

4.2.2 Water Related Features

Since river systems were such important travel corridors for the Cree, it was essential to know the features of the river that help shape it, such as points, islands, cliffs and the shape of banks. Knowledge of this type allows for better navigation, orientation and recognition of place. For these reasons, most water related features were given names that described a certain attribute they possess, which in most cases is the most prominent attribute, but in some instances, more than one attribute was used in naming. By creating place names in this manner, the features with respect to their attributes were easily recognizable to the people as they travelled around the area. Those features that

were most recognizable would perhaps be used as landmarks to help guide people during their travels.

With the Hayes River being a major travel corridor inland and to the coast, it was necessary for the Cree to familiarize themselves with the features of the river. In doing so, place names were given to different features along the river. One such feature is the cliff located at the junction of the Fox River and the Hayes River. The Cree named the cliff, *Ocicâhkopasew Kîskatinâw* or “Crane’s Breast Cliff”. The Cree thought the shape of the cliff resembled the shape of a crane’s breast, thus named it accordingly.

Another major travel corridor was the Nelson River and, like the Hayes River, was also given place names for different features along its banks. The last point of land or bend in the Nelson River before it enters into Hudson Bay is one of the features that is named by the Cree. They refer to it as *Neyak or Neyâw* which means, “it is headland or a point”, thus the Cree name describes what the land does. To find this point on a map, the name Flamborough Head will need to be used, because this is what it is known as today.

Along the coast of the Hudson Bay lies a point of land that separates the mouth of the Nelson River and the mouth of the Hayes River. The Cree named this feature after two of its attributes that tell people “it is headland or a point that is marshy”. From these attributes, the name *Neskwâkâw* was derived, capturing the physical appearance of this piece of land. Even the English name, Marsh Point, keeps the attachment of the name to the appearance of the land.

4.2.3 Settlement Areas

Even though a nomadic lifestyle was an important part of the identity of the Cree people, they still settled in certain areas for different amounts of time and different seasonal activities. Most often, areas for setting up camps, building cabins or more permanent homes were situated along rivers, preferably in sheltered locales. Since many of these different settlement or camp areas were used more than once, some on a regular basis, it was important to be able to identify and talk about camp areas with others. It was also beneficial to know who frequented certain camp areas, whether it was a certain family or a group of families. By associating camp or settlement areas with a name, much of this important information could be easily transferred with the use of the name. Therefore, the challenge was to choose an appropriate name that incorporated as much information as possible about the site.

One way the Cree people named settlement and camp areas was based on their appearance, which allowed for easy recognition of a place. With the sheer size of the depot and other buildings at York Factory, it was no wonder that York Factory was named *Kîhciwaskahikan* or "the great house". The appearance of the buildings and the number of people at the site must have been overwhelming to the Cree who were used to things on a much smaller scale.

A name could also refer to the entire area in which the camp or settlement is located. This is true for the creek the Cree call *Wâskahikanisîpîsis* or "a creek of houses". In this case, the creek is named in relation to a small group of cabins that used to be located along this creek. Significance was obviously placed on the cabins in this area, since the name directly relates to some form of housing. Naming the entire creek after

the small settlement area would ensure that the location of the cabins was known and which waterway could be followed to get there.

4.2.4 Distance

For the Cree people, most of their existence involved moving with the seasons to places that would provide food and shelter, which was especially important during the winter season. Much of the travel was done on foot, but boats/canoes and dog teams were also used when possible. Travel to some places meant travel over great distances, but this did not seem to bother the people. Distance was not a concern when it came down to survival and existence.

"...spent summers in York Factory hunting and fishing. Went to the trapline for the winter, east of York Factory toward Kaskatamagun. We camped at many places as we travelled east of York Factory. My family walked everywhere, usually pulling sleighs when we could..."

Dorothy Wavey, Bird, MB.
(pers. comm., 2000)

Although distance did not seem to be an important problem in the life of the Cree, certain place names directly relate to distance. An example would be Four Mile Island in the Hayes River. The Cree termed it *Newotipahikan Ministik* or "Four Mile Island" which relates to the distance of the island from York Factory. It is exactly four miles from the York Factory site. This direct relation to distance could be due to the use of the island as an indicator to an area or point of significance close by or to indicate part of a travel route.

4.3 Places Named after Species Descriptions

In many cultures, plant and animal species are often associated with their use as a cultural resource, whether for food, medicine or materials (Johnson, 1999; Inkpen, 1999; Turner, 1995). Each species plays a certain role in cultures and is surrounded by many different beliefs and stories, including legends and past experiences. Therefore species recognition was an important part of daily life for traditional peoples who relied on their land bases for subsistence.

Although the Cree did give names to both plant and animal species, plant species are not as commonly used as animal species in naming places (Table 4). This could reflect the higher degree of use of animal species, especially in hunting, fishing and trapping, despite plants also being utilized. These hunting activities were vital for survival and played an extensive role in the livelihood of the Cree. In addition, animals were more readily identifiable than plants and could be seen from further distances.

4.3.1 Dominant Species

Typically, places were given names of species that dominated certain areas, like islands and certain rivers and creeks. This is true of *Áhâsiw Ministik* or Ahasew Island as it is known today. It translates as "crow island" and is an island where people said that they always saw many crows, possibly because it was a good nesting or roosting site for crows.

Table 4: Cree place names that are based on the recognition of a certain species; includes the definition (English translation) and the context (story/origin of the name).

Cree Term	Definition	Context
Atikosîpîy	Deer River	***No Information Available***
Atimosîpîy	Dog River	***No Information Available***
Âhâsiw Ministik	Crow Island	Ahasew Island on map; people always saw lots of crows here.
Akik Ministik	Seal Island	Name given because seals used to come this far up the Hayes River.
Onôkonew Sîpîsis	Woodcock Creek	Refers to Woodcock Creek; area where woodcocks could be found.
Kîyâsk Ministik	Gull Island	Offshore island in Hudson Bay that has lots of gulls on it.
Makesiw Ministik	Fox Island	Most likely named after a large fox population.
Namekosîpîsis	Salmon Creek	Refers to Salmon Creek.
Ôhó Sîpîy	Owl River	Used to see lots of owls along the river.
Âsawâpaskosîpîsis	***Unavailable***	Refers to Asawapuskun Creek; people used to see polar bears down this creek.

4.3.2 Uncommon Species

The Cree also named places after an uncommon or unusual species sighting in an area. One such place is Woodcock Creek or *Onôkonew Sîpîsis* as called by the Cree. Down this creek people said they were able to see woodcocks, which were special in this area, because the range of the woodcock does not typically extend this far north. Due to the presence of this bird, the creek was given a name that means exactly that, "woodcock creek".

4.4 Place Names and the Issue of Translation

After recording the many place names that were remembered by the Cree collaborators, much information was revealed about the nature of place naming, specifically what the name meant and where it came from. Once all the translations of the Cree place names were complete, the literal meaning of each name could then be assessed as to whether or not it complied with the English names on maps used today. In some cases, the Cree place names were attempted to be used, but were most often misspelled. Other times, the Cree and English place names had nothing in common or showed a connection with each other either directly or indirectly.

Through further assessment and close study of the place names, many questions arose regarding the issue of the origin of the place names or how the names came about. Four different hypotheses were developed based on the place names documented, each with examples of documented place names that support the hypotheses.

4.4.1 Cree into English

The first question that came to mind after analyzing the place names was, are the place names a direct translation of Cree into English? This question deals with the notion of adopting the original Cree name or trying to translate it into English. If the Cree originally named the place, then the English would have had a choice of using the Cree name or the English name that reflected the Cree name. Some of the place names show an attempt to adopt the original Cree name, such as Nonehkanakow Creek, Maskakowan Creek, Wanatawakaw Island and Kapipikowak Creek. In many of these cases the Cree names were misspelled which could be due to spelling the names as they sounded.

The alternative was to directly translate the Cree place names into English. Examples are those place names that almost have the same meaning in both Cree and English, like *Kîsemiciskan Sîpîy*, which translates as Weir River in English and is used on maps today. Another example would be *Neskwâkâw* or Marsh Point as it is known today.

