FROM EXCLUSION TO CO-EXISTENCE:

ABORIGINAL PARTICIPATION IN ONTARIO FOREST MANAGEMENT PLANNING

by

Deborah McGregor

A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
Faculty of Forestry
University of Toronto

© Copyright by Deborah McGregor 2000
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

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

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

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

Aboriginal participation in environmental decision making is increasingly recognized as vital to the move towards greater sustainability, both globally and locally. This is true in many areas of resource management, including Canada’s forest industry. Taking the lead in improving Aboriginal involvement in forest management is Ontario’s Ministry of Natural Resources, along with various industry and First Nations representatives from around the province. The new Aboriginal consultation process is long overdue, given the province’s history of excluding Native people from forestry, and represents a significant component of Ontario’s forest management planning system. This research provides initial feedback on this process and one of its most controversial components, “Native Values Mapping”. The potential benefits of the new system are great, and include increased cooperation among government, industry and First Nations in moving towards the common goal of sustainable forest management. The research highlights ways in which gains are being achieved, as well as how barriers to such gains persist. The Aboriginal consultation and Native Values Mapping processes are affected by Ontario’s complex history of Native/non-Native relations. The thesis describes this historical context, based on available literature, in order that the research outcomes can be better understood. Over the summer of 1999, 52 recent participants in the new forest management planning process were interviewed. Using the Grounded Theory method of social research, interview responses were analyzed to identify core variables which explain the variety of responses obtained. These core variables also serve to identify key issues which underlie the challenges faced by all forest planning participants in the research. Two core variables were identified in this study, the first being “World View, Spirituality and Native Values,” while the second was “Relationships and Power”. These variables explain how lack of understanding of different world views and unequal distribution of power between Native and non-Native peoples are hurdles to be overcome if sustainable forest management is to be achieved in Ontario. Finally, the ancient “Co-Existence Model” is suggested as a way of achieving cooperation between Native and non-Native peoples in working toward this goal, while allowing cultural identities to remain intact.
ACKNOWLEDGMENTS

In keeping with Aboriginal tradition, this thesis is in many ways the result of a truly communal effort. Its writing would not have been possible without the blessing and assistance of a great many people. I have been and remain inspired by the tireless work of so many Elders, leaders, community members, traditional peoples, scholars, warriors, grandmothers/grandfathers, communities and nations who have come before me to keep the traditions strong and keep Aboriginal knowledge alive. This has been an invaluable GIFT, and one that I will always cherish. Their teachings and struggles continue to provide me with the enthusiasm needed to pursue the work they have started. This thesis is and will remain part of my lifelong work.

My supervisory committee ensured that my program was always challenging (as did I). I gratefully acknowledge the continued support of Rorke Bryan (supervisor), Sylvia Van Kirk, Krystyna Sieciechowicz and Andy Kenney, especially for their confidence in my work as being worthwhile and interesting. Included in this group are my external reviewers for whom I have the utmost respect: Professor Peter Homenuck of York University and Professor John Borrows from U of T’s Faculty of Law. I sincerely appreciate their willingness to participate in my program and contribute to my understanding of the work I undertook.

Over the years, various employers and colleagues have provided support in numerous ways. Harry Bombay, Peggy Smith and Janet Pronovost at the National Aboriginal Forestry Association, with whom I conducted TEK and forestry research during the course of my program, greatly inspired the topic and provided opportunities to engage peers in discussions about TEK and forest management planning. At Winnipeg’s Centre for Indigenous Environmental Resources the climate for working with Aboriginal knowledge was ideal and there I was provided with the opportunity to ponder, research, teach and discuss TEK. I thank the Chiefs of Ontario and the Six Nations Environmental Management Committee for their support and the opportunity to work with TEK in practical community settings. At the University of Toronto, two special people have been instrumental in providing their support over the “final mile” of completing the writing of the thesis: Anita Benedict, Coordinator of First Nations House, and Professor Keren Rice, Coordinator of the Aboriginal Studies Program. Their advice and accommodation of my needs assisted me greatly, especially over the past eighteen months. U of T Aboriginal scholar Eileen Antone and Professor Laara Fitznor also provided advice and encouragement.

The research would not have been possible without the cooperation and interest of the interviewees. I thank the various representatives from the Ministry of Natural Resources, the forest industry and First Nations throughout the province who gave their time and shared their ideas and experiences.

I received continued support throughout my program from the Whitefish River First Nation, my home. Over the years other support has been provided by: the Ontario Graduate Scholarship Program, the Clair Coates CFUW 75th Anniversary Fellowship, the University of Toronto Open Doctoral Fellowship, the Edward Elsworth Johnson Post-graduate Fellowship of Forestry, the Department of Forestry Fellowship, and the First Nations House bursary program.
During my time in the program my family has worked hard to support my various endeavours and has provided support in numerous ways. These have included offering encouragement, patience and childcare assistance whenever possible. My mother, Marion, and father, Murray Sr., were always confident that I would try my best and therefore succeed. My brothers and sisters provided much assistance, especially over the last eighteen months. Leslie, Lissa, Steve, and Derek provided numerous hours of childcare and quality family time for my son, Hillary. Lorrilee (who also provided resources), Murray Jr., and Darrell were always interested and helpful. A special acknowledgment goes to my sister, Leslie, who assisted with childcare for many years as well with more technical aspects of my work. Much love to my family.

With great love, I thank my partner, Steve, for everything he sacrificed to make the completion of this dissertation possible. His contribution is immeasurable. Steve handled all the logistical arrangements for research travel, and arranged a leave of absence from teaching to accompany me on those long road trips along with our son Hillary (who had to be a very patient boy too many times to count). Steve also provided me with creative, critical and insightful discussion during the research and writing of the thesis. Steve spent many hours proofreading and editing the thesis while teaching full-time, and, most important of all, being “Papa” to two wonderful boys: Hillary and Arden. Steve believed in me.

My son Hillary’s patience must be acknowledged. He endured the long tiring road trips and the “quiet time” while I wrote my thesis, and was willing to spend lots of time with aunts and uncles, sometimes every day of the week. This program was as demanding on him as it was on me. Hillary has been a very loving, forgiving, thoughtful little boy throughout this process. Arden, the newest member of the family, was with me, literally, during every step of the final writing of the dissertation and at both defenses (the final being the most challenging). He has provided much inspiration to finally complete the thesis.

To my friends who have been both helpful and kind: Alan Corbiere, Rob Innes, Ed Doolittle, and Mary Bernard. I send a special appreciation to Jacinta Shawanda who assisted with childcare immensely over the last year.

There have been a number of people working in the field of TEK who have influenced my thinking and thus have contributed directly or indirectly to the writing of the thesis. Among these are Peter Poole, Peter Homenuck, Jackie Wolfe, Harvey Feit, Marc Stevenson, Henry Lickers, James Ransom, Elder Robin Greene, and Elder Lillian McGregor.

For the opportunity to know and learn from so many people I am most grateful and appreciative.

Deborah McGregor

August 29, 2000
-TABLE OF CONTENTS-

ABSTRACT ................................................................. ii
ACKNOWLEDGMENTS ..................................................... iii
LIST OF TABLES ......................................................... xii
LIST OF FIGURES ......................................................... xiii
LIST OF APPENDICES ................................................... xiii
FOREWORD ................................................................. xiv

CHAPTER ONE
INTRODUCTION ......................................................... 1

BACKGROUND: ABORIGINAL PEOPLE AND PUBLIC INVOLVEMENT IN FOREST MANAGEMENT ......................................................... 1

INCORPORATING ABORIGINAL KNOWLEDGE .............................................. 5

FOCUS OF THE RESEARCH ............................................................ 6

THESIS STATEMENT ............................................................... 7

IMPLICATIONS OF THE STUDY
Objectives ..................................................................... 7
Contribution to the Knowledge ................................................. 8

CONCEPTUAL FRAMEWORK: THE NEED FOR ABORIGINAL KNOWLEDGE AND FOREST SUSTAINABILITY .............................................. 9

TERMINOLOGY .................................................................................. 11
Aboriginal ........................................................................ 11
Traditional Ecological Knowledge (TEK) .................................. 12
Western World View ................................................................. 12
Forests, Forestry, and Forest Management .................................. 13

THESIS ORGANIZATION .............................................................. 14

CHAPTER TWO
ABORIGINAL WORLD VIEW, EPISTEMOLOGY AND THE ACADEMIC RESEARCH PROCESS:
CREATING A NEW APPLIED RESEARCH MODEL .............................................. 15

INTRODUCTION ............................................................................. 15

THE RESEARCH PROCESS: RESPECTING THE VALIDITY OF ABORIGINAL APPROACHES TO INVESTIGATION .............................................. 17
## Two Systems of Knowing

**CHOOSING AN APPROPRIATE APPROACH: CROTTY'S FOUR ELEMENTS OF RESEARCH**

**EPistemology: The Concept of Co-Existence**

**Theoretical Perspective**

- Key Aspects of Aboriginal World View, Epistemology and Knowledge

**Methodology**

- Grounded Theory
- Literature Reviews in Grounded Theory
- Qualitative Research
- Words as Data
- Case Studies
- A Word About Ethical Research
- Intellectual Property Rights

### Chapter Three

**Research Plan: Methods and Procedures**

**Introduction**

**Research Procedures**

**Information Sensitivity Issues**

**Informed Consent**

**Access to Information**

**Data Analysis**

**Determination of Study Population and Recruitment of Participants**

**Risks**

**Benefits**

### Chapter Four

**Aboriginal/Non-Aboriginal Relations and Forest Management in Canada**
INTRODUCTION .................................................................................................................. 51

ABORIGINAL PERSPECTIVES ON ABORIGINAL HISTORY ........................................... 52

PRE-CONTACT TIMES ........................................................................................................ 53

NATIVE/NON-NATIVE ENCOUNTERS: THE RISE OF STEREOTYPING ................... 54

THE UNIQUE STATUS OF ABORIGINAL PEOPLE ...................................................... 57

ABORIGINAL PEOPLE AND FORESTS: SYSTEMATIC EXCLUSION ....................... 61

CHAPTER FIVE

ONTARIO FOREST MANAGEMENT PLANNING:
Dismantling The Policy of Exclusion .......................................................... 65

INTRODUCTION ................................................................................................................ 65

PRE-EUROPEAN CONTACT: ABORIGINAL RELATIONSHIPS WITH FORESTS ...... 65

POST-EUROPEAN CONTACT: ABORIGINAL EXCLUSION ............................................ 66

THE PROVINCE OF ONTARIO'S VIEW TOWARD ABORIGINAL PEOPLES: TWO CASE STUDIES ................................................................................................................. 67
  The St. Catherine’s Milling Case ............................................................................... 68
  Ontario’s Timber Management Hearings .............................................................. 70
  The Influence of the 1994 EA Decision on Ontario’s Forest Management Planning
    Process .................................................................................................................... 72

FIRST NATIONS AND ONTARIO’S NEW FOREST MANAGEMENT PLANNING PROCESS .......................................................... 74

ABORIGINAL CONSULTATION AND PARTICIPATION .................................................. 75
  The Forest Management Native Consultation Program ........................................ 75
  The 1994 Crown Forest Sustainability Act .............................................................. 76
  Sharing in the Economic and Social Benefits of the Forest: Term and Condition 77
  Living Legacy/Lands for Life .................................................................................... 77
    Lands for Life ........................................................................................................... 78
    Ontario’s Living Legacy Land Use Strategy .......................................................... 79

CHAPTER SIX

NATIVE AND NON-NATIVE PERSPECTIVES ON FOREST VALUES ......................... 81

INTRODUCTION ................................................................................................................ 81
  What are Forest Values? ............................................................................................. 81
MNR’s Values Data Collection Strategies .......................................................... 109
Issues Raised Concerning Native Values Mapping Data Collection .................. 110
Credibility of Information .............................................................................. 110
Confidentiality ............................................................................................... 111
Lack of Understanding or Non-Acceptance of Native Values ......................... 112
Lack of Resources ......................................................................................... 112
Benefits ......................................................................................................... 112
Summary ........................................................................................................ 113

RESPONSE CATEGORY #4: DEGREE OF ASSURANCE THAT ALL VALUES ARE
PROTECTED .................................................................................................... 113
First Nations ................................................................................................. 113
Industry ......................................................................................................... 114
MNR .............................................................................................................. 114
Summary of Issues Around Native Values Protection ........................................ 115
Confidentiality ............................................................................................... 116
Lack of Resources ........................................................................................ 117
Community Impacts ...................................................................................... 117
Defining Values ............................................................................................ 117
Cultural Appropriateness of Native Values Mapping ....................................... 118
Reluctance to Share Values .......................................................................... 118
Lack of Trust ................................................................................................ 118
Cultural Differences ..................................................................................... 119
Summary ........................................................................................................ 119

RESPONSE CATEGORY #5: THE POTENTIAL OF ABORIGINAL PARTICIPATION TO
CONTRIBUTE TO FOREST MANAGEMENT PLANNING .................................. 119
Unique Knowledge/Perception ...................................................................... 120
Specific Information ....................................................................................... 121
Forest History ............................................................................................... 121
Source of New or More Information ............................................................. 121
Native Values ............................................................................................... 121
Local Knowledge/Field Knowledge ............................................................... 121
Summary ........................................................................................................ 121

RESPONSE CATEGORY #6: DEFINITIONS OF TRADITIONAL ECOLOGICAL
KNOWLEDGE .................................................................................................. 122
First Nations ................................................................................................. 122
Industry ......................................................................................................... 123
MNR .............................................................................................................. 123
Summary ........................................................................................................ 123

RESPONSE CATEGORY #7: THE POTENTIAL CONTRIBUTION OF TEK TO FOREST
MANAGEMENT PLANNING ............................................................................. 124
Identification of Native Values ....................................................................... 124
Forest Management and Planning .......................................................... 124
Better Protection of Forest and Values ................................................ 125
Source of New or More Information ...................................................... 125
Ecosystem Change/Historical Information ............................................. 125
Knowledge of the Environment/Ecosystem ........................................... 125
Summary ............................................................................................... 125

RESPONSE CATEGORY #8: DEGREE OF ASSURANCE THAT FOREST
MANAGEMENT PLANNING CURRENTLY INCORPORATES TEK .............. 125
First Nations ......................................................................................... 126
Industry ................................................................................................. 127
MNR ......................................................................................................... 127
Summary ............................................................................................... 128

CHAPTER EIGHT
INTERPRETATION AND ANALYSIS ...................................................... 129

INTRODUCTION ......................................................................................... 129

THEME #1: THE RELATIONSHIP BETWEEN NATIVE VALUES AND TEK .... 129
Traditional Ecological Knowledge .......................................................... 130
History of TEK in Canada ...................................................................... 132
Defining TEK: What does it mean? ......................................................... 134
  Non-Aboriginal Views ........................................................................ 134
  Aboriginal Views .............................................................................. 136
Differences in Meaning ......................................................................... 139
Barriers to the Utilization of TEK .......................................................... 141
  Non-Aboriginal Researchers’ Views .................................................... 141
  Aboriginal Views .............................................................................. 143
Relationship to the Research ................................................................. 145
Summary ............................................................................................... 147

THEME #2: NATIVE VALUES IN FOREST MANAGEMENT PLANNING ....... 149
Native Values: Predetermined and Pre-defined ...................................... 149
Native Values and Sustainable Forestry ................................................. 153
Summary ............................................................................................... 154

THEME #3: THE REPRESENTATION OF KNOWLEDGE IN
THE MAPPING PROCESS ......................................................................... 155
Traditional Ecological Knowledge and Mapping .................................... 155
The Native Values Mapping Process ...................................................... 158
Summary ............................................................................................... 161

THEME #4: NATIVE VALUES PROTECTION ............................................ 163
Achievement of Native Values Protection in Ontario’s Process ............... 164
Protection of the Knowledge and People who Inform Native Values: Intellectual Property Rights ................................................................. 166
Summary ................................................................. 168

THEME #5: LACK OF UNDERSTANDING OF ABORIGINAL PEOPLE ............... 169
Revitalization of Aboriginal Communities: Nation-Building and Healing ........ 172
Summary ................................................................. 173

CHAPTER NINE
IDENTIFICATION OF CORE VARIABLES .................................................. 175

INTRODUCTION ................................................................. 175

CORE VARIABLE #1: WORLD VIEW, SPIRITUALITY AND NATIVE VALUES ........ 179
Understanding Aboriginal Spirituality ....................................................... 181

CORE VARIABLE #2: RELATIONSHIPS AND POWER .................................. 185
Lack of Knowledge About Aboriginal People ............................................. 185
Exclusion of Aboriginal People from the Dominant Resource Paradigm ........ 186
Forced Conformity to Dominant Modes of Western Resource Management .... 187
TEK in Resource Management: Finding Adequate Expression ...................... 190

SUMMARY: THE CO-EXISTENCE MODEL .................................................. 193

CHAPTER TEN
COMMENTS AND CONCLUSIONS ......................................................... 197

INTRODUCTION ................................................................. 197

THESIS RESEARCH FINDINGS ......................................................... 197

LESSONS LEARNED ................................................................. 198

RELATIONSHIP BETWEEN TEK AND NATIVE VALUES MAPPING ................ 199

MOST IMPORTANT FINDINGS .......................................................... 202

CONTRIBUTIONS OF THE RESEARCH ............................................... 203

FUTURE RESEARCH ................................................................. 204

FINAL REMARKS ................................................................. 207

REFERENCES ................................................................. 208
LIST OF TABLES

Table 3.1. Ontario Forest Management Plans thus far completed which have formally included a Native Values Mapping component. ....................................................... 40
Table 6.1. Examples of forest values. ................................................................. 81
Table 7.1. First Nations definitions of Native Forest Values based on responses from First Nations interviewees. ................................................................. 97
Table 7.2. Industry definitions of Native Forest Values based on responses from industry interviewees. ................................................................. 99
Table 7.3. MNR definitions of Native Forest Values based on responses from MNR interviewees. ................................................................. 102
Table 7.4. Reasons for differing understandings of Native values as offered by First Nations respondents. ................................................................. 105
Table 7.5. Characteristics of Native values as described by industry respondents. ................................................................. 106
Table 7.6. Characteristics of Native values as described by MNR respondents. ................................................................. 106
Table 7.7. Scenarios under which Native values data was collected, by collecting agent. ................................................................. 108
Table 7.8. First Nations methods of collecting Native values data. ................................................................. 109
Table 7.9. MNR methods of collecting Native values data. ................................................................. 109
Table 7.10. Reasons offered by First Nations respondents for inadequate protection of Native values. ................................................................. 113
Table 7.11. MNR respondents' views on the degree of successful protection of Native values. ................................................................. 115
Table 7.12. Main issue categories raised by the three response groups in relation to Native values protection. ................................................................. 116
Table 7.13. Main types of contributions potentially brought to forest management planning through Aboriginal participation, as raised by interviewees from the three response groups. ................................................................. 120
Table 7.14. Characteristics and sources of TEK as explained by First Nations respondents. ................................................................. 122
Table 7.15. Characteristics and sources of TEK as explained by industry respondents. ................................................................. 123
Table 7.16. Characteristics and sources of TEK as explained by MNR respondents. ................................................................. 123
Table 7.17. Main types of contributions potentially brought to forest management through the use of TEK, as raised by interviewees from the three response groups. ................................................................. 124
Table 7.18. First Nations respondents' perceptions of the current incorporation of TEK in Ontario forest management planning processes. ................................................................. 126
Table 7.19. Industry respondents' perceptions of the current incorporation of TEK in Ontario forest management planning processes. ................................................................. 127
Table 7.20. MNR respondents' perceptions of the current incorporation of TEK in Ontario forest management planning processes. ................................................................. 127
Table 8.1. Characteristics of TEK as presented by non-Native scholars. ................................................................. 135
Table 8.2. Characteristics of TEK as presented by Native researchers. ................................................................. 137
Table 8.3. Similarities and differences between Aboriginal and non-Aboriginal perceptions of TEK. ................................................................. 139
Table 8.4. Issues raised by non-Native researchers as constituting barriers to the incorporation of TEK into resource management. .................................................. 142
Table 8.5. Issues raised by Aboriginal people as constituting barriers to the incorporation of TEK into resource management. .................................................. 143
Table 9.1. Sample expressions of Aboriginal spirituality. .......................... 182
Table 10.1. Three levels of analysis: response categories, themes, and core variables. ...... 198
Table 10.2. Lessons learned from the research ........................................... 199
Table 10.3. Major applied and theoretical contributions of the research .......... 203

LIST OF FIGURES

Figure 1: Relationship Between Traditional Ecological Knowledge (TEK), Native Values (NV) and Native Values Mapping (NVM), Schematic 1 .......................... 200
Figure 2: Relationship Between Traditional Ecological Knowledge (TEK), Native Values (NV) and Native Values Mapping (NVM), Schematic 2 ................. 201

LIST OF APPENDICES

APPENDIX 1: List of Interview Questions .................................................. 231
APPENDIX 2: Assessment and Indicators of Forest Sustainability ..................... 235
APPENDIX 3: Structure of the Separate Parallel Aboriginal Consultation Process .... 239
APPENDIX 4: Environmental Assessment Board Criteria for Native Values Reports .......... 241
APPENDIX 5: MNR Forest Management Planning Manual Values Map Requirements .... 245
APPENDIX 6: Interview Questions and Response Categories .......................... 249
APPENDIX 7: MNR Cultural Heritage Values Planning Process ........................ 254
FOREWORD

This thesis represents one stage of a lifelong learning process in the area of Indigenous knowledge. Prior to beginning my research at the University of Toronto's Faculty of Forestry, several smaller projects of a similar nature were undertaken. As well, my Master of Environmental Studies degree was completed at York University. My interest and commitment in this area is personal, professional and academic. As an Anishnabe person, I am deeply concerned with the systematic exclusion of Aboriginal perspectives from dominant discourse in the Canadian environmental and resource management fields. I firmly believe, as do many others, that Aboriginal environmental and philosophical perspectives have much to offer, and could even take the lead in this area.

In conducting my research, I am always inspired by the vision of my ancestors, who were able to live sustainably with all of Creation. In turn, I am motivated by a deeply held concern for the survival of future generations. The survival of distinct Aboriginal peoples has been threatened for some time in Canada. I will continue to explore ways in which Aboriginal Nationhood and sustainability can come together with mainstream Canada in a shared framework. For the time being, I find favor with the concept of Co-existence, expressed through the Two Row Wampum, which provides hope for this vision.

I have chosen to pursue this vision, to express and make it real, from within the discipline of forestry. Nevertheless, my overriding objective remains the survival of Aboriginal peoples in Canada. While the nature of the relationship between Aboriginal and non-Aboriginal people provides the context for my program, Indigenous knowledge remains its central focus point. My disappointment with the lack of meaningful Aboriginal involvement in environmental and resource management motivates me to work towards increased recognition of Indigenous knowledge as a unique and worthy knowledge base, as well as a valid and important way of life for Aboriginal people. The move in Canada toward sustainable forest management, which represents a significant paradigm shift from the status quo, presents an ideal starting point for exploring the relationship between Indigenous knowledge and sustainable forest management in Canada. The recent recognition of Indigenous knowledge in Canadian national forest policy is a
positive change. It is important to realize, however, that simple recognition is essentially all that has been achieved so far. This is only the beginning. Still lacking is the definition of a new process to guide the research and application of Aboriginal knowledge in forest management planning.

My thesis itself focuses on Ontario’s forest management planning process. It is a process that claims to be sustainable. It is new and has only recently been applied, but it has components which include Aboriginal peoples. It represents an opportunity to understand how Indigenous knowledge is being applied in the field. Ontario’s forest management planning process is thus uniquely positioned as an ideal case study for exploring my research interests. Moreover, the Ontario process provides a mechanism through which the recognition and incorporation of Indigenous knowledge is possible. This mechanism is Native Values Mapping.

Native Values Mapping involves the mapping of Indigenous knowledge as part of sustainable forest management and planning. It has many potential contributions to make to the discipline of forestry, including the improvement of relations between Aboriginal and non-Aboriginal peoples in the forest sector. As well, Ontario’s Native Values Mapping process represents an actual application of Aboriginal knowledge in forest management planning. It will thus provide insight into how Aboriginal knowledge can be incorporated into forest management planning. Both Aboriginal and non-Aboriginal people wish to access and utilize Aboriginal knowledge in their work and gaining insight into Ontario’s planning process will assist with this goal. This Ph.D. research is occurring at an ideal time, because although the Ontario process is relatively new (only a few years old), a significant body of knowledge and experience among all planning participants has been gained which can be used to help guide the process in the future.

I have been fortunate to have had the opportunity to explore my ideas, overcome struggles and meet challenges throughout the duration of my research program and thesis work. Most important, however, has been the chance to participate in and hopefully contribute to the development of a field of study which holds much promise for both Aboriginal and non-Aboriginal people.
BACKGROUND: ABORIGINAL PEOPLE AND PUBLIC INVOLVEMENT IN FOREST MANAGEMENT

Public involvement in forest management is relatively new in Canada and is thus experiencing its fair share of growing pains. It is not an easy transition for forestry to make. Carrow (1999, 73) writes that in Canada:

Historically, the direction and priorities in forest management on Crown land were determined through negotiation and discussion between the provincial government and the forest industry. This process prevailed, largely undisturbed, until the 1960s when the first wave of environmentalism was born.

Over the last 30 to 40 years, the theory and practice of public involvement in forestry has evolved to the point where currently in Ontario any major forest policy development, management undertaking or planning exercise is expected (or even required) to involve consultation with the public (Blouin 1998). The forestry sector has begun to include meaningful public involvement as a criterion for the achievement of sustainability in forest management (CCFM 1998, 1992).

Of particular interest in this dissertation are even more recent initiatives to involve Aboriginal people in forest management, particularly as a group separate from the Canadian mainstream. Formerly, it was assumed that Aboriginal concerns would be addressed (if Aboriginal issues were considered at all) in the course of mainstream public involvement. Aboriginal peoples were assumed to be “interests” or a “stakeholders”, much like anglers or hikers. This is a view not shared by Aboriginal people themselves. Aboriginal people are unique in Canada, possessing unique rights that are constitutionally recognized and protected. These include rights to self-determination and self-government (Mercredi and Turpel 1993, Ransom 1996).

The appropriate expression of these rights in forest management planning is not to relegate Aboriginal people to “interest group” or “stakeholder” status, but to recognize First Nations as distinct governments, requiring treatment as Nations. These aspirations are supported and
affirmed by the findings of the Royal Commission on Aboriginal Peoples (RCAP 1996a). Although the situation is slowly changing, "...much remains to be done to translate this into forest management regimes and practices" (CCFM, 1998, 32). Recognition of Aboriginal and treaty rights in forestry remains an outstanding concern for Aboriginal groups in Canada.

Consideration of Aboriginal people as a unique group with different consultative requirements and "not just another stakeholder" (Smith 1995, Wright 1994), has been spurred on by a number of factors, such as:

1. the extension to Aboriginal people of the general trend in forestry to include the public in forest management planning. Although it has been argued that Aboriginal people have previously been able to participate as part of mainstream processes, these tended to be processes of exclusion from an Aboriginal point of view (EA Board 1994).

2. the rise within the last several decades of Indigenous and human rights movements. These pushed for the inclusion of Indigenous people in the decision-making processes that impact their lives and lands, and created pressure in Canada to take Aboriginal concerns seriously. More recently, Canada has been a participant in international events such as the International Panel on Forests and the signing of the Convention on Biodiversity, which explicitly states goals regarding the participation of Indigenous peoples in forest management (Higgins 1998, NAFA 1996a, Smith 1998).

3. the shift in forestry paradigm both internationally and within Canada. Sustainable forestry is coming to replace sustained yield as the primary focus of progressive forest management initiatives. This is gradually encouraging the practice of forestry to consider other perspectives and values within its planning process, including the unique perspectives of Aboriginal people (Beyers and Sandberg 1998, Kimmins 1995, Luckert 1997, Myre 1998, Rowe 1994).
4. the national and international recognition that Aboriginal people have unique systems of knowledge which are closely aligned to many current notions of sustainability. This realization has captured the interest of many resource managers, including forestry professionals (Berkes 1999, 1993; Bombay 1996a; CCFM 1998; Feit 1998a; Inglis 1993; Myre 1998; Robinson and Ross 1997; Wolfe et al. 1992).

5. the existence of major unresolved issues in relation to Aboriginal peoples, such as constitutionally protected Aboriginal and treaty rights, Aboriginal self-government, and land claims. Recent Court decisions combined with grassroots Aboriginal activism (direct action) have led resource managers to recognize the importance of these issues and to begin to address them through forest policy and management regimes (CCFM 1998, 1992; NAFA 1999, Treseder and Krogman 1999).

6. the overwhelming demand by Aboriginal people to be included in the forest management process. Direct action, law suits, and court battles, many over the issue of inclusion, have resulted in significant gains for Aboriginal people in Canada (CFS 1998, Notzke 1994). This is perhaps the most significant factor in the trend to begin including Aboriginal people in forest management.

Despite the progress that has been made in the last decade or so, meaningful participation in forest management for Aboriginal Peoples remains elusive (Higgins 1999, Treseder and Krogman 1999). In 1989, the National Aboriginal Forestry Association (NAFA) was created specifically to address this issue (InfoLink Consultants 1989, Notzke 1994). One of NAFA's main objectives is to increase the participation of Aboriginal people in forestry (NAFA 1996b). Barriers to Aboriginal involvement have been studied by NAFA and reported in various NAFA documents (Bombay 1995c, Hopwood et al 1993, Merkel et al 1994, NAFA 1993). Such impediments have also been outlined in Royal Commission on Aboriginal Peoples reports (RCAP 1996a).
As a result of this shift in thinking, there have been a few noteworthy instances of efforts to remove barriers to Aboriginal involvement. For example, the federal Model Forest Program and the federal Aboriginal model forest program, along with the increasing number of industry/First Nations partnerships, all point to a gradual yet not insignificant move to establish greater Aboriginal participation. Organizations like the Sustainable Forest Network (SFN) also support Aboriginal/industry partnerships. However, such efforts are the exception rather than the rule (Curran and M'Gonigle 1997). These examples can to a certain degree provide models for Aboriginal involvement in forest management planning, yet for the average First Nation the experience with forest management is still largely one of exclusion. Vying for inclusion in forest related decision making remains a major component of the Aboriginal agenda.

Despite major court decisions and government policy shifts, achieving meaningful inclusion remains a complex and, at times, seemingly insurmountable task, particularly when it comes to actual field operations. There is continued resistance on the part of government and industry to take significant action. It has been a salient feature of Canadian resource management history (both federal and provincial) to exclude Aboriginal people by deliberately diminishing their rights to the lands over which they have exerted authority and jurisdiction since time immemorial (Lambert and Pross 1967, RCAP 1996a). The history referred to here is discussed further in Chapter Four. What is important to note at this point is that this legacy continues, and many Aboriginal people argue that exclusion is still the prevalent mode of operation (Furniss 1999).

The continuing dominance of Aboriginal exclusion policies is illustrated in the Final Evaluation Report on the National Forest Strategy (Blue Ribbon Panel 1997) in which it is recognized that Aboriginal and treaty rights should be respected. “No provincial government has put legislation in place to recognize Aboriginal and treaty rights” (Blue Ribbon Panel 1997, p.7-3). In another instance, the Canadian Council of Forest Ministers (CCFM) led an initiative to identify indicators for sustainable forest management. NAFA, Canada’s only national Aboriginal forestry advocacy group, participated in these discussions and argued for a “distinct criterion entitled Respect for Provisions for Aboriginal and Treaty Rights” (Bombay 1996c, 9). However, “this criteria was not accepted by CCFM. The council instead offered to redraft the
Criterion on Accepting Society's Responsibility for Sustainable Development to reflect Aboriginal concerns" (Blue Ribbon Panel 1997, p.3-9). NAFA reacted by stating that:

the lack of assigned responsibility among federal government departments to follow up on this commitment and other aspects of Strategic Direction Seven [of the National Forest Strategy], and the inactivity of most provinces in linking Aboriginal and Treaty rights with forest management policy, have been disappointing (NAFA in Blue Ribbon Panel 1997, p.7-2).

Much remains to be achieved in terms of meaningful Aboriginal participation in Canadian forestry.

**INCORPORATING ABORIGINAL KNOWLEDGE**

International and domestic impetus has resulted in another emerging trend, the incorporation of Aboriginal or Indigenous knowledge (sometimes referred to as Traditional Ecological Knowledge, or TEK, see “Terminology” section at the end of this chapter) into forest management planning. Support for identifying and creating links between Aboriginal knowledge and sustainable forest management, in particular, is gaining momentum. The 1992 National Forest Strategy (CCFM 1992) recognizes the potential value of Aboriginal knowledge for achieving sustainable management goals, particularly in Strategic Direction Seven which deals specifically with Aboriginal peoples. Here, it is stated that, "The knowledge they have gained through their enduring relationship with the land can bring a special perspective to sustainable forest management” (CCFM 1992, 39). The 1992 strategy, however, did not reflect this notion in its framework for action. In 1998 the strategy was revised, and took this interest in Aboriginal knowledge further (also in Strategic Direction Seven) by developing an action “7.4”, which stated that Aboriginal involvement should be improved:

By identifying means by which traditional knowledge can contribute to sustainable forest management, and by developing guidelines for defining this knowledge, incorporating it in to forest research, management practices, planning and training, in a manner that respects Article 8(j) of the U.N. Convention on Biological Diversity (CCFM 1998, 34-35).

Although Aboriginal knowledge is thus explicitly identified in the 1998 National Forest Strategy, what has occurred on the ground in relation to this action remains unexplored.
At least two important NAFA papers have also addressed the issue of the incorporation of Aboriginal knowledge in forest management planning in Canada. Bombay (1996a) found that despite substantial interest in Canada regarding Aboriginal knowledge, little was yet being done in terms of ground-level changes. The "state of the art" of incorporating Aboriginal knowledge remains largely at the documentation stage, and little in terms of meaningful application has yet been achieved (McGregor, in press). In 1998, NAFA was commissioned by the Canadian Forest Service to produce another report on the state of TEK in Canada (Brubacher and McGregor 1998). The focus of this effort was to identify and describe mechanisms for the incorporation of TEK into forest management planning in Canada. National in scope, the report's findings were similar to those of the 1996 effort. Aboriginal knowledge has not yet been applied on any meaningful scale and existing "mechanisms" for doing so provide little opportunity for improving this situation (Brubacher and McGregor 1998). In terms of policy, progress is being made as far as involving Aboriginal people and their knowledge in sustainable forestry. The expression of such policy, however, remains weak in terms of field-level practices. The Blue Ribbon Panel (1997, p.9-3) found, "substantial progress at the policy level; yet to be validated at the planning level and operational level on the ground."

FOCUS OF THE RESEARCH
As stated, forestry is experiencing ongoing paradigm shifts at international, national, regional and local levels. The conventional focus on sustained timber yields is giving way to sustainable forest management, and public involvement processes have evolved to the point where the need for meaningful Aboriginal involvement is formally recognized. This thesis focuses on Aboriginal involvement in Ontario forest management planning. Ontario's Ministry of Natural Resources (MNR) forest management planning process is appropriate for this study because it has in place both a legislative basis for the involvement of Aboriginal people in forest management planning and a "mechanism" for the incorporation of Aboriginal knowledge and values. Study of Ontario's forest management planning process is particularly timely because the first set of forest management plans which formally attempt to address the previously identified Aboriginal involvement issues have now been completed (12 such plans were completed in 1999. See Chapter 3). Each new Ontario forest management plan must now
contain the results of a “Native Values Mapping” exercise which is the main mechanism for the incorporation of Aboriginal knowledge into forest management planning (Brubacher and McGregor 1998). The goal of this research has therefore been to investigate the role of Native Values Mapping in achieving the incorporation of Aboriginal knowledge into Ontario’s forest management planning process.

THESIS STATEMENT
Through an exploration of the views of participants in Ontario’s Native Values Mapping process, insight will be gained on the perceived success of the incorporation of Aboriginal knowledge into forest management planning.

IMPLICATIONS OF THE STUDY
A primary objective of MNR’s Aboriginal consultation process is to work with First Nations and incorporate their knowledge and values into planning to improve the sustainability of forest operations in Ontario. This study aims to support the achievement of this objective by offering insight as to how it is being achieved “on the ground” in Ontario, based on the experience of those who have already gone through the process. Findings of the research will be shared with all interested participants, who then may use the findings to modify subsequent consultations. An improved process would enhance the experience of planning participants, both Native and non-Native, and would hopefully serve to bridge some of the existing rifts among Native and non-Native forestry interests. As the Ontario process is one of the first of its kind, experiences here will no doubt inform future endeavours across Canada and elsewhere.

Objectives
The objectives of this dissertation are:

1. to provide an initial evaluation of MNR’s Native Values Mapping process for forest management through analyzing and interpreting the results of interviews with practitioners having experience in this process.
2. to further define the role of Aboriginal people and their knowledge in the development and application of sustainable forest management in Canada.

3. to explore some of the social and environmental benefits of applying Aboriginal knowledge to sustainable forest management practices.

4. to utilize an interdisciplinary, inclusive, cross cultural (Aboriginal and non-Aboriginal) approach at all stages of the research.

5. to demonstrate the applicability of a "grounded" approach to research in this time of uncertainty and change brought about by ongoing paradigm shifts in forestry.

**Contribution to the Knowledge**

This dissertation will facilitate the development of new knowledge in several ways:

1. by examining how Aboriginal knowledge is formally being incorporated into Ontario forest management planning "on the ground".

2. by gaining a better understanding of Aboriginal knowledge and its potential contributions to forest management planning.

3. by facilitating a greater appreciation for Aboriginal participation, knowledge and values as indicators of forest management sustainability.

4. by improving understanding of the process of Native Values Mapping and its relationship to Aboriginal knowledge.

5. by illustrating Aboriginal ways of understanding, investigating, and transmitting knowledge that may be applicable in a forest management planning context.
CONCEPTUAL FRAMEWORK: THE NEED FOR ABORIGINAL KNOWLEDGE AND FOREST SUSTAINABILITY

A fundamental premise of this thesis is that Aboriginal people and their knowledge have valuable contributions to make to the concept and practice of sustainable forestry. This has not always been realized, especially in Canada, where there is a long history of domination and exploitation of Aboriginal people and their lands (LaDuke 1999, NAFA 1993, RCAP 1996a). Although it can be argued that, at least in Canada, a new stage of negotiation is underway to establish relationships with Aboriginal people based on recognition, respect, sharing and responsibility (RCAP 1996b), there remains much to be done.

The framework within which this thesis is written is reflected in various social movements (human rights, Indigenous rights, environmental) in Canada and around the world, as well as in the literature discussing forestry, environmental and Aboriginal issues. It is a perspective which sees North American, and particularly Canadian, society as being currently involved in a paradigm shift when it comes to forestry. There is, both among the general public and those involved in forestry and environmental issues, a growing sense that a change is needed in dominant society's values regarding how we relate to forests. In part, this realization that change is required stems from international pressure from such sources as the World Commission on Environment and Development (WCED 1987), the Worldwatch Institute (e.g. Brown et al 1990), and the United Nations (e.g. through Agenda 21 produced at the 1992 United Nations Conference on Environment and Development). Prominent organizations the world over are calling for improved forest practices and increased protection of forest resources as part of global efforts to avert world-wide environmental catastrophe. This has led many North American governments, including Canada's federal and Ontario's provincial governments, to begin to closely examine existing forestry policies and practices and to enact modifications as well as entirely new guidelines intended to put Canada and Ontario on a path towards greater sustainability in forest management.

Governments are also experiencing demand for change in forest practices from more locally-based sources. In Canada and the US, registered foresters, forest scientists, forest technicians, and environmental and social activists have been making increasingly demonstrative and
coherent efforts to produce a wide-scale shift from conventional methods of industrial forestry to more “ecologically responsible” or sustainable systems of forest use (e.g. Behan 1990, Dodds 1994, Drengson and Taylor 1997, Hammond 1991, Maser 1988, M’Gonigle and Parfitt 1994). The volume and logic of the arguments being presented, as well as the appearance in reality of some of the large scale and long term negative effects of conventional forestry predicted by critics, have added significant pressure on governments to make real changes to the conventional system, for political, ecological and economic reasons.

An important component of the suggestions for change has been that Aboriginal peoples need to be both consulted for their knowledge of forest ecosystems and included meaningfully in forest-related decision making, particularly where such decision making affects First Nations communities (as it most often does, especially in Canada). Not only is there the outstanding issue of land claims to be resolved from a moral and legal perspective, but there remains a significant body of Aboriginal Knowledge which could guide new forestry systems toward increased sustainability.

In recent decades, the resurgence of Aboriginal cultures, including the call for the settlement of land claims, the assertion of Aboriginal and treaty rights, and the meaningful inclusion of Aboriginal people in decision making processes, have received increasing support in the international political arena. This support has come about in large part as a result of the recognition of the global environmental crisis. The key meetings of world political leaders mentioned earlier, such as the World Commission on Environment and Development (WCED 1987) and the 1992 United Nations Conference on Environment and Development, have stated that Aboriginal people must be supported in their efforts to re-establish healthy, land-based communities, because the knowledge inherent is these communities potentially holds a great many answers to current ecological problems. These recommendations have found their way into the planning guidelines of signatory nations, including Canada. Processes being developed to certify forest activities and products as “sustainable” have included the meaningful and respectful involvement of Aboriginal peoples and the recognition of Aboriginal and treaty rights as indicators of sustainability (CCFM 1998, 1992). Canada and Ontario now both have policy
frameworks for moving towards sustainable environmental decision making which include Aboriginal participation as an indicator of the sustainability of forest-related operations. Canadian federal and provincial governments have also been under intensifying pressure to include First Nations in forestry from Indigenous peoples themselves.

There are many areas to explore in light of the conceptual framework described above and the gaps in knowledge identified in the introduction. This research, however, will focus on a single component of an information gathering process whose goal is to incorporate a wider range of interests and values into forest management planning in Ontario. Specifically, this dissertation proposes to explore the Ontario Ministry of Natural Resources (MNR)’s Native Values Mapping system, which forms a major component of the Native consultation program for forest management. Native Values Mapping is MNR’s current mechanism for the incorporation of Aboriginal knowledge into its forest management plans.

**TERMINOLOGY**

Throughout this thesis various concepts and terms are used interchangeably. With shifts in paradigm come shifts in language (usage); terms which meant one thing come to mean another, and outmoded terms are replaced by those more appropriate to current circumstances. In this thesis, certain terms are used repeatedly, and some of these warrant brief definition.

**Aboriginal**

There are a number of terms that are used to identify the original inhabitants of North America and their descendants. Some of these can be used relatively interchangeable; some are no longer considered acceptable for various reasons. As well, certain labels take on a legal significance, which can make a given term particularly significant or contentious. For the purposes of this dissertation, the term Aboriginal peoples refers to people who are descendants of the original inhabitants of North America. The Canadian constitution recognizes three groups of Aboriginal people: “Indian”, “Inuit” and “Metis”. In Canada, “Indian” has legal definitions (as per the Indian Act), but is generally regarded as offensive and its use is declining. In this thesis, the word “Indian” will be used only in direct quotation or in reference to various pieces of legislation.
which use the term (e.g. BNA Act, Indian Act, Royal Proclamation Act). Several terms are now used instead of “Indian”, including Aboriginal, Indigenous, First Nations, and Native, often with the word “person” or “people” attached.

**Traditional Ecological Knowledge (TEK)**
The term traditional ecological knowledge (TEK), although still in common usage, has become a concept which is increasingly challenged by Aboriginal people. Other terms have come to replace it or are used synonymously with it. This includes terms such as “Indigenous knowledge”, “traditional knowledge”, “naturalized knowledge systems” and “Indigenous science”. In this paper, the term “Aboriginal knowledge” is used and refers to all of these terms. Though the appropriateness of the term “Traditional Ecological Knowledge (TEK)” is increasingly contested, I do refer to it from time to time as it is currently the predominant label in use and is the concept employed in government efforts to incorporate Aboriginal knowledge. The issue of defining TEK or Aboriginal knowledge continues to be a preoccupation of those involved in working with it and will be expanded upon later in the paper.

**Western World View**
“Western” is used throughout this thesis in referring to a particular world view, which, although it can be said to have originated largely in western Europe, cannot truly be attributed solely to one area of the world or to one group of people. As Wolfe et al. (1992, 34) state, “world view” does not refer to a fixed “geographic reference, but to a state-of-mind, a way of constructing the world....” Characteristics of a Western world view can thus be found in the thinking not only of the people of European descent to whom they are most often attributed, but in the ideas of many other peoples as well. This is particularly true in a modern context following generations of colonial activity. Conversely, people of western European descent do not necessarily subscribe, in whole or in part, to Western world view. Again, this is increasingly the case as individuals are able as never before to travel the globe and experience what other cultures have to offer.
Forests, Forestry, and Forest Management

As is stated on several occasions in this thesis, the dominant paradigm within forestry is in a state of ongoing change. The terminology associated with forestry has begun to reflect this dynamic, largely through the movement away from concepts focusing solely on timber production to ideas which are much broader in nature. In forestry and forest management, timber production through silviculture has most often been seen as the method through which the, "...major part of the growing store of knowledge about trees and forests is applied" (Smith 1986, 1). In recent years, however, there has been a significant movement towards understanding forestry as something much broader, such that it, "...has been defined as the art, science, and practice of managing forested landscapes to provide a sustained production of a variety of goods and services to society" (Kimmins 1992, 48). Kimmins (1992, 48) continues that:

Professional forest management is all about providing one or more of the following from our forested landscapes: jobs, timber products, fish and wildlife habitat, high quality of water and recreational opportunities (including wilderness), hunting, trapping, range values, visually attractive landscapes and views, landscape or community protection (against wind and water erosion, avalanche, and cold air drainage), and, to an increasing extent, a sink for the atmospheric 'greenhouse gas' CO2.

Many foresters and forest practitioners extend this broader perspective a significant step beyond Kimmins, stating that the "production" of any particular commodity or limited group of commodities is not an appropriate goal if the long-term health of the forest is to be maintained. Hammond (1991, 1) states that:

Forests are interconnected webs which focus on sustaining the whole, not on the production of any one part or commodity. Trees, the most obvious part of a forest, are critical structural members of a forest framework. However, trees are only a small portion of the structure needed for a fully functioning forest.

The debate over what forests are, and consequently what the goals of forestry and forest management should be, continues to evolve, with the general trend towards a broadening of concepts remaining key among its features (see Dunster and Dunster 1996). Despite this trend, the actual breadth of concepts which is tolerated and expressed "on the ground" in forest management remains very much dependent on the social and political climate of the affected area (Kimmins 1992, 49). As often occurs, thinking on the subject is often ahead of what occurs in practice.
The focus of this thesis is not on defining forestry, but rather on exploring the process through which First Nations may come to the table and influence such definitions in the immediate and long term future.

THESIS ORGANIZATION
There are eight chapters following this first one. The second chapter emphasizes the unexplored nature of the area under examination and highlights the need for new theory. In so doing, it provides the rationale for the choice of research methods utilized in this study. The research method itself is described in Chapter 3. Before presenting the research results (Chapter 7) it is necessary to outline the context within which these results lie. This is done in three parts: Chapter 4 offers a brief history of Aboriginal/non-Aboriginal relations in Canada as they pertain to forest management; Chapter 5 takes a more specific look at the history of forest management in Ontario with a focus on the tendency to exclude Native people from relevant processes; Chapter 6 provides background information on the similarities and differences between Native and non-Native views of forest values, an important topic in the participant interviews. As stated, the interview results are presented in Chapter 7. Interpretation and analysis of the results takes place in Chapter 8, identification of core variables occurs in Chapter 9, and final comments and conclusions are offered in Chapter 10.
INTRODUCTION

This research has been conducted while a significant paradigm shift is occurring within forestry, a shift which is creating both uncertainties and new opportunities. Of particular interest in this thesis are those challenges to the forest sector which are presented by Aboriginal people, including in part how sustainable forestry is and will be practised in Canada. One of the main topics examined by the research is the relationship between Aboriginal people and forestry in Canada, including policy, management and practice. A second critical question, however, is addressed in this chapter. This question concerns the nature of research itself when investigating the role of Aboriginal people in forestry. What are appropriate and inappropriate approaches to carrying out such research? In order to address such issues, it was necessary to design and employ a research methodology that was mindful of the requirements of conducting research in both Western and Aboriginal contexts. The need for and the characteristics of such an approach are the focus of discussion for this chapter.

Aboriginal people present a challenge not only to industrial forestry, but also to the research approaches used to understand their re-emerging role as decision-makers involved in forest management. Aboriginal issues have been largely unexplored by forestry research in the past. This has begun to change in recent years, however, particularly with the release of the Canadian Council of Forest Ministers’ ‘National Forest Strategy’ in 1992, which was revised in 1998 (CCFM 1998). The 1992 strategy implies a need for consideration of Aboriginal issues by encouraging the incorporation of Aboriginal perspectives into professional forestry educational institutions (CCFM 1998, 42). The 1998 update goes so far as to make specific reference to Aboriginal forest research as part of the framework for action aimed at building the capacity within Aboriginal communities to participate in sustainable forest management activities. Section 7.14 cites the need for:
...developing an Aboriginal research agenda to address research issues specific to: sustainable forest management on Indian Reserve lands; the integration of activities and knowledge into forest management and related business decision making both on and off-reserve; and, the development of Aboriginal research capacity. (CCFM 1998, 36)

Appropriate methods of approaching this issue from an academic point of view are largely unexplored. In the field, the need to address Aboriginal concerns and issues through research is beginning to be recognized (Parkins 1999). However, due to the historical exclusion of Aboriginal people from forest management planning, information on how to include Aboriginal people or even how to conduct research into methods of such inclusion have generally not been a part of forestry curricula. Interest in Aboriginal issues in mainstream forestry education is relatively recent in Canada. The professional forestry schools are just beginning to respond in a meaningful way (BCFCSN 1997). There remain very few Aboriginal foresters in Canada (NAFA 1997), and still fewer of these are in graduate programs in forestry and pursuing Aboriginal-related forestry research. It is a challenge for anyone in mainstream graduate programs to determine appropriate approaches to examining issues which involve Aboriginal knowledge and values. Inadequate information and experience in this field makes it difficult to address Aboriginal-related forestry research. The challenge of the current research, therefore, is to contribute not only to the body of knowledge concerning Aboriginal values related to sustainable forestry, but also to the methodology involved in investigating such a question in the first place. The ongoing paradigm shift in forestry and the lack of appropriate academic research frameworks for addressing Aboriginal issues creates an environment of uncertainty in examining research questions such as the one raised by this thesis. However, it also creates a climate of opportunity. It is a time of excitement, creativity, growth and innovation.

