The Alexander Mackenzie Voyageur Route:

A Community Perspective on Waterways and the

Development of a Trans-Canada Heritage Route

A Thesis submitted to the Committee on Graduate Studies in Partial Fulfillment of the Requirements for the Degree of Master of Arts in the Faculty of Arts and Science

TRENT UNIVERSITY

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ABSTRACT

The Alexander Mackenzie Voyageur Route: A Community Perspective on Waterways and the Development of a Trans-Canada Heritage Route

Peter Nelson Labor

The Alexander Mackenzie Voyageur Route is a recently proclaimed heritage route which stretches from Quebec City, Quebec to Bella Coola, British Columbia. The purpose of this thesis is to examine community interest in the Route, emphasizing the connection of the community to the adjacent waterway, in order to understand better the local and national heritage significance of the Route.

Five hundred and forty-eight questionnaires were sent to 137 communities located along the Route from Lachine, Quebec to Bella Coola. Thirteen percent of the questionnaires were returned, representing 43 communities. Respondents indicated strong historic linkages to the waterway, emphasizing the importance of Native culture, the fur trade and geological and natural history. Recreation, fishing and tourism were identified as dominant Route uses, with recreation and tourism identified as the most important future activities for the waterways associated with the Route.

The Alexander Mackenzie Voyageur Route reflects the local and national heritage significance of the inland waterways of Canada. Carefully managed promotion of the Route through community-based identification, education and selective development for recreation and tourism will benefit communities through which the Route passes.

Acknowledgements

I am grateful to all the community members who took the time to fill out the questionnaire - I hope the information presented in this thesis is helpful in fulfilling some of the goals expressed in the responses.

Thanks to my committee of John Jennings, John Marsh, and Bruce Hodgins for taking an interest in my work, and involving me in much more than a M.A. thesis.

Thanks to my friends for the time, the music and the companionship, and special thanks to my dog Kedji for sitting at my feet under my desk and taking me for walks. As always, thanks to my folks for their constant support.

Particular thanks to Jim Smithers who has inspired and supported my endeavours over the years, and who got me into the "voyageur business" in the first place, and to all the voyageurs who have travelled the Route with me. And, finally, thanks to all the people I met in my travels along the Route who have shared with me the human side of heritage and culture.

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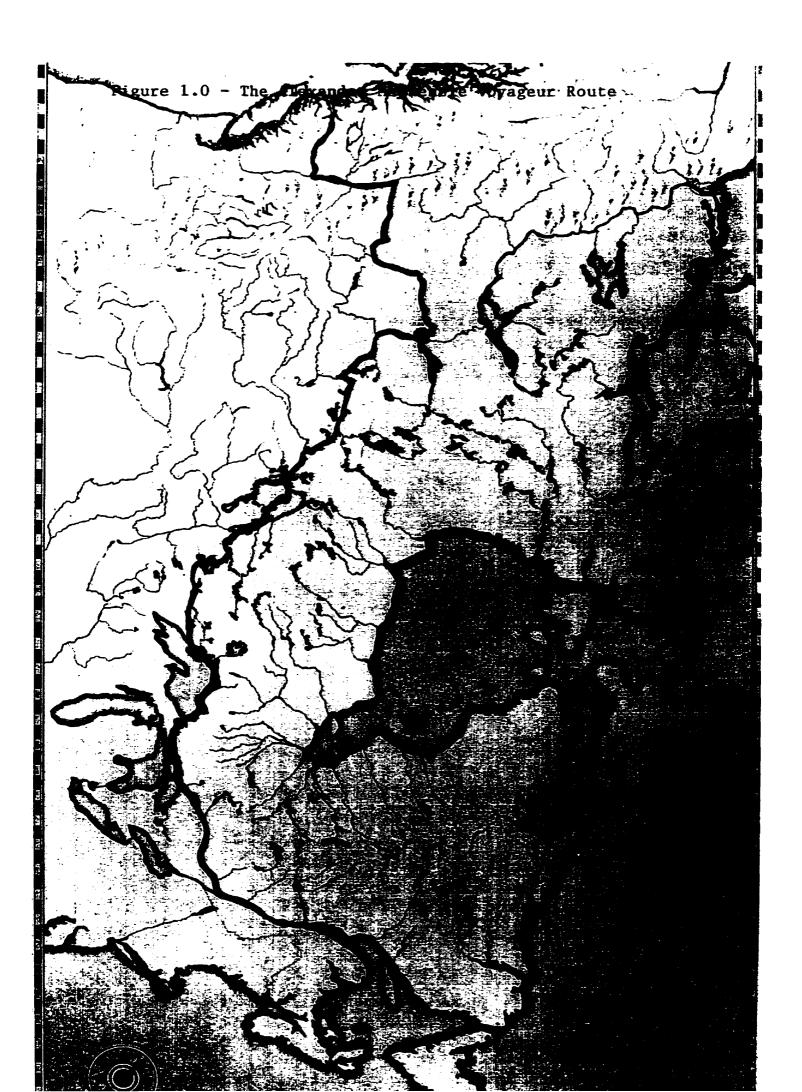
Chapter 1 - Introduction

OVERVIEW

The Alexander Mackenzie Voyageur Route (AMVR) is a heritage route which traces the course taken by Alexander Mackenzie in becoming the first European to successfully record a crossing of North America from sea to sea (Figure 1.0). Supported by a federal proclamation and proclamations from each of the six provinces through which it passes, the Route recognizes a physical cross-section of the Canadian landscape and a cultural history upon which the country was established. Although named after Mackenzie, the heritage and historic value of the route far exceeds its use by Mackenzie, or even its prior use as a trading and transportation corridor by fur traders and Natives. The rivers, lakes and drainage basins of this intricate network of waterways constitute a physical wonder, but when combined with a rich cultural history beginning with thousands of years of Aboriginal use and continuing to the present, they represent a heritage resource of considerable importance.