4.4.2 English into Cree

A second possible explanation is that some of the Cree names might have originated from the English. This is the reverse of the previous. The examples that support this statement also support the previous Cree into English question in that they almost have the same meaning in both languages. Additional examples of this would be Woodcock Creek or *Onôkonew Sîpîsis* and the Owl River or *Ôhó Sîpîy*. A possibility for this hypothesis would be in areas that were more important to the English and thus had English place name first which were then adopted by the Cree and translated into their language.

An additional issue surrounding this question is one that relates to the collaborators. Were some of the place names a result of people directly translating the English names on the maps into Cree? Maybe this is not the case, but could be an important issue to ponder. When I was conducting my research, this thought never even entered my head, but once I started to process and analyze the findings, this question plagued me.

4.4.3 Co-naming of Places

Another curious question that arose was the possibility of co-evolution of two cultures, the Cree and English. Could the correlation of Cree and English place name translations be due to years of contact between the two cultures so that they developed together? In this case, the development or evolution pertains to the fur trade since it influenced the way of life of the Cree and their use of the land in space and time. Many Cree adapted to the fur trade by working for the trade company which involved many different activities. These activities could then be used in the naming of places. Maybe when the Cree guided the 'white' company workers, they named places together.

The supporting examples for this hypothesis lie in those place names associated with fur trade depots, particularly the York Factory area, where the Cree and English had much contact and often worked together. Many of the place names are indirectly related, meaning the translations are not exact, but do contain parts that are similar. For example, Hay Island is an island in the Hayes River where hay or grass was cut to feed cattle and horses kept at York Factory. The Cree name, *Nôtâskosîwew Ministik*, translates as "the place where you make hay". In this case, the word "hay" is the part that connects the two names to an activity at York Factory. Another supporting example would be that of Fishing Island or *Pakitahwâw Ministik* which translates as "an island where fishing nets are set". During the operation of York Factory, there was a small fishery on this island. Knowing the activity of the island supports the "fishing" connection between the Cree and English place names.

4.4.4 Names with No Commonality

The final question pertains to those place names that show no connection between the Cree and English names. In this case, why do some places show no connection? After reviewing all the place names, the pattern that emerges reflects those areas that were of central importance to the Cree, especially major waterways, since they were significant travel routes used to access hunting and camp areas. This pattern is supported by the Cree name for the Hayes River, which is *Ápíhtisîpîy*. The English name takes the name of a former Hudson Bay Company employee while the Cree name comes from the color of water because it means "the river that is bruised". Another major river that supports the pattern is the Churchill River or *Mântewisîpîy* as called by the Cree. The Cree name means "a river of strangers" which has no relation to the English name. Other examples can be found in Tables 2, 3 and 4.

Chapter 5: Cree Knowledge of Landscape Terminology

"We, native people, have lived in our land since time immemorial. We know our lands, are experts in our environment. We do not study it for just a few years. It is a lifetime study. It is knowledge from the beginning passed on to us by our Ancestors. We have knowledge, true knowledge because it's our way of life."

Titi Kadluk, Chesterfield Inlet
(McDonald et al., 1997)

The Cree language is most easily characterized by the descriptiveness of the many words it possesses. Often, a single word in Cree can describe an activity or the appearance of something, whether animate or inanimate, which in English might take a whole sentence. For this reason, a single Cree word carries a large amount of meaningful information, reflective of a culture that once relied solely on oral tradition to pass on cultural knowledge. One such area of knowledge is that of the landscape with its many waterbodies, forest lands and land formation.

When dealing with the Cree language, there is a need to understand how the words achieve such a descriptive nature. To put it simply, many of the descriptive landscape terms are complex compound words, formed by joining several root words and making one word. In other words, the root words are the building blocks. Therefore, being able to identify and define the root words makes it easier to understand the meaning of and manner in which many landscape words are used. Of course, this is true for all Cree terms, not just those pertaining to landscape. For further explanations of the structure of the language, there are many books available that cover all aspects of the language. Some of these books are:

- Wolfart, H.C. and J.F. Carroll. 1981. *Meet Cree: a guide to the Cree language*. Edmonton: University of Alberta Press.
- Wolfart, H.C. 1973. *Meet Cree: a practical guide to the Cree language*. Edmonton: University of Alberta Press.
- Francis, T. 1987. *Learning to speak, read and write Cree*. Regina: Gabriel Dumont Institute of Native Studies and Applied Research.
- Anderson, A. 1998. *Let's Learn Cree*. Edmonton: Duval House Publishing: Metis Nation of Alberta.

Perhaps the best way to illustrate the descriptive nature of the Cree language is by writing about a conversation I had with Micheline Manseau, Boreal Ecologist for Parks Canada, and one of my advisors. The conversation started during a meeting we had in June while I was going over some of the Cree landscape terms that had been shared with me during my research. As I started explaining the definitions of some of the words, she realized how descriptive each word was. At that moment, she started talking about her recent trip to the Cree community of Grand Rapids, Manitoba, where some initial work was being done to establish a new National Park in the area. She went on to say that she now understood why the mayor of the community was somewhat upset at Parks Canada's classification of a large area of land as "muskeg". The mayor mentioned that the area was not just muskeg, but was much more diverse than that.

After seeing the various landscape terms and definitions I had recorded, Micheline could relate to what the mayor had been telling her. She realized the detail with which Cree words describe the land, from the texture of the ground to the physical appearance of the land, to how wet or dry the ground is, to the type of vegetation characteristic of a ground type. By grouping the various landscape types into "muskeg", injustice was being done to Cree knowledge of landscape, which is directly related to the dependence of the Cree people on the land. With the amount of time they spent on the land, the Cree people became intimate with the land, and developed extensive knowledge about the land. Ultimately, the knowledge cannot be separated from the way of life on the land.

How do the Cree perceive and describe the landscape? In an attempt to answer this question, I studied the words that are used by the Cree people to refer to the

landscape. Words were recorded that describe different land and ground types, different features of the land, different forest types, types of water bodies and many other elements that shape and define the land. In turn, each Cree term was translated into English to capture the descriptive detail of each term, making it possible to examine how the Cree characterize and look at the land. For example, Johnson (1999, p.120) has found the Gitskan people to make reference to “topography (mountain or lowland), water status (swamp or not swamp), and lack of trees (various words for meadow, slide area, or non-treed areas, including burned over areas)”, thus characterizing how different cultures name the landscape.

To make sense of the Cree landscape terminology, the terms were put into classes according to their descriptive detail or what the term is based on. It must be noted that these classes are my own interpretation and the Cree collaborators did not put the terms in these classes. The classes reflect the translation of the Cree terms into English. In this research project, the landscape terminology may be based on: (1) physical descriptions, (2) habitat descriptions, (3) activity descriptions and (4) land use descriptions.

5.1 Landscape and Physical Descriptions

Quite often, the words associated with landscape are nothing more than physical descriptions or the appearance of certain components of the land (Brice-Bennett, 1977). With the sense of sight playing such a huge role in familiarizing people with their environment, it seems natural to base landscape terms on their visual qualities. In fact, first impressions are important and are what people remember about other people and about things. For this reason, using physical appearance to establish working landscape terms is practical and provides descriptive information about the appearance of the land.

The Cree have terms for various landscape descriptions, including descriptions of trees, berries, land features and land or ground types. Within these terms, there are many examples that can be used to show the use of physical appearance as a method of describing the landscape.

5.1.1 Trees

With the use of trees for fuel, shelter and to build other things, it was important to recognize the difference between tree species, because some were better for certain uses. This reason for distinction, of which there are many more, made it necessary to develop terms for tree species. The easiest way to create terms was according to how the Cree people observed the trees. A few examples of tree terms that are based on physical appearance are as follows:



wâkinâkan

The Cree term means "the tree that bends". It is used in reference to the tamarack or larch because of the way the tree grows. The trunk is not straight but often bent, giving it a distinct physical appearance.



napakâsihtâkon

The Cree term means "flat or broad spruce". It is used in reference to the balsam fir tree due to its flat needles. The flat needles are the defining characteristic used by the Cree in naming the tree.

