CONTEMPORARY AND TRADITIONAL VALUES OF A LANDLESS
CREE FIRST NATION IN NORTHERN ONTARIO

by

KYLE EDWARD BATESON

B.Sc., The University of British Columbia, 2006

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF SCIENCE

in

THE FACULTY OF GRADUATE STUDIES

(Forestry)

THE UNIVERSITY OF BRITISH COLUMBIA

(Vancouver)

February 2009

Abstract

It is a commonly held notion among many Aboriginal people that one's worldview, knowledge, values and identity are shaped through the connection one has with the physical and spiritual components of their traditional territory; the land and waters, the beings which occupy these places and one's ancestors. For the members of Missanabie Cree First Nation, the connection with their traditional territory was disrupted as a result of the failure of the Crown to set aside land in the treaty process in the early 20th Century. Through a review of literature on the Cree of Northern Ontario and Quebec, this thesis answers questions raised by the community concerning their ancestors' traditional resource management methods, and the kinship roles associated with these methods. Q-method is used to determine the current day values the members hold regarding the land and waters in and around Missanabie. Knowledge of these values, where members agree and disagree, can assist leadership in making decisions about how to proceed in the reestablishment of a viable Aboriginal community within the traditional territory. From the Q-method, three factors which represent the members values emerged; Cultural and Spiritual Values, Economic and Conservation Values, and Community Infrastructure Values. The factors demonstrate that the First Nation holds a mix of traditional and contemporary values with differences appearing in how each factor describes members' connection to the land and the desires of what members want the land to provide. To move forward in their journey toward reestablishment on their traditional lands, compromises and accommodations within the community need to be reached, and can best be achieved through comprehensive land management planning.

Table of Contents

List of Tables

List of Figures

Acknowledgements

I would like to acknowledge all the members of Missanabie Cree First Nation for their support and participation in this project. I would also like to acknowledge the community advisory committee; Louise Campbell, D'Arcy Fletcher, Jackie Fletcher, JoAnn Pezzo, Kim Rainville, Isabell Souliere, and Gloria Wesley who volunteered their time to assist and lend their insight into the project over the two years.

I thank my academic committee of Dr. Charles Menzies and Dr. Michael Meitner for their assistance and my supervisor Dr. Ronald Trosper for his guidance and support throughout the process.

This project was also made possible by the in kind contributions of Missanabie Cree First Nation and funding from the Social Sciences Research Council of Canada (SSHRC).

Finally, a special thanks to my partner Deirdre and my parents Audrey and Walter for their support, encouragement and most importantly their patience.

1 Introduction

1.1 Worldview, Traditional Knowledge and Assessing Values

This research deals with the forest values of a First Nation in Northern Ontario, the Missanabie Cree First Nation. Missanabie Cree First Nation is an Aboriginal community without title to land recognized under Canadian Law. It is a commonly held notion that Aboriginal communities rely on the land for their continued existence; culturally, spiritually and economically. Therefore, to understand the magnitude of the statement - Missanabie Cree is an Aboriginal Community without official title to land in their traditional territory – a brief description of commonalities among Aboriginal worldviews, and a look at what Aboriginal traditional values and knowledge are is required. It is also important to acknowledge how Aboriginal values and knowledge may have been influenced through outside agencies, and note how Aboriginal values have been studied up to this point.

1.1.1 Worldview

Many agree that an Aboriginal person's worldview is directly related to their surrounding environment and their connection to land and spirit. Such a connection defines their identity and epistemology. In many Aboriginal worldviews, there is no separation between the spiritual and the physical, encompassing all aspects of the landscape in which they live (Smith 1998, Salmon 2000, Ingold 2000).

Martin (2003), talks about the worldview of the Quandamooka of the mid east coast islands of Australia known as the people of the sand and salt water. She describes the

importance the movement of tidal waters and winds have for her people, and the equal standing that all elements have. The Land, People, Waterways, Animals, Plants, Skies and Spirits all live in close relations with one another and no one entity is raised above another.

The Māori of New Zealand embrace a concept of whakapapa which relates people to all other things in the world; fish, trees, insects, and stones, the outer universe and to the beginning of time. Tapu is a concept of sacredness that applies on one level to everything in the Māori world. Since everything has whakapapa and can be linked back to a particular atua or spiritual being that has a level of tapu and is respected as such (Mead 2003, Smith Tuhiwai 2000).

The Nuu-chah-nulth people, on the west coast of Vancouver Island, have a term, *Hishuk ish tsawak*, meaning everything is one and all is interconnected. Atleo (2004) describes this term as meaning more than just the unity of the physical universe. He states it is a perspective that is inclusive of all reality, physical and metaphysical. Incorporating this concept into their everyday lives "contributes to a lifestyle that recognizes the need to respect the earth" and has allowed the Nuu-chah-nulth to "manage their lives and communities for millennia".

The Cree of Northern Ontario hold a relational ontology similar to other Aboriginal worldviews. The Cree view their place in the world and their relationship with animals, plants, weather, landforms and spirits through the "bonds of kinship". They are bound together through all things "capacity for consciousness and inherent social worth" (Knudtson and Suzuki 1992). In Ontario, the Cree are a hunting people that rely on the resources of the boreal forest for their survival. In his book, *Sacred Ecology*, Berkes

(1999), describes the Cree ecocentric worldview through the human / animal relationship. The Cree believe that when hunting, a person is obligated to respect an animal to ensure a good hunt, and that the hunter's obligations to the animal are connected to social obligations. He asserts that Cree social values apply to human / animal relations in the same way they do to human / human social relations. The Cree dwell in an environment which hosts both the natural and supernatural, where animals know as much as humans and that fact is communicated between human and animal (Ingold 2000, Berkes 1999).

Ian Davidson-Hunt and Fikret Berkes (2003), from their work with an Anishinaabe First Nation in Northern Ontario investigating adaptive learning and social ecological resilience, attribute the process of learning in Anishinaabe communities to the worldview they hold. They describe learning as being part of a social-ecological system in which knowledge and social memory are developed and maintained through "a web of relationships of people and places". Knowledge resides in the land and is revealed to the person that journeys continuously and frequently throughout the land. "An individual is expected to learn through participation in experiences on the land and under the guidance of a knowledgeable person while engaging in collective experiences" (Davidson-Hunt and Berkes 2003). Memory is said to be embedded in the land and in the observation of changes and transitions of landmarks and events within a territory. The history of the land, how a place looks, what is found there, what has occurred there, come together to form knowledge and memory of place which can be passed between people through storytelling, ceremony, teachings, language, and in the daily practice of being out in the land (Davidson-Hunt and Berkes 2003).

The example of the various Indigenous worldviews presented in this introduction was not at all intended to insinuate that all Aboriginal worldviews are the same. The way people view the world around them, and their place in it, is influenced by their location on this earth. The diversity of regions where Aboriginal people are found, results in a distinct variation in beliefs and expression of worldviews (Pierotti and Wildcat 2000). Although distinct there are strong commonalities that exist among them. For instance, what was shown in the examples presented here is that these Aboriginal people, although from very different regions in the world, view themselves not as being separated from their environment, but as living within it or among it. It is from this ecocentric cosmology that Aboriginal traditional values and knowledge can be said to unfold (Smith 1998, Ingold 2000, Parsons and Prest 2003, Nakashima and Roué 2002).

1.1.2 Traditional Knowledge

The shared experiences, customs, values, spiritual beliefs and traditions unique to the people in an Aboriginal community, and the knowledge acquired by the people through these cultural factors is commonly referred to as traditional Aboriginal knowledge. In terms of natural resource management, traditional knowledge is generally known as traditional ecological knowledge (TEK). Traditional ecological knowledge stems from Aboriginal peoples' knowledge of the resources distribution and processes within their particular geographical area (Berkes 1999). A working definition of TEK that seems to have gained recognition with academics is defined as: "a cumulative body of knowledge and beliefs, evolving by adaptive processes, and handed down through generations by cultural transmission" (Berkes 1999, p. 8). It is the respected Elders, the knowledge keepers in an Aboriginal society, who normally reinforce the worldviews and pass on

wisdom from their ancestors and life experiences to younger generations (Parsons and Prest 2003). A level of balance in all aspects of their being is passed along with this knowledge and seen to be of great importance and practical value (Kenny et al. 2004).

The acknowledgement and recognition of the value of Aboriginal traditional ecological knowledge by the dominant society can be credited in part by the pursuit of various Indigenous rights by Aboriginal communities in the realm of resource management, and the recognition of those rights by Government agencies (Stevenson 1996). It is believed that the use of traditional ecological knowledge in the development of forestry management plans, environmental assessments, or climate change models may be a significant source of information for policy development (Parsons and Prest 2003, Stevenson 1996, Cohen 1997).

It should be pointed out that, although researchers may acknowledge that traditional knowledge is a valuable "body of knowledge and beliefs," they have difficulty incorporating all aspects of it into their work. Berkes et al.(2000) reinforce this by stating that they intentionally omitted the "belief or spiritual component" of traditional knowledge in one of their works, because that part of traditional knowledge "lay outside the realm of ecology". For traditional knowledge to have real benefits in natural resource planning mechanisms, the separation or distinction of ecological knowledge from the entirety of traditional knowledge should be seen as problematic (Turner et al. 2000). In separating the ecology from the rest of the components of traditional knowledge, the spiritual and social aspects, a person would miss the complex entirety of such a worldview (Stevenson 1996).

Debates surrounding the labeling of TEK are ongoing among academics. Some view the term 'traditional' as denoting the knowledge to be simple and stuck in the past times (Berkes et al. 2000, Warren 1995). Others have a problem with using the term ecological because ecology tends to assume a separation between man and nature. Perhaps the term Indigenous knowledge would be better suited for describing the shared experiences, customs, values, spiritual beliefs and traditions unique to the people in an Aboriginal community. It is a term being more widely accepted in academic circles (Nakashima and Roué 2002, Stevenson 1996, Warrren 1995). Indigenous knowledge, according to Stevenson (1996), is the combination of traditional knowledge and non-traditional knowledge. Such a definition allows for the inclusion of the social beliefs, spiritual aspects and past knowledges of an Indigenous worldview to be combined with the vast amounts of outside knowledge that Aboriginal people have acquired over time through their interactions with non-aboriginal institutions and technologies. The combination and balance of these components of Indigenous knowledge in the development of contemporary Aboriginal values should not be dismissed.

1.1.3 Assessing Values

A value as a stand-alone concept is most difficult to define. Values can be categorized into various groupings, individual, moral, ethical, historical, and on and on. The categories in which a person places particular values can be debated indefinitely. Values are associated with ideas and experiences, worldview, culture, location, age, and a person's sex (Adamowicz et al. 1998). There is no reason to believe that all Aboriginal people share the same value system, but, there are, as in Aboriginal worldviews, similarities. In Bengston's (2004) analysis of Aboriginal perspectives on natural resource

management, he discovered that spiritual values, values on environmental justice, economic values, subsistence values, and land sovereignty values were all common values held among Aboriginal communities.

When addressing values of Aboriginal communities, it is vital to recognize what influences may have been imposed on the development of those values. Aboriginal people in this country have been affected by many outside agencies that have no doubt affected the development of values. The following is a quote from a symposium on the traditional strengths of Dene which addresses this:

> " Fifty years ago in Canada, large numbers of indigenous young people were taken from their local and family settings and placed in boarding schools, frequently run by various churches in the name of a "civilizing" process. As a result, there have been significant dislocations of tradition, including language and cultural practices…While the older generation may have lived in traditional ways out on the land and dependent on natural resources, the younger generation may have learned about these traditions and their meanings only as adults, often after significant negative experiences of family dysfunction and substance abuse" (From Uncle Gabe's Friendship Centre as in Adamowicz, 1998*)*

In Cree communities, children were also taken from their homes and placed into a society that was foreign to them. While away from home, they developed values that are not compatible with traditional Cree life. After returning to their homes, they had neither the skills nor the attitude required for life on the land (Ohmagari and Berkes 1997).

An illustration presented by Berkes et al.(2000) demonstrates how entwined knowledge of the land, management of the land, social values and worldview are in Aboriginal communities. The illustration consists of four ellipses beginning with one in the centre and the other three expanding outward in separate rings or orbits around the center. Each ellipse representing one of the four categories mentioned above. Nested in

the centre and working outwards is Local Knowledge of Animals, Land and Resource Management Systems, Social Institutions and Worldview.

Berkes illustration reinforces how crucial land is for Aboriginal peoples' cultural development, and how any disconnect among these four areas would have negative implications on the development of social values and indigenous knowledge. The loss of traditional knowledge, spiritual and cultural values is a concern among many Aboriginal communities (Ohmagari and Berkes 1997).

1.2 Research Questions and Rationale

To date there has been no all-inclusive and comprehensive evaluation of Missanabie Cree First Nation members' values towards the lands within their traditional territory. As part of the process of re-connecting to the land and establishing a viable Aboriginal community within their traditional territory, the First Nation needs to plan its economic development and environmental policy with guidance from knowledge of the values and attitudes of its membership. With such knowledge, leaders can forge compromises and policies that suit the desires of the membership.

I intend to explore how the contrast of values that the community members hold may interact in the re-establishment of a viable Aboriginal community in Missanabie and if individuals feel they have a role in the re-establishment of a community with formal title to the land awarded in a claims process. I would also like to look into what people's connection to the region is and how the mix of community values may impact development and partnerships with government and industry.

In meeting with the Chief and Council of Missanabie Cree to discuss my research, they identified the following two questions they would like to have explored, in addition to the collection of the members land values:

1. How much of a role did hunting, fishing, trapping,- the gathering and sharing of various forest resources- play in the social interactions among and between different families and Northern Cree community structure? (How were families linked through resource consumption and management?)

2. How did Northern Cree traditional harvesting methods ensure a continued source of resources for future years? What were the roles and level of influence of the individuals (Women, Men, and Children) on decision making?

The third question is more specifically related to my area of interest and, therefore, is the area where the research will primarily focus. It should be kept in mind, however, that the questions of interest are related; the answers to the first two influence the third.

3. What does the land / forest mean to the people of Missanabie Cree First Nation, what do they want it to provide, and what connection, if any, do the individuals have to the Missanabie area?

Looking back on the description of Berkes' illustration, the center of which is 'knowledge of land', Worldview, indigenous knowledge, the transfer of that knowledge, and cultural values, all have land at the core of their development. Without formal title to a land base in their traditional territory Missanabie Cree First Nation is an Aboriginal community with a major disconnect from what is 'needed' to develop indigenous

knowledge and pass it on across generations. The importance of the statement that I made earlier in the introduction, Missanabie Cree First Nation is an Aboriginal community without formal title to a land base, should now be clear. After such a review, it should be evident that Missanabie Cree is a unique community that may not easily fit into conventional models of Aboriginal thought and pedagogy.

Out of a necessity for survival, the Missanabie Cree community members dispersed from the region to cities across Canada and into the United States. Many members of the last few generations of Missanabie Cree have grown up in an urban setting, where their only opportunity to return to their traditional lands began in 1992. For one week in the month of August, Missanabie Cree members are invited to attend a community annual gathering at Island View Lodge, the fishing camp owned by the First Nation. There are some in the community who hold traditional knowledge and are willing to pass on their wisdom and experience; however, an absence of access to land within their traditional territory creates a lack of opportunity. Some Missanabie community members reach out to urban Aboriginal communities and other First Nations for guidance, which may lead to an amalgamation of Aboriginal identity, knowledge, and worldview. Unlike other urban Aboriginal people who may have family and friends from their home communities to whom they can reach out, Missanabie Cree members are not as fortunate.