This chapter does not represent a critique of social science nor Western science in general, but focuses on where accepted Western academic research approaches can intersect with Aboriginal approaches to investigation. The research approach developed in undertaking this thesis attempts to address the weaknesses in current research methodologies and aims to describe an approach to dealing meaningfully with Aboriginal world views, epistemologies, knowledge and modes of knowledge acquisition. This chapter discusses ways in which the two systems may be able to
come together utilizing a “co-existence” model.

THE RESEARCH PROCESS: RESPECTING THE VALIDITY OF ABORIGINAL APPROACHES TO INVESTIGATION

The nature of the topic undertaken by this research necessitates changes to certain aspects of conventional research methods. In particular, a culturally sensitive approach must be developed. This research is in many ways cross-cultural. It is an attempt to make sense of, or to bridge, two world views and two ways of knowing. If it is to be useful, this research must represent Aboriginal reality in an authentic manner, in spite of the difficulties in communicating between Aboriginal and non-Aboriginal society. The challenge is to rise above the essentially colonial relationship that still exists and move toward a more equal sharing of knowledge. In taking this approach I have outlined the following principles as a guide to this research (adapted from RCAP 1993a, 37-38):

- The research must respect Aboriginal cultures, values, languages, knowledge and ways of legitimizing knowledge.
- The existing literature must be open to reassessment.
- Information obtained through Aboriginal modes of knowledge transmission must be respected equally along with documented sources.
- The research must reflect the multiplicity of viewpoints in Aboriginal communities.
- Protocols concerning communications in Aboriginal communities must be observed.
- Ethical and professional practices must be upheld.
- All participants in the research must be accorded fair treatment.

Two Systems of Knowing

The year 1492 marked the first meeting of two disparate world-views, each on its own uncharted course of exploration and discovery for purposeful knowledge. The encounter featured two diametric trajectories into the realm of knowledge. One was bound for an uncharted destination in outer space, the physical, and the other was on a delicate path into inner space, the metaphysical.

(Ermine 1995, 101)

The movement toward the “science of wholeness” depends in large measure on the ability of philosophers and scientific thinkers to move beyond their
comfortable and presently accepted categories of arranging and interpreting data--to glimpse and grasp new unities of experience and knowledge....

Some thinkers have begun to entertain non-western notions of knowledge and its acquisition.

(Deloria 1999, 40)

The quotes above relate well to my theoretical perspective, my philosophical standpoint which informs my research methods (see Crotty 1998 for discussion on the importance of philosophical standpoint). In this research I have utilized both Western scientific (including social scientific) and Aboriginal traditions in investigating my research question. More fundamentally, I am basing my overall approach on Aboriginal world view and investigative frameworks, specifically the concept of "co-existence" which embodies principles of mutual recognition, respect and sharing (RCAP 1995).

My greatest challenge in this research was selecting a theoretical perspective, an appropriate methodology and method that would be consistent with and reflective of the epistemological underpinnings of a research question that required a cross cultural framework. As part of the research process, it is necessary to provide a rationale for my decisions. Crotty (1998, 2) writes, "Justification of our choice and particular use of methodology and methods is something that reaches into the assumptions about reality that we bring to our work. To ask about these assumptions is to ask about our theoretical perspective."

The nature of reality and how we try to understand it is a critical context in which to place the research. It is generally acknowledged among scholars that Aboriginal and western world views and epistemology are different (Deloria 1999, Ermine 1995, Peat 1994). These differences are much less of a problem than the fact that Aboriginal knowledge is often regarded as less valid or acceptable than information obtained through the western scientific tradition (Colorado 1988, Colorado and Collins 1987, Deloria 1999, Mohawk 1988a). This, too, is part of the larger context in which this research finds itself.
CHOOSING AN APPROPRIATE APPROACH: CROTTY'S FOUR ELEMENTS OF RESEARCH

The burden of the research approach then becomes expressible as, "What methodology would be considered valid and acceptable within forestry, while at the same time serve to validate Aboriginal epistemology?" This presents a difficult question when one is committed to respecting the legitimacy of Aboriginal world view while studying in an intellectual tradition dominated by western modes of thought. Choosing a methodology consistent with Aboriginal modes of investigation, which would also fulfil the academic requirements of my research from a western institutional standpoint, was no easy task (see Smith (1999) for an excellent exploration of this topic). To respond to this question, I have utilized Crotty’s (1998) four elements that he suggests form the basics of any research approach. He poses four questions that he says must be answered in undertaking research. These are, (1), "What methods do we propose to use?", (2), "What methodology governs our choice and use of methods?", (3), "What theoretical perspective lies behind the methodology in question?", and (4), "What epistemology informs this theoretical perspective?" (Crotty 1998, 2). Crotty (1998, 3), goes on to define these terms as follows:

- **Methods**: the techniques or procedures used to gather and analyse data related to some research question or hypothesis.
- **Methodology**: the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcomes.
- **Theoretical perspective**: the philosophical stance informing the methodology and thus providing a context for the process and grounding its logic and criteria.
- **Epistemology**: the theory of knowledge embedded in the theoretical perspective and thereby in the methodology.

These elements are addressed in the following pages, beginning with the last and most theoretical element, epistemology, and proceeding through to the more practical discussion of methodology. The epistemology section discusses the overall guiding paradigm of my research- the “co-existence” concept. The theoretical perspective section illustrates how the theoretical perspective maintained in this research embraces both western and Aboriginal intellectual traditions and forms the context for the research process. The methodology section discusses “grounded theory”, as well as qualitative research and the case study approach as major components of my research design because of their compatibility with Aboriginal modes of investigation. Specific
information on the methods employed is presented in Chapter 3. In discussing each of these elements I will describe my research process.

**EPISTEMOLOGY: THE CONCEPT OF CO-EXISTENCE**

Although the idea of co-existence has been around and its methods practised by Aboriginal people since time immemorial, it is now beginning to enjoy a resurgence. Co-existence is a concept that has been passed on through oral tradition and is symbolically represented in the Two Row Wampum of the Haudenosaunee (Although the Two Row Wampum is commonly attributed to the Haudenosaunee, many other Aboriginal nations subscribe to this idea (Borrows 1997)). Although in recent years the concept has been used in reference to treaty making and as a way to honour treaties already made, it has application in other areas. One such area involves the co-existence of western and Aboriginal intellectual traditions. Co-existence can be viewed as a way to have two world views and knowledge systems interact in an equitable fashion. This notion is summarized by the Royal Commission on Aboriginal Peoples (RCAP 1993a, 45):

> The widespread concerns for authentic Aboriginal voice, for authentic representation of Aboriginal experience and history, are continuing legacies of the colonial past. They underline the power relationship between Aboriginal and non-Aboriginal people in Canada. A related concept recurring throughout is the necessity of parallel development, perhaps best captured symbolically in the Two Row Wampum belt. Hamelin advocates a process of intercultural convergence and cohabitation:

> There is symbolism in the train that enhances its value-added by using two rails that are independent yet associated for the task. Writers will think of independent canoes moving along the same body of water without colliding. Still others will envision a dog sled team on the tundra, each animal using its own track to jointly pull the sled. These metaphors imply that the mutual regime would include both independent and communal traits.

Whether in justice, social services, education, or government structures and processes, efforts to ‘indigenize’ the dominant, non-Aboriginal institutions are seen largely as failures. Parallel institutions and systems, in which authentic voice and representation can be asserted, are seen as more promising avenues of development. Writers repeatedly urged the Royal Commission to study diverse existing examples of parallel development under Aboriginal direction, with the goal of finding out what works. On the basis of such research, models may be developed and communicated for broader application.
The above quote aptly describes the perspective I have chosen for my research. Neither Aboriginal nor western systems of knowledge are subordinate or dominant to each other, but run parallel, each with their own forms of validity and reliability, their own standards for legitimizing knowledge. Guided by the co-existence model (which in turn comes from the ancient Two-Row Wampum, discussed in more detail below), the research process I have developed will hopefully find broader application not just in forestry but in other interdisciplinary fields of study as well.

The concept of co-existence described in this thesis reflects an Aboriginal understanding (see Hill (1990) for a discussion of Aboriginal versus non-Aboriginal views on the Two Row Wampum). Although the concept of co-existence has been part of Aboriginal tradition for many centuries, it finds its most prevalent expression in treaties (both prior to and after contact with Europeans. See Borrows (1997) for an example). The concept suggests that, “Together, side by side, we go down the river of life in peace and friendship and mutual co-existence” (Lyons 1988, 20). The notion of co-existence as the basis of relationships between Aboriginal and non-Aboriginal people has suffered during colonial rule, described by the statement, “As they dominated the land, so they came to dominate its original inhabitants” (RCAP 1996b, 11). Aboriginal people, their institutions, knowledge, traditions and values became targets of attack for centuries (Churchill 1998, Cole and Chaikin 1990, Grant 1996, Miller 1996, Pettipas 1994). Along with the people and their lands, the ideology of co-existence was violated.

In more recent years, principles signified by the Two Row Wampum are enjoying a re-emergence. With the release of the final report of the Royal Commission on Aboriginal Peoples (RCAP) in 1996, a new blueprint for restoring a more peaceful and equitable relationship has been articulated for Canada. The Royal Commission has managed to influence public policy, and in conjunction with long time resistance from Aboriginal people themselves, is resulting in a gradual shift in Aboriginal policy from promoting a relationship of dominance to achieving one of greater partnership. The Government of Canada’s most recent Aboriginal policy statement, “Gathering Strength - Canada’s Aboriginal Action Plan” is an example of this shifting focus at the policy level. The plan’s intent is described in the following statement (DIAND 1997, 2):
*Gathering Strength* is an action plan designed to renew the relationship with the Aboriginal people of Canada. This plan builds on the principles of mutual respect, mutual recognition, mutual responsibility and sharing which were identified in the report of the Royal Commission on Aboriginal Peoples.

Co-existence and the principles it embodies have returned to the forefront as a way of describing how two groups of people can peacefully co-exist despite having totally different world views, knowledge systems, and ways of coming to knowing.

As previously stated, the co-existence model is informed by the Two-Row Wampum (also known as the “Covenant Chain”, or the “Guswenta”) as expressed in early Aboriginal-European relations. This powerful symbol outlines, “the principles of peace and friendship that are to guide the two nations in dealing with each other. It is also a statement on sharing, a very ancient Indian principle” (Hill 1990, 27). Hill (1990, 27) continues by describing this symbol of relations between two nations, an illustration of the concept of “separate but equal”, and an “image of the two water vessels, each containing laws and beliefs of the two distinct peoples, [which] creates a visual symbol of separate nations equal in rights, travelling in the same direction, but not crossing each other’s paths.” John Mohawk, Haudenosaunee scholar, observes that, “The wampum represents the peoples’ best thinking put into belts....it was a symbol of a people’s successful accomplishment of coming to one mind about how they were going to go on...in a permanent relationship of peace and tranquility between the two sides” (Mohawk 1988b, xiv).

The Two Row Wampum is thus a metaphor for the relationship historically desired by Aboriginal people with non-Aboriginal people. Hope for the establishment of this relationship continues to the present day (Borrows 1997).

The concept of co-existence has relevance and application in many areas. It explains how First Nations and non-Native peoples can peacefully interact, how two distinct peoples can share lands, resolve differences, and share knowledge. The concept was of such importance that it formed the basis for early treaties. As Mohawk suggests, it also has application for intellectual traditions, which is of particular interest here. The Royal Commission on Aboriginal Peoples,
while listening to the views of Elders from across the country, heard time and time again of the value of Aboriginal knowledge, and of the disappointment by many that this value is not recognized. RCAP (1996c, 120) has identified a need for:

...bridging the gap of understanding between Aboriginal and non-Aboriginal Canadians. The Elders who spoke to us often provided teachings they considered a starting point for mutual understanding.

Experts on relationships, Elders understand better than most people the original relationship that existed between Aboriginal peoples and other Canadians. For the Mohawk Nation, the nature of this relationship is symbolized by the Two Row Wampum. (emphasis added)

As an Aboriginal doctoral student, my goal is to take on the challenge issued by Marlene Brant-Castellano, Mohawk scholar, when she asserts that:

For Aboriginal people the challenge is to translate the well-honed critique of colonial institutions into initiatives that go beyond deconstruction of oppressive ideologies and practices to give expression to Aboriginal philosophies, worldviews and social relations. For non-Aboriginal people the challenge is to open up space for Aboriginal initiative in schools and colleges, work sites and organizations so that indigenous ways of knowing can flourish and inter-cultural sharing can be practised in a spirit of co-existence and mutual respect. (Brant-Castellano, in press, p.32) (emphasis added)

THEORETICAL PERSPECTIVE

In the spirit of co-existence, this thesis utilizes a theoretical perspective that respects and applies both Aboriginal and non-Aboriginal intellectual traditions. However, understanding the context for my research process requires an appreciation of the, "subjugation of Aboriginal people and the discounting of their ideas" (Ermine 1995, 3). Over time, Aboriginal world view, epistemology, knowledge and ways of acquiring information have been negated, ignored, deliberately excluded and ridiculed (Brant-Castellano, in press; Lewis 1993; Mihesuah 1998; Montejo 1994; Smith 1999; West 1996). Vine Deloria, Jr., a Sioux scholar who writes prolifically on this topic, observes (Deloria 1999, 41):

Non-Western knowledge is believed to originate from primitive efforts to explain a mysterious universe. In this view, the alleged failure of primitive/tribal man to control nature mechanically is evidence of his ignorance and his inability to conceive of abstract general principles and concepts.

Tribal methodologies for gathering information are believed to be "prescientific" in the sense that they are precausal and incapable of objective symbolic thought.
This belief, as we shall see, is a dreadful stereotypical reading of the knowledge of non-Western peoples, and wholly incorrect.

In fact, tribal peoples are as systematic and philosophical as Western scientists in their efforts to understand the world around them. They simply use other kinds of data and have goals other than determining the mechanical functioning of things.

This situation is slowly changing as a new appreciation for Aboriginal knowledge has started to appear in some circles. Because this move to recognize Aboriginal knowledge is so recent, appropriate frameworks for its grounding and application are non-existent and/or weak or inappropriate (Graveline 1998, McGregor 1999b, West 1996).

Nonetheless, changes are occurring which indicate a move towards greater appreciation of Aboriginal systems of knowing. In relation to the substantive area of my research, there are some major forces at work which are supporting this move. Three of these are:

- A gradual yet significant shifting of power in broader Canadian society, which is resulting in an incremental renegotiation of the relationship between Aboriginal and non-Aboriginal people. There is a general rejection of the status quo by Aboriginal people and the inappropriateness of the past few centuries has been acknowledged. It is a time of change and challenge.
- An ongoing shift in forestry sector ideology away from sustained yield and toward sustainable forestry.
- A second shift within forestry towards recognizing and respecting Aboriginal people and their knowledge.

Partly in response to these shifts in thinking, the Government of Ontario has formally recognized the potential role of Aboriginal people in contributing to sustainable forest management in Ontario. Reference to Aboriginal people shows up in its public consultation guidelines and Native Values Mapping exercise. Aboriginal participation is in fact listed as an indicator of sustainability (MNR 1996).
However, little is actually known or shared about what this actually means, what has taken place in the field, or what effects there have been on the people who have to implement or who are affected by these new guidelines. There is little in terms of theory or theoretical constructs that can assist in understanding this situation. This policy direction exists at international, national and regional levels, but what does it really mean in the field? In this sense, an integral part of this research is a degree of uncertainty and mystery. As such, a methodological framework which can be used to structure systematic research yet which is not rendered unworkable by this situation is necessary. This methodology must be able to deal with unknowns, be able to function where there is little or no pre-existing theory, and rise to the challenges presented by uncertainty. Methodology is discussed further in this chapter. Prior to discussing appropriate approaches to research involving Aboriginal world views, it is necessary to highlight some important components of such perspectives.

**Key Aspects of Aboriginal World View, Epistemology and Knowledge**

Interest in Aboriginal world view and knowledge in academic and applied settings is increasing. Despite this, little has yet been written from an Indigenous or Aboriginal perspective, although this is beginning to change. With the recent proliferation of literature on Indigenous knowledge, particularly in the last two decades, it would be easy to conclude that the subject of Indigenous knowledge is a newfound one. In fact, Indigenous knowledge was highly valued in the early years of contact with Europeans. Without it, the newcomers would have perished. Indigenous knowledge of medicines, foods, technology, science, land, climate and weather sustained Aboriginal peoples on these lands and in turn helped to sustain the European arrivals. Aboriginal knowledge is an ancient knowledge; it is not new. As stated by RCAP (1996c, 119), “Aboriginal knowledge - the North American intellectual tradition - is indigenous to this land. It sustained Aboriginal cultures for thousands of years, enabling them to thrive and grow strong.”

From an Aboriginal point of view, knowledge is not separated from the person who holds it (AFN 1995, Deloria 1999, McGregor 1999b). “Knowledge is sacred, a gift from the Creator. This affects how knowledge is protected and used, as well as how it is acquired and validated” (RCAP 1996c, 114). RCAP (1996c) describes two kinds of Aboriginal knowledge: objective
knowledge, which comes directly from the Creator, and subjective knowledge, which comes from experience. "For Aboriginal people, both types of knowledge inform everyday life" (RCAP 1996c, 115).

Another fundamental aspect of Aboriginal knowledge is its spirituality (Beck et al. 1996). "This spiritual aspect of knowledge is central to the North American intellectual tradition" (RCAP 1996c, 114). Spiritual knowledge can be described in terms of its source (e.g. spiritually derived or "objective" knowledge), its acquisition (e.g. through ceremonies or spirit journeys), or its meaning/significance (e.g. spiritual healing). The idea that spirituality is central to Aboriginal knowledge is explained in the following quote (Chapman in RCAP 1996c, 113):

> The knowledge, this thing called knowledge - I know we can learn some things in school, but the real knowledge comes from the Creator. The knowledge that grows in the mind comes from the Creator. The one who created all the people...The things that we know now in our lives, in our mind, it comes from the Creator, not from our fellow human beings.

Brant-Castellano refers to knowledge derived from the spirit world or Creator, as "revealed knowledge" (in press, p. 34). She describes three forms of Aboriginal knowledge: traditional, empirical, and revealed. Traditional knowledge refers to information passed down via the oral tradition, and includes creation stories, genealogies and rights to territory (p.33). Empirical knowledge "is gained through careful observation" (p.33) and involves creating knowledge. Revealed knowledge is spiritual in origin and is acquired through methods such as dreams, visions and intuitions (p.34). In previous work (McGregor 1999a), I have described Indigenous knowledge as spiritually derived, whether it is learned directly from the spirit world or teachings originally derived from the spirit world that are then taught by people and/or other beings.

A third major facet of Indigenous knowledge is that it always has been and continues to be dynamic; it is not fixed in time. Just as people and their circumstances change, so does their knowledge. Cree scholar Laara Fitznor (1998) argues, for example, that Indigenous knowledge has for many years contained, as part of its contemporary teachings, information on how to resist oppressive and colonial forces which seek to undermine and eradicate Indigenous knowledge.
As stated, there is an increasing body of literature on the subject of Indigenous knowledge, from both Aboriginal (see, for example, Brant-Castellano in press, O'Meara and West 1996, and McGregor 1999b) and non-Aboriginal (see, for example, Grenier 1998 and Wolfe et al. 1992) perspectives. For the purposes of this dissertation, some key characteristics of Aboriginal knowledge are listed below:

- **Inclusiveness:** All information is somehow important or relevant. Nothing is excluded. Deloria (1999, 44) writes that, “In formulating their understanding of the world, Indians did not discard any experience.” Deloria (1999, 46) continues that, “...in the Indian system, all data must be considered, the task is to find the proper pattern of interpretation for the great variety of ordinary and extraordinary experiences we have” (emphasis added). Cajete (1999, 82) notes that, “...the Indigenous perspective is wholly inclusive and moves far beyond the boundaries of objective measurement.”

- **Holism/Wholeness:** All aspects of an entity are considered to be important. According to Bopp et al. (1988, 26), “All things are interrelated. Everything in the universe is part of a single whole. Everything is connected in some way to everything else. It is therefore possible to understand something only if we can understand how it is connected to everything else.” This idea involves unity and centering, understanding what is occurring on the “inside” as well as the “outside” of a person or being. Ermine (1995, 103) writes, “Their fundamental insight was that all existence was connected and that the whole enmeshed the being in its inclusiveness....It is a mysterious force that connects the totality of existence - the forms, energies, or concepts that constitute the outer and inner worlds.” Such ideas were also expressed during the RCAP hearings, where it was stated that, “the relational approach to knowledge sees the relationship among things as well as the unity and integrity of things. Such a way of seeing is called holistic (RCAP 1996c,115).

- **Focus on Experiential Learning:** Experience is valued as well as formal training and education. This is referred to as subjective knowledge, where one acquires knowledge by doing. This knowledge is thought of as, “subjective because it can change: an individual
may find a better way of doing things. This learning and refining can continue throughout a lifetime. In many Aboriginal cultures, knowledge is often suspect if it is founded on events outside one’s personal experience” (RCAP 1996c, 115). Deloria (1999, 45-46) observes that, “Indians believed that everything that humans experience has value and instructs us in some aspect of life. The fundamental premise is that we cannot ‘misexperience’ anything; we can only misinterpret what we experience.” Buckley (1989, 48) adds that, “All learning is experiential. It follows clearly from the Yurok theory of individuality that knowledge is an object of perceptual experience, and only an individual is capable of experiencing for himself.”

- **Applicability and Relevance:** Because all experience is valued and all data considered valid, methods of inquiry and the resulting knowledge are relevant and applicable to everyday life. Everything is connected and related in some way to everything else. Nothing is irrelevant; we just have to wait for the pattern or meaning to reveal itself.

- **The Need for Patience:** Conclusions are not drawn by rushing into them immediately, but by waiting for them to reveal themselves. One did not force conclusions from a place where there were none. Revelation was a key method of becoming informed (Brant-Castellano, in press).

- **Valuing Change:** Change is expressed in a number of ways, including transformation, growth, development, and paradigm shifts. Bopp et al (1988, 27) write, “All of Creation is in a state of constant change. Nothing stays the same except the cycle upon cycle of change.” Change is valued and viewed as necessary. Bopp et al (1988, 27) continue that, “There are two kinds of change. The coming together of things (development) and the coming apart of things (disintegration). Both of these kinds of change are necessary and are always connected to each other.” Deloria (1999, 46) adds that, “the world is constantly recreating itself because everything is alive and making choices that determine the future.”
Inquiry Without Theory or Prejudgment: This does not mean that Aboriginal peoples did not have theory. This idea refers back to the domination, including ideological domination, of Aboriginal people by non-Aboriginal people. It means that Aboriginal views have been misrepresented, misunderstood and distorted (Fitznor 1998, McGregor 1997, Mihesuah 1998). Existing Eurocentric frameworks or paradigms tend to assert themselves over Aboriginal thought, which puts Aboriginal perspectives in a "continuous struggle" (Fitznor 1998, 25). The investigation of phenomena outside the realm of current theories and their frameworks becomes desirable. Another aspect of this point is revealed by Deloria (1999, 67), who states, "even though data can come in a highly emotional context, the task is to make sense of the experience or withhold judgement on its meaning until a sufficient number of similar experiences reveal the pattern of meaning that is occurring." One does not force the "data" to "fit" a preconceived notion. Cordova (1996, 15) adds, "the philosophical exercise of questioning and analyzing the offered 'data' should not be undertaken with preconceived notions." Further to this point is the fact that despite the proliferation of academic work about Aboriginal people, it can be argued that still much remains unknown. "Although it has sometimes been said that Aboriginal people have been 'studied to death', enormous gaps remain in our knowledge in this field." (RCAP 1993a, 1). RCAP then describes examples of such gaps including how Aboriginal people are including traditional knowledge or values in various aspects of contemporary life.

METHODOLOGY

Grounded Theory
Having outlined some of the more prevalent features of Aboriginal knowledge systems, the task remains to determine a methodology and subsequently a method which is considered valid in terms of western research criteria, but which is also compatible with the principles and characteristics of Aboriginal investigation. This methodology must also be functional in an area of research where little in the way of prior theoretical understanding exists. Grounded Theory is one such methodology.
...the strongest case for the use of grounded theory is in investigations of relatively uncharted waters, or to gain a fresh perspective in a familiar situation. In the first instance, it can easily be understood that where no theory regarding a situation exists, it is impossible to test theory. It is especially helpful - even necessary - in attempting to study complex areas of behavioural problems where salient variables have not been identified. In the second instance, it becomes clear that the value of a fresh perspective in a familiar situation is in its applicability to practical problems. (Stern 1994, 116)

Stern’s quote aptly describes the appropriateness of choosing grounded theory as the methodology for this research. Grounded theory is explained by co-founder Barney Glaser (1992, 16) as, “...a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area.” Listed below are some key characteristics of grounded theory:

- A fundamental difference between grounded theory and other methods of analysis is that, “...grounded theory...stresses discovery and theory development rather than logical deductive reasoning which relies on prior theoretical frameworks” (Charmaz 1994, 96). Further to this, “In using the grounded theory approach the problem is allowed to emerge from the data and is thus defined by the actors in the situation” (Mullen and Reynolds 1994, 138). Grounded theory thus does not rely on the literature to shape ideas. The literature is used to explain the theory; “the theory is not derived from it” (Stern 1994, 124).

- Verification in grounded theory occurs by checking developing ideas with further observation (data). It does not require verification from other researchers to be valid (Charmaz 1994). The researcher’s job, “...is to generate, not to verify” (Glaser 1992, 33).

- Grounded theorists study process (Charmaz 1994, Glaser 1992), and, “...they assume that making theoretical sense of social life is itself a process” (Charmaz 1994, 97).

- Grounded theory is inclusive of both qualitative and quantitative research; theory can emerge from the gathering and analysis of both sets of data (Glaser 1992).

According to Glaser (1992, 15):

A well constructed grounded theory will meet its four most central criteria: fit, work, relevance and modifiability. If a grounded theory is carefully induced from
the substantive area its categories and their properties will fit the realities under study in the eyes of the subjects, practitioners and researchers in the area. If a grounded theory works it will explain the major variations in behavior in the area with respect to the processing of the main concerns of the subjects. If it fits and works the grounded theory has achieved relevance. The theory itself should not be written in stone or as a "pet", it should be readily modifiable when new data present variations in emergent properties and categories. The theory is neither verified nor thrown out, it is modified to accommodate by integration the new concepts. When these four criteria are met, then of course the theory provides a conceptual approach to action and changes and accesses into the substantive area. In this sense it provides control in the substantive area researched.

Writing also on the relevance criterion of grounded theory, Mullen and Reynolds (1994, 134) observe that, "Presentations of grounded theorists to practitioners have shown that they do not require an interpreter to translate the research. The practitioner can hear it, relate it to his or her experience, and apply it." Thus, in order for the findings of this research to be useful, they have to be readily understandable by those who will most likely be interested in applying them, namely natural resource practitioners.

A key aspect of grounded theory is its ability to accommodate interdisciplinary study, of which this research is an example. Grounded theory is a general methodology. As Glaser (1992, 18) writes, "...grounded theory methods are not bound by either discipline or data collection."

Grounded theory creates a research environment which is in many ways compatible with the features of Aboriginal knowledge systems, as follows:

*Inclusiveness:* Grounded theory is primarily concerned with data; none are excluded from the analysis.

*Wholeness:* Grounded theory analysis concerns itself with understanding and explaining relationships and connections, a key component of wholeness.

*Experiential Learning:* Grounded theory prides itself on its attention to the experiences of the subject, but just as important are the experiences of the researcher. "Professional experience,
personal experience, and in depth knowledge of the data in the area under study truly help in the substantive sensitivity necessary to generate categories and properties” (Glaser 1992, 28). Under this methodology, the researcher matters, as is the case in Aboriginal systems.

Relevance: Because the use of grounded theory requires that conclusions be drawn from the available data without discarding data which do not “fit” some previous theory, grounded theory ensures that findings will have relevance to the “real life” situation being studied. Grounded theory does not require “ideal conditions” to function; rather it is meant as a tool for explaining real human circumstances.

Change: As those circumstances change, the findings of grounded theory can be modified to incorporate the new information.

Inquiry without Prejudgment: Finally, the defining characteristic of grounded theory is that it is not reliant on previous theories for analyzing data. As stated, this is ideal for investigations in an Aboriginal context. It is also consistent with the Aboriginal pursuit of knowledge in which judgment is withheld until patterns begin to emerge.

Literature Reviews in Grounded Theory

According to Glaser (1992), grounded theory methodology does not require a literature review be undertaken prior to embarking on research. Rather, “...the dictum in grounded theory research is: There is a need not to review any of the literature in the substantive area under study” (p.31, emphasis added). Grounded theory sees literature review at this stage as not relevant and a possible contaminant of the research findings. Conducting a prior literature review could burden the researcher with conscious or unconscious assumptions about what the subsequently collected data should mean. Literature reviews can thus inhibit a researcher’s ability to let the data speak for themselves (Glaser 1992, 31). The idea is to leave the researcher as free as possible to let new ideas emerge.
Although Glaser is critical of literature reviews occurring prior to data gathering, he does see a role for such reviews following the data gathering and analysis. The literature review is used once ideas, patterns, conceptions or theories have emerged. Its intent is to help interpret or explain the data, and support the theory derived from the data (Glaser 1992, 33). Although preconceived notions from earlier literature review may force unwarranted conclusions from the data, once emerging patterns and conceptions are firmly grounded, a literature review can begin. “Indeed the researcher may be hard put to know what substantive field his theory is in until it has emerged sufficiently” (Glaser 1992, 32). Glaser argues further that, “It is far more efficient than reading the literature beforehand with no clear notion of relevance” (Glaser 1992, 33). Thus, the literature review will be much easier to conduct after conceptual categories have emerged. The researcher will search for what is relevant. Depending on the research findings, there may in fact be little or no existing literature in the field. If this is the case, then grounded theory has served its purpose in opening up new opportunities for future research. Glaser adds that if an abundance of related literature emerges then the grounded theory approach is aptly able to synthesize and integrate what is relevant about related literature.

In my research process, therefore, no formal literature review was conducted prior to data collection. However, I was necessarily familiar with much of the existing literature in my area of interest due to program requirements such as completing course work, formulating a research proposal, and developing an ethics review protocol. I have also been involved in related curriculum development work and other professional work experience which has further led me to become familiar with what texts there are in this field.

Though I continue to be familiar with this material, there is little of it to speak of in the academic literature. This is one of the main reasons grounded theory was chosen: theory generation is sorely needed in the field. The literature that I reviewed did not generate or contribute to the development of theory; what it revealed was the need for one. I am not a forester, and am therefore not as familiar with the theories and paradigms associated with forest management planning as a trained forester might be. Glaser would no doubt see this as an advantage; the less I have in the way of preconceived notions the better I am able to see the data for what it is.
Qualitative Research

Grounded theory can be applied to both qualitative and quantitative undertakings. Qualitative research was chosen as the desirable research approach for this dissertation topic. Like grounded theory, qualitative research is an approach to knowledge production (Tesch 1990) which has been described as an excellent tool for understanding social phenomena (Marshall and Rossman 1989). The approach is fluid and flexible and accommodates change (Tesch 1990). The data gathered in qualitative research is not meant to be quantified, but interpreted and explained. It is, as Tesch points out, for researchers who seek connections and explanations. They try to discover more than just what is, they also try to find out why it is (Tesch 1990, 85). These properties are highly complementary to Aboriginal views of knowledge seeking, in which basic assumptions revolve around “interrelationships”, “connections”, and “explanations” based on the knowledge of the person who is experiencing them. A key aspect of seeking and producing Aboriginal knowledge involves looking for relationships among the data. Such data may take the form of stories, prayers or songs (to name a few) (Cajete 1994, Colorado 1988). Qualitative research is, as Tesch (1990, 4) states, “...the process of making sense of narrative data.”

Words as Data

In this research, I have used interviews as the primary source of data. Without the literature creating preconceived notions, the primary data take on a particular importance. The data gathered in the interviews were not meant to be tabulated but described and interpreted. Tesch (1990, 2) asserts that, “When we ask questions about human affairs, the responses come in sentences, not numbers. We collect as ‘data’ narratives, or, as I like to call them, stories.” This approach to data collection is consistent with Aboriginal approaches: stories too can be data. In fact, in the Aboriginal oral tradition, stories can be a primary source of “data” (Tesch 1990). Stories based on personal experience are also highly valued. Tesch (1990, 3) adds, “It might be more proper to call these data ‘textual’, and of the type of research that is based on them ‘descriptive’ or ‘interpretive/critical’. ” To reflect this, my overall approach has been to listen, engage with the participants, observe, describe, interpret and explain. I did not measure or test.
Qualitative research is also ideal for interdisciplinary study. Aboriginal world view is holistic; divisions do not occur along neat or obvious lines. Economic, social, cultural, spiritual, ecological, legal, and political aspects of life are viewed, experienced and explained as part of a whole. This research requires an interdisciplinary approach that can accommodate this mode of experiencing phenomena.

Case Studies
The case study is a flexible approach to research that investigates a real life phenomenon or action (Yin 1994). Colin Robson (1993) writes, “It is true that one of the great strengths of case study is its flexibility” (p.148). He adds that, “In principle, it can be pre-structured or ‘emergent’ as you wish -- or, more accurately, as is appropriate for the purposes of your case study”. (p.149). Case studies, “...permit the observer to render social action in a manner that comes closest to the action as it is understood by the actors themselves” (Feagin et al 1991, 8). Data and later interpretation and explanation are “grounded in the claims of those who make them” (Feagin et al 1991, 8). According to Feagin et al (1991, 13), there are four main characteristics of the case study approach. This tool:

a) permits observations or words (data) to be grounded.

b) permits a more holistic approach, as the researcher examines the social action in its complete form. “The investigator is better able to grasp the total complex world of social action as it unfolds” (Feagin et al 1991, 9).

c) allows the researcher to examine the contemporary as well as historical dimension of the action of interest. Change is an element to consider and a fact of any real life situation.

d) encourages the generation of new ideas and theories.

The value of the case study approach for my research can be illustrated through a comparison with First Nations stories. Stories in the Aboriginal tradition can in fact be viewed as case studies. A single event, retold as a story in the Aboriginal epistemological tradition, is utilized as a lesson from which current and future generations can learn. The story explains the event. A case study in the western tradition of qualitative research serves much the same purpose as a
story in the Aboriginal tradition. The case study, as employed in this project, was used as a method to gather words as data. These data are then the narratives or stories referred to by Tesch (1990).

A Word About Ethical Research
Long before formal ethical procedures were established in academic institutions, professional and scholarly ethics, particularly in field work, were a major consideration for scholars (Hedican 1995). At the University of Toronto, a formal ethical review process now exists and applies to research involving human subjects. Consideration of ethical research guidelines, particularly with Aboriginal participants, was a primary influence in my choice of methodology and methods. The eventual research products (the dissertation and any subsequent publications which may emerge) are influenced by decisions I made to ensure my research met ethical review standards set by the University (Ethical Review Unit, Social Science and Humanities, Office of Research Services), as well as those insisted upon by Aboriginal peoples themselves (described in RCAP 1993a).

Two documents guided the ethical considerations I made in relation to this research. The first is the “Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans” (MRC et al 1998) which includes a section devoted to “Research Involving Aboriginal Peoples”. The second document is “Copyright Law and Traditional Indigenous Knowledge of First Nations Peoples: A Resource and Information Guide” (AAPSI 1996) which focuses entirely on First Nations perspectives on research as well as ownership of the research results. The ethical review process at the University of Toronto serves as both an ethical review and a peer review (to ensure scholarly merit).

Being an Anishnabe person myself with extensive work experience in the Aboriginal community (both urban and reserve based) as well as in the academic environment (as a researcher, student and instructor) has made me highly sensitive to ethical considerations. Research can easily misrepresent reality if a researcher is not sensitive or careful. Ron Ignace, of the Shuswap Nation, declares in an interview:
Because we live as a colonized people within the country of Canada, originally colonized by Great Britain and now by Canada, our rights are denied. You have two cultures. There is the open western culture that Native people live by, but there's also an underground Native culture that is not spoken about and not displayed. It's like an underground movement. Unless you get out and get to know the Indian people, you don't see that. I think this is where a lot of academic anthropologists miss the boat. They see only the surface lifestyles of a people and they don't get to understand the deeper ways and means of a people's techniques of survival under trying conditions. (Ignace et al. 1993, 169)

The observation by Mr. Ignace applies to researchers in many subject areas. For example, criticism from Aboriginal groups has been directed at the discipline of history. "Ethnocentric biases of past historical accounts" still plague and distort relations between Aboriginal and non-Aboriginal people in Canada (RCAP 1993a, 44). Aboriginal people, RCAP's findings reveal, "...are not represented within their context or on their own terms" (RCAP 1993a, 44). The natural and applied sciences have not been immune to such failings, as discussed at length by Vine Deloria, Jr. (1995). Status quo procedures do not produce the best scholarly work, particularly when ethical issues are considered. Fresh perspectives and new models are required.

**Intellectual Property Rights**

Protocols are being developed for ethical considerations in research involving Aboriginal knowledge (see AAPSI 1996). Concern in this area stems from the past (and continuing) practice of extracting and exploiting Aboriginal knowledge from the people. Such exploitation is often used to advance knowledge in some area, sometimes making immense profit for external agencies with little benefit or credit given to the Aboriginal community from which the knowledge originated (Churcher 1997). Guidelines are being developed to address such occurrences.

For the purposes of this research, guidelines considered included those developed for the Convention on Biodiversity (which promotes and encourages the use of Aboriginal knowledge), as well as domestic texts such as the Inuit Research Guidelines, Dene Cultural Institute (see Grenier 1998). In summary, I am confident that I conducted my research with the utmost respect for all research participants, Aboriginal and non-Aboriginal alike.
INTRODUCTION

The Native Values Mapping exercise under review in this research is part of an emerging paradigm shift in Western methods of governance with respect to forestry and resource management in general. In the older (and arguably still the predominant) system, Aboriginal people, their ideas and knowledge are generally excluded from decision making processes. In the emerging system, Aboriginal involvement is seen as vital not only politically, but also because Aboriginal knowledge may hold answers to some of today's most troubling ecological questions. This realization is occurring along with the recognition by the new sustainable forestry paradigm of the need to account for all forest related values (CCFM 1998, 1992). As a developing process, meaningful Aboriginal participation in government regulated forest management planning remains largely unexplored. Existing as it does in this climate of uncertainty and growth, there is no adequate theory with which to meaningfully explain the outcomes of such a new process. There is little basis for a deductive approach. This research, therefore, will rely upon inductive reasoning to arrive at conclusions and explanations drawn from the data.

This study is primarily sociological and qualitative in nature. In exploring the thesis statement and searching for answers and conclusions, it will focus on relationships among people and among the responses they provide. It will not concentrate on individual responses, but rather on identifying patterns among the many responses received. The patterns that emerge will determine the specific structure of the analysis performed, and the analysis of the patterns will determine the conclusions.

The use of inductive reasoning in sociological and qualitative research, where the conclusions and generalizations arrived at are "grounded" in the data, is referred to as "Grounded Theory" (Glaser 1994, Strauss 1987) and is described in the previous chapter. This approach was developed as a framework for developing new theory, for assessing new information where much
of the data obtained could not be adequately explained by existing theories. This is precisely the case with the new Aboriginal consultation process and Native Values Mapping exercise in Ontario forest management: a fresh perspective is required. The goal of research in such instances is to contribute to the development of new theory and to fill in gaps in understanding. Theory thus emerges from the data through comparative analysis.

This research utilizes a Multiple Case Study approach to collecting data (see Yin 1994). Both Grounded Theory and the Multiple Case Study approach are inclusive in nature; data is not excluded on the basis of disagreement with existing theory. Rather, both systems promote holism in an attempt to explain the findings as completely as possible, instead of as compartmentalized fragments. This approach is ideal for people who need to understand and work with the entire system. When dealing with human sociological processes, minor details are often relatively meaningless without an understanding of the larger picture. From an Aboriginal perspective, detailed information often loses its meaning and can even become harmful when separated from its larger, holistic context.

In keeping with the need for obtaining as complete a picture as possible, this study utilizes a universal, or 100%, sample size. As of 1999, there are only 12 forest management plans which have been completed under the new process, and they are all considered in this study.

Table 3.1 provides a list of the management districts consulted in this study.
Table 3.1. Ontario Forest Management Plans thus far completed which have formally included a Native Values Mapping component. Planning participants from all 12 of these districts were interviewed as part of this study. (Source: Ontario Ministry of Natural Resources)

<table>
<thead>
<tr>
<th>Plans Scheduled for Approval and Implementation in 1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management Unit Name (current or proposed)</td>
</tr>
<tr>
<td>Brightsand Forest</td>
</tr>
<tr>
<td>Elk Lake</td>
</tr>
<tr>
<td>French-Severn Forest</td>
</tr>
<tr>
<td>Kapuskasing</td>
</tr>
<tr>
<td>Lanark</td>
</tr>
<tr>
<td>Magpie Forest</td>
</tr>
<tr>
<td>Nipissing Forest</td>
</tr>
<tr>
<td>Temagami</td>
</tr>
<tr>
<td>Trout Lake Forest</td>
</tr>
<tr>
<td>Upper Spanish Forest</td>
</tr>
<tr>
<td>Watabeag</td>
</tr>
<tr>
<td>Whiskey Jack Forest</td>
</tr>
</tbody>
</table>

RESEARCH PROCEDURES

In satisfying the requirements of the research and sampling approaches discussed, the general steps listed below were undertaken in order to complete the study:

- **General Literature Review**: This was ongoing throughout the course of the program and course work. Literature reviewed focussed on the background information related to this research; including the history of Aboriginal participation in forest management, the development of the new Ontario forest management planning process, Canadian forest policy, and Aboriginal knowledge. As per the requirements of the Grounded Theory research method, a literature review specific to the primary research undertaken was
conducted upon completion of the data collection and analysis. Background research took place in Toronto, e.g. at University of Toronto libraries or the MNR information centre.

- **MNR Public Documents Review**: In particular, forest management plans and related documents were reviewed for the purpose of identifying forest management districts who have completed the new planning process, as well as key MNR, industry, and First Nations participants in this process. Phone calls were made to MNR to confirm this information.

- **MNR Letter Mail-out**: An invitation to participate in the research as well as a research information letter were sent to each of the 12 MNR districts of interest in this study. These letters were also sent to each of the three Ontario MNR Regional Directors, since districts from all three regions were involved in this study.

- **Identification of Research Subjects**: Each MNR district was called and an appropriate representative identified (e.g. plan author, Native liaison officer, or whomever MNR felt would be appropriate to talk to). This MNR representative then identified appropriate contacts from industry and local First Nations who were involved in the forest management planning process. In some cases the affected First Nation did not participate in the planning process.

- **Letters of Invitation to Potential Interviewees**: Once potential interview subjects were identified a phone call was made (and/or a letter of invitation sent) to invite him/her to participate in the research.

- **Informed Consent**: Each representative who expressed an interest in participating was given the choice of signing a written consent form or consenting orally (see Informed Consent section below).
Interviews: 52 interviews were conducted over a period of approximately 6 months, from June through November of 1999. Each interview lasted for roughly 1 to 2 hours and was usually conducted in the interviewee's office. The same core set of interview questions was utilized with all participants. Some additional questions were asked which were specific to MNR and industry representatives, and some were specific to First Nations (see Appendix 1 for Interview Questions). In all, 22 representatives were interviewed from MNR, 10 from industry, and 20 from First Nations.

Data Recording: Information (i.e. participant responses) was recorded using pen and paper only. Responses to interview questions were written down in the form of notes during the interview. All participants were given the opportunity to review, revise and/or delete information from any such notes immediately following the interview, in discussion with the investigator. No audio or video tapes were used, and no information was recorded against the will of any participant. Only that information which the participants willingly shared and were comfortable having recorded has been used in the writing of this thesis. Participation in the interview was voluntary, and participants were asked to share only that information they felt comfortable releasing.

Data Analysis: Patterns among the participant responses were identified, following the steps outlined in Grounded Theory (see Data Analysis section below).

Discussion and Final Literature Review: Conclusions were drawn based on the results of the data analysis, aided by a final literature review which involved searching available texts for explanations and previous experience with the types of data and patterns observed in this study.

Primary Data Gathering: Interviews took place at MNR District Offices, forest company offices, or First Nation band offices across the province of Ontario.
• **Placebos and Control Groups**: Neither was involved in this research. Every effort was made to ensure that all participants had a clear understanding of how the research was performed and what its implications may be.

**INFORMATION SENSITIVITY ISSUES**

• **Documents**: All existing records (e.g. MNR forest management plans) accessed as part of this research are contained in public documents.

• **Interviews**: Discussion focussed around the extent to which the participants felt that Aboriginal values, needs, and goals were incorporated into the new forest management planning process. The detailed *nature* of these values, needs, and goals (i.e. specific descriptions of First Nations recommendations made to the plans such as the need to protect certain culturally sensitive areas, which may be shown on existing Native values maps etc.) were not identified. As stated, all participants had the opportunity to review notes taken during the interview and to modify or delete information of a sensitive nature which may have been inadvertently recorded. Though the opportunity was always provided, the interviewees never made such revisions during this research, as the investigator never asked participants to divulge sensitive information. At no time during the research were participants required to share Native Values Maps or other information regarding Aboriginal values which they deemed to be of a sensitive nature. If participants wished to share this information, they were free to do so.

**INFORMED CONSENT**

Potential interviewees were invited to participate via a phone call and/or a letter of invitation as well as a research information letter. Those who expressed interest in participating were given the option of signing a written consent form or consenting orally. The reason for providing this choice of methods for indicating consent stems from the long and most often negative experience First Nations people have had with “signing” important documents, e.g. treaties which have not been upheld. While obtaining written consent frequently makes sense in a non-Native context, in
a project involving Native people this may arouse suspicion and/or other negative feelings in invited participants. As an Anishnabe person myself, and someone who has worked extensively with Aboriginal organizations and communities, I expected that a number of the First Nations representatives would have refused to participate in this study were they required to sign anything first. This would have jeopardized the feasibility of the study to the point where it may not have been possible to carry out. To promote an atmosphere of fairness across the board in all aspects of this research, therefore, all potential interviewees in this study, Native and non-Native, were given the option of providing written or verbal consent. Given the straightforwardness of the research and the minimal risks involved, it was felt that verbally granted consent would not result in any undue legal or other risks.

ACCESS TO INFORMATION
All participants are welcome to a copy of the final research product. In part this is its test of validity, in that the final product must be relevant to those parties which contributed to it. The reception of the final product in the field is really the best test of this according to the criteria provided in Grounded Theory. In view of Aboriginal ethical research issues, First Nations should always receive a copy of the final product.

DATA ANALYSIS
This research focussed on how Aboriginal values, needs, and goals have been incorporated into Ontario forest management planning. The aim of the data analysis was to find patterns and relationships which would explain the variation in the incorporation of Aboriginal input among the different Forest Districts and the individual planning areas. Patterns in the incorporation of Aboriginal input were determined using the following steps from Grounded Theory (described further by various authors in Glaser 1994):

- Coding/Categorizing the Data: Participant responses were coded according to observed characteristics and categorized according to clusters that appeared. No pre-existing set of codes or categories for the data was established prior to data collection; the codes and categories or scales used to explain the data emerged from the data. Clusters or
categories of data began to appear following the first few interviews. From this point on, coding and categorizing frequently occurred simultaneously with data collection, as key determinants began to allow data to be categorized immediately upon its reception.

- **Memo Writing, or “Memoing”**: This occurred simultaneously with coding and data collection, and was used to record ideas, patterns, or possible explanations. While working with the data, an ongoing search was made for configurations or patterns which might suggest links or correlations among the various pieces of information. Memoing is simply the process of making note of these possibilities as they appear. It is a reflective activity which helps to bring the primary data up to a conceptual level. It is an ongoing internal dialogue engaged in by the investigator as well as a “running record” of thoughts, concepts, insights that occur as a result of data collection. Inspired directly by the raw information, these notes help to keep emerging patterns and final conclusions grounded in the data.

- **Identification of Core Variables**: This allowed categories of data to be regrouped into two larger categories, the distinguishing variables between which accounted for most of the observed variation in the data.

- **Sorting and Integrating Memos**: Similarly to the data, memos were categorized, integrated where such connections were feasible, and ordered for further analysis. Patterns or themes were derived from the memos as part of the process of developing explanations for the collected data.

- **Discussion and Explanation**: Potential explanations, based on observed correlations and relationships among the data, were discussed (see Chapters 8 and 9). As patterns and concepts emerged, previously unconsidered literature was considered and integrated into the discussion before drawing conclusions.
DETERMINATION OF STUDY POPULATION AND RECRUITMENT OF PARTICIPANTS

To acquire as holistic a perspective as possible in this study, representatives from three groups (MNR, industry, and First Nations) were selected for interviews as the major players in the development of the new forest management plans. Within each representative group, individuals identified as having a key role to play in the planning process were invited to participate. The rationale for selecting this study population is as follows:

**MNR:** Although there have been many recent changes in the legislation and practice of forest management planning in Ontario, MNR remains responsible for the Aboriginal component, including Native Values Mapping.

**Industry:** Under the new Crown Forest Sustainability Act, most of the former Crown-controlled “forest management units” in Ontario have now been transferred to “Sustainable Forest Licenses” which are managed by private or a combination of private and community-based industrial corporations. Industry is now responsible for the writing of forest management plans and is increasingly becoming responsible for the forest management planning process. Industry representatives now play a more active role (or at least are perceived/expected to) in the Aboriginal component of the planning process. Thus, both MNR and industry perceptions were viewed as key to this study.

**First Nations:** First Nations input is considered valuable to the new forest management planning process. Although opportunities for First Nations participation in the planning exercise are offered on a voluntary basis, Aboriginal participation is now regarded as an indicator of sustainability (MNR 1996, C-68, C-71; see Appendix 2 for the criteria and indicators in the Forest Management Planning Manual) and is thus sought after under sustainable forest management planning processes. Furthermore, Native values maps are required under the new process, and are to be produced with or without Aboriginal participation in the public consultation process. Such maps are obviously more meaningful if produced in cooperation...
with the affected First Nation(s). Obtaining the experience and perceptions of First Nations individuals who were involved in the Native Values Mapping process was critical to this study.

From the three groups, such individuals as Plan Authors, Aboriginal Liaisons, Company Foresters, and First Nations spokespeople were selected by their respective organizations as primary representatives in the Aboriginal consultation process. Frequently these individuals were listed in the forest management plans as part of the planning team. In some cases listed individuals indicated others who have now assumed primary responsibility for Aboriginal consultation in addition to or instead of listed personnel. In the case of First Nations, Chief and Council recommended or appointed interviewee(s) who they felt best represented their views and who worked most closely with the plan and the consultation process.