5.1.2 Berries

One of the food sources gathered by the Cree people, most often by the women, were berries. To the Cree diet, berries were the fruit of long ago and provided vital nutrition to the people. It was important for the people to be able to recognize the different berries, aside from knowing where they could be found. For easy recognition, some berries were identified and named according to their physical appearance or resemblance of something. For example,



otehimin(a)

The meaning of this Cree term is "heart berry". The Cree use the term to refer to the strawberry, because the fruit resembles the shape of a heart when it hangs from the plant.



sâpômin(a)

When this Cree term is translated it means "see through berry" and refers to the gooseberry. The name is given because when the berries are green, the pulp can be seen inside.



mîkominsa

This Cree term translates as "blood/red berry" and is used in reference to the soapberry or the buffalo berry. The Cree name originates from the dark or deep red colour of the berries.



anôskan(a)

This Cree term means "broad berry". It is used in reference to the raspberry due to the shape of the berry that is broad or wide rather than round like most berries.

5.1.3 Landscape Features

In a landscape that is generally flat, the many landscape features give character to the overall appearance of the landscape. They allow for diversity and represent the history of the area as to how they were formed. Through their creation, some features have developed unique appearances that are accounted for in many of the landscape terms used by the Cree. The Cree have used their perceptions of the different features to describe how they view the land.



(Photo courtesy of Lynda Dredge)

okîhcikami kê niskipepanik

This Cree term translates as "where the great body of water goes up and down or floods". It refers to the area called the tidal flats, since the tide regularly changes the water level.



(Photo courtesy of Lynda Dredge)

nakâmâwatinâw

The Cree term translates as "raised land that ends or does not go any further". The people use this word when talking about an esker, because that is how it appears on the land, it all of a sudden stops.



(Photo courtesy of Lynda Dredge)

kiskatinâw

Term translates as "a piece of land that is broken off or cut". It is used to refer to a steep bank, but can also be used in reference to a cliff. Term describes the appearance of something steep as being cut or broken.



(Photo courtesy of Lynda Dredge)

nikâwiskâw

This term means "a place with lots of sand". It is used to refer to a beach area with an abundance of sand. Sand is the first thing that is remembered about a beach, hence it is what the name is based on.



(Photo courtesy of Lynda Dredge)

wachîy

This term means "high or raised ground". In this area, the term refers to beach ridges as they appear as "mountains" (high ground), therefore making them quite noticeable over this rather flat landscape.



(Photo courtesy of Kevin Burke Jr.)

pîkwâscâw

The Cree term means "the ground is broken". It is used to refer to frost and thaw eroded soil or any ground cracks. Term is a direct description of the appearance of the ground and an important feature.



(Photo courtesy of Lynda Dredge)

nikâwâtawâkâw, nikâwâkâw
These terms both mean " a sandy piece of land that is broken off or cut". It is used in reference to a steep sand bank or sand cliff. This term is more specific to the type of bank than the previous term.

5.1.4 Land Cover Types

In addition to the more prominent landscape features, the general cover or composition of the rest of the land can be quite variable. The region is characterized by various land types and/or ground covers that are recognizable to people who travel on the land. With the extensive travel of the region by the Cree, it becomes apparent that they had specific terms by which to call the various land or ground types. Many of the terms were based on physical descriptions, texture and status of water or vegetation of the land. In this way, the Cree were able to make a direct connection with what they see and what they say. The Cree terms carry enough descriptive information in them for people to create a mental picture of what the land or ground looks like. A few examples of terms with this capability are:



(Photo courtesy of John Henderson)

maskosiskâw

This term translates as "the ground is covered by grass". From the picture you can see that the term is used when talking about an area where the ground cover is grass.



(Photo courtesy of Kevin Burke Jr.)

paskwawaskamik

Term means, "land where nothing grows or land that is desolate". The terms refer to the barren lands or tundra. It is not that nothing grows there, but it appears so due to low growing plants and the fact that there is no tall vegetation.



(Photo courtesy of Kevin Burke Jr.)

maskekwaskamik

This term means "land that is covered in moss", referring to what is often called a muskeg or a swamp. Moss is used as the defining characteristic of a muskeg, therefore is central to the Cree description of the land.



(Photo courtesy of Lynda Dredge)

wesâpiskitew

This term translates as "land where the ground is sort of black/burnt". It is used in reference to areas of peat where the soil has a brown or a "burnt" appearance.



(Photo courtesy of Lynda Dredge)

môstâskamik

This Cree term means "land that shows itself or is bare/naked". It is used to refer to areas of the ground that are bare or have no vegetation growing. All that is visible in these areas are either soil or rocks.



(Photo courtesy of Lynda Dredge)

asinîwaskamikâw

This Cree term means "land covered in rocks". It is used to refer to rocky ground. The name originates from the appearance of the many rocks sticking out of the ground.



(Photo courtesy of Lynda Dredge)

nipîwâscâw

This term when used by the Cree means an "area where the ground or land is wet". It is used to refer to wet ground in general, but is not used to directly refer to a swamp, bog or wetland.



(Photo courtesy of Lynda Dredge)

nipîwaskekâw

This Cree term means "land that is watery/swampy". It is used to refer to a swamp or an area where there is standing water for long periods of time, making the ground waterlogged.



(Photo courtesy of Lynda Dredge)



(Photo courtesy of Lynda Dredge)

âkwatâscâw

This Cree term means “land that is frozen”. It is used to refer to frozen land or, more specifically, the permafrost that exists under the upper layer of the soil. Permafrost is frozen, therefore it forms the basis of the term.

pâkwaskamik

This term means “land that is dry”. It can be used to refer to dry ground, as in the case of a drained pond. The soil appears dry therefore the term is based on this appearance.

5.2 Landscape and Habitat Descriptions

The landscape familiar to the Cree people involved in this project is very diverse and provides many different habitat types for the plant and animal species found on the land. Animal species may live in or frequent areas that have a certain forest type or ground cover type. Plant species may prefer certain soil types or variable moisture conditions, from dry to boggy to extremely wet. All in all, every species has found its place on the land according to what conditions it likes. With the close connection the Cree had with the land, it makes sense that they knew where certain species could be found in relation to their habitat. By using this acquired knowledge, the Cree were able to name various species according to where they lived or grew. This is evident in some of the landscape terms used for certain species, in this case plant species. After defining

the Cree terms, it can be shown that the terms are habitat descriptions or where the species can be found on the land. Here are a few examples to clarify and support this idea:



(Photo courtesy of Kevin Burke Jr.)

maskekosihtâkon

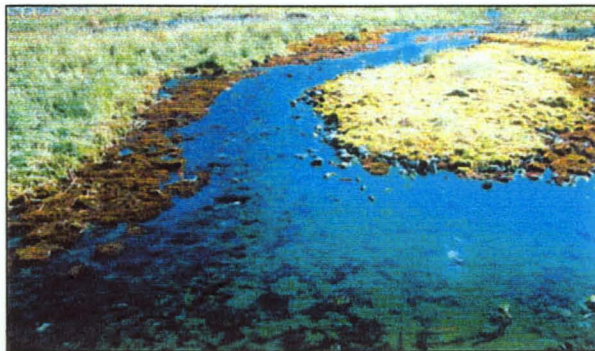
This is the Cree term for the black spruce tree. When translated, the term means "muskeg spruce tree", which is indicative of where the tree is commonly found growing. It prefers the conditions provided by the muskeg habitat.



(Photo courtesy of Lynda Dredge)

asinîwâkonak

The Cree use this term to refer to lichen. In this case, lichen are viewed by the Cree as "plants that grow on rocks". Although there are specific words for the many species of lichen, this term is used in a general sense.



maskek

This term is often used in reference to a muskeg, but it actually means "moss". Since moss is the most common species in a muskeg, both words are viewed as being one in the same.



maskekopâkwa

The 'true' Labrador tea, with large leaves, is the plant species referred to by this term. The Cree name the plant "muskeg tea" in relation to where it grows. The Cree primarily used it to make tea with.