A great deal of research undertaken in Aboriginal communities has been ethnographic studies that describe the ontology (Smith 1998, Salmon 2000) or epistemology (Davidson-Hunt and Berkes 2003, Stevenson 1996, Berkes et al. 2000, Turner et al. 2000, Ohmagari and Berkes 1997, Lewis and Sheppard 2005) of people and include recommendations on how to incorporate such knowledge into western scientific models.

A few studies have made use of discourse analysis (Adamowicz et al. 1998, Bengston 2004) in order to determine the breadth of Aboriginal land values for the same purpose. All the studies mentioned here have worked with or examined Aboriginal communities with a land base. Ethnographic studies such as the ones conducted in Moose Factory by Ohmagari and Berkes (1997) would be of great value for Missanabie Cree, after a settlement is reached in the ongoing land negotiations, and there is a community for people to live in; a community where people can have access to their land to learn about and take part in traditional cultural practices. Until that time comes, in order to return to Missanabie and re-establish a community, the current values people of the community hold need to be examined. No study that I am aware of examines the values of a landless Aboriginal community. In order for any community to develop effective policy, it is beneficial for leadership to know and acknowledge the values and attitudes of the members of that community, and where agreements and disagreements lie.

1.3 Report Organization

In Chapter one I discussed the similarities among Aboriginal worldviews, and introduced the research question and rationale for engaging in the project. Chapter two begins with a description of Missanabie Cree First Nation's Community Profile. The methods and research techniques used in the project are also presented in this chapter. In Chapter three I engage in a review of the pertinent literature on traditional Cree resource use and management, hunting territories, along with kinship structure and roles of individuals. Chapter four presents the findings from the research undertaken with the community members and provides a description of emerging themes. Throughout Chapter five I discuss the similarities of these themes in greater detail. I describe the

strengths of land management planning in bridging differences in values. I acknowledge the challenges of implementing the research methods in the community and finish by discussing the limitations and strengths of the methods. Chapter six concludes the thesis with some closing remarks on the relevance of the findings and how the project contributed to initial deliverables set out prior to commencing the project.

2 Community Description and Methods

This research used various methods of data collection which include; analysis of pertinent literature on traditional Cree practices, gathering land value statements from members of Missanabie Cree First Nation via questionnaire, review of community archives including video of Elder interviews, and reports produced for the First Nation by various consultants. The first two research questions introduced were addressed by drawing upon literature from research that has already occurred on traditional Cree practices in other communities. The last question was addressed using the Q-methodology.

2.1 Community Profile

The Missanabie Cree First Nation (MCFN) is a distinct group of the Mushkegowuk Cree whose traditional territory is centered in, on and around Missinaibi Lake, Dog Lake, and Wabatongushi Lake, Ontario (Lovisek 2003). The region is typical of Canada's Boreal Forest. The landscape is dominated by a multitude of lakes and wetlands, exposed bedrock and vast forests with soils ranging from rocky and silty glacial till to sandy. The forested lands are mainly comprised of jack pine (*Pinus banksiana*), black spruce (*Picea mariana*), white spruce (*Picea glauca*), balsam fir (*Abies balsamea*), trembling aspen

(*Populus tremuloides*), and white birch (*Betula papyrifera*) (Repath 2006). The boreal forest provides for a diverse mixture of flora and fauna that has allowed the Missanabie Cree to exist since time immemorial.

Under the terms of Treaty 9, the Crown was to set aside reserves for each band that was a signatory to the Treaty. The failure of the Crown to set apart land for the Missanabie Cree has resulted in the displacement of the First Nation members (Missanabie Cree First Nation 2007). The community now has its membership living across Canada from coast to coast and encompasses people who have moved from the area, a few who have never left, and generations of Missanabie Cree members who have grown up in urban centers, separated from traditional Cree land and culture. The impact of displacement from their traditional territory and the effects of urbanization on aboriginal values and culture have created unknown consequences for this First Nation (Missanabie Cree First Nation 2007).

According to Lovisek (2003), a written request for land that was to be used for the purpose of farming vegetables, was submitted to the Department of Indian Affairs on behalf of James Fletcher in March of 1915. That request was denied. In the spring of 1929 James Fletcher, once again sent a written request for land to the Department of Indian Affairs and followed up the request with a personal visit to Ottawa. The second request was also denied. In a statement from the Deputy and Secretary of Indian Affairs at the time, A. F. Mackenzie, Mr. Fletcher was told "it is not considered advisable to establish an Indian reserve for the Cree band at present" (Lovisek 2003).

Missanabie Cree was formally recognized as an Indian band by the Department of Indian Affairs in 1951. The first Chief and Council were elected by the First Nation

under the Indian Act in 1992. In 1993 Missanabie Cree First Nation submitted a specific claim for outstanding treaty land entitlement. In 1996 Canada accepted the claim with a condition that Ontario is to be included in negotiations as a signatory to Treaty 9. Missanabie Cree First Nation has been involved in negotiations with Canada and Ontario for the land rightfully owed to them under the provisions of Treaty 9 and is currently working on a land transfer agreement with the Provincial Crown. (Missanabie Cree First Nation 2007).

When this project was initiated, Missanabie Cree First Nation had 346 registered members, 289 of whom 18 years of age or older. The First Nation has a functioning government made up of one Chief and five Councilors. There is a Band Administrator, who oversees the operations of the band office, located in Sault Ste. Marie, Ontario. The band Council is progressive, pursuing partnerships with local forestry companies and investigating various economic opportunities within and outside of their traditional territory. No legal survey of Missanabie Cree's traditional lands has been undertaken; the following map however, outlines the First Nation's area of traditional use.

Figure 1 Map of Missanabie Cree First Nation Traditional Resource Use Area
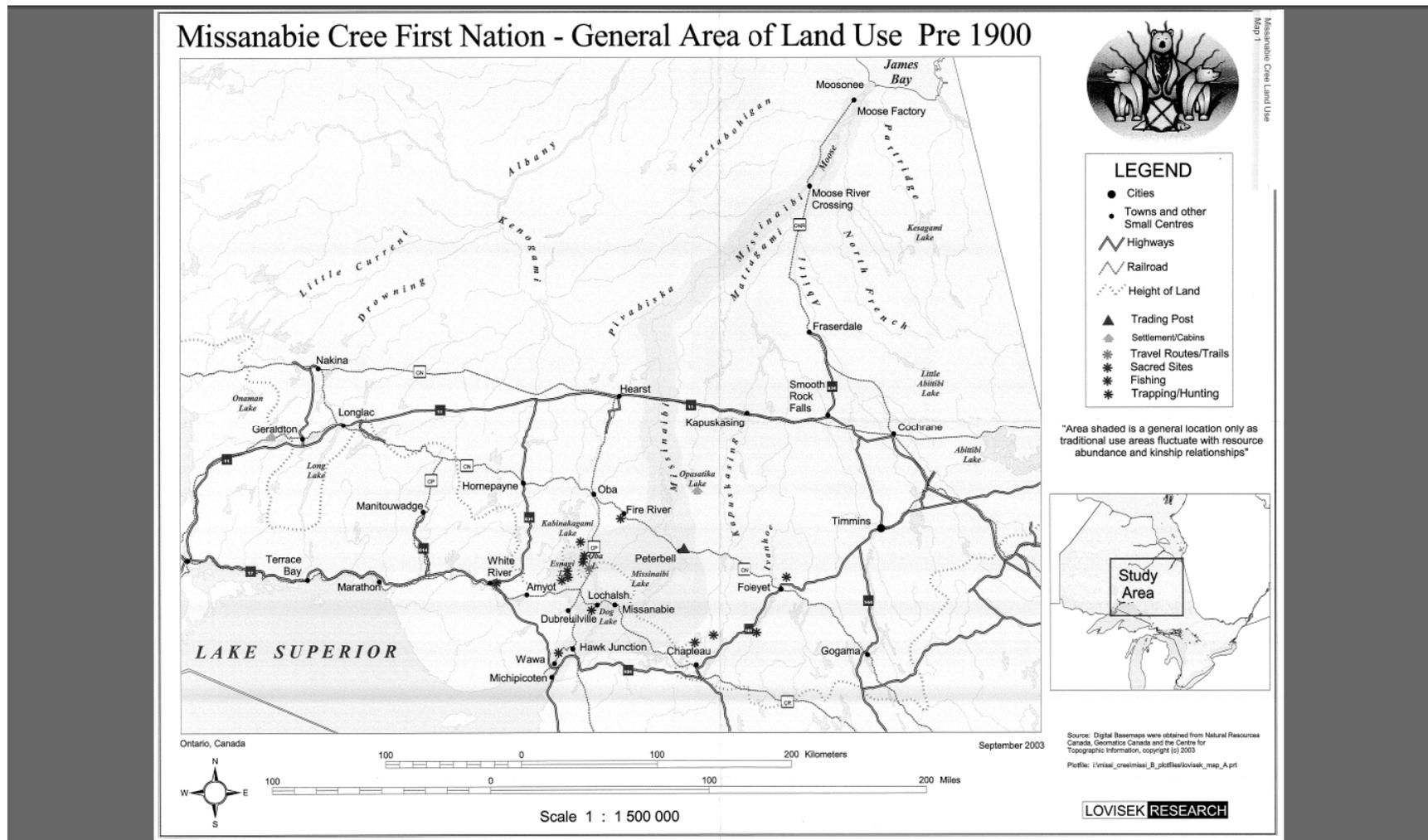
Copyright, Lovisek Research 2003, reprinted by permission.

2.2 Methods and Research Techniques

There were various techniques used for data collection throughout the project; including a review of literature, a mail out survey, and Q-sort interviews both online and in person. This project was made possible through the support given by many members of the community, their willingness to contribute their time and to share their attitudes and values towards the land.

2.2.1 Community Participation

Researchers and Aboriginal communities who work together have a responsibility to ensure that projects are of benefit to the community and are not a one-sided affair in which the researcher views the indigenous person as a research subject and is there only to gather information for his own gain. Menzies (2004) notes that new perspectives which arose in anthropological circles in the latter end of the 20th century started to address these concerns and transformed a branch of anthropology research methodologies from focusing "on" people, to research "with" communities of people. It is this expression which I engaged in my research. My intent was to work with the community of Missanabie Cree First Nation to address an issue that is of concern to our members. I wanted interested community members to be involved in the project from forming research questions to dissemination of the results.

In 2005, I approached Chief and Council to discuss the possibility of working with the community on a project that would focus on our members' attitudes and values towards the land in our traditional territory. At this meeting, councilors were asked what questions they felt our community needed answered, resulting in the first two research

questions that were introduced in Chapter 1. An understanding of the roles and responsibilities of the First Nation, the Principal investigator and myself were also reached to ensure a successful project and relationship throughout the process.

The Bear Fax printed a notice asking for volunteers to sit on an advisory committee that would be directly involved in the development of the research project. The committee chosen consisted of seven Missanabie Cree members from various regions in Canada, and represented multiple families. The committee included Elders, a member of Council, and other interested adults. The advisory committee was essential to the project and received updates as to how I was progressing through my studies and also of the progress that was made on the research project. They were asked for feedback on the literature review, asked to recommend sources or contribute information of their own in order to ensure accuracy. The advisory committee was also involved in the refining of statements and the development and implementation of the Q-sort. Their review and approval of the thesis was a key step in the completion of the project.

Relationship building between researchers and community, proper consultation, ownership of the research process, and meaningful results are considered cornerstones of participatory research (Hoare et al. 1993, Hudson and Taylor-Henley 2001, Menzies 2001; 2004). There are challenges in engaging in a process that all will consider flawless. Some may conclude that the process was initiated in a manner which was not consistent with community values, that it was culturally irrelevant or that the participants were not representative of the entire community. Considering the geographical constraints our community faces in coming together, budgetary and time constraints for this project and being an Aboriginal community that has many members engaged in the process of

learning their identity and regaining their culture, this project was carried out with the awareness of the need to be inclusive of all the major aspects of responsible research with a First Nations Community.

2.2.2 Literature Review

The purpose of the literature review is to help answer questions some members of Missanabie Cree may have regarding their ancestors' methods of land use and resource management. The review draws upon ethnographic literature of traditional resource management practices of Northern Cree communities in Ontario, from which Missanabie Cree's roots are linked. The purpose of the review is not to address whether or not the traditional / historical methods of resource management used by the ancestors of Missanabie Cree are consistent with today's definitions of conservation and preservation. Nor is it intended to be an in-depth review of the history of the fur trade in Northern Ontario. Rather, the intent of the review is to describe the role and influence the utilization of forest resources had on social interactions; within individual families, between the different families in the community, and the structure of the community. Moreover, the review addresses the roles and level of influence individuals (women, men and children) had on decision making around the utilization of forest resources. Methods of resource utilization that have helped to ensure a continued source of resources for future years will also be touched on throughout.

The literature review provides a background on a part of Missanabie Cree's history that helps explain the origin of some current day members' worldviews, traditional knowledge and land ethic. The ancestors' beliefs and practices no doubt had an influence in the development of values currently held by the people of Missanabie Cree today.

2.2.3 Mail out survey

Mail out surveys are an effective method for researchers to gather data from populations spread out over a large geographical area at relatively inexpensive costs as compared to other methods; such as, in person interviews or workshops (Benson 1946, Kanuk and Berenson 1975). Mail out surveys are even said to have some advantages to electronic surveys via computer. As popular as home computers have become, some people may not feel comfortable enough to attempt an electronic survey. A paper survey may seem less intimidating. A risk of data becoming lost or corrupt exists for researchers who choose to use electronic surveys (Boyer et al. 2001). Disadvantages of mail out surveys are the potential for low response rates, and the associated non-response error (Kanuk and Berenson 1975).

With the population of Missanabie Cree dispersed across Canada, a mail out survey was viewed as the most reliable method to collect statements on members' land values. The use of a mail survey was also chosen because it allowed the respondent time to gather their thoughts and submit them within their own time frame, unlike a face to face interview. A short survey was mailed out to all members of the community who were 18 years of age and older, whose address was known to the administration. The surveys were followed up with a reminder, after one month, asking those who had not filled out the survey to please do so and also to thank those who had responded.

The surveys fulfilled two purposes. First, they were intended to be a census on members' education and employment skills which were to be used to update the records kept by the Band office. Second, they were used as a tool to collect information on

members' land values through written statements intended to be used in a Q-sort at a later date.

The possibility of a low response rate was a concern in reference to the census; however, this was not as relevant in the collection of value statements. Participants were encouraged to write as much, or as little, as they wanted in answering the question on land values. Watts and Stenner (2005) suggest that the methods or materials used to create a sample of statements (known as a Q set) to be used with the Q method are of little concern "provided that the final Q set can justifiably claim to be 'broadly representative' of the relevant opinion domain…" In keeping with this notion, the principal investigator, committee members and I, thought that the surveys were successful in capturing the majority of the discourse surrounding the members' land values, once a number of duplicate or repetitive value statements had been received.

2.2.4 Q Method

William Stephenson is credited as being the person to introduce Q methodology to the science community through his letter to the editor of *Nature* in 1935 (Brown 1980). The Q method is a technique which combines qualitative and quantitative aspects of data collection and analysis to obtain the views and identify attitudes of people within a specific group. The method relies on factor analysis to establish patterns of agreement or disagreement among the group around a particular theme or issue called a "concourse" by Q researchers. The focus is on similarities of the whole group rather than focusing in on which individuals share agreement or disagreement on an issue (Addams & Proops 2000).

Typically, factor analysis is used to study relations among traits held by individuals.