The initial concept of the Alexander Mackenzie Voyageur Route came in 1975 after the Nature Conservancy of Canada received a proposal to preserve the 350 kilometre "Grease Trail¹" which Alexander Mackenzie followed from the Fraser River to the Bella Coola Valley on the Pacific Coast. The Alexander Mackenzie Trail Association was

¹ The term "grease" refers to historic Aboriginal use of the trail as a trade route for transporting fish oil to the interior.



formed, and there is now a protected corridor, The Alexander Mackenzie Heritage Trail (Nuxalk-Carrier Grease Trail), reaching from the Fraser Valley, across the Chilcotin Plateau to the Pacific Ocean. The dedication of a sea to sea land and water route which would stretch from "Canada" (Ontario/Quebec) to the Pacific Ocean seemed logical in building on the success of The Trail. In 1993, the Alexander Mackenzie Voyageur Association (AMVA) was formed from the earlier Trail Association to continue its efforts for commemoration of a national route.

Of great importance to the national efforts was the Canada Sea-to-Sea Bicentennial Expeditions. On the 200th anniversary of Mackenzie's crossing, groups of students from Lakehead University recreated the voyage across Canada by canoe. The Expeditions visited hundreds of communities, reenacting the fur trade era and giving communities an opportunity to celebrate their regional history and culture.

Canada's inland waterways are part of an important heritage which begins with the First Nation's spiritual bond to the land and continues through a legacy of economic and political growth and change as a result of European expansion and resource demands from fishing, furs and forestry. Most of the communities located along the Route were settled primarily because of the adjacent waterway, and others are now closely linked to their waterway by industry, recreation, or transportation. Proper management of such a far-reaching and diverse national heritage resource requires coherent and coordinated planning. Unfortunately, the varied and diverse characteristics of the Route, which provide for the outstanding heritage qualities, also make establishment of the Route difficult. The AMVR is also an intangible resource which exists regardless of the proclamations, rivers, lakes and tangible heritage resources associated with it. While the tangible aspects of the Route can be inventoried, named and listed, the "value" of the Route as a whole certainly exceeds the sum of its parts. The Alexander Mackenzie Voyageur Route is constantly evolving.

Although the federal and provincial proclamations signify a new beginning, providing a stable platform on which to stand during the planning process, "management" of the Route truly has no beginning or end. So, is it enough to know that the Route exists and has been recognized as an important part of a shared Canadian heritage - or should something more be done?

Route Description

The Alexander Mackenzie Voyageur route exists as a continuous route from the Old Port of Quebec, in Quebec City, to Alexander Mackenzie Provincial Park, on the north shore of Dean Channel, west of Bella Coola, British Columbia² (Figures 1.1, 1.2, 1.3, 1.4). The Route is more than 8500 kilometres in length, passing through four major drainage basins (Atlantic, Hudson Bay, Arctic, Pacific). More than 140 communities are

² Although the northern waterway from Ft. Chipewyan to the Beaufort Sea has been proposed for inclusion in the Route, it has not been proclaimed as part of the AMVR.

located along the Route, as well as two World Heritage Sites, two National parks, six Heritage Rivers, and six National Historic Sites/Parks. The Route also contains numerous provincial parks, reserves, and historic sites, as well as many regional/community heritage resources.

Though many of the heritage resources associated with the Alexander Mackenzie Voyageur Route are well known and may be easily identified, a cohesive resource inventory would allow for classification of resources such that various regions or agencies will be able to gain a better understanding of the Route as a whole. While the Route may be seen as a strand which connects a variety of "gems", identification of the gems and their relevance to the Route is important. A complete inventory of the Route, however, would require local participation and a well organized system to compile information for easy retrieval.

The following list summarizes the waterways followed by the Route;

The St. Lawrence - Ottawa Valley	* Grand Portage
-	Pigeon River
St. Lawrence River	Boundary Waters/Quetico
Ottawa River	Pigeon River
	North, South Fowl Lake
Nipissing Region	Moose Lake
	Vasuex lake
Mattawa River	Fan Lake
* La Vase Portages	Mountain Lake
Lake Nipissing	Watap Lake
French River	Rose Lake
	Rat Lake
Great Lakes	South Lake
	- height of land portage
Georgian Bay - Lake Huron	North Lake
Lake Superior	Little North Lake
-	Little Gunflint Lake
Hudson Bay Divide	Gunflint Lake
-	

Magnetic Lake Pine River Pine Lake Granite River Lake Saganaga Cypress Lake Knife Lake Knife River Carp Lake **Birch Lake** Basswood Lake **Basswood River** Crooked Lake Iron Lake Lac La Croix Loon Lake Loon River Little Vermilion Lake Vermilion Lake Namakan Lake Rainy Lake Rainy Lake **Rainy River** Lake of the Woods

Winnipeg River/Lake Winnipeg

Winnipeg River Gun Lake Little Sand Lake Roughrock Lake Tetu Lake Eaglenest Lake Numao Lake Nutimik Lake Dorthy Lake Natalie Lake Lac Du Bonnet Lake Winnipeg

Lower Saskatchewan River

Cedar Lake Saskatchewan River

Sturgeon-Weir Region

Cumberland Lake Sturgeon-Weir River Amisk Lake **Upper Churchill River** Frog Portage Churchill River Trade Lake Keg lake Drinking Lake Nistowiak Lake Mountain Lake Otter Lake Devil Lake Ninew Lake Trout Lake **Black Bear Island Lake** Sandfly Lake Pinchouse Lake Sandy Lake Dreger Lake Knee Lake Primeau Lake Dipper Lake Shagwenaw Lake Lac Ile-a-la-Crosse Churchill Lake Peter Pond Lake La Loche River Lac la Loche