In all, 52 representatives were interviewed: 22 from MNR, 10 from industry and 20 from First Nations. The number of representatives per plan/district varied, depending on factors such as:

- whether or not a given MNR District had a Plan Author as well as an Aboriginal Liaison, both of whom were considered key interviewees for this research
- the number of First Nations who are affected by and who participated in a given forest management plan. Some plans affect more than one First Nation (up to 7 in one case, though not all participated in the planning process).
- whether or not key representatives recommended other key individuals from their office/band to be interviewed
- whether or not any identified key representatives chose not to be interviewed.

Each interview was conducted at the workplace of the interviewee. The investigator travelled throughout Ontario in order to complete this portion of the research.

RISKS
In keeping with the ethics protocol developed for and approved by the University of Toronto,
several considerations regarding risk to participants shaped the research methodology. Though the risks associated with this study are minimal, there are a few which required that preventative steps be taken.

The general aim of this research was to avoid potential risks through appropriate consideration of the "Ethical Guidelines for Research" developed by the Royal Commission on Aboriginal Peoples (RCAP 1993a). Risks identified as pertinent to this study included:

- potential negative feedback from participants’ superiors (e.g. in the workplace, in the community) where those superiors feel their organization has been poorly represented in the study and if they are able to determine who spoke for their organization. This could possibly affect the responses of some interviewees, probably more so in the case of MNR and industry representatives. Similarly, there is a minimal risk of the research data being put to evaluative purposes which could adversely affect participants. Participant responses could be seen by other members of an involved organization to reflect poorly on that organization (e.g. the research results could reflect perceived inadequacies in MNR or industry procedures), thus eliciting a call for punitive measures against the participant(s) who gave such responses.

- potential unfavourable impact on relationships among Native and non-Native parties in the forest planning process. Respondents may be concerned about their responses pertaining to the Aboriginal consultation and Native Values Mapping process, particularly if seen to be negative. Respondents may avoid saying anything too negative or controversial in order to avoid jeopardizing relationships which have required significant effort to establish and maintain. Aboriginal groups in particular have had many experiences of their words collected as research being used to their disadvantage at a later date.

In order to minimize such risks:
- All responses are confidential. No one but the researcher has seen or will see any of the actual responses. No responses have been or will be assigned to specific individuals, MNR Districts, companies, or communities; names were not written on the interview question sheets or on the pages upon which notes were taken. Rather, all responses were summarized and analyzed as part of one of 3 groups: MNR, Industry, or First Nations. It will not be known which MNR person, which forest company, or which Aboriginal community provided what opinion; only aggregates of opinions are presented in the dissertation.

- During the interview itself, time was given for reflection, collecting thoughts, etc. In this way, each respondent chose his or her words carefully, and was not pressured into saying anything they were not entirely comfortable with. Participants were reminded that they could stop the interview at any time and that they did not need to provide any information they felt was of a sensitive nature.

**BENEFITS**

The benefits of the research to participants will be indirect, yet hopefully significant in the long run, especially to the participants’ organizations. The research will suggest improvements to the Native Values Mapping process which, if utilized, could help MNR, forest companies, First Nations, and Ontario as a whole move towards more sustainable forest management. In the shorter term, it was expected and later observed that there was a wide variation among the districts as to the degree of success they have had with Native Values Mapping thus far. Each district will be able to review the results of this study and gain insight into those strategies that have been most successful, and hopefully incorporate these into their own planning. First Nations in particular stand to benefit from improved processes which facilitate their participation in forest management planning and protection of values that are dear to them. On the broadest scale, it is expected that other provinces, and even other countries, may observe Ontario’s progress in this area and incorporate its successes into future processes. As well, other fields of endeavour which require Native participation and protection of all forest values as an indicator of sustainability, such as developing forest products certification, may benefit from the knowledge
of the Native Values Mapping process obtained in this study.

The forest management plans being implemented in 1999 represent a first attempt at the new process which specifically requires Aboriginal input. This research is timely in offering initial feedback on a process which, if undertaken by all affected parties with sincerity and diligence, may well have a long and important future in Ontario.

In fulfilling the requirements of a Ph.D. thesis, this research will also contribute to the existing bodies of knowledge in both Forestry and Aboriginal Studies. The significance of this contribution is enhanced by the potential for the generation of new theory. It is hoped that this research will assist in the earlier described paradigm shift, from the general exclusion to the vital inclusion of Aboriginal communities in meaningful decision making processes.
CHAPTER FOUR
ABORIGINAL/NON-ABORIGINAL RELATIONS AND FOREST MANAGEMENT IN CANADA

INTRODUCTION

There is more at stake in the issue of First Nations and forest management than simply forestry. There are numerous related and underlying factors which cannot be ignored if one is to achieve an effective understanding of the topic. These include pre-and post-contact Aboriginal history; as well as issues around self-government, land claims, treaties and Aboriginal rights and title. It is these factors which give rise to Aboriginal goals for forest management but also to many of the current conflicts among stakeholders, governments and First Nations. It is important to have an understanding of the relationship between Aboriginal and non-Aboriginal people in Canada in order to appreciate how this relationship influences the current state of Native participation in forest management.

Furthermore, to understand the meaning and significance of the Native Values Mapping process in Ontario, we must first understand the historical and cultural context within which this process lies. This chapter briefly examines the history of Native/Canadian relations so as to define the cultural context in which the Native Values Mapping process is undertaken. George Erasmus, former Grand Chief of the Assembly of First Nations, comments (Erasmus 1989, 92):

To understand the native or indigenous point of view on conservation or environmental matters, one must understand our history, our cultures, and the way we see our relationship with nature.

This chapter highlights the parallel relationship between forest management and the colonization of Aboriginal people in Canada. It will be shown that as Aboriginal people and their land were dominated by the newcomers, they became effectively alienated from the land (forests) that they had cared for and depended upon for thousands of years. It has been a parallel process: as colonization, settlement and later industrial expansion increased, Aboriginal control and management over lands diminished.
ABORIGINAL PERSPECTIVES ON ABORIGINAL HISTORY

The bulk of historical writing describing Aboriginal and Canadian history concerns the period beginning with the arrival of the Europeans in North America. Mercredi and Turpel (1993, 15) write, “The idea that we exist only within European history is a major misconception that is still taught”. The Royal Commission on Aboriginal Peoples found that, “Non-Aboriginal discourse on history still dominates, despite the efforts in the new historiography that seeks to correct the ethnocentric biases of past historical accounts” (RCAP 1993a, 44). Although this situation is slowly changing, the body of literature is still fairly limited (RCAP 1993a, 44).

This has occurred largely because, as Metis scholar Olive Dickason observes, “History, for its part, has been described as a document-bound discipline. If something was not written, preferably in an official document, it was not historical” (Dickason 1997, xi). Throughout most of their history, Aboriginal cultures have been primarily oral. The struggle to have Aboriginal oral history considered historically and legally valid is slowly progressing in a larger Canadian context. This is evident in court cases where Aboriginal people are asserting their Aboriginal/treaty rights and making claims to lands.

Perhaps the most dramatic such case involves the Supreme Court decisions regarding the Gitksan Wet’suwet’en people in British Columbia. In the ongoing struggle to have their comprehensive land claim settled, the Gitksan Wet’suwet’en were told by Chief Justice Alan McEachern (1991, 56) that their oral history had a, “decided complexion of unreality about it”, and was thus not valid or acceptable as evidence in a court of law. This decision, which resulted in yet another failure to resolve the land claim, was more recently overturned by the Supreme Court of Canada, which stated that, “...Native people in Canada have a unique claim to their traditional lands...and that future courts must accept valid Native oral history as a key ingredient in proving such claims” (Persky 1998, 1). This recognition of the need to respect oral histories as valid along with written histories represents a major hard won victory for Aboriginal people across the country. The Gitksan Wet’suwet’en, though their work is far from over, will now be able to go back to court to fight for their lands armed with the knowledge that their oral histories describing traditional territories will be accepted as valuable evidence for the claim.
Winona Stevenson, Aboriginal scholar and historian, discusses the power imbalance that exists between Aboriginal and non-Aboriginal peoples. She argues that it is, "...more than a difference in concepts and ideology" (RCAP 1993a, 44). Aboriginal people have simply not been represented according to their own terms. This unequal division of power has served to perpetuate misunderstanding in that the, "empowered groups have been able to define history and provide an explanation of the present" (Frideres 1993, 14). Any distinct group, either dominant or dominated, will tend to construct history differently from other distinct groups; however it is the dominant groups that are, "...able to keep others from initiating alternative explanations or definitions" (Frideres 1993, 14). In the case of North America and Canada in particular, this has resulted in the construction of history largely from the perspective of Europeans.

In addition to the dawning acceptance of oral histories as being legally valid and attempts to restore a more equitable relationship between Aboriginal and non-Aboriginal people, many Native authors are now publishing their own views on historical and current Aboriginal societies and their relationships with non-Native peoples. The details of such writings, though well beyond the scope of this paper, can be found in such texts as that by Dickason (1997).

PRE-CONTACT TIMES

Aboriginal people have been living for thousands of years in what is now known as North America. Prior to the arrival of Europeans, much diversity existed (and in many respects continues to exist) among Aboriginal peoples culturally, socially, politically, economically and spiritually. The many hundreds of Aboriginal groups in North America were fully functioning sovereign Nations. In recent years, many authors have written in opposition to the popular conception that there was "empty" or "unused" land here (see Richardson 1993). Erasmus and Sanders (1992, 3) state:

> When Non-Native people first came to this continent some five hundred years ago, indigenous peoples lived all across the Americas. It is a matter of historical record that before the arrival of Europeans, these First Nations possessed and exercised absolute sovereignty over what is now called the North American continent.

Mercredi and Turpel (1993, 15-16) observe that:
The "New World", as it was referred to, was populated by distinct peoples organized in diverse and culturally distinct nations. Each nation had its own defined territory, language, spiritual practices, economic institutions and political system. It was not vacant or empty. It was not new; it was ancient.

Absolute sovereignty prior to European contact involved the duties and activities any sovereign nation would experience, including ways of relating to and engaging with other Nations as well as managing internal affairs and relations among citizens (RCAP 1996b). Inherent in this sovereignty were sophisticated methods of relating to and utilizing the natural environment, including forests. First Nations people in North America had highly refined ways of understanding and explaining the world and its resources. Complex systems of resource control and management were developed long before Europeans realized this continent existed.

Gisdaywa of the Gitksan and Wet'suwet'en observes, "Our people used and managed the natural resources for thousands of years, and the resources remained plentiful. The environment was cared for and kept healthy" (Gisdaywa in Mills 1994, x). Discussion of the details of such systems is beyond the scope of this paper (see Barsh 1996, Berkes 1999 and 1993, or Feit 1998 and 1988 for more detail). What is important to recognize here is that there never was an "empty" North America waiting to be "discovered" by Europeans. First Nations people were engaged in political, cultural, spiritual, and economic activities across this land, just as any other group of fully functioning sovereign nations would have been.

NATIVE/NON-NATIVE ENCOUNTERS: THE RISE OF STEREOTYPING

It is an unfortunate fact that Aboriginal people and their aspirations have been misunderstood and misrepresented (RCAP 1993a, Fitznor 1998). It is necessary at this point to include a brief discussion of some common stereotypes in order to better comprehend the context in which Native Values Mapping is currently taking place.

Aboriginal peoples had well developed systems of land use prior to the arrival of Europeans. Such systems existed within a framework of distinct beliefs and ways of looking at the world which Native peoples had also fully developed (Smith et al 1995). The world views of First Nations people were often in direct contrast to those of the non-Native immigrants. Such differences need not necessarily lead to conflicts, but when the holders of one view see
themselves as superior and strive to dominate the other, then the multitude of problems we have witnessed in cross-cultural dealings in the Americas begin to arise (Clarkson et. al 1992, Frideres 1993).

Dickason (1995, 1-2) writes that, “Europeans were misled...” by what they saw of First Nations people, and “...erroneously concluded that they had no social organization at all, that they were 'savages'. This conviction governed Euro-Canadian policy toward Amerindians throughout the colonial period, and influenced every sphere of interaction between the two peoples.”

LaRoque (1988) supports Dickason’s views. LaRoque refers to a “cultural hierarchy” which has been used by non-Native people as the basis for comparison between Aboriginal people and Europeans. The Europeans believed themselves to be “civilized” while Native people have been considered to be savages. LaRoque (1988, 200) writes:

The underlying assumption was that, as savages, Indians could not be as developed, organized, or ordered as Europeans, and from this has come a cluster of ideas, images, and terminology that has set Indians apart in an inferior status. This dichotomy of white civilization and Indian savagery has resulted in gross distortions about Indians in literature, historiography, and ethnography.

Right from the first Native/non-Native encounters, Native people have been viewed as inferior by non-Native society (Berger 1991, Richardson 1993). Apart from the obvious attempts at extermination of Indigenous peoples through war, forced relocation, and destruction of economic resources, relations among Native and non-Native societies have been characterized by more subtle, yet perhaps more powerful, attempts at assimilation of Native cultures into dominant society.

A common stereotype, unfortunately prevalent in academic literature and therefore erroneously viewed by many as credible, is that of Indigenous people as “primitive” or “savage”. Trigger (1995) observes that negative stereotypes of Aboriginal people were highly useful in the colonizing effort, particularly when First Nations people were no longer needed as allies in French, English and American struggles. First Nations people were portrayed in French, English and American attitudes and literature as savage, backward, violent, dirty, immoral and cruel
Beliefs about Aboriginal people were racist and based on an ideology that placed First Nations on the bottom of the evolutionary ladder (Trigger 1995, 446).

Far from being viewed as capable land and resource managers, Aboriginal people were seen as unable to use the land in ways which suited "civilized" peoples. Aboriginal people did not "treat land as a source of income", which Europeans saw as being uncivilized, unproductive and yet another indicator of First Nations inability to "conform to civilized norms" (Berger 1991, 74).

Not only did the Europeans disapprove of traditional land use for racist as well as economic reasons, but they were also unwilling to recognize Aboriginal title to the land or respect any Aboriginal rights upon it. The debate over such title and rights has been waging for centuries and is ongoing today. The North American laws we now live under have been enacted to serve the needs and intentions of non-Native people, without due concern for or input from Native people. The British North America (BNA) Act and the Indian Act are prime examples of how legislation was used to divide Native lands among the "powers". In discussing court cases over Aboriginal land use and land rights in the US and Canada, Berger (1991, 83) writes that judges have, "believed that one form of use and occupancy is valid and another is not; one way of life is valid, the other is not." Berger (1991, 83) continues, stating that, "This is our view today. We believe in a linear idea of progress, the movement of humankind through stages: first hunting and gathering, then agriculture, finally urban, industrial civilizations. Europe represents an advanced stage of development, the Indians a primitive stage."

"Such attitudes," Berger (1991, 83) points out, "are more important than constitutions and laws....Events on the ground, the innate prejudices of men, not laws, no matter how carefully crafted, are the determinants of Indian rights." Prevailing attitudes in North America continue to see many aspects of Aboriginal culture, such as subsistence living, as the "antithesis of modernity" (Berger 1991, 127). Moreover, "Our [Western] values, our interests take precedence" over those of Native people (Berger 1991, 136).

The doomed image of Native people remains a persistent notion, despite the uncomfortable
reality of continued Aboriginal existence and resistance (Francis 1992). Trigger (1995, 428) notes that, “Although the more obviously pejorative stereotypes have largely been excised from historical works written in the last twenty years, the neglect of native peoples has persisted in mainstream Canadian historical studies, French and English.” Although some academics have been willing to take on the challenge of a “reinterpretation of history”, there are still deeply ingrained attitudes and beliefs that will be difficult to supplant. Trigger (1995, 443) writes, “In spite of the progress that has been made so far, there are strong reasons to believe that entrenched European stereotypes continue to distort our understanding of native people and their history.”

LaRoque (1988), Trigger (1995), and Dickason (1995) all argue that ethnocentrism is an unfortunate aspect of the situation in which First Nations people currently find themselves. Frideres (1993) puts it simply by stating that the underlying reason for the treatment that First Nations people received (and continue to receive in many instances) from Europeans, is racism. He writes that, “Although some people may object to this claim, racism is undeniably the underlying ideology of the manifest policies regarding Native-White relations throughout the history of Canada” (Frideres 1993, 10). Frideres further argues that this racism has not disappeared in Canada, and that a new form of racism has emerged “which focuses on the inferiority of a group’s way of life, their ethos and their assumptions about the world” (Frideres 1993, 10). This attitude results in cultural inequality even if biological equality may be accepted. The unfortunate consequence of these beliefs about Aboriginal peoples in Canada is that racism (in whatever form) serves to “widely distort the attitudes of White Canadians towards Native peoples” (Frideres 1993, 10). Frideres adds that while no one likes to hear that the society that they live in is fundamentally racist, until this issue is critically examined and a new ideology developed to replace it, it will remain a fact of Native/Canadian relations. Clearly, the status quo needs to be firmly challenged.

THE UNIQUE STATUS OF ABORIGINAL PEOPLE
As a result of decades of intense effort on the part of Indigenous people from around the world, Indigenous peoples’ resource management issues have begun to be recognized at an international level. A noteworthy milestone in this achievement was the release of the World Commission on
Environment and Development's *Our Common Future* (WCED 1987) which acknowledged the essential role of Indigenous people in addressing global environmental issues. This idea was reinforced at the 1992 United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, particularly through the resulting Convention on Biodiversity and Agenda 21 (Higgins 1998). The legitimate and critical role of Indigenous people in striving for global sustainable development, while initially slow to be recognized, is now often finding specific expression in international conventions (Higgins 1998, Scientific Panel 1995). As well, recently developed forest products certification processes such as that undertaken by the Forest Stewardship Council are including Aboriginal participation in forest management as a key indicator of sustainability (Smith 1998). Despite such gains, it remains to be seen whether this new-found respect for Indigenous people and their knowledge will affect the implementation of resource management strategies in a sufficiently meaningful way.

The need to work with Aboriginal people on resource management issues has recently come to be acknowledged in Canadian forestry, at least at the policy level. Canada's National Forest Strategy (CCFM 1998, 1992) reflects this commitment to addressing Aboriginal issues (Bombay 1996c, 1992; Graham 1999).

Conventional forestry's emerging paradigm shift from sustained yield to sustainable forestry has resulted in attempts to develop indicators of sustainable forestry. In Canada, the Canadian Council of Forest Ministers has begun to define sustainable forest management and identify appropriate indicators. Aboriginal issues are included among such indicators and, "therefore become part of forest management activity [wherein] the unique or special needs of Aboriginal people must be reflected" (Bombay 1996b, 7).

As at the international level, Canadian national wood products certification processes are also recognizing the importance of Aboriginal involvement in forest management. As did the Forest Stewardship Council, the Canadian Standards Association has included the involvement of Aboriginal people as a key indicator of the sustainability of Canadian forest management practices (Bombay 1996b).
Other initiatives that attempt to move outside the dominant economic/political/legal framework within which forestry operates include the federal Model Forest Program implemented in 1992 and renewed in 1996. From its onset this program recognized the importance of forests to Aboriginal people (Bombay 1996d). As part of the renewal process for this program, Aboriginal participation was encouraged via a specific component which provides funds to projects that promote traditional ecological knowledge (Bombay 1996d, 1). Furthermore, an Aboriginal-led project, the Waswanipi Cree Model Forest, was initiated in Phase 2 of the Model Forest Program. Some headway has also been made in provincial government/industry relationships with First Nations in co-management agreements. These agreements take many forms and indicate a gradually increasing role of Aboriginal people in forestry (Bombay 1995b).

In Canada, the unique status of Aboriginal people also provides impetus for their inclusion in forest management from a legal perspective (Brubacher and McGregor 1998, Graham 1999, Smith 1995). The Canadian provinces are starting to, “understand that forest management planning can no longer ignore the fact that much of the Crown forest under their jurisdiction also happens to lie within the traditional territories of Canada’s First Nations” (Brubacher and McGregor 1998, 7). Ontario is one province which has formally institutionalized the voluntary participation of Aboriginal people within its legislative, policy and planning frameworks.

Despite these initiatives, however, relations among Aboriginal and non-Aboriginal parties in forest management remain uneasy. There is still a long way to go.

Aboriginal people have a unique constitutional and legal status in Canada. This is based upon the recognition that Aboriginal people lived sustainably on these lands since time immemorial. Aboriginal people and their descendants have rights associated with this original occupancy. In the Royal Proclamation Act in 1763:

...the Crown recognized that they were encroaching on Aboriginal lands. The Proclamation required the consent of Aboriginal peoples before that land was occupied and gave the Crown the sole authority to negotiate such land settlements. From the Proclamation flowed treaties between the Crown and Aboriginal peoples. (Smith 1995, 2)
Such Treaties, along with Aboriginal rights associated with original occupancy of the land, form the current basis of Aboriginal peoples' unique position in Canadian society. From an Aboriginal perspective:

Treaties are sacred agreements which can only be negotiated, undertaken and maintained between sovereign Nations. This is not simply an assumption, but rather, it is a firmly held belief that is based upon a range of fundamental political, legal, and moral principles both domestically and internationally which serve to illustrate the depth and significance of the First Nations Treaty perspective. The Treaty relationship is an historical and spiritual endowment which has been handed down to us from our ancestors and which shall continue to clarify and define both our past and future political, social, and economic relationships with the Crown. (AFN 1995, 2)

This, however, is generally not the position that Canadian governments have taken on treaties. Treaties were used as a way for colonial and subsequent Canadian governments to “open up Indian lands for settlement and development” (Dickason 1997, 250). The interpretation of treaty rights, with two such contradictory points of view interfacing on a regular basis, presents a major ongoing concern in Canada, particularly in relation to issues around access to resource rights (Macklem 1997, Smith 1995, Venne 1997).

Despite legally binding treaties, Aboriginal people have for centuries been relegated to the fringes of Canadian society. More often than not, they have been seen as “irrelevant to present-day concerns” (Berger 1991,140). There is a long history in Canada of oppression and colonization directed specifically at Aboriginal people (Berger 1991, Boldt 1993, Little Bear et al 1984, Miller 1989) Colonization was institutionalized and legislated in the Indian Act of 1876, which continues in many ways to regulate the lives of registered “Indians” in Canada. Ongoing colonial policies and legislation have undermined Aboriginal sovereignty and self-determination.

In 1982, Section 35 of the Constitution Act recognized and affirmed Aboriginal and treaty rights (Berger 1991, RCAP 1993b, 1992). This served to renew the unique legal and constitutional position held by Aboriginal people in their relationship with the rest of Canada. Although Aboriginal and treaty rights are still being interpreted in the courts under the influence of Canada’s colonial legacy, it is becoming increasingly expected that Aboriginal rights be recognized and accounted for in the resource management arena. Aboriginal people are
gradually finding more opportunities to express their unique status and take up their legitimate role as people with a special place in decision making processes that impact their lives and lands.

This special relationship is now being formally recognized in various areas of Canadian forest management planning (Bombay 1992, Smith 1998). This means that Aboriginal people can no longer be considered as just another group of stakeholders in a decision making process. Aboriginal people have specific unique rights as well as treaties which must be upheld. Moreover, Aboriginal people are beginning to assert these rights more and more strongly. Pressure from Aboriginal communities has made doubly sure that they can no longer be simply ignored (McGregor 1999b).

Recent court decisions on the infringement of Aboriginal and treaty rights provide guidance as to the duty of government and industry to consult with Aboriginal people in Canada (Robinson and Ross 1999). "Consultation is one of the government’s tools in avoiding and minimizing infringement" (Robinson and Ross 1999, 173). Aboriginal consultation processes, long considered a mere formality, are being taken much more seriously by a greater number of parties than ever before (see Smith 1995 for a discussion of the importance of continued improvements in this area). Aboriginal and treaty rights have a close relationship to resource rights which are finally finding expression in forestry.

ABORIGINAL PEOPLE AND FORESTS: SYSTEMATIC EXCLUSION

Aboriginal people have a unique relationship with the land, a relationship that, although warped by European settlement and imposition of foreign institutions and rules of order, continues to this day. It is a relationship that provides the basis of economic, cultural and political activity in Aboriginal communities. Traditional forest-based economic activities of hunting, fishing, trapping and gathering are protected in many areas by Treaty. These activities are still very much a part of the Aboriginal way of life, especially in those few areas where access to natural resources has not been diminished by overuse and industrial exploitation. (Smith 1995, 5)

A fundamental aspect of Aboriginal world view is that the Earth is a conscious being (Beck et al. 1996, Booth and Jacobs 1990, Deloria 1999, Fitznor 1998). This world view was reflected in how Aboriginal people related to and interacted with their forest environment for millennia.
"Over thousands of years Aboriginal people developed a way of life and spirituality based on respect for the land and all living things; these practices are still very much alive" (Smith et al. 1995, I-2). Upon contact, Europeans introduced and later imposed a fundamentally different view of the forest. Forests were seen as frightening, since it was thought that, "much of the forest was an enemy to be eradicated as quickly as possible" (Lambert and Pross 1967, xiii)

Later, forests began to take on a different, more utilitarian value and were exploited on an increasing basis (Lambert and Pross 1967). In the early years of colonization, this exploitation involved little in the way of management. Acquisition of land was an important policy objective of the colonial governments. Aboriginal people, like forests, were regarded as impediments to the path of progress and systematically removed from the path of development through treaties, policies and legislation (e.g. BNA Act, Indian Act) of the British and later Canadian governments. (Alfred 1999a). In time, forests became valued for their timber and management of the forests began to be seen as important. Little changed in terms of how Aboriginal people were viewed, however, and the early colonial practice of Aboriginal relations consisted largely of forging ahead and displacing Aboriginal people from their lands. Later, it was deemed necessary to make treaties as a way to remove people from the path of "progress", including settlements and other developments (Lambert and Pross 1967). As RCAP (1996b, 17) found, "the representatives of the Crown had come to see treaties merely as a tool for clearing Aboriginal people off desirable land." The dominant form of human interaction with the forest thus rapidly shifted from systems of Aboriginal stewardship to "management" as practiced by Europeans. The territories upon which Aboriginal people depended for their survival were wrested from their control. Phil Fontaine, current Grand Chief of the Assembly of First Nations notes (Fontaine 1998, 17):

All of us know only too well our pasts of political treachery, unfulfilled treaties with the Crown, dispossession from our ancestral territories by an aggressive and possessive colonizing society. We have witnessed other peoples encroaching on our lands, exploiting natural resources while we have suffered the multiple effects of poverty and powerlessness.

In the early years of colonization, there was not much regulation of forests, resources were assumed to be bountiful, and conservation was not an issue for some time (Lambert and Pross
Later, the need for conservation was recognized and forest policy and management frameworks were developed (see Beyers and Sandberg 1998, and Levy 1994 for a more thorough historical account of forest policy in Canada and Ontario).

In First Nations, forests continue to contribute substantially to community life in terms of economics (logging, trapping), cultural, spiritual and social activities (ceremonies,) health (medicines), food (hunting, gathering, growing), shelter, fuel requirements and recreational activities. The benefits that contemporary First Nations derive from the forests are rooted in the past, yet continue to provide sustenance in the present. This immediate connection to the land has received even more emphasis with the drive for Aboriginal self-determination and its dependence on natural resources to make it a reality. Control and management over forests is therefore as important now to First Nations as it was for thousands of years prior to contact.

On-reserve forests are an important source of livelihood for First Nations. Unfortunately, they tend to be in poor condition due to a long history of mismanagement. The Indian Act is inadequate in scope in terms of forest management (Auditor General 1994, 2-32; NAFA 1993; Smith et al.1995). Harry Bombay, Executive Director for the National Aboriginal Forestry Association, simply states (Bombay 1994, 30:29):

The issue of Indian reserve management is one that this committee could spend days talking about. However, the Auditor General pointed out in his report of November 24, 1992, and re-emphasized just last month, that the forest resources on our reserve lands, which have been under the care of the federal government, are seriously depleted due to several decades of neglect and lack of forest management.

Over the last 15 years, the federal government has undertaken some initiatives to create policy and deliver forestry programs which address some of these problems. These include the Policy for Indian Land Forestry Program in 1983, and the First Nations Forestry Program in 1996. As well, the 1992 “Sustainable Forests: A Canadian Commitment” established by the Canadian Council of Forest Ministers (CCFM) expressed a commitment to involve Aboriginal people in forest management and was renewed in 1998. (For a more comprehensive review of government sponsored forestry programs, refer to Claudia Notkze (1994) and J.H. Smyth (1998)). Despite such efforts, First Nations are still striving for more control; they wish to derive benefits from the
forest as they have always done.

The 1867 British North America Act (BNA Act) divided powers among the federal and provincial governments. In relation to Aboriginal people and their territories, the BNA Act gave jurisdiction over Indians and lands reserved for Indians to the federal parliament (Erasmus and Sanders 1992). The responsibility for the management of natural resources fell to the provinces, thus the traditional territory that Aboriginal groups enjoyed since time immemorial came under provincial jurisdiction (Bombay 1994, 30:27). This arrangement of confederation without the consent of Aboriginal people has been a source of problems ever since. Aboriginal groups have effectively been stripped of their authority and jurisdiction over the land upon which they relied. Bombay (1994, 30:30 - 30:31) comments on this situation:

   A major issue that has to be dealt with is the existing forest tenure systems in Canada. In 1993 NAFA conducted a study of existing forest tenure systems, where we examined the barriers ingrainied in the process through which provincial governments manage and allocate forest resources. As we all know, most economically accessible crown forests in first nations traditional territories are already committed under long-term renewable licences....

   Because of the renewable features of most licences, such as forest management licences or FMAs, opportunities will remain unavailable unless provinces renegotiate the forest management agreements with the industry to require participation and partnerships with aboriginal communities.

Although there are exceptions, the policy and legislative frameworks which govern Canada’s forest industry continue to alienate and exclude Aboriginal people from forest management. This involves restricting access to forest resources (e.g. harvesting timber) and denying access to decision making such that Aboriginal cultural and traditional uses and values continue to be unaccounted for (NAFA 1993). There has been in the past considerable conflict over forest resources between Aboriginal and non-Aboriginal society (Notkze 1994). Aboriginal assertions of rights and court decisions in their favor have recently led to a somewhat more favorable climate for Aboriginal involvement in decisions impacting their lands. Despite these small inroads into the current system, the state of Aboriginal forestry in Canada is unfortunately still characterized by exclusion.
INTRODUCTION

This chapter briefly traces the history of forest management policy in Ontario, with particular emphasis on the post-European arrival policy of excluding Aboriginal people from forest management planning. Discussion takes place regarding several recent developments in Ontario forest management planning, focussing on the 1994 Environmental Assessment Board Decision which resulted in a new forest management planning process for the province. This process explicitly requires that Aboriginal participation be sought during planning. This represents a significant alteration in provincial policy regarding forest management and Aboriginal people, and a previously non-existent opportunity for Aboriginal communities to voice their concerns. However, the new process continues to ignore the Nation-to-Nation relationship Aboriginal people have with Canadian governments and thus falls short of meeting the needs of Aboriginal communities. These issues are discussed in further detail, along with brief highlights of other new developments such as the Lands for Life program and the subsequent Living Legacy strategy. Initially, however, a short history of Aboriginal relationships with forests is presented.

PRE-EUROPEAN CONTACT: ABORIGINAL RELATIONSHIPS WITH FORESTS

Aboriginal peoples managed the forests of Ontario for thousands of years prior to the arrival of Europeans (Bombay 1996a, Rice 1997). Nations whose territories included Ontario (but were not bound by it) were diverse, ranging from the Cree in the north to the Six Nations of the Iroquois in the south. Each nation in its own way relied upon the forest for its economic, spiritual, political, social and cultural health. Aboriginal people traditionally shared an intimate relationship with the forest. This relationship persists in many ways to the present day, and Aboriginal people continue to obtain benefits from the forest as they did historically. Among other necessities of life, the forest provides food, shelter, and medicines. Aboriginal people also recognized the forest as part of a larger environment in which forest integrity needed to be maintained in order to function properly in conjunction with other nearby ecosystems such as
wetlands (a source of foods such as wild rice and fish) or agricultural areas (Rice 1997). Aboriginal relationships to the forest operate on a number of levels, including the spiritual (ceremonies), physical (food and shelter), emotional (peace and tranquillity) and intellectual (a place for learning and receiving teachings). In contemporary society, Aboriginal and treaty rights as well as Supreme Court decisions also shape Aboriginal interests in the forest.

In historical and contemporary times, Aboriginal world view has guided Aboriginal relationships to the forest. Many Aboriginal people view the Earth as alive and have developed philosophies and ways of life based on this view (Brant-Castellano, in press). Although colonization has had significant detrimental impacts on such world views and ways of life, many of these ancient forms of understanding are still very much in existence and continue to be practiced in numerous Aboriginal communities (Fitznor 1998). Past Grand Chief of the Assembly of First Nations, Phil Fontaine (1998, 9), observed that:

- Aboriginal perspectives on the land are different than the rest of Canada. That difference is reflective of distinctive Aboriginal world views and in particular our holistic approach to the understanding of people’s relationships and responsibilities to each other and to the material and spiritual world.

A comprehensive description of Aboriginal forest management practices and traditional forest use is beyond the scope of this thesis. What is important to note is that Aboriginal people have for many centuries sustainably managed the forests they relied on for survival. It is also worth noting that Aboriginal people managed for a diversity of values, and did not focus on just one aspect of the forest (Smith et al. 1995).

**POST-EUROPEAN CONTACT: ABORIGINAL EXCLUSION**

Since the arrival of Europeans, Aboriginal people have become excluded from managing the forests on their territories (this process was described in more detail in Chapter Four). As in the rest of Canada, colonization and settlement in Ontario has wrested from Aboriginal people most of the access to and use of their traditional territories. Aboriginal people have been denied authority and jurisdiction over their territories in a variety of ways, including the enactment of legislation (e.g. BNA Act, Indian Act), policy, and treaties (RCAP 1996b). Prior to the BNA Act, Aboriginal people in Ontario had been pushed aside and denied access in favour of settlers.
and economic opportunities for colonial governments and private interests (e.g. forest companies).

Since the BNA Act of 1867, when the provinces received jurisdiction over “Crown” lands, Aboriginal people in Ontario have been subjected to a more systematic alienation from formal resource management processes. These processes, along with the rest of colonization and “progress”, have gone ahead with little thought to the First Nations who had always relied upon and managed their lands. The following statement epitomizes the erroneous view, held by many resource managers, that Ontario was a wilderness with no form of management or valid use prior to European settlement. In this view, Ontario is described as, “…a province that has grown in two centuries from an un-mapped wilderness to a mighty complex of agriculture, industry, cities and communications” (Lambert and Pross 1967, 61).

While it was recognized that Aboriginal people lived on the land, they were viewed as obstacles to progress. The practice, in early government-Aboriginal relations in Ontario, was to simply forge ahead and displace Aboriginal people from their lands in favour of white settlement and industry. It aimed to alienate Aboriginal people from any rights and access to the lands they occupied. Government and industry, brought together in the common interest of timber exploitation, have tended to form powerful associations in the area of resource control (Lambert and Pross 1967, Levy 1994). There is a long history of a close relationship between these two parties, one that has made it even more difficult for Aboriginal people to resist exclusion.

THE PROVINCE OF ONTARIO’S VIEW TOWARD ABORIGINAL PEOPLES: TWO CASE STUDIES
The policy and practice of a government derive largely from the prevailing opinions of its members and constituents. Some of the most telling opinions held by the Province of Ontario in regard to Aboriginal people are illustrated through two legal cases which helped set the stage for how Aboriginal people in Ontario participate (or don’t participate) in resource management. The first of these is the 1885 St. Catherine’s Milling Case and the second is the 1980’s Timber Management Hearings. These two cases provide examples of how, in both the past and present,
governments of Ontario have viewed Aboriginal people, their involvement in resource management, and their title to the land.

The St. Catherine's Milling Case

The *St. Catherine's Milling and Lumber Company* case of 1885 is described by both Cottam (1991) and Hall (1991). It involved a disagreement between the governments of Ontario and Canada over ownership of the bountiful natural resources northwest of Lake Superior. The outcome of this case would determine the beneficiary of extinguished Native claims in the area; that is, who would control the land and be able to exploit its resources (Cottam 1991, 248; Hall 1991, 270). The disagreement began following the Dominion government’s granting of a licence to St. Catherine’s Milling for the logging of certain areas of land. The provincial government, which was at that time in dispute with the Dominion government over the boundaries of northern Ontario and the resulting jurisdiction over lands, took the Dominion government to court. The province wanted the company to cease logging activity and to leave on the ground the timber it had already cut (Cottam 1991, 247). The Dominion claimed that the land was under its jurisdiction, as it was to the government of Canada that the legal interest in the land fell by virtue of treaties. This position was based on the recognition that Aboriginal people held title to their land prior to treaty establishment.

The province of Ontario won the case, as well as the appeals that followed through a series of higher courts. As Cottam (1991, 250) writes, this case, “enables us to see how a society with a long history of justifying to itself its dispossession of Aboriginal peoples around the world handled that problem in a particular time and place.” In particular, Ontario’s position on the matter reveals a disturbing attitude toward Aboriginal people. David Mills and Edward Blake, hired by the province to present its claim, rejected any idea of meaningful Indian property rights. Cottam (1991, 259) discusses the reasons for Mills’ assessment: “One was his acceptance of the popular belief in the supremacy of the Anglo-Saxons and the Darwinian notion that not the ‘best...but the fittest’ would survive. The fittest race, of course, was the Anglo-Saxon one....”
Mills also had difficulty understanding Aboriginal world view in relation to the land. He rejected "...the existence of collectivist practices; people work for themselves, not the collective, he asserted, echoing the theory of economic man" (Cottam 1991, 260). "His thinking," Cottam (1991, 260) adds, "admitted no possibility that the Indians should be treated as nations with valid laws." Ontario's position as presented by Mills is based on the assumption that Aboriginal people had no legal property rights because they were too primitive to hold such notions. Native people were seen as having no laws except those that would be created for them, and no legal interest in their ancestral lands except in instances created by the Crown. Hall (1991, 275) cites Ontario's lawyers during the case, who argued that Aboriginal people, "have no government and no organization, and can not be regarded as a nation capable of holding lands."

Cottam (1991) points out that the issue of whether or not Native people had rights over their lands was in many ways a moot point to begin with. He quotes Lord Watson, who stated that a, "pretext has never been wanted for taking land" (Watson in Cottam 1991, 261). The view of many of the day was that, "The land will be taken; displacement is the common denominator in the experience of Aboriginal peoples" (Cottam 1991, 261).

The bottom line to all of this is that Aboriginal people were considered to have no title to the land unless so given by the Crown. Hall (1991) argues, and rightly so, that such views are rooted in the racist ideology prevalent during this time. He writes that:

For the Victorians it was perfectly normal to legislate and to litigate questions of Indian rights while taking absolutely no notice of the opinions and views of living Native people. Victorian attitudes to race were too rigid to allow even the suggestion that Aboriginal groups had the slightest right to a political role in the self-governing institutions of Canada, let alone their own communities. (p.281)

Hall continues that, "In this sense, the old attitude of racial hierarchy, honed to a Darwinian science in the Victorian era, reigned supreme. Such attitudes were lodged in the foundation of the Canadian Constitution where they remain firmly embedded still!" (Hall 1991, 281).

The St. Catherine's Milling Case set the tone for the future of Aboriginal participation in resource management in Ontario. No matter the nature of existing Aboriginal relationships to the
land, the province was viewed (and is still viewed) to have the legal right to exploit such land as they saw fit. As a result, development would continue uninterrupted in Ontario for many decades.

**Ontario’s Timber Management Hearings**

In the 1970’s Ontario’s Ministry of Natural Resources began work on a planning process for timber management which would be approved by Ontario’s Environmental Assessment (EA) Process. By 1985 the timber management process was submitted to the Environmental Assessment Board for review. Revisions were suggested and an amended version was submitted to the EA Board in 1987. The Minister of Environment required the EA Board to hold a hearing, which subsequently began in 1988 and took 4 1/2 years to complete. The EA Board’s final decision, the “Decision on the Class Environmental Assessment for Timber Management in Ontario” not reached until 1994, approved MNR’s Class EA and permitted MNR to undertake forest management planning in Ontario subject to terms and conditions. The decision of the Board was, and still is, legally binding.

Unlike during the St. Catherine’s Milling Case of a hundred years earlier, Aboriginal people participated in the EA hearings and provided testimony as to their historical and current exclusion from forestry in Ontario. The EA Decision thus devotes a whole chapter to Aboriginal issues, providing a brief historical overview of how First Nations and Aboriginal peoples went from being the original managers and caretakers of the land to their present marginal status.

During the hearings, Aboriginal people cited the long history of commercial exploitation of their lands and resources, including fishing, logging and hydroelectric development. This type of exploitation has caused numerous problems for Aboriginal communities. As well, settlers forced many Aboriginal people off the land. Treaty making in Ontario did little to improve relations, as each side interpreted the meanings of the treaties differently. Non-Native people saw the treaty making process as a way to gain access to Native land. Native people viewed the process as a way to ensure land would remain accessible, and that they would be “sharing” the land with the outsiders (MacClem 1997, RCAP 1996b).
Though Aboriginal people did participate to some extent in early northern logging operations, racial discrimination eventually resulted in Native exclusion from participating meaningfully in even this process. Colonial Indian policy and other measures were used to ensure that Aboriginal people remained on-reserve and this led to further marginalization of Aboriginal people from the general economy. Aboriginal people wished to participate in forestry and derive benefits from the very forests on which they had traditionally depended, yet such opportunities were denied them.

In the 1980's various forestry programs for Native people living on-reserve were introduced. However, these did not address the underlying issues of exclusion and historical alienation from the land. Aboriginal testimony at the EA hearings revealed that both the Ontario and federal governments contributed to the impoverishment of Aboriginal peoples by "denying them off-reserve access to hunting, fishing and trapping" (EA Board 1994, 356). Historical records noted in the EA Decision provide examples of the attitudes of Indian Agents and provincial officials towards the plight of Aboriginal Nations. Common among these attitudes was a lack of caring resulting in the sloughing off of Indian issues to other jurisdictions because Indians were confined to reserves and denied access to off-reserve resources, even for food needed to feed their families.

In response to broader political developments in relation to Aboriginal and treaty rights in Canada, the Ontario government eventually responded by easing the "restrictions on status Indians to harvest game and fish for non-commercial use on non-reserve treaty lands" (EA Board 1994, 357). In practice, this meant more lenient enforcement of legislation and regulations. This policy changed slightly after the Sparrow Decision in 1991, in which the easement on Aboriginal people conducting traditional activities "off reserve" transformed to a "recognition" of Aboriginal rights to harvest certain resources.

The dismal situation of Aboriginal people did not go entirely unnoticed by the Ministry of Natural Resources over the years. The EA Decision states that:

MNR told us that it recognizes the very high rates of unemployment and limited opportunities for developing a stable economic base in many Aboriginal
communities. Although their witnesses gave us examples of MNR’s attempts to encourage Aboriginal involvement in timber management operations, the results are not likely to be impressive without access to timber and creative thinking. (EA Board 1994, 357)

One of the EA Board’s main findings, following testimony on Aboriginal concerns and timber management planning in Ontario, was stated as follows (EA Board 1994, 13):

The evidence we received on employment, poverty and access to off-reserve timber convinced us of the historical and present day exclusion of native communities from sharing in the social and economic benefits enjoyed by non-native communities from timber operations on Crown Land.

The EA board was unable or unwilling to define how treaty and Aboriginal rights are to be handled in timber management planning. The EA Board conceded that these rights must be resolved before Aboriginal community sustainability can be achieved.

In an attempt to address the concerns of Aboriginal people in Ontario, the 1994 EA Decision approved the MNR planning process with three provisions: Term and Condition 77, which provides opportunities in forestry for Aboriginal people to derive economic and social benefits from the forestry operations on their lands; Condition 57, which establishes a separate and parallel Aboriginal consultation process in response to the recognition that Aboriginal people are not just another stakeholder; and Condition 19, which requires the production of a Native Background Information Report, including Native values maps, as part of each new forest management plan.

The Influence of the 1994 EA Decision on Ontario’s Forest Management Planning Process

Ontario’s forest management planning process has undergone many changes in the last decade. One of the more notable changes lies in the dominant view of the forest and how it shall be managed. Until relatively recently forest management planning in Ontario had a virtually exclusive timber management focus. Bombay (1995b, 1) writes:

Until recent years, the standard practice was for provincial governments to license access to timber supplies and authorize forest operations without reference to the interests and needs of the First Nations whose communities and traditional territories were surrounded by or were part of licensed areas.
The EA Decision required that Aboriginal concerns be formally recognized in the new plans.

We believe that all stakeholders and forest values must be afforded protection against the adverse impacts of timber operations. Our Conditions of Approval hold MNR responsible for doing so: the forest is no longer the sole preserve of timber extraction and the public will never allow a return to the past where the value of the forest was calculated only by its worth as logs and pulp and paper.

In the first we approve the Timber Management Native Consultation Program, which parallels the overall planning process but affords opportunities for First Nations and Aboriginal communities to get recognition for their unique concerns into Timber Management Planning. In our opinion, this program can offer the same protection for the values of native communities against the adverse impacts of timber operations that we are approving for other northern Ontario communities and interests (EA Board 1994, 13).

In terms of philosophy, the forest management planning regime in Ontario has shifted from one of sustaining timber yield to “managing for all forest values and moving toward ecosystem management” (Levy1996, 24). The EA Decision proposes a different approach to timber management in Ontario, including concepts of sustainability and protection of “non-timber” values. Although the Decision supported a class environmental assessment that still focusses on timber, the terms and conditions outlined in the Decision were aimed at the protection of all forest values. The EA Decision means that forest management planning will be different in Ontario and MNR must change its management direction. “A significant shift in management philosophy is under way at MNR with its commitment to move into forest management based on sustainability” (EA Board 1994, 14). Managing for sustainability in Ontario means “managing for all the values of the forest” (MNR 1998a, 7)

The position of the Ontario provincial government toward Aboriginal people has changed over the last 100 years or so. As Bombay writes, Ontario’s current view towards Aboriginal people “seems to be one of ambivalence, although it has become more responsive in recent years. For many years Ontario seemed bent on blocking attempts by First Nations to have treaty and Aboriginal rights addressed” (Bombay 1995c, 5). However, it is felt that the 1994 EA Decision and the 1994 Crown Forest Sustainability Act (CFSA) have helped shift the focus of provincial forest policy and improve opportunities for Aboriginal people (Bombay 1995c, McKibbon 1999). The period following these two events has been a time of uncertainty in Ontario. The
province’s new policy focus has only been operational for a few years. Whether Ontario is meeting the goals laid out in the CFSA or the EA Decision is still unknown.

FIRST NATIONS AND ONTARIO’S NEW FOREST MANAGEMENT PLANNING PROCESS

Ontario is one of the few provinces in Canada that has formalized Aboriginal involvement in forest management planning. This represents an abrupt change in Ontario’s forest management policy in relation to Aboriginal people. As a result of the two major initiatives described above, the new Ontario Forest Management Planning Manual was developed “to implement the Board’s Decision and the newly appointed Crown Forest Sustainability Act” (McKibbon 1999, 9). The new manual, “prescribes the process and product requirements for planning forest management operations on Crown lands in each management unit” (MNR 1996, 1). Whereas the CFSA reflects the decisions of the EA board, the planning manual reflects the legal requirements of both the Crown Forest Sustainability Act and the EA Decision. It ensures that, “Ontario’s forests are managed for a broad range of uses and to conserve economic, social, environmental and cultural values” (MNR 1998b, 6). The planning manual contains the regulations for the CFSA and implements the Terms and Conditions of the EA Decision, thus laying out steps for how Ontario is to achieve more sustainable forestry.

Ontario’s new forest management planning process as embodied in the forest planning manual is regarded as one of the most environmentally rigorous in the world. It has addressed sustainability and developed indicators of such, and is designed to address a multitude of non-timber values. However, it remains highly debatable as to how well the planning process meets the goal of addressing Aboriginal concerns as laid out in the EA Decision.

According to Naysmith (1996, 6), the new planning manual represents, “a substantial opportunity for First Nations to incorporate their concerns, values and aspirations into the earliest stages of developing forest management plans.” As quoted above, the EA Decision presents opportunities for Aboriginal people to “get recognition of their unique concerns” addressed in the planning process (EA Board 1994, 13). In practice, however, this “recognition” of Aboriginal
people's "unique" concerns occurs at the MNR district administration level in the planning process. Due to their unique historical situation as explained in Chapter 4, First Nations insist on a nation-to-nation relationship, where they are partners in meaningful decision making, and not mere participants in a previously established planning process. The new planning process does not accommodate this position (Bombay 1995c).

ABORIGINAL CONSULTATION AND PARTICIPATION

The Forest Management Native Consultation Program

Whereas MNR had previously described Aboriginal peoples as stakeholders in their planning process, the EA Board contested that, "We are persuaded by the evidence we heard that it is incorrect to characterize the interests of First Nations people and Aboriginal people as the same as other stakeholders" (EA Board 1994, 346). The EA Decision recognizes the need to have a separate parallel process to address unique Aboriginal needs and values.

In some respects the Aboriginal public consultation process resulting from the EA Decision also recognizes the unique needs/values of Aboriginal people through the provision of a voluntary process in which identified Aboriginal communities can opt to participate. The "Forest Management Native Consultation Program" is a parallel yet separate planning process (Appendix 3). This program represents MNR's interpretation of the EA condition for separate Aboriginal involvement. As Smith (1995) points out, however, it does not represent what Aboriginal people perceive as an appropriate process for consultation. The program was "formulated and defined by the Ministry of Natural Resources, not Aboriginal organizations" (Smith 1995, 8).

So, although the forest management planning manual does reflect the EA's direction on the conditions required for Aboriginal participation in the process it does not necessarily represent what Aboriginal people want from participation in forestry. "As a result, some First Nations in Ontario decline to participate in either the public consultation process or the parallel Aboriginal consultation process" (Smith 1995, 8). Ironically, the creators of the "Native Consultation Process" as set out in the forest management planning manual, failed in the first place to obtain adequate Aboriginal involvement in the development of the consultation program itself! The
new consultation process has thus had a shaky beginning.

The 1994 Crown Forest Sustainability Act

Drafted in 1994, the Crown Forest Sustainability Act (CFSA) replaced the Crown Timber Act when it came into force in 1995. This Act provides the framework for Ontario’s new policy direction which had begun in the early 1990’s (Levy 1996). The CFSA sets out principles for sustainability and switches the focus of forest management from timber extraction to management of a diverse set of forest-based values, including timber.

The Crown Forest Sustainability Act provides for the regulation of forest planning, public involvement, information management, operations, licensing, trust funds for restoration and processing facilities such as sawmills. The legislation also has sanctions and penalties for noncompliance. Its purpose is to ensure the long-term health of Ontario’s forests. (MNR 1998b, 6)

The main purpose of the CFSA is, “to provide for the sustainability of Crown forests and, in accordance with that objective, to manage Crown forests to meet social, economic and environmental needs of present and future generations (Government of Ontario 1998, 3).