Such use is commonly known as the R method. Q method differs from R, in that, Q

correlates and factors people as opposed to traits (Brown 1980, McKeown and Thomas

1988). Such a description of Q may lead some to determine that it is nothing more than

an R matrix turned on its side. While the statistical procedures used to acquire emerging

factors from the correlation matrices of R and Q are the same there is a methodological

difference between the two methods. Brown (1980) briefly describes this difference in

the following:

> "In moving from R to Q a fundamental transformation takes place: In R, one is
> normally dealing with objectively scorable traits which take meaning from the
> postulation of individual differences between persons, e.g., that individual **a** has
> more of trait **A** than does individual **b**; in Q, one is dealing fundamentally with the
> individual's subjectivity which takes meaning in terms of the proposition that
> person **a** values trait **A** more than **B.** "
> (Brown 1980. p.19)

The ability to quantify subjectivity is the heart of Q methodology as was introduced by

Stephenson and currently promoted by Brown. It is not my intention to describe Q

methodology in depth, as it is more the method of the Q sort and the results the method

uncovers that interests me. For a detailed discussion of the difference between R and Q

methodology see Brown (1980) McKeown & Thomas (1988), or visit www.qmethod.org.

The Q method requires that participants sort a set of statements, photos or other forms

of concourse within a specified distribution that is usually a scale ranging from "most

agree" to "most disagree". The Q-method is not intended to have results that say a

specific percent of the population of Missanabie Cree thinks "x is true" or "z is false".

Rather, the intent is to help illustrate common discourse or conversation within the

community which would ideally be taken into consideration by decision makers (Sweeden 2005).

To initiate the Q method with Missanabie Cree First Nation, an exploration of the discourse surrounding Community members' values of the land around Missanabie and what they want the land to provide was implemented. An open ended questionnaire where participants were free to write as much as they thought was pertinent on the issue, as well as, interviews with some members of the First Nation and various documents stored in the Community's archives, were used to develop a set of 40 statements - referred to as a Q-set - on Community members' land values.

At the 2008 annual gathering, any band member who was 18 years of age and older and wished to participate, was invited to sort (Q-sort) the statements into nine columns that were given value ranging from "Less Important (disagree)" to "Important (agree)". A website that featured an electronic version of the Q-sort was also created to provide an opportunity for members who could not make it to the gathering to participate in the process. A freeware software program developed by Hakert and Braehler (2007) called Flash-Q was used to administer the Q-sort both online and in person at the First Nation's Annual Gathering.

The Q-sort is completed in three major steps. Initially, participants are asked to read over the statements and sort them into three categories, those that they tend to agree with, those that they tend not to agree with, and a third pile for the ones they are not sure of either way. This is shown in Figure 2.

In the second step, the participants are asked to rank the statements relative to each other from disagree to agree based on a scale from -4 to +4. In this case, the Community

advisory committee decided that a scale ranging from 1 to 9 where 1 was equal to

"disagree" most strongly or "less important" and 9 was equal to "agree" most strongly or

"most important" was easier to comprehend than using the conventional scale. Using a

scale from 1 to 9 does not affect the analysis. This is shown in Figure 3.

The third stage of the Q-sort is a post-sort interview. This stage occurs when the

participants are asked to explain why they placed the two statements that they did in the 1

column and why they placed the two statements that they did in the 9 column. This stage

can also be used to gather information from other questions of interest. In this project, the

participants were asked information on demographics and questions that reveal their

feelings as to whether or not they have a role in the development of the community. The

purpose of this step is to provide the researcher with additional information that may be

useful in analyzing and describing the emergent factors that result from the Q-sorts. The

post-sort interview is shown in Figures 4 and 5.

Figure 2 Initial sort of statements from drop down

(10) I want the lands and waters to be a special place of cultural learning and personal development.

6/40

LESS IMPORTANT (DISAGREE) (#1)	NOT SURE (#2)	IMPORTANT (AGREE) (#3)
(27) Some of the land and waters should stay pristine and provide for the spiritual needs of our community.	(8) The land and waters are an integral part of our heritage and traditional way of life. They provide and should continue to provide a means for us to engage in our traditional activities.	(12) The land and waters within our traditional territory are sacred.
(22) The lands and waters within our traditional territory should provide a place where Missanabie Cree First Nation can have a community of full-time and seasonal residents who can live and enjoy the area.		(6) Alternative power sources such as micro-hydro projects and wind power should be investigated as options in the development of our land.

Figure 3 Ranking of statements on 1 to 9 scale

LESS IMPORTANT (DISAGREE) ← → IMPORTANT (AGREE)

1	2	3	4	5	6	7	8	9
(13) Missanabie Cree First Nation should develop and monitor its own...	(17) The lands and waters should provide a means of living from trapping,...	(10) I want the lands and waters to be a special place of cultural learning and...	(27) Some of the land and waters should stay pristine and provide for the...	(34) The community housing and infrastructure should be built...	(9) I would like the land and waters to be a place for me visit from afar where I...	(28) I want the land and waters of our traditional territory to be a place future...	(30) Resource extraction from the land and waters within our traditional...	(40) The community housing and infrastructure should be built...
(35) The natural resources in our traditional territory should be exploited for...	(5) Partnerships between Missanabie Cree First Nation, Universities and...	(33) There should be water front property for every member to build on within our...				(23) The land and waters should provide economic prosperity through the...	(38) Land should be set aside during community planning and development...	(36) The key to developing wealth for Missanabie Cree First Nation and building our...
	(25) Partnerships with mining companies should be encouraged within our...	(24) Partnerships with forest companies should be encouraged within our...				(31) If the forests in our traditional territory are going to be cut, Missanabie Cree...	(3) An industry such as logging should provide a source of revenue to support our...	
		(32) Community housing and infrastructure should be carefully...		(26) A portion of our traditional territory should be managed as...		(14) The land and waters within our traditional territory should be a place for family to...		
		(37) I consider these lands to be my home-land even though I have been away...				(2) An industry such as mining should provide a source of revenue to support our...		

LESS IMPORTANT (DISAGREE)	NOT SURE	IMPORTANT (AGREE)
(22) The lands and waters within our traditional territory should provide a place where Missanabie Cree First Nation can have a community of full-time and seasonal residents who can live and enjoy the area.	(21) Mining within our traditional territory should be limited. (18) The lands need to be preserved. (19) The land and waters are a part of my identity	(4) An industry such as tourism should provide a source of revenue to support our First Nation. (12) The land and waters within our traditional territory are sacred.

Figure 4 Post sort interview (ranking explanation)

Important (Agree) (9)

(36) The key to developing wealth for Missanabie Cree First Nation and...

(40) The community housing and infrastructure should be built...

Less Important (Disagree) (1)

(13) Missanabie Cree First Nation should develop and monitor its own...

(35) The natural resources in our traditional territory should be exploited for...

Continue...

Figure 5 Post sort interview (demographic information, etc.)

Age*
Please check the correct box.
☐ 18-30
☐ 31-40
☐ 41-50
☐ 51-60
☐ Over 60

Gender*
☐ female
☐ male

Have you ever lived in our traditional territory?
☐ Yes
☐ No

Do you intend to live in Missanabie in the future?
☐ Yes
☐ No
☐ I do not know

Do you feel you have a role to play in the deviopment of a community for Missanabie Cree First Nation?
☐ Yes
☐ No
☐ Somewhat

Enter Comments on the Questionnaire and why you sorted the statements as you did.

The final steps of the Q method are to analyze the results and identify statements upon which there is great agreement, great disagreement, or no strong feelings to either side and to report these results. A free software program called PQMethod was used to undertake a statistical factor analysis of the correlations among statement rankings to extract 'typical' sorts of statements around the research question.

3 Literature Review

Much of the information presented in this chapter has been drawn from literature written about the Cree from the James Bay region. Similarities in forest resource utilization and management among Missanabie Cree's ancestors and between the different communities can be inferred, as the Missanabie Cree are direct descendents of those northern communities. Using literature about communities near James Bay was also necessary as there has been little ethnographic research conducted on the Cree near Missanabie until recently.

3.1 Forest Resource Utilization: Role and Influences

3.1.1 Conservation Ethic

When discussing the methods of natural resource management used by the Cree, or the influence natural resources have on the structure of Cree society, it is important know how the Cree have historically viewed themselves in relation to those resources. Cree beliefs embrace the notion that there is no separation between themselves and the world around them. They live within a system where the social world and natural world are interlinked (Feit 2004b). The Cree are hunting, trapping, fishing people who traditionally rely on the resources within their territory for subsistence. Much of the academic

discourse surrounding Cree life in northern Ontario focuses on the relationship a hunter has with his environment.

When hunting, a person is obligated to respect an animal to ensure there is a good hunt. The hunter's obligations to the animal are connected to social obligations found in Cree communities. Cree social values apply to human-animal relations in the same way they do to human-human social relations (Berkes 1999). The Cree view animals as having the same abilities and characteristics as humans do with regard to intelligence and willpower. Hunters and the animals which they rely on are both capable of independent choice and are responsible for their actions (Feit 2004a). The relationship between the hunter and animal is grounded in reciprocity and may be viewed as a partnership in survival (Feit 2004b). From the Cree hunter's perspective, animals are viewed as gifts. The hunter is provided subsistence and in turn keeps animal populations viable. Hunting is a necessity of survival for both the hunter and the animal. For a hunt to be successful the actions of the animal and the hunter must be complementary. The killing of an animal during a hunt is not a matter of chance but rather an intentional event where the animal gives itself to the hunter so he can meet his needs. The hunter accepts the gift given by the animal and by doing so acquires certain obligations of care and respect to the animals (Feit 2004b). The relationship between the Cree hunter and an animal is not exclusive to the pair, but rather it extends to spiritual relations as well.

The actions taken by both hunters and animals are at times guided by various spiritual beings. For instance, a hunter may gain insight and guidance from his Mistabeo – described by Preston (2002) and Cooper (1944) as an attending spirit or ghost helper that a hunter may wish to develop a relationship with through the process of a conjuring

ceremony, also known as a shaking tent ritual. While taking part in conjuring, a hunter may ask his Mistabeo for advice about where to find game and about the future success of hunts. A hunter's Mistabeo can have influence over the spirits of animals and convince them to provide for the hunter. Likewise a hunter's Mistabeo may not be successful in its attempt to influence the spirits of the animals and, as a result, the hunter may have poor success (Preston 2002). The Cree do not differentiate between the characteristics of humans and animals or such things as wind and water (Feit 2004a). Therefore, if a person is to have an attending spirit then associating animals, plants, water and other natural phenomena with having their own attending spirits is understandable.

Whiteman and Cooper (2000) describe the Cree as possessing an "ecospirtiual" worldview that "privileged the earth as having a living and sentient force that requires respect and care."

Although the Cree may acknowledge that there is a spiritual component linked to the successful outcome of a hunt, it should not be construed there is a lack of autonomy on part of the hunter or that hunting is all chance and random events. To have become successful hunters, the Cree have developed extensive ecological knowledge of the environment in which they dwell. The development of such detailed knowledge and practice of social norms unique to the Cree is referred to by Whiteman and Cooper (2000) as a type of "ecological embeddedness". Ecological embeddedness has been related to the successful management of family hunting territories traditionally found within Cree society of Northern Ontario.

3.1.2 Territoriality as method of Conservation

Feit (2004b) describes the organization of hunting territories and the social relations associated with them in the following statements:

> "The Cree have a distinct system of rights and responsibilities concerning land, resources, community and social relations – a legal system of land and resource tenure, and of self-governance. This system enables hunters to fulfill their responsibilities to animals and spirits and contribute to the conditions necessary for their mutual survival" (p. 107).

He continues:

> "The Cree are efficient enough at hunting that they could deplete the game. Restraint is both and individual and a community responsibility and is assisted through a stewardship system. All hunting land is divided into territories under the stewardship of Elders" (p. 107).

Feit's description above of the organization of hunting territories and the rights and responsibilities are exhibited in the territory management systems of the Cree near Moose Factory. In Moose Factory, an Elder, usually a man, is normally recognized as the steward of a territory and exercises the lead role in hunting (Cooper 1939, Flannery and Chambers 1986, Cummins 2004). Here, the title for the leader of a family hunting group is known as an Okimah (Rickard 1998). An Okimah is described by Rickard's father – someone who is regarded in Moose Factory as an Okimah himself - as "someone who watches how people handle themselves, answers questions about what to do on the land, and is a teacher". Rickard's father recognizes his responsibility to decide where he wants to take his family for the hunt and his family in turn respects his decision without question. He teaches his son, grandson and son-in-law techniques for hunting.

Whiteman and Cooper (2000) focus their discussion around the Cree of Eastern James bay. In this region, the Cree have family designated hunting grounds with each one being cared for by a Tallyman. A Tallyman has similar responsibilities as an Okimah found on the West coast of James Bay. Tallyman is a name that originated from the Hudson's Bay requirement in the 1930's and 1940's for a leader of a territory to record the number of beaver houses within his territory. The term Tallyman is translated from the cree word amiskuchimaaw meaning "steward" or "beaver boss" (Whiteman and Cooper 2000).

The tallymen are males over 40 who are responsible for the wellbeing of their hunting grounds. The position of Tallyman is usually inherited and a person is chosen because of their proven skills and knowledge of their land. Whitman and Cooper (2000) lay out a description of the responsibilities a Tallyman holds in what they term the "key dimensions of ecological embeddedness":

1.) There needs to be a personal identification with the land.

2.) There must be adherence to ecological beliefs (ex. reciprocity, respect)

3.) There is the continuance of ecological information gathering.

4.) Being physically located in the ecosystem "walking out" on the land to manage it.

Land stewards, Okimah or Tallyman, before taking over a hunting and trapping ground usually live in a territory for sometime learning, hunting and developing a relationship with land and spirits. They become familiar with the changes that go on in the territory such as population fluxes in prey. The Okimah hold the responsibility to decide how or even if his territory will be used for hunting and trapping. His familiarity of the land and process within his territory coupled with discussions of the conditions in

neighboring territories with their respective Okimah, assist in this determination (Feit 2004a).

"In practice, the system of hunting-territory stewardships works to maintain an ongoing balance between harvests and game. This is generally possible for beaver and moose populations and in some areas for marten" (Feit 2004a).

In their investigation into the family hunting territories around James Bay and along the Moose River basin, Flannery and Chambers (1986) reviewed the research undertaken by anthropologist John M. Cooper in the 1930's. Cooper's investigation incorporated testimony from elders of Moose Factory, primarily an elder by the name of Simon Smallboy. Smallboy was seventy-seven years old when Cooper began his investigation. Flannery and Chambers (1986) report that Simon Smallboy had described the hunting territories of Moose Factory and area to Cooper dating as far back as the 1870's.

The family hunting territories around James Bay are inherited along family lines, normally along the male line. From father to son, brother to brother, etc. (Cummins 2004). However, Cooper (1939) noted that there were no rules against land being donated from the title holder to someone that is not connected by blood or marriage. From this Cooper postulated that title to hunting territories was more individual than a group right. Upon the death of a man who was the title holder of a hunting territory, whose his son or daughter was too young to hunt, the widowed mother usually held the territory in trust until the son was of age to hunt or the daughter married. In some instances the widow may have remarried and brought in another man to hunt until her sons matured, or passed the territory to a son-in-law (Cooper 1939, Flannery 1935, Flannery and Chambers 1986). The title to a hunting territory is noted by Cooper (1939) to be permanent and not

dependant upon occupancy and exploitation of resources and it is only to be relinquished through inheritance or donation.

Hunting territories were usually adjoining through marriage lines. They centered on a drainage system along major rivers. Traveling through others territory on the way to ones hunting grounds was necessary and was not seen as an intrusion as long as certain protocol was adhered to. Hunting, for what was needed, as a family passed through was acceptable. The outward limits of hunting territories were not static and seemed to be somewhat overlapping. Rough boundaries were established by landscape features where the land beyond a particular feature, within two or three miles, was know to be used by other families (Cooper 1939, Flannery and Chambers 1986). Marriage and close social ties would be a means by which families extend access to new territory. The wife would usually join her husband's family; however, it would not be unusual for a man to join the wife's family. If game was scarce in a particular territory, or there were not enough hunters to maintain a group, in-laws or friends would invite others to join their hunting group. Cooper (1939) also noted that lending land on a temporary basis, for a few seasons, was common practice and done only for reasons of good will and not for profit.