5.3 Landscape and Activity Descriptions

In some instances, the landscape terminology developed and used by the Cree displays a link to certain activities. This means that the Cree terms are simply descriptions of activities from the Cree perspective. Most often, the activities are specific land use practices that reflect a subsistence lifestyle or living off the land, such as hunting, trapping and fishing. Although these terms do not necessarily deal with landscape, they do occur on the land and with the intimate relationship of the Cree with land, it is appropriate to include them. In addition, land use has left marks on the landscape and has, in some areas, produced a landscape that shows an influence by people. The following terms illustrate descriptions of certain activities:

wanîkewin

The first term means "working at something" and usually refers to trapping. The second term means "the act of setting traps" and directly refers to trapping. Either term can be used when talking about the activity of trapping.

nôcikinosewewin

This term literally means "working or bothering the fish". It refers to the activity of fishing of which there are different methods and techniques developed.

mâcîw

This term refers to the important activity of hunting. When translated it actually means " the act of hunting".

kapesowinikew

The activity described by this term is " to make or prepare place to get off and rest". It is used to talk about preparing camp, just as people do today when they go to a campground.

papâmôtewin

The definition of the term is " to walk around on land". Although the term refers to walking, in a much broader sense it is used to refer to travelling, since walking was the primary method of travel for the Cree.

wanikopikâwin

This term relates to a portage activity. The term means " packing something (goods) across land". In this case, the term refers to portaging goods or supplies and not canoes, as there is a different term for that.

5.4 Landscape and Human Use Descriptions

The land has always provided the Cree people with everything they needed, from food to shelter to travel routes. Over time, different uses of the land by the people have been developed and perfected, some leaving noticeable signs on the land, like trails and camp areas. Many of these uses are reflected in certain terms used to describe the landscape. However, while these terms seem to relate more to land use, they do refer to the landscape in an indirect way. The terms show how the people have used the landscape and have named it accordingly. In other words, another way of looking at or perceiving the land is presented. Examples of terms that support this view are as follows:

wanikop

This term refers to a portage trail as "a place for carrying canoes overland or across". Some of these portages are still evident on the landscape today and even marked on topographic maps.

meskanâw

The Cree use this term when they talk about distinct travel routes, since it means "a trail or road". Trail is used to talk about the walking trails of the past and road is used to talk about the roads and highways of today.

kapesiwin

This term describes certain places on the land as "a place to get off and rest", referring to campsites as commonly known. With the amount of travelling done by the Cree, these rest areas were numerous.

maskihkiwahtik

The direct translation of this term is "a medicine tree or plant" which is used to refer to herbs in general. The Cree used many herbs for medicinal purposes, whereby the term was created.

mihta

This term is used to refer directly to firewood, despite the term meaning "wood or logs". It describes one use of the trees on the land by the people.

mistikoskâw

The meaning of this term is "land covered with trees, timber, wood". It is used in reference to a burn-out area where the trees are ideal for dry firewood.

5.5 Landscape Terminology in Review

After viewing some of the landscape terms the Cree use when talking about land, it is easy for one to see the practical nature of the words. Practical in the sense that the terms tend to be based on descriptions of physical appearance, habitat preferences, human activities and land uses. In other words, the terms relate to the daily life of the Cree people, what they see and do everyday. Although the Cree terms are much lengthier than what most people are used to, the Cree version is much simpler and allows one to create a mental image of what the word is describing.

Table 5: List of Cree landscape terms and their definition (English translation); includes previous examples.

Cree Term	Syllabic Equivalent	Definition
âkwatâscâw	akwatascaw	"land that is frozen"
anôskan(a)	anoskan(a)	"broad berry", referring to the raspberry(ies)
âsâtî	asati	poplar tree
asinîwâkonak	asiniwakonak	"plants that grow on rocks", referring to lichen in general
asinîwâpiskâw	asiniwapiskaw	"rocks lying along the water's edge or close to"
asinîwaskamikâw	asiniwaskamikaw	"land covered in rocks"
asiskîwan	asiskiwani	"it is muddy"
asiskîy	asiskiy	piece of soil, dirt, mud, or the ground in general
askâhtik, kasiskâhtik	askatik, kasiskatik	"fresh or raw wood", referring to wood or trees that are green
askîy	askiy	"land", but refers to any scale from the earth to the land under your feet
inikâwâk	inikawak	"a sandy area" or "sandy land"
iskwâtokâkâk	iskwatokakak	"the end of the treeline"
ispâcâw, wachiwan	ispacaw, waciwan	"land that is high/ mountainous land", referring to an upland area
kâ isinâkwâk askîy	ka isinakwak askiy	"how the land looks"
kâ kanawenihcikâtek askîy	ka kanawenicikatek askiy	"land that is being put away or kept"
kâ kekaypâkwa	ka kekaypakwa	dwarf or narrow leafed Labrador tea, used for medicine
kâ mistikoskâk	ka mistikoskak	"it has lots of wood or trees/sticks"
kâ pihci tâwpeyak sâkâyikanîk	ka pici tawpeyak sakayikanik	"where a lake cuts into or opens up in the land", referring to an inlet

Cree Term	Syllabic Equivalent	Definition
kâ sâpostekwiyâk	ka sâpostekwiyak	"it flows or runs through", referring to the channel of a river
kâ wânipeyâsik	ka wânipeyasik	"a small body of water" (smaller than a lake)
kâ wâpaskamikâk	ka wâpaskamikak	"white or frosted moss", referring to reindeer moss
kânîpewaskamikâk	kanîpewaskamikak	"land always under water", referring to a wetland
kapâwin	kapawin	"a place to get off", referring to a camp
kapesiwin	kapesiwin	"to get off and rest"
kapesowinikew	kapesiwinikew	"to make or prepare a place to get off and rest"
kaskâweskanâw	kaskaweskanaw	"a trail made from one body of water to another", referring to a portage
kîhcikamîy, kîhcikamîw	kicikamiy, kicikamiw	"a great body of water", referring to the ocean or sea
kîskatinâw	kiskatinaw	"a piece of land that is broken off or cut", referring to an overhanging cliff or steep bank
kôtâwân	kotawan	"place to make a fire"
machîkewâsâtî	macikewasati	"disfigured or deformed poplar tree", referring to the black or balsam poplar
mâcîw	maciw	"the act of hunting"
manitômin(a)	manitomin(a)	"berry(ies) of God or of sacred power", referring to the black currant(s)
maskek	maskek	"moss", referring to a muskeg or moist area
maskekopâkwa	maskekopakwa	"muskeg tea", referring to true Labrador tea (larger leaves)
maskekosihtâkon	maskekositakon	"muskeg spruce", referring to the black spruce
maskekowaskîy	maskekwasikiy	"muskeg land" or "swampy land"
maskekwasamik	maskekwasamik	"land that is covered in moss"
maskihkiwahtik	maskikiwatik	"medicine tree or plant", referring to a herb in general
maskômin(a)	maskomin(a)	"bearberry(ies)"
maskosîskâw	maskosiskaw	"the ground is covered by grass"
maskosîwan	maskosiwan	"a place with grass"
maskosîya	maskosiya	"grass" (any type)
meskanâw	meskanaw	"trail or road"
mihta	mita	"wood or logs"
mîkominsa	mikominsa	"blood/red berries", referring to soapberries or buffalo berries
ministik	ministik	island
ministikwâpiskâw	ministikwapiskaw	"an island covered in rocks"
ministikwaskweyâw	ministikwaskweyaw	"an island covered in wood or clumps of bushes"
minoskamikaw	minoskamikaw	"land that is good"
mînsa	minsa	berries
misâskwatômin(a)	misaskwatomin(a)	saskatoon berry(ies)
mistik	mistik	"a tree, a stick, a log, wood, timber"
mistikôkan	mistikokan	a lopstick, used as a marker
mistikoskâw	mistikoskaw	"land covered with wood"