As noted earlier, no provincial government has formally put in place legislation that recognizes Aboriginal and treaty rights, although some provinces have taken steps towards formally involving Aboriginal people as part of the forest management planning process (Blue Ribbon Panel 1997). Ontario is a province which has taken the latter step. The CFSA contains Ontario’s attempt to involve Aboriginal people. Section 6 of the CFSA states that, “This Act does not abrogate, derogate from or add to any aboriginal or treaty right that is recognized in the Constitution Act, 1982” (Government of Ontario 1998, 5). Section 23 notes that, “The Minister may enter into agreements with First Nations for the joint exercise of any authority of the Minister under this Part” (Government of Ontario 1998, 8). Finally, in relation to the granting of forest licenses, the CFSA, in section 24, provides a regulation which authorizes a license or forest resources to an applicant without competition if the agreement creates economic opportunities for Aboriginal people (Blue Ribbon Panel 1997, p.7-3). (See Bombay 1995c for further details regarding the CFSA and economic opportunities for Aboriginal people.)
Sharing in the Economic and Social Benefits of the Forest: Term and Condition 77

One of the main findings of the EA Decision was that Aboriginal people do not benefit from timber management planning as do other communities and forest users. In response to this situation, the second significant aspect of the Decision in relation to Aboriginal people states (EA Board 1994, 14):

> Based on the evidence we received solely by pertaining to the application before us, we order the Ministry of Natural Resources to undertake negotiations with First Nations and Aboriginal communities on the basis of initiatives MNR is already pursuing. These include the provision of employment opportunities in bush and mill operations near native communities and the provision of timber licenses where unalienated Crown timber exists close to Indian Reserves or where there are opportunities for third-party license negotiations with existing licensees.

This statement is part of “Term and Condition 77”, and is one of 115 conditions for approval of the Class EA for timber management laid out in the Environmental Assessment Board’s Decision (McKibbon 1999). “Condition 77”, as it is generally referred to, was meant to remedy concerns raised by Aboriginal interveners regarding the lack of First Nations participation in and benefit from the use of their lands. While condition 77 is not dealt with specifically in this dissertation, it has been mentioned here because its incorporation into Ontario’s forest management planning is driven by the EA Decision. It is a highly important issue to First Nations in Ontario, and warrants further investigation as part of another study.

Living Legacy/Lands for Life

The Lands for Life process and the Living Legacy Land Use Strategy are both part of a single mission by the Ministry of Natural Resources to provide overall strategic direction for developing natural resources in a sustainable way (MNR 1999, 2). The purpose of these policies is to help MNR achieve “sustainable development” and manage natural resources “on the basis of ecological sustainability by safeguarding nature’s capacity to renew itself” (MNR 1999, 2). Overall land use strategic direction in Ontario was viewed by many sectors in Ontario as being long overdue.

These policies were not specifically dealt with as part of this research. However, they do bear on the issues being discussed here. Moreover, recent public controversy surrounding them has
raised the question of how they will impact the Aboriginal participation processes discussed in this thesis.

Lands for Life

In 1997, the Minister of Natural Resources announced the creation of “Lands for Life, a comprehensive program for planning all aspects of the future use of Ontario’s Crown land and resources” (Lands for Life Round Tables 1998, 5). Lands for Life was intended to signify a new approach to land use planning in Ontario. The existing land use plans were regarded as outdated.

The Lands for Life process utilized a “roundtable” format which was divided into three major planning areas: Boreal West, Boreal East and Great-Lakes-St. Lawrence. The roundtable format facilitated the public consultation process in a more regional forum. Each of the round tables was asked to develop and recommend to the Minister a draft regional land use strategy (Lands for Life Round Tables 1998).

The Ontario government’s four main objectives in this process are (Lands for Life Round Tables 1998, 6):

- Completing Ontario’s system of provincial parks and other protected areas.
- Recognizing the land use planning needs of the resource-based tourism industry.
- Providing the forest, mining, and other resource industries with greater land and resource use certainty.
- Enhancing angling, hunting, and other Crown land recreation opportunities.

At the same time, the roundtables were given the following mandate (Lands for Life Round Tables 1998, 6):

- Consider how the Government’s four objectives could be achieved, while considering other land and resource uses.
- Undertake a wide-ranging public consultation.
- Make land use planning recommendations to the Minister, including a draft regional land use strategy.
The purposes of the regional land use strategies were to (Lands for Life Round Tables 1998, 6):

- Set objectives for land and resource use.
- Designate lands for parks and protected areas, resource-based tourism, forest management, and multiple use.
- Identify opportunities for enhancing angling, hunting, and Crown land recreation.
- Provide management direction for these and other land use resource uses.
- Provide frameworks and set directions for more detailed, local scale planning.

Consultation with Aboriginal people was regarded as a key component of the public involvement activity assigned to the regional roundtables (Lands for Life Round Tables 1998, 6). However, as with the new EA driven forest management planning process described earlier, the Lands for Life roundtable consultations did not recognize the nation-to-nation status of Aboriginal people with respect to Canadian governments. In the forest management process, there is at least the recognition of the need for a separate parallel Aboriginal process, even though it still is not a government-to-government one. The Lands for Life process did not even go this far. It took a step backwards in that it viewed Aboriginal people merely as stakeholders, along with the various other users of the forest. As a result, Lands for Life met with substantial resistance from Aboriginal people in Ontario, many of whom either refused to participate or participated only to a limited extent. Achievement of Aboriginal participation in Lands for Life can therefore be described as disappointing at best.

**Ontario’s Living Legacy Land Use Strategy**

The Lands for Life process dealt with public consultation and making recommendations for provincial land use planning. The Ontario Living Legacy Land Use Strategy is designed to implement the recommendations of the Lands for Life program, and deals with the “intended strategic direction for the management of 39 million hectares of Crown lands and waters in a planning area covering 45 percent of the province” (MNR 1999, 1). The planning objectives of the Living Legacy remain the same as the Lands for Life (described above). The process by which land and resource planning will take place is through the defining and locating of land use categories and then identifying the purposes, goals, objectives and management strategies for these areas. The two main land use categories under the Living Legacy initiative are, “Land Use
Designation” areas (LUDs) and “Enhanced Management Areas” (EMAs).

LUDs include provincial parks, conservation reserves, forest reserves and general use areas, while Enhanced Management Areas include natural heritage sites, recreation and remote access sites, fish and wildlife areas, Great Lakes coastal areas, resource-based tourism zones and intensive forestry areas (MNR 1999, 19). The Living Legacy program states that the LUDs and EMAs will generally not impact Aboriginal or treaty rights and where they might, Aboriginal people will be consulted. (MNR 1999, 4).

Previous chapters outlined the historical exclusion of Aboriginal people from involvement in the forest sector in Canada. In Ontario, similar forms of exclusion have existed, as exemplified by two major forestry related legal decisions in Ontario: the 1885 St. Catherine’s Milling Case and the Ontario Timber Management Hearings about a century later. These cases reveal the tenacity of inappropriate attitudes toward Aboriginal people as well as the entrenchment of exclusionist policies. The new Ontario forest management planning process potentially offers a significant break from this historical legacy. As the Lands for Life and Living Legacy initiatives reveal, however, Aboriginal concerns are still inadequately addressed in Ontario.

The following chapter explores more specifically the concept of forest values other than timber and how concepts of Native forest values have been constructed in the forest management arena.
CHAPTER SIX

NATIVE AND NON-NATIVE PERSPECTIVES ON FOREST VALUES

INTRODUCTION

What are Forest Values?
The concept of forest values is becoming more common in the vocabulary of sustainable forest management and has been recognized as an integral part of such management at an international level (Rousseau 1998). In Canada, CFS (1998) describes the range of meaning of the term through two main categories: commercial values and non-commercial values (often referred to as non-timber values). A major difference between commercial and non-commercial values of the forest is that the former can be assigned monetary equivalents whereas the latter are not easily quantified. The following chart summarizes the main characteristics of different forest values.

Table 6.1. Examples of forest values. Source: CFS (1998).

<table>
<thead>
<tr>
<th>Examples of Commercial Values (can be assigned monetary equivalents)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Forest Industry Activities</td>
<td>Non-industry Activities</td>
</tr>
<tr>
<td>- timber</td>
<td>- hunting</td>
</tr>
<tr>
<td>- pulp and paper production</td>
<td>- tourism</td>
</tr>
</tbody>
</table>

Examples of Non-Commercial Values

- Intrinsic
  - inherent value of the forest itself
  - value of the forest is independent of any other value
- Spiritual
  - directly associated with Aboriginal people
  - reflects a special relationship and cultural identity that is tied to the forest
  - religious feeling associated with the forest
  - meaning and symbols associated with the forest
- Ecological
  - maintaining or enhancing ecological integrity and biological diversity of the forest
  - acknowledges the relationship between ecological functions of the forest and human survival
- Community
  - related to community identity and quality of life
  - local knowledge and values
  - non-industry commercial opportunities (tourism and recreation)
  - non-timber aspects of forest provide food, medicines, shelter, craft materials
- Existence
  a) knowing the forest will exist for future generations
  b) associated with Aboriginal peoples' seventh generation principle
Although managing for non-timber values is often viewed as a constraint on timber management (Kimmins 1992, Levy et al. in press), such management is increasingly acknowledged as being essential to sustainable forest management. Such values, even in a purely western context, are challenging to define (Cooke 1991). However, differences between Aboriginal and non-Aboriginal forest values are coming to be recognized (CCFM 1992, Natural Resources Canada 1998, Smith et al. 1995, Turner 1997). There is also the suggestion that Aboriginal forest values may hold promise for guiding the development of criteria and indicators for sustainable forest management.

**Native versus non-Native Values**

In addition to increasing Aboriginal involvement, the new Ontario forest management planning process aims to protect a range of forest values, including the values of Native people, as part of the move toward sustainability. Conventional forest management can perhaps be more accurately termed “timber management” as its primary and often exclusive focus has been on the production of wood volume. Under the new system required by the 1994 EA Decision, a much wider range of “non-timber” values must be considered in the planning process. This process is intended to include the forest values of Native people.

The difficulty with fulfilling this intention comes about as a result of the large gap between Native and non-Native views of forest values. To start with, “timber” management as we perceive it today, having been created by western society, is not thought to be a Native value at all, though a few Aboriginal communities have adopted aspects of it for economic development purposes (Kosek 1993). When it comes to the myriad of non-timber values, it rapidly becomes apparent that Native and non-Native perspectives are highly divergent there as well. For example, non-Native descriptions of non-timber values tend to focus on the ecological, while Native views have a strong social and spiritual component. Asking non-Native forest managers and practitioners to incorporate Native-defined non-timber values into forest planning is problematic when the Native values are not well understood by those asked to incorporate them.

This chapter illustrates these issues by contrasting Native and non-Native views of non-timber
values. It highlights the significant gap in Native and non-Native perspectives of these values, such that later chapters can further discuss these issues within a more well-developed context.

The chapter begins by presenting examples from Canadian forest policy on non-timber values, especially as it pertains to the recent movement towards more sustainable systems of forestry. It goes on to present examples from Ontario as required by the 1994 EA Decision and set out in the resulting new Forest Management Planning Manual. These expressions of non-Native views on non-timber values are contrasted with Aboriginal perspectives.

FOREST VALUES AND CANADIAN POLICY
A recurring notion in this dissertation has been the ongoing paradigm shift in forestry from sustained yield timber management to sustainable forestry. A common thread among the varying conceptions of sustainable forestry is the idea that managing for sustainability involves managing for a wide range of values, not just timber (Bombay 1995c, CCFM 1992, Gale and Cordray 1991, Hammond 1991, Kimmins 1992, Natural Resources Canada 1998, Wells 1991). This has begun to be expressed in various national forest policy documents within the last ten to fifteen years (see Young and Duinker 1998 for detailed analysis and discussion). Below are some examples.

1987 National Forest Sector Strategy
Canadian forest policy began to see some limited beginnings of a movement towards sustainability with the 1987 publication of, “A National Forest Sector Strategy for Canada” (CCFM 1987). This strategy introduced the need to recognize, “important attributes of the forest that are not usually associated with economic development, but are nevertheless essential to Canada’s social and environmental well-being” (CCFM 1987, 1). Although the focus was still largely on protecting the timber aspect of forestry, the new strategy also expressed a wish to, “increase the number and range of benefits that can be derived from the forest land base” (CCFM 1987, 1). With a concentration on ecological aspects of non-timber values, the document drew upon World Conservation Strategy principles for sustainable development, such that, “Its objectives are designed to safeguard important ecological processes and the genetic diversity on
which civilization depends, and to ensure that all utilization of natural resources can be sustained” (CCFM 1987, 5). Although limited in scope and vision, the strategy laid the groundwork for consideration of non-timber values of the forest.

1992 National Forest Strategy

In 1992, the Canadian Council of Forest Ministers published a new National Forest Strategy, as discussed in previous chapters (CCFM 1992). The scope of forest values considered by this strategy was significantly greater than that of previous national initiatives. The 1992 strategy explicitly recognized non-timber uses and values of the forest, acknowledging that, “We have refined our planning and management practices to incorporate a broader range of forest uses and interests” (CCFM 1992, ii). It states also that, “Our forests will be managed on an integrated basis, supporting a full range of uses and values including timber production, habitat for wildlife, and areas allocated for parks and wilderness” (CCFM 1992, 6). Other references to a broader range of values are contained in the section, “Strategic Direction Number Two”, where the values described are ecological in focus and range from wildlife and recreation to watersheds and biodiversity, and where a “holistic” approach to forest management is encouraged (CCFM 1992, 15).

The 1992 Strategy also makes reference to the incorporation of Aboriginal values, claiming that, “We have established new partnerships that reflect the importance of forests to Aboriginal people, maintained and enhanced cultural and spiritual values, and expanded economic opportunities” (CCFM 1992, iii). Aboriginal people are mentioned again in “Strategic Direction Number Seven”, although only one actual reference is made to Aboriginal forest values. In the “Framework for Action”, it is stated that, “In 1992, Aboriginal forestry organizations and the federal government will complete a strategy to address the training and employment needs of Aboriginal people in accordance with their forest values” (CCFM 1992, 42).

In 1992, the National Aboriginal Forestry Association did in fact develop an “Aboriginal Forest Strategy”. This strategy incorporated the protection of cultural, social, spiritual and heritage values (Bombay 1992, 7), thus representing a much broader perspective than the mainstream
strategies. In particular, the Aboriginal strategy included a spiritual component consistent with Native values. Mainstream values tend to focus on more physical and ecological aspects of the forest.

1998 National Forest Strategy
The 1992 National Forest Strategy was renewed in 1998 for another five years. Like its predecessor, the 1998 strategy incorporated the goal of managing for a range of forest values as a key aspect of sustainability. "Strategic Directions" One and Two dealt with the protection of and management for a wide range of non-timber forest values. The approach for achieving this focused on ecology, promoting more ecosystem-based forest management. Planning, "for a full range of environmental, social, economic and cultural forest values" was included in the "Framework for Action" (CCFM 1998, 10). "Strategic Direction Number Seven", while not addressing the issue of Native values specifically, did call for increased understanding between Aboriginal peoples and the rest of the forest community in matters which include, "traditional forest values and modern Aboriginal aspirations and needs" (CCFM 1998, 35).

FOREST VALUES IN ONTARIO FOREST MANAGEMENT
In Ontario, direction for the management of non-timber values comes from the EA Decision handed down in 1994 and renewed in 1995, as well as from the Crown Forest Sustainability Act (see Chapter 5). Steps for the implementation of these directives are laid out in the new Ontario Forest Management Planning Manual. In the EA Decision, consultation with Native people was undertaken. The testimony of various Aboriginal representatives was heard in the process. In this sense, some attempt was made to incorporate Aboriginal perspectives on forest values. Below are examples of the concerns raised and the manner in which the EA Decision addressed them.

Native Values and the 1994 EA Decision

Native Concerns
Chapter Ten of the EA Board Decision summarizes concerns raised by Aboriginal interveners
during the hearings, briefly describing the long history of denial of Aboriginal and treaty rights as well as the ongoing exclusion from participation in forest management and in the economic benefits of forestry. The chapter highlights a number of issues raised by Aboriginal interveners, including: denial of access to participation in the forest industry, denial of access to hunting and fishing on traditional lands, and persecution of Aboriginal people by MNR.

As well, Chapter 10 deals with the subject of Native forest values. Testimony from Aboriginal interveners and expert witnesses described the impacts of timber management practices on their communities and culture. MNR acknowledged that Aboriginal people can be, “specifically affected by timber management operations and that because of their history and culture, Aboriginal people, especially those living in remote areas, have particular concerns” (EA Board 1994, 364). Some Aboriginal activities, such as trapping and hunting, were described as spiritual activities as well as being traditional and economic. Other land based Native values included the importance placed on wild rice, fuel wood, and berry picking sites (EA Board 1994, 365). “Religious” and cultural values discussed included traditional pow-wow sites, spirit rocks, burial grounds, pictograph sites, traditional camping areas and other archeological sites (EA Board 1994, 365). Aboriginal witnesses stated that many cultural and “religious” sites have been assaulted in the past and require protection, not just of the actual site but of the information located at the sites as well.

**MNR and EA Board Responses**

MNR stated that guidelines are in place to protect values such as trapping and hunting (guidelines for fish and wildlife habitat). It was also stated that implementation guidelines will be developed to prevent or mitigate impacts of timber management operations on hunting, fishing and trapping (EA Board 1994, 365). MNR reported that action was being taken to protect religious or cultural sites mentioned by Aboriginal people via the “Timber Management Guidelines for the Protection of Cultural Heritage Values” (MNR and MCC 1991).

The EA Board felt that one way to alleviate impacts on Native values was to collect information on Native values early on in the forest management planning process. The EA Board recognized
that "traditional lifestyles, the values placed on medicinal plants and religious and cultural sites and the status of treaty and Aboriginal rights are concerns unique to these communities" (EA Board 1994, 370). Some concerns were viewed by the EA Board to be shared with other Ontarians. Therefore, MNR is responsible for promoting early Aboriginal involvement in the process to collect values. To achieve this, MNR proposed a separate parallel Native consultation program which the EA Board accepted despite Aboriginal rejection of the proposal. The EA Board (1994, 371) stated:

We are persuaded that the Timber Management Native Consultation Program can offer the same protection against the adverse impacts of timber management operations for the values of Aboriginal communities as the overall planning process we are approving serves the interests of other Northern Ontario communities.

The Native consultation program is voluntary on the part of Native people. MNR is required to document all efforts to involve Native people in the process, but can go ahead with planning regardless of whether the affected First Nations are able to participate. The purpose of the consultation program is to acquire information on Native communities via the Native Background Information Report (which includes a Native Values Map), as well as the Preliminary and Final Reports on the Protection of Native Values. The EA Board criteria for required documents provided direction for MNR as to what needs to be included in their planning process. A copy of the EA Board criteria are provided in Appendix 4.

Interestingly, the EA Board recognized that, "it is essential that good communication exists between the planning team and the affected communities if these values are to be identified and protected" (EA Board 1994, 365). Testimony from Aboriginal representatives concurred that personal communication was a must, as well as the establishment of relationships based on trust. Cross cultural differences were raised as an issue, particularly with Elders, but the EA Board largely ignored the cross cultural concerns raised by Aboriginal witnesses.

Native values specifically recognized in the EA Decision are described as (EA Board 1994, 500):

- "areas of significance", such as traditional or recreational areas;
- trap lines;
- reserves and other Native communities;
areas for obtaining fuelwood or building materials;
and sites of local archeological, historical, religious, or cultural heritage significance (e.g. graveyards, spirit sites and burial sites).

The EA Board Decision thus provided direction for MNR to protect Native values. The mechanism to do this is described in the Forest Management Planning Manual, which is the subject of the next section. Before proceeding, however, attention must be drawn to a critical point. The EA Board, while indeed providing a forum for the expression of Aboriginal concerns, failed to incorporate Native values to any meaningful degree for one main reason: the Board tried to incorporate and protect Native values by incorporating them into a pre-existing framework designed by and for non-Native people and systems of management. Most Aboriginal concerns could not be addressed through the existing framework and were therefore ignored by default. This issue, discussed further in Chapters 7 and 8, represents one of the major barriers to be overcome in improving Native/Canadian relations in forestry.

Sustainability, Forest Values and the New Forest Management Planning Manual
Ontario’s new Forest Management Planning Manual meets the requirements of both the EA Board’s Decision (terms and conditions) and the Crown Forest Sustainability Act (CFSA) (EA Board1995). The Manual addresses Native values based on the terms and conditions outlined in the EA Board Decision. It requires that a Native Values Map be produced (see Appendix 5 for the type of information portrayed on these maps) as part of the Native Background Information Report which includes descriptions of past resource uses and recent concerns related to forest management (MNR 1996, A-9). More specifically, the Native Background Information Report includes (MNR 1996, A-10):

(a) a summary of the past use of the timber resource by those communities;
(b) a summary of the past use of other resources by those native communities, in particular, traditional and commercial hunting, fishing, trapping and gathering;
(c) a native values map and listing which identifies the location of specific natural resource features, land uses and values which are specifically used by, or of importance to, those native communities. In particular, the following features, lands and values will be mapped:
   i areas of significance to local native communities, such as areas used for traditional or recreational activities,
   ii boundaries of trapline management areas of those native communities (i.e. all registered trapline areas associated
with individual native communities),
Reserves and other native communities,
ii areas that have been identified as being required as Reserve
lands or for economic or capital development projects of
those native communities,
iv areas used by those native communities for fuelwood or
building materials, and
v sites of local archaeological, historical, religious and
cultural heritage significance to those native communities,
including native graveyards, spirit sites and burial sites;
(d) a summary of forest management-related problems and issues specific to those
native communities, which arose during implementation of the forest management
plan for the past five-year term; and
(e) a summary of the success or failure of negotiations at the local level with
Aboriginal peoples whose communities are situated in the management
unit, in order to identify and implement ways of achieving a more equal
participation by Aboriginal peoples in the benefits provided through forest
management.

It is recognized in the manual that the location of some values are confidential and identification
of their location would be, "detrimental to conservation" and thus not be shown on the Native
Values Map. Each Native Background Information Report is also to be provided to the Ontario
Native Affairs Secretariat (MNR 1996, A-10).

A key requirement to acquiring a Native Values Map is the participation of Aboriginal
communities in the forest management planning process. The Manual requires MNR to invite,
by written notice, Native communities in or adjacent to the management unit under consideration
(MNR 1996, A-154) to participate in either the standard consultation process or the separate
Native Consultation Program (Appendix 3). The Invitation to Participate includes (MNR 1996,

a) a statement that the purpose of this public consultation opportunity is to
solicit the active participation of the native community; to invite the native
community to participate in the preparation of the Native Background
Information Report; and to provide an opportunity for the native
community to choose between the standard public consultation provisions
of the forest management planning process and the Forest Management
Native Consultation Program;
b) a statement that the native community is asked to advise MNR how they
wish to participate in the preparation of the Native Background
Information Report within 30 days (for the assistance of the native community, a specific date will be provided); and c) a statement that the native community is asked to advise MNR whether they wish to become involved in the Forest Management Native Consultation Program within 60 days (for the assistance of the native community, a specific date will be provided).

Thus, although a Native Background Information report is required for approval of a forest management plan (containing a Native Values Map), Aboriginal participation is not (although it is desired). This puts MNR in an awkward position if Native communities do not wish to participate in the forest management process. Clearly there is a need for Aboriginal participation in the forest management planning process (via the consultation programs or otherwise) in order to achieve successful production of the Native Values Map.

How are Native Values Protected in the Forest Management Planning Manual?

Guidelines
In general, mitigative measures are taken to protect non-timber values from forest operations. Extensive guidelines exist within MNR to govern this process. Examples of guidelines and areas designated for protection include: Forest Management Guidelines for Wildlife; Black Bear Management Areas, Crown Game Preserves; Areas of Natural and Scientific Interest (MNR 1998a, 12); Environmental Guidelines for Access Roads and Water Crossings; Guidelines for Protection of Tourism Values; Guidelines for Evaluating Wetlands and Guidelines for the Protection of Cultural Heritage Values (MNR 1998b, 13). Guidelines also exist for the management of specific species; including pine marten, woodland caribou, bald eagles, golden eagles, peregrine falcons, moose and white-tailed deer.

Areas of Concern Planning
MNR introduced to the EA Board a special process within forest management planning for the protection of forest values. "The first step is to map site-specific features to be protected" (EA Board 1994, 91). In other words, a values map is required. The values become "areas of concern" (EA Board 1994, 91). If implementation guidelines already exist for the particular
value or area of concern, then the guidelines will be applied. If appropriate guidelines do not already exist, then an evaluation of alternatives will occur and a prescription will be selected. Where there is disagreement on the prescription for the value, the reasons for such disagreement must be documented. If further disagreement occurs, then dissatisfied parties can enter into an issues resolution process. Should the parties continue to be dissatisfied then a "bump up" (see below) can be requested (EA Board 1994, 93).

The Manual defines an "area of concern" as a, "geographic area within the areas selected for operations which is adjacent to an identified value(s) which is portrayed on the values map(s) for the management unit" (MNR 1996, A-87). In area of concern planning, prescriptions are developed that will prevent or minimize adverse effects associated with forest management operations on the values (MNR 1996, A-87). Protective measures may include reserves or buffers within the area of concern, modified operations (e.g. operations occur only in the winter) or regular operations.

**Issue Resolution and Bump Up**

A concerned party may identify an issue that requires specific attention (MNR 1996, A-175). A detailed process must be followed as outlined in the Manual. The concerned party first meets with the plan author. Where the issue remains outstanding, the District manager and a "local citizens committee" become involved. If a resolution is still not found, then the Regional Director is included and will provide a written decision on the matter. A "bump up" request can be made at any time during the preparation of a forest management plan to the Minister of Environment and Energy for an individual environmental assessment (MNR 1996, A-177).

**Non-Native Criticism of the Forest Management Planning Manual**

Although Ontario’s new forest management process is thought by many to reflect new thinking in sustainable forest management, criticisms have been directed at MNR from non-Native as well as Native groups. Concerns have been raised that the Manual still only manages for timber, not for the whole the forest (Gray in EA Board 1995, 7).
The Board failed to settle this dispute and indicated they are not in a position to determine whether MNR is conducting forest or timber management planning (EA Board 1995, 8). It was suggested that when the approval is reviewed in 2003, a determination can be made as to the conduct of forest or timber management planning by MNR. For the time being, however, the Board accepted the view that because the Manual contains non-timber objectives that guide overall management (see MNR 1996, A-38), "...non-timber objectives, targets and management strategies cannot and will not be overlooked or ignored" (EA Board 1995, 9).

Thus, the concern has been raised, even before implementation of the Manual, that non-timber forest values may not be sufficiently protected under the new process and that in fact MNR will still be managing for timber supply, a key consideration for those promoting sustainable forest management.

Aboriginal Views of Forest Values

Thus far there has been little documented specifically on the topic of forest values from a First Nations perspective. It is recently that Aboriginal people have begun to use forestry vocabulary (jargon) to describe the forest-related activities that concern them. Part of the reason for this is that forestry terminology is based on western world views and is therefore not capable of presenting Native views in many cases. The distinction between timber and non-timber, for example, may be inappropriate for expressing Aboriginal forest values. At the same time, some Native people are defining Native values as including commercial forestry (timber harvesting)! (Wright 1994). Not all Aboriginal people agree with this view, but it certainly exists within the diversity of Native views expressed.

Even in such instances, however, First Nations discussions of forest management tend to have strong references to non-timber values. NAFA, for example, while promoting business-type uses of the forest, recommends "an enhanced non-timber business environment through incorporation of non-timber values in forest management planning; and...protection of sites of cultural importance" (Bombay 1995c, 9).
Smith et al. (1995) specifically address the issue of forest values from an Aboriginal perspective. In this document values are synonymous with uses (p. XIII-1). This guide also encourages the consideration of all forest values in forest management planning (like sustainable forestry). Forest uses or values of interest to Aboriginal people which are discussed include: food, medicine, shelter, clothing, timber harvesting, non-timber vegetation, fish and wildlife, grazing domestic animals, recreation and tourism (p. XIII-1). Noteworthy about this guide is the attention given to Aboriginal cultural perspectives. For example, the section on Fish and Wildlife specifically discusses traditional management systems, acknowledging that Aboriginal people have been managers of the forest for countless generations. Aboriginal management systems are described as spiritual in nature and it is suggested that, “Every effort should be made to learn and use the knowledge of traditional management systems in formulating guidelines for fish and wildlife management by interviewing elders and community people still pursuing hunting, fishing, trapping and gathering as a way of life” (p. XIV-1).

The guide also stresses the spiritual and cultural aspects of Native forest values:

Fish and wildlife harvesting has been and continues to be an essential part of the traditional Aboriginal economy. Hunting, fishing and gathering activities are not only economic activities, but also, in large part, define Aboriginal culture and spirituality. Fish and wildlife and the harvesting of them provide a sense of well being, nutrition, a link to the land, a way of communicating with the Creator; also, clan systems and family relationships are structured around these activities. The Aboriginal right to pursue these traditional activities is recognized in some areas of Canada under treaties signed between the Crown and Aboriginal peoples and by the Constitution of Canada. Recognition of treaty or Aboriginal rights to harvest fish and wildlife means little if there is nothing to harvest. (Smith et al. 1995, XIV-1)

Under the section titled “Non-Timber Vegetation”, culturally and spiritually important plant life is considered. Examples include berries, mushrooms, nuts, seeds, roots, bark, maple products, ceremonial materials, and medicines (Smith et al. 1995, XV-1). Again, the spiritual and cultural elements of forest use are emphasized. Recreation and landscape values are also specifically acknowledged for their spiritual qualities, noting that, “the forest is a place of spiritual renewal and identified our home and place” (Smith et al. 1995, XVII-1). Recreational values also provide a source of economic renewal to Aboriginal communities. Heritage and cultural values discussed
are (Smith et al. 1995, V-3):

- traditional and current land use patterns,
- old village and burial sites,
- spiritual places and ceremonial grounds,
- individual trees that are used for special cultural purposes, such as canoes or medicine (sometimes called "culturally modified trees"),
- pictographs and petroglyphs,
- old trails and campsites,
- archaeological values, and
- other special Aboriginal features.

The Native values described above are broad and not at all limited to ecological considerations. Rather, spirituality is a core component of Native values. Native values are also understood to encompass other aspects; they are viewed holistically. For example, a use or value may have a significant spiritual significance, but equally important is its economic significance. They are not viewed as in conflict when understood holistically.

SUMMARY

Accounting for a full range of forest values is a defining feature of sustainable forest management. The forest sector, as illustrated by national policy and in Ontario's forest management planning process, has constructed ideas around what non-timber forest values are. Included in this conceptualization is the recognition that Aboriginal peoples have unique and special values associated with the forest, although commonalities exist with mainstream society as well.

At issue is the fact that the process of accounting for Native values in forest management planning is driven by an external agenda. The imposition of an external process means the imposition of a different (and frequently opposing) world view, along with the values inherent in it. There are assumptions made about what is appropriate for Aboriginal people in terms of Native values that may not be shared by Aboriginal people themselves.

Native values differ from non-Native forest values. A defining characteristic of Native values is the spiritual component. This is not surprising as spirituality in Aboriginal world view is integral to everyday living (Berneshawi 1997, Sioui 1992, Turner 1997). In Aboriginal views, every
“value” has a spiritual component. Although a spiritual component exists in mainstream society as well, it is frequently mentioned but rarely explained. It is not a defining characteristic in western society. Such fundamental differences in the understanding and expression of forest values represent one of the major obstacles to be cleared in resolving conflicts between First Nations and the conventional forest sector.

The following chapters discuss this issue further in presenting and analyzing field data which explore Native values from a variety of perspectives.
CHAPTER SEVEN
INTERVIEW RESULTS

INTRODUCTION
This chapter presents summaries of the responses obtained through interviews conducted with First Nations, industry, and MNR representatives during the months of June through November of 1999. These responses represent the data upon which the findings of this thesis will be based.

For reasons of both confidentiality and space, the data are not presented here in their entirety. Rather, they are shown, in both textual and tabular form, following an initial phase of analysis. The initial analysis has accomplished two important tasks: first, the content of all interview responses has been reviewed to derive all the information obtained of relevance to Native Values Mapping; second, the responses received to the interview questions (see Appendix 1) have been grouped into 8 “Response Categories” as a first step in the search for the core variables required by Grounded Theory. (Appendix 6 shows which interview questions yielded which Response Categories). Further analysis and collapsing of the data occurs in the next chapter, whereupon the core variables become clear.

In this chapter, the Response Categories discussed are:

- Definitions of Native Forest Values
- Understanding of Differences Between Personal Views of Native Values vs Those of the Other Planning Participants
- Data Collection for the Native Values Mapping Process
- Degree of Assurance That All Values Are Protected
- The Potential of Aboriginal Participation to Contribute to Forest Management Planning
- Definitions of Traditional Ecological Knowledge
- The Potential Contribution of TEK to Forest Management Planning
- Degree of Assurance That Forest Management Planning Currently Incorporates TEK
For most response categories, the information is presented by major respondent group (i.e. First Nations, Industry, and MNR). Each group's responses are summarized in a table, following which is a more detailed description of the information highlighted by the table. For certain response categories, the data for all three respondent groups are summarized in a single table and described together.

RESPONSE CATEGORY #1: DEFINITIONS OF NATIVE FOREST VALUES

First Nations

First Nations responses to this query varied. In some cases, respondents answered the question directly, while others did so indirectly throughout the course of the interview. Some First Nations respondents seemed to struggle with the question and were uncertain as to how to answer. Others simply listed off types of values and their characteristics. Table 7.1 below summarizes First Nations responses.

Table 7.1. First Nations definitions of Native Forest Values based on responses from First Nations interviewees.

<table>
<thead>
<tr>
<th>Types/Characteristics of Native Values</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Values</td>
<td>• includes burial sites, fish spawning beds, hunting areas, etc.</td>
</tr>
<tr>
<td>Cultural Values</td>
<td>• includes trap lines, berry picking sites, medicinal areas (gathering), pictographs</td>
</tr>
<tr>
<td>Spiritual Values</td>
<td>• includes ceremonial sites, meditation</td>
</tr>
<tr>
<td>Community Defined</td>
<td>• whatever the community says a value is</td>
</tr>
<tr>
<td></td>
<td>• Elders' memories/knowledge</td>
</tr>
<tr>
<td>Collective and Individual Values</td>
<td>• What is thought or felt to be a value varies with the person you speak with. Some values are collective, such as burial site or pictographs; others are individual, such as eagles.</td>
</tr>
<tr>
<td>Native and Non-Native Values</td>
<td>• may include what might be thought of as Non-Native sites, for example, the site of an event or incident involving non-Native people (e.g. plane crash)</td>
</tr>
<tr>
<td>Traditional or Contemporary</td>
<td>• the value can be ancient (pictographs or trails) or contemporary (recreational area, e.g. picnic site)</td>
</tr>
</tbody>
</table>
Aboriginal people view Native values as being very broad, holistic and flexible in nature. As noted above, it was often challenging for First Nations interviewees to respond to this question. Native values, as First Nations people understand them, take on a range of meaning consisting of whatever is important to the community or individual members. Some values are collective, such as ceremonial sites; others are family or clan oriented (e.g. totems, burial sites or berry patches); and some are individual (e.g. favorite fishing spots).

Most First Nations respondents raised the issue of how difficult it is to define Native values. They noted how awkward it is for Elders to be asked to draw imaginary lines around values, such as burial or ceremonial sites, that are important to identify during the Native value mapping exercise. Elders were not comfortable with this exercise, although they did participate in some cases to protect the values important to them. Values also include belief systems and are not limited to “where” an event occurs or a specific location. First Nations respondents indicated that they did attempt to try to understand what MNR means by Native values. They tried to cooperate and comply with MNR demands for Native values, even if the type of Native values asked for seemed strange or not culturally or community oriented. First Nations respondents stated they endeavored to explain what they themselves mean by values.

It is important to note the overlap of many of the examples of values among the various types or categories of Native values presented in Table 7.1. For the First Nation respondents, a single value may have properties or aspects which are found in other value types. For example, a communal burial or ceremonial site may be described as having physical properties (location), but also encompasses cultural and spiritual aspects. It other words, the Native value can be physically located, but location alone is not sufficient in defining (or protecting) that value. The values are experienced as holistic; a value may be labeled for the sake of brevity by one individual as cultural, but may be described by another as spiritual or physical. It is difficult to distinguish between spiritual and cultural values, and then to identify their physical locations to be mapped. Moreover, it was pointed out that a Native value often may not be limited to a
specific site, but will include the area around the site as well.

When a value has many dimensions it poses great difficulty for western forest management when it comes to ensuring that all of these dimensions are accounted for when planning for Native values protection. It is challenging to ascertain specifically what the "value" is in the given Native value. This challenge is frequently then put back on Aboriginal people. As one respondent stated, First Nations people are required to decide what aspect of the Native value is worth protecting (e.g. to choose to protect its physical location through mapping it in the forest management process but to violate its spiritual integrity in doing so). This practice is regarded as unfair and culturally inappropriate in light of the holistic nature of Native values. Some of the intangible values of Native people, such as spiritual values, are considered to be broad in scope and to be found everywhere and in everything. First Nations want these values protected as well.

Industry

Responses varied in this group. Some industry representatives had great difficulty articulating what Native values are, while others held very clear and certain ideas about them. Most respondents in this category recognized that there are problematic issues around defining values. Table 7.2 summarizes industry responses to this question.

<table>
<thead>
<tr>
<th>Types/Characteristics of Native Values</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Point Specific/Can be Mapped          | • something that can be pointed out in a map, e.g. archaeological site  
  • any location or site that is of value to the First Nation |
| Non-Point Specific and Broad          | • any activity that impacts the values that the community wishes to protect  
  • whatever the community identifies as a value* |
| Traditional Activities/Areas          | • includes, hunting, trapping and gathering areas |
| Spiritual sites                       | • sacred rocks, trees or burial grounds |
| Externally Defined                    | • MNR directs the definition of what a Native value is |
| Native values cannot be defined       | • too broad and too different to define |

* This was not a common view.
Description

Industry perspectives reflect controversy around defining Native values and discomfort at not having precise definitions or locations for these values. Native values are more commonly thought of as being something that can be pointed out on a map, i.e. site or point specific. Even where respondents stated that defining a value is left up to whatever the First Nation decides it is, the value is still expected to be location-specific. First Nations are expected to produce a map of Native values. Definitions of Native values in this response group thus tend to be narrow in comparison to the First Nations response group.

It is, however, acknowledged that Native values, (their identification, collection and protection) represent a "grey" or ambiguous area. Addressing the issues is not as simple as previously thought and the planning process is weak in dealing with the nature of Native values. Whereas the planning process requires a map of site specific values; broad, non-point-specific values are regarded as difficult to define, locate and protect. Education and discussion are required for protecting broader or non-point specific values.

The seeming ambiguity of Aboriginal responses to what a value is, such as, "it is everything out there", confuses and frustrates planners in this process. There is a lack of understanding of what such statements mean. Native spiritual values are admittedly poorly understood. Some respondents stated they gained a better understanding and appreciation of Native values over the course of working with First Nations people.

It was also noted that the definition of Native values is externally driven. Before First Nations communities are even approached, there exist views of what Native values are, how to identify them and how to protect them. It was observed that First Nations have to figure out what MNR and industry mean and then try to provide what is demanded of them during the forest management planning process. It is generally assumed the values can be mapped. Native values are expected to be rationalized and justified, especially if they cannot be seen or they are very subjective or broad. Some respondents observed that what exactly a Native value is from an Aboriginal perspective is lost in this process.
Other issues raised by respondents about Native values concerned their sensitivity and the need for confidentiality. First Nations do not want to release the location of their values. Trust (or lack thereof) is a major factor in the ability to identify and collect values for mapping.

It was also recognized that Aboriginal people have a different view of Native values. They come from a different “mindset”, as one respondent stated.

**MNR**

In the forest management planning process it is MNR who carries the responsibility for Native Values Mapping. MNR representatives on the planning team need to have an idea of what they are seeking from First Nations in order to fulfil this requirement. In response to the question on defining Native values, MNR officials thus had plenty to say. In some cases, a single respondent assigned a number of characteristics or aspects to Native values. Other respondents were vague and indicated that they did not know what Native values are. Despite this diversity among respondents and responses, common themes and categories emerged. These are presented in Table 7.3.
Table 7.3. MNR definitions of Native Forest Values based on responses from MNR interviewees.

<table>
<thead>
<tr>
<th>Types/Characteristics of Native Values</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point Specific/Can be Mapped</td>
<td>• include “anything” the community states as long as it can be mapped (e.g. portage trails, medicinal plant areas)</td>
</tr>
</tbody>
</table>
| Non-Point Specific/Broad                                | • ambiguous and hard to pin-point sites, such as hunting and gathering areas, spiritual areas  
• can include a “way of life” such as trapping  
• may be abstract, symbolizing something to the community  
• regarded as important to be protected (e.g. traditional way of life) |
| Traditional Use/Area                                    | • includes areas for wild rice, trapping, berry picking, fishing, hunting, etc.                                                          |
| Traditional or Contemporary                             | • can include both trapping and commercial forestry, historical values (e.g. old family trap cabin), or new values (e.g. prohibit use of pesticides) |
| Spiritual                                               | • cannot be seen or touched, e.g. fasting site.  
• includes spiritual ties to the land                   |
| Cultural                                                | • includes burial sites, spiritual values, or non-resource based values, heritage  
• includes those values found in traditional use         |
| Cannot be Defined                                       | • don’t know what a Native value is  
• What is a value to a Native person?                     |
| Community Defined                                       | • Whatever the community or individual in it defines to be a Native value                                                             |
| Externally Defined                                       | • MNR decides what values are (in EA Decision and Forest Management Planning Manual).                                                  |

Description

Despite assuming the responsibility for Native values mapping, MNR respondents seemed to struggle with the definition of Native values. In MNR responses there was often overlap between the characteristics of the definitions of Native values that they provided, such that characteristics of values may be found in different value types or categories. For example, trapping was described as a cultural, traditional or broad intangible value. Thus, a single value is viewed differently by different MNR respondents. All may recognize it as important, but for different reasons.
Upon elaboration, some MNR officials recognized that the Native Values Mapping exercise represented an imposition of an external world view upon First Nations people. This does not mean that Aboriginal people do not have their own view of mapping (within their world view), but that the mapping for forest management purposes represented a highly specific exercise for a particular objective which may not be meaningful to First Nations communities. MNR has made no secret of the fact that point-specific values which can be mapped are preferred over broad values which cannot. At the same time, MNR respondents stated that they did not want to prejudice what a Native value is defined as in the planning process. However, in light of the next section’s findings, it is doubtful that much balance has been achieved in this area.

Values mean something different to people of different cultures. MNR representatives may know what they mean by value, but this meaning may not be shared by Aboriginal people. In the current system, “values” is a technical term in forestry (cited in the Manual and the EA decision). First Nations groups wish to protect their values, but their definition of the term may not be the same as the “values” defined by forestry. First Nations values may not be translatable into a values map, such as is required by the forest management planning process.

In relation to characteristics of Native values, some MNR respondents attempted to distinguish between cultural and spiritual values. However, the characteristics seem to overlap. A distinction was made between traditional and “modern” values. MNR was more interested in the identification and protection of “traditional” values. Representatives in one district said they did not bother with the modern values identified by the community; they regarded modern values as the same as mainstream environmental values.

For the most part, MNR respondents recognized that Native values can be broad and very difficult to define. Native values can include ways of life, beliefs or ethical systems, or relationships to the land, much of which cannot be mapped, yet First Nations still wish to have these values protected. Native values were also recognized to be dynamic and diverse within a particular community. For example, the older generation may value a particular activity or place (medicinal gathering area), but the younger generation may not (they may want to log the area).
Some MNR respondents report First Nations individuals as stating they value forestry as an economic activity. However, this value may not be shared by the whole community. As well, individuals in a First Nations community may value commercial forestry as an economic activity yet still wish very much to protect Native values. It was recognized that there is a diversity of views within First Nation communities.

"Areas of interest" were also identified as a type of value. Areas of interest were one way that MNR chose to deal with broad values such as trap lines or even land claim areas. They were identified and mapped to a certain degree, and were acknowledged to be areas of heightened interest to First Nations. However, areas of interest, while accounting for non-point-specific values, were categorized by MNR as not requiring protection. MNR officials also recognized that many Native values are confidential and sensitive issues for First Nations.

Summary
Despite definitions of Native values being provided in the EA Decision and the Forest Management Planning Manual, in practice, consistent and precise definitions of Native values remain elusive as indicated by all response groups. This is worrisome, particularly for First Nations, as they are the group from whom the values are "extracted", yet they are uncertain as to what the planning requirements are for Native values. Even if planning requirements are met, First Nations respondents feel that their values are not appropriately represented.

The next section examines how each response group understands their views of Native values to be the same or different from those of the other response groups.

RESPONSE CATEGORY #2: UNDERSTANDING OF DIFFERENCES BETWEEN PERSONAL VIEWS OF NATIVE VALUES VS THOSE OF THE OTHER PLANNING PARTICIPANTS

First Nations
First Nations respondents felt that they had a different view of values than the other planning participants. First Nations respondents' reasons for this are provided in Table 7.4.
Table 7.4. Reasons for differing understandings of Native values as offered by First Nations respondents.

<table>
<thead>
<tr>
<th>Reason for Differing Views of Native Values</th>
<th>Examples</th>
</tr>
</thead>
</table>
| Perception of the Land is Different         | - all of the land is important to us, not just some spots  
                                           | - all life on the land is important, not just some species of wildlife  
                                           | - relationship to the land is a value  
                                           | - a medicine to First Nations may be a noxious weed to MNR |
| Native Values Include Treaties and Land Claims | - respecting treaties is part of Native values  
                                                | - protecting the provisions of the treaties, such as hunting and fishing, is crucial as well  
                                                | - land claim areas are regarded as values (not just “areas of interest”) |
| Non-Physical Values                         | - MNR has a difficult time understanding values that are not physical. If they cannot see it or there is no “evidence” on the ground, MNR does not consider it a value.  
                                                | - Values involve history, including oral history (cannot easily map), as well as learning/knowledge |
| Lack of Recognition of Values               | - MNR does not recognize some First Nations values as legitimate.  
                                                | - MNR believes values should be restricted to wildlife (e.g. birds).  
                                                | - MNR prefers to only protect what it sees as “traditional values” |
| Lack of Knowledge of Aboriginal Culture     | - MNR knows little about Native culture, therefore they are unable to recognize what is important to us.  
                                                | - Values include our philosophy and beliefs |

First Nations respondents felt that MNR tries to tell them what their values are. MNR restricts the definition of values by demanding that they be mapped. First Nations feel that they should be able to tell MNR what their values are without the pressure to map them where this is not appropriate.

Some First Nations respondents reported that they were told the values they identified were not Native values. If the values offered did not conform to MNR definitions (found in the Manual (MNR 1996) and EA Decision Cultural Heritage Guidelines (EA Board 1994)), then they were not considered Native values. MNR also prefers “traditional” values; if the value is regarded as modern then it is not seen as a Native value (by some MNR representatives).

**Industry**

Most industry respondents observed that Native people have a different view of Native values from either MNR or industry. Responses to this question were not elaborated on in great detail,
but those who noted differences referred to characteristics presented in Table 7.5.

Table 7.5. Characteristics of Native values as described by industry respondents.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details Cited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point vs Non-Point Specific Values</td>
<td>• Native people tend to have non-site specific values</td>
</tr>
<tr>
<td></td>
<td>• Native values are broader and harder (if not impossible) to define</td>
</tr>
<tr>
<td></td>
<td>• Native values do not seem to have boundaries</td>
</tr>
<tr>
<td></td>
<td>• Native values are subjective</td>
</tr>
<tr>
<td>Spiritual/Non-Physical Values</td>
<td>• Native values tend to be spiritual</td>
</tr>
<tr>
<td></td>
<td>• Value may not be physical, may not be any “evidence” of value (nothing</td>
</tr>
<tr>
<td></td>
<td>there to know an area is a value)</td>
</tr>
<tr>
<td>World View Difference</td>
<td>• Native values are different because they have a different “mindset”</td>
</tr>
</tbody>
</table>

There appears to be a recognition that Native values are different than values offered by other planning participants. The spirituality of Native values are recognized by some, but not well understood. Such significant differences are highlighted, for example, by concepts such as spirit rocks. However, it was felt that some of the values were not different from non-Native values (e.g. wildlife protection). Thus, there are differences but also similarities.

MNR

Though there were exceptions, MNR respondents for the most part felt that Native values were indeed different from “mainstream” values. Characteristics of values that were regarded as different from non-Native values are presented in Table 7.6.

Table 7.6. Characteristics of Native values as described by MNR respondents.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible/Non-Physical</td>
<td>• hard to locate/define values that are intangible (can’t see and feel)</td>
</tr>
<tr>
<td></td>
<td>• hard to put boundaries on Native values</td>
</tr>
<tr>
<td>Historical/Heritage/Culture</td>
<td>• Native people have a unique history; values that reflect this are important</td>
</tr>
<tr>
<td>Treaties and Rights Associated with Treaties</td>
<td>• Treaties and the signing of treaties are regarded as values</td>
</tr>
<tr>
<td>Cultural Differences</td>
<td>• Native people have a traditional relationship to the land</td>
</tr>
<tr>
<td></td>
<td>• Native people have different concept of value. It is misleading word.</td>
</tr>
</tbody>
</table>

MNR officials remarked that everyone, Native and non-Native, has a difficult time articulating
their values. In a cross-cultural context the attempt becomes even more challenging. Some Native values are regarded as the same as non-Native values. Surprisingly, those MNR officials who held this view provided spiritual values as an example. Spiritual values were regarded as mainstream values, the same as environmentalists would provide.

Some Native and mainstream values are seen to overlap, for example, the desire to protect eagle nests. However, the eagle may also have spiritual significance to Native people, so although it is valued as a wildlife species it also has a spiritual value. Having more value (or “added value”, as one MNR respondent put it), especially a spiritual value, has implications for protecting the value (appropriate buffers). Another MNR respondent explained that Native people will say they value the forest, but everyone involved in forest management planning values the forest. The forest is valued in different ways by different people. The reasons are different, but the bottom line is that parts of the forest will be cut, so all values cannot be protected.

**Summary**

Native values are regarded and recognized as being confidential. Because of this there is unwillingness on the part of First Nations to identify and map their values. This becomes a major concern for planning participants as they are required to collect data on and then protect these values in the forest management planning process. First Nations are not *required* to reveal their values. However, they are told that if they do not, the values will not be protected! First Nations do not appreciate this position.