Arctic Divide

* Methye Portage Clearwater River

Lower Athabasca

Athabasca River Lake Athabasca

Peace River

Peace River Dinosaur Lake

Pacific Divide

Williston Lake Parsnip River Arctic Creek Arctic Lake Portage Lake

Fraser River

Pacific Lake James Creek Herrick Creek McGregor River Fraser River

Overland - Pacific Region

* Alexander Mackenzie Heritage Trail Blackwater/West Road River Bella Coola River Dean Channel

* Land based components

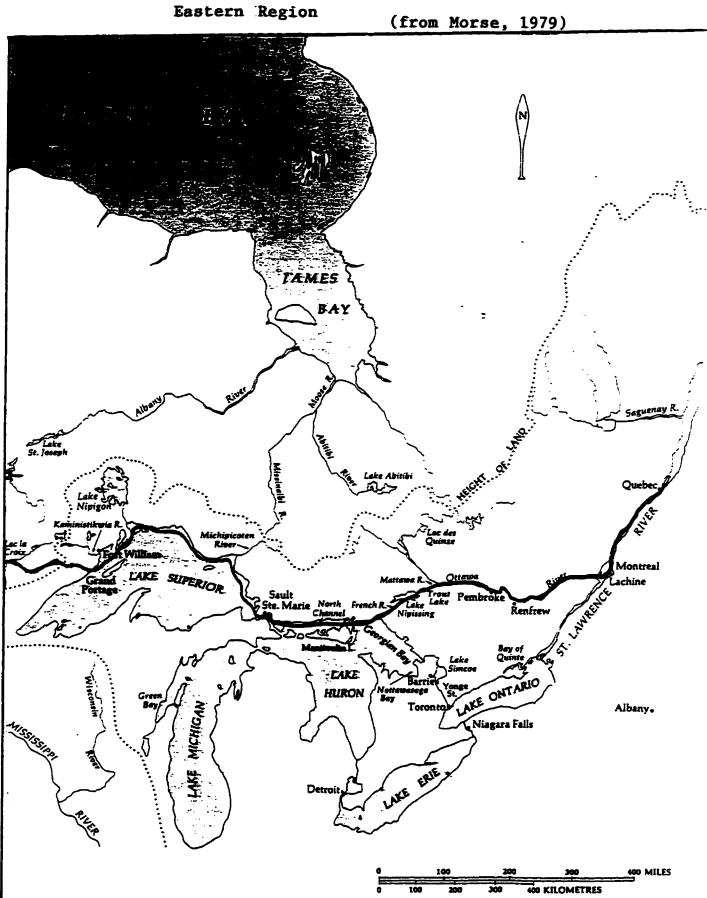
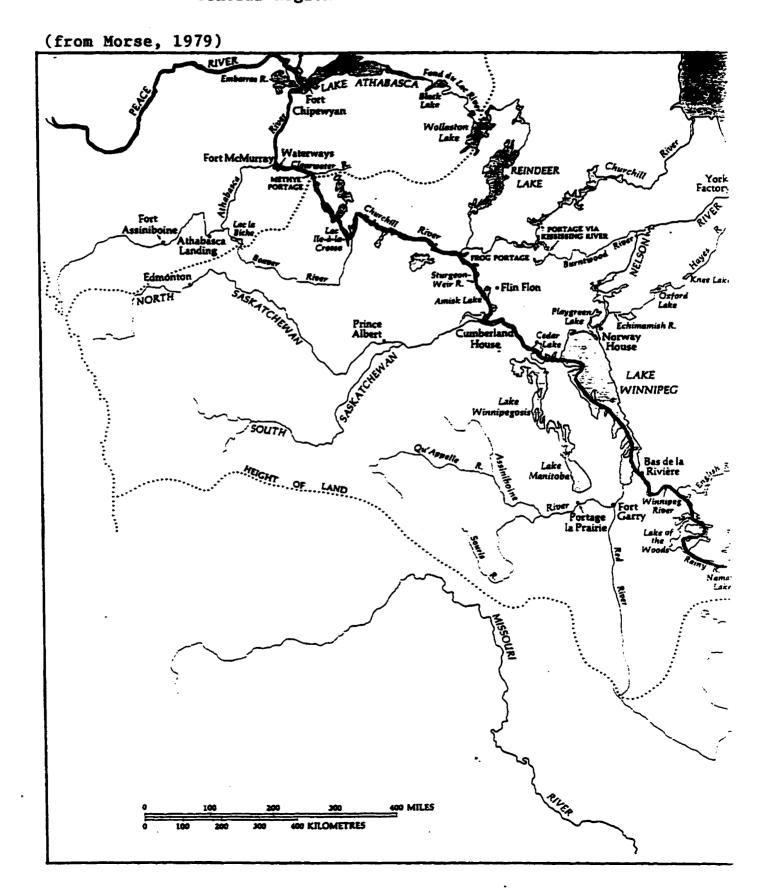
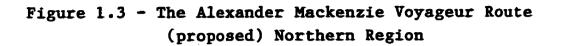
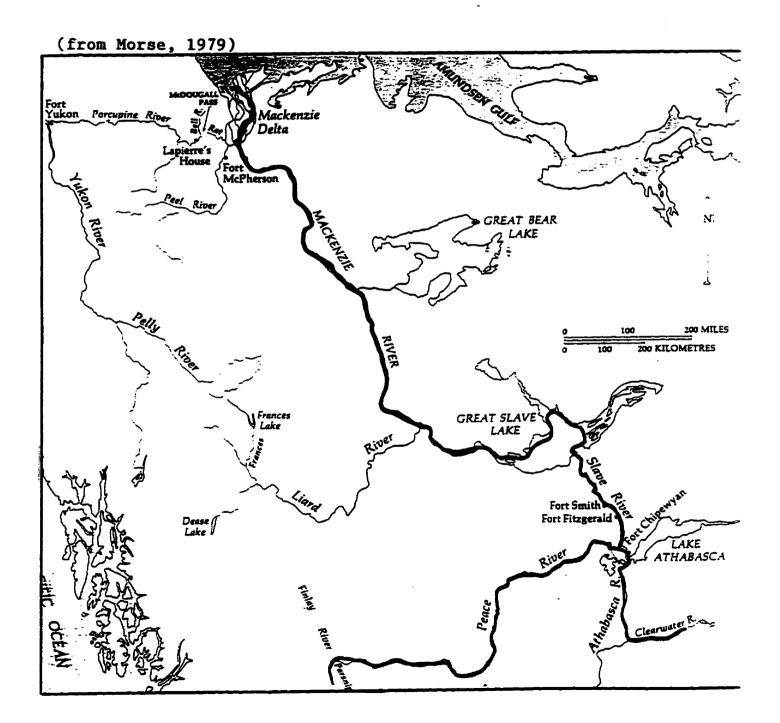