Feit (2004a) and Scott (1996) describe Goose hunting territories along the coast of James Bay. The territories for goose hunting, like the hunting territories inland that run along river drainages are under the stewardship of one person. The steward in this case is referred to as a "shooting boss" or a "goose boss". The territories for goose hunting are smaller than the inland hunting territories but they still manage to accommodate up to twelve hunters (Peloquin 2007). Within each hunting territory there are a number of places for hunting. These hunting areas are usually used on a system of rotation ensuring

that some areas are left to rest while others are being exploited. The hunters that use a particular goose hunting territory are linked through marriage or friendship (Scott 1996). As mentioned previously with inland hunting territories, in certain circumstances friends or family may be invited to join a hunting group in a goose hunting territory. Peloquin (2007) points out that "hunters whose family's territories are inland then get to participate in the coordinated coastal goose hunt through invitations from members of coastal families, which highlights the social importance of these alliances and invitations".

   Anthropologist Charles Bishop (1970) reviewed various theories on the timeline around the development of family hunting territories in James Bay. When and why this system of management was adopted is a matter still up for debate. Reliable first hand testimony, of those who used such a system, only dates back as far as the mid nineteenth century (Flannery and Chambers 1986). Therefore, the origin of such territories may never be made clear. Whether the hunting territories pre-dated contact or were constructs of changing socio-demographic factors resulting from the fur trade and/or changes to environmental conditions is not important to this discussion. What is important is that family territories were developed out of necessity, and the management undertaken within the tenure system adheres to the ecological ethic of the Cree.

   Family hunting territories allowed for the careful management of resources within each territory and among the community. Cummins (2004) however, states that by the 1920's, pressures from the increasing number of non-Aboriginals encroaching on Aboriginal families territories and hunting beaver indiscriminately caused natives to follow suit. Ontario refused to limit hunting for non-Aboriginals and for a fee of fifteen dollars, granted the payee the right to trap anywhere in the province (McLeod 2004).

Simon Smallboy told Flannery (1995) that after the opening of the territory to non-native trappers, these people would take all the beaver, therefore, he had decided to take them all himself otherwise someone else would get them. Such actions went against beliefs of respect and reciprocity and represent a "tragedy of the commons" type situation. In a model of hunting territories, Berkes (1986) states that territory systems fail, upon open access, when a point is reached where a trapper "can no longer reap the benefits of his own restraint".

Resulting from concerns about the declining numbers of furbearing animals and from the suggestions put forth by William McLeod - a fur dealer in Chapleau – Ontario created the world's largest game preserve. The Chapleau Crown Game Preserve was created by Order-in-Council on May 27th 1925 and had major implications for Cree traditional hunting territories around Missanabie. One of the benefits McLeod envisioned the game preserve providing was the protection of the "way of life and livelihood of the Indian to whom a legal and equitable duty was owed" (Missanabie Cree First Nation nd; McLeod 2004). That purpose, however, was not realized. The creation of the new game preserve saw the prohibition of all hunting and trapping within the park. Many looked to family with hunting territories outside the boundary of the preserve for help. Those that chose to stay and continue to hunt on their traditional lands risked being arrested by game wardens and prosecuted for poaching (Lovisek 2003). The Brunswick House Band, which is known to have family associations with Missanabie Cree First Nation, was forced to leave their homes on the shore of Missinaibi Lake, land that their families have hunted on for generations and relocate to Chapleau and Elsas (Missanabie Cree First Nation nd; McLeod 2004).

Traditional hunting areas, territories of Aboriginal people located outside the boundaries of the game preserve were also being negatively affected by the open access policies of trapper licenses in the province. Not until 1947 would new regulations on trapping be instituted. The new the system of registered trap lines instituted by the Ministry gave exclusive trapping rights in specific regions of Crown land. The new system of trap lines was originally thought to be an easy transition for Aboriginal people as they were similar to boundaries that they had traditionally used. However, the trap lines have been said to go against Cree notions of territoriality. The system had established boundaries and quotas instituted by the Ministry and had imposed its own style of management onto the Cree (Cummins 2004). Some Cree acknowledged the trap line system as a positive, believing that it protected them from 'outsiders' and was a recognition of their family hunting grounds. Others disagreed and abandoned the Ministry imposed regulatory system in favor of their own system of management, although the trap lines still exist on paper (Cummins 2004). It may be fair to say that the policies implemented by the government of Ontario had detrimental effects to the traditional family hunting territories as a method of subsistence and resource conservation.

3.1.3 Methods of Management to ensure Resources for Future Years

The ability of the Cree to manage the resources that lay within their territory, developed over generations. The gathering and exercising of localized knowledge, including the processes of the land and the ecology of its inhabitants is critical to conservation. The methods used arrive from a combination of the need for survival in the present and into the future, spiritual influences and the social obligations that come with

living in a world based on reciprocity. Harry Auer (1906), in his book titled *The North Country* describes his observations of Aboriginal hunting territories and conservation during a trip to northern Ontario:

> "Each Indian has his own territory wherein he hunts, and no Indian
> trespasses upon his hunting grounds, in his territory he is supreme.
> He knows how many beaver there are in each dam, he knows how
> many he can trap, without decreasing the supply for the following year,
> and his respect is greater than that of the most prudent farmer who is
> anxious not to rob the soil of its fertility. No more caribou, moose, otter
> or other animals are taken by him, than will be replaced by increased
> numbers the following year" (p. 117).

Resource management is rooted in the Cree social system. As mentioned earlier, the Cree live in a system where the social, natural and spiritual worlds are interlinked. A few particular methods of resource management used by the Cree separate from the influences of spiritual insight and reciprocity, however, separation is difficult at best. Accepting the words of one's Mistabeo on the number of prey available to catch, or, respecting the teachings and wishes of the Okimah or Tallyman in a hunting territory are both methods of resource management that are based in spirituality and respect. Listening to the stories of human / animal / spirit relations that have been passed on and practicing their teachings is a method of ensuring there is a continued resource for future years. One such story, told by John Blackned, explains the influence the Mistabeo has on a family's welfare and the importance of treating the animal remains with respect. Offerings of meat were commonly placed in the fire before cooking animals (Preston 2002). Bones were buried or hung in trees to show respect and ensure the animals would continue to provide a good hunt in the future (Lanzelo and Richardson 1975). Scapulimancy was also practiced to determine where good hunting was to be had (Flannery 1995). Such spiritual

methods declined over the years, possibly due to the influence of missionaries (Flannery 1995). However, Elders of Missanabie Cree still recall the use of shaking tents and the hanging of bones in trees along travel routes to indicate where a good hunt was and to provide nourishment to travelers along the way (Lovisek 2003).

To ensure resources for future years, methods of management that required knowledge of land processes and ecology of various species also needed to be employed. Beaver populations, being a source of food and furs for the Cree, were carefully monitored. A census of beaver houses within a hunting territory was undertaken and when a new lodge was discovered the house was marked and the number of beavers present was observed. Many trappers were careful not to take all the occupants of the lodge, leaving a few to repopulate. According to Ellen Smallboy, whenever her husband Simon discovered a new beaver lodge in his territory, he left two to breed (Flannery 1995). The Hudson Bay Company relied on the knowledge of the Cree to implement an experimental beaver preserve on Charlton Island in the early 17th Centruy. The Cree trappers knew methods for selecting and catching young beavers for transport to the preserves and also when and where it was appropriate to trap beaver in order maintain optimum population levels and pelt quality (Feit 2007).

Rotation of trapping and hunting areas within a territory was another method of conservation used by the Cree. When game is scarce in one region of the territory, trappers would leave their hunting grounds and trap with family members in another region. The land would be left unused but continually monitored for an increase in animals, anywhere from one to as many as three years (Feit 2007). Such a system was demonstrated in Richardson's story (Lanzelo and Richardson 1975) of the Mistassini

Hunters. Three families stayed for the winter on one hunting territory. One of the families was allowing for his territory to be repopulated and had not used it for two years.

The use of fire to create suitable habitat for grazing animals on the edge of rivers and lakes, and soil conditions for berry patches and gardens was also evident among the Cree (Berkes and Davidson-Hunt 2006). Many reports from traders and anthropologists suggest that the soil in the boreal shield region is not suitable for farming. However, Missanabie Cree Elders report having gardens in the area and records indicate several requests from James Fletcher in the early 20th Century for land to be transferred to the Cree at Missanabie for the purpose of farming (Lovisek 2003). Land that had a mix of hardwood trees would have contained a deeper soil that, after burning, would be suitable for gardening. Sandy, rocky, areas that did not have enough soil for farming would produce very bountiful blueberry patches in approximately three years after a fire. A few years later the blueberries would emerge through succession if left alone, therefore, fires would be continually used every few years to keep berry patches viable (Berkes and Davidson-Hunt 2006).

3.1.4 Group structure and the roles of individuals

Community structure and interaction among people in the community was no doubt influenced by the utilization of forest resources, and the availability of those resources. Groups of families congregated and dispersed at different times of the year in response to the changes in the seasonal availability of resources and their needs for survival and companionship.

According to Cummins (2004), the Mushkegowuk Cree had large family units that included two brothers-in-law and their sisters, along with elder parents. There were

variations of this arrangement, of course, but Mushkegowuk families did not consist of the typical nuclear structure commonly know in Western society. In the summer months, as many as 2 to 10 family groups – known as a microband - would gather near lake shores where there was known to be good fishing (Cummins 2004). The groups would collect fish, hunt non-migratory game birds, harvest berries, and other plants (Lovisek 2003). Groups stayed together in these fishing camps for a few months, worked together building large nets and fish traps and sharing in the catch (Flannery 1995). Later in the season, these groups would break into their smaller family units and disperse to their winter hunting territories along their family's particular river drainage.

In the winter season when there were shortages of game, some families could not stay together. Ellen Smallboy stated that her family, at one point, had to leave her sisters to find food and that her husband had left her alone with their children for a couple of days and she had to fend for them by snaring rabbits until he returned from Moose Factory with food (Flannery 1995). At times, only certain territories along the river drainage experienced a scarcity of game and families would concentrate their efforts in one region. When this scarcity of game occurred, several men would hunt together and the meat would be divided, based on the size of the families, regardless of which hunter actually got the kill (Flannery 1995).

Lovisek (2003) outlines the historical seasonal cycle of the Missanabie Cree pre-1910 in a table stating the activity, location and intensity/regularity of which activities occur. "According to Elder testimony, certain activities were engaged in by small groups; such as, hunting and trapping. Fishing, berry picking, trading and gardening would be conducted in larger groups. Traditional Cree group structure was flexible, making it

possible to adjust to changing environmental conditions" (Lovisek 2003). The development of the railroad through the region influenced how people accessed their territories and provided some with wage work as is indicated in the table below. Over the years the distance trappers traveled to trade furs was also influenced by the development of the railway.

Table 1 Seasonal Cycle 1900-1910

Season	Activity	Location	Intensity / Regularity
Summer	Harvest plants; fish; non-migratory game; marsh birds; some fishing by nets for herring; wage work including guiding; work for Hudson Bay Company and Canadian Pacific Railway; prepare potato gardens.	Proximity to a fishing lake (including Dog Lake; Wabatongushi Lake; Manitowik Lake; Missinaibi Lake); Close to trading post and rail town at Missanabie; Gardens planted at Dog River, Emily Bay, Island Lake.	Every summer.
Autumn	Collect supplies at fur at trading post; set gill nets for whitefish; fish consumed and / or dried; waterfowl and muskrat harvested; harvest plants (berries) along rock cuts; snare hare; hunt bear and caribou; store canoes at freeze-up; repair nets.	Disperse to fall camps close to lakes; establish camp; process kill and skins. Travel route along Missinaibi River from Moose Factory to Missinibi Lake area and interior; Travel later facilitated by train.	Every autumn.
Winter	Hunt bear, moose and beaver; construct log cabins and cache racks; make snowshoes and sleds; set traps; mend equipment; procure firewood; set fish nets under ice.	Disperse to hunting territories along Missinaibi River, Dog Lake, Oba River, Return to fall site to where canoes cached and or train located.	Every winter.
Spring	Travel during ice breakup to trade at posts and to rejoin other families; hunting and fishing on route.	Camp established near fall site. Trading at Moose Factory, Missinaibi Lake, Missanabie and along CPR tracks. Travel route along Missanabie Lake area and interior. Use of train to reach spring / summer locations.	Every spring. Locations depended on fur prices, location, and proximity to hunting territory.

Copyright, Lovisek Research 2003, reprinted by permission

As shown in the table above, the activities undertaken by the Missanabie Cree were

multifarious requiring specific skills and aptitude. These activities were a means of

survival and helped to define people's roles within families and the community. It can not

be said for certain who is giving direction during the activities in each season. However,

below I discuss the division of labour among Cree groups from which inference can be drawn. I refer to the descriptions of group members' responsibilities, from Ellen Smallboy's recollections, as documented by Flannery (1995) and those of John Blackned, as recorded by Preston (2002).

Men and Women

The role that men played in the family groups was that of the hunter, provider and also educator. They were the family members known to hunt large game and to make most of the journeys to the trading posts. The elder men, as mentioned earlier were respected for the extensive knowledge they held of their land and their skills at hunting and trapping. The Okimah was revered by the group as a teacher, leader and a provider. The men within family groups were also known to be the mechanics and handymen; they were the ones who were tasked with the construction and maintenance of the hunting, and transport equipment.

Women played many different roles in their families; providers, educators and nurturers, among others. The women had some of the most important roles within camps and were the ones who set up camp. They supplied firewood for the camp to provide warmth when hunters returned in the winter and also for cooking the meat upon its delivery (Flannery 1935). The women looked after the kill when the men would bring it back; plucking geese, preparing flesh for drying, stretching hides, cleaning and drying fish, etc. and saw to the distribution of the meat among the group (Cummins 2004). Ellen Smallboy told Flannery (1995) that "It is up to the wife to decide because she knows best how much her family needs". The children were well fed before the surplus was shared among the other families. Women also knew how to set snares and wooden traps, make and use fish nets and construct clothing from skins and furs. They needed to be able to

provide for their families when the men left on extended trips (Flannery 1935). John

Blackned told Preston (2002) that the men of the families who lived far inland of the

posts would go and leave the family in the bush. The men would take the guns so the

women would need to use the tools left behind to provide for the family.

Children

Teaching children was the responsibility of all family members. Most of the education

took place through imitation and play. Ellen Smallboy recalled that much of the

schooling she got from her mother was in this manner. She got small pieces of meat or

dough to cook and old pieces of fish nets to use to catch small fish to cook. She stated

that she taught her children in the same manner she was taught. She gave her daughters

small pieces of cloth to wrap around sticks so they could learn to make a wikiwam. The

boys were given bows with blunt arrows so they could hunt small birds. Girls of age six

could snare rabbits and by age ten, they could string snowshoes. Boys would go hunting

with their fathers and grandfathers whenever they were deemed old enough to do so

successfully (Flannery 1995).

Children's roles in the group were taught at a young age. John Blackned spoke to

Preston (2002) about different ceremonies for boys and girls. Families would have a feast

and present meat to the eldest man of the family. A small boy in the family would be

given meat to present to the Elder and the community would praise the boy for supplying

the group with the meat. The praise according to Blackned was given in hopes of the boy

becoming a great hunter and provider for the community. He also describes a similar

ceremony for girls where they are given wood and praised by the group for providing

wood to keep the community warm. Meat would be given to the girl to pass to the eldest

man and the wood was presented to the eldest female. This was done to teach the girl the importance of providing for the community when her husband was out hunting.