Cree Term	Syllabic Equivalent	Definition
môsomín(a)	mosomin(a)	"moose berry(ies)", referring to high bush cranberry(ies)
môstâskamik	mostaskamik	"land that shows itself or is bare", referring to bare ground
nakâmâwatinâw	nakamawatinaw	"raised land that ends or does not go any further", referring to an esker
napakâsihtâkon	napakakitakon	"flat or broad spruce tree", referring to the balsam fir
natimik	natimik	"the area upstream"
natimik sîpîk	natimik sipik	"up a river going inland or upstream"
neyak, neyâw	neyak, neyaw	"a point or head of land"
neyâpiskâw	neyapiskaw	"point of rocks advancing into the water"
nikâw	nikaw	sand
nikâwâtawâkâw, nikâwâkâw	nikawatawakaw, nikawakaw	"a sandy piece of land that is broken off or cut", referring to a steep sand bank
nikâwiskâw	nikawiskaw	"a place with lots of sand"
nîpisîkopâw	nipisikopaw	"a clump of willows"
nîpisîskâw	nipisiskaw	"willows abound" or "willowy"
nîpisîy(a)	nipisiy(a)	willow(s)
nîpîwan	nipiwan	"it is wet"
nîpîwâscâw	nipiwascaw	"area where the ground is wet"
nîpîwaskekâw	nipiwaskewaw	"watery, swampy land"
nîpîy	nipiy	water
niskimin(a)	niskimin(a)	blueberry(ies)
nôcikinosewewin	nocikinosewewin	"working at fishing"
nôcimihk	nocimik	"in the bush"
nôskâscâw	noskascaw	"it is soft land"
okîhcikami kâ niskipepanik	okicikami ka niskipepanik	"where the great body of water goes up and down or floods"
omâcîw	omaciw	"one who hunts"
opapâmôtew	opapamotew	"one who walks around on land"
opikowin	opikowin	"growing or living like a plant", referring to vegetation
osâscâw	osascaw	"a long raised piece of ground", referring to a ridge
oskâtâk	oskatak	jack pine
oskâtakâwan	oskatakawan	"a jack pine covered area", referring to a sandy area
otehimin(a)	otehimin(a)	"heart berry(ies)", referring to the strawberry(ies)
owanîkâyâw	owanikayaw	"one who traps"
pâkwâscâw	pakwasaw	"the ground or soil is dry"
pâkwaskamik	pakwaskamik	"land that is dry" or "an area of dry soil"
papâmôtewin	papamotewin	"to walk around on land"
paskestikweyâw	paskestikweyaw	"place where goes off the main river and splits", referring to fork in a river
paskwâw	paskwaw	"a bald, treeless space of land"
paskwawaskamik	paskwawaskamik	"land where nothing grows or land that is desolate", referring to the tundra
patotecîwan	patoteciwaw	"water that misses or does not follow the path"
pâwistik	pawistik	a rapids

Cree Term	Syllabic Equivalent	Definition
pikwâscâw	pikwascaw	"the ground is broken", referring to frost and thaw eroded soil
pipikwâscâw	pipikwascaw	"the ground is rough or bumpy", referring to rough and uneven ground
piskohkopâw	piskokopaw	"lump or clump of bushes"
piskowaskway	piskowaskway	"lump or clump of birch trees"
piskwapiskâw	piskwapiskaw	"a low rocky or sandy raised piece of ground near the water line", referring to a reef or sandbar
piskwâscâw	piskwascaw	"a swelling or lump in the ground"
piskwatinâw	piskwatinaw	"a land swelling", referring to a mound or a small hill
pîswecâw	piswecaw	"it is soft, spongy or loamy ground"
sakâw	sakaw	forest
sâkâyikan	sakayikan	lake
sâkayikanâpoy	sakayikanapoy	"lake water"
sâkayikanis, wânipîyâs	sakayikanis, wanipiyas	"a small lake"
sâkitawâk	sakitawak	"end of a river where it pushes the water through", referring to the mouth of a river
sâpômin(a)	sapomin(a)	"see through berries", referring to the gooseberry(ies)
sihtâkon	sitakon	spruce tree
sihtâkoniskâw	sitakoniskaw	"an area covered in spruce trees"
sîpâstik	sipastik	"a river which branches off, flows through a section of trees, and returns to the main river"
sîpîsis	sipisis	"small body of water flowing into a river" (usually beaver there)
sîpiwâpoy	sipiwapoy	"river water"
sîpîy	sipiy	river
sîpîy kâ pimcawâk	sipiy ka pimcowak	"what makes the river flow or travel", referring to a river current
sôkicîwan	sokiciwan	"it flows through fast", referring to a fast or strong flowing river
sôskoâsâtî	soskoasati	"slippery poplar tree", referring to the white poplar
tapâscâw	tapascaw	"land that is low"
taskamômeskanâs	taskamomeskanas	"a small walking path or trail that is shorter", referring to a shortcut path
tawâw	tawaw	"there is an opening or space"
tîkâscâw	tikascaw	"melted or thawed out ground"
wachîy	waciy	"raised land"; often used to refer to a hill, mountain, beach ridge or mound
wâkinâkan	wakinakan	"the tree that bends", referring to the tamarack
wâkinâkaniskâw	wakinakaniskaw	"land covered in tamarack trees" or "place where there are many tamaracks"
wânatawâkâw	wanatawakaw	"crooked bank", referring to a dented, sandy bank that looks wavy or crooked
wanîkeskanâw	wanikeskanaw	"a trapping path or trail", referring to a trapline
wanîkew	wanikew	"the act of setting traps"

Cree Term	Syllabic Equivalent	Definition
wanikewin	wanikewin	"working at something", usually refers to trapping
wanikop	wanikop	"a place for carrying canoes overland"
wanikopikâwin	wanikopikawin	"packing something (goods) across land"
wapâk	wapak	narrows of a river
wâpasihtakon	wapasitakon	"white spruce"
wâpaskweyâw	wapaskweyaw	"land that looks white" due to the color of trees (birch or white poplar)
wâsahikamâw, wâsahâk	wasayikamaw, wasak	"bay where the water is still", referring to a harbour
wasâw, wasâhâk	wasaw, wasahak	"where the land is around water", referring to a bay in general
waskway	waskway	birch bark tree
watî	wati	a hole or den
wâwâkamon	wawakamon	"a crooked or curved part of a river", referring to a meander
wesâpiskitew	wesapiskitew	"land where the ground is sort of black/burnt", referring to peat
wesâpôskitew	wesaposkitew	"an area where the trees have been burnt", but are still standing
wîsakîmin(a)	wisakimin(a)	"sour berries", referring to low bush cranberry(ies)

Chapter 6: Synthesis of Cree Knowledge and Landscape

"We, as aboriginal people, are part of the land and water...we recognize and respect the delicate balance of nature for the total existence of all living things including those we see physically, and those we don't. The Creator gave us that understanding and knowledge to visualize the harmonious relationships we have with our lands and water..."

Donald Saunders, York Landing
(McDonald et al., 1997)

Through documenting Cree knowledge, the richness of a group of peoples' knowledge can be illustrated and used to provide understanding that may be lacking in the world today. The knowledge of the Cree is extensive and covers many different areas of expertise, from science to history to geography. Cree knowledge is dynamic and constantly evolving with the life of the people. It is the relationship of the people with the land that allows for the potential of Cree knowledge to aid in the understanding of landscape.

With Western science always playing the dominant role in studies of the land and the environment, it is beneficial to seek out what is already known by other knowledge systems. By building on experiences and observations, the knowledge of the Cree accumulates and continually evolves (Berkes, 1999). This expertise held by the Cree can provide a different view of the landscape in terms of how it is perceived, described and named, ultimately leading to a clear and complete understanding of the land.

6.1 Cree Knowledge: High Use Areas and Local Scale Knowledge

Cree knowledge can provide a more detailed understanding of landscape, with respect to what it contains and how it all fits together. As knowledge is obtained at the local scale, it can provide specific information about a local area or region. This detailed information is based on observation and very descriptive, as it is derived from generations of reliance and experience on the land. It also stems from the advice often given by Cree elders who say, "you have to be observant about everything around you and you have to take time to know". In other words, by being observant and patient, the Cree have been able to make sense of their surroundings. It is this sense or awareness

that allows for the capacity of the Cree to explain landscape patterns and processes and how people interact with the surrounding environment.