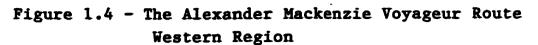
Figure 1.1 - The Alexander Mackenzie Voyageur: Route

Figure 1.2 - The Alexander Mackenzie Voyageur Route Central Region

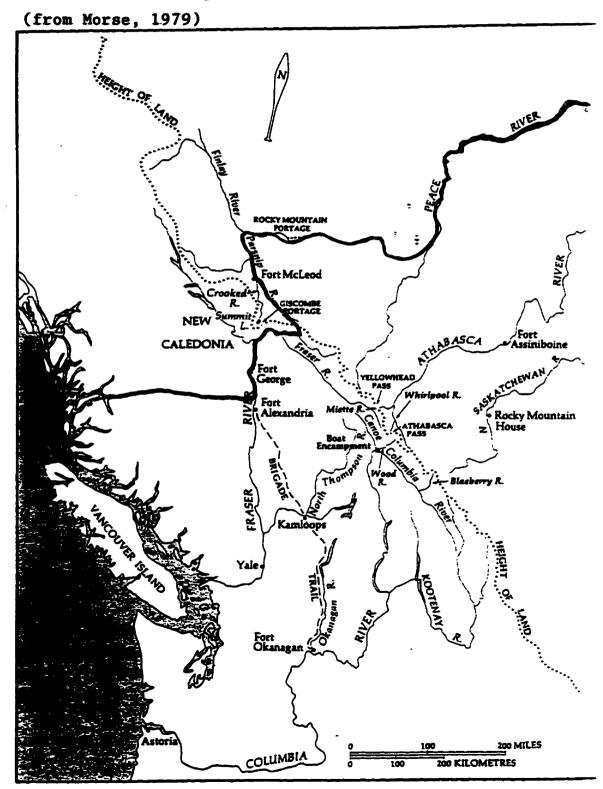








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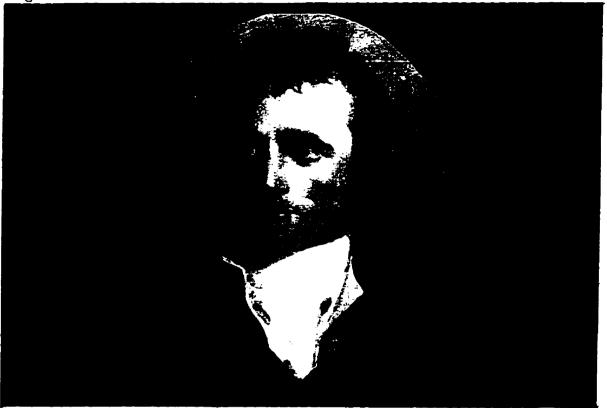