Although there were distinct roles for men and women within a group, whatever needed to be done was done. It was a matter of survival (Flannery 1935). Over time, children observed much of what was expected from the opposite sex and could perform the tasks. They were not looked down upon if people were doing work that was traditionally meant to be done by the other sex.

In the book titled *Reclaiming our History*, written by Jackie Fletcher (2006), similar roles, as discussed above, and viewpoints were expressed by the women who were interviewed. However, some women in Fletcher's book spoke of a breakdown of mutual respect between men, women and children within the family and community. One way this breakdown is being addressed in our community is through the development of the Otisiabi Matriarchal Society and reclaiming women's roles and significance in the family and community. In some of the Cree communities around James Bay, the importance of teaching children about family hunting groups and activities is being embraced by the education system. A school break is given for the fall and spring hunt to allow children the opportunity to take part in traditional family activities (Rickard 1998).

There are members of Missanabie Cree who do still engage in hunting and trapping activities however, I am quite sure that the traditional kinship system of territory stewardship has long been abandoned by most Missanabie Cree throughout the traditional territory. I do not know how many members currently maintain trapping areas but I was happy to hear recently that an elder member of the community who holds a trap line up near Moose Factory has asked the Chief to take it over from him. Upon accepting, the

Chief is expected to walk the land with the Elder learn the territory boundaries and methods of trapping. He will be learning role responsibilities of an Okimah and in time pass it on himself. The return to "family" hunting territories and traditional roles for many Missanabie Cree is very unlikely. However, it is good to know that someone is continuing the practice of walking the land and maintaining a link to traditional practices of resource management.

4 Findings

This chapter presents the findings of the land value rankings which emerged from the Q sorts that were administered at the Missanabie Cree First Nation Annual Gathering in August of 2008 and online at www.mcfnqsort.com from June to August 2008. There were a total of 59 participants. Ten people completed the exercise online while the remaining 49 people participated in person at the gathering. One participant requested to be left out of the analysis. However, this person did agree to have their comments taken into consideration. The results presented are both qualitative and quantitative in nature.

4.1 Q sort Analysis with PQ Method

The resulting data from conducting the Q sorts, as described in Chapter 2 was entered into the PQ Method software program. A matrix of correlation coefficients was produced to demonstrate the extent to which each participants Q sort is similar to that of every other participant's sort. Factor analysis identified groups of Q sorts based on the strength of their correlations. The Principal Component Analysis (PCA) feature in PQ Method was used with Varimax rotation to extract the factors. It is common practice when using factor analysis to retain factors with eigenvalues greater than 1 (McKeown and Thomas

1988) or when there is a break in the slope of eigenvalues as can be seen on a scree plot, as described by Cattell (1966) .

The scree plot, as seen in Table 2, shows a break in the slope after the third factor where the fourth factor is nearly indistinguishable from the third and therefore, three separate factors were distinguished through the statistics and used in this analysis.

Table 2 Scree Plot of Eigenvalues

Eigenvalues
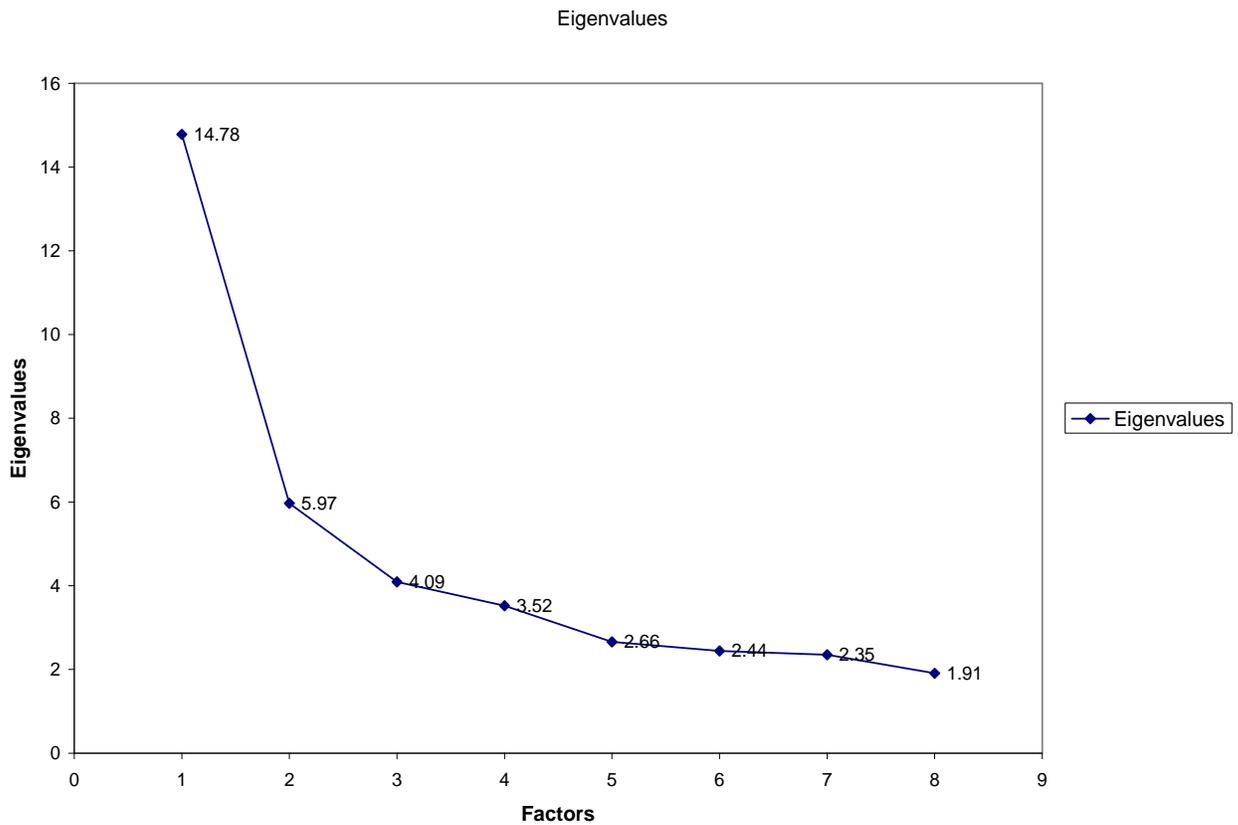
Each participant is associated with the factors through a Factor loading score also know as a correlation score. An example of a high correlation with a factor would be a score of 0.90 and a low correlation would be 0.10. Factor loadings range from 1.0 to -1.0 (Valenta and Wigger 1997). For each distinguished factor there is a corresponding Q sort that reflects the thoughts or theme of the positive loadings associated with that given

factor. No factors had significant negative factor loadings that were used. Participants who load significantly on a factor are used to determine a corresponding Q sort for that factor. The significance of the participants factor loadings was calculated with the following formula: SE = 1/(sqrt[N]) where SE is the standard error and N is the number of statements. Correlation is significant at 0.01 level when greater than 2.58(SE) = X, where X is the factor loading of a participant on a given factor (Valenta and Wigger 1997).

The corresponding Q sort which helps to define the factor is determined by weighted factor scores of participants who loaded highly on a factor. Swedeen (2005) explains a factor score as the following:

> "… a weighted average score for each statement that is associated with each factor according to the following process. A "defining sort" is identified—the sorts which had the highest factor loadings for each factor, and which did not have significant factor loadings for more than one factor. Each Q sort that is significantly associated with a factor is then weighted to take into account the difference in the degree to which that sort is associated with its factor. The weight for each Q sort within a factor is used to calculate a normalized "z score", or raw factor score for each statement" (p.196).

An example of the formula used to calculate the weighted scores as presented by (Brown 1980) is as follows: $w = \dfrac{f}{1 - f^2}$ where f is the factor score of a participant who loaded significantly on a given factor. Using the weighted scores, a $z-$score is calculated for each statement in a given factor. A detailed explanation on calculating z-scores can be found in Brown (1980 p.240-241).

Once all weighted scores are calculated the corresponding Q sorts are determined. For comparison between factors the weighted scores are transformed back to the numbers 1 – 9 that were used in the original Q sorting process (Valenta and Wigger 1997). Table 3 shows the score (from the Scale 1 to 9) that is associated with each statement in the Q sort that corresponds with each factor.

Table 3 Statements and Rankings for each Factor

Statements and Rankings for each Factor	*A*	*B*	*C*
1. The land and waters in our traditional territory are a potential means of development for our First Nation.	5	7	7
2. An industry such as mining should provide a source of revenue to support our First Nation.	2	6	5
3. An industry such as logging should provide a source of revenue to support our First Nation.	3	7	4
4. An industry such as tourism should provide a source of revenue to support our First Nation.	4	5	6
5. Partnerships between Missanabie Cree First Nation, Universities and Colleges should be developed to help thoroughly research the natural resources in our traditional territory.	5	7	6
6. Alternative power sources such as micro-hydro projects and wind power should be investigated as options in the development of our land.	5	7	8
7. The land and waters provide a spiritual connection to our relations.	6	6	3
8. The land and waters are an integral part of our heritage and traditional way of life. They provide and should continue to provide a means for us to engage in our traditional activities.	7	7	5
9. I would like the land and waters to be a place for me to visit from afar where I can maintain a tie to my heritage.	5	5	4
10. I want the lands and waters to be a special place of cultural learning and personal development.	6	6	5
11. The lands and waters within our traditional territory are ideal for providing opportunities in eco-tourism businesses.	3	3	4
12. The land and waters within our traditional territory are sacred.	8	4	2
13. Missanabie Cree First Nation should develop and monitor its own environmental regulations to protect fish, plants and wildlife.	6	5	5
14. The land and waters within our traditional territory should be a place for family to recreate, visit and play.	7	4	6

Statements and Rankings for each Factor	A	B	C
15. Development within our traditional territory should be done in an ecologically sustainable manner.	6	9	7
16. The lands and waters should provide economic growth that will sustain our community for generations to come.	4	8	6
17. The lands and waters should provide a means of living from trapping, hunting, fishing, wood cutting, and berry picking.	6	3	5
18. The lands need to be preserved.	9	4	3
19. The land and waters are a part of my identity.	8	4	2
20. Logging within our traditional territory should be limited.	4	2	7
21. Mining within our traditional territory should be limited.	4	3	5
22. The lands and waters within our traditional territory should provide a place where Missanabie Cree First Nation can have a community of full-time and seasonal residents who can live and enjoy the area.	6	5	9
23. The land and waters should provide economic prosperity through the development of non-timber forest products. (for example: food, health, decorative, landscape and garden products)	3	5	4
24. Partnerships with forest companies should be encouraged within our traditional territory.	2	6	3
25. Partnerships with mining companies should be encouraged within our traditional territory.	1	5	3
26. A portion of our traditional territory should be managed as parkland.	4	3	4
27. Some of the land and waters should stay pristine and provide for the spiritual needs of our community.	7	6	6
28. I want the land and waters of our traditional territory to be a place future generations will want to live.	9	6	7
29. I believe that the land and waters within our traditional territory can not provide us with anything as the resources have already been mismanaged.	2	1	1
30. Resource extraction from the land and waters within our traditional territory must be managed in an ecologically sensitive manner.	7	8	7
31. If the forests in our traditional territory are going to be cut, Missanabie Cree First Nation should be doing the cutting.	5	2	5
32. Community housing and infrastructure should be carefully planned and developed slowly.	5	7	8
33. There should be water front property for every member to build on within our traditional territory.	3	1	6
34. The community housing and infrastructure should be built away from lakeshores to provide protection to the shoreline.	4	5	2

Statements and Rankings for each Factor	A	B	C
35. The natural resources in our traditional territory should be exploited for economic benefit.	1	2	1
36. The key to developing wealth for Missanabie Cree First Nation and building our community is by investing in business outside our traditional territory.	3	8	5
37. I consider these lands to be my home-land even though I have been away for a very long time.	8	4	4
38. Land should be set aside during community planning and development that is available for each member who wishes to continue to live off reserve but may desire to return to our traditional territory in the future and build a home.	5	4	9
39. Missanabie Cree should have a management plan developed for its land, waters, and wildlife before any large scale community infrastructure development takes place.	7	9	8
40. The community housing and infrastructure should be built away from lakeshores to provide equal access to the waterfront for all members of Missanabie Cree	5	3	3

The three distinguished factors account for 42% of the variance in the Q sorts. The factor scores associated with each distinguished factor are not fully independent of each other as can be seen in Table 4. This table shows the relationships between the factor scores through the correlations of the factor score arrays.

Table 4 Correlation Between Factor Scores

Factor	A	B	C
A	1.0000	0.2721	0.3089
B	0.2721	1.0000	0.4757
C	0.3089	0.4757	1.0000

The correlation that exists between some factor scores suggests there are similarities among the idealized sorts representing each factor. Factor scores for factors A and B have a significant correlation at .01 level. These similarities between factor scores will be discussed in greater detail once each factor is described.

Table 5 presents the correlation that exists between each participants Q sort and each of the three distinguished factors. The participant numbers that loaded significantly on

each factor and whose sorts were used in generating the defining Q sorts, are marked with an asterisk. The total number of significant participants for each factor is noted at the bottom of the table. The percent of the variance accounted for by each factor is also presented at the bottom of the table.

Table 5 Participants Loadings on each Factors Defining Q sort

Participant	Factors		
	A	B	C
001	0.1552	0.3640	0.0700
002	-0.1097	0.5436*	0.0944
003	0.4942	0.4138	0.3377
004	-0.0690	0.7999*	0.0749
005	-0.1740	0.5190*	0.1161
006	0.3199	-0.1850	0.1273
007	0.7733*	0.0209	0.0904
008	0.7777*	-0.0582	-0.1464
009	0.1699	0.5297*	0.4002
010	0.6623*	-0.0885	0.1455
011	0.5771*	0.1947	-0.0284
012	0.1616	0.3976	0.5174*
013	0.2644	0.1763	0.5912*
014	0.6218*	0.2418	0.1266
015	0.7221*	0.1975	0.2683
016	-0.4973	0.0778	0.4987
017	0.1890	0.1947	0.1356
018	0.1320	0.1700	0.5570*
019	0.2727	0.6077*	0.1679
020	0.5252	0.5199	0.1920
021	0.3660	0.6488*	0.1076
022	0.6968*	0.0070	0.2828
023	-0.0107	0.0312	-0.0268
024	0.6143*	0.1998	0.4150
025	0.6237	-0.1249	0.5327
026	0.4004	0.4254	0.3681
027	0.6946*	-0.0114	0.2129
028	0.3460	0.0766	0.4679
030	-0.0085	0.7275*	0.4022
031	0.2653	-0.1258	0.4000
032	0.1058	0.0653	0.6373*
033	0.0634	0.5690*	0.3928
034	0.6859*	0.2304	0.1414
035	-0.1691	0.3694	0.7146*
036	0.1858	-0.0343	0.3343
037	0.5933*	0.2292	0.1548
038	0.6586*	-0.0409	0.3712
039	0.3925	-0.1619	0.3853
040	0.1309	0.1451	0.4365

	Factors		
Participant	A	B	C
041	0.1418	0.0975	0.4709
042	0.6387*	0.2790	0.0211
043	0.3130	-0.2925	0.6941*
044	0.1469	0.5405*	0.2660
045	0.5412*	0.0569	0.1213
046	0.5266	0.5691	0.0546
047	0.0356	0.5487*	0.2035
048	0.6881*	0.0106	0.0627
049	0.3938	0.3728	0.4145
050	0.2199	0.4937	-0.2067
051	-0.2062	0.3198	0.6443*
052	-0.1538	0.3828	-0.1724
053	0.0955	0.0216	0.3031
054	0.6011*	0.4082	0.0211
055	0.0137	0.1221	0.7043*
056	0.7035*	0.0805	0.2151
057	0.1187	0.2900	0.0253
058	0.0864	0.6359*	-0.0401
059	0.0897	0.2160	0.5438*
# loaded	17	11	9
variance %	18	12	12

*denotes significance > .01

Since most participants ranked significantly upon Factor A, this indicates that Factor A represents the majority discourse. Although Factors B and C have less participants loading significantly and explain less of the variance, they each represent a distinguishable discourse within the community. Twenty-one participants either did not load significantly on any one factor, or did load significantly on multiple factors and, as a result, were not chosen as a sort that was used to define a factor. These participants who were not marked as significant are however correlated with one of the three distinguishing factors to some extent. A level of significance greater than .01 was used to assist in eliminating participants who loaded on multiple factors from the interpretation. By using a higher level of significance the researcher is presented with a more clear idea of the theme associated with the emergent factors.