With observations and experiences playing a key role in the accumulation of Cree knowledge, it can be expected that areas or regions that have been or are still intensively used by the people will have the most information known about them in terms of naming. Through extensive travel on land and water, primarily for subsistence purposes, the Cree people were able to familiarize and attach themselves to certain land areas. The Cree express attachment to a place through the accumulation of place names and meanings (Kaltenborn, 1998). This is evident in many of the place names obtained, especially in the York Factory area that was frequented by both the Cree and Hudson Bay Company employees alike (Figures 4 and 6). The concentration of place names in this area not only reflects heavy use, but each name contains valuable information about the history and culture of the Cree and reinforces their intimate link to the land.

Another example of the local knowledge reflecting high use areas is the Cree identification, naming and classification of plants according to the various categories and terminologies used in their culture. The name given to a particular plant species helps to communicate information about the plant to others in the society (Turner, 1995). Since the Cree used plants for food, medicine and materials, it was important for the people to know how to identify and locate the different species. Knowing where to find the different species of plants comes from knowledge of the land and the use of various resources provided by the land. The more the people used the land, the more they discovered and learned about it.

6.2 Cree Language and the Richness of Landscape: Examples of a Few Themes

The Cree view of the land is directly related to their understanding of the relationship of each species, feature, process and function to their daily life. In turn, the way people understand and relate to their surroundings is linked to their cultural background and view of the world. Just as scientists tend to view the land in terms of an ecosystem concept, the Cree have their own view. Although the Cree have no term for 'ecosystem', they do express the concept when they talk about landscape or land in general. All aspects of land are present in the knowledge of the Cree when they speak about landscape, including landscape structures, flows across the landscape and functions and processes that occur on the land.

Through the analysis of Cree landscape terminology, an understanding can be obtained about how the Cree view the land differently than scientists and others do. Typically, the landscape terms used by the Cree show richness in the number of terms used to describe certain land themes, such as rivers, and species and their habitat. Sometimes, the terms contain 'extra' information that is not revealed after defining or translating the Cree words into English. Information of this type can only be obtained with additional knowledge of the context the words are used in, which comes from talking to people and going out on the land.

6.2.1 Rivers

The richness of the Cree language can be shown in the many terms used to talk about rivers and their many parts and features. In Cree, the general term for river is *sîpîy*, but there are many more specific terms used to characterize the parts of a river, flow pattern of a river and areas of a river. With the role rivers played in the lives of the Cree,

as transportation corridors, as providing important places to camp and find food and as reference points when travelling, it was important for the Cree to know and be able to describe the characteristics of a river.

Perhaps the best way to characterize a river is according to the various terms the Cree use when they talk about a river. Different terms, as shared by the Cree, cover a range of characteristics as shown in Table 6. There are distinct Cree terms for the mouth of a river, the narrows of a river, a river meander, fork in a river and many more. In addition, there are terms that differentiate between the channel and current of a river as well as the source of a river. However, the Cree have their own way of defining these terms, distinct from the common English terminology and scientific terminology.

Table 6: Cree terms used to characterize the components of a river; includes the definition (English translation).

Cree Term	Definition
sîpîy	"a river"
sôkicîwan	"it flows through fast", referring to a fast or strong flowing river
kâ sâpostekwîyâk	"it flows or runs through", referring to the channel of a river
sîpîy kâ pimcawâk	"what makes the river flow or travel", referring to a river current
patotecîwan	"water that misses or does not follow the path"
pâwistik	"a rapids"
paskestikweyâw	"place where goes off the main river and splits", a fork in a river
sîpâstik	"a river which branches off, flows through a section of trees, and returns to the main river"
sâkitawâk	"end of a river where it pushes the water through", referring to the mouth of a river
wapâk	narrows of a river
wâwâkamon	"a crooked or curved part of a river", referring to a meander
natimik	the area upstream
sîpîsis	small body of water flowing into a river "usually beaver there", referring to a stream connecting a pond to a river

6.2.2 Species and Their Habitat

Another theme that can be used to exemplify the richness of the Cree language is that of species and their habitat, more specifically, areas covered with a certain tree species or a stand/thicket of trees. The Cree terms used to describe these tree covered areas can be seen in Table 7 along with their English translation. Reading through the table, the terms and their definitions may look straightforward, but what is missed is the 'extra' information provided by these terms. The 'extra' information is that the terms not only include the specific tree species but also include the habitat in which the species grows. In other words, the terms reveal the type of ground or substrate that supports the tree species. The translations do not reveal this information because it is something that comes with knowing where the tree species is commonly found growing. For this reason, it is essential to provide this 'extra' information in the definitions by referring to the common habitat of each tree species.

Table 7: Cree terms that contain 'extra' information about the habitat of a species; includes the definition (English translation).

Cree Term	Definition
nîpisîskâw	"area covered in willows or a willowy area", referring to a wet habitat like riverbanks
oskâtakâwan	"a jack pine covered area", referring to a sandy habitat
sihtâkoniskâw	"an area covered in spruce trees", referring to a moist, well-drained habitat like peat or gravel areas
wâkinâkaniskâw	"land covered in tamarack trees or a place where there are many tamaracks", referring to a tamarack fen or swamp

Once this additional or 'extra' information is known, the Cree term becomes even more meaningful in describing the landscape. Not only are different stands of trees described, but soil types are also described in an indirect manner. This way of describing

a species and its habitat shows the connection between the two, and that everything in an area plays a role in what grows there, what is found there, and what the area looks like. Since the trees are the first things a person would see when travelling on the land, it makes sense to use them in the naming, rather than having to determine the soil or ground type. In this way, easy travel routes could be determined by looking at the trees, from which the firmness or type of ground could be assessed from a distance. To aid in the recognition of these areas, here are a few pictures representative of these Cree terms:



(Photo courtesy of Lynda Dredge)

wâkinâkaniskâw

This term means "land or an area covered in tamarack trees", but also includes that habitat tamarack trees typically occupy. In this case, the habitat would be a fen or swamp.



(Photo courtesy of Lynda Dredge)

nîpisîskâw

In English, this Cree term means "an area covered in willows" or "a willowy area". In addition, the term includes the habitat of the willows, generally wet areas such as those along riverbanks and swamps.



(Photo courtesy of Lynda Dredge)

sihtâkoniskâw

This Cree term means "an area covered in spruce trees". The term also includes the habitat requirements of spruce trees in general, which is a moist, well-drained area like peat or gravel soil.



oskâtakâwan

This Cree term means "a jack pine covered area". In addition, the term includes the habitat requirements of the jack pine in general, which is usually a sandy area.

6.3 Cree Knowledge: Everything is Alive and Connected

Cree lifestyle is characterized by a strong holistic view of spirituality (Hill, 1993). At the centre of Cree lives is their belief in spirits, which exist in the form of human and non-human spirits, such as those of wildlife, plants and the earth in general. Evil spirits are believed to bring hunger, sickness and death, while helping spirits bring insight, bravery and success. This belief in spirits is the foundation for the worldview of the Cree which encompasses their morals, values and relationships between each other and the land (Simpson, 1999b). Spirits give meaning to the life of the Cree and are essential to the creation, accumulation and transmission of Cree knowledge and its evolution.

It is important, when discussing the traditional knowledge within the Cree culture, to consider the views that the Cree and most traditional cultures hold. The strong cultural base of the Cree makes their society dynamic, complex and intricate, and thus their views are grounded in a few principles that form the foundation for the generation, communication, transmission and characterization of Cree knowledge (Simpson, 1999b). However, a key consideration that must be remembered is the ever present spiritual

aspect, of living and non-living entities, possessed by the Cree. Spirituality is the underlying and most important value of the traditional knowledge of the Cree. What this statement refers to is the notion that spiritual entities, like plants and animals, can also distribute or share knowledge, as opposed to the belief that only people can pass on knowledge.