Figure 1.5 - Portrait of Sir Alexander Mackenzie

-12-

* original painting by Sir Thomas Lawrence - National Gallery of Canada, Ottawa



Figure 1.6 - A performance of the Canada Sea-to-Sea Expeditions

P. Labor - photo

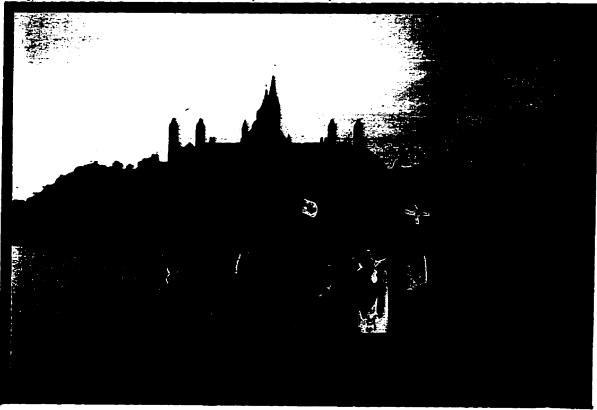


Figure 1.7 - Ottawa River, Ottawa, Ontario

P. Labor - photo



Figure 1.8 - Georgian Bay - Great Lakes, Ontario

P. Labor - photo



S. Dickman - photo

Figure 1.10 - Lake Winnipeg, Manitoba

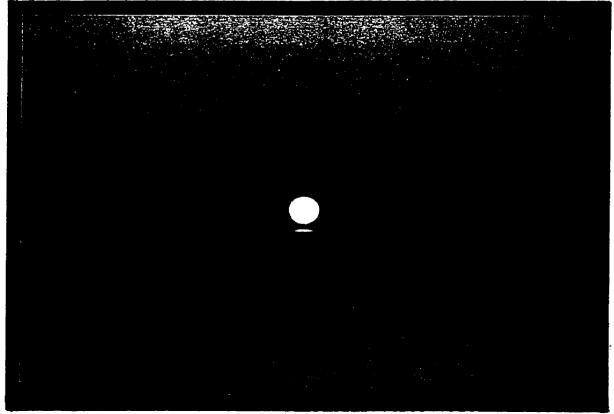


Figure 1.9 - Quetico/Boundary Waters, Ontario/Minnesota

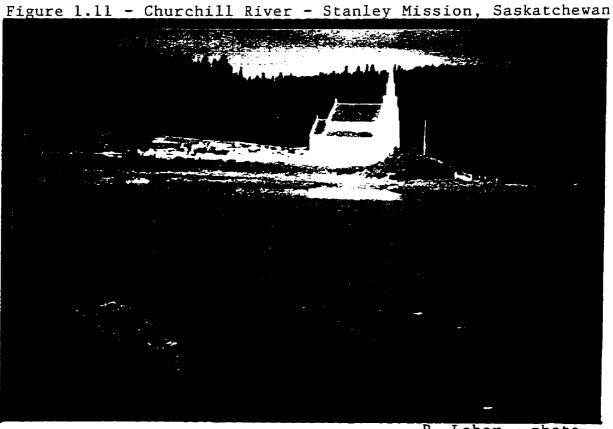




Figure 1.12 - The Clearwater River Valley from Methye Portage

P. Labor - photo



-16-Figure 1.13 - Great Slave Lake, Northwest Territories

Figure 1.14 - Mackenzie River, Northwest Territories



H. Flygare - photo



-17-Figure 1.15 - The Peace River, Alberta



Figure 1.16 - The Peace River, British Columbia

P. Labor - photo



Figure 1.17 - Arctic/Pacific Continental Divide



Figure 1.18 - The Alexander Mackenzie Heritage Trail, B.C.

H. Flygare - photo



Figure 1.19 - Dean Channel from Mackenzie Rock Provincial Park

P. Labor - photo

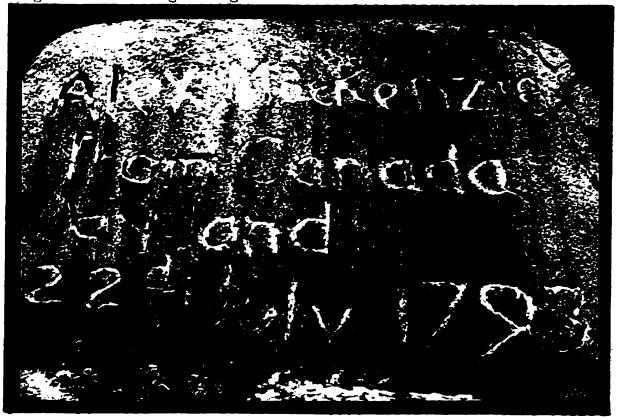


Figure 1.20 - Engraving at Mackenzie Rock Provincial Park *

*inscription reproduced in 1920's by surveying expedition

PURPOSE

The purpose of this thesis is to examine community interest in the Alexander Mackenzie Voyageur Route, emphasizing the connection of the community to the adjacent waterway. Through the distribution of a questionnaire, community stakeholders were questioned about the importance of their local waterway, waterway use, future aspirations for the waterway and perceived effects of establishment of the Alexander Mackenzie Voyageur Route.

A review of literature related to waterways, history, heritage and culture, and a summary of other heritage route planning models, coupled with four years of personal experience in travelling the Route, established a frame of reference for discussion of the ouestionnaire results.

Thesis Statement

The Alexander Mackenzie Voyageur Route has both local and national heritage significance, and further establishment of the Route is perceived by stakeholders to benefit communities through which it passes and Canada as a whole.

Research Questions

- 1. Do communities located along the Alexander Mackenzie Voyageur Route have ties to their waterway? What is the nature of these ties?
- 2. Do community stakeholders support the development of the Alexander Mackenzie Voyageur Route?
- 3. Should the Alexander Mackenzie Voyageur Route be protected, developed and promoted as a local and national heritage resource for tourism and recreation?

The following goals will be met through the completion of the thesis by achieving

the given objectives.

Goal: To explore the value of the Alexander Mackenzie Voyageur Route as a natural and cultural heritage resource.

Objectives

- * Read literature related to Canadian history, geography, and social studies as it relates to concepts of natural and cultural heritage
- * Review and report on selected existing heritage route planning in Canada and the United States
- * Write a chapter defining the historical, natural and cultural links between heritage and the Alexander Mackenzie Voyageur Route
- Goal: To examine the level of community stakeholder interest in the local waterway and the Alexander Mackenzie Voyageur Route.

Objectives

- * Compile a comprehensive mailing list of communities along the AMVR
- * Develop and distribute a questionnaire to representative stakeholders, addressing community ties to the waterway, and local views of the Alexander Mackenzie Voyageur Route.
- * Compile, analyze and summarize the data from returned questionnaires
- Goal: To ensure that information gathered in this thesis is accessible, both in content and availability, such that it may be used to support further discussions on the future of the Alexander Mackenzie Voyageur Route.

Objectives

- * Write in a clear and concise manner which avoids the use of disciplinary jargon
- * Prepare a short summary report, based on the thesis, for public distribution

Chapter 2 - Rivers and the Alexander Mackenzie Voyageur Route as Heritage in Canada

PREFACE

In springtime I was born, and each Spring I am born again - or at least that is when I come to life. My story starts in Spring.

Cold, dark, long winter nights are the time for sleep. But, then one day the sun stays in the sky a little longer and rises a little higher - its warmth bringing a wet glisten to the snow and ice countryside. I am awakened by the warm touch of a south wind, and with a crack, a sigh a release... winter's sleep is broken and a pulse of life trickles through my snowy banks.