Below is a more detailed analysis of each factor. The following description of the discourse representing each factor is done in a manner that uses the Q statements which were key in defining them. These statements are identified by number in parentheses throughout the descriptive paragraphs. Refer to Table 3 for the corresponding Q statements.

4.1.1 Factor A: Cultural and Spiritual Values

The core belief in this perspective is that the land and waters within the traditional territory are sacred and need to be protected now and into the future. There are four important statements that lend themselves to this perspective: The need for the lands to be preserved (18), having the land and waters of the traditional territory be a place that future generations will want to live (28), the idea that land and waters are sacred (12) and that a portion of the land and water should stay pristine to provide for the spiritual needs of the community (27).

Table 6 Q sort distinguishing Factor A

1	2	3	4	5	6	7	8	9
25	29	23	16	9	10	27	12	28
35	2	11	20	32	17	14	37	18
	24	36	4	38	7	8	19	
		3	21	31	13	39		
		33	26	6	15	30		
			34	1	22			
				40				
				5				

Figure 6 Distinguishing Q sort for Factor A

1	2	3	4	5	6	7	8	9
(25) Partnerships with mining companies should be encouraged within our...	(29) I believe that the land and waters within our traditional territory can not provide us...	(23) The land and waters should provide economic prosperity through the development...	(16) The lands and waters should provide economic growth that will sustain our...	(9) I would like the land and waters to be a place for me visit from afar where I can maintain a...	(10) I want the lands and waters to be a special place of cultural learning and personal...	(27) Some of the land and waters should stay pristine and provide for the spiritual needs of...	(12) The land and waters within our traditional territory are sacred.	(28) I want the land and waters of our traditional territory to be a place future generations will...
(35) The natural resources in our traditional territory should be exploited for economic...	(2) An industry such as mining should provide a source of revenue to support our First...	(11) The land and waters within our traditional territory are ideal for providing...	(20) Logging within our traditional territory should be limited.	(32) Community housing and infrastructure should be carefully planned and...	(17) The lands and waters should provide a means of living from trapping, hunting,...	(14) The land and waters within our traditional territory should be a place for family to...	(37) I consider these lands to be my home-land even though I have been away for a...	(18) The lands need to be preserved.
	(24) Partnerships with forest companies should be encouraged within our...	(36) The key to developing wealth for Missanabie Cree First Nation and building our...	(4) An industry such as tourism should provide a source of revenue to support our First...	(38) Land should be set aside during community planning and development that...	(7) The land and waters provide a spiritual connection to our relations.	(8) The land and waters are an integral part of our heritage and traditional way of...	(19) The land and waters are a part of my identity.	
		(3) An industry such as logging should provide a source of revenue to support our First...	(21) Mining within our traditional territory should be limited.	(31) If the forests in our traditional territory are going to be cut, Missanabie Cree...	(13) Missanabie Cree First Nation should develop and monitor its own environmental...	(39) Missanabie Cree should have a management plan developed for its land, waters, and...		
		(33) There should be water front property for every member to build on within our...	(26) A portion of our traditional territory should be managed as parkland.	(6) Alternative power sources such as micro-hydro projects and wind power should be...	(15) Development within our traditional territory should be done in an ecologically...	(30) Resource extraction from the land and waters within our traditional territory...		
			(34) The community housing and infrastructure should be built away from...	(1) The land and waters in our traditional territory are a potential means of...	(22) The lands and waters within our traditional territory should provide a place where...			
				(40) The community housing and infrastructure should be built away from...				
				(5) Partnerships between Missanabie Cree First Nation, Universities and Colleges should...				

56

This view highlights that the land and waters within the traditional territory are considered by many in the community to be their home-land (37) and are integral to how they define themselves (19). The value of the land is exemplified through family connections and activities (14), cultural learning and personal development (10), spiritual needs and connections (27, 7).

This perspective also emphasizes a clear preference for the traditional uses of the land and resources in the traditional territory (8, 17) over community engagement in industrial resource extraction, such as, logging and mining (24, 25, 2, 3) which were rated at the low end of the scale of importance.

In this perspective there is a preference for putting the welfare of the land, water and wildlife ahead of community infrastructure development and resource extraction. This preference is shown through the acknowledgement for the use of resource management planning (39) and a need for ecologically sensitive resource management (30). In sorting the statements, the community members who loaded highly on this perspective ranked economic and community infrastructure development with less importance than they did family connections, and the cultural / spiritual values they find inherent in the land and waters.

4.1.2 Factor B: Economic and Conservation Values

The core belief in this perspective is that land management planning is important (39). This perspective puts forth a conservation ethic through promoting the careful, ecologically sensitive and sustainable use of resources (15, 30) to provide economic growth that will sustain the community for generations to come (16). The lands and

waters need to be protected (30) but with less emphasis placed on preservation (18)

focusing more on conservation.

Table 7 Q sort distinguishing Factor B

1	2	3	4	5	6	7	8	9
33	31	11	12	22	24	6	30	39
29	20	40	19	25	28	1	16	15
	35	26	38	23	3	8	36	
		17	37	10	2	32		
		21	14	13	7	5		
			18	9	27			
				34				
				4				

Figure 7 Distinguishing Q sort for Factor B

1	2	3	4	5	6	7	8	9
(33) There should be water front property for every member to build on within our...	(31) If the forests in our traditional territory are going to be cut, Missanabie Cree...	(11) The land and waters within our traditional territory are ideal for providing...	(12) The land and waters within our traditional territory are sacred.	(22) The lands and waters within our traditional territory should provide a place where...	(24) Partnerships with forest companies should be encouraged within our...	(6) Alternative power sources such as micro-hydro projects and wind power should be...	(30) Resource extraction from the land and waters within our traditional territory...	(39) Missanabie Cree should have a management plan developed for its land, waters, and...
(29) I believe that the land and waters within our traditional territory can not provide us...	(20) Logging within our traditional territory should be limited.	(40) The community housing and infrastructure should be built away from...	(19) The land and waters are a part of my identity.	(25) Partnerships with mining companies should be encouraged within our...	(28) I want the land and waters of our traditional territory to be a place future generations will...	(1) The land and waters in our traditional territory are a potential means of...	(16) The lands and waters should provide economic growth that will sustain our...	(15) Development within our traditional territory should be done in an ecologically...
	(35) The natural resources in our traditional territory should be exploited for economic...	(26) A portion of our traditional territory should be managed as parkland.	(38) Land should be set aside during community planning and development that...	(23) The land and waters should provide economic prosperity through the development...	(3) An industry such as logging should provide a source of revenue to support our First...	(8) The land and waters are an integral part of our heritage and traditional way of...	(36) The key to developing wealth for Missanabie Cree First Nation and building our...	
		(17) The lands and waters should provide a means of living from trapping, hunting,...	(37) I consider these lands to be my home-land even though I have been away for a...	(10) I want the lands and waters to be a special place of cultural learning and personal...	(2) An industry such as mining should provide a source of revenue to support our First...	(32) Community housing and infrastructure should be carefully planned and...		
		(21) Mining within our traditional territory should be limited.	(14) The land and waters within our traditional territory should be a place for family to...	(13) Missanabie Cree First Nation should develop and monitor its own environmental...	(7) The land and waters provide a spiritual connection to our relations.	(5) Partnerships between Missanabie Cree First Nation, Universities and Colleges should...		
			(18) The lands need to be preserved.	(9) I would like the land and waters to be a place for me visit from afar where I can maintain a...	(27) Some of the land and waters should stay pristine and provide for the spiritual needs of...			
				(34) The community housing and infrastructure should be built away from...				
				(4) An industry such as tourism should provide a source of revenue to support our First...				

This view highlights the importance of looking outside the traditional territory for economic opportunity (36) and also to create the partnerships that will invite the needed expertise to assist in an assessment of the resources within the community's territory (5). It is believed that this direction will allow the community to build the necessary internal capacity to fulfill the responsibilities of sustainable land planning and stewardship. The importance that this perspective places on looking outside our territory for wealth development and creating partnerships to access expertise, aligns itself with the planning and conservation ethic that is at its core.

There is a strong feeling in this perspective that the land is still able to provide for the community regardless of the mismanagement of resources in the past (29). It holds the belief that the land is an integral part of our heritage and should continue to provide a means for us to engage in out traditional activities (8). This view places a higher importance on logging and mining as a source of revenue for the First Nation (24, 25, 2, 3, 20, 21) than does factor A, as long as it is undertaken with the condition that it be done in manner which is ecologically responsible and non-exploitive (35).

The comments from the community members who loaded heavily on this perspective note that, once plans are in place, development can occur in a responsible manner and other issues can be addressed. The cultural and spiritual needs and desires of the community are important and will be a component of effective planning. Questions around residency, full-time and seasonal are considered of less importance at this time (38) but, will also fall into place as a result of strong economic and resource development plans.

"Part of who we are as people of the land is to ensure our multi-generational connection to a healthy and natural environment. From a spiritual connection our actions in all areas of resource development will have a clear protection component in other areas including economic, social, spiritual and recreational growth."

"Planning for all future anticipated activates ranging from resource extraction, economic development, infrastructure, etc. will be the template for the development stages of our future growth".

The idea of land and waters in the traditional territory as a way of one to identify ones self (19) is a given, or, will develop once people have the opportunity to return to a well planned community in and around Missanabie.

4.1.3 Factor C: Community Infrastructure Values

The core belief in this perspective is that there should be a place in the traditional territory for those who choose to make a life away from the area (off reserve). That a place be set aside for them to visit, live in the territory seasonally or make a permanent home if they should choose to do so in the future (38, 22).

Table 8 Q sort distinguishing Factor C

1	2	3	4	5	6	7	8	9
29	12	25	9	21	33	28	39	38
35	34	24	37	31	5	30	32	22
	19	7	11	17	4	15	6	
		40	3	10	27	1		
		18	23	8	16	20		
			26	13	14			
				2				
				36				

Figure 8 Distinguishing Q sort for Factor C

LESS IMPORTANT (DISAGREE)   IMPORTANT (AGREE)

1	2	3	4	5	6	7	8	9
(29) I believe that the land and waters within our traditional territory can not provide us...	(12) The land and waters within our traditional territory are sacred.	(25) Partnerships with mining companies should be encouraged within our...	(9) I would like the land and waters to be a place for me visit from afar where I can maintain a...	(21) Mining within our traditional territory should be limited.	(33) There should be water front property for every member to build on within our...	(28) I want the land and waters of our traditional territory to be a place future generations will...	(39) Missanabie Cree should have a management plan developed for its land, waters, and...	(38) Land should be set aside during community planning and development that...
(35) The natural resources in our traditional territory should be exploited for economic...	(34) The community housing and infrastructure should be built away from...	(24) Partnerships with forest companies should be encouraged within our...	(37) I consider these lands to be my home-land even though I have been away for a...	(31) If the forests in our traditional territory are going to be cut, Missanabie Cree...	(5) Partnerships between Missanabie Cree First Nation, Universities and Colleges should...	(30) Resource extraction from the land and waters within our traditional territory...	(32) Community housing and infrastructure should be carefully planned and...	(22) The lands and waters within our traditional territory should provide a place where...
	(19) The land and waters are a part of my identity.	(7) The land and waters provide a spiritual connection to our relations.	(11) The land and waters within our traditional territory are ideal for providing...	(17) The lands and waters should provide a means of living from trapping, hunting,...	(4) An industry such as tourism should provide a source of revenue to support our First...	(15) Development within our traditional territory should be done in an ecologically...	(6) Alternative power sources such as micro-hydro projects and wind power should be...	
		(40) The community housing and infrastructure should be built away from...	(3) An industry such as logging should provide a source of revenue to support our First...	(10) I want the lands and waters to be a special place of cultural learning and personal...	(27) Some of the land and waters should stay pristine and provide for the spiritual needs of...	(1) The land and waters in our traditional territory are a potential means of...		
		(18) The lands need to be preserved.	(23) The land and waters should provide economic prosperity through the development...	(8) The land and waters are an integral part of our heritage and traditional way of...	(16) The lands and waters should provide economic growth that will sustain our...	(20) Logging within our traditional territory should be limited.		
			(26) A portion of our traditional territory should be managed as parkland.	(13) Missanabie Cree First Nation should develop and monitor its own environmental...	(14) The land and waters within our traditional territory should be a place for family to...			
				(2) An industry such as mining should provide a source of revenue to support our First...				
				(36) The key to developing wealth for Missanabie Cree First Nation and building our...				

Land management planning for resource use and community infrastructure, before development begins, is a top priority for those who loaded highly on this perspective (39, 32), as is the investigation into the use of alternative energy sources in the development of the lands (6). It is generally realized that resource extraction and development of resource industries will take place and it is rated to be fairly important as long as it is done in an ecologically and sustainable manner (30, 15).

It is clear in this perspective that individual waterfront residences (33) are fairly important as the related statement rated much higher than those associated with building away from shorelines to provide protection to the shore (34) and equal access for all members (40). It seems that those who hold this perspective feel that the answer of shoreline protection and equal access can be addressed through adequate and comprehensive planning. Although the cultural and spiritual values of the land and waters rated relatively low in this perspective, the importance of having a waterfront property may be interpreted as a contemporary expression, of a cultural need for access to the water.

Comments of participants who rated significantly on this factor, note that the land is not part of their identity (19), but the place has significance to them either through family connections or recreational activities and time spent in the region (14). They feel they are entitled to be part of the community and want a place for themselves and their families to have into the future.

4.1.4 Demographics of Factors

The numbers of participants was evenly distributed between gender with 28 females and 30 males taking part in the Q sort. The age class distribution was also quite evenly distributed as shown in Table 9.

Table 9 Age Class Distribution of Participants

Age Class	18-30	31-40	41-50	51-60	60+
% of participants	21	24	12	24	19

Participants were asked if they had ever lived in the traditional territory, if they plan on living there in the future, and also if they feel they have a role to play in the development of the community.

The percentage of participants who have lived in the traditional territory at some point was 55%. The percentage of participants who plan to live in the territory in the future is 40%, those who do not, make up 5%. The participants who do not know at this time if they will live in the territory in the future make up the remaining 55%. A large proportion of participants – 77% - feel they have a role to play in the development of the community while 5% do not and 21% feel that they have somewhat of a role to play.

The following table outlines how the participants associated with each factor answered these questions. No significance is placed on the numbers in Table 10, however, they do paint an interesting picture and are included in the results to invoke thought.