An important view of the Cree is the notion that everything is 'alive'; earth, air, fire and water have a life force, as well as all parts of the natural world and the cosmos. This sense of life can be felt in the way the Cree named places and characteristics of the land. Each Cree name or term is expressed in a manner that shows life, as if a person was describing another person. Although there are many examples, this feeling of 'life' needs to be felt as the definitions of the terms are read. In addition, each name or term reflects the idea that everything has a purpose in the world, therefore everything is treated as being 'alive' and all things are equal and related (Knudtson and Suzuki, 1992). It is this equality that makes it important for the Cree to show respect toward all things, especially to the land that has become their provider and partner since time immemorial and is therefore considered sacred.

Another important view of the Cree is that knowledge is cyclical, holistic and dependant on linkages, in the form of relationships and connections, with all that has life and spirit, meaning both living and non-living beings and entities (Colorado, 1988). In this view, everything is connected; therefore, good relationships must be formed so as not to harm anything or anyone. These connections and/or relationships are expressed in some of the place names and terms used by the Cree to describe the landscape. For example, a connection between water and land is shown in the Cree term that refers to

tidal flats or "where the great body of water goes up and down". Also, a connection between people and land is represented in such terms as *maskihkiwahtik* or herbs that are used by the Cree as "a medicine tree or plant". Place names can also show connections, like those between species and land, such as Ahasiw Ministik or Crow Island, which is frequented by flocks of crows either, roosting, nesting or feeding. Ultimately, there exists an important relationship between the Cree, the natural world and the spirit-world in which the Cree are the least important beings.

These basic views allow the Cree to possess a unique system of knowledge and a different way of understanding, perceiving and experiencing reality, the world and the land. They also help to understand or get a sense of what is at the core of Cree society and what molds their culture and everything associated with it. It must be realized that relationships and linkages are important and always present, when dealing with any aspect of Cree knowledge. Cree landscape terminology and place naming, reflecting traditional knowledge and understanding, includes spiritual components which are of utmost importance. This terminology cannot be used outside of its cultural context without creating problems of misunderstanding, misinterpretation and misuse (Inkpen, 1999).

Chapter 7: Contributions of Cree Knowledge to Understanding Landscape

"Since time immemorial, the natives were put here ... to take care of the land. Our grandfathers did not abuse the land and it's our turn to pass our knowledge on to our younger generation. What our forefathers kept all this time is very precious. It's now in our hands. Our Creator has given us the responsibility for taking very good care of what we have. If we don't take care of it we will lose our own culture one day."

John Petagumskum, Whapmagoostui
(McDonald et al., 1997)

7.1 Richness of Cree Knowledge

Cree knowledge is so rich that it is all encompassing in all aspects of life and the environment. For this reason, Cree knowledge is catching the attention of those who want to learn and gain a better understanding of the land and its resources. For many, Cree knowledge is used to provide an alternate view of the environment, as opposed to a purely scientific view. However, the knowledge is rich enough to enable people to obtain information about all sorts of topics. It is just a matter of working with communities and individuals willing to share this information. The knowledge is available, but needs to be learned by devoting time and showing a great deal of respect for the culture and to those who hold the knowledge.

The richness of Cree knowledge has been illustrated only in part through this documentation of local place names and Cree landscape terms with the use of photos to help identify and visualize the meaning and origin of the terms. Although this is just one area covered by Cree knowledge, it contains a great deal of information and shows the richness of the Cree language. At the same time it is important to compile this specialized terminology since such words and terms are slowly being lost.

7.2 Cree Knowledge within Communities

Cree knowledge is a way of life, based on the experience of the individual and of the community, as well as knowledge passed down from elders and incorporated in the Cree language. In this way, the knowledge can constantly evolve by being adapted to the changing environment of each community. As long as the use of the land, water and its resources are protected, and people still use the land, water and resources, this knowledge will remain current and continue to exist. Unfortunately, many of the elders who grew up living on the land are passing away, and with them their knowledge of the land and of the traditions of their people. Therefore, it is essential to build this knowledge within communities, to promote its transmission to the youth of today. Otherwise, the knowledge and many of the traditions will be lost, and the Cree people will be left without the benefit of their irreplaceable heritage.

7.2.1 Building within

Cree knowledge is held by individuals in communities and also collectively by the communities. Therefore, it is essential that this knowledge remain with the communities and be strengthened. The process of building back the knowledge would be complex and would require the restoration, development and documentation of Cree ways of life and culture. However, mere documentation cannot build the knowledge of communities because knowledge also contains a spiritual element and an element of learning-by-doing (Berkes, 1999; Inkpen, 1999). Attachment to the land is important in order to preserve and build the knowledge base.

Within communities, ways of communicating and transmitting the knowledge need to be encouraged to make the knowledge locally available to all ages. This needs to

start at home by encouraging children to participate in activities and stories that are part of their culture. Exchanges between adults/elders and children are vital to the building process and can occur in many other ways, aside from the home setting. Communities could arrange for camps in important resource areas where the focus would be on elders passing on knowledge to the youth. Camps could also be held in the communities with different topics being discussed each time. For example, one camp could be on storytelling, another crafts, another food preparation or another language. Hunters and trappers could also take youth out on the land to give some "hands on" experience. In all these settings, the Cree language could be promoted since it is an important part of culture.

7.2.2 Use and Sharing of Knowledge

Cree knowledge needs to be used and shared by communities in order to preserve it. The holders, users and recipients of Cree knowledge must respect each other and the culture, if this knowledge is to have any relevance. More importantly, the knowledge shared should be developed and maintained in a context that supports the expression of peoples' views and their interactions with the land (Johnson, 1992).

To promote the use of Cree knowledge in communities, activities need to be planned on a family and community basis. This means promoting those activities that will pass on the knowledge of the culture, like fishing, hunting, trapping, and arts and crafts. Cree knowledge should also be incorporated into the schools through the use of various tools and methods. First and foremost, Cree language programs should be introduced along with programs on Cree culture and history. Inviting elders to the schools to share their knowledge with the students could complement these programs. In

addition, the schools could organize certain weekend land-based education programs as part of course requirements, and to get students participating in activities that involve the use of Cree knowledge. Also, schools should encourage and accommodate, to some extent, traditional seasonal activities, such as spring and fall goose hunts.

In addition to school activities for the youth, education could be extended to the community at large by getting them involved in consultations and organizations. For example, artifacts with connections to certain regions and groups of people should be kept in the area for historical purposes. This could tie in with a community person in charge of cultural resources who would get help from the elders. At the community level, it is important for the local people to take pride in the knowledge they possess by being involved in, and even taking the initiative in, research projects that involve the documentation of their knowledge or use of their knowledge.

Although there is a great deal of Cree knowledge available, very little has been learned, which leaves a great deal more to be learned and captured. Documenting and preserving the knowledge and its use at the community level is key in keeping it alive for future generations. Incorporating the knowledge into the education systems is a big step toward its preservation and revitalization, but this incorporation is not a substitute for personal experience and learning from the elders.

7.3 Overall Impression

After reading through many oral ethnohistories and talking with many of the elders, I felt quite sad. I guess I was sad to know that some of these elders have already passed on, which leaves only a few remaining. Their stories are always so interesting and they give me a sense of how independent and free they were back then. Times changed rapidly and drastically for them. I cannot believe their livelihoods were taken away from them. Many of the elders commented on the move to the inland communities after York Factory closed and how they did not want to go.

What affected me even more is the fact that hardly any of the younger generation knows the Cree language, therefore they have difficulty communicating with and understanding their elders. The elders have such wisdom and so many stories to share...this is what I enjoy and miss now that I live in the city...Winnipeg just is not the same. I must say that I have thoroughly enjoyed talking and visiting with the many people that shared in this work. It became an enjoyable learning experience for myself, definitely one I will not forget.