It is right that I awaken each year this way. I am born of ice and snow settled in cool mountain valleys or lying silent in dark woods. I am fed by the new rains of Spring and clear fountains which well from the earth. In partnership with the sky I bring life to the land - and the land gives me form and character.

It is Spring and I am alive and moving. I am filled with life, old and new. In my mind I carry the memory of the past, of pools and stones and channels long since abandoned. In my arms I carry earth, bound for settlement at a distant spot of calm.

On my back I carry the greatest weight of all - the weight of humanity.

It is all a matter of perspective - life, history and rivers. So, in considering concepts of heritage, culture and the value we place on things, it is important to remember that to each consideration we bring our own bias, and reality is no more than what we can accept on faith alone. Science and art, as disciplines, bring tools to understand ourselves and the world around us better, but both science and art are limited by human understanding and the ability or willingness to accept "other" views of the world. Bertrand Russel, a noted mathematician, writer and philosopher, questions the scope of knowledge and our acceptance of science,

In considering the reasons for believing in any empirical statement, we cannot escape from perception with all its personal limitations. How far the information which we obtain from this tainted source can be purified in the filter of scientific method and emerge resplendently godlike in its impartiality, is a difficult question... (1948, p.8).

One approach to "justifying" rivers and the Alexander Mackenzie Voyageur Route as significant aspects of heritage would be to elaborate on the historical record and scientific "value" of the "resource", but somehow such a justification would fall short in approximating the importance and depth of the topic. "What about the river?", posed a participant at the Canadian Heritage Rivers Conference¹, in discussion on the future of rivers in Canada. What about the river? Will our actions take into account those things which don't seem to affect us, or does the need to justify actions in terms of outcomes limit the ability to preserve for preservation's sake - or understand for the sake of knowledge? Perhaps, by accepting that there are no "right" answers, it is possible to improve (or perhaps re-discover) a personal relationship with rivers and move forward to improve this relationship with open eyes and minds.

In considering rivers and Canadian heritage, then, it is important not to cast aside all that has come to us through "the filter" of science and historical study, but to approach an understanding of heritage with caution. Rivers are many things, and represent the best and worst of all that there is, and all that we are. Rivers are life, story and resource. Rivers indeed carry the weight of humanity, but through understanding and cooperation it is possible to lighten the load. Chief Seattle, in an 1852 response to the

¹ Held in Peterborough, Ontario in 1994, the purpose of this conference was to review, on its 10th anniversary, the Canadian Heritage Rivers System, and to prepare a vision for the future of the System in Canada.

U.S. government, which wanted to buy his Nation's land perhaps said it best.

The shining water that moves in the streams and rivers is not just water, but the blood of our ancestors... Each ghostly reflection in the clear waters of the lake tells of events and memories in the life of my people. The water's murmur is the voice of my father's father. The rivers are our brothers. They quench our thirst. They carry our canoes and feed our children. So you must give to the rivers the kindness you would give my brother (Erasmus, G. in Hummel, 1989 p. 92).

The purpose of the following discussion is to explore the river as a facet of Canadian heritage, with such exploration providing a clearer view of history as it relates to rivers and the Alexander Mackenzie Voyageur Route. By contemplating rivers and the Alexander Mackenzie Voyageur Route within natural and cultural contexts, it is possible to consider the future stewardship of the Route as a significant heritage resource².

A NATURAL CONTEXT

In the beginning, when God created the universe the earth was formless and desolate. The raging ocean that covered everything was engulfed in total darkness, and the power of God was moving over the water. Then God commanded "Let there be light" - and light appeared. God was pleased with what he saw. Then he separated the light from the darkness, and he named the light "Day" and the darkness "Night." Evening passed and morning came - that was the first day.

Then God commanded, "Let there be a dome to divide the water and to keep it in two separate places" - and it was done. So God made a dome, and it separated the water under it from the water above it. He named the dome "Sky." Evening came and morning passed and that was the second day... (Genesis 1:1-8).

... Skywoman, who was expecting a child, looked down from skyworld and as far as she could see there was glistening blue water. She leaned further over the hole where the great tree had been uprooted as she had seen it in her dream, gripping tightly to a branch for balance - the

² "Heritage resource" in this context includes any tangible or intangible, natural or cultural elements.

branch broke and Skywoman tumbled downward. Two swans saw her falling, caught her and saw that there was no place to set her down. As the swimming and flying animals gathered around to see this new visitor, they decided they should make some land to support her, so turtle sent different swimming animals one at a time to the bottom of the water to bring up some earth. Each one failed - the duck, beaver and loon - as the water was too deep, until finally tiny muskrat, floating to the surface let his tiny paw open on turtles back, spilling out a pawful of earth. The earth grew and grew, and when the swans lowered Skywoman to the turtle's back her hand fell open spilling seeds from the branch of the great tree. That is how the first land was formed.³

... The Earth is thought to be about 4.6 billion years old⁴ (Selby, 1985 p.4), with the vast granite platform of the Canadian Shield dating to the "Archean Era" 2.5 billion years ago (Bird, 1972 p. 6). For billions of years, more rock and sediment was laid down over this crustal base, and small sea creatures and plants settled to fossilize in the forming rock. The end of this "Pre-cambrian" era marked the end of major crustal formation (Bird, 1972 p.10), but in a world now largely dominated by water, the "structure" of the planet's surface was just taking shape.

Three hundred millions years ago, simple life (plant and animal) thrived, water and land rose and fell and continental plates shifted to present a new view of an Earth dominated still by water, but showing consolidated form (Bird, 1972 p. 16). Only in the most recent 150-200 million years have ocean basins and exposed plains been formed,

³ Adopted in a shortened form from an Onondaga creation story told to me by a student storyteller with the Canada Sea-to-Sea Expedition. A version can also be found in <u>Keepers of the Earth</u>, by Caduto and Bruchac.