Table 10 Demographics and Plans of Participants which Loaded Significantly

Factors and number of Participants	Largest Age Class Represented	Gender	Lived in Traditional Territory	Will live in Traditional territory in the future	Role in development of the community
A n = 17	18-30 43%	60% M 40% F	76% Yes 24% No	65% Yes 0% No 35% Unsure	94% Yes 6% No 0% Somewhat
B n = 11	51-60 36%	55% M 45% F	55% Yes 45% No	18% Yes 9% No 73% Unsure	64% Yes 9% No 27% Somewhat
C n = 9	51-60 55%	55% M 45% F	22% Yes 78% No	22% Yes 00% No 78% Unsure	55% Yes 12% No 33% Somewhat

5 Discussion

5.1 Q sort Factor Comparison

It was mentioned earlier in Section 4.1 and shown in Table 4 that there are indeed similarities among the factor scores that emerged from the Q sort analysis. The majority of the similarities are found between Factors B (Economic and Conservation) and C (Community Infrastructure), where the correlation is 0.47. These factors are distinct enough to be differentiated statistically, however; the idealized array used for interpretation demonstrate they are similar in where they place their importance on management planning of both community infrastructure and resource management. The rankings also show similar priorities put on in incorporating green technologies into

community development and developing partnerships with educational institutions to research the resources in the territory.

The differences between Factors B and C are found in two areas. One difference is the extent to which each perspective views mining and forestry as potential avenues for the First Nation to generate revenue. Factor B ranks the participation of the First Nation in mining and forestry with greater importance than does Factor C. The second difference is the issue of setting aside land for people who wish to remain off reserve but may desire to return in the future and have the lands be a place for both seasonal and full time residents. Factor C places greater importance on the issues of land allocation for community members than Factor B.

In order to bridge the differences between perspectives, it is important to focus on the similarities between them and determine if there is an avenue that can be taken to address the values of each in a meaningful manner. The link between B and C would seem to be the statements on planning for both community development and resource management.

Since booth factors B and C place similar importance on having a comprehensive plan in place perhaps this could be explored further by the community. In the process of addressing the differences in agreement between factors B and C, the community will undoubtedly be faced with difficult questions. Members hold differing opinions on how the lands received from the Treaty Land Entitlement process and those extending into our traditional territory should be divided between personal use and business use. Questions that come to mind are: How is land to be allocated? Is the land to be divided into lots per family or held in a common? If the land is held in a common, how will seasonal or off-reserve members accommodated? How will membership expansion be addressed? What

limitations does the Indian Act impose over our community determining how land is to be allocated among our community? What limitations does the Indian Act impose over our community determining how our business are operated and managed on our traditional lands? These are important questions that may accompany the perspective presented by Factors C and B in the process of addressing differences among members.

Further Q sorts that are solely focused towards these questions could be implemented to determine thoughts and attitudes on methods of land allocation and management among the community.

Now that it has been shown where the perspectives of factors B and C can be bridged, a real challenge for the community lay in the bridging of Factor A (Cultural and Spiritual) with the other two factors. The strong differences between Factor A and the others became apparent earlier in the reporting of the results. Here the areas of agreement will be examined.

Factors A and C are similar in how they rank the importance of the traditional territory being a place of recreation, to visit and play. The similarities exhibited between the two factors may be incidental however. After the analysis of factors took place a member of the community advisory committee had pointed out that the word recreate for her meant to "re-create". Recreate to her was associated in re-establishing identity, "re-creating" a sense of place and community in her traditional territory, a notion that fits strongly with the interpretation of Factor A, whereas those who loaded on Factor C may have viewed recreate to mean recreational activities such as fishing, hiking, boating, etc.

An area of agreement among all the factors centers around the idea of having strong plans in place before development commences. For Factor A the area of agreement for

management planning lays mainly with land, wildlife and community infrastructure. All factors, A, B, and C positively rank statement 30 which says, that resource extraction should be managed in an ecologically sensitive manner. This shows that even though participants who load highly on Factor A rank resource extraction as a very low priority or may totally disagree with the community being involved in such activities, they accept that it may be necessary for the First Nation to become involved in resource extraction. With proper planning that preserves areas within the traditional territory for the community's spiritual and cultural needs, compromise or consensus may be reached. The potential to find compromise is further reinforced by factors B and C's positive ranking of statement 27 in effect agreeing with Factor A that some of the land should stay pristine and provide for the spiritual needs of our community. By initiating land management planning process, the areas that need to stay protected and the degree to which protection is provided can be identified and addressed.

5.2 Land Management Planning in Missanabie

Knowledge of community values and their priority within the community is important for leadership to have. The identified values and the level of importance or the manner which priority is placed on them by the community would have a direct bearing on the direction to take to advance the First Nation on its journey to become re-established within its traditional lands. The perspectives that emerged from the factors generated by the Q sort suggest that the current focus of the majority of the members interviewed is towards more land protection and cultural development. Less importance was placed on the economic opportunities and rewards that would accompany developing partnerships

or job opportunities in resource based industries, particularly the forestry and mining sectors.

For an administration to take any specific course of action or direction in the development of the traditional territory, compromises would need to be reached among the perspective of the majority and minority perspectives in the community. Important questions that may accompany the perspectives found in the Q sort factors when trying to reach a compromise might be: How can traditional lands and activities, cultural and spiritual values and sacred areas be protected and maintained while engaging in the modern economy and industries within the boreal forest? How do we incorporate the community's priorities into action without jeopardizing business opportunities? Trosper (1995) notes that avenues for development that a First Nation engages in may indeed be unique from what is traditionally defined as economic development. The values that the Missanabie Cree hold towards the lands in their traditional territory may differ from that of the dominant society and, therefore, the community may require a unique strategy for its re-establishment and development.

Bridging differences in opinion is going to require 'social entrepreneurship' in the community to break through, and a plan to ensure that the ideas brought forth provide the protection and accommodation of key ideals expressed by the First Nation (Anderson et al. 2006). Perhaps traditional participation in resource industry activities, like mining, logging, and tourism, need to be replaced with novel approaches that allow the First Nation to benefit indirectly and have its needs addressed.

Other First Nation communities in Canada hold a similar dichotomy of values and have successfully engaged in creating land management plans for their traditional areas.

Osoyoss Indian Band is a model for many First Nation communities looking to find a balance between the need for economic initiatives in their territory and providing for the social, cultural and spiritual needs of their people. The motto of their development corporation is 'working with business to preserve our past by strengthening our future (Anderson et al. 2006). Chief Louie of the Osoyoss band is quoted in a document produced by the Institute on Governance as saying "If making money is more important than your aboriginal heritage then you have compromised your identity as an aboriginal corporation" (Graham and Edwards 2003).

The Huu-ay-aht are embarking on the journey to develop a plan that will define their lands, their cultural and heritage resource values, and the management objectives for these lands to ensure the land use addresses the needs of the Huu-ay-aht people (Huu-ay-aht First Nation 2007).

Poplar River First Nation has created a very comprehensive management plan titled Asatiwisipe Aki Land Management Plan, which was completed in 2005. The land plan covers the traditional territory of the First Nation which is 862,000 hectares in size. Much of the region covered by the plan is park reserve; it does however, cover areas outside of protected regions and encompasses over lapping territory with other First Nations. The plan is seen as a framework created by the First Nation to guide other governments and industry in their planning processes concerning resource use in the region (Poplar River First Nation 2005).

Missanabie Cree, like other First Nations, faces challenges in the area of land management planning. The Treaty Land Entitlement process currently underway will see land transferred to the First Nation as fee simple from the government of Ontario, and

then in the same action it will be surrendered to Canada and made into a reserve, effectively limiting the autonomy the community has over the management activities on the land. This it seems, coupled with a traditional territory that is fragmented with various mining claims and forest tenures - all of which the First Nation has no ownership or management - complicates the effectiveness of a plan to be implemented. However, with Supreme Court of Canada decisions in such cases as Haida v. British Columbia (Minister of Forests) and Weyerhaeuser (2004), and Delgamuukw v. British Columbia (1997) each ruling in favor of consultation and accommodation of First Nations rights, a comprehensive community and land management plan could be developed in accordance with the values of the membership and the vision the First Nation has for its traditional lands located both on and off reserve. A land management plan, such as this, would have the potential to strengthen the unity within the community and to have their ideals incorporated in the policies and planning of neighboring First Nations, government agencies and industry.

5.3 Rewards and challenges of Q method with Missanabie Cree

Chapter 2 discussed the importance of research initiatives with First Nation communities being undertaken in a meaningful and respectful manner. Even though much of the feedback from the participants was positive, the project did encounter a member who had strong negative feelings towards the methods and the instrument used in the project. The participant stated that the scale was inappropriate for the comments being asked, and that some of the statements were compound in nature and therefore problematic. A few participants mentioned that while working on the Q sort it was difficult for them to prioritize the statements and they tried their best to give their over all

impression where they placed the importance of economics, ecological integrity and cultural needs in a viable community setting:

> "It was very difficult for me, as I tended to have very few disagrees. So I had to focus on the things that were most important, which are Sustainability and non-exploitation of our Mother Earth. Cultural and Traditional items are also important to me but in that area I am a follower and not a leader so by putting them in the "don't care" section it is not completely true."

> "I did my assessment to the way I feel about the importance of the question. They may not necessarily be rated as such seeing that all the questions pertain to the structure of our lands."

The participant who voiced their dissent also stated that the instrument was flawed and that it was not the proper method to use for working with Aboriginals, by making reference to this being another attempt to fit the Aboriginal people into the "Western box" and asking them to use the words of another person to describe their views is very disrespectful. It was implied that assimilated or integrated people would have an easier time breaking down and compartmentalizing viewpoints into simple dichotomies.

It was only one participant who expressed such views openly, however, the sentiments expressed by this person may explain why others in the community, although supportive of the efforts made by a member of the First Nation on working to further his education, did not view the Q sort as a valuable exercise for themselves or the First Nation and, as a result, decided not to participate. It was by no means a surprise that such comments would arise in this project and it was good that they did. The fact that these comments did arise speaks to the difficulties that exist in attempting to combine the ontologies and epistemologies of a minority, like those of Aboriginal peoples, with scientific models created and accepted by the dominant society. For future research projects and

partnerships with educational institutions to continue to be beneficial for the First Nation, acknowledgement and examination of the obstacles that exist are needed.

The researcher believes that the strength of the Q method in this project lay in its participatory nature and how the collection and analysis of data was undertaken. Effort was made in this project to address the concerns that are known to exist in some Aboriginal communities when research is proposed by outside agencies. A meeting with community leaders to discuss the validity of such a project took place almost two years before the proposal was submitted for funding. An advisory board of community members, representative of various families within the First Nation that were engaged in all aspects of the process including the refining of the initial research question and approval of the thesis that was created. As well, issues surrounding ownership of data, deliverables and outcomes of the project were addressed with the community leaders. As mentioned previously, the majority of feedback from the participants indicated that they found the exercise valuable. Leadership in the community has always tried to make an effort to include members in discussions and decisions pertaining to the First Nation. However, it seems that a major criticism heard by the membership is the lack of ability to have their voice heard. Many participants felt that this project gave them a voice and allowed them to express what they value in their traditional territory and what is important to them:

> "I believe this questionnaire will have a significant role to play in the
> planning stage for the development of our community…the results of this
> should be taken seriously when planning because this is what we want,
> this is how we feel."

"I am happy about being part of the Q sort because the questions are related to my history. It is also a good tool to find out how other band members think and it is an opportunity to express their feelings in another format. Not everyone is comfortable voicing their feelings and opinions verbally"

"The questionnaire was a useful tool in sorting out my own quest for answers on what direction we should be taking and what is best for us now and future generations to come."

"I thought the questionnaire was a great approach to organizing and assembling the wants and needs of our members."

5.4 Limitations and Strengths of Q method

Much of the strength of the Q method comes from its participatory nature. However, as Addams and Proops (2000) note, this also makes it quite time intensive. The process of capturing the discourse through interviews or questionnaires and the subsequent evaluation of statements to include in the Q sort requires much attention from the researcher. In Missanabie, each Q sort that was done in person required instruction and supervision for the participant in an exercise which took anywhere from 40 minutes to an hour. Some time was saved using an online version with written instructions, however, a great amount of time was also required to program the Q sort, set up the website and include detailed instructions. The time intensity associated with the Q method is countered by the fact that "statistically rigorous results" can be generated by having relatively few participants (Addams and Proops 2000).

With the use of social research techniques, it is not uncommon for questions of validity and reliability of the methods to be encountered. Valenta and Wigger (1997) point out that validity in Q is found where; 1.) The statements are derived from the participants and are left as much as possible in their own words. 2.) Each participant's set

of rank-ordered statements is considered to be a valid expression of their opinion, and 3.) Advice from a team of experts is used along with a review of literature on the topic under examination.

Reliability of Q method has been investigated using a test-retest procedure. Brown (1980) has reported correlation coefficients of .80 when administering the same Q sort to the same participants at two different times. Akhtar-Danesh and Baumann (2008) report that in a study by Fairweather (1981), a reliability of over .90 was recorded for a test-retest of Q sorts over a 1 to 2 year interval.

In this project Q sorts were completed by participants either in person or via computer at the annual gathering or over the internet. According to Van Exel and de Graaf (2005) Reber, Kaufman and Cropp (2000) concluded that there is no difference in validity or reliability of either method, in person interview based or via computer.

Other traditional methods of evaluating attitudes could be used, such as, qualitative interviews or quantitative questionnaires. Each of these methods has its strengths, however interviews alone do not lend themselves well to statistical analysis while the most quantitative questionnaires may not fully allow for the full range of attitudes the respondents hold to be expressed "so they may impose clarity and some consistency of attitudes, where this does not exist" (Addams and Proops 2000). Q method incorporates both qualitative and quantitative aspects allowing for statistical analysis of attitudes and values of a group through statements that are directly generated from the participants themselves.

6 Conclusion

Through the Q sort it has been demonstrated that currently, Missanabie Cree do indeed hold a mix of traditional and contemporary values, with the main division among members appearing in how each expresses their connection to the land. As was demonstrated, three distinguishable factors emerged from the Q sort analysis; Spiritual and Cultural, Economic and Conservation, and Community Infrastructure. After examining the importance land and place play in the development and affirmation of the ontologies and epistimologies of Aboriginal people, and looking at the traditional methods of resource management practiced by Missanabie Cree and their ancestors, the results as presented should be of little surprise.

Many of the values that were expressed by Missanabie Cree members in the process of doing the Q sort such as preserving sacred areas, being stewards of the territory for future generations, maintaining a right of connection to the territory through family, engaging in the careful utilization of resources in the territory, and taking care of all these values through prudent management planning, are not totally outside the realm of influence from that of their ancestors. Historically, the Cree have valued the land and resources and expressed this through their every day practices and belief systems based on reciprocity and respect. The roles and responsibilities of the Okimah and Talleymen described earlier are similar to the knowledge, rules and regulations that could be incorporated into a land management plan developed by the community based around their values. It was stated before that values and knowledge in Aboriginal communities are handed down from preceding generations to the ones following (Berkes 1999, Parsons and Prest 2003). The conservation ethic described in the literature review and the

values associated with it would have been passed down to the current members of

Missanabie Cree among families and incorporated into their worldview and expression of

values of today. However, there are systems other than the transference of knowledge and

values from generation to generation within the community at play, and the strength of

influence of these outside agencies on Missanabie Cree should not be forgotten.

A good portion of participants in the Q sort express that they do not view the land in a

spiritual way and do not place much importance on the traditional activities but remain

connected through family and their recreational experiences upon the land. The

following are a few comments from members:

> "I am sorry but I am not spiritual to the land. I love being there but I
> have no identity with the spirits… I have been gone too long and am now
> assimilated into White Culture".

> "It may be a home-land for my mother. My connection comes through
> her and my other relatives".

> "Just come to visit family here. We go fishing. So, when we come here
> is all about seeing everybody from all over that we don't see or only see
> once a year."