**RESPONSE CATEGORY #3: DATA COLLECTION FOR THE NATIVE VALUES MAPPING PROCESS**

There were a variety of ways in which MNR collected data for mapping Native forest values. These methods varied from District to District (and from planning area to planning area within a district). In some cases, MNR attempted to collect the values data themselves; in others, agreements were made with the First Nations to have the First Nations themselves do the collecting. In still other situations, First Nations or MNR hired a consultant to collect the data for them. In all cases it is MNR who is responsible for seeing that the values data is collected and mapped. Industry, while sometimes involved in the process, is not responsible for collection
of values data. As such, they deferred comment on this topic to MNR. Table 7.7 presents the various scenarios under which values data was collected for the Native Values Mapping process.

Table 7.7. Scenarios under which Native values data was collected, by collecting agent.

<table>
<thead>
<tr>
<th>Collecting Agent</th>
<th>Collection Scenarios</th>
</tr>
</thead>
</table>
| MNR              | • MNR representative went to First Nations community with map to identify values  
|                  | • MNR representative left maps with First Nations to use in identifying values  
|                  | • Some First Nations already had values identified through other processes. MNR simply acquired existing “values maps” to meet planning requirements.  
|                  | • MNR relied on previous information and data (e.g. cultural/heritage sites) to construct a values map  
|                  | • High potential model* was utilized in some cases to assist with identifying the location of Native values, with or without First Nations participation in the process  
|                  | • MNR collected values data themselves through own information/records in combination with funding a consultant to do some collection |
| First Nation     | • First Nations were provided with funds (from MNR, and in some cases the SFL holder may contribute) to collect values  
|                  | • First Nations identified and collected values data through larger coordinating body, e.g. Tribal Council  
|                  | • Some First Nations already had values identified through other processes and did not engage in values mapping exercise  
|                  | • First Nations did not utilize the high potential model* to identify community values |
| Consultant       | • First Nations hired a consultant to identify and collect values data  
|                  | • MNR hired a consultant to identify and collect values data  
|                  | • High potential model* was used by planning teams in some cases to help identify the locations of Native values in addition to working with the First Nations community |

* The high potential model is a computer program that identifies areas where there is a high potential for cultural and heritage values (normally along shores of water bodies).

Essentially, there were three main ways in which Native values data were collected. Either MNR collected the data, with or without Aboriginal input; or, First Nations collected values data themselves, usually (but not always) with financial assistance from MNR or other sources; or, a consultant was hired by either MNR or the First Nations community to collect data. Consultants hired by the First Nations were often required to work with community members or Elders.

Below, Tables 7.8 and 7.9 present more detailed information on values data collection methods.
First Nations' Values Data Collection Strategies

Table 7.8. First Nations methods of collecting Native values data.

<table>
<thead>
<tr>
<th>Community Representatives who Conducted Data Collection</th>
<th>Sources of Information</th>
<th>Methods of Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>• First Nation Band staff member</td>
<td>• Elders</td>
<td>• Personal Interviews: visits with Elders and resource users such as trappers, families etc.</td>
</tr>
<tr>
<td>• First Nation Band Councillor</td>
<td>• Community Members</td>
<td>• Public Forums: open houses, community meetings, feasts, give-aways, pow-wows</td>
</tr>
<tr>
<td>• local community person(s)</td>
<td>• Chief and Council</td>
<td>• Secondary Sources: including archival research, library research, land claims documents, etc.)</td>
</tr>
<tr>
<td>• Elders (in one or two cases)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The First Nations data collection process was largely community driven. Sources of information were generally known to the data collector, which added a degree of credibility to the information provided and/or allowed for information to be verified. This is different from MNR data, the source of which is often not known and therefore cannot readily be verified or queried. In First Nations data collection, traditional or community methods for data collection were utilized (feasts, give-aways, etc.) to gain participation. Elders’ roles were not limited to that of information providers; in a few cases they participated as data collectors as well. In all cases widespread community participation was sought.

MNR’s Values Data Collection Strategies

Table 7.9. MNR methods of collecting Native values data.

<table>
<thead>
<tr>
<th>Steps Taken by MNR Representative</th>
<th>Sources of Information</th>
<th>Methods of Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>• took a map into First Nations community to collect data</td>
<td>• Community member(s)</td>
<td>• Community visit, Open House, Information Centre</td>
</tr>
<tr>
<td>• left map in community for First Nations to put values on it</td>
<td>• In some cases MNR did not know who identified Native values on the map</td>
<td>• High potential model (see Table 7.7)</td>
</tr>
<tr>
<td>• MNR and industry representative “walked the ground” with First Nations official to identify and locate values</td>
<td></td>
<td>• Collect data over the course of a year (planning cycle)</td>
</tr>
<tr>
<td>• hired a consultant to collect data</td>
<td></td>
<td>• Consult with other government departments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Consult existing MNR records, take map to public information centre, ask for missing values</td>
</tr>
</tbody>
</table>
There are a variety of ways in which MNR attempted to collect values information from First Nations communities. The methods utilized did not mobilize community participation or support to any significant degree. MNR representatives attempted to plug into existing MNR public consultation processes to acquire values. This was done, for example, through the presentation of maps at community open houses or public information centers. MNR also relied on its own resources to produce maps. Such resources included existing MNR records (e.g. regarding trap lines, cultural/heritage sites), other government departments, or the high potential model (see Table 7.7). In some cases MNR used a combination of its own resources and verifying these or adding values at public forums. MNR methods often result in it being unclear who the source(s) of the values information are.

There are varying degrees of perceived effectiveness of the methods used to collect values data which will be discussed in the next chapter.

Issues Raised Concerning Native Values Mapping Data Collection

Credibility of Information

The validity of Native values data and maps depends upon the source of the data. For example, First Nations individuals stated in some cases that Native Values Maps were completed by MNR for their community, but MNR may have only spoken with one or a few individuals to identify the values. Although the values of the person(s) who provided the values are regarded as legitimate, such maps were viewed by First Nations respondents as limited or invalid in terms of representing the views of the community. The community leadership may not accept such maps as valid, particularly where the source of information is unknown, and/or the process to collect the information was not a collective, community-driven effort.

The more community-based the identification and collection of values data, the more credible the Native Values Maps are perceived to be by the community itself. This is only true up to a point, however. As was noted by First Nation respondents, the entire process is initially MNR-driven, thus making it an invalid process to begin with.
Issues of credibility exist among MNR and industry respondents as well (more so with industry). Knowledge or information that is orally communicated is viewed as suspect. For the most part it is only documented forms of history which are regarded as credible and reliable.

Confidentiality
Information on Native values is regarded as highly sensitive from a First Nations community perspective, a point which was raised consistently by all three response groups. First Nations fear that if their values are identified and located on maps they will be vulnerable to exploitation, vandalism, and other forms of disrespect or violence; not an uncommon experience for many First Nations. First Nations are therefore reluctant to share this information, sometimes within the community itself, but in particular with outside agencies. Releasing information becomes especially troublesome if the outside agency (such as MNR or the Ontario Native Affairs Secretariat (ONAS)) is not trusted or if there is a lack of a positive, mutually beneficial relationship. MNR and industry respondents are certainly aware of this reluctance and in some cases refusal to share values information.

This means that values information that is shared must be protected from other forest users. As well, the values sites themselves must be protected on the ground from forest operations. Protection of values thus takes on two levels: protection of information (the Native Values Map) and protection of the value itself. There is no clear or consistent policy for either situation.

Some MNR Districts worked in conjunction with First Nations groups to develop data-sharing agreements and ways to protect the mapped information. One way in which this was done was to identify where a value is located, but not what the value is. In this case the community kept a separate, coded record in their community of the nature of the mapped values. Another method involved not pin-pointing a precise location on the map, but rather designing a buffer around the value that would not make the value noticeable or identify precisely where the value was. These protection measures required a degree of cooperation and trust. Not all MNR and industry respondents liked this way of protecting information; they still insisted upon knowing “what” the value was as well as its specific location.
Lack of Understanding or Non-Acceptance of Native Values

It was reported in some cases that where values were shared with MNR officials in either meetings or public forums, these values were not understood, and therefore not recorded or accorded adequate protection. First Nations often reported that the values information they provided was ignored or excluded. It was also stated that on the one hand, First Nations are pressured by the requirements of the forest management planning process to identify their values to MNR. On the other hand, once these values were provided (often reluctantly), the First Nations were made to feel that they had to justify these values.

From the point of view of MNR respondents, defining values, particular broad or non-point-specific values, and then attempting to map them was particularly problematic. Furthermore, the very requirement that the values be mapped dictates what a value can and cannot be defined as. This imposition of an externally driven process serves to further confuse the definition of Native values. First Nations essentially have to find out what is required by the process and then attempt to provide what is needed, should they decide to participate at all.

Lack of Resources

First Nations who conducted values mapping exercises in their communities stated that they did not receive enough money or time to do the kind of job they would have liked to do. The forest management planning process is very much driven by previously determined external time lines which must be met if First Nations participation is to be included in the process. This doesn’t always allow enough time to properly identify and collect values to be mapped. It was also noted that sometimes the process was not well enough understood to know what was expected or required. MNR respondents also stated they do not have adequate resources for Native Values Mapping to do the kind of job they feel is required.

Benefits

There are benefits, external to the forest management planning process, which some First Nations respondents said their communities received through participating in the Native Values Mapping exercise. Community members who worked with Elders stated they learned a lot about
their culture, spirituality and traditions in the course of the mapping exercise. Historical information that was gathered was of interest to community members for reasons other than forest management.

Summary

Overall, the values identification and collection exercise of Native Values Mapping was different in each District and plan. This lack of consistency is highly noticeable to First Nations and industry representatives whose interests lie beyond the administrative units of MNR. In most cases, First Nations were uncomfortable with the values mapping process. The topic of Native forest values is highly sensitive and the forest management planning process is ill-equipped to deal with First Nations realities. Conversely, industry and MNR representatives felt that First Nations lacked the capacity to conduct or participate in Native Values Mapping (e.g. they don’t have mapping or GIS experience, etc.).

RESPONSE CATEGORY #4: DEGREE OF ASSURANCE THAT ALL VALUES ARE PROTECTED

First Nations

For the most part, First Nations felt that their values were not afforded adequate protection. A number of reasons for this were posed. These are summarized briefly in Table 7.10.

Table 7.10. Reasons offered by First Nations respondents for inadequate protection of Native values.

<table>
<thead>
<tr>
<th>First Nations’ Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• We ran out of time and money to complete the values mapping exercise, so many values will be destroyed in the course of forestry operations.</td>
</tr>
<tr>
<td>• Due to their complex nature, some of the values that were identified by First Nations could not be mapped, and are therefore not protected. Only those values on the map will be protected. First Nations respondents felt that they could not provide a “dot” on a map for some important values.</td>
</tr>
<tr>
<td>• Planning team members were not able to properly protect the values because they do not understand them.</td>
</tr>
<tr>
<td>• Despite attempts to collect them, it was felt that some values could not be shared (refusal of Elders to divulge sensitive information, etc.).</td>
</tr>
<tr>
<td>• Broader areas are not well protected. It is known, for example, that there will still be logging in the “areas of interest” (identified areas of non point-specific values) and the values within these areas will be damaged or destroyed.</td>
</tr>
<tr>
<td>• Broad values are difficult to map, but even when they are mapped, MNR will still not protect them because they cover a lot of land. Protecting them would significantly affect the volume of timber available for logging.</td>
</tr>
<tr>
<td>• Identified values were rejected or ignored, not recognized as Native values!</td>
</tr>
</tbody>
</table>
Only one First Nations representative felt that all identified Native values were protected.

Other Native values protection issues raised by First Nations respondents included the need to protect Native values from timber operations, pillagers of cultural sites, other government agencies such as the Ontario Native Affairs Secretariat (ONAS), broader forces such as land claims disputes, and other exploitive individuals, organizations, or situations.

**Industry**

Industry responses were quite varied regarding this issue. Most industry representatives felt that all identified values are protected, although it was acknowledged that they realize they did not obtain information on all the values for various reasons. It was also recognized that point-specific values were protected while broader values remain an outstanding concern. One respondent indicated that ongoing involvement of the First Nations is required for proper protection of values. He (and the SFL holder he represents) did not approach the Native Values Mapping exercise as a “one shot deal”. This respondent felt that if you did not get all the values on the map, you’d “lose”. In this unusual situation, the SFL holder is committed to protection and makes a considerable effort to keep the First Nations community involved and informed (e.g. annual work schedules are reviewed with the community). This ongoing process of taking the time and effort to maintain a positive relationship will ensure greater protection of Native values than is often achieved.

**MNR**

For the most part, MNR respondents felt that all Native values that were identified were protected through area of concern planning or other guidelines. Table 7.11 represents a summary of the responses provided by MNR representatives.
Table 7.1. MNR respondents' views on the degree of successful protection of Native values.

<table>
<thead>
<tr>
<th>MNR Views</th>
</tr>
</thead>
<tbody>
<tr>
<td>• All Native values were protected, we did not have to do anything special.</td>
</tr>
<tr>
<td>• It is very difficult to develop a prescription for a value which covers a large area</td>
</tr>
<tr>
<td>• Native values that would be affected by forest operations were protected (although a large number of values would be identified, only a few would actually be affected by forest operations, and only these were prescribed protection)</td>
</tr>
<tr>
<td>• Protection of Native values was not an issue for all plans; in some cases no values were close to harvest operations.</td>
</tr>
<tr>
<td>• Native values already protected along shorelines (via other guidelines, riparian zones or wildlife prescriptions</td>
</tr>
<tr>
<td>• All Native values are protected to some degree</td>
</tr>
<tr>
<td>• Protection is in place for those values that are on a map</td>
</tr>
<tr>
<td>• Not all values are protected, such as trap lines, although trappers were consulted on how they wanted their trap lines harvested.</td>
</tr>
</tbody>
</table>

Most, if not all, MNR officials were confident that all identified values that were mapped would be protected from timber cutting operations. However, various issues were raised as to the design of the actual protection measures. In some cases, methods of protection are negotiated with the First Nations to determine protection measures acceptable to MNR, industry (the local sustainable forest licence (SFL) holder) and affected First Nations. In some cases, First Nations were not involved in such values protection negotiations, despite wishing to be. In these circumstances standard guidelines were used (e.g. MNR's (1991) cultural/heritage guidelines). In other cases, MNR feels that Native values were protected in course of protecting other values (e.g. wildlife, riparian zones, etc.) and Native values did not require special consideration.

Some MNR Districts continued to communicate with First Nations about Native values identification and protection, even after the original planning exercise was complete, in order to deal with newly identified values as they came up. Other Districts have not taken this initiative. It appears generally known that MNR officials are aware that First Nations are not generally satisfied with the current state of protection of Native values.

Summary of Issues Around Native Values Protection
Table 7.12 below lists major categories of issues raised by respondents from the three response groups. Beside each issue a “Yes” is placed under each response group for whom the issue was brought up. The lack of a “Yes” does not necessarily mean that the issue was not considered
relevant by that response group, but that this issue was not raised by any of the interviewees representing that response group. Note that there are issues common to all three response groups. Although the reasons for recognizing a specific issue may differ, the fact that the issue is recognized in all three cases is important to highlight. Following the table a brief discussion of each issue is presented.

Table 7.12. Main issue categories raised by the three response groups in relation to Native values protection.

<table>
<thead>
<tr>
<th>Issues</th>
<th>First Nations</th>
<th>Industry</th>
<th>MNR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidentiality</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Lack of Resources</td>
<td>Yes</td>
<td>---</td>
<td>Yes</td>
</tr>
<tr>
<td>Community Impacts</td>
<td>Yes</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Definition of Values</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cultural Appropriateness of Values Mapping</td>
<td>Yes</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Reluctance to Share Values</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Lack of Trust</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cultural Differences</td>
<td>Yes</td>
<td>Yes</td>
<td>---</td>
</tr>
</tbody>
</table>

Confidentiality

All three response groups identified confidentiality as a major issue in the identification, collection and protection of Native values. It is troublesome to many First Nations people that once values are identified they often become public, regardless of measures taken to ensure their secrecy. For example, although they are not involved in forest management planning per se, the Ontario Native Affairs Secretariat (ONAS) receives a copy of the Native Background Information Report (which includes the Native Values Map and a Report on the Protection of Native Values) as part of the requirements of the Forest Management Planning Manual. MNR and industry both understand that confidentiality poses a significant barrier to Native values data collection.
Lack of Resources
First Nations who choose to participate in the exercise often request funds to assist with Native values identification, data collection and protection. The amount of funding provided (if it is provided at all), is perceived as inadequate to do an appropriate job. Projects are frequently rushed and money soon runs out. It requires much time and many resources to produce a detailed, well-thought out and comprehensive Native Values Map. MNR recognizes this issue as well, indicating that they do not receive enough funds themselves to in turn provide First Nations with the resources they need to effectively collect the information on their own or hire a consultant to do so. Both First Nations representatives and MNR officials feel more resources need to be directed toward Native Values Mapping.

Community Impacts
This category refers to the view held by First Nations that sometimes the Native Values Mapping process can divide (or further divide) a community. This can happen, for example, when Chief and Council agree to a Native values protection project without the full support of everyone in the community. Some community members can become highly upset at this outcome. Community impacts also refers to the stress that many Elders and knowledge sharers experience because they feel that they have to share values that would be normally be kept under varying degrees of secrecy (e.g. within the oral tradition, within a family clan, within a community, etc.) in order to protect them. This kind of stress on community members merely adds to the pressure First Nations communities already experience for a variety of social, political, and economic reasons.

Defining Values
As noted earlier, there are some vastly different views of what Native values are. It has occurred in the Native Values Mapping process that a First Nations community has shared a value regarded as important and in need of protection from forest operations, only to be told that this value does not meet the criteria for acceptable values under the existing process and therefore cannot be protected. First Nations feel that they are pressured into sharing their values, only to have them not taken seriously. It was specifically mentioned by one First Nations person that in
his experience non-Native people do like Native values; they have a hard time understanding First Nations views on values and their protection. MNR takes a narrow and point-specific view of Native values, which does not fit well with First Nations views.

Cultural Appropriateness of Native Values Mapping
It is regarded as wildly inappropriate by some First Nations to map Native values. Attempting to determine appropriate buffer zones for spiritual sites, for example, is incredibly difficult if not impossible to do. Putting dollar signs on Aboriginal spirituality and deciding what is worth or not worth protecting about a spiritual site is seen as culturally offensive. This process forces the conformity of Aboriginal people to non-Aboriginal ways.

Reluctance to Share Values
This category is closely related to confidentiality. Many First Nations people, especially Elders, are not comfortable divulging information to outsiders or their agencies. Sometimes this even applies to others within the First Nation community itself. More than a confidentiality issue, it is related to sharing core cultural values with non-Natives against their better judgement. Often it is seen that traditional information in the wrong hands can lose its value or can be used against the original knowledge holder.

Lack of Trust
Distrust of the system and the people who wish to extract values from First Nations is a major barrier to effective Native Values Mapping exercises. The lack of trust may be historical, or it may be based on previous personal experience such as having witnessed values destroyed in timber cutting operations despite their earlier identification for protection purposes. Gaining trust and building relationships takes time. The forest management planning exercise does not allow for such time, nor does it specifically require lasting positive relationships. One MNR official observed that the forest management planning process requires a Native Values Map, not a relationship with the First Nation.
Cultural Differences
Closely related to the cultural inappropriateness of the Native Values Mapping exercise for many First Nations is the simple fact that Native and non-Native people have different world views and different ways of validating knowledge. In the values mapping process, for example, there is tension over the credibility of values derived from oral tradition versus those derived from documented sources. In most First Nations, Elders are regarded as credible; if they state that something has value, then it is generally accepted by the community as having value. These same Elders’ words are not readily accepted by individuals who come from a different culture, or who have received scientific training and have been taught to devalue this kind of knowledge.

Conversely, First Nations people, especially Elders, are suspicious of the written word or other information not derived from direct experience. First Nations in the values mapping exercise are expected to conform to western standards of verification, or the values identified risk not being accepted. First Nations are required to adapt to a culturally compromising and externally driven exercise. One MNR official pointed out that the forest management planning process cannot accommodate knowledge derived from oral tradition, stating that it has to be put into a “useable” form! There is little evidence of cross cultural understanding in the Native Values Mapping process. This is discussed further in the next chapter.

Summary
A number of issues were raised around Native values protection, some of which (such as confidentiality, defining values and reluctance to share values) were identified by all three response groups. Some issues were recognized as problematic by one response group and not by the others (e.g. lack of resources, lack of trust). Clearly, cultural differences play a major role in the identification and protection of Native values.

RESPONSE CATEGORY #5: THE POTENTIAL OF ABORIGINAL PARTICIPATION TO CONTRIBUTE TO FOREST MANAGEMENT PLANNING

As noted in previous chapters, Aboriginal participation in sustainable forest management is a criterion for sustainability. Furthermore, Aboriginal values and knowledge are identified as part
of sustainable forest management (CCFM 1998). Ontario’s process itself indicates Aboriginal participation as an indicator of sustainability. This Response Category deals with the perceptions among the response groups as to what the participation of Aboriginal people does to improve sustainability.

Table 7.13 below lists major categories of potential contribution highlighted by respondents from the three response groups. Beside each contribution a “Yes” is placed under each response group by whom the contribution was brought up. The lack of a “Yes” does not necessarily mean that the contribution was not considered relevant by that response group, but that this contribution was not raised by any of the interviewees representing that response group.

Table 7.13. Main types of contributions potentially brought to forest management planning through Aboriginal participation, as raised by interviewees from the three response groups.

<table>
<thead>
<tr>
<th>Contributions</th>
<th>Response Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First Nations</td>
</tr>
<tr>
<td>Unique knowledge or perception</td>
<td>Yes</td>
</tr>
<tr>
<td>Specific information, such as medicinal plants,</td>
<td>Yes</td>
</tr>
<tr>
<td>moose calving areas, etc.</td>
<td></td>
</tr>
<tr>
<td>Forest history</td>
<td>Yes</td>
</tr>
<tr>
<td>Source of new or more information</td>
<td>Yes</td>
</tr>
<tr>
<td>Native Values Mapping</td>
<td>---</td>
</tr>
<tr>
<td>Local, on-the-ground knowledge: not Native specific</td>
<td>---</td>
</tr>
</tbody>
</table>

**Unique Knowledge/Perception**

It was generally acknowledged that Aboriginal people have a unique perspective that can provide balance to other views. First Nations were attributed with a philosophy of stewardship and caretaking of the forest. As a result of living on the land for a long period of time, First Nations have knowledge, views and experience that non-Natives do not have. First Nations perspectives are viewed as having the potential to keep the others in check.
Specific Information
First Nations are viewed as being able to provide highly specific information about the forest ecosystem, its wildlife, and about activities such as fishing and gathering medicines. First Nations live close to the forest and have information about the forest that would be challenging to acquire otherwise.

Forest History
First Nations are seen as having knowledge of how the forest developed, including significant events in its history (e.g. fires). They have lived in the same area longer than anyone else and have much of this knowledge.

Source of New or More Information
First Nations are perceived as sources of new information/insights on different aspects of the forest. Due to their unique perspectives, they bring up issues that had not previously been considered.

Native Values
First Nations contribute Native “values” which are required in the planning process. The current role of Native people in the planning process is to identify Native values.

Local Knowledge/Field Knowledge
This contribution is not regarded as Native-specific, but consists of information that informed local persons might bring to the planning team that is not known except locally.

Summary
Although First Nations are recognized as making some kind of unique contribution to sustainable forest management planning, there are unresolved issues among some planning participants about the validity of Aboriginal contributions because they are not regarded as quantifiable. The science based nature of forestry creates barriers to accepting new types of knowledge, especially where these are difficult to verify on scientific terms. It was also mentioned that it is difficult to
accept and implement First Nations contributions where they contradict conventional forestry.

RESPONSE CATEGORY #6: DEFINITIONS OF TRADITIONAL ECOLOGICAL KNOWLEDGE

Although there is no consensus on the definition of Traditional Ecological Knowledge (TEK), it commonly refers to knowledge of the land held by Aboriginal people (Berkes 1999, 1993; Johnson 1992). It is part of Canadian national policy direction that this knowledge be included in forest management planning. Canada is a signatory to international agreements to this affect (Higgins 1998, Smith 1998). Values mapping has been identified as a “mechanism” for the inclusion of TEK in forest management planning in Ontario (Brubacher and McGregor 1998). This section provides highlights and descriptions of what the respondents understand TEK to be. Later in this section, comments are presented on the inclusion or exclusion of TEK in forest management planning at the field level.

First Nations

First Nations respondents explained that TEK is not an easy concept to explain, but it does not mean that one does not know it. Some First Nations respondents are still in the process of learning about TEK, although they were able to offer views on its characteristics and utility in the forest management planning process. The term TEK was unfamiliar to some First Nations as this term was not referred to at the community level. Other terms mentioned interchangeably with TEK include: Elders’ knowledge, traditional knowledge and knowledge of the land. Table 7.14 represents the characteristics attributed to TEK by First Nations respondents as well as the potential sources of such knowledge.

<table>
<thead>
<tr>
<th>Characteristics of TEK</th>
<th>Sources of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• broad and holistic</td>
<td>• Elders</td>
</tr>
<tr>
<td>• spiritual</td>
<td>• Oral Tradition</td>
</tr>
<tr>
<td>• land based (forest, animals, medicines, weather)</td>
<td>• Creator</td>
</tr>
<tr>
<td>• living the knowledge, everyday, being part of it</td>
<td>• Experiential</td>
</tr>
<tr>
<td>• includes world view, ethics, code of conduct</td>
<td>• Living/Part of living</td>
</tr>
<tr>
<td>• based on practical experience</td>
<td></td>
</tr>
<tr>
<td>• collective knowledge</td>
<td></td>
</tr>
</tbody>
</table>
Industry

Some industry respondents, although familiar with the term TEK, did not know what it meant from a First Nations point of view. They tended to take a very scientific view of TEK and relate it more often than not to ecological processes.

Table 7.15. Characteristics and sources of TEK as explained by industry respondents.

<table>
<thead>
<tr>
<th>Characteristics of TEK</th>
<th>Source of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• knowledge of the land, plants, wildlife, etc.</td>
<td>• Elders</td>
</tr>
<tr>
<td>• traditional life</td>
<td>• Living in an Area</td>
</tr>
<tr>
<td>• observations of ecosystem change</td>
<td></td>
</tr>
<tr>
<td>• Native values</td>
<td></td>
</tr>
</tbody>
</table>

MNR

MNR respondents had some difficulty in trying to define TEK. Some admitted to not knowing what TEK was, but indicated that they were interested in it.

Table 7.16. Characteristics and sources of TEK as explained by MNR respondents.

<table>
<thead>
<tr>
<th>Characteristics of TEK</th>
<th>Source of Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>• community based</td>
<td>• Elders</td>
</tr>
<tr>
<td>• handed down knowledge, informally communicated</td>
<td>• Historical (oral tradition)</td>
</tr>
<tr>
<td>• Native values</td>
<td>• Learn it from custodians of TEK</td>
</tr>
<tr>
<td>• land and resources (e.g. medicines)</td>
<td>• Passed on from one generation to the next</td>
</tr>
<tr>
<td>• knowledge of ecosystems</td>
<td></td>
</tr>
<tr>
<td>• has predictive capacity</td>
<td></td>
</tr>
<tr>
<td>• experiential, ongoing and holistic</td>
<td></td>
</tr>
<tr>
<td>• includes management</td>
<td></td>
</tr>
<tr>
<td>• collective knowledge</td>
<td></td>
</tr>
</tbody>
</table>

Summary

There are similarities and differences among response groups in terms of characteristics and sources of TEK. Common to all three groups is the identification of Elders as a source of TEK. Industry representatives tended to take a narrow view that was limited to ecological or physical environmental factors. MNR had a much broader view of TEK than industry representatives. MNR views were still not nearly as broad as First Nations views, which tended to be all encompassing and inclusive of spirituality (a feature absent from descriptions offered by the other two response groups).
RESPONSE CATEGORY #7: THE POTENTIAL CONTRIBUTION OF TEK TO FOREST MANAGEMENT PLANNING

Table 7.17 below lists major categories of potential TEK contribution highlighted by respondents from the three response groups. Beside each contribution a “Yes” is placed under each response group by whom the contribution was brought up. The lack of a “Yes” does not necessarily mean that the contribution was not considered relevant by that response group, but that this contribution was not raised by any of the interviewees representing that group.

Table 7.17. Main types of contributions potentially brought to forest management through the use of TEK, as raised by interviewees from the three response groups.

<table>
<thead>
<tr>
<th>Contributions</th>
<th>First Nations</th>
<th>MNR</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of Native Values</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Forest Management and Planning</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Better Protection of Forest and Values</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ecosystem Change/Historical Information</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Source of New or More Information</td>
<td>Yes</td>
<td>Yes</td>
<td>---</td>
</tr>
<tr>
<td>Knowledge of Environment/Ecology</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Identification of Native Values
TEK can help identify Native values on the landscape.

Forest Management and Planning
TEK is seen as making a contribution to social aspects of forest management planning. TEK offers a balance of a social nature in contrast to the more technical nature of many areas of forest management planning. TEK is viewed as offering a cultural perspective which the planning process should incorporate.
**Better Protection of Forest and Values**

Due to the more conservative and protective philosophy associated with TEK, it offers better protection for forest values and the forest itself.

**Source of New or More Information**

In areas for which there may not be a lot of technical forest-related information (e.g. remote or inaccessible locations), First Nations often have this information. TEK can provide base line data (foundations), as well as information on other uses of forest not unique to Native people.

**Ecosystem Change/Historical Information**

Through living with and using the forest for a long time, First Nations have developed intimate knowledge of the forest and all its changes. TEK can provide insights into forest development which can contribute to forest sustainability (e.g. through better understanding how to protect and maintain the forest).

**Knowledge of the Environment/Ecosystem**

TEK includes knowledge of wildlife, plants, fires, the landscape, and many other aspects of the forest. TEK is viewed as being a physical knowledge base associated strongly with the land upon which it is derived.

**Summary**

Despite differences in describing characteristics and sources of TEK, all three response groups were remarkably similar with respect to views on the potential contribution of TEK to forest management planning. The next section addresses the actual *practice* of the incorporation of TEK into forest management planning.

**RESPONSE CATEGORY #8: DEGREE OF ASSURANCE THAT FOREST MANAGEMENT PLANNING CURRENTLY INCORPORATES TEK**

As noted earlier, Aboriginal knowledge of the land, or TEK, is expected to contribute to sustainable forest management planning. Broad policy statements provide direction in this area. However, what happens on the ground may differ markedly from such direction. This section
provides brief descriptions of perceptions among the response groups as to the actual accommodation or incorporation of TEK into forest management planning in Ontario. Responses in Tables 7.18, 7.19, and 7.20 below are each divided into two columns: the "Yes" column indicating an affirmative in terms of respondents' perceived incorporation of TEK into forest management planning. The "No" column indicates that the respondent perceives TEK as not being incorporated at this time. In each of the "Yes" and "No" columns, reasons for the respondents' perceptions are given.

First Nations

Table 7.18. First Nations respondents' perceptions of the current incorporation of TEK in Ontario forest management planning processes.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reasons for perception:</strong></td>
<td></td>
</tr>
<tr>
<td>• The planning process can deal with TEK (e.g. incorporate forest history, methods of harvest)</td>
<td>• Not incorporated or desired in planning by MNR and industry officials.</td>
</tr>
<tr>
<td>• TEK is used for values identification</td>
<td>• There is resistance to TEK</td>
</tr>
<tr>
<td>• TEK is used for &quot;Area of Concern&quot; planning</td>
<td>• TEK cannot be integrated with forest management planning</td>
</tr>
<tr>
<td>• TEK is used informally but not formally</td>
<td>• Only science is viewed as valid; TEK is ignored and rejected (deliberately excluded)</td>
</tr>
<tr>
<td>• TEK is used but not used well</td>
<td>• No place for it at this time, especially spiritual aspect of TEK.</td>
</tr>
</tbody>
</table>

For the most part, First Nations respondents felt that TEK has a potential contribution to make and to some extent is being incorporated into forest management planning. There are, however, a number of barriers which either prevent its incorporation or limit its effectiveness. The major barrier mentioned is the devaluing of TEK in relation to western science. Elders are not taken seriously because they are not scientists, although they are regarded as experts in their communities. World view, cross cultural and language issues also serve as barriers. Forestry professionals have a difficult time communicating with Elders or TEK holders and vice versa. Some First Nations respondents also stated that TEK cannot be integrated, or at least some aspects of it will be difficult for planning process to accommodate. It was mentioned that the best way to incorporate TEK into forest management planning is through relationship building.
and interaction between First Nations (knowledge holders, etc.) and forest management planners.

Industry

Table 7.19. Industry respondents' perceptions of the current incorporation of TEK in Ontario forest management planning processes.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reasons for perception:</strong></td>
<td><strong>Reasons for perception:</strong></td>
</tr>
<tr>
<td>• Forest management planning can incorporate TEK, but is not well done</td>
<td>• Forest management planning does not address TEK</td>
</tr>
<tr>
<td></td>
<td>• Planning is not designed to deal with TEK</td>
</tr>
<tr>
<td></td>
<td>• TEK is not emerging during the process</td>
</tr>
</tbody>
</table>

The major issues described by industry respondents is the value of TEK in comparison to western science. It was stated that if TEK and science are not in agreement then there will be conflict. It was felt that TEK has a potential contribution to make to forest management planning, yet it is rarely used. Like the First Nations respondents, it was felt by some industry respondents that the best way to incorporate TEK into forest management planning occurs through interaction during the course of ongoing communication and discussion, without the pressure of timelines and any real conscious effort.

MNR

Table 7.20. MNR respondents' perceptions of the current incorporation of TEK in Ontario forest management planning processes.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reasons for perception:</strong></td>
<td><strong>Reasons for perception:</strong></td>
</tr>
<tr>
<td>• TEK is incorporated informally not formally</td>
<td>• TEK has not emerged yet</td>
</tr>
<tr>
<td>• TEK is used for value identification</td>
<td>• TEK is new to the forest management planning process and is hard to deal with</td>
</tr>
<tr>
<td>• TEK and Native values are incorporated; planning changes are result of this input</td>
<td>• Not aware of TEK and don’t understand its potential</td>
</tr>
<tr>
<td></td>
<td>• forest management planning is not designed to deal with TEK, only Native values</td>
</tr>
<tr>
<td></td>
<td>• Uncertain whether Native people really have TEK or managed their resources</td>
</tr>
</tbody>
</table>

Among MNR officials it was recognized that TEK would be a valuable knowledge base to incorporate into forest management planning, but that this is generally not occurring. It was felt that there is an opportunity for TEK in forest management planning, but not in a formal process,
except perhaps in Native Values Mapping. A dominant theme which emerged among MNR respondents is that Native Values Mapping is designed for the acquisition of Native values, not for incorporating TEK, although some recognized a relationship between TEK and Native values. TEK was also felt to be difficult to understand, access and then apply, due to its nature (intangible and hard if not impossible to map). Similar to both First Nations and industry responses is the view that the best way to incorporate TEK into forest management planning is through building relationships, gaining trust, and developing rapport. This can be achieved through informal means, and, with First Nations representatives on the planning team, is bound to happen.

Summary
Aboriginal contributions to forest management planning are recognized by all three response groups. However, the perceived contribution by MNR and industry tends to focus on Native values. This was not the most significant contribution identified by First Nation representatives. The perceived degree of Aboriginal knowledge incorporation into forest management planning varies among the response groups. TEK is generally not used in forest management planning in Ontario, despite its perceived potential. In fact it was noted that the forest management planning process is not accommodating to TEK, except in the form of Native values (although as noted earlier there are problems with the effectiveness of this process as well).

In the next chapter, analysis and interpretation will examine why these similarities and differences in perceptions exist among the three participant groups.
CHAPTER EIGHT
INTERPRETATION AND ANALYSIS

INTRODUCTION
This chapter provides analysis and interpretation of the issues related to Native Values Mapping and Traditional Ecological Knowledge described in the previous chapter. In keeping with the Grounded Theory approach, further collapsing of response categories is undertaken in the search to determine the core variables which will best assist in explaining the data. In this chapter, analysis of the data reveals patterns and themes that run throughout the response categories. The themes emerge directly from the data and the relationships among them become evident.

Again in keeping with Grounded Theory, a literature review was conducted according to the emerging themes. Related literature was drawn from the fields of Environmental Studies, Native Studies, Geography (mapping and cartography), Traditional Ecological Knowledge and Forestry. This literature is reflected upon to assist with the analysis and interpretation.

The 5 major themes into which categories are grouped in this chapter are:

1. The Relationship Between Native Values and TEK
2. Native Values in Forest Management Planning
3. The Representation of Knowledge in the Mapping Process
4. Native Values Protection
5. Lack of Understanding of Aboriginal People

THEME #1: THE RELATIONSHIP BETWEEN NATIVE VALUES AND TEK
Although the two concepts are not the same, there is a close relationship between Traditional Ecological Knowledge (TEK) and Native Values in the Ontario forest management planning process. To explore the relationship between TEK and Native values more fully, a brief history of TEK and Native values is presented.
Traditional Ecological Knowledge

At national and international levels, as well as in the Ontario forest sector, TEK is currently a recognized term in the move towards increased forest sustainability. However, its precise meaning, role and application remain elusive at both the policy and operational levels. There have been attempts to gain an appreciation of TEK application in forest management in Canada, but for the most part, despite the strong statement made in the National Forest Strategy in 1992 and later in 1998, little has actually been achieved. Noteworthy exceptions include:

- The completion of two National Aboriginal Forestry Association (NAFA) reports specifically dealing with TEK and forest management in Canada. (Unfortunately, both reports reveal disappointing findings.)
- The Clayoquot Sound Scientific Panel (1995) promoted the integration of scientific knowledge and TEK in an attempt to establish standards for sustainable forestry.
- The Indigenous Perspectives in Forestry Education Workshop (BCFCSN 1997) at the University of British Columbia addressed the issue of incorporating Indigenous world view and knowledge into forestry education.
- The inclusion of TEK issues in various forestry forums in the last few years (see, for example Veeman et al. 1999).

The state of TEK incorporation into forest management planning in Canada is summarized in two NAFA reports: Bombay (1996a), and Brubacher and McGregor (1998).

The paper by Bombay (1996a) recognizes and promotes the importance of the potential contribution of TEK to sustainable forest management. Five Canadian case studies are presented as examples. Current national and international interest in these matters is described, and there is a discussion of issues around defining Aboriginal forest based ecological knowledge, as well as applying TEK to forest management. Principles and protocols for using this knowledge are developed and a paradigm shift in how forests are used is called for. Despite a growing recognition of TEK in mainstream society, the report finds that:
• the application of TEK in Canadian forestry is in its infancy
• the actual impact of TEK on forest management in Canada remains almost nil.

The 1998 report (Brubacher and McGregor 1998) further refines and assesses the term TEK. It observes that TEK is not a discrete knowledge base but is inseparable from the people who hold it. The report documents the growing support for the recognition of TEK in Canada (in policy and in the courts). It explores a variety of mechanisms for incorporating TEK in federal and provincial forest management frameworks, as well as in Aboriginal controlled forest management regimes. It provides a preliminary, informal evaluation of these mechanisms and identifies and describes key related issues and barriers. The report questions the notion of "integration" of TEK into forest management planning and introduces an alternative, the idea of "co-existence" between TEK and mainstream forest management regimes.

Despite the growing popularity of TEK in environmental and resource management in Canada, it remains relatively unexplored "on the ground". In terms of theory, there has been some rethinking and questioning of the underlying assumptions regarding the incorporation of TEK in Canadian forest management. This is largely due to growing dissatisfaction with the actual practice (or lack therefore of) of TEK in forest management regimes (McGregor in press, and 1999b; Stevenson 1999).

The last two decades have seen an increasing interest in Aboriginal views of the environment, particularly in relation to the concepts of sustainability and sustainable development (AFN and ICC 1991, Clarkson et al 1992, Corsiglia and Snively 1997, Gadgil and Berkes 1993, Inter Press 1993, LaDuke 1997, Low 1992). This stems from the recognition that Aboriginal people and their knowledge can significantly contribute to local, regional and global sustainability based on long standing sustainable relationships with their environments (Berry 1988, Cajete 1993, Knudston and Suzuki 1992, Martinez 1998). The recognition of the potential contribution of Indigenous peoples and their knowledge to sustainability began to manifest itself in various international commissions, conferences, protocols and conventions. For example, the
Brundtland Report (WCED 1987), the 1992 UNCED Conference, and the 1992 Convention on Biodiversity all make explicit recognition of Indigenous people and their knowledge (Higgins 1998, Scientific Panel 1995). Coupled with the recognition of Indigenous people and their knowledge is the realization that alternative knowledge systems are required to assist with the environmental challenges the global community faces; science and technology alone cannot effectively resolve these issues (Draper 1998, Johnson 1992). Moreover, some thinkers have argued that science and technology and their supporting ideologies are in fact the cause of many of the environmental challenges faced by humanity (Berry 1988, Mander 1991, Suzuki 1992). In fact, some thinkers state that Aboriginal people should be given a leadership role in helping to resolve challenges (LaDuke 1997, 1994). Here in Canada, interest in TEK has also increased substantially in recent years. TEK is now emerging as a field of study, complete with theory, research approaches, models and potential applications.

History of TEK in Canada

A comprehensive description of the history of TEK is beyond the scope of this thesis (see Berkes 1999 and 1993, and Johnson 1992 for summaries). It is important to note, however, that TEK use in Canada actually began before the emergence of the formal field of study. Two prominent examples stand out:

- The Berger Inquiry (into the MacKenzie Valley Pipeline issue) gave significant weight to evidence presented in the form of what we might now call TEK. “When the Berger Inquiry was being conducted, no one considered it a quest for traditional knowledge. However, the transcripts show a valuable collection of knowledge about wildlife, land and traditional practices throughout the Mackenzie Valley” (Roberts 1996, 113).

- The Inuit Land Use and Occupancy Project was the first of its kind in Canada. Initiated by the Inuit Tapirisat of Canada for the purposes of pursuing and negotiating a land claim, the project supports the fact that the Inuit have used and occupied their vast territory (1.5 million square miles) since time immemorial, continue to do so now and will continue to do so in the future. The project incorporated Inuit philosophy, values and
attitudes toward the land, as well maps to indicate land use. Like the Berger Inquiry, the term TEK was not formally used in this study, yet it too revealed a tremendous wealth of traditional ecological knowledge of the Inuit (Freeman 1993, 1976).

Although not formally recognized as TEK, Indigenous environmental/ecological information was being collected and documented for various reasons in Canada prior to the explosion of the field in 1980’s. The main reason for Aboriginal people sharing their knowledge was to protect their interests, including their land and the assertion of their rights via land claims (AFN 1995, Poole 1998, Roberts 1996). To a large extent, the reasons for sharing this knowledge with external interests remain the same.

Since this time, the concept of TEK has found meaning in a number of applications other than traditional land use and occupancy studies. TEK is being expressed in various areas of environmental assessment and resource management, including: wildlife, forestry, fisheries and endangered species. Despite this, the meaning, theory and practice of TEK advanced little in the first two decades, and it has been only been in roughly the last 5 years that significant challenges to the mainstream concept of TEK have come forth, influenced by the increasing dissatisfaction among Aboriginal people with the misuse of their knowledge by external interests (see AFN 1995, McGregor 1999b, Roberts 1996, Stevenson 1999). There has also been a backlash against TEK, particularly since in some mainstream processes such as environmental assessment in the north, where it has gained a secure foothold (see, for example, the position offered by Howard and Widdowson 1997 and 1996, and responses by Berkes and Henley 1997, and Stevenson 1997a).

In theory, the recognition of Aboriginal contributions to sustainability is generally well intentioned. It is the practice and application (or lack thereof in some cases) that has come under scrutiny. Despite the interest in TEK, there is little to show for it on the ground and Aboriginal people throughout Canada are becoming increasingly dissatisfied with this state of affairs. This will be explored more fully later in this section.
Defining TEK: What does it mean?

Despite the interest in TEK by environmental managers, policy makers, academics, consultants, environmentalists, and Aboriginal communities themselves, the meaning of TEK remains both elusive and controversial. There is no commonly accepted view of the term TEK. An in-depth analysis of the issues around defining TEK is beyond the scope of this dissertation, and has begun to be systematically examined in other texts (e.g. McGregor, in press, and 1994; Procter 1999). For the purposes of this thesis, some of the basic issues in defining TEK are presented.

Non-Aboriginal Views

Below are presented brief definitions from a dominant or mainstream perspective. The most commonly heard views of TEK tend to be variations of Martha Johnson’s (1992) description in which TEK is defined as:

...a body of knowledge built up by a group of people through generations of living in close contact with the nature. It includes a system of classification, a set of empirical observations about the local environment, and a system of self-management that governs resource use. The quantity and quality of traditional environmental knowledge varies among community members, depending upon gender, age, social status, intellectual capability, and profession (hunter, spiritual leader, healer, etc.). With its roots firmly in the past, traditional environmental knowledge is both cumulative and dynamic, building upon the experience of earlier generations and adapting to the new technological and socioeconomic changes of the present. (p. 4)

Fikret Berkes (1999, 8) defines TEK as, “...a cumulative body of knowledge, practice and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment.”

Nancy Doubleday (1993, 41) suggests that it is:

...a collective understanding attained over long periods of time, in particular places, of the relationship between a community and the Earth. TEK may encompass spiritual, cultural and social aspects as well as substantive and procedural ecological knowledge. TEK may also include customary rules and laws, rooted in the values and norms of the community to which it belongs.
In turn, Douglas Nakashima (1993, 99) calls TEK simply, "...the knowledge of Native people about their natural environment."

Beyond simply offering definitions of TEK, many non-Native scholars, researchers and environmental managers have presented details on what they see as the major characteristics of TEK. Prominent examples are summarized in Table 8.1.

Table 8.1. Characteristics of TEK as presented by non-Native scholars.

<table>
<thead>
<tr>
<th>Author</th>
<th>Characteristics of TEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkes 1999</td>
<td>- cumulative body of knowledge, beliefs and practice</td>
</tr>
<tr>
<td></td>
<td>- evolving</td>
</tr>
<tr>
<td></td>
<td>- transmitted culturally</td>
</tr>
<tr>
<td></td>
<td>- concerns itself with relationships among living beings and the environment</td>
</tr>
<tr>
<td>Feit 1998a, 1998b, 1988</td>
<td>- refers to TEK as local knowledge</td>
</tr>
<tr>
<td></td>
<td>- includes knowledge, values and practice</td>
</tr>
<tr>
<td></td>
<td>- informed and affirmed spiritually</td>
</tr>
<tr>
<td></td>
<td>- part of world view, society and culture</td>
</tr>
<tr>
<td></td>
<td>- continuous re-creation - can be recently developed</td>
</tr>
<tr>
<td></td>
<td>- informs management systems</td>
</tr>
<tr>
<td>Grenier 1998</td>
<td>- innovative, broad and holistic; includes all aspects of life</td>
</tr>
<tr>
<td></td>
<td>- local, unique, cumulative, dynamic, gendered</td>
</tr>
<tr>
<td></td>
<td>- all community members have TEK</td>
</tr>
<tr>
<td></td>
<td>- transmission is rooted in culture</td>
</tr>
<tr>
<td></td>
<td>- includes process for acquisition and application as well knowledge base</td>
</tr>
<tr>
<td>Stevenson 1996</td>
<td>- specific environmental knowledge</td>
</tr>
<tr>
<td></td>
<td>- ecosystem relationships</td>
</tr>
<tr>
<td></td>
<td>- code of ethics</td>
</tr>
<tr>
<td></td>
<td>- accommodates change and innovation</td>
</tr>
<tr>
<td></td>
<td>- broad social, economic and spiritual dimensions</td>
</tr>
<tr>
<td></td>
<td>- various levels to TEK</td>
</tr>
<tr>
<td></td>
<td>- includes management</td>
</tr>
<tr>
<td>Doubleday 1993</td>
<td>- collective, social, cultural, spiritual and ecological</td>
</tr>
<tr>
<td></td>
<td>- customary rules, values and laws</td>
</tr>
<tr>
<td></td>
<td>- relationship between people and environment</td>
</tr>
<tr>
<td></td>
<td>- gained over a long period of time</td>
</tr>
<tr>
<td>Hunn 1993</td>
<td>- human ecology</td>
</tr>
<tr>
<td></td>
<td>- traditional (enduring adaptation to specific places)</td>
</tr>
<tr>
<td></td>
<td>- knowledge of the natural environment</td>
</tr>
<tr>
<td></td>
<td>- transmission requires use of the traditional language of holder</td>
</tr>
<tr>
<td></td>
<td>- values and beliefs</td>
</tr>
<tr>
<td></td>
<td>- culturally transmitted</td>
</tr>
</tbody>
</table>
Aboriginal Views

Aboriginal perspectives vary by nation and cultural group, although there are common themes that run throughout. In some cases the language used is similar to that of western academics, as Aboriginal people have increasingly had to use the dominant language and terminology in order to communicate (AFN 1995). At the same time, this practice is being challenged by some parties with the result that alternative Aboriginal descriptions are emerging. Following is a sampling of Aboriginal views of TEK.

Elder Annie Catholique states that, “When the government people talk about land, I find it very funny, talking about all the things we use, all the things we survive on, like animals and caribou and those things. When I think about land, I think about the Great Spirit” (Catholique in Raffan 1993, 49). According to Gleb Raygorodetsky (1997), knowledge is inseparable from the land. He states that:
The term “Land”...is not restricted to the physical environment only. It has a much broader meaning, used by indigenous people to refer to the physical, biological and spiritual environments fused together. The closest scientific equivalent of the “Land”, taken without its spiritual component, is “ecosystem”. (p. 14)

Raygorodetsky also observes that, “Spiritual and ethical values have been woven into this knowledge, creating a system that has guided the people and helped them survive” (p.14).

Taiake Alfred (1999b, 9) states, “The Indigenous belief, reflecting a spiritual connection with the land established by the Creator, gives human beings special responsibilities within the area they occupy as indigenous peoples, linking them in a ‘natural’ way to their territories.”

Aboriginal workshop participants in Roberts (1996, 114) explain that:

Traditional knowledge is an accumulated body of knowledge that is rooted in the spiritual health, culture, and language of the people and handed down from generation to generation. It is based on intimate knowledge of the land, water, snow and ice, weather and wildlife, and the relationships between all aspects of the environment. It is the way people travel and hunt. It is a way of life and survival.

Traditional knowledge is practical common sense, good reasoning, and logic built on experience. It is an authority system (a standard of conduct), setting out rules governing the use and respect of resources, and an obligation to share. For example, it tells people that they do not have the right to hunt all animals of a species, as in wolf kill programs. The wisdom comes in using the knowledge and ensuring that it is used in a good ways. It involves using the head and heart together. Traditional knowledge is dynamic, yet stable, and is usually shared in stories, songs, dance and myths.