⁴ Dated as the formation of the Earth's crust through differential cooling from a molten core (Pasachoff, 1987 p.136).

with most landforms appearing in much more recent history (Selby, 1985 p. 4). The thin⁵ "outer crust" folding, rising and shifting gave rise to mountains, basins and underwater ridges, setting the stage for the development of drainage patterns and rivers which are evident today.

As the seas withdrew from what is now seen as Canada's western prairies⁶, early rivers flowed east-west, only to be later "captured" by the deepening north-south valleys of the Mackenzie and Mississippi systems (Bird, 1972 p.18). The arrival of the Quaternary period 1.8-2.5 million years ago, however, signalled the crucial period of visible landform change in Canada, as described by Bird,

In this final period of the earth's history [the Quaternary], the dual cataclysms of the Pleistocene glaciations and the arrival of man - Indian, Eskimo and European -have modified the physical landscape at a rate that can barely be equalled in the more remote geological past (1972, p. xv).

While earlier processes of heat and movement gave Canada its form, it is water that gives it its appearance. The imprint of glacial ice on the Canadian landscape is inescapable, with the most recent glaciation occurring some 6000 years ago (Bird, 1972 p. 22). Still living in an Ice Age⁷ today, the effects of four glaciations during which the Laurentide Ice Sheet extended from the Arctic to the Great Lakes (Bird, 1972 p. 29) have sculpted the face of the country. The great weight of ice two miles thick depressed the

⁵ "Thin" at a maximum thickness of 125 kilometres beneath the continents to 50 kilometres beneath the oceans (Selby, 1985 p. 35).

⁶ c. 63 million years ago, between Mesozoic and Cenozoic eras

⁷ A period of time lasting c.20-100 million years in which there are periodic glacial advances and retreats (glacials and interglacials) (Selby, 1985 p.417).

land (which is still slowly springing back), and on its retreat scraped and carved the land, depositing rock and soil which changed the physical and biotic make-up of the region. Rivers and river valleys were altered or created by the glacial retreat, and the familiar landscape of present-day Canada emerged.

River patterns resulted from glacial land change, and rivers themselves are perhaps second only to glaciation in their ability to continually change the face of the land through which they flow (Bird, 1972 p.3). Canada is a country of great diversity, with an area of nearly 3.5 million square miles (Bird, 1972 p. 1) and nearly half the fresh water in the world⁸ (Franks, 1977 p.6). Canada today contains six fairly distinct physical regions, including the Arctic Islands, the Great Lakes-St. Lawrence Lowlands, the Appalachian Region, the Interior Plains, the Cordilleran Region and, at the heart of Canada, the Canadian Shield, the Pre-cambrian rock base which makes up nearly 50% of the country (Webster's Encyclopedic Dictionary, 1988 C-4).

A legacy of rock and water was left by the glaciers. Massive lakes were formed and drained by massive rivers, and later humans came to walk beside these rivers and even ride upon them in canoes fashioned from the trees of the land. This coming of the first people to the water was the beginning of a new chapter and volume in an ongoing story. The physical evolution of waterways in Canada continues, but the rate of natural physical change is dwarfed by the physical and cultural effect of humans in the past ten thousand years. The inclusion of human experience transfers the story of rivers from a

⁸ Estimated to cover 7.6% of Canada's land area (Webster's Encyclopedic Dictionary, 1988 p. C-5).

listing of probable events to an unfolding cultural narrative which defines the relationship between the natural and human world.

A CULTURAL CONTEXT

Although this predominantly "northern" landscape of rock and water may appear as a barrier to habitation and growth, in many ways Canada developed as a nation not despite her geography, but because of it (Innis, 1967 p.xiv). Innis's reference to the role of geography in the development of Canada reflects the tremendous physical scale of the country, and the importance of access and transportation provided by what canoeist and explorer J.W. Tyrell described as, "certainly one of the greatest glories of Canada... her God-given waterways" (1898, p.12).

Whether described as an expanding political empire from the St. Lawrence River, an unfolding western frontier, or a developing regional economy based around urban centres (Careless, 1954), the "Canadian" historical story always leads back to the importance of the land, its resources and the meeting of the native inhabitants and newcomers from Europe.

In recounting a cultural history of Canada it is essential to acknowledge that the story of Canada is incomplete without a valid representation of pre-European culture and economy. The historic timing of the early occupation of Canada⁹ is less important than the acceptance of a long history of Native occupation which includes rich cultural traditions, a diverse and organized economy and a diversity of autonomous Nations, each with well- established ways of living - stretching from the Pacific and Arctic to the Atlantic coast (Lunn and Moore, 1992 p.14). Trade was important in establishing and maintaining relations between Nations, and the success of such trade networks relied especially on the ability to adapt to the natural transportation network of rivers and lakes (Ray, 1974 p.30). C.E.S. Franks (1977), reflects on the great influence of the Canadian landscape in the shaping of North American culture. The canoe, developed by Canada's aboriginal inhabitants long before the arrival of Europeans, was the means by which individuals were able to travel through a varied and often harsh landscape. The waterways were (and are) a valuable resource both as a transportation corridor and as a rich source of food and sustenance.

When Europeans arrived in North America, the value of Native technologies and the importance of the inland waterways were quickly realized, and utilized for what was seen as a collective good. One account of Jacques Cartier¹⁰ describes his first experience with the canoe at the Lachine Rapids, a point at which he could sail no further up the St. Lawrence, and even his best men in row boats could make little headway.

⁹ Often cited as 10-12 000 years ago with the end of the last glaciation - although there may have been "pockets" of human populations in areas not affected by the ice.