> "It is a good feeling to know that my family and I can get together for
> celebration and reconciliation in an area where our ancestors lived and
> celebrated". "As there has been no land base for so many years I have been
> forced to provide for my family elsewhere. I have created a comfortable
> way of life and would like to keep ties and be proud of my achievements
> at the same time."

Over time, the influx of missionaries and trading companies moving into the region,

the assimilation of children through residential schools and the introduction of

government policies on land management that are foreign to the traditional Cree systems,

have had an impact on the way some people now connect to the land culturally. The

major disconnect Missanabie Cree experienced from their land and culture resulting from

these outside agencies coupled with the effects of Canada's failure to set land aside for the community in the treaty process, without a doubt play a role in shaping how the membership of today place importance on the values associated with their traditional territory.

This does not mean, however, that everyone influenced by Western agencies and those who moved away from the traditional lands lost their historical spiritual and cultural values. It is possible that many developed similar connections to lands elsewhere. In fact, this may be why some people in the community have managed to maintain their sense of identity through the land and continue to pass on the cultural significance of lands around Missanabie to others in their families. This is reinforced by the fact that many of the participants in the Q sort did rate the land as part of their identity quite highly. This is a positive discovery for a community that is working to rediscover its culture and traditions and teach them to the people who may have lost them and who wish to regain them.

According to Tindall (2002), environmental sociological literature suggests that "younger cohorts hold more pro-environmental attitudes and values" and are "more supportive of post-materialist values". An interesting finding is the fact that the majority of the participants who loaded on the Spiritual and Cultural factor were between the ages of 18 -30. The annual gatherings in Missanabie for the past 17 years have allowed for the youth to visit their traditional lands and engage in some cultural activities, which has for some, introduced them to a rural environment and is helping to answer questions about their cultural identity. These brief visits in the past few years have allowed the youth to hear messages of how important the land is to the people of Missanabie Cree and how it

should be looked after. These experiences and messages coupled with outside influences such as information from environmental awareness movements - which younger generations are identifying with – may be the reason for such a result.

What the disconnect from the traditional lands definitely did do to many members of Missanabie Cree First Nation was to contribute to a loss of the key dimensions of ecological embeddedness as described by Whitman and Cooper (2000); a personal identification with the territory, continuance of ecological information gathering and being physically located in the ecosystem. Family territories were no longer maintained or governed in a traditional manner and cultural methods of conservation were no longer practiced. Traditional roles within the family and community were changed and no longer viewed in the same way. People moved to urban areas where a melding of worldviews changed perceptions of generations.

A sentiment shared by some throughout the community is expressed by Elder and Councillor Audrey Bateson:

> "We can not go back to living off the land in a purely sustenance lifestyle,
> it is not practical. We can regain our culture and traditions through
> re-connecting with our land, however, we must continue to pursue the
> advancement of our community by finding areas to enter the mainstream
> economy and that may mean engaging in the careful extraction
> of timber and minerals" (Bateson 2008)

Over time, an intimate knowledge can be regained between the community members and the land and waters within their traditional territory, however, a return to traditional land management practices is unlikely due to the modern economic climate and the restrictions imposed on the management of First Nations reserve lands by the Indian Act and the complexity of land tenure systems currently in place in Northern Ontario.

As was stated in Chapter 1, until now, there has been no comprehensive evaluation of

Missanabie Cree First Nation members' values towards the lands within their traditional

territory through either qualitative and quantitative methods. The process of re-

connecting to the land and re-establishing a viable Aboriginal community within the

traditional territory requires leadership to have guidance from the knowledge of the

values and attitudes of its membership. I acknowledge that some members did choose not

to participate and I do not know the reasons for their decision. Without passing over the

concerns raised by a participant as to the epistemological validity of the process and their

concerns that there were systematic flaws within the model, I believe over all the Q sort

was successful in engaging many community members in the research process, providing

them with a unique method of voicing their thoughts and opinions, and comparing the

differences and similarities of values we as a group hold. It is my intention that

Community leaders can use these results in working towards compromises and policies

that suit the desires of the membership.

The values as described in this project should not be generalized as being

representative of all First Nations in Canada. The value statements presented are unique

to the members of Missanabie Cree First Nation as is their connection to their traditional

territory. First Nations across Canada have differing social, political, economic, and

cultural influences and that would determine the development of the values held within

these unique communities. The process undertaken here could however be a model that

would contribute to the construction of an information gathering system for the other

First Nation communities in Canada, who like Missanabie Cree are without legal

recognition to a land base, allowing them to assess how the incorporation of differing

values both contemporary and traditional may play in the development of their own

communities.

References

Adamowicz, W., Beckley, T., MacDonald, D., Hatton, J. L., Luckert, M., Murray, E., 1998. In search of forest resource values of indigenous peoples: Are non-market valuation techniques applicable? Society and Natural Resources, 11(1), 55.

Addams, H. & Proops, J. 2000. Q methodology. In H. Addams, & J. Proops (Eds.), Social discourse and environmental policy (pp. 14). Northampton, MA: Edward Elgar.

Akhtar-Danesh, N., & Baumann, A. 2008. Q-methodology in nursing research: A promising method for the study of subjectivity. Western Journal of Nursing Research, 20(10), 1.

Anderson, R., Dana, L., & Dana, T. 2006. Indigenous land rights, entrepreneurship, and econonmic development in Canada: "opting-in" to the global economy. Journal of World Business, 41, 45.

Atleo, R. 2004. Tsawalk: A Nuu-Chah-Nulth worldview. Vancouver: UBC Press.

Auer, H., A. 1906. The north country. Baltimore: Cincinnati : Clarke.

Bateson, A. 2008. Councilor, Missanabie Cree First Nation

Bengston, D. N. 2004. Listening to neglected voices: American Indian perspectives on natural resource management. Journal of Forestry, 102(1), 48.

Benson, L. 1946. Mail surveys can be valuable. The Public Opinion Quartely, 10(2), 234.

Berkes, F. 1986. Common property resources and hunting territories. Anthropologica, 28(1-2), 145.

Berkes, F. 1999. Sacred ecology - traditional ecological knowledge and resource management. Philadelphia: Taylor and Francis.

Berkes, F., Colding, J., & Folke, C. 2000. Rediscovery of traditional ecological knowledge as adaptive management. Ecological Applications, 10(5), 1251.

Berkes, F., & Davidson-Hunt, I., J. 2006. Biodiversity, traditional management systems, and cultural landscapes: Examples from the boreal forest of Canada. International Social Science Journal, 58(187), 35.

Bishop, C. A. 1970. The emergence of hunting territories among the northern Ojibwa. Ethnology, 9(1), 1-15.

Boyer, K., Olson, J., & Jackson, E. 2001. Electronic surveys: Advantages and disadvantages over traditional print surveys. Decision Line, 32(4), July 2008.

Brown, S. R. 1980. Political subjectivity. New Haven: Yale University Press.

Cattell, R. B. 1966. The Scree Test for the Number of Factors. Multivariate Behavioral Research, 1(2), 245.

Cohen, S. J. 1997. What if and so what in Northwest Canada: Could climate change make a difference to the future of the Mackenzie basin? Arctic, 50(4), 293.

Cooper, J. M. 1939. Is the Algonquian family hunting ground system pre-columbian. American Anthropologist, 41(1), 66-90.

Cooper, J. M. 1944. The shaking tent rite among plains and forest Algonquians. Primative Man 17(3/4)

Cummins, B.,D. 2004. In Steckley J.,L. (Ed.), Only god can own the land: The Attawapiskat Cree. Canadian Ethnographic Series, Volume 1. Toronto: Pearson-Prentice Hall.

Davidson-Hunt, I., J., & Berkes, F. 2003. Learning as you journey: Anishnaabe perception of social-ecological environments and adaptive learning. Conservation Ecology, 8(1), 5.

Delgamuukw *v*. British Columbia, [1997] 3 S.C.R. 1010

Fairweather, J. R. 1981. Reliability and validity of Q-method results: Some empirical evidence. Operant Subjectivitiy, 5, 2.

Feit, H. A. 2004a. Hunting and the quest for power: The james bay cree and whiteman development. Native peoples: The Canadian experience (Third Edition ed., pp. 101). Canada: Oxford University Press.

Feit, H. A. 2004b. James bay crees' life projects and politics: Histories of place, animal partners and enduring relationships. In M. Blaser (Ed.), In the way of development: Indigenous peoples, life projects and globalization (pp. 56). Openbooks: IDRC.

Feit, H. A. 2007. Myths of the ecological Whiteman: Histories, science, and rights in North American - Native American relations. Native Americans and the environment: Perspectives on the ecological Indian (1st ed., pp. 54). Lincon Nebraska: University of Nebraska Press.

Flannery, R. 1935. The position of women among the Eastern Cree. Primitive Man. 8(4).

Flannery, R. 1995. Ellen smallboy: Glimpses of a Cree woman's life. Montreal and Kingston, ON: McGill-Queen's University Press.

Flannery, R., & Chambers, E.,M. 1986. John M. cooper's investigation of james bay family hunting grounds, 1927-1934. Anthropologica, 28(1-2), 109.

Fletcher, J. 2006. Reclaiming our history: Otisiabi matriarchal society project. Sault Ste Marie, ON: Ojibway Cree Cultural Centre.

Graham, J., & Edwards, H. 2003. Options for commercial enterprizes in first nations. Ottawa: Institute On Governance.

Hackert, C., & Braehler, G. 2007. FlashQ

Haida Nation *v*. British Columbia (Minister of Forests), [2004] 3 S.C.R. 511, 2004 SCC 73

Hoare, T., Levy, C., & Robinson, M. 1993. Participatory action research in native communities: Cultural opportunities and legal implications. The Canadian Journal of Native Studies, 13(1), 43.

Hudson, P., & Taylor-Henley, S. 2001.. Beyond the rhetoric: Implementing a culturally appropriate research project in first nations communities. American Indian Culture and Research Journal, 25(2), 93.

Huu-ay-aht First Nation. 2007. Land use management plan. Retrieved October 15, 2008, from http://huuayaht.org/index.php?option=com_content&task=view&id=35&Itemid=74

Ingold, T. 2000. The perception of the environment: Essays on livelihood, dwelling and skill. London: Routledge.

Kanuk, L., & Berenson, C. 1975. Mail surveys and response rates: A literature review. Journal of Marketing Research, 12(4), 440.

Kenny, C., Faries, E., Fiske, J., & Voyageur, C. 2004. A holistic framework for aboriginal policy research. Ottawa, ON: Status of Women Canada.

Knudtson, P., & Suzuki, D. 1992. Wisdom of the elders. Toronto: Stoddart Publishing Co. Ltd.

Lanzelo, T. & Richardson, B. 1975. Cree hunters of mistassini. [Video/DVD] National Film Board of Canada.

Lewis, J., & Sheppard, S. 2005. Ancient values new challenges: Indigenous spiritual perceptions of landscapes and forest management. Society and Natural Resources, 18(10), 907.

Lovisek, J. 2003. Missanabie Cree land use report. Surrey, BC: Lovisek Research.

Martin, K. 2003. Ways of knowing, ways of being, and ways of doing: A theoretical framework and methods for Indigenous re-search and Indigenist research. Journal of Australian Studies, 76, 203.

McKeown, B., & Thomas, D. 1988. In Lewis-Beck M. (Ed.), Q methodology. London: Sage Publications.

McLeod, W. 2004. The chapleau game preserve: History, murder, and other tales. North Bay, Ontario: Beatty Printing.

Mead, H. M. 2003. Tikanga māori: Living by māori values. Wellington: Huia Publishers.

Menzies, C. R. 2001. Reflections on research with, for, and among indigenous peoples. Canadian Journal of Native Education, 25(1), 19.

Menzies, C. R. 2004. Putting words into action: Negotiating collaborative research in gitxaala. Canadian Journal of Native Education, 28(1/2), 15.

Missanabie Cree First Nation. No date. Missanabie Cree First Nation Traditional Ecological Knowledge Report. Unpublished manuscript

Missanabie Cree First Nation. 2007. TLE team. Retrieved October, 15, 2008, from http://www.missanabiecree.com/tle_team.html

Nakashima, D., & Roué, M. 2002. Indigenous knowledge, peoples and sustainable practice. In P. Timmermann (Ed.), Encyclopedia of global environmental change (pp. 314). Chichester, UK: Wiley and Sons.

Ohmagari, K., & Berkes, F. 1997. Transmission of indigenous knowledge and bush skills among the western james bay cree women of the subarctic canada. Human Ecology, 25(2)

Parsons, R., & Prest, G. 2003. Aboriginal forestry in canada. The Forestry Chronicle, 79(4), 779.

Peloquin, C. 2007. Variability, change and continuity in social-ecological systems: Insights from james bay cree cultural ecology. Unpublished Master of Natural Resource Management, University of Manitoba, Winnipeg, MB.

Pierotti, R., & Wildcat, D. 2000. Traditional ecological knowledge: The third alternative (commentary). Ecological Applications, 10(5), 1333.

Poplar River First Nation. 2005. Asatiwisipe aki management plan (Land Management Plan. Poplar River, ON: Poplar River First Nation.

Preston, R.,J. 2002. Cree narrative: Expressing the personal meanings of events (2nd ed.). Montreal and Kingston, ON: McGill-Queen's University Press.

Reber, B. H., Kaufman, S. E., & Cropp, F. 2000. Assessing Q-Assessor: A Validation Study of Computer Based Q sorts versus Paper Sorts. Operant Subjectivity 23: 4

Repath, D. 2006. Forest management public summary for Tembec Iindustries inc. - superior forest (Certification Assessment No. SW-FM/COC-1749). New York City: SmartWood Program.

Rickard, P.,M. 1998. Okimah. [Video/DVD]: National Film Board of Canada.

Salmon, E. 2000. Kincentric ecology: Indigenous perceptions of the human-nature relationship. Ecological Applications, 10(5), 1327.

Scott, C. 1996. Science for the west, myth for the rest? In L. Nader (Ed.), Naked science: Anthropological inquiry into boundaries, power and knowledge (pp. 69). New York and London: Routledge.

Smith Tuhiwai, L. 2000. Kaupapa Maori research. In M. Battiste (Ed.), Reclaiming indigenous voice and vision (pp. 225). Vancouver: UBC Press.

Smith, D. 1998. An athapaskan way of knowing: Chipewyan ontology. American Ethnologist, 25, 412.

Stevenson, M. 1996. Indigenous knowledge in environmental assessment. Arctic, 49(3), 278.

Sweeden, P. 2005. Post-normal science in practice: A Q study of the potential for sustainable forestry in Washington state, USA. Ecological Applications, 57(2), 190.

Tindall, D. 2002. Social networks, identification and participation in an environmental movement: Low-medium cost activisim within the British Columbia wilderness preservation movement. The Canadian Review of Sociology and Anthropology, 39

Trosper, R., L. 1995. Traditional American Indian economic policy. American Indian Culture and Research Journal, 19(1), 65.

Turner, N., Boelscher, M., & Ignace, R. 2000. Traditional ecological knowledge and wisdom of aboriginal peoples in british columbia. Ecological Applications, 10(5), 1275.

Valenta, A., L., & Wigger, U. 1997. Q-methodology: Definition and application in health care informatics. Journal of the American Medical Informatics Association, 4(6), 501.

Van Exel, J. & de Graaf , G. 2005. Q methodology: A sneak preview.

Warrren, M. 1995. Comments on article by Arun Agarawal. Indigenous Knowledge and Development Monitor., 4(1), 13.

Watts, S. & Stenner, P. 2005. Doing Q methodology: theory, method and interpretation. Qualitative Research in Psychology, 2, 67.

Whiteman, G., & Cooper, W. H. 2000. Ecological embeddedness. The Academy of Management Journal, 43(6), 1265-1282.