Table 8.2 summarizes the main contributions of Aboriginal authors on the concept of TEK.

Table 8.2. Characteristics of TEK as presented by Native researchers.

<table>
<thead>
<tr>
<th>Author</th>
<th>Characteristics of TEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brant-Castellano (in press)</td>
<td>-personal, oral, experiential, holistic, dynamic</td>
</tr>
<tr>
<td></td>
<td>-conveyed in oral tradition</td>
</tr>
<tr>
<td></td>
<td>-derived spiritually, through oral tradition and empirical observation</td>
</tr>
<tr>
<td></td>
<td>-TEK is still intact, and reinforces Aboriginal identity and values</td>
</tr>
<tr>
<td>Source</td>
<td>Key Points</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>McGregor (in press)</td>
<td>-inclusive, dynamic, holistic</td>
</tr>
<tr>
<td></td>
<td>-accepts and accommodates other knowledge systems</td>
</tr>
<tr>
<td>McGregor 1999b</td>
<td>-embedded within a world view</td>
</tr>
<tr>
<td></td>
<td>-do not have to necessarily define it for outsiders</td>
</tr>
<tr>
<td></td>
<td>-knowledge is inseparable from the people</td>
</tr>
<tr>
<td></td>
<td>-not just a &quot;knowledge base&quot;, it includes the process to acquire it and then to share it</td>
</tr>
<tr>
<td></td>
<td>-need to challenge the term TEK</td>
</tr>
<tr>
<td>Alfred 1999a, 1999b</td>
<td>-spiritual connection to land established from Creator</td>
</tr>
<tr>
<td></td>
<td>-local</td>
</tr>
<tr>
<td>Ransom 2000, 1999</td>
<td>-introduces concept of &quot;co-existence&quot; as an appropriate method for working with TEK</td>
</tr>
<tr>
<td></td>
<td>-fundamentally different from western forms of environmental knowledge</td>
</tr>
<tr>
<td></td>
<td>-collective and living knowledge/science with ancient roots</td>
</tr>
<tr>
<td>Lickers 1997</td>
<td>-need to challenge the term TEK</td>
</tr>
<tr>
<td></td>
<td>-replace with Naturalized Knowledge System</td>
</tr>
<tr>
<td>Raygorodetsky 1997</td>
<td>-spiritual, biological and physical environment are inseparable</td>
</tr>
<tr>
<td></td>
<td>-ethical value system</td>
</tr>
<tr>
<td>Good Striker 1996</td>
<td>-spiritual origin; based on relationship to and instructions from Creator</td>
</tr>
<tr>
<td></td>
<td>-world view level - beliefs, practices and attitudes</td>
</tr>
<tr>
<td></td>
<td>-sustainable, in and of itself</td>
</tr>
<tr>
<td></td>
<td>-rules and practices</td>
</tr>
<tr>
<td></td>
<td>-oral knowledge</td>
</tr>
<tr>
<td></td>
<td>-not homogenized; each culture's TEK is different</td>
</tr>
<tr>
<td>Workshop participants in (Roberts 1996)</td>
<td>-people, knowledge, and values are inseparable</td>
</tr>
<tr>
<td></td>
<td>-accumulated body knowledge of the people</td>
</tr>
<tr>
<td></td>
<td>-rooted in language, spirituality, culture and health</td>
</tr>
<tr>
<td></td>
<td>-way of life (survival)</td>
</tr>
<tr>
<td></td>
<td>-has rules, codes of conduct, ethics, must be used in a &quot;good way&quot;</td>
</tr>
<tr>
<td></td>
<td>-includes management</td>
</tr>
<tr>
<td></td>
<td>-using head and heart together, wisdom</td>
</tr>
<tr>
<td></td>
<td>-includes Aboriginal laws (and taboos)</td>
</tr>
<tr>
<td></td>
<td>-inclusive, collective, held by all community members, some people's knowledge more extensive than others</td>
</tr>
<tr>
<td></td>
<td>-holistic, dynamic, experiential</td>
</tr>
<tr>
<td></td>
<td>-intergenerational, innovative</td>
</tr>
<tr>
<td></td>
<td>-experts are people who practice TEK (not academics)</td>
</tr>
<tr>
<td>LaDuke 1994</td>
<td>-culturally and spiritually based way of relating to ecosystems</td>
</tr>
<tr>
<td></td>
<td>-minobinaatiiwin or &quot;good life&quot;</td>
</tr>
<tr>
<td></td>
<td>-world view level, principles</td>
</tr>
<tr>
<td></td>
<td>-observation is critical</td>
</tr>
<tr>
<td></td>
<td>-local, sustainable</td>
</tr>
</tbody>
</table>
**Differences in Meaning**

In many cases there are significant differences between the views of the term TEK held by academic researchers who work in the field of TEK and the views of Aboriginal people themselves. Table 8.3 highlights similarities and differences between Aboriginal and non-Aboriginal views of TEK so that these can then be related to the data found with respect to Ontario's forest management planning process.

Table 8.3. Similarities and differences between Aboriginal and non-Aboriginal perceptions of TEK.

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>-recognition of broad implications of TEK, including spiritual, social, cultural aspects, as well as ecological</td>
<td>Aboriginal view</td>
</tr>
<tr>
<td>-recognition that it is a body of knowledge, accumulated over time</td>
<td>-these “aspects” are part of an integrated whole, inseparable from the knowledge itself</td>
</tr>
<tr>
<td>-viewed as experiential</td>
<td>Non-Aboriginal view</td>
</tr>
<tr>
<td></td>
<td>-possible to focus on or separate out “ecological” aspects from the broader cultural and social framework</td>
</tr>
<tr>
<td>-recognition that the knowledge is held collectively,</td>
<td>Aboriginal view</td>
</tr>
<tr>
<td>although different people have more comprehensive or specialized knowledge</td>
<td>-TEK is not homogenous; it differs with different cultures in meaning and practice</td>
</tr>
<tr>
<td>than others (e.g. Elders)</td>
<td>Non-Aboriginal view</td>
</tr>
<tr>
<td></td>
<td>-although local differences are recognized, TEK is an externally-defined concept and therefore tends toward homogeneity</td>
</tr>
<tr>
<td>-recognition that spirituality is part of TEK</td>
<td>Aboriginal view</td>
</tr>
<tr>
<td></td>
<td>-TEK is understood to be derived from spirit (e.g. the Creator) and is therefore inseparable from spirituality</td>
</tr>
<tr>
<td></td>
<td>Non-Aboriginal view</td>
</tr>
<tr>
<td></td>
<td>-spirit regarded as important but not as a direct source of TEK</td>
</tr>
<tr>
<td>-recognition of relationships to the land, environment, ecosystem, animals</td>
<td>Aboriginal view</td>
</tr>
<tr>
<td>and people</td>
<td>-focus on relationship to Creator</td>
</tr>
<tr>
<td></td>
<td>Non-Aboriginal view</td>
</tr>
<tr>
<td></td>
<td>-focus on ecological processes</td>
</tr>
<tr>
<td>-transmission is cultural (e.g. oral tradition)</td>
<td>Aboriginal view</td>
</tr>
<tr>
<td></td>
<td>-TEK as inherently sustainable</td>
</tr>
<tr>
<td></td>
<td>Non-Aboriginal view</td>
</tr>
<tr>
<td></td>
<td>-TEK as contributing to sustainability</td>
</tr>
</tbody>
</table>
Another way of looking at the differences between Aboriginal and non-Aboriginal views of TEK is to state that Aboriginal views of TEK are "verb-based"; that is, action-oriented. TEK is not limited, in the Aboriginal view, to a "body of knowledge". It is expressed as a "way of life"; it is conceived as being something that you do. Non-Aboriginal views of TEK are "noun-" or "product-based". That is, they tend to focus on physical characteristics. TEK is viewed as a thing rather than something that you do. Aboriginal views of TEK are inclusive of non-Aboriginal views, but tend to be broader in scope and more holistic. The focus is not solely on the physical aspects, such as the natural environment. TEK is also viewed by Aboriginal people to be inherently sustainable and spiritual. Non-Aboriginal scholars and researchers see TEK as "contributing" to sustainability, and that spirituality is an aspect of TEK.

One of the most significant differences between Native and non-Native views of TEK is the fact that Aboriginal people view the people, the knowledge and the land as a single, integrated whole. They are regarded as inseparable. As Roberts (1996, 115) points out:

Capturing a single aspect of traditional knowledge is difficult. *Traditional knowledge is holistic and cannot be separated from the people.* It cannot be compartmentalized like scientific knowledge, which often ignores aspects of life to make a point. However, traditional knowledge parallels scientific knowledge. (emphasis added)

The data from the research with planning participants in the forest management planning process in Ontario reflect the above findings. Aboriginal views of TEK are broad, and include spirituality, world view and a way of life. Industry views tend to focus on "ecological" aspects (similar to Lewis 1993, Nakashima 1993, and Richardson 1993). MNR views depict TEK as

| -recognition that TEK consists of more than a knowledge base, but also values, beliefs, ethics, and systems of management | Aboriginal view |
| -TEK is a particular way of life, a "good life" or "good way" |
| -moral aspect to TEK |
| Non-Aboriginal view |
| -TEK is a knowledge base, a tool which can be used to contribute to desired outcomes, e.g. sustainability |

| -recognition that TEK is inclusive, dynamic, and innovative | Aboriginal view |
| -TEK as inseparable from the people |
| -part of a larger system of people, Creation etc. |
| Non-Aboriginal view |
| -TEK can be extracted and transferred |
broad, but tend to be noun-based (similar to Doubleday 1993, Johnson 1992, and Wolfe et al. 1992). MNR views can be regarded as falling somewhere in between Aboriginal and industry views.

Such differences can be attributed to world view. Aboriginal peoples’ way of life is based on spirituality. A lifetime is spent enhancing and maintaining appropriate and sustainable relationships with the Creator and all of creation. This is the essence of Indigenous science. Aboriginal people are reluctant to reduce TEK to simply “ecological” aspects. Aboriginal views tend to move in the opposite direction to western trained researchers, scientists and scholars; that is, toward wholeness (pulling it together rather than taking it apart to understand it).

In addition to the difficulty of defining TEK are the complications involved in applying it in forest management operations. The data from this research reveals that despite support from all three response groups for the incorporation of TEK, precious little of it is currently utilized. It is generally felt that Aboriginal knowledge or TEK can contribute positively forest management, but for the most part this is not occurring. Possible reasons for this situation are explored below.

**Barriers to the Utilization of TEK**

There are a number of barriers to the use of TEK in forestry, as well as other areas of resource management, which have been identified in the literature. Respondents from all three groups in this study also identified barriers to the use of Aboriginal knowledge. In this section, barriers identified through a review of relevant literature will be compared with the results of the research to determine patterns and trends.

**Non-Aboriginal Researchers’ Views**

Barriers to the incorporation of TEK in environmental and resource management in Canada have been explored by a number of researchers and scholars. Many of the barriers are long standing and have not been adequately addressed. Many are systemic and will require substantive restructuring of existing relations between Aboriginal and non-Aboriginal society in Canada in order to be resolved. Table 8.4 presents a summary of barriers raised by non-Native researchers.
Non-Native Perspectives on Barriers to TEK Use

<table>
<thead>
<tr>
<th>Potential barriers include:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• western scientists’ skepticism of TEK and inability to accept TEK as valid</td>
</tr>
<tr>
<td>• ethnocentrism</td>
</tr>
<tr>
<td>• erosion of TEK through assimilation of Aboriginal people into western culture</td>
</tr>
<tr>
<td>• holders of knowledge are not considered “traditional” by external interests</td>
</tr>
<tr>
<td>• TEK is disappearing rather than changing or evolving</td>
</tr>
<tr>
<td>• lack of resources, as well as appropriate methods, for documenting and utilizing TEK</td>
</tr>
<tr>
<td>• difficulties in trying to reconcile two very different world views</td>
</tr>
<tr>
<td>• cultural barriers and misunderstanding</td>
</tr>
<tr>
<td>• subordination of TEK to western science due to political power imbalance</td>
</tr>
<tr>
<td>• utilization of western methods to collect, verify and validate TEK</td>
</tr>
<tr>
<td>• language and translation issues: western or scientific terminology may not reflect the meaning of the information shared</td>
</tr>
<tr>
<td>• oral tradition/transmission difficult for non-Aboriginal people to understand</td>
</tr>
<tr>
<td>• not knowing the right questions to ask or the proper way to approach knowledge holders</td>
</tr>
<tr>
<td>• disciplinary and methodological barriers between natural and social scientists attempting to work together on TEK issues</td>
</tr>
<tr>
<td>• expectation that Aboriginal people should conform and adapt to western scientific methods but not vice versa</td>
</tr>
<tr>
<td>• use of TEK to provide “data” to state-run system that adheres to western scientific management paradigms</td>
</tr>
<tr>
<td>• lack of will and capacity to accept TEK by state managers, scientists, etc.</td>
</tr>
<tr>
<td>• TEK is considered too exotic to be useful, or out of date, not modern</td>
</tr>
<tr>
<td>• Aboriginal people are too “primitive” and “unscientific” to have worthy knowledge</td>
</tr>
<tr>
<td>• inappropriate application of TEK</td>
</tr>
<tr>
<td>• TEK collection may not benefit the Aboriginal people involved and may in fact prove harmful to them</td>
</tr>
<tr>
<td>• lack of researcher and scientist training for this area of study/research (technically and cross-culturally)</td>
</tr>
<tr>
<td>• lack of recognition that TEK is part of a larger and distinct cultural and social framework</td>
</tr>
<tr>
<td>• TEK is decontextualized, commodified and sanitized into forms that conform to the dominant agenda</td>
</tr>
<tr>
<td>• TEK is misrepresented and in some cases exploited and thus Aboriginal people are reluctant to share it</td>
</tr>
<tr>
<td>• TEK is viewed as unscientific, non-quantitative, anecdotal</td>
</tr>
<tr>
<td>• Spiritual aspect of TEK is viewed with suspicion</td>
</tr>
</tbody>
</table>

Non-Aboriginal views of barriers to TEK use can be summarized in the following quote (Nakashima 1990, 23):

Herein, however, lies the environmental scientist’s dilemma. Traditional knowledge, in spite of its evident strengths, corresponds poorly with Western intellectual ideals of “truth.” In our society, the acceptable norms of intellectual development have been rigidly institutionalized. University degrees, journal publications, conference presentations are the milestones which mark our narrow “path to knowledge.” Guided by these inflexible norms, environmental scientists
reject the traditional knowledge of Native hunters as anecdotal, non-quantitative and amethodical. Unable to overcome a deeply engrained and ethnocentric prejudice against other ways of "knowing", they turn their backs on a source of data of exceptional utility to EIA.

Nakashima refers specifically to TEK in Environmental Impact Assessment, arguably the area where most of the TEK work in Canada is being applied. Nakashima's analysis holds true, however, for other resource management arenas, including forestry, as described in the literature and as found in this research. Nakashima's words were written a decade ago. Unfortunately, the attitudes that underlie the unsuccessful application of TEK in environmental and resource management still exist and have even amounted in some cases to a backlash against it (see Howard and Widdowson 1997, 1996).

Aboriginal Views

Aboriginal views of barriers to applying TEK in environmental or resource management regimes have been documented by both non-Aboriginal and Aboriginal people. Table 8.5 represents a summary.


<table>
<thead>
<tr>
<th>Aboriginal Perspectives on Barriers to TEK Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential barriers include:</td>
</tr>
<tr>
<td>• Aboriginal and non-Aboriginal definitions of TEK differ (external definitions are imposed)</td>
</tr>
<tr>
<td>• discomfort with the western scientific tendency to control and interfere with nature</td>
</tr>
<tr>
<td>• cross cultural barriers and misunderstanding</td>
</tr>
<tr>
<td>• difficulty trying to communicate TEK to people and systems focused on western scientific method, and who do not share Aboriginal traditions, experience, or values</td>
</tr>
<tr>
<td>• non-Aboriginal people are skeptical of TEK; it is not taken seriously or valued (even if it is collected)</td>
</tr>
<tr>
<td>• TEK and scientific knowledge are not regarded as equal in state systems; TEK is trivialized</td>
</tr>
<tr>
<td>• lack of involvement of Aboriginal people in research and decision making</td>
</tr>
<tr>
<td>• not enough time or money to conduct studies properly</td>
</tr>
<tr>
<td>• lack of understanding of western terminology (language barriers)</td>
</tr>
<tr>
<td>• outsiders only want certain aspects of TEK, do not wish to include &quot;laws&quot; or &quot;taboos&quot;</td>
</tr>
<tr>
<td>• &quot;ownership&quot; of TEK (studies, maps, etc.) should remain with the people</td>
</tr>
<tr>
<td>• abuse of TEK has made many Aboriginal people reluctant to share it, uncertain of how it will be used</td>
</tr>
<tr>
<td>• outsiders often don't work with or contact the right people (the ones who actually have the knowledge)</td>
</tr>
<tr>
<td>• outsiders do not ask the right questions or don't record information properly</td>
</tr>
<tr>
<td>• outsiders don't seem to have the time or patience to listen carefully and understand what is being shared</td>
</tr>
</tbody>
</table>
fly in and fly out ("one shot deal") approach to TEK research is inappropriate
local community should benefit from sharing TEK
Aboriginal people feel they are "forced" to conform to dominant culture
documenting and gathering TEK does not fit well with the tight time frames of external interests
TEK is used to "legitimize" unsustainable outside interests
TEK is not accepted or regarded as valid because it not expressed in written form
Representation of TEK in non-traditional forms is often met with skepticism from Aboriginal people
especially the holders of knowledge.
lack of recognition of the relationship between TEK and Aboriginal rights
refusal of governments to recognize rights of Aboriginal people
during TEK research process, Aboriginal people are treated as objects of study rather than partners
models for incorporation of TEK into environmental and resource management regimes are flawed
western resource use paradigms are a poor fit for Aboriginal resource use paradigms
loss of TEK transmission to younger generations within Aboriginal communities, due to colonization
cannot practice TEK due to alienation from or destruction of much of their traditional territory
rejection of spirituality as a core element of TEK
TEK can be used against Aboriginal people

Kemp and Brooke (1995, 27) summarize Aboriginal views of the main barriers to meaningful consideration of TEK in environmental and resource management as follows:

The most important lesson learned from the Nunavik experience is that indigenous peoples must first and foremost control their own information. It has also become clear over the years that the knowledge base of indigenous peoples is vital, dynamic and evolving. Merely “collecting” and “documenting” indigenous environmental knowledge is in fact counter-productive. These knowledge systems have been under serious attack for centuries, and the social systems that support them have been seriously undermined. However, indigenous peoples must not just support “salvage” operations of what now is often referred to as “a rapidly disappearing knowledge base”. It is not just a question of recovery and recording indigenous knowledge; it is one of respect and revitalization. This information has to remain current and not be considered a relic of the past. Indigenous peoples must also insist that their knowledge not be reduced to an interesting research topic for western science to explore.

The literature reveals many similarities between Aboriginal and non-Aboriginal views of barriers to the incorporation of TEK in resource management. Some concerns are unique to Aboriginal people because they are the people from whom TEK is sought. This situation is complicated by the unequal distribution of power which characterizes Aboriginal/non-Aboriginal relations in Canada. Brubacher and McGregor (1998, 14) discuss this power imbalance in relation to forest management in Canada, noting that:

Further compounding the distance between these understandings is the fact that dialogue around TEK takes place on the basis of a largely dis-empowered
Aboriginal minority talking to the dominant culture, in the language of the dominant culture and within the existing institutional frameworks that govern forest management.

Healey (1993, 21) adds to this, suggesting that:

It is difficult to separate political aspects of the relationship between the custodians of traditional ecological knowledge and those who wish to have access to that knowledge from legal, ethical and economic dimensions. A consequence of this situation is that the relationship between traditional communities on the one hand and researchers, sponsors of research and development, and consumers of insights gained from traditional ecological knowledge on the other is generally a very unequal one. Power is concentrated on the side of researchers, sponsors and consumers, whether the power is political, economic or even military. More often, at least in the contemporary world, the power relation is muted, masked, and benign; but not less unequal for all that.

This unequal power relationship and its impact on the utilization of TEK in resource management, including forestry, is recognized by others such as Chapeskie (1995), Johnson (1992), Lukey (1995), and Stevenson (1997b). This topic will be discussed further in Chapter 9.

Relationship to the Research

Many of the concerns described in the literature were also identified by the respondents during the research conducted for this dissertation. Not surprisingly, descriptions of the barriers to the effective incorporation of TEK into forest management planning in Ontario mirror those found in other management regimes throughout the country, among many different Aboriginal cultural groups and resource managers (Feit 1998, Lalonde 1993, Winds and Voices 1999). The research reveals that respondents generally see TEK as not being well incorporated (where it is incorporated at all) in forest management, mirroring the findings of reports highlighted earlier (Brubacher and McGregor 1998, Bombay 1996a). Although respondents for the most part recognize the value and importance of TEK in forest management planning, there is generally a lack of understanding as to how to achieve its practical application. When it comes down to whether forest managers are willing to actually incorporate TEK at the operational level, support for the use of TEK dwindles as the knowledge of how to do this decreases (it is not outlined specifically in the Forest Management Planning Manual).
Non-Native views of TEK in Ontario forest management planning focus on the acquisition of Native values. As noted in the previous chapter, this is not the significant contribution of TEK to forest management planning from an Aboriginal perspective; it is merely an aspect of it. This point was raised by Aboriginal respondents in this study, and mirrors the trends identified in the literature. Aboriginal and non-Aboriginal criticisms of the practice of TEK note that only those parts of TEK deemed relevant are extracted for use in resource management regimes, rather than applying the knowledge as a whole (AFN 1995, Roberts 1996, Stevenson 1999).

Some Aboriginal participants stated they believe that TEK is not incorporated in forest management planning because of an outright refusal to do so; exclusion is often perceived as deliberate.

Some respondents stated that the forest management planning process cannot accommodate TEK as it is not designed to do so. This view was not shared by all. It is important to realize, however, that if one perceives the forest management process as unable to involve TEK, then there is little motivation for attempting to achieve this. The existence of this view is perhaps surprising from a process perspective, in light of the province’s desire for Aboriginal participation as indicated in the Manual and as identified in indicators of sustainability. This finding may reveal deeper underlying attitudes that cloud perceptions of TEK and its potential. Wolfe et al (1992) explored the underlying systemic bias against TEK in state controlled resource management systems. Dominant resource management paradigms are based on western scientific knowledge taught in universities and professional schools across the country. Rejection of TEK in resource management may be a direct result of the bias developed through focusing on learning from this purely western point of view. Wolfe et al. (1992, 2) write:

Scholars, scientists and managers are trained in this system, and become increasingly bound into its mode of thinking the longer they pursue formal education. Consciously or unconsciously they subscribe to the scientific knowledge paradigm and utilize an analytical mode of thinking. Consequently they are highly constrained in their ability to recognize other systems of knowledge generation, modes of thinking or resource management, and are limited in their ability to give any credence to the validity of other systems.

This attitude toward TEK and some deeply rooted attitudes toward Aboriginal people in general
will be explored later in this chapter. These two aspects are very much related.

Of importance for the moment is the view of the relationship between TEK and Native values (and Native Values Mapping) that is revealed in the research findings. TEK is understood to represent the overall knowledge base of Aboriginal people, as well as the process for its acquisition. It is viewed and experienced by Aboriginal people as being inseparable from who they are as a people. However, the actual research and practice of TEK in Ontario’s forest management planning process is reductionist, tending to focus on only those aspects that are of interest to resource managers. While Native values are desired and required by the Forest Management Planning Manual, TEK as a whole is not, at least not directly. As noted earlier, TEK informs native values (if the mapping is conducted by Aboriginal people) and thus can potentially be conceived of as being “required” in the forest management planning process. TEK is thus indirectly required except in cases where Aboriginal people are not involved in the Native Values Mapping process.

As is noted in the section on barriers to utilizing TEK in resource management, it is difficult to incorporate TEK when the dominant resource management framework is designed only to accommodate minor fragments of it, and this only if planners and managers from the dominant system have the will and capacity to do so. Although it is common practice in environmental and resource management regimes, including Ontario’s forest management planning process, the literature suggests that it is inappropriate to view and seek TEK in this reductionist way.

Summary
The trends and patterns that emerge from the data collected in the course of this research parallel the findings in the literature. TEK is hard to define. The fact that community based Aboriginal people struggle with its meaning illustrates that TEK is a product of an externally driven and defined process. TEK is a confusing concept because of the terminology itself and the lack of consensus on its meaning. It is also used interchangeably with other terms. First Nations are beginning to work with mainstream terminology, yet in many ways continue to resist it. For example, some First Nations individuals, organizations and communities reject the use of the
term TEK in favor of other terms (Lukey 1995; McGregor in press, and 1999b). All respondents in this study had heard of TEK and believed it should have meaning in forest management planning, but had some difficulty in explaining what TEK was. Surprisingly, they could nonetheless describe characteristics of TEK and comment on sources of it. They could also suggest potential applications for TEK in the forest management planning process.

As noted, most respondents recognized that there is a role for TEK in forest management planning, but that this has not been translated into action. Some respondents argue that the forest management planning process cannot accommodate TEK. Trends and patterns that emerge from both the data and the literature review suggest that dominant resource management paradigms and their proponents are inherently ill equipped to deal with TEK. The forest management planning process was not designed to deal with broader issues, particularly issues of importance to Aboriginal people such as governance, land claims and recognition of Aboriginal and treaty rights. The problems that plague the TEK field in general are consistent with the issues identified in the research.

The relationship between “Native values” (as required by the Manual) and TEK is of relevance to the forest management planning process. TEK does not equal Native values. It is more appropriate to describe the relationship as follows: TEK informs the identification and protection of Native values in the forest management planning process. A notable commonality between the two concepts is that they are both externally derived. Both terms and their definitions originate from outside Aboriginal people and their communities. This has occurred in spite of the fact that Aboriginal people are regarded as the “holders” of this coveted knowledge. Aboriginal people find themselves reacting in acquiescence to these concepts in order to retain some influence over matters that concern them. Aboriginal acquiescence should not be construed as being the same as sharing. Aboriginal and non-Aboriginal views remain fundamentally worlds apart.

The next section explores in more detail the issue of Native values as a sub-component of TEK in Ontario’s forest management planning process.
THEME #2: NATIVE VALUES IN FOREST MANAGEMENT PLANNING

Native Values: Predetermined and Pre-defined
Despite the direction given in the EA Board Decision as to the nature of Native values, along with its later incorporation into the Forest Management Planning Manual, identifying Native values remains an ambiguous undertaking. In order to identify Native values, an understanding of their nature is required. It becomes important for resource planners and managers charged with the responsibility of protecting these values to try and define what Native values are as well as to identify their location. Different values, such as wildlife and cultural values, have different prescriptions for protection. There is a need to know what kinds of values exist if appropriate guidelines are to be applied or protection is to be negotiated during “area of concern” planning.

In Ontario’s process, however, forest management planners have been preoccupied largely with the location only of Native values, having had pre-defined notions of what these values are. This has led to situations where, if a Native community does not participate in Native Values Mapping, a Native Values Map is completed anyway without their input. Pre-defined “Native values”, already institutionalized in the forest management planning process, are used to guide this procedure. In such cases, Native values are defined as “cultural/heritage” values (the most familiar definition to most forest management professionals), and are included as part of the non-timber forest values which must be considered in forest management planning. In this way, Native values can be relatively easily addressed using existing guidelines. The “Timber Management Guidelines for the Protection of Cultural Heritage Resources” “provide a technical framework for the protection and conservation of cultural heritage resources on Crown land during timber management planning and subsequent implementation processes” (MNR 1991, i). These guidelines significantly influence perceptions among forest planners and managers as to what Native values are supposed to be and how these values are to be protected.

Native Values Mapping already existed within the institutional framework before Aboriginal people were even approached to identify their values for protection. Thus, forest management planning teams certainly held preconceived ideas about the nature of Native values. As
professionals in timber management, learning to protect cultural/heritage resources has been a part of their education and training. The guidelines for protecting cultural/heritage values utilized in the forest management planning process existed prior to the development and implementation of the Canadian Forest Sustainability Act or the Forest Management Planning Manual.

Once Native witnesses in the EA Timber Hearings expressed concerns over their spiritual, cultural, social and economic ties to the land being disrupted or destroyed by timber management activities, these concerns were automatically categorized by EA Board members and MNR as “cultural/heritage” values and were described as such in the EA Board Decision and the Manual. These predetermined categories for Native values may not express what Aboriginal people meant, but it is what the EA Board and MNR heard and reacted to.

As noted in Chapter 7, there is a definite bias to the perceptions of Native values held by MNR and industry respondents. The view they tend to hold is that Native values are location- and site-specific. Native values are thought to be physical in nature. Where this is clearly not the case, as in identified spiritual and cultural values, they are thought to be representable in physical terms (i.e. able to be located in a physical space). The “Definitions and Categories of Cultural Heritage Resources” section of the Timber Management Guidelines specifically states (MNR 1991, 2):

Where cultural heritage values (i.e. known sites and/or high potential areas containing unidentified sites) are identified, these values must be defined geographically (i.e. associated with a specific location or site) so that they can be properly considered in the timber management planning process. (emphasis added)

This view is not limited to forest management planning; it is found, for example, in the field of heritage conservation. MNR has in fact utilized a definition developed by the Ministry of Culture and Communications. Other acts and regulations apply to protection of cultural/heritage resources in Ontario as well (MNR 1991, iii).
In the Timber Management Guidelines, specific reference is made to Aboriginal peoples: "There may also be in effect Native treaties or federal and/or provincial agreements concerning Native rights which protect and conserve heritage resources. Where these exist, they are to be respected." (MNR 1991, iii). The Guidelines acknowledge Native interests, albeit in an undefined way. However, it is implicitly assumed that whatever concerns Native people may have can be conceptualized as heritage resources and can also be physically located. Definitions located in the glossary section of the Guidelines highlight the location-specific and physical biases of the heritage conservation field and its impact on values protection in forest management planning. MNR (1991, 15) lists the following definitions:

**Heritage Resource:** any places or things of human activities which allows us to describe their way of life. Heritage resources means everything produced by the people of a given geographic area, the sum of which represents their cultural identity. This means their handicrafts, folklore, rituals, tools and equipment, buildings and furnishings, containers, transportation, communications, art, structures, personal artifacts, historical places and events.

**Heritage Resource Value Maps:** maps outlining known sites and high heritage potential areas.

**Value:** in the context of cultural heritage resources and timber management planning, either known cultural heritage sites or high potential areas.

This framework, which has been in place for decades, contained a predetermined notion of "value" for the forestry profession long before the concept called "Native values" emerged from the EA Decision and later came to be required in the Forest Management Planning Manual. The long standing institutionalized notion of value (governed by various Acts and regulations) became the backdrop for MNR's conceptualization and working definition of Native values outlined in the Manual.

In recent years, Aboriginal people have begun to influence the concept of Native values in forest management planning, though little has yet occurred in practice. Native respondents understand and express Native values quite differently, clearly challenging the location-specific bias that forestry professionals and heritage planners bring to the planning process. Native views of Native values include those of MNR and industry (and the heritage conservation field) but are conceptualized differently and are not limited to these views.
The contrast between Native and non-Native views is of course not surprising. The concept of "heritage resources" is a product of a western world view, while Native conceptions are based on Aboriginal world view. As Fixico (1996, 30) reminds us:

Actually, Native Americans and Anglo-Americans differ considerably in their value systems....Basic values of Indians and Whites differ to the point of being polar opposites in intellectualization and cultural world views. This incongruence accounts for both their separate cultural development and their clash over natural resources.

Fixico's observations can certainly be applied to the Native Values Mapping exercise.

In some respects, MNR has tried to accommodate Native views of Native values as revealed in their description of Native values in the research. The views expressed go beyond the standard definition given to Native values in the Timber Management Guidelines, EA Board Decision and the Manual. However, MNR views remain unsatisfactory to First Nations. First Nations feel pressured to limit their values to specific locations during the process of Native Values Mapping.

In this study, Native respondents also experienced some difficulty when asked to explain what is meant by Native values. There are some possible reasons for this. All First Nations respondents in this research have had some experience trying to identify Native values and/or produce a Native Values Map for MNR. All respondents understand that a Native Values Map is required in the forest management planning process; they also know that MNR has a predetermined idea of what they are looking for. Native people know this and try to work with it, although they still challenge conventional perceptions. Native people are expected to conform to an external agenda and produce a map of values required in a process that they feel does not serve their interests. Native people have to determine what outsiders mean by "Native values" and try to produce these values for them. It is an onerous undertaking for First Nations involved in this exercise. Furthermore, some Native respondents felt that Native people should not have to define their values for the interests of outsiders. In fact, defining rights, knowledge and values for outsiders is commonly met with suspicion by Aboriginal people. "Indigenous people themselves do not regard their knowledge systems as suitable subjects for definition" (AFN 1995, 33).
Native people feel their views of Native values are not taken seriously or are rejected outright. Aboriginal respondents recognize the differences in views of Native values among planning participants and express dissatisfaction with the definition that is imposed upon them.

First Nations respondents are not comfortable with the demands imposed by MNR in the forest management planning process, in particular defining and locating Native values for mapping. There is considerable pressure to meet these demands, in addition to being overtaxed and stressed from the array of issues that confront First Nations on a daily basis (Wolfe 1989). Inability or unwillingness by some First Nations to engage in the Native Values Mapping process has been perceived by MNR as disinterest. This is far from the truth; Aboriginal people have an inherent interest in their traditional territory (AFN 1993). However, it is not expressed in the same way as it would be in non-Aboriginal society in Canada.

There are many reasons for lack of participation by First Nations in western style environmental and resource management systems. Berneshawi (1997, 135), suggests the following: racism and intolerance; location of meetings, differing interpretations of the meaning of words; Aboriginal and treaty rights and colonial experiences, to name a few. Aboriginal reality is poorly understood and assumptions are made about First Nations ability or inability, as well as interest or disinterest in participating in forest management planning (Berneshawi 1997, Wolfe 1989). Furthermore, due to the long history of colonization and oppression of Aboriginal people in Canada which has involved attacks on governance, knowledge, lands, culture, and spirituality (Kemp and Brooke 1995), Aboriginal concern for their land is often expressed as resistance to dominant regimes (LaDuke 1999).

Native Values and Sustainable Forestry
Not only is Native values protection in Ontario’s forest management regime limited in comparison to Native views, but Ontario’s process is restrictive as well in comparison to national policy direction for the realization of sustainable forestry. This is due in part to Ontario’s established guidelines for the protection of cultural/heritage resources that have formed a part of forest planning for some time. Ontario is just in the beginning stages of broadening its focus of
non-timber forest values for the general public. Affording Native values the same breadth of meaning will take some adjustment on the part of MNR. Although the Forest Management Planning Manual addresses the broader non-timber forest values subscribed to in the sustainable forest management lexicon in Canada, this practice does not seem to extend to Native values. This is met with resentment by First Nations respondents, as they feel they are restricted to identifying “cultural/heritage resources” rather than the whole spectrum of values asked of non-Native people. In Ontario, Native people and Native Values Mapping appear to be segregated into a specific forum in the forest management planning process. Native input is sought, but for specific and limited purposes. It is rare at this time for Native input to be sought during all aspects of the planning process and regarding a diverse range of topics. Even if there is Aboriginal representation at the planning team level, Native respondents feel confined to dealing with “Native” issues only, rather than participating in the full spectrum of forest management planning. This practice marginalizes Native input and Native values and is not appropriate if meaningful sustainable forest management is to be achieved in Ontario.

Summary
Different world views are bound to present different values. As Fixico (1996, 32) observes, “how people perceive things, other people, and the environment is relevant to understanding life and how and what one values.” Aboriginal world view, relationship to the land and the knowledge emerging from this way of life is reflected in perceptions and experiences of forest values. A fundamental feature of Native forest values is their spiritual nature. Mainstream non-timber forest values reflect spirituality as well. However, spiritual values as revealed in policy documents such as the National Forest Strategy tend to be presented as a separate value to be considered. Aboriginal spiritual values, on the other hand, form an integral part of every forest value.

With such world view differences, it is not surprising to find that Aboriginal respondents perceive their “Native values” as different from those of non-Aboriginal people. Problems arise when one set of perceptions (the dominant set) is imposed upon the other. Resistance or refusal to participate in imposed processes is not an uncommon response to this situation.
Another major point of divergence between Aboriginal and non-Aboriginal views of Native values is the viability and appropriateness of mapping the values. It is assumed in dominant western forest management that this an appropriate exercise to undertake. The Timber Management Guidelines for the Protection of Cultural Heritage Resources require that the resources be geographically specific and mapped in order to be considered. This view is being challenged by Native people involved in this process who state that some values cannot and should not be mapped. Native Values Mapping exercise itself is the topic of the next section.

**THEME #3: THE REPRESENTATION OF KNOWLEDGE IN THE MAPPING PROCESS**

Like the field of TEK research, the mapping of Indigenous knowledge or values is evolving. At times a highly controversial activity, mapping is a significant feature of planning participants’ experience in Ontario’s forest management planning process. As part of this process, the production of Native Values Maps is required, whether or not this is done with Aboriginal support or participation. This situation has in many instances resulted in conflicting interests between the forest management planners who “require” this knowledge and the Aboriginal people who possess it. This section explores this issue more fully by drawing upon the relevant literature, as well as concerns around Native Values Mapping raised by respondents in the research.

**Traditional Ecological Knowledge and Mapping**

On the topic of Aboriginal views towards mapping, the Assembly of First Nations (1995b, 1) reports that:

> Over the last ten years Indigenous knowledge has become a highly charged topic and proposals to represent it in non-traditional ways are likely to meet with skepticism and perhaps with outright refusals to cooperate on the part of elders and Indigenous communities.

AFN (1995b, 2) continues that:

> Indigenous People may also have a skeptical attitude towards maps, which are often associated with external power sources. Maps have had instrumental value for colonial authorities, for administrative purposes, or are useful for people to find their way through strange territories. But they have generally been redundant
to Indigenous Peoples. It is as though an architect’s drawing is needed for living in one’s own house.

However, under certain circumstances, this antipathy towards maps now appears to be contradicting itself; some Indigenous communities and representative associations have taken to mapping certain elements of their traditional knowledge and practice. This reversal signifies that mapping is now acquiring instrumental value for Indigenous peoples, as part of their strategy for dealing with external interests. (p.2).

Reporting on an international level, Peter Poole (1995a, 1) states that:

In Sarawak, Penan can get arrested for possessing a map. Maps have always been both symbols and instruments of power. After flag raising came the naming of places to express possession for the gratification of distant patrons of exploratory expeditions. Now, a revisionist tendency is reasserting itself: indigenous peoples are using maps to re-name and reclaim their lands. Their maps remain instruments of power, but a creative and restorative power, reflected in these articles about “re-mapping” “power-mapping”, “counter-mapping”, “defending the land with maps”. Bernard Neitchsmann says it aptly: “More indigenous territory can be reclaimed and defended by maps than by guns.”

The decision by Aboriginal people to document TEK in textual formats such as maps is relatively recent. Traditional “land use and occupancy” studies, ongoing in Canada since the 1970’s, still represent this country’s most common form of expressing TEK in cartographic or geomatic form.

Aboriginal people have been “mapping” for thousands of years, and, “had developed a vast geographic knowledge of their homeland and had their own cartographic conception of where they lived” (Nantel 1999, 34). Like TEK, spatial knowledge was shared through oral tradition. As well, Aboriginal maps could be made in snow, campfire ash, or sand; they could be drawn on skin, textiles, birchbark or rock; or could be built three-dimensionally out of available materials (Nantel 1999, 35-36). Oral methods, Poole (1998, 36) writes, could result in, “topography transformed into poetry and songs, stellar reconstructions for celestial marine navigation.” “Everyone in Lutselk’s, it seemed had stories to tell about the Thelon area, and many of the stories were maps in their own right - about how to navigate safely, both physically and spiritually, through an abundant but harsh land” (Raffan 1993, 49). Native maps were thus also created and stored mentally. “Inuit knowledge was of stories and places, lives and experiences
all wrapped in a living landscape of the mind” (Raffan 1993, 56). Raffan (1993, 54) refers to Elders as “spiritual geographers”. Native maps were, and still are, created within a cultural, spiritual and social context.

There is a clear link between TEK and mapping. Robinson and Ross (1997) suggest traditional land use mapping as a way of integrating TEK with forest management planning. TEK is the source of knowledge for mapping. “Whatever the level of technological sophistication, locally-gathered traditional knowledge is conserved as the basic source of information” (Poole1995b, 74). Furthermore, maps represent a certain aspect of Indigenous knowledge (AFN 1995). Many projects are initiated by Aboriginal peoples in Canada in recognition of this. Undertakings which seek to conserve traditions, document knowledge, manage or conserve the environment, or aid in the assertion of rights, involve mapping as a key component (see DCI 1993, McDonald et al. 1997, and Robinson and Ross 1997, for examples). Hrenchuk (1993, 72) stresses the critical link between TEK and mapping:

Land use and occupancy studies also demonstrate both specific and comprehensive aspects of traditional knowledge. Specifically, traditional ecological knowledge is reflected in the data collected concerning particular resources, for example, where and when to find specific game. This information relates both to the relationship of animals and the environment, and to the cultural utilization and transmission of this knowledge. Comprehensively, traditional ecological knowledge is reflected in the delineation of the intimate and extensive knowledge of the topography in which the specific ecological information is held. This is not solely route-finding knowledge, but an expression of the concrete ways in which the animals, land, and community are linked. The notion of occupancy rests on the premise of traditional and continuing knowledge of the land and its resources. This knowledge is inherently ecological in the case of the boreal hunting Cree. (emphasis added)

Native maps, then do not just show data, they demonstrate relationships.

Despite the skepticism of mapping held by many Aboriginal people, maps are also viewed as at least one of the tools which can be used to assist in the assertion or establishment of rights and in the protection of lands (AFN 1995, Gonzalez et al. 1995, Poole 1995a, Robinson and Ross 1997, Walsh 1998). Although maps have been used to colonize and claim Aboriginal territories (Nietschmann 1995), Indigenous people all over the world are now using available technology to
create their own maps which are rooted in TEK and are “far more accurate and detailed” than maps produced in other ways (Gonzalez et al. 1995).

Using TEK as a source for creating maps to assist with reclaiming or asserting rights makes perfect sense. Indigenous people possess knowledge of the land upon which they have lived for thousands of years. The source of information for maps is thus long-standing and reliable. Some Aboriginal people argue that map making based in Indigenous knowledge can represent a form of decolonizing by “being able to protect, determine and decide” (Goes In Centre in Walsh 1998, 33). Maps do represent certain aspects of Indigenous knowledge (AFN 1995, 13). Many Aboriginal groups in Canada initiate cultural revival projects or assert rights which include mapping as a core feature (McDonald et al 1997, Poole 1995c).

Maps, then, can be tools for Aboriginal community empowerment if generated and utilized appropriately. If misused, they can also serve as a tool for oppression and alienation. In Ontario’s forest management planning process, the Native Values Mapping exercise has been criticized by First Nations respondents as being an imposition that may not benefit them.

The Native Values Mapping Process
In the last few years, there have been a number of ways in which Native Values Maps have been generated under the Forest Management Planning Manual. There is little in the way of a consistent methodology in the Manual for acquiring these values. Nor has MNR as an agency developed an appropriate system for doing so. Therefore, this research found a lack of consistency across districts and regions for how values were collected. As reported in Chapter 7, three major categories emerge from the data in terms of how Native values are collected: MNR-collected values; First Nations-collected values: or Consultant-collected values (hired by either the First Nation or MNR). Associated with each method are varying degrees of perceived success. The more direct the involvement of First Nations, the more complete and useful the Native values maps were determined to be by all response groups. Aboriginal collection methods included TEK as a source of knowledge and utilized traditional methods to gather the information (e.g. feasts, pow-wows), although traditional methods were not the only ones used.
Consultants generally tried to use a community-based approach to identifying and documenting Native values, again attempting to utilize TEK as an information source for the values and maps. MNR attempting on their own had the least success with identifying and documenting Native values. The sources for the Native values remain uncertain or unknown even if the community was approached to acquire them; in other words it is unknown whether TEK informed the process or not. Poole (1998, 1995b, 1995c) suggests that if mapping is to benefit Indigenous people or represent their knowledge in any way, Indigenous knowledge must inform the mapping process.

Even when Aboriginal people directly participate in the Native Values Mapping exercise there are still major issues outstanding. Some First Nations respondents expressed dissatisfaction with the Native Values Mapping process, stating that information they shared about Native values was ignored or deliberately excluded. Western resource management systems as well as their managers and planners are generally ill equipped to understand and appreciate sources of TEK as well as their output (the Native Values Maps). This is not uncommon in the traditional knowledge field, as Johnson (1992, 11) observes:

> Of the studies that have been conducted, most have tended to concentrate on a specific topic, such as harvesting or the ecological knowledge of one species. Consequently, a broad overview of the range of environmental knowledge available among aboriginal peoples has not been well documented.

Wolfe et al. (1992, 17-18) add:

> Oral-based indigenous peoples have difficulty communicating their knowledge to systems which are based on literacy, numeracy, and scientific summarizing and differentiating categories. Because orally-based indigenous knowledge systems are designed to incorporate complexity, expand detail, and incorporate rather than eliminate the unexplained and unexplainable, they do not reduce information into condensing or summarizing categories: rather, they seek inclusive groupings with complex internal differentiation.

There are two major forces at work in Native Values Mapping. First, as Johnson (1992) explains, the focus of external managers and planners on acquiring specific information means "other" perhaps more important information to Aboriginal people is ignored or trivialized. Second, as Wolfe et al. (1992) suggest, what external agencies are conceptually asking for, such as discrete categories of information when this is information is perceived and experienced
holistically by Aboriginal people, will tend not to be well expressed or be a "nice fit" within predetermined categories (such as those that exist for Native Values Mapping).

Maps created by external agents are not the "objective", or "impartial" accounts they are often presented to be. They are embedded in a context. "They were constructed by particular individuals educated to see certain things when they walked the land...they consulted with other researchers and, drawing on their own way of naming and knowing the land, prepared their reports" (Forbes 1995, 71).

Critical parts or even whole essences of the information informing Native values are missing, according to Native respondents who participated in the process. The TEK and mapping literature reveals that the same issues plaguing Native Values Mapping in forest management planning affect other environmental and resource management regimes driven by western paradigms. It was specifically stated by some First Nation respondents that MNR does not have the necessary capacity to identify, document and map Native values. They simply do not understand Aboriginal people, nor their world view, well enough to carry out these tasks appropriately.

Another point of contention expressed among all response groups in relation to the process of mapping Native values was the credibility of the source of information. TEK as a source for Native values identification is regarded with suspicion by western trained resource managers. First Nations, on the other hand, regard non-TEK sources with distrust.

Some First Nations respondents, regardless of the final outcome, regard the whole Native Values Mapping process as invalid. They remain critical of the assumption that their values can be mapped. According the Assembly of First Nations, "Indigenous experts continue to criticize outsiders for their apparent assumption that Indigenous knowledge can be defined, codified and mapped" (AFN 1995, 12). While it is agreed the mapping does represent certain aspects of TEK, it should not be confused with actually being TEK. Referring to Chipewyan and Inuit peoples, Raffan (1993, 57) states:
As in Western culture, there is a range of perspectives, and they are changing with a changing world. But the core of traditions of the cultures continue, and in neither has the idea of land become tied to the lines on a two-dimensional land-use map. Land remains the places where the people have been, the stories they have heard and the spiritual connections they feel to an integrated physical, cultural and spiritual universe. It defines them and makes them whole.

Reducing the information shared to merely “representing Indigenous knowledge as a catalogue of facts, some of which may be deemed useful for inclusion in western knowledge systems” (AFN 1995, 6) is offensive to many First Nations people.

The criticisms should not take away from the fact that Native communities can benefit from Native Values Mapping for the purposes of forest management planning (Robinson and Ross 1997). Some First Nations respondents indicated as much, particularly in relation to the movement within Aboriginal communities to revitalize their traditions, cultures and values as part of the larger movement of self-determination. This position is supported as well in the literature (Mecredi and Turpel 1993). In addition, there is the potential for outsiders to assist Aboriginal communities in realizing some of their goals (Forbes 1995, Poole 1995c).

Summary

Within a framework in which Native people can use maps as tools for meeting some of their goals, maps can be a powerful and positive force. Maps can be used for internal community purposes such as education or recording oral history. They can be used to protect and “articulate traditional knowledge” (Poole 1995a, 1). They can also be useful for responding to external pressures and exerting an influence in such matters as land claims and resource development proposals (Robinson and Ross 1997). Whatever the purpose, if the Aboriginal community is to benefit, it is important that, “...the content remains traditional ecological and cultural knowledge and practice” (Poole 1995b, 74). It seems, therefore, reasonable to suggest that under the proper circumstances, Native Values Mapping should potentially be able to assist Aboriginal people in achieving goals in forest management planning. The Native Values Mapping process can be viewed as a potential mechanism for influencing forest management activities on traditional territories.
Native Values Mapping as currently practiced, however, is not readily compatible with the meeting of Aboriginal goals and needs. The existing process needs to be challenged, and more community and culturally based forms of mapping should be considered (see, for example, Aberley (1998) for a description of bioregional mapping). Native Values Mapping as it stands remains preoccupied with meeting the pre-defined requirements of an externally initiated and perpetuated process. This process has been inspired, conducted and directed by non-Aboriginal people in Ontario forest management planning. It seeks to capture, in map form, Aboriginal peoples’ knowledge. The fact that it is an externally driven process with highly specific purposes in mind remains true even if a First Nation chooses to conduct the exercise within their own community utilizing their own knowledge and resources. The values data eventually have to be handed over in suitable form to be utilized in the dominant external framework. The community is coerced into defining their knowledge and values for outsiders who already hold preconceived notions of what their responses should look like. First Nations find themselves struggling to identify values in a process which may or may not recognize those values as valid or credible, as well as attempting to map certain values which may not be appropriately mapped. This is perceived as a loss of control of traditional knowledge, in the form of “values”, to a dominating regime. The whole process of Native Values Mapping is therefore troublesome from an Aboriginal perspective. Native Values Mapping under the Ontario forest management planning framework can easily be viewed as just another way for outsiders to gain more control of traditional lands. Under these circumstances, it is of little wonder that there are objections.