References

- Ames, Randy. Land Use in the Postville Region. In: *Our Footprints are Everywhere: Inuit Land Use and Occupancy in Labrador* (Carol Brice-Bennett, A. Cooke and N. Davis, eds.). Labrador Inuit Association, pp. 205-235.
- Assembly of First Nations and the Inuit Circumpolar Conference. 1994. A preliminary research prospectus. In: *Traditional Ecological Knowledge and Modern Environmental Assessment* (B. Sadler and P. Boothroyd, eds.). Vancouver: University of British Columbia, pp. 61-68.
- Beardy, F. and R. Coutts. 1996. *Voices From Hudson Bay: Cree Stories from York Factory*. Montreal & Kingston, London, Buffalo: McGill-Queen's University Press.
- Berkes, F. 1994. Co-management: bridging the two solitudes. *Northern Perspectives* 22(2-3): 18-20.
- Berkes, F. 1999. *Sacred Ecology, Traditional Ecological Knowledge and Resource Management*. Philadelphia: Taylor & Francis.
- Brice-Bennett, C. 1977. Land use in the Nain and Hopedale regions. In: *Our Footprints are Everywhere: Inuit Land Use and Occupancy in Labrador* (Carol Brice-Bennett, A. Cooke and N. Davis, eds.). Labrador Inuit Association, pp. 97-203.
- Carroll, P. 1998. Cultural Resources of Wapusk National Park: A Background Report. Parks Canada Western Canada Service Centre.
- Carroll, P. 2000. *Wapusk National Park: A Land Use History*. Parks Canada Western Canada Service Centre.
- Dene Cultural Institute. 1994. Guidelines for the conduct of participatory community research. In: *A Background Paper on Traditional Ecological Knowledge and Modern Environmental Assessment* (B. Sadler, and P. Boothroyd, eds.). University of British Columbia: CEAA and the International Association for Impact Assessment.
- Dredge, L.A. 1992. *Field Guide to the Churchill Region, Manitoba*. Geological Survey of Canada Miscellaneous Report 53.
- Dredge, L.A. and Nixon, F.M. 1992. *Glacial and Environmental Geology of Northeastern Manitoba*. Geological Survey of Canada Memoir 432.

- Fast, H.B. 1996. *Subsistence in the Hudson Bay Bioregion: Land Use, Economy and Ethos*. PhD thesis, Natural Resources Institute. University of Manitoba. Winnipeg
- Freeman, M.M.R. 1992. The nature and utility of traditional ecological knowledge. *Northern Perspectives* 20(1): 9-12.
- Gadgil, M., Berkes, F. and C. Folke. 1993. Indigenous Knowledge for Biodiversity Conservation. *Ambio* 22 (2-3): 151-156.
- Gottesfeld, L.M. 1994. Conservation, territory and traditional beliefs: an analysis of Gitksan and Wet'suwet'en subsistence, northwestern British Columbia, Canada. *Human Ecology* 22(4): 443-465.
- Hellier, A., Newton, A.C. and S. Ochoa Gaona. 1999. Use of indigenous knowledge for rapidly assessing trends in biodiversity: a case study from Chiapas, Mexico. *Biodiversity and Conservation* 8: 869-889.
- Hill, S. 1993. *Fox Lake Band Land Use and Occupancy*. Masters thesis, Natural Resources Institute. University of Manitoba. Winnipeg.
- Hrenchuk, C. 1991. *South Indian Lake Land Use and Occupancy*. Masters thesis, Natural Resources Institute. University of Manitoba. Winnipeg.
- Huntington, H. P. 1998. Observations on the utility of the semi-directive interview for documenting traditional ecological knowledge. *Arctic* 51(3): 237-242.
- Inkpen, T. 1999. *Healthy People, Healthy World: Preserving Aspects of Traditional Knowledge and Improving its Application to Environmental Assessment*. Masters thesis, Natural Resources Institute. University of Manitoba. Winnipeg.
- Jefferies, R.L. 1977. The vegetation of salt marshes at some coastal sites in Arctic North America. *Journal of Ecology* 65: 661-672.
- Johnson, L.M. 1999. Ethnobotanical research in northwest British Columbia: collaboration with the Gitksan and Wet'suwet'en. In: *Securing Northern Futures: Developing Research Partners* (M.M.R. Freeman, P.A. McCormack, M. Payne, E.E. Wein, and R.W. Wein, eds.). University of Alberta: Canadian Circumpolar Institute Press, pp. 115-125.
- Johnson, M., editor. 1992. *Lore: Capturing Traditional Environmental Knowledge*. Yellowknife: Dene Cultural Institute and IDRC.
- Kaltenborn, B.P. 1998. Effects of sense of place on responses to environmental impacts. *Applied Geography* 18(2): 169-189.

- LeClaire, N. and G. Cardinal. 1998. *Alberta Elders' Cree Dictionary*. Edmonton: The University of Alberta Press and Duval House Publishing.
- McDonald, M., Arragutainaq, L., and Z. Novalinga, editors. 1997. *Voices from the Bay: Traditional Ecological Knowledge of Inuit and Cree in the Hudson Bay Bioregion*. Ottawa: CARC and Municipality of Sanikiluaq.
- MKO (Manitoba Keewatinowi Okimakanak). 1994. *Parks Canada Churchill National Park Proposal and Traditional Land Uses of the MKO First Nation Communities*. MKO Natural Resources Secretariat in cooperation with Parks Canada: Thompson.
- Morton, A.S. 1973. *A History of the Canadian West to 1870-1871*. Toronto: University of Toronto Press, 2nd Edition.
- Müller-Wille, L. 1987. *Gazetteer of Inuit Place Names in Nunavik (Quebec, Canada)*. Inukjuak: Avataq Cultural Institute.
- Ohmagari, K. 1996. *Social Change and Transmission of Knowledge and Bush Skills Among Ohmuskegowuk Cree Women*. PhD thesis, Department of Anthropology. University of Manitoba. Winnipeg.
- Ohmagari, K. and F. Berkes. 1997. Transmission of indigenous knowledge and bush skills among the Western James Bay Cree women of subarctic Canada. *Human Ecology* 25(2): 197-222.
- Parks Canada. 1994. *Parks Canada – Guiding Principles and Operational Policies*. Minister of Supply and Services Canada.
- Parks Canada. 2000. *Background information to the Wapusk Ecological Integrity Statement*. Western Canada Service Centre, Winnipeg, Manitoba.
- Payne, M. 1989. *The Most Respectable Place in the Territory: Everyday Life in the Hudson's Bay Company Service, York Factory: 1788-1870*. Studies in Archaeology, Architecture and History. Ottawa: National Historic Parks and Sites.
- Riedlinger, D. 2001. *Community-Based Assessments of Change: Contributions of Inuvialuit Knowledge to Understanding Climate Change in the Canadian Arctic*. Masters thesis, Natural Resources Institute. University of Manitoba. Winnipeg.
- Riedlinger, D. and F. Berkes. 2001. Contributions of traditional knowledge to understanding climate change in the Canadian Arctic. *Polar Record* 37(203): 315-328.

- Scott, P. 1998. A Conceptual Model for the Wapusk National Park Ecosystem. Parks Canada.
- Simpson, L. 1999a. Anishinaabe Ways of Knowing. In: *Aboriginal Health, Identity and Resources* (J. Oakes, R. Riewe, S. Koolage, L. Simpson and N. Schuster, eds.). Winnipeg: University of Manitoba, pp. 165-185.
- Simpson, L. 1999b. Indigenous Knowledge and Western Science: towards new relationships for change. In: *Aboriginal Health, Identity and Resources* (J. Oakes, R. Riewe, S. Koolage, L. Simpson and N. Schuster, eds.). Winnipeg: University of Manitoba, pp. 186-195.
- Tough, F. 1996. *'As Their Natural Resources Fail': Native Peoples and the Economic History of Northern Manitoba, 1870-1930*. Vancouver: UBC Press.
- Turner, Nancy J. 1995. Ethnobotany today in Northwestern North America. In: *Ethnobotany: Evolution of a Discipline* (R.E. Schultes and Siri von Reis, eds.). Dioscorides Press, pp. 264-283.
- Wissink, H.R. 1993. North Baffin: Co-management of a Canadian National Park within Nunavut. Practicum submitted to the University of Cambridge: Scott Polar Research Institute.