Aboriginal peoples have always been concerned with the protection of their lands, and the treaties reflect this concern. The recent trend in larger society to protect non-commercial or non-timber forest values does not represent a new concept for Aboriginal people. Despite this, national and provincial forest policy frameworks for the protection of unique Native values ignores treaties and Aboriginal rights in favor of a much narrower process. Considerable pressure is applied to Aboriginal people to share their knowledge to meet this new external agenda in order to protect their interests. However, little effort has yet been made to ensure that these values, and the knowledge that informs them, are meaningfully defined and appropriately protected. These issues form the topic of the next section.
THEME #4: NATIVE VALUES PROTECTION

As noted in the previous section, maps appropriately constructed and used represent potentially powerful tools for protecting Aboriginal interests. The purpose of the Native Values Mapping exercise in Ontario is to protect Native values. Failure to define Native values to the satisfaction of either the Aboriginal communities or the forest management planning team risks having those values not being protected.

Steps for the protection of values have been pre-determined, and in fact are institutionalized in the Forest Management Planning Manual through such procedures as mitigation, area of concern planning and issues resolution. Protection of native values also falls under the Timber Management Guidelines for the Protection of Cultural Heritage Resources (MNR 1991). While Native values protection falls under other MNR guidelines for protection of non-timber values (e.g. wildlife, riparian zones), the Timber Management Guidelines are viewed as those most relevant for Native values. The Guidelines outline a planning process for identifying and protecting cultural heritage resources. This process (see Appendix 7 for a schematic representation) involves three major steps (MNR 1991, 7):

a) identify cultural heritage resource values within the management unit (on maps of an appropriate scale).

b) identify areas of concern within areas selected for operations for the five-year term of the plan at a more detailed scale.

c) for the areas of concern, determine specific management strategies for the protection of significant heritage resources.

The Guidelines also outline possible operational strategies for protecting cultural heritage values, summarized in the following points (MNR 1991, 9):

- Reserve the site;
- Modify timber management operations;
- Specify access provisions;
- Conduct normal timber management operations with mitigation measures included in the prescription; or
- Conduct normal timber management operations.
Achievement of Native Values Protection in Ontario’s Process

In addition to these guidelines, some individuals in MNR district offices involve Native people in the design of protection measures for Native values. This tends to occur if the level of Aboriginal involvement has been high; that is, there is active Aboriginal representation on the planning team, often involved during the area of concern planning phase. This scenario produces a higher satisfaction level for First Nations in terms of protecting Native values. In this research, however, even in those cases where First Nations were the most involved, Aboriginal representatives still felt their values were not adequately protected.

Thus, despite the number of guidelines for protection of non-timber values in the Manual and supporting documents, Aboriginal respondents continued to state that their values were inadequately protected. Reasons for this situation (see Chapter 7, Table 7.10) include: some Native values cannot be mapped and only point specific values are afforded some protection; Native values were not protected because they were not understood by planning team members; Native values were not recognized to be Native values, and were either rejected or ignored; and Native people felt that broader, non-point specific values would be destroyed during forest operations because they cannot be mapped.

MNR and industry representatives felt that identified, mapped Native values have been offered some degree of protection. There is clearly a difference in perspective. Issues raised by respondents on the issues of Native values protection are described in Chapter 7 and are summarized as follows: confidentiality, lack of resources, community impacts, defining values, cultural appropriateness of Native Values Mapping, reluctance to share values, lack of trust, and cultural differences. It is generally perceived by Native respondents that MNR does not have the capacity to identify nor collect values; they simply do not know enough about Aboriginal people, their world view and values, to do so. MNR presently lacks the ability to deal with the nature of and protection of Native values. This insight is rather disturbing, as established earlier, because the Native values process (including the definition, collection and protection of Native values) is driven by MNR, yet they are perceived as currently unable to produce success in this area, even in circumstances of comparatively high levels of Aboriginal involvement.
Conceptual barriers to understanding Native values along with the lack of understanding of issues in relation to their adequate protection are prevalent in forest management planning. For example, spiritual values are exceedingly difficult to protect, though everything in the forest is regarded as having spirit by Aboriginal people. The challenge in protecting values is related to mapping and the objection of First Nations people to representing their forest values as “dots on a map”. As noted in the previous section, mapping in and of itself is not an undesirable exercise under an appropriate framework. At this point in time, the Native Values Mapping exercise within the Ontario forest management planning process does not offer this framework. There is much that is lost in the process of mapping Native values, and Aboriginal people are acutely aware of this. The Native Values Mapping exercise ends up presenting someone’s else ideas of what Native values are, rather than what Native people feel their values to be. Forbes (1995, 70) writes:

By naming objects, we organize and make sense of a world that would otherwise be unknown, chaotic. Maps and boundaries, our traces on the land, are ways of illustrating the particulars of naming and knowing, ways of demonstrating spatially what we see conceptually.

Naming the objects of our places is a way of entering into relationships with those places, of making them our own, of creating a home. When we are forced to live in places according to boundaries, maps, and names that are created elsewhere, we in turn become alienated from those places. A more subtle estrangement occurs when outsiders attribute different meanings to the places where we live. This kind of “conceptual trapping”, some argue, now occurs under the guise of economic development and environmental management.

When a concept is enclosed in the context of a radically alien language, something is inevitably “lost in translation.”

In other words, the Native values that the forest management planning team locates on maps and then protects are only the Native values that they themselves see! They fail to protect many values that are important to Aboriginal people.

The research reveals that Aboriginal people feel their values are considered “acceptable” values as long as they do not “tie up a lot of land” slated for logging operations. Under the present system, it is most unlikely that broad-based Native values will ever receive adequate protection as these values will be in conflict with western economic concerns. As (Kimmins 1992)
observes, non-timber values, which many Native values tend to be, are perceived as “constraints” on forest management.

The research also revealed that many First Nations people feel awkward and uncomfortable about indicating appropriate protection measures. Native values, from an Aboriginal point of view, will rarely receive the level of protection they feel is required to maintain the integrity of the values, because forest management planning requirements can be met with inadequate protection measures in place. Ensuring sufficient protection in many cases would involve rewriting the requirements of the planning process. Aboriginal people do not have that kind of say in the overall planning process. As it stands, Native people have to decide what values or parts of values should be protected. Other parts of the value must be left vulnerable to destruction, since the existing process is not capable of protecting all Native values, or even single whole Native values. For example, protecting a ceremonial area includes conserving not the only the “site”, but also the area around the site (including the water and the trees which may have spiritual properties, as well as other plants with medicinal properties, etc.). The area around a specific site is also part of the value, and is required in order to maintain the integrity of the value. The present system, however, only affords protection for the site itself (e.g. by leaving a buffer strip or zone around the site). In this scenario, the value has not been protected from a First Nations perspective because the area around the central site has been destroyed and thus the value will be destroyed as well. There are no more spirits and medicines to keep the value alive. This view is reflected in the literature, in which Aboriginal people state that identifying only small patches of value when the whole forest is valued is inherently unsustainable (Brubacher and McGregor 1998). Logging around a patch is not really protecting the value, and undermines the achievement of sustainable forestry through the protection of forest values.

**Protection of the Knowledge and People who Inform Native Values: Intellectual Property Rights**

A topic that has received little consideration in Ontario’s Native Values Mapping exercise is the issue of protecting the people and knowledge which inform Native values. There is much more to protecting Native values than simple mitigation practices and buffer zones. Confidentiality of
values (their location), for example, has been identified as a serious subject of concern in the forest management planning process. However, in order to adequately protect Native values, the knowledge and people that inform those values must be protected as well. The forest management planning process fails repeatedly in these regards. This issue is described in part by the growing field of "intellectual property rights", a controversial topic internationally and increasingly so in Canada. Discussion of this topic will likely continue to expand as Aboriginal knowledge for external purposes is increasingly sought.

A comprehensive discussion of intellectual property rights is beyond the scope of this thesis (see Posey and Duffield (1996), and RAIF (undated) for more analysis). At issue here, for example, is the observation made that Elders or knowledge holders do not want to share their knowledge. There is also an interest in Aboriginal communities in protecting their Elders from external exploitation. Native people do not want their knowledge used against them, or used to legitimize external agendas. Enrique Salmon (1996, 70) writes:

> Indigenous ecological knowledge is an adhesive of traditional societies. It is not thought of as property but as a gift that maintains culture. Ever since European contact, Euro-American people have appropriated indigenous knowledge at an alarming rate. Such knowledge undergoes changes as it is separated from its source. Both indigenous people and others have yet to fully comprehend the effects of appropriating knowledge. Nor do we understand the potential that a collaboration of separate visions can bring.

With a such a legacy it is little wonder that Aboriginal people are reluctant to share their knowledge. Such abuses have also occurred in Canada in the field of TEK (Roberts 1996). Elders are reluctant to share knowledge for fear of abuse of the knowledge. As well, some knowledge is sacred and so should remain secret (Johnston in Holloway 1994). To protect indigenous knowledge, the people who possess it must be afforded some protection as well (Barsh 1996, Brush 1993, Grenier 1998, McNeil and McNeil 1989). Furthermore, the lands and environment that Aboriginal depend upon must also be afforded protection. Aboriginal knowledge is maintained on the land through management and use. Denying Aboriginal people the rights to use and manage their lands results in a loss of TEK (Barsh 1996). Alienation of Aboriginal people in Canada from their traditional territory and disrupting their relationship to the land is a continuing problem as implied at various points throughout this thesis. In order to
seriously protect Native values, issues of this scope and magnitude must be addressed.

Western society handles and views knowledge in ways that are different from those of Aboriginal people (Brush 1993, Salmon 1996). Knowledge tends to be a commodity in western society and is treated as such. In Aboriginal society, knowledge is a gift and with it come responsibilities. Knowledge, as noted earlier in this thesis, also cannot be separated out from the holder of the knowledge. Aboriginal people need to have control over their knowledge. According to LaDuke (1997), TEK has unique qualities as a knowledge system. She writes (pp.35-36):

Nor is it something an anthropologist can extract by mere research. Traditional ecological knowledge is passed from generation to generation; it is not an appropriate subject for a Ph.D. dissertation. We who live by this knowledge have the intellectual property rights to it, and we have the right to tell our stories ourselves. There is a lot to be learned from our knowledge, but you need us in order to learn it.

As soon as knowledge is handed over to outsiders in the form of text or a map, it becomes vulnerable. It has been separated from both its holder and the traditional controls that govern its appropriate use. It is absolutely critical that Aboriginal people maintain control over their own knowledge, although it can by all means be shared with others. Compounding this problem is the power imbalance that characterizes most current relationships between the seekers of the knowledge and the holders of the knowledge (Brush 1993, McNeil and McNeil 1989).

Summary

Clearly, these issues need to be addressed further in Ontario’s forest management planning process. The production of Native Values Maps frequently represents a critically damaging separation of the knowledge from its holders. Furthermore, it is not just the knowledge itself, but the people themselves and their processes of innovation that require protection in order for Native Values Mapping to be meaningful. Aboriginal knowledge or TEK is not a well understood concept in forest management planning in Ontario. Understanding Aboriginal views of knowledge, its appropriate protection, etc., requires a comprehensive understanding and knowledge of Aboriginal people themselves. This research has revealed a worrisome level of ignorance regarding Aboriginal people, their history, world view, culture and values. An
exploration of this issue is the topic of the next section.

THEME #5: LACK OF UNDERSTANDING OF ABORIGINAL PEOPLE

A major lesson of the Oka confrontation of 1990 for most Canadians was the startling realization of how little they knew about their own history. For many, it was a revelation to learn that the conflict, far from being a flash in the pan, had roots that go deep into our national past - easily to the first meetings between Amerindians and Europeans, and by extension even beyond, if the attitudes that both sides brought with them are included. There was nothing in our standard national histories that prepared Canadians for this. (Olive Dickason 1996, p.7)

...there is a general lack of understanding of how dispossession of land, either through dismissed land claims or land transfers for development and/or resource harvest, has a substantial impact on First Nation communities (Susan Berneshawi 1997, p.121).

There are long-standing, deep-rooted negative attitudes and stereotypes of Aboriginal people in Canada (Francis 1992). The view that Native people are primitive, savage and "low on the evolutionary ladder" is an attitude that has permeated most aspects of Aboriginal/non-Aboriginal relations (Brascoupe 1993, Dickason 1996). The attitudes and stereotypes that characterize Aboriginal peoples as such are extremely difficult to supplant and have shaped contemporary relations (Furniss 1999, McGregor 1997). These attitudes, representations and stereotypes have revealed themselves through public policy and in court decisions, as in McEachern's infamous "nasty, brutish and short" comment about Aboriginal life in the Delgamuukw vs the Crown case in British Columbia (Brown and Vibert 1996, Culhane 1998).

The early patterns of Native and non-Native relations at first contact influence policies to this day (Dickason 1996). Elizabeth Furniss devotes a book to this theme: The Burden of History: Colonialism and the Frontier Myth in a Rural Canadian Community (1999). The fundamental premise of the book is that, "Canada persists as a colonial (rather than postcolonial) society whose culture remains deeply imprinted by the legacy of colonialism" (p.11). A comprehensive historical description of Aboriginal/non-Aboriginal relations, colonization and the resulting devastating impacts on Aboriginal people will not be discussed at length here. There are numerous books on this topic. Examples include Thomas Berger's A Long and Terrible Shadow (1991), Boyce Richardson's People of the Terra Nullius (1993), Getty and Lussier's As Long As
the Sun Shines and Water Flows: A Reader in Canadian Native Studies (1983), J.R. Miller’s Sweet Promises: A Reader on Indian-White Relations in Canada (1991), and Ronald Wright’s Stolen Continents: The New World Through Indian Eyes (1992). The important point to note here is that the history of Native/Canadian relations in Canada and Ontario directly impacts Canadian forest management in relation to Aboriginal people. Moreover, with the lack of understanding of Aboriginal people in general comes a lack of understanding of Aboriginal relationships to the land. Dr. Lorelei Colomeda, writes (1999, 20):

Europeans never really understood the culture they were trying to subjugate nor did they wish to until almost too late. What eluded and continues to elude Europeans was a sensibility, common to Native People, of intimate abiding interconnectedness with nature...Europeans also failed to comprehend the complexities of the relationship between Native People and the diverse presences that comprised their world: mountains, lakes, rivers, trees, birds, animals, and so on. For Native People, the presences inhabiting nature comprise the very center of existence, a great unifying Life Force or spirit. Kinship with all creatures is very real.

The research findings reveal that First Nations respondents believe that non-Native society and its institutions continue to dominate Aboriginal people. Lack of cultural understanding is evident throughout the Aboriginal aspect of the forest management planning process. Aboriginal people and their values are neither understood nor appreciated. As Brascoupe (1996, 356) states, there is a, “lack of understanding of the traditional economy and traditional knowledge of Aboriginal people.” Native values, despite the mandate to “protect” them, are subordinate to the values of dominant society. Chamberlin (1997, 29) adds that, “It was certainly true that many British and Canadian citizens deemed tribal values to be primitive and those who held such values by definition to be either undeveloped or degenerate.” Aboriginal people have good reason to be suspicious; it was not so long ago that the purpose of Aboriginal policy was to get rid of their values, cultures and traditions through various means (Cole and Chaikin 1990, Miller 1996, Pettipas 1994, Waldram 1997).

Throughout the interviews conducted for this research, MNR and industry representatives acknowledged that they do not know much about Aboriginal people, their history, traditions, culture or values. Although this is not a desirable situation by any means, it is not surprising in light of the larger economic, political and cultural framework in which forest management
planning finds itself. As noted earlier, forestry and other resource management sectors emerge from dominant society's scientific framework, not from Aboriginal traditional knowledge. The history of colonialism has created the current state of relationships between the colonizers (the state) and Aboriginal people, particularly in the resource management arena where disputes over land have dominated conflicts for centuries (Berneshawi 1997, Chapeskie 1995, RCAP 1996a, Stevenson 1997b). The incorporation of TEK into forest management planning is regarded as one way to alleviate some of these land conflicts (Bombay 1996c, CCFM 1998 and 1992).

Within the field of TEK, it is recognized that Aboriginal people have managed the water, land and forests they have lived with since time immemorial (Barsh 1996, Berkes 1999, Feit 1998a, Freeman 1992, Nakashima 1990, Smith et al. 1995). However, Aboriginal management systems, although the topic of much research, remain poorly understood (Chapeskie 1995, Roberts 1996). Even less Aboriginal knowledge is actually applied, particularly in forestry (Bombay 1996c, Brubacher and McGregor 1998).

There are many aspects of Aboriginal world view and management systems that are difficult for western trained resource managers to fully understand. Berneshawi (1997, 121) writes:

> Spirituality, relationship to land, and the doctrines of Native thought are generally poorly understood by non-Native people. For many non-Native people it is difficult to understand how the plants and animals, the winds and spirits, the land and sky bind Native people to their land on a spiritual level.

Significant barriers to the incorporation of TEK into resource management are common and traditional Aboriginal management philosophies, principles and practices do not find adequate expression in dominant frameworks. To complicate matters, the long history of colonization has severely compromised or in some cases destroyed traditional forest management. The relationship between Aboriginal people and the land is a close one; when one is destroyed, the other is soon to follow. Stavropoulou (1994, 106) states that, "Unquestionably, the disruption of the relationship between indigenous people and their environment threatens their very existence as a people...." Aboriginal people have always resisted colonialism and being able to resist has been a key feature of Aboriginal existence for some time (LaDuke 1997, Mercredi and Turpel 1993). Cajete (1994, 191) notes that non-Native people often "...underestimate the tenacity and
adaptive ability of Indian cultures.” In recent years there has been a resurgence of Aboriginal nationhood, governance, identity, rights, culture, traditions and values that will continue to gain momentum in the resource management arena (RCAP 1996a). The next section focuses on this revitalization movement among Aboriginal peoples and its relationship to forest management planning and Native Values Mapping.

Revitalization of Aboriginal Communities: Nation-Building and Healing

You thought you knew all the answers, thought you could solve all the problems of the world. You didn’t need us, so you set us up on reservations where we could be kept quiet. And now, suddenly, you realize that maybe we had a few good ideas, that maybe we were on to something in the way we thought about nature. And now you come searching us out, asking “What was it you said about the earth? What exactly are your religious beliefs?” And we say, “We don’t know. We’re all Baptists now.” (Oren Lyons in Forbes 1995, p. 71)

One of the most biting criticisms of Aboriginal people is that they have lost their culture through the process of colonization and assimilation over the centuries. Oren Lyon’s cynical words in the above quote epitomize a common perception of Aboriginal people held by many Canadians. Indeed, there are Aboriginal people who have forgotten the ways of their ancestors. This should not be a surprising phenomenon, as billions of dollars over the centuries has been spent in trying to achieve this goal in Canada. It is also true that many Aboriginal people have not forgotten the lessons of their culture and many more are in the process of reclaiming these traditions. Cajete (1994, 191) writes of this process:

It is true that much has been lost in the wholesale assaults on Indian culture during the past 500 years. But, the cultural roots of Indian ways of life run deep. Even in communities where they seem to have totally disappeared, they merely lie dormant, waiting for the opportunity and the committed interest of Indian people to start sprouting again.

Decolonization and reclaiming nationhood is a powerful movement among Aboriginal people and cannot and should be not ignored in the forest management planning arena. This revitalization or resurgence of Aboriginal nationhood is a crucial movement in Aboriginal communities. It is occurring throughout Canada and yet is not well understood by non-Aboriginal people. The movement is occurring at community (personal or community healing) as well as regional and national levels (nation building). This movement represents an effort to
decolonize and alter the undesirable relationship that Aboriginal people have with non-Aboriginal people (Armstrong 1995a, Charter 1997, Mercredi and Turpel 1993, RCAP 1996b).

Kassi (1996, 77) remarks:

...despite this brutal and sustained assault on our people and on our families and our cultures, we have refused to vanish. Much to the chagrin of those who tried to destroy us, we are still here, and we still have a voice....Our ceremonies and our healers are beginning to re-emerge in my nation now. Our drum is safely kept by the Nestyh Gwich’in. The caribou songs are coming back. These elements of our culture are coming back very strongly. Our young people are reclaiming our sacred ways, and these ways are a vital force in their lives.

Colomeda (1999, 24) adds:

Today, Indian people are relearning and reclaiming the Old Ways from the oral histories of the elders. The return to cultural pursuits, spiritual healing, celebrations of sobriety, and Indigenous ceremonies have impacted in a positive, healing way. Nonetheless, collisions with the dominant culture in North America continue to affect Native Peoples in conflicts over land and sovereignty...

Across Canada today there is a tremendous resurgence of First Nations peoples living out their traditional ways and demanding redress and accountability from those institutions which have caused them to suffer (McNab 1999). This movement is particularly important at the community level and makes the Native Values Mapping process especially crucial. This movement was confirmed by some First Nations respondents as being important in their communities. There is a heightened interest in protecting the integrity of Native values. Thus, it is not just important to protect the value from forest operations; it becomes crucial to be able to access and use the value to assist with the recovery of nationhood that First Nations seek.

However, issues of access and use are not addressed in the Native Values Mapping exercise, nor are they addressed in the establishment of protection measures. Dominant society’s notion of “protection” is “preservation” (as outlined in the Heritage Resource section of the Timber Management Guidelines (MNR 1991)). This stance does not allow for the likely increasing number of Aboriginal people who will wish to access critically important “Native values”.

Summary

This section is perhaps best summarized in the following quote by Winona LaDuke (1997, 25), who states that:
...the perspective of indigenous peoples, is entirely different from that of the dominant society in this country.

Indigenous peoples believe fundamentally in natural law and a state of balance. We believe that all societies and cultural practices must exist in accordance with natural law in order to be sustainable. We also believe that cultural diversity is as essential as biological diversity to maintaining sustainable societies. Indigenous peoples have lived on earth sustainably for thousands of years, and I suggest to you that indigenous ways of living are the only sustainable ways of living. Because of that, I believe there is something to be learned from indigenous thinking and indigenous ways. I don’t think many of you would argue that industrial society is sustainable. I think that in two or three hundred years this society will be extinct because a society based on conquest cannot survive when there’s nothing left to conquer.

The bottom line is that indeed there has been a long history of misunderstandings and sustained attempts to colonize and assimilate Aboriginal people by dominant society. Despite this, there is a movement to try and learn from Aboriginal people the precious knowledge they have managed to maintain throughout. It becomes, then, crucial and more productive to support Aboriginal people in their recovery and their attempts to realize their rightful place in Canada. In light of this, the Native Values Mapping process takes on a new importance; it can either be a help or a hindrance to Aboriginal people.

The next chapter explores possibilities for the emerging relationship that Aboriginal people are forging with Canadians.
CHAPTER NINE
IDENTIFICATION OF CORE VARIABLES

INTRODUCTION
Within the forest management planning process in Ontario, the relationship between Aboriginal and non-Aboriginal peoples (including the institutions that support them) is characterized by an inequitable distribution of power. It is within this framework that Aboriginal participation is sought for the purpose of acquiring Native values as required in the Forest Management Planning Manual. This time-restricted process of defining, identifying, mapping and then protecting Native values creates a contentious situation. Chapters 7 and 8 described problems associated with incorporation of Aboriginal perspectives, knowledge and values into the forest management planning process, despite the desire of many to do so. Key findings were that:

- Western world view is dominant in Canada and therefore is the primary influence on national and provincial sustainable forest policy.
- It is assumed that this new vision of sustainable forest management meets the needs of all segments of society, including Aboriginal people.
- Western world view and Aboriginal world view are fundamentally different, and this is becoming increasingly recognized.
- There is a paradigm shift occurring in forestry which encourages the inclusion of Aboriginal people and their knowledge.
- A broad range of forest values is to be considered in sustainable forest management, including the unique values of Aboriginal people.
- The current forest management policy framework represents the dominant system that is imposed on Aboriginal people. It overrides Aboriginal management regimes and undermines the legitimacy of land claims and the exercise of Aboriginal and treaty rights. It is not neutral or objective.
- Aboriginal people, their culture and knowledge, are poorly understood. This contributes to the presently ineffectual nature of Aboriginal participation in forest management.
- Power imbalance characterizes Aboriginal/non-Aboriginal relations in Canada.
In spite of the problems which all three response groups recognize, there are potential benefits of the Native Values Mapping process to First Nations. In the process of revitalization of Aboriginal society, culture, values and traditions, Native Values Mapping may have a contributing role. For example, one First Nations respondent observed that it was a positive experience to bring the Elders out to community feasts and pow-wows to share their knowledge with other community members (sharing of traditional knowledge). Using the information gathered for education programs in schools or for other uses such as land claims was also considered beneficial. Such positive outcomes from mapping elements of traditional knowledge (such as values) are noted in the literature (Kemp and Brooke 1995; Poole 1998, 1995a,b,c; Walsh 1998). In addition to protecting and reclaiming ancestral lands, indigenous mapping can help advance Aboriginal goals in other areas. Poole (1998, 36) indicates that mapping, “reinforces local awareness of land issues; it draws younger people in as mappers and elders as sources of knowledge; and it localizes cartographic operations previously reserved to distant agencies.” Mapping controlled by and done for Aboriginal people can ensure that traditional knowledge is taken into account in deliberations over resource development. In the right climate, determined by such factors as MNR’s approach to Aboriginal participation and the willingness and capacity of First Nations to participate (influenced in turn by circumstances such as past relationships with outside agencies and the state of other unresolved issues in the community), the mapping process can be beneficial and empowering. With a few inconsistent exceptions, this goal has not yet been realized in Ontario.

To date there has been a high degree of variability among Districts as to the level of “success” or “effectiveness” of Native Values Mapping. Some Districts had little or no Aboriginal involvement in any aspect of forest management planning. Others achieved First Nations involvement at several stages of the process. There is inconsistency across the Districts concerning just how Aboriginal people can and will be involved at the “value gathering” and decision making or planning team levels.

One District produced notably greater satisfaction among First Nations participants. In this instance Aboriginal participation was sought at all levels of the forest management planning
process. First Nations representatives were invited to participate on the planning team (i.e. at the decision making level). Funds were provided to the First Nations to undertake values data gathering on their own.

In some cases the First Nations opted for hiring a non-Native consultant to work directly with them to produce the native values maps. This was helpful in some cases because the goals of First Nations and MNR are divergent in relation to Native Values Mapping. In cases where First Nations felt somewhat satisfied with the values mapping process, it was often the case that a non-Native consultant had served as a bridge between the First Nations and MNR. Consultants chosen by First Nations had years of experience of working with Aboriginal people and were in some cases already known to the community (at least to the leadership). The consultants hired already had knowledge and experience working with Aboriginal people and understood the ways of properly approaching the community leadership and community members to obtain information. Knowledge and skills in this area are particularly critical in cases where the information to be obtained is acquired for external purposes. Furthermore, consultants also understand the requirements of MNR and their mapping process. The consultant tries to bridge the needs of both, by defining, documenting (mapping) and in some cases utilizing or recommending appropriate measures to protect values in a way that MNR understands and the First Nations can live with. Consultants translate information in a form which is palatable to MNR and at the same time remains useful to the First Nation. In some cases consultants hired were already sensitized to the controversial and confidential nature of the work they were asked to do. For some communities without the internal capacity to do the Native Values Mapping themselves, hiring a known, credible and trustworthy consultant worked best. The drawback to this approach is that it does not increase the community's internal capacity for this kind of work to a significant degree. The transfer of knowledge, technology and skills to the community for mapping is uncertain in such situations.

The consultants hired by First Nations attempted to utilize indigenous methods to collect the information. For example, some became involved in hosting feasts and pow-wows in the community to encourage broad based community support. These methods produced the results
required by MNR, and to at least some extent proved useful to the First Nations communities. However, such process are still not community driven, and therefore do not result in the full benefits of a community driven process which seeks to fulfil community aspirations (Poole 1998).

In the area of protection, some District planning teams invited First Nations to participate in determining appropriate protection measures for identified values. In one case, direct Aboriginal involvement in area of concern planning for Native values was undertaken. In this case, First Nations were involved in developing criteria for classes of Native values that required protection. In other cases, First Nations were not involved in determining protection measures for Native values (even if they were involved in Native values collection). The level of Aboriginal involvement considered feasible or appropriate for Native values protection was again inconsistent across Districts.

The widespread inconsistency across the Districts as to how Native Values Mapping was approached has its strengths and weaknesses. It is desirable to have flexibility at the local level to meet local interests and needs. Problems arise when the inconsistency is due to the level of competency (in the area of Aboriginal participation) and the degree of commitment of MNR staff charged with the responsibility of acquiring the Native Values Map. For example, First Nations whose traditional territory falls into two or three MNR administrative boundaries noticed marked differences among Districts in their approach, their level of knowledge, and their willingness to listen and accommodate Aboriginal concerns and issues. Some Districts have staff, including District Managers, who are more receptive or have more experience with Aboriginal people and thus progress can be made. Other Districts either have antagonistic relationships with local First Nations or no relationship at all. Thus, the same First Nations may have to deal with different Districts with opposite approaches at the same time. This can be highly frustrating for all concerned.

MNR also remains disheartened with the lack of consistency across Districts, as they sometimes cannot meet the expectations achieved in other nearby districts. MNR staff report that
insufficient and inconsistent direction is provided centrally to assist with Native values collection and protection. Unfortunately, the inconsistency observed often has to do with MNR's overall capacity to deal with Aboriginal issues, rather than simply with responses to local needs.

There are many factors that can potentially help or hinder the values mapping process. The previous two chapters began to group the experiences of planning participants, as expressed by the respondents in this research, first into “categories of response” and then into broader “themes”. This chapter looks at the final “core variables” which emerge from the data and which underlie and explain the experience of the respondents interviewed in this research. It is the finding of this research that there are two core variables that influence the meaningful participation of Aboriginal people in Ontario’s Native Values Mapping process. These are classified as:

- World View, Spirituality and Native Values; and
- Relationships and Power.

It must be remembered that from an Aboriginal philosophical perspective, all factors and influences are related to every other part of an integrated whole. As an Anishnabe person, it was therefore most difficult to identify and separate out these core variables as the research method requires. Isolating core elements from other aspects was a challenging exercise to undertake!

**CORE VARIABLE #1: WORLD VIEW, SPIRITUALITY AND NATIVE VALUES**

An underlying theme permeating the research process and confirmed by the literature is the fact that Aboriginal and non-Aboriginal people simply have different world views (Cajete 1994, Fitznor 1998, Graveline 1998). The existence of different world views need not translate into conflicts in resource management if both world views are accepted and accommodated. Unfortunately, most if not all state environmental and resource management regimes in Canada do not recognize Aboriginal world view and the knowledge it produces as valid. This knowledge is ignored, de-valued and sometimes deliberately excluded (Berneshawi 1997, Chapeskie 1995, Feit 1998a and 1988, McClenaghan 1999, Wolfe et al. 1992). Past and present
National and provincial forest management policy regimes reflect this attitude. As such, it can be expected that in Ontario’s forest management planning process and the Native Values Mapping exercise it requires, worldview differences will continue to run as a conflicting undercurrent.

This is not an easy problem to overcome under the current system, arising as it does out of the historical oppression of Aboriginal world view in Canada. There is a long and unfortunate history in this country of deliberate attempts to undermine Aboriginal world view and knowledge (Colorado 1988, RCAP 1996b, Tinker 1996). Aboriginal world view remains misunderstood and de-valued as a legitimate expression of relationship to the land, especially in the area of governance and land rights. This means that Aboriginal world view and its core expression - spirituality - continues to be excluded from the discourse on resource management in Canada. Spirituality has emerged in the Aboriginal knowledge or TEK arena, yet remains marginalized and is not applied in any meaningful way. This is not an issue that will disappear any time soon. Aboriginal spirituality is viewed as a fundamental tenet in Aboriginal relations with the land.

RCAP (1996a, 436) reports that:

Some Canadians told us that they find resonance in such insights, because they provide a kind of spiritual content that is often missing from public discourse on land and resource issues. Mavis Gillie of Project North, an inter-church coalition in support of Aboriginal peoples, made this point in her appearance before the Commission:

The chief lesson I think I have learned all these years is that there is a moral and spiritual dimension to the right of Aboriginal peoples to be distinct peoples, their right to an adequate land base and the right to self-government.

I believe that the reason Canada has failed so miserably in the past in its relationship with First Peoples is that it failed to take into account the impact of this moral and spiritual dimension, and we had to better not make the same mistake this time around.

Mavis M. Gillie
Project North
Victoria, British Columbia
22 May 1992

At the core of Aboriginal peoples’ world view is a belief that lands and resources are living things that both deserve and require respect and protection.
McNab (1999,6) adds that, “The primary objective of Aboriginal people is spiritual: to protect the land - Mother Earth - and the waters of Turtle Island. This is a sacred trust, a trust to protect the land.”

Aboriginal spirituality is becoming increasingly recognized as an element of environmental and resource management, yet it is still not accommodated or protected in the manner or extent desired by Aboriginal people. Under the current process, Aboriginal spirituality tends to be reduced to cultural heritage resources (e.g. burial sites). Protection of cultural heritage resources is a matter of policy in Ontario’s forest management planning process. However, as discussed in earlier chapters, protection of spiritual resources is largely based on external western definitions and applications. The research findings indicate that this process is flawed from an Aboriginal perspective. Aboriginal people simply feel that their spiritual values are neither being accommodated nor protected.

**Understanding Aboriginal Spirituality**

A major criticism of conventional resource management is its lack of spirituality. Conversely, a major non-Native criticism of Aboriginal views on resource management is its inclusion of spirituality. How can these two systems of thought be bridged? To start with, an understanding of Aboriginal spirituality is required. This section by no means offers a comprehensive discussion of Aboriginal spirituality (even if such a thing were possible!). However, the quotes in Table 9.1 offer examples of various expressions of spirituality.
Table 9.1. Sample expressions of Aboriginal spirituality.

<table>
<thead>
<tr>
<th>Source</th>
<th>Expression of Aboriginal Spirituality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berneshawi 1997, p. 120</td>
<td>“Spiritual life is everywhere, everything in the universe has spirit and is alive.”</td>
</tr>
<tr>
<td>McKay 1994, p. 214</td>
<td>“Indigenous spirituality around the world is centered on the notion of relationship to the whole creation. We call the earth our mother and the animals are our brothers and sisters. Those parts of creation which biologists describe as inanimate we call our relatives. This naming of creation into our family is an imagery of substance, but it is more than that, because it describes a relationship of love and faithfulness between human persons and the creation. This unity as creatures in the creation cannot be expressed exclusively, since it is related to the interdependence and connectedness of all life.”</td>
</tr>
<tr>
<td>Sewid-Smith 1995, p.68</td>
<td>“...Aboriginal spirituality was more than a ritual. It was a daily communion and encounter with what we call the Supernatural world that changed you from within.”</td>
</tr>
<tr>
<td>Sewid-Smith 1995, p.70.</td>
<td>“They considered the environment totally entwined with their physical and spiritual being; therefore it affected the moral and spiritual part of themselves as related to their Creator.”</td>
</tr>
<tr>
<td>Fixico 1996, p.43</td>
<td>“Spirituality and the supernatural played a central part in the Native world as interpreted by each Native nation. Their intellectual and cultural understandings were heavily influenced by their acceptance of and desire for the supernatural as evinced by the world around them. As witnessed in their myths and legends, they based much of their values systems on understanding of the natural laws deemed to be from the Creator.”</td>
</tr>
<tr>
<td>Kassi 1996, p.76</td>
<td>“We believe that our spirituality is our highest form of consciousness.”</td>
</tr>
<tr>
<td>LaDuke 1997, p.26</td>
<td>“Looking at the world and seeing that most things are alive, we have come to believe, based on this perception, that they have spirit. They have standing on their own.”</td>
</tr>
</tbody>
</table>

Aboriginal spirituality has been part of Aboriginal discourse on land and environment since time immemorial. Spirituality is just starting to emerge in the public discourse in forestry in the form of non-timber forest values (e.g. see CFS 1998). Herein lies a fundamental gap between Aboriginal perspectives on appropriate relationships with the land as expressed in their spirituality and that of dominant culture. Despite the exclusion of Aboriginal views from the dominant discourse, Aboriginal views are also deserving of merit. As RCAP (1996a, 425) relates, “Aboriginal concepts of territory, property and tenure, of resource management and ecological knowledge may differ profoundly from those of other Canadians, but they are no less entitled to respect.”
Aboriginal people are required to "fit" into a process that is not designed to accommodate or deal with their concerns and needs. This is a highly uncomfortable match, to say the least. In the Native Values Mapping process and resulting protection measures, the essential core of what these values represent and mean to Aboriginal people is not captured. It is difficult, inappropriate, and even nonsensical to reduce a peoples' world view and fundamental aspect - spirituality - to a dot on a map. In this research, Aboriginal participants, industry representatives and MNR officials all seemed to recognize this to varying degrees.

Why are current attempts to deal with spirituality so problematic? As noted by the Aboriginal research participants, Native Values Mapping as part of forest management planning in Ontario is an externally derived and driven process. The reigning forest management paradigm is a product of a world view that is based on the "dominant system of property and natural resource management that flows from the European industrial mind" (LaDuke 1997, 146). In this process Native values are reduced to fitting into a framework that requires specific locations ("dots on a map") when the values are actually part of a whole (a philosophy and world view). McKay (1994, 216) notes:

The value that informs the spirituality of my people is one of wholeness. It is related to a view of life which does not separate or compartmentalize. The relationship of health with ourselves, our community and with all creation is a spiritual relationship.

Aboriginal values in their holistic form (i.e. in their proper context), are valuable in their own right. They do not require manipulation to be recognized or protected. These values challenge the resource management paradigm that dominates state systems in Canada. To achieve sustainability, such challenges are needed. Tinker (1996, 172) states that all peoples and cultures have a contribution to make to the sustainability of the whole, and believes that, "the survival of Indian cultures and cultural values may make the difference for the survival and sustainability for all the earth as we know it." He adds that, "American Indian peoples may have something of value - something corrective to Western values and the modern world system - to offer the world. The loss of these gifts, the loss of the particularity of these peoples, today threatens the survivability of us all" (p.172).
The view that Aboriginal people have much to offer is one that is increasingly recognized by Aboriginal and non-Aboriginal thinkers alike (Berry 1988, Booth 1998, LaDuke 1997, Tinker 1996, Wright 1994). In the Ontario forest management planning process, Aboriginal participation is sought and is acknowledged as an indicator of sustainability. Data on Aboriginal values are required to be collected. Under the current system, however, addressing Aboriginal concerns and needs remains unsuccessful.

There needs to be a major shift in thinking with regard to the recognition of non-dominant forms of resource management, rather than simply focusing on non-timber forest values. From an Aboriginal perspective, simply acknowledging spiritual values is not enough. Embracing the truly holistic nature of what sustainability means is critical, and this means incorporating spirituality in a way that maintains and enhances its integrity. The lack of meaningful involvement of Aboriginal modes of thinking and values (such as spirituality) in the dominant resource management discourse may well represent more than an unwillingness, but also an inability (lack of capacity) to do so. The dominant forms of resource management can barely satisfy their own social and cultural needs, let alone tackle those of another cultural group. Low (1992, 5) summarizes aptly the need for incorporating Aboriginal thinking into dominant systems:

> Indigenous knowledge then portends more than just the academic definition used by the Western world. Their definition...is very technical in scope and content. In reality, the Western world needs more than just to extract forms of indigenous knowledge to resolve its over-usage of non-ecological practices; it needs to incorporate and embrace indigenous *ecologically oriented spirituality* to really promote worldwide sustainable development. For the time being, to gain validity in the Western world, the focus must be on proving the technical efficiencies of indigenous knowledge practices; since Western ways as most cultures cannot change overnight. Instilling an "ecology of mind" will require time and patience
> but a spirituality interconnected with ecology will in the long term play the vital role in changing Western attitudes and behaviour. (emphasis added)

The exclusion of Aboriginal world view, spirituality and Native values represents to Aboriginal people an oppressive legacy. Aboriginal people and their world view must find meaningful expression in forest management and planning in order to make forest sustainability a reality.
CORE VARIABLE #2: RELATIONSHIPS AND POWER

Over the last five hundred years the indigenous experience has been one of conflict between the indigenous and the industrial world views. This conflict has manifested itself as holocaust. This is our experience.

Now, it is not appropriate for me to say that my holocaust was worse than someone else’s. But is absolutely correct for me to demand that my holocaust be recognized. And that has not happened in America. Instead, nobody knows anything about us, not even educated people. Why? Because this system is based on a denial of our existence. (Winona LaDuke 1997, pp.28-29)

A theme which has appeared throughout the research and which is also found in the relevant literature is the power imbalance that underlies the relationship between Aboriginal and non-Aboriginal people in Canada. In fact, domination and assertion of power over Aboriginal people has been a defining characteristic of historical and contemporary Aboriginal/non-Aboriginal relations in Canada. As pointed out earlier in this paper, this unhelpful relationship has a long history and is rooted in colonialism. It is a history that has oppressed Aboriginal peoples and has caused tremendous disruption in all spheres of Aboriginal life. This relationship of inequitable power distribution manifests itself in Ontario’s forest management planning process and thus in the Native Values Mapping exercise. In relation to this core variable, the following topics will be discussed:

- Lack of Knowledge About Aboriginal People
- Exclusion of Aboriginal People from the Dominant Resource Paradigm
- Forced Conformity to Dominant Modes of Western Resource Management
- TEK in Resource Management: Finding Adequate Expression

Lack of Knowledge About Aboriginal People

Related to the largely negative relationship between Aboriginal and non-Aboriginal peoples in Canada is a lack of knowledge among non-Natives regarding Aboriginal people. Specifically in relation to resource management, Chapeskie (1995, 44) writes that:

The persistence of obsolete notions about aboriginal relationships to land in state resource management policy is offensive to Anishinaabe people I work with who derive all or a significant portion of their livelihood from the land. Provincial resource managers in Ontario continue to refer to aboriginal harvesting as if this constitutes the sum total of aboriginal presences on the land.
Such views marginalize the voice of Aboriginal people as well as deny their presence on the land. Ethnocentric ideas persist about Aboriginal peoples’ relationship to the land (Berger 1991, Chapeskie 1995). There is a lack of understanding among resource management professionals and policy makers as to the historical dispossession of Aboriginal people from their lands, even though the agencies they work for have frequently been key players in this process. The impacts of this dispossession are also poorly understood, as demonstrated in prevalent attitudes toward Aboriginal land use, management and governance. Berneshawi (1997, 121) concurs that, “First Nations sovereignty over land and culture is grossly misrepresented and poorly understood.” Wolfe (1989, 64) states that even when differences in world view and culture are “sensed,” they are, “given little formal acknowledgment and are poorly understood.”

Exclusion of Aboriginal People from the Dominant Resource Paradigm

Exclusion of Aboriginal views from the dominant discourse on environmental and resource management represents a violation of Aboriginal and treaty rights as well as a failure to consider the “cultural, spiritual, and social importance of both land and its natural resources to First Nations” (Berneshawi 1997, 116). In relation to rights, McClenaghan (1999, 7) asserts that, “The widespread exclusion of aboriginal decision making from federal and provincial decisions that profoundly affect the environments in which aboriginal peoples live amounts to a fundamental omission of a constitutional right of participation.”

Land disputes remains one of the main areas of conflict between Aboriginal and non-Aboriginal people (Mercredi and Turpel 1993, RCAP 1996a). In this arena the power imbalance between the two cultures is particularly evident. The Royal Commission on Aboriginal Peoples devotes a chapter to this topic. One of RCAP’s key findings was that Aboriginal people and their rights are seldom respected in resource policies. RCAP (1996a, 522) states that:

The role of the state management system is to make decisions about allocation, and in making those decisions, Crown agencies have consistently ranked Aboriginal interests at the very bottom. In this respect, state management has meant that forests have become resources to be protected against their former users.
Aboriginal people have lived on the land sustainably for thousands of years. This very same land is now being managed, unsustainably, with little consideration for its former uses and users (Erasmus 1989, Gottesman 1983). Aboriginal people have held an insignificant amount of power in relation to resource management over the last two centuries. Despite the recognition of constitutionally protected rights, recent court decisions finally concluding in favor of Aboriginal people, and the recognition of the value of Aboriginal people and their knowledge in resource policy, Aboriginal influence over resource management has remains limited at best. The primary policy objective for most of Canada's history has been to dominate Aboriginal people through various means (e.g. the Indian Act) and assimilate First Nations into mainstream Canadian society (e.g. through residential schools) rather than to recognize their distinct nation status (Mercredi and Turpel 1993). There are exceptions in some areas, such as in the northern territories, that are showing promise as part of land claim settlements and self-government agreements. Despite some inroads, however, policies of denial and exclusion persist (Furniss 1999, RCAP 1996a).

**Forced Conformity to Dominant Modes of Western Resource Management**

Within the larger climate of the domination of Aboriginal people in Canada, resource management regimes persist to the exclusion of Aboriginal peoples' ancient management systems. It was noted in Chapter 8 that the knowledge systems of Aboriginal people are dominated by those of western science. This section explores these relationships more fully.

The Commissioners of the RCAP (1996a) found in the course of their nationwide hearings that it is the theory as well as the practice of resource management that is problematic:

While many employees of resource management agencies know that Aboriginal people living on reserves continue to harvest on Crown lands, they are generally unaware that most do so in accordance with their own rules of common property. Nor are they aware that Aboriginal people generally consider state rules an unfortunate imposition. In part, this is a reflection of the way those agencies are structured. Authority is centralized and flows from the top down, and the environment is reduced to conceptually discrete components, such as forests, parks, fish and wildlife, that have traditionally been managed independently (although less so as governments commit to principles of sustainable development or holistic management).
This arrangement reflects long-standing government policy and practice as well as the way resource managers are trained as foresters, biologists, planners and technicians. Managers bring to their jobs the systems of knowledge and understanding that prevail in those disciplines, and those systems have become part and parcel of the corporate memory and institutional interests of resource management agencies. (p.525)

Chapeskie’s (1995) analysis concurs with that of the RCAP. He observes that:

...the discourse of resource management employed by the dominant non-aboriginal society which invariably forms the context of co-management discussions between aboriginal groups and state agencies is plagued with ambiguity. The state largely controls the conceptual framework in which co-management negotiations take place....A significant corpus of research documenting the cultural distinctiveness and community-based character of aboriginal land use systems has had no more than a trace impact on discussions that have been established to resolve resource management conflicts in northwestern Ontario. (p.27)

LaDuke (1994, 145) adds that:

Resource management systems that exist in North American law today rely on a system of property rights that emulate the social values of Euro-American society and have no reference to indigenous values and property rights. As a result, I argue that these systems have no relation to this land.

A comprehensive discussion of issues related to the dominance of the resource management paradigm is beyond the scope of this review. To briefly summarize, other problems noted in RCAP’s (1996a) findings include:

- the division between managers and users in the dominant resource management paradigm;
- the assumption that only managers have useful (i.e. scientific) knowledge, with little weight given to other knowledge or experience (p.526).
- the undermining by current systems of Aboriginal systems of governance
- the fact that the “distinctive” relationship that Aboriginal people have with the land “has been problematic for Canadian society since the days of early settlers” (p.526.); and
- the difficulty for Aboriginal people to articulate their views in this climate when they are intimidated by the “the dominant resource ethos.” (p.678)

State systems of resource management are not neutral or objective; they are products of the
worldview, society and culture that produced them (Berneshawi 1997, Chapeskie 1995, Feit 1998a, RCAP 1996a). LaDuke (1994, 146) points out that, “As no two societies or cultures are identical, there can be no such thing as a scientifically or technically neutral management regime that is equally applicable and acceptable to both.” Chapeskie (1995, 12) argues this point as well, stating that:

When non-aboriginal Canadians use categories such as “wilderness” and “natural resources” to refer to the land and the “wealth” that it contains, they are not employing categories that transcend cultural boundaries. Rather, as they are used to describe Canadian landscapes, they embody a whole series of inferences concerning human relationships to this “undeveloped” land that have historically been the cultural domain of Euro-Canadians. By now this should go without saying. In fact, however, it has done little to alter the tendency of the relevant state institutions to assume that the Euro-Canadian technical paradigm of resource management possesses a superior intrinsic rationality and predictive capacity. Such power is assumed to endow this paradigm with a universal applicability that should transcend cultural boundaries.

Aboriginal people are forced to conform to the dominant resource management paradigm in order to be “involved” or have a say in what happens on their lands. Dominant systems are imposed and in some cases Aboriginal peoples have been forced to accept them to gain access to lands and resources (Stevenson 1999). Situations like this are symptomatic of inequitable power relations. Chapeskie (1995, 18) adds that, “Anishinaabe people find themselves in a position of having to accept that this discourse inevitably governs discussions concerning land use issues.” This results in further suppression of Aboriginal/land relationships and attempts to maintain them. Aboriginal concepts in relation to land stewardship and tenure are rooted in their language which is also excluded from the discourse. Chapeskie (1995, 56) further observes that the “colonizing nature of the western discourse of resource management poses a serious threat to the very fabric of aboriginal cultural diversity.”

The distinction between Aboriginal and non-Aboriginal relationships to the land is expressed in more recent environmental and resource management discourse as the difference between TEK and scientific knowledge (Chapeskie 1995, 26). As some researchers suggest, however, even the discourse on TEK is dominated by western paradigms (McGregor, in press; Procter 1999). How TEK fares in Ontario’s forest management process was discussed at some length in Chapter 8.
The following section summarizes and further emphasizes the domination of TEK (or local knowledge) by mainstream resource management paradigms.

**TEK in Resource Management: Finding Adequate Expression**

Despite the recent interest in incorporating local knowledge (including TEK) into resource management regimes, the interests of the state continue to dominate (Feit 1998a). Although Feit’s observations stem from the wildlife management field, the same applies to forest management. Feit argues that local knowledge (and TEK) is shaped by bureaucratic and professional interests. This view is similar to that uncovered by RCAP in which the individuals who attempt to work with Aboriginal people or their knowledge are influenced to a great extent by their professional training and the accompanying assumptions. Wolfe et al. (1992, 27-28) observe that, “Those acculturated in Western tradition presume that their belief and knowledge system is sound and rational, that anything else is unsound and a-rational, and that adherents to other systems should be reeducated to adopt the system which they utilize.”

Conventional professional resource management training in Canada does not include, to any significant extent, courses or curricula about Aboriginal people or their knowledge. This is increasingly recognized as a problem, and there have been a few efforts in some forestry schools to address the situation.

As noted, the experience of Aboriginal participants in Ontario’s forest management planning process reveals an inequitable power relationship that influences the use of Aboriginal knowledge. The literature on TEK also reveals dominance of western scientific systems over local or Indigenous systems. Use of Aboriginal or local knowledge does not occur in isolation or in an objective fashion; it occurs within contexts of “power, dominance and resistance” (Feit 1998a, 2).

Feit (1998a) has many insights to offer in relation to the influence of dominance and power on the utilization of TEK in resource management. Drawing many of the same conclusions as Chapeskie (1995), Berneshawi (1997), and Wolfe et al. (1992); Feit (1998a) points out that:
• local knowledge is used to fit into dominant structures rather than the context in which
  the knowledge finds meaning;
• actual knowledge is not sought, just the products;
• these products of knowledge are sought without developing an ongoing relationship with
  the local peoples; and
• those carrying out the process prefer to work with only a small number of “experts” rather
  than recognize the reality that most people in the community have some knowledge.

Feit (1998a, 7) concludes that, “despite some notable changes, the processes linking local
knowledge holders in all of these fields is still dominated by non-local institutions and their
agendas, practices, values, needs, justifications and limits.” Unfortunately, the same observation
can be made with forestry.

Stevenson shares similar findings to those listed above, specifically identifying the dominance of
western resource management paradigms as undermining the effective utilization of Indigenous
knowledge. Stevenson (1999, 163) states that:

...it is reasonable to ask why Aboriginal and First Nations people would want to:

• Expose their knowledge, much of which is considered proprietary if not
  sacred, to decontextualization and misappropriation by outsiders?

• Participate in processes that systematically “hamstring” their
  contributions, abilities and rights to manage human activities and impacts
  on their lands?

Significant changes to state resource management paradigms are called for. Merely wishing to
include Aboriginal people and their knowledge is not enough. The dominant paradigms and the
professionals (managers, planners, scientists, policy makers, decision makers) who adhere to
them are ill equipped to deal with Aboriginal people and their concerns. Aboriginal people are
expected to conform or acquiesce to the dominant paradigm in order to be “involved” or
“consulted”. Aboriginal people are forced to “play by the rules of dominant culture” (Stevenson
1999, 164). The knowledge of Aboriginal people is forced to fit into dominant frameworks
which often renders irrelevant the intellectual, social, cultural and spiritual contribution that
Aboriginal people have made or can potentially make. This occurs in spite of recent developments that recognize Aboriginal people and their knowledge as key aspects, if not a possible cornerstone, of sustainability (LaDuke 1994). Fully appreciating and utilizing Aboriginal knowledge must occur in the context of positive, equal and healthy relationships. State agencies responsible for resource management must increase their own capacity to address Aboriginal people’s concerns and knowledge.

Unless and until Western society has the will and the capacity to accept the validity of indigenous knowledge systems and the existence of indigenous resource management systems, little useful contribution to the emergent so-called resource co-management and joint land use planning systems of northern and native Canada can be made. (Wolfe et al. 1992, p.28)

Wolfe et al. (1992) made this observation and prediction almost a decade ago, when co-management and joint management were beginning to be recognized as fraught with problems as Roberts (1996) reported. More recently, Stevenson’s (1999) evaluation has shown that despite the interest and burgeoning research in this area, little meaningful progress has been made. These disappointing results are in no way indicative of the importance of TEK and the potential contribution of Aboriginal people. “Traditional Ecological knowledge is absolutely essential. Crafting a relationship between us is absolutely essential” (LaDuke 1997, 36). Cajete (1994, 192) adds that, “intellectual, social, and spiritual learning unfolds in a definite context of relationships” (emphasis added). From an Aboriginal perspective positive relationships hold the key to a move toward sustainability and the fair use of TEK in environmental and resource management.

The next section summarizes this chapter and describes in more detail what this new “relationship” might or should be. As noted in the literature reviewed in this chapter, co-management has been put forth as a viable option in which more equitable relationships between Aboriginal and non-Aboriginal can be attained (McClenaghan 1999, RCAP 1996a). Co-management can take various forms but represents, “…essentially a form of power sharing, although the relative balance among parties, and the specifics of the implementing structures, can vary a great deal...almost all arrangements envisage provincial, territorial or federal governments having the final say on matters of central concern” (RCAP 1996a, 666). In view of the
inequitable power relations that still characterize Aboriginal/non-Aboriginal relations, even a model such as co-management is viewed as a viable alternative to the status quo. However, initial evaluation of co-management agreements throughout the country have generally been less than satisfactory.

**SUMMARY: THE CO-EXISTENCE MODEL**

The title of this chapter reflects the need for a new paradigm in defining relationships between Aboriginal and non-Aboriginal people in sustainable forest management (See also NAFA (2000) for a recent discussion of this topic). Since the time of contact, a consistent message from Aboriginal people has been that they regard their relationship with the newcomers as one of nations interacting. The call for a nation-to-nation relationship between Aboriginal peoples and Canadians is thus not new or unknown among federal and provincial governments. In fact, this type of relationship has existed in the past and for a period of time was a key characteristic of the relationship between Aboriginal and non-Aboriginal peoples in North America. This was a time when it was clear to colonial powers that Aboriginal people were needed in order to settle these lands. The knowledge and technology that Aboriginal people possessed enabled the newcomers to survive here when the newcomers themselves lacked the capacity to do so. The Royal Commission on Aboriginal Peoples suggests four stages that describe Aboriginal and non-Aboriginal relations in Canada. These four stages are summarized as follows (see RCAP 1996b, pp.5-18):

1. **Separate Worlds:** At this time Aboriginal and non-Aboriginal people lived on separate continents and knew nothing of each other.
2. **Nation-to-Nation Relations:** Following years of first contact, fragile relations of peace, friendship, and rough equality were given the force of law in treaties.
3. **Displacement and Assimilation:** Then power tilted to non-Aboriginal people and governments. They moved Aboriginal people off much of their land and took steps to "civilize"them and teach them European ways.
4. **Renewal and Renegotiation:** This is a time of recovery for Aboriginal people and cultures, a time for critical review of the relationship, and a time for its regeneration and renewal.
Thus, the relationship of equity described in the second phase soon gave way to one of dominance and oppression. The resulting status quo in terms of relations among Aboriginal people, the Canadian state (and the institutions that represent it) and the Canadian peoples is not appropriate or acceptable. Stage Four (presumably the current stage) calls for a re-evaluation of this relationship.

The broader picture in terms of forest policy is changing, internationally and nationally, specifically including calls for the meaningful participation of Aboriginal people. Can this be interpreted to mean that Aboriginal people and their knowledge and resources are now needed again? Many people seem to think so (LaDuke 1997, Low 1992). On what terms will Aboriginal people flourish in a climate of renewal and renegotiation? As noted throughout this thesis, attempts to address Aboriginal people's concerns and incorporate their knowledge in resource management have been limited at best. The current approach to resource management, RCAP finds, "has not worked and cannot work. The Aboriginal principles of sharing and coexistence offer us the chance for a fresh start. Canadians have an opportunity to address the land question in the spirit of these principles" (RCAP 1996, 428). Continued cultural clash is not useful. New relationships based on mutual reconciliation and peaceful co-existence are required. However, this renewed relationship must recognize that "land is not a just a commodity; it is an inextricable part of Aboriginal identity, deeply rooted in moral and spiritual values" (RCAP 1996a, 430). The new relationship must also recognize Aboriginal and treaty rights in a meaningful fashion - to embrace them as an expression of Aboriginal relationships to the land.

This new or renewed relationship RCAP calls for is based on the ancient Indigenous philosophical view that sought "co-existence" between Nations. It is founded on the belief that having separate world views is not necessarily an undesirable thing, and developing a framework which would respect different the world views would be an appropriate approach to take. This approach is based on the idea of the Two-Row Wampum, discussed in Chapter 2. The Two-Row Wampum serves as a model for renewing and reconciling a damaged relationship between two peoples. It is a model that can apply to any interaction between two Nations. In the current
situation involving sustainable use of resources in Canada (and throughout the world), in which the participation of Aboriginal people and their knowledge is sought, the Two-Row Wampum and the principles it symbolizes can be appropriately applied. The principles of sharing and respect can apply to the intellectual tradition in the form of sharing knowledge. In the times when treaties were made based on the Two-Row Wampum, it involved the sharing of knowledge. Indigenous knowledge was used almost exclusively in the early years in order for the Europeans to survive. Aboriginal people shared their knowledge readily and it was also readily accepted. An important element to consider as well was the principle that both Nations would come to the mutual aid of one another; again this applies to sharing knowledge.

At this point in the history of humanity, Aboriginal knowledge is needed to offer insights into sustainability and the contexts in which it finds meaning (e.g. spirituality). It is a time when Aboriginal knowledge is being called upon to come to the aid of another nation. What has not been achieved in recent years are the conditions which make the principles of co-existence meaningful: equitable power relationships. Nation-to-nation relationships have as much relevance today as they did centuries ago.

RCAP has rightly condemned the policy of domination and displacement that has characterized Aboriginal policy for centuries and has called for a new relationship based on partnership and co-existence. Only through a shift in power relationships can Aboriginal people and their knowledge be effectively involved in moving toward sustainability.

The changes in cultural resource management in the Yukon are attributed to the increasing political power held by First Nations as a result of land claims settlement, rather than the participation of individuals of Aboriginal descent in heritage studies. It is only with the empowerment of the Territory’s First Nations that traditional historical knowledge has been able to begin to effectively influence cultural resource management practices. (Sub-Committee 1997, 36) (emphasis added)

The model of co-existence is viewed as holding promise for resource management (Brubacher and McGregor 1998; Chapeskie 1995; McGregor, in press; Ransom 1999). Co-existence is viewed as serving as a potentially promising bridge between sustainable forest management as conceptualized by mainstream Canada and by Aboriginal people (TEK). Brubacher and
McGregor (1998) anticipate that the co-existence approach can serve as a starting point for renegotiating an old relationship in a contemporary context:

...a co-existence approach would promote a focus on formally acknowledging Aboriginal people as legitimate partners in resource management. It would ensure their rightful place in the development and implementation of management policies and decision making....By drawing upon principles which express the values and perspectives of both Aboriginal and non-Aboriginal cultures, there is potential for developing an effective co-existence model, one that bridges distinctions by building upon shared values. (pp.18-19)

The co-existence model is most appropriate in situations of “cross cultural incommensurability” which limit conventional arrangements between Aboriginal and non-Aboriginal people in resource management (Chapeskie 1995, 46). The co-existence approach does not devalue western or Indigenous resource management practices and the knowledge that informs them. Co-existence does not allow for the domination of one over the other. In this sense, both systems are valued, and most importantly for Aboriginal people, their cultural survival is assured. Aboriginal world view and all it has to offer will no longer be threatened, dominated or distorted.
CHAPTER TEN

COMMENTS AND CONCLUSIONS

INTRODUCTION
There are many insights to be gained from the participants in this research into the perceived incorporation of Aboriginal knowledge into forest management planning. Overall, it is clear that Aboriginal knowledge informs forest management planning in Ontario to a limited degree. The perceived success of the incorporation of Aboriginal knowledge into sustainable forest management depends to a large extent on the meaningful participation of Aboriginal people in the planning process. This is not a surprising result, but one that still seems to be difficult to achieve. Ensuring meaningful participation of Aboriginal people in any process requires relationship building; positive relations based on trust, friendship, peace and respect must be established.

This final chapter summarizes the main findings of the thesis research, including outcomes, lessons learned, contributions and conclusions, and areas for future research.

THESIS RESEARCH FINDINGS
The aim of the research analysis was to identify patterns, themes and relationships that emerged from the input provided by research participants. Three levels of analysis yielded three groupings of results, with each grouping becoming further refined until finally the results were divided into two major types which could explain the original variety of results obtained. The three types of groupings were referred to as response categories, themes and core variables. These are listed in Table 10.1 below.
Table 10.1. Three levels of analysis: *response categories*, *themes*, and *core variables*.

<table>
<thead>
<tr>
<th>Level One Analysis (Chapter 7)</th>
<th>Eight Response Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Definitions of Native Forest Values</td>
</tr>
<tr>
<td></td>
<td>• Understanding of Differences Between Personal Views of Native Values vs Those of the Other Planning Participants</td>
</tr>
<tr>
<td></td>
<td>• Data Collection for the Native Values Mapping Process</td>
</tr>
<tr>
<td></td>
<td>• Degree of Assurance that All Values Are Protected</td>
</tr>
<tr>
<td></td>
<td>• The Potential of Aboriginal Participation to Contribute to Forest Management Planning</td>
</tr>
<tr>
<td></td>
<td>• Definitions of Traditional Ecological Knowledge</td>
</tr>
<tr>
<td></td>
<td>• The Potential Contribution of TEK to Forest Management Planning</td>
</tr>
<tr>
<td></td>
<td>• Degree of Assurance that Forest Management Planning Currently Incorporates TEK</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level Two Analysis (Chapter 8)</th>
<th>Five Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• The Relationship Between Native Values and TEK</td>
</tr>
<tr>
<td></td>
<td>• Native Values in Forest Management Planning</td>
</tr>
<tr>
<td></td>
<td>• The Representation of Knowledge in the Mapping Process</td>
</tr>
<tr>
<td></td>
<td>• Native Values Protection</td>
</tr>
<tr>
<td></td>
<td>• Lack of Understanding of Aboriginal People</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level Three Analysis (Chapter 9)</th>
<th>Two Core Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• World View, Spirituality and Native Values</td>
</tr>
<tr>
<td></td>
<td>• Relationships and Power</td>
</tr>
</tbody>
</table>

Each level of analysis yielded insights from the perspective of participants in the forest management planning process. The challenge for me in the final stage of analysis was to reconcile the analytical framework demanded by the Grounded Theory approach with my epistemological stance of holism and inclusiveness. As the Crotty (1998) framework purports, it is necessary to start with and maintain a philosophical standpoint which guides the overall research paradigm through such challenges. I thus returned to my epistemological and theoretical frameworks as well as my data to finally arrive at the core variables.

**LESSONS LEARNED**

The results of each level of analysis are discussed in the chapters referred to in Table 10.1. Many of these issues can be restated as "Lessons Learned" from the research, and are summarized in Table 10.2. A key finding to be drawn from this summary is that Native Values Mapping does to
a limited degree incorporate TEK into Ontario’s forest management planning.

Table 10.2. Lessons learned from the research.

<table>
<thead>
<tr>
<th>LESSONS LEARNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>There exists a high degree of consensus that Aboriginal knowledge/TEK has something to offer sustainable forest management (SFM).</td>
</tr>
<tr>
<td>Native Values Mapping can be empowering for Aboriginal peoples given an appropriate framework (when it supports rebuilding and recovery).</td>
</tr>
<tr>
<td>First Nations are not fully comfortable with “Native Values Mapping”.</td>
</tr>
<tr>
<td>There is a lack of capacity on all sides to conduct the Native Values Mapping exercise properly and meaningfully.</td>
</tr>
<tr>
<td>Different views of “Native values” exist among planning participants.</td>
</tr>
<tr>
<td>Cross-cultural meanings of “Native values” emerge.</td>
</tr>
<tr>
<td>The approach to identification, collection and protection of Native values varied considerably among districts.</td>
</tr>
</tbody>
</table>

TEK:
- Participants are not entirely sure what TEK is.
- Participants know it can potentially contribute to SFM.
- TEK is being incorporated into SFM to a limited extent in Ontario.
- The more limited the view of TEK by planning participants, the more limited its perceived potential contribution and application for SFM.

RELATIONSHIP BETWEEN TEK AND NATIVE VALUES MAPPING
The following diagrams schematically represent the relationship between Traditional Ecological Knowledge and Native Values Mapping, specifically how TEK can in some cases inform the Native Values Mapping process.
Relationship Between Traditional Ecological Knowledge, Native Values and Native Values Mapping

Figure 1: Relationship Between Traditional Ecological Knowledge (TEK), Native Values (NV) and Native Values Mapping (NVM), Schematic 1.
Relationship Between TEK, Native Values and Native Values Mapping

Figure 2: Relationship Between Traditional Ecological Knowledge (TEK), Native Values (NV) and Native Values Mapping (NVM), Schematic 2.
Both of these diagrams (Figures 1 and 2) represent the relationship between TEK and Native Values Mapping. TEK represents a broad base of knowledge that flows from the people. TEK does not represent all Indigenous knowledge. TEK is a construction of knowledge believed to be ecological in nature. TEK then informs the Native values identification process required in Ontario’s forest management planning. This process enquires of Aboriginal people, “What is it that Native people value about the land?” Native Values Mapping is the physical representation on maps of the Native values that Aboriginal people identify in the planning process. In order to identify Native values and then physically locate them for mapping purposes, informants must know and understand some form of TEK.

As noted in Chapter 7, Native values were in some instances identified, collected and mapped without the input of Aboriginal people. Not surprisingly, the collection of Native values without Native input is viewed by all planning participants to be the least effective data collection method. In such cases, very few values are identified (in one plan only two values were noted to be “Native”) and therefore protected, contributing little to the Aboriginal component of sustainable forest management planning. Native values exercises which do not have meaningful Aboriginal involvement are not informed by TEK or the people who hold TEK and thus contribute the least to sustainable forest management.

**MOST IMPORTANT FINDINGS**

The research provides guidance for sustainable forest management through its finding that the best way to incorporate Traditional Ecological Knowledge into Sustainable Forest Management is through *RELATIONSHIP BUILDING*. Those districts with the most positive and productive relationships with Aboriginal people in the forest management planning process produced the best results. This was true in terms of the values map itself, its benefit to the First Nations community, and the contribution made to sustainable forest management.

To support relationship building, Aboriginal communities need support in their efforts towards *NATION BUILDING*. Nation building includes: reclaiming nationhood, healing, revitalization, decolonization, recovery, resistance and re-negotiation. These initiatives support the challenge to
the status quo and the move to propel forestry into a more sustainable era.

CONTRIBUTIONS OF THE RESEARCH

The primary contributions that emerge from insights gained in this research are both pragmatic and scholarly. They will help in the advancement and application of knowledge as it pertains to sustainable forest management. Specific contributions are listed in Table 10.3 below.

Table 10.3. Major applied and theoretical contributions of the research.

<table>
<thead>
<tr>
<th>RESEARCH CONTRIBUTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applications</strong></td>
</tr>
<tr>
<td>MNR:</td>
</tr>
<tr>
<td>• Districts to gain insight into strategies/approaches that are most successful in involving Aboriginal people and their knowledge</td>
</tr>
<tr>
<td>• Improve sustainability of forest management planning</td>
</tr>
<tr>
<td>First Nations:</td>
</tr>
<tr>
<td>• Protect values</td>
</tr>
<tr>
<td>• Increased participation in SFM</td>
</tr>
<tr>
<td>Industry:</td>
</tr>
<tr>
<td>• Better planning process (fewer delays, lower planning costs)</td>
</tr>
<tr>
<td>• Improved sustainability of forest management planning</td>
</tr>
<tr>
<td>Forest Sector in General:</td>
</tr>
<tr>
<td>• Other jurisdictions to learn from the Ontario examples</td>
</tr>
<tr>
<td>• Improved forest certification processes</td>
</tr>
<tr>
<td>• Sustainable Forest Management (SFM): forest values as indicators of sustainability</td>
</tr>
<tr>
<td>• Cooperative efforts to influence policy (e.g. Anishnabek Nation/MNR)</td>
</tr>
<tr>
<td>Theory</td>
</tr>
<tr>
<td>• Better understanding of the paradigm shift and how to maneuver through it</td>
</tr>
<tr>
<td>• Contribute to the generation of new theory (what is sustainable forestry?)</td>
</tr>
<tr>
<td>• Methodology (gaining insight into problems and solutions through different disciplines and Aboriginal methods)</td>
</tr>
<tr>
<td>• Challenge the ideology: &quot;integration&quot; of knowledge is not always appropriate, and the exploration of other models is warranted.</td>
</tr>
</tbody>
</table>
FUTURE RESEARCH

The questions raised by this research represent some unique opportunities for further study in the field. Following is a brief list:

1. More study and insight is required to fully appreciate the implications of the Co-existence/Two Row Wampum concept in regard to relationship building. It is an honorable and just concept from an Aboriginal perspective. However, there are challenges to its effective realization in Canada, in light of the nature of Aboriginal/non-Aboriginal relations and the power imbalance that continues to dominate. This concept has applications at various levels, from individuals and communities to Nations.

2. The need for Aboriginal involvement is now formally recognized in Canadian forest policy. Despite this acknowledgment, Aboriginal voices still tend to be silenced or muted, due in part to western scientific dominance of the discourse in environmental and resource management. At this time, Aboriginal views generally do not find expression in the concept of sustainable forest management. For meaningful involvement of Aboriginal people to occur in sustainable forestry in Canada, Aboriginal views must be incorporated. Aboriginal people must be supported to develop their own discourse on the topics of Traditional Ecological Knowledge and Sustainable Forest Management.

3. It is important to support Aboriginal people in the recovery of their traditional knowledge and ability to function as distinct societies. This thesis research acknowledges the relationship between TEK and Nation Building. More work is warranted to explore this relationship further and develop practical steps to move toward its greater realization.

4. The Ontario Ministry of the Environment has recently initiated the Forest Management Improvement Process. A key component of this process is the acknowledgment that improvements are required in the Aboriginal portions of the planning process. Insights gained from this thesis research could well be applied to this new initiative.
5. Although much insight was gained in this research, more work is required in order to prepare adequately for the review of the Environmental Assessment Board Decision in 2003. Gaps include: The Native consultation process and its effectiveness; Aboriginal involvement in the development of guidelines for forest values; and Aboriginal participation in decision making, to name a few. Further investigation is encouraged.

6. Further exploration linking this research with new initiatives is recommended. One example is the National Aboriginal Forestry Association/Forest Stewardship Council’s “Report on the Meaningful Consultation with Aboriginal People on Forest Management in Canada.”

7. More work is required to increase capacity in First Nations to participate meaningfully in forest management planning in Ontario.

8. In Ontario, MNR and some First Nations are exploring possibilities for issuing new Sustainable Forest Licenses that lie outside current areas of undertaking. Under such a plan, Aboriginal people would potentially be the forest license holders in these areas. The potential for this research to influence the meaningful incorporation of Aboriginal knowledge into such systems of forest management planning is high. More work should be conducted to further clarify other mechanisms for incorporation of TEK into sustainable forest management that may occur in Ontario.

9. Further research and action on the lack of Aboriginal women’s voices (and women in general) on the topics of sustainable forest management and TEK. These views are conspicuously absent and deserve further attention. Although the situation is changing, women’s voices have historically been systematically excluded and/or misrepresented in academic research, particularly in the sciences (Harding 1987). This needs to be addressed, as a significant body of knowledge and critical perspective is missing from the dialogue in environmental and resource management. In addition, Indigenous knowledge is gendered, and this needs to be reflected in the discourse and in practice.
10. The implementation of Term and Condition 77 was raised an issue in this research. The Environmental Assessment Board Decision, which contains Term and Condition 77, comes up for review in 2003. This issue needs to systematically examined in order to understand the challenges faced and identify where inroads can be made to improve the process.

11. High potential mapping was raised as a concern among planning participants. The ability of this model to predict where Native values might be located is viewed with suspicion. More work is required to review its appropriateness for Native Values Mapping.

12. More education on Aboriginal peoples and their potential contributions to the theory and practice of sustainable forest management is needed in the professional forestry schools. There are a few initiatives across the country, and such undertakings need to be strengthened and encouraged, particularly in relation to gender issues.

13. More work on relationship building must be undertaken, much like the work Environment Canada - Ontario Region is conducting with respect to the Great Lakes Program (McGregor 1999c). Relationship building and identifying the potential interface between western and Aboriginal knowledge is currently being explored.

14. Exploration of other models for the potential incorporation or interface of Aboriginal knowledge with sustainable forest management is required. Models such as En'owkin (Armstrong 1995b) which require the enriching experience of divergent systems of knowledge to achieve common goals. There are other models that need to be investigated.

15. New methods of incorporating TEK into sustainable forest management must be developed and applied. It was not specifically the purpose of my research to examine the methodology for documenting TEK. However, the research revealed that certain methods were more effective than others in ensuring meaningful incorporation of Aboriginal
knowledge into forest management planning. Cases where the Native Values Mapping process utilized Aboriginal approaches to knowledge generation and transmission (feasts, pow-wows, etc.) were more useful to both the planning process itself and the participating First Nations than those that did not. This approach represents a deviation from the conventional TEK research methodology and is worth investigating further.

FINAL REMARKS
For thousands of years, Aboriginal knowledge has guided Aboriginal peoples in their relationship with Creation. It is the desire of Aboriginal people and many state managers to include the knowledge of Aboriginal people in forest management planning as part of the move toward sustainability. Ontario’s forest management process represents a beginning, with lessons to offer all those interested in realizing this common goal.

Although my thesis ends by suggesting the potential benefits of the Co-existence (Two-Row Wampum) concept, this is really just the beginning. I have only just started thinking about what this might mean on the ground. I look forward to the challenge of trying to make it a reality for the benefit of Aboriginal and non-Aboriginal people alike.

In conclusion, I cannot stress enough the importance of relationship building and assisting Aboriginal people in reconstructing their nations. Based on the insight gained through the words and experiences of the planning participants engaged in this research, relationship building will come to be the primary mechanism through which Traditional Ecological Knowledge is applied in sustainable forest management.
REFERENCES


Ransom, J. 2000. Traditional Knowledge and Western Science - A New Paradigm. Presentation for the Aboriginal Awareness Training Workshop, held May 12, 2000, at the Native Canadian Centre of Toronto. Environment Canada, Ontario Region, Toronto, ON.


APPENDIX 1:

List of Interview Questions
Overall Question of the Research:

"To what extent is the Aboriginal consultation component (including Native values mapping) of MNR's forest management planning process successful in incorporating Aboriginal knowledge, needs, and goals into forest management plans?"

General Questions

Please describe the following:

1. your role in the development of the forest management plan for your area. (position, title, etc.)
2. your general feelings/perceptions of the forest management planning process in Ontario. (has it improved, gotten worse, why?..the Planning process is new...)
3. your general feelings/perceptions of the Aboriginal consultation process within Ontario forest management planning. (What is the purpose of it! What is MNR's goal in relation to this program?)

Working Definitions

4. Define Aboriginal for the purposes of Forest Management Planning (First Nations only, Metis included etc.).
5. How do you decide who is Aboriginal? Who will be invited to participate? Sources consulted etc.

Background/Historical Relationship

6. Within the context of forest management planning, please describe your current relationship with the other 2 major participant groups in this study (e.g. If you represent MNR, then describe your relationship with Industry and First Nations).
7. Has this relationship always been the way you described? (e.g. Was it better in the past?, Is it better now?, etc.). Identify possible reasons for the situation you describe.
8. In your view, how does Ontario's new planning process affect this relationship? (e.g. improves it, makes it worse, etc.).

Aboriginal Consultation Process

9. Describe the Aboriginal consultation process undertaken for your area's forest management plan (e.g. How many times did you meet? Where did you meet? Under what conditions?).Minutes taken of meetings, etc..should tell me this..or the Native Background Report.
   a) How many Aboriginal groups were invited to participate? How many accepted the invitation? Of those who accepted the invitation to participate, how many opted for the separate process? (remained with the mainstream process)
   b) How were Aboriginal groups invited. A letter? to whom? a visit to the
c) How many Aboriginal groups refused and what were the reasons given?
d) Forums used to consult (open house, meetings etc.)
e) Describe any efforts to “involve” Aboriginal people, their knowledge and needs into the planning process?
f) In your view, what is the role of Aboriginal people in the planning process (provide information, assist make to decisions, provide examples).

10. Does your office have a specific person assigned to work with Aboriginal people (for what reasons? Planning or Condition 77, other?) Why was this decision made? Does it help?
11. Describe your role in the Aboriginal consultation process.
12. In general, what aspects of the Aboriginal consultation process do you feel went well? Explain.
13. In general, what aspects of the Aboriginal consultation process do you feel could be improved? Explain.
14. Describe any other issues, comments or concerns you may have in relation to the Aboriginal consultation process that have not been covered by the previous questions.

Values Mapping Process

15. Define “values” for the purposes of the forest management planning you have been involved in.
16. Please describe the process used to “collect” values from the First Nation(s) affected by your area’s forest management plan. (First Nations interviewees are asked to explain how values were collected specifically from their own First Nation).
   a) Did MNR collect the values?
   b) Did MNR hire a consulting firm to collect the values on their behalf?
   c) Did MNR provide funds for First Nations to collect values (community does the work themselves or hire consultants).
   d) Was a values map completed without Aboriginal input? Why or why not?

17. In general, were you satisfied with this process?
18. How many values were recommended by First Nations to be protected under the final plan? (First Nations interviewees are asked for the number of values recommended for protection by their own First Nation).
19. How many of these values were actually protected in the final forest management plan?
20. Where these values protected to the satisfaction of all concerned? (First Nations interviewees are asked whether their First Nation’s recommended values were protected to their satisfaction).
21. If some values were excluded from protection in the final plan, please explain why you believe this is the case.
22. Describe any issues/comments/concerns that you feel are important around the issue of values mapping.
Other Recommendations

23. Were there other recommendations that First Nations made to be included in the plan? If so, how many?
24. How many of these recommendations were incorporated into the plan?
25. If there were certain recommendations that First Nations made that were not included, why do you think they were excluded?
26. In general, describe the extent to which you feel First Nations recommendations were accommodated in the final forest plan for your region.

The Nature of Native Values

27. Define Native values? Is your view different than that of other planning participants? Is so, please explain.
28. What kind of knowledge or experience do Aboriginal people have that can potentially contribute the plan?
29. Define Traditional Ecological knowledge? Does the planning process, from your point of view, incorporate this knowledge into the planning process? If not, why not? If so, how? Provide examples? How can the planning process be improved to accommodate these values?

Final Thoughts: The Future

30. Describe any other issues or concerns that come to mind about the Aboriginal consultation and/or Values Mapping processes that have not been covered.
31. Describe from your own point of view what the future holds for the Aboriginal consultation and Native Values Mapping processes in forest management planning.
32. Please make any other comments about the forest planning process that are important to you.

Other: Trends that Impact Planning Process

33. Land for Life/Living Legacy:
   a) What is it?
   b) It's relationship to forest management planning?
   c) How has it impacted your planning?
34. Land Claims/Aboriginal and/or Treaty Rights
35. Any other issues
APPENDIX 2:

Assessment and Indicators of Forest Sustainability

4.3 Assessment of Forest Sustainability

Forest sustainability must be assessed at the end of the five-year term of the forest management plan, and a report on that assessment must be included in the report of past forest operations. The assessment of the success of the plan in achieving forest sustainability is produced through an examination of measurable indicators of the forest sustainability criteria previously described in Part A, Section 2.3.2.2, and an analysis of changes to the forest condition (see Part A, Section 2.2.2.3) and the socioeconomic condition (see Part A, Section 2.2.3).

Regular periodic assessment of progress on the course toward forest sustainability is required:

(a) to confirm whether the course is true, through observations and analysis of trend-over-time data; and
(b) to determine the actual values of the measurable indicators of forest sustainability, and compare them to the acceptable levels which have been established for each indicator.

In the assessment, the significance of any changes in trends and indicator values must be evaluated.

Measurable Indicators

The measurable indicators of the five forest sustainability criteria which are considered in the assessment are presented in Figure C-1. The indicators which are used predictively in the analysis of management alternatives (see Figure A-2 in Part A, Section 2.3.4) are identified with an asterisk (*). The measurable indicators, and the corresponding tables in the report of past forest operations which report on those indicators, are:

- ** managed Crown forest area available for timber production (by forest unit) (Table RPFO-13 and Table RPFO-14);
- ** landscape pattern or forest diversity indices (Table RPFO-15);
- ** habitat for selected wildlife species (Table RPFO-16);
- net primary productivity (Table RPFO-17);
- water yield (Table RPFO-17);
- total productive Crown forest (by working group) (Table RPFO-18);
- ratio of area of riparian reserves to length of shoreline adjacent to timber harvest activity (Table RPFO-18);
PART C - MONITORING AND REPORTING

4.0 Report of Past Forest Operations

4.3 Assessment of Forest Sustainability

- percentage of Native communities in or adjacent to the management unit involved in the special Native consultation option (Table RPFO-18);
- percent of Available Harvest Area which is actually utilized (Table RPFO-18);
- percent of forecasted silvicultural budget requirement actually received (Table RPFO-18);
- value added (Table RPFO-18);
- local citizens committee's self-evaluation of their effectiveness (RPFO-18); and
- frequency distribution of clearcut and wildfire sizes (Table RPFO-19).

The number of measurable indicators which can be monitored to assess progress towards forest sustainability is not restricted by many of the limitations which apply to the predictive indicators. Therefore, a more comprehensive coverage of the five forest sustainability criteria to track progress towards forest sustainability is possible in the assessment.

For each of the five predictive indicators, the predicted and actual indicator values are recorded in the applicable tables in the report of past forest operations. For some of these predictive indicators, acceptable levels are also recorded in the tables. For all of the other measurable indicators, the actual indicator values are recorded in the applicable tables, and the basis for the acceptable levels is identified in Figure C-1.

For the five predictive indicators, a comparison of the predicted and actual indicator values will determine if there are significant differences, and enable conclusions to be made, such as conclusions on the reliability of the predictions in the forest management plan. For all of the indicators, a comparison of the actual indicator values and the acceptable levels for each indicator will determine whether acceptable levels have been achieved for the indicator. In cases where there are significant differences between the predicted and actual indicator values, or where actual indicator values are outside the acceptable levels, the implications of those differences must be discussed in the text. Collectively, the comparisons will assist in an assessment of whether or not the selected management alternative is on a sustainable course.

In the comparisons, questions such as the following should be considered:

- How much change is appropriate?
- Is the difference real, or a result of unreliable predictions (e.g., due to inadequate modelling assumptions)?
- Does the difference threaten forest sustainability?
- Do the differences infer that the model requires calibration to better represent the local forest?
### FIGURE C-1

**INDICATORS FOR THE ASSESSMENT OF FOREST SUSTAINABILITY (CONTINUED)**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Measurable Indicator</th>
<th>Aspect of Criterion Assessed</th>
<th>Acceptable Levels for Measurable Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil and Water Conservation</td>
<td></td>
<td>Soil conservation and protection of water quality</td>
<td>The &quot;ratio&quot; for coldwater bodies and warmwater bodies should not decrease over time</td>
</tr>
<tr>
<td>Water yield</td>
<td>Ratio of area of riparian reserves to length of shoreline adjacent to timber harvest activity</td>
<td>Evapotranspiration and runoff</td>
<td>Management unit water yield should be consistent with the water yield objective(s) for the sub-regional watershed</td>
</tr>
<tr>
<td>Accepting Society's Responsibility for Sustainable Development</td>
<td>% of Native communities in or adjacent to the management unit involved in the special Native consultation option</td>
<td>Native community involvement in forest management planning</td>
<td>% of Native communities involved in the special Native consultation option should not decrease over time, unless this decrease represents confidence that Native concerns are being addressed adequately through the standard public consultation process</td>
</tr>
<tr>
<td>Local citizens committee's self-evaluation of their effectiveness</td>
<td>Public satisfaction with participation in the forest management planning process</td>
<td>The average effectiveness rating of all committee members (scale of 1 to 10) should be greater than 5</td>
<td></td>
</tr>
<tr>
<td>% of forecasted silvicultural budget requirement actually received</td>
<td>Society's commitment to sustainable forestry</td>
<td>100% of silvicultural budget requirement should be received to implement the selected management alternative</td>
<td></td>
</tr>
</tbody>
</table>

**Measurables**

- Spatial
- Non-Spatial
APPENDIX 3:

Structure of the Separate Parallel Aboriginal Consultation Process

### FIGURE A-5
**SCHEDULE: FOREST MANAGEMENT PLAN PRODUCTION, REVIEW AND APPROVAL**

<table>
<thead>
<tr>
<th>Stage One</th>
<th>Stage Two</th>
<th>Stage Three</th>
<th>Stage Four</th>
<th>MNR Regional Director Issue Review</th>
<th>Stage Five</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Consultation Stage</strong></td>
<td><strong>Standard Consultation Schedule</strong></td>
<td><strong>NATIVE CONSULTATION SCHEDULE</strong></td>
<td><strong>Step in Planning, Review and Approval Process</strong></td>
<td><strong>MNR Regional Director Issue Review</strong></td>
<td><strong>Operations Commence</strong></td>
</tr>
<tr>
<td>Organizing for Planning</td>
<td>Time as required</td>
<td>Time as required</td>
<td>Assembly of Background Information</td>
<td>Issue Review</td>
<td>Operations Commence</td>
</tr>
<tr>
<td>Invitation to Participate</td>
<td>Notice of First Information Centre</td>
<td>Notice of Community Meeting</td>
<td>Assembly and Analysis of Background Information, Analysis of Management Alternatives, and Identification of Optional Areas for Harvest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time as required</td>
<td>30 days</td>
<td>Notice of Community Meeting</td>
<td>Public Review of Analysis of Management Alternatives and Optional Areas for Harvest</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notice of Second Information Centre</td>
<td>Public Response Due</td>
<td>Time as required</td>
<td>Analysis of Responses and Identification of Alternatives for Operations for Five-Year Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time as required</td>
<td>60 days</td>
<td>Community Response Due</td>
<td>Public Review of Evaluation of Alternatives for Operations for Five-Year Term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Information Centre</td>
<td>Notice of Native Consultation Forum</td>
<td>Native Consultation Forum</td>
<td>Analysis of Responses and Preparation of Draft Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time as required</td>
<td>30 days</td>
<td>Time as required</td>
<td>MNR Review of Draft Plan Preliminary List of Required Alterations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time as required</td>
<td>30 days</td>
<td>Submission of Draft Plan for MNR Approval</td>
<td>Completion of MNR Review of Draft Plan Final List of Required Alterations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Centre or Other Forum</td>
<td>Notice of Draft Plan Review</td>
<td>MNR Approval of Plan and Notice of Plan Inspection</td>
<td>Preparation of Revised Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time as required</td>
<td>30 days</td>
<td>15 days (approx.)</td>
<td>MNR Review of Revised Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Response Due</td>
<td>Community Response Due</td>
<td>15 days (approx.)</td>
<td>Public Inspection of MNR-Approved Plan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time as required</td>
<td>60 days</td>
<td>Submission of Revised Plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final List of Required Alterations to District Manager/ Company Affected Persons</td>
<td>Time as required</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time as required</td>
<td>30 days (approx.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submission of Revised Plan for MNR Approval</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time as required</td>
<td>15 days (approx.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNR Approval of Plan and Notice of Plan Inspection</td>
<td>30 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last Opportunity for &quot;Bump-Up&quot; Request</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More Decision on &quot;Bump-Up&quot; Request</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**September 1996**
APPENDIX 4:

Environmental Assessment Board Criteria for Native Values Reports

APPENDIX 6: NATIVE BACKGROUND INFORMATION REPORT

1. The Native Background Information Report shall contain:

(a) a summary of past utilization of the timber resource by those native communities;

(b) a summary of past utilization of other resources by those native communities, in particular traditional and commercial hunting, fishing, trapping and gathering;

(c) a native values map and listing which identifies the location of specific natural resource features, land uses and values which are specifically used by, or of importance to, those native communities. In particular, the following features, land uses and values will be mapped:

   (i) areas of significance to local native communities such as areas used for traditional or recreational activities;

   (ii) boundaries of trapline management areas of those native communities (i.e. all registered trapline areas associated with individual native communities);

   (iii) Reserves and other native communities;

   (iv) areas which have been identified as being required as reserve lands or for economic or capital development projects of those native communities;

   (v) areas used by those native communities for fuelwood or building materials; and

   (vi) sites of local archaeological, historical, religious and cultural heritage significance to those native communities, including native graveyards, spirit sites and burial sites.*

   *PUBLICIZING THE LOCATION OF CERTAIN VALUES MAY BE DETRIMENTAL TO CONSERVATION IN WHICH CASE INFORMATION WOULD NOT NORMALLY BE SHOWN ON THE NATIVE VALUES MAP.

(d) a summary of timber management-related problems and issues specific to those native communities, which arose during implementation of the Timber Management Plan for the current five-year term.

2. A copy of the Native Background Information Report will be provided to the Ontario Native Affairs Secretariat.
APPENDIX 10: REPORT ON PROTECTION OF IDENTIFIED NATIVE VALUES

Preliminary Report on Protection of Identified Native Values:

1. In those cases where the native community has chosen to be involved in the Timber Management Native Consultation Program, during the development of the Timber Management Plan, the planning team shall produce a Preliminary Report on Protection of Identified Native Values. The Report shall consist of the following components:

(a) a mapped summary of the proposed areas of operations and alternative road corridors;

(b) the most current updated versions of the values map and the native values map;

(c) an evaluation of alternative prescriptions for specific Areas of Concern associated with the native values identified in the Native Background Information Report affected by the anticipated operations for the five-year term;

(d) an evaluation of the alternative road corridors of potential interest to the native community; and

(e) a comment sheet and the name of a native community contact person and an MNR contact person.

Final Report on Protection of Identified Native Values:

2. In those cases where the native community has chosen to be involved in the Timber Management Native Consultation Program, upon completion of the draft Timber Management Plan, the planning team shall produce a Final Report on Protection of Identified Native Values. The Report shall consist of the following components:

(a) the summary of the draft Timber Management Plan;

(b) the most current updated versions of the values map and the native values map;

(c) in order to communicate the results of previous consultation, the selected prescriptions for the specific Areas of Concern associated with the native values identified in the Preliminary Report on Protection of Identified Native Values; the reasons for the selected prescriptions; and any associated MNR preliminary required alterations; and

(d) the selected road locations of potential interest to the native community, reasons for the selected locations and use management strategies; and any associated MNR preliminary required alterations.

3. Copies of both the Preliminary and Final Report on Protection of Identified Native Values will be provided to the Ontario Native Affairs Secretariat.
APPENDIX 5:

MNR Forest Management Planning Manual Values Map Requirements

APPENDIX II

VALUES MAP INFORMATION

The following is a list of the types of information usually portrayed on the values map(s), where the values have been identified and are verifiable:

(a) Natural Resource Features
   (i) Fisheries
       - major fish communities by lake/stream
       - bait fish lakes
       - spawning areas
       - nursery areas
       - migration areas
       - headwater lakes and streams
       - food supply areas
   (ii) Wildlife
       - moose concentration areas (early & late winter)
       - aquatic feeding areas
       - mineral licks
       - calving sites
       - deer wintering areas (yards)
       - raptor nests (e.g., eagles, ospreys, red-shouldered hawks, Cooper's hawks, and other locally featured species, such as goshawks)
       - heronries
       - waterfowl nesting areas
       - important habitats of rare, vulnerable, threatened and endangered species
       - caribou migration routes
       - caribou calving/high summer use areas
       - caribou wintering areas

(iii) Areas of Natural and Scientific Interest, and candidate Areas of Natural and Scientific Interest (ANSIs)

(iv) Significant communities of flora or fauna, including all sites which contain old growth red and white pine forest communities

(v) Classified wetlands (Southern Ontario)

(vi) Provincially significant wetlands (Northern Ontario)

*Publicizing the location of certain values may be detrimental to conservation, in which case information would not normally be shown on the values map(s).
(vii) Forests
   - tree improvement areas
   - seed orchards
   - seed collection areas
   - genetic test areas
   - research plots (e.g., provenance test areas)

(b) Forest Resource Uses or Values
   (i) Tourism Establishments
      - main base lodges
      - outpost camps
      - commercial boat caches
      - potential tourism areas
   (ii) Cottaging or Residential Sites or Areas
      - existing development
      - proposed development (from lakeshore management plans)
      - remote cottage sites
   (iii) Mineral, Aggregate or Quarry Development
      - pit or quarry permits or licences
      - active mining claims
   (iv) Commercial Fur
      - registered trapline areas
      - trapper cabins
   (v) Bear Management Areas
   (vi) Wild Rice Production Areas
   (vii) Crown Land Recreation
      - access points
      - canoe routes
      - portage trails
      - hiking/nature trails
      - snowmobile trails
      - cross-country ski trails
      - approved boat caches
      - land use permit hunt camps

(c) Existing and Planned Infrastructure Features, such as:
   - roads and railways
   - utilities (pipelines, hydro lines)
   - waste and sewage disposal sites
APPENDIX II

Values Map Information

- potable water supply sources, including sites on lakes, rivers and streams identified by any person as being used for water supplies
- communications towers
- airports/airstrips
- logging camps
- mills

(d) Cultural Heritage Sites, * such as:
  - cultural landscapes
  - structural remains
  - archaeological remains
  - traditional use sites

(e) Other Special Land Uses of Local Significance as identified by any person, such as:
  - areas of significance to local communities such as areas used for traditional or recreational activities
  - boundaries of registered trapline areas
  - Reserves and other native communities
  - areas which have been identified as being required as reserve lands or for economic or capital development projects
  - areas used for fuelwood or building materials
  - sites of local archaeological, historical, religious and cultural heritage significance, including native graveyards, spirit sites and burial sites*
  - medicinal plants

(f) Exclusions from the Land Base of the Management Unit, including:
  - patented lands
  - Federal lands (e.g., Indian Reserves, Department of National Defence Bases, National Parks)
  - provincial parks and approved provincial park candidates
  - Crown land leases (e.g., land use permits, licenses of occupation)
  - cemeteries/burial grounds, including native cemeteries and burial grounds*
  - Areas of Natural and Scientific Interest which have been designated as exclusions from the management unit

* Publicizing the location of certain values may be detrimental to conservation, in which case information would not normally be shown on the values map(s).

September 1996
APPENDIX 6:

Interview Questions and Response Categories
All participants were given a copy of the interview protocol (questions) to facilitate understanding of the research. The protocol served as a guide for the ensuing discussion which took on a number of forms. Most participants simply talked about their experience in the planning process rather than follow the questions directly as presented. Some participants chose to answer the questions as presented, skipping the questions that did not apply to them. Some discussions integrated both styles. My task for this stage of analysis (Chapter 7) was to review all responses and determine the appropriate response categories based on the data. In some cases, the response categories correspond neatly with a specific question or questions asked in the interview protocol. However, it was more often the case that the response categories are derived from a number of questions (often overlapping).

The tables below present the list of response categories with accompanying questions from the interview protocol.

Response Category One: Definitions of Native Forest Values:

Interview Protocol:

Q. 15. Define Native values for the purposes of the forest management planning you have been involved in.

Response Category Two: Understanding of Differences Between Personal Views of Native Values vs Those of the Other Planning Participants

Interview protocol:

Q. 15. Define "values" for the purposes of the forest management planning you have been involved in.
Q. 22. Describe any issues/comments/concerns that you feel are important around the issue of native values mapping
Q.27. Define Native values. Is your view different than that of other planning participants? Is so, please explain.

Response Category Three: Data Collection for the Native Values Mapping Process

Interview Protocol:

Q. 11. Describe your role in the Aboriginal consultation process.

Q. 13. In general, what aspects of the Aboriginal consultation process do you feel could be improved? Explain.

Q. 14. Describe any other issues, comments or concerns you may have in relation to the Aboriginal consultation process that have not been covered by the previous questions.

Q. 16. Please describe the process used to "collect" values from the First Nation(s) affected by your area’s forest management plan. (First Nations interviewees are asked to explain how values were collected specifically from their own First Nation).

- Did MNR collect the values?
- Did MNR hire a consulting firm to collect the values on their behalf?
- Did MNR provide funds for First Nations to collect values (community does the work themselves or hire consultants).
- Was a values map completed without Aboriginal input? Why or why not?

Q. 17. In general, were you satisfied with this process?

Response Category Four: Degree of Assurance That All Values Are Protected

Interview Protocol:

Q. 18. How many values were recommended by First Nations to be protected under the final plan? (First Nations interviewees are asked for the number of values recommended for protection by their own First Nation).

Q. 19. How many of these values were actually protected in the final forest management plan?

Q. 20. Where these values protected to the satisfaction of all concerned? (First Nations interviewees are asked whether their First Nation’s recommended values were protected to their satisfaction).

Q. 21. If some values were excluded from protection in the final plan, please explain why you believe this is the case.

Q. 22. Describe any issues/comments/concerns that you feel are important around the issue of native values mapping.
Response Category Five: The Potential of Aboriginal Participation to Contribute to Forest Management Planning

Interview Protocol:

Q. 3. Please describe your general feelings/perceptions of the Aboriginal consultation process within Ontario forest management planning. (what is the purpose of it! what is MNR's goal in relation to this program?.)

Q. 9e. Describe any efforts to “involve” Aboriginal people, their knowledge and needs into the planning process?

Q. 9f. In your view, what is the role of Aboriginal people in the planning process (provide information, assist make to decisions, provide examples).


Q. 13. In general, what aspects of the Aboriginal consultation process do you feel could be improved? Explain.

Q. 14. Describe any other issues, comments or concerns you may have in relation to the Aboriginal consultation process that have not been covered by the previous questions.

Q. 23. Were there other recommendations that First Nations made to be included in the plan? If so, how many?

Q. 24. How many of these recommendations were incorporated in to the plan?

Q. 25. If there were certain recommendations that First Nations made that were not included, why do you think they were excluded?

Q. 26. In general, describe the extent to which you feel First Nations recommendations were accommodated in the final forest plan for your region.

Q. 30. Describe any other issues or concerns that come to mind about the Aboriginal consultation and/or Values Mapping processes that have not been covered.

Q. 31. Describe from your own point of view what the future holds for the Aboriginal consultation and Native Values Mapping processes in forest management planning.

Q. 32. Please make any other comments about the forest planning process that are important to you.

Response Category Six: Definitions of Traditional Ecological Knowledge

Interview Protocol:

Q. 29. Define Traditional Ecological knowledge? Does the planning process, from your point of view, incorporate this knowledge into the planning process? If not, why not? If so, how? Provide examples? How can the planning process be improved to accommodate these values?
### Response Category Seven: The Potential Contribution of TEK to Forest Management Planning

**Interview Protocol:**

Q. 3. Please describe your general feelings/perceptions of the Aboriginal consultation process within Ontario forest management planning. (what is the purpose of it? what is MNR’s goal in relation to this program?)

Q. 9e. Describe any efforts to “involve” Aboriginal people, their knowledge and needs into the planning process?

Q. 9f. In your view, what is the role of Aboriginal people in the planning process (provide information, assist make to decisions, provide examples).

Q. 29. Define Traditional Ecological knowledge? Does the planning process, from your point of view, incorporate this knowledge into the planning process? If not, why not? If so, how? Provide examples? How can the planning process be improved to accommodate these values.

### Response Category Eight: Degree of Assurance That Forest Management Planning Currently Incorporates TEK

**Interview Protocol:**

Q. 9e. Describe any efforts to “involve” Aboriginal people, their knowledge and needs into the planning process?

Q. 9f. In your view, what is the role of Aboriginal people in the planning process (provide information, assist make to decisions, provide examples).

Q. 29. Define Traditional Ecological knowledge? Does the planning process, from your point of view, incorporate this knowledge into the planning process? If not, why not? If so, how? Provide examples? How can the planning process be improved to accommodate these values.

Q. 30. Describe any other issues or concerns that come to mind about the Aboriginal consultation and/or Values Mapping processes that have not been covered.

Q. 31. Describe from your own point of view what the future holds for the Aboriginal consultation and Native Values Mapping processes in forest management planning.

Q. 32. Please make any other comments about the forest planning process that are important to you.
APPENDIX 7:

MNR Cultural Heritage Values Planning Process

Figure 2  Overview of Planning Steps for Areas of Concern for Cultural Heritage Values