¹⁰ Cartier was sent in 1534 by King Francois I, of France, to find riches in this "Terre-Neuve" (new land). Cartier plied up the St. Lawrence River, and asked the people he met what they called their land. They answered "Canada", meaning "the village" in their language, but Cartier applied the name to the whole country, putting Canada on the map (Lunn and Moore, 1992 p. 30).

Cartier, then was resigned to "swallow [his] pride and imitate "les sauvages" in adapting to the demands of geography" (Lavender, 1977 p. 26) - his adaptation was the acceptance of the canoe as the best "technology" for travelling the Canadian waterways. It is likely that Cartier's recognition of the value of the eastern-Natives as trading partners -"partners in furs" (Francis and Morantz, 1983) - began an association which was to direct the future of Canada for several hundred years.

The era of the fur trade was one of the most culturally defining periods in North American history. Miller (1991, p.xi) describes the early exchange of furs for trade goods as cooperative and mutually beneficial, creating a largely positive relationship into the 19th century. Early trading between fisherman and coastal Natives was a natural sideline to fishing, with Natives offering the furs off their backs in barter for ironware, beads and other manufactured goods. With a rising fashion trend for beaver felt hats in Europe, these "greasy beaver"¹¹ were a valuable commodity, as was a cooking pot for Natives who had been boiling water in birchbark with heated stones.

Cultural traits related to acquiring beaver pelts and trade goods were stressed within this new Native/European cultural mix (Innis, 1956), and a new "common history" of a developing Canada was launched. Fur traders and voyageurs - the workhorses of the trade - adapted in many ways to the Native way of thinking and most certainly to the Native modes of travel.

¹¹ the term refers to well worn betver furs with the outside guard hairs worn off - making them more valuable for trade

The active participation by Natives in various aspects of the fur trade encouraged profound changes in both European and Native cultures (Short and Neering, 1992 p. xi) which grew into an inter-dependence based around the trade of goods and European desire¹² to find a passage across the continent. Miller (1989 p. 20), points out that it is a wonder that early contact through the fur trade was as cooperative as it was, as the newcomers and the Indians came from well established societies with clearly different political and cultural identities and vastly different lifestyles. Despite such differences, the trade in furs flourished through the 17th and 18th centuries, leaving its mark on Canadian cultural identity.

Without the fur trade there would have been no stimulus of competition to search out new fur lands, and without the profits to underwrite the voyages there would have bee no means to carry out the search. Most important of all, without the Indian, the canoe, maize and other products of indigenous society, none of the great exploratory trips would have got much further than Lachine (Miller, 1989 p.43).

Through the pursuit of furs, European traders travelled inland with Native guidance along well established waterways. The Alexander Mackenzie Voyageur Route, is largely synonymous with what David Lavender (1977) calls the "Trans-Canada Canoe Trail", described as a commercial highway joining sections of well-used waterways across Canada. Winding through four major drainage basins, the route is better described as a network of drainage basins connected by rivers (Morse, 1979 p. 27) which allowed European explorers to follow the Native's example and "head inland" to the interior of

¹² When the fur trade was taken over by the Scottish, the focus altered to include dreams of discovery and expansion, rather than simply a quest for fur (MacLennan, 1971 p. 7).

the continent. "So mobile was the canoe, so enticing the next bend around the river, so dominant the human instinct to know what lay around it, that within the course of a very few years the voyageurs of French Canada were in the heartland of the continent" (MacLennan, 1971 p.14).

This "momentous event in a collective history" (Mercredi, 1993 p.16), while setting the stage for cultural integration, also provided a setting for cultural disintegration due to the growing imbalance in power between European and Native participants. While the Indians were the dominant partner in the early commercial relationship of the fur trade (Miller, 1989 p. 37), as the fur trade declined in relative importance and as immigration and agricultural settlement speeded up, "the Indian as commercial partner became a much less attractive figure to the colonist" (Miller, 1991 p.xi). By the early 1800's, with the waning of the interior fur trade and an influx of settlers to the west, the interaction between Native and non-Native was altered, and the long-ranging travel so prominent during the trade decreased until the building of the railway in the late 1800's.

The fur trade was most certainly an economic and political force in the development of Canada as a nation, but the power of the fur trade is much more than economic (Eccles, 1979 p.421). And, although the fur trade contributed to the geographic development of the country, the notion that the main pattern of development of Canada was based on the westward expansion of the fur trade ignores the real geography of the trade in establishing trading corridors from the St. Lawrence River to southwest to the Mississippi River valley and later north to James Bay.

The importance of departing from a traditional historical model of Canada as a commercial empire which began in the east and "spread" west, lies in the acceptance of Canada as a collection of culturally distinct regions sharing a common Canadian experience and history, while retaining an important cultural and regional identity (Wise, 1975). Native trade routes used during the fur trade stretched like arteries throughout the continent, joining otherwise disparate regions, and while in the United States settlement favoured the transition of east to west, Canada for the most part, still tends to favour regional commitment (Careless, 1969 p.4), much like that present during the fur trade.

Ramsey Cook (in Careless, 1969 p.1) referred to such regional, ethnic, cultural and class identities as "limited identities", writing that "it is in these limited identities that "Canadianism" is found, and that except for our over-heated nationalist intellectuals, Canadians find this situation quite satisfactory". The concept of a nation of limited identities fits well within a regionally defined model of the fur trade, which can be described as the meeting of two cultures of limited identities - diverse Native groups distributed across the country and an equally diverse collection of newcomers.

In <u>Re-discovering Canadian History - a challenge for the 80's</u>, Paul Bennet (1980), emphasizes the importance of recognizing the pluralism and diversity of Canada, where, by accentuating regional differences, a cultural understanding can be created. Seeing Canada as a collection of culturally and geographically distinct regions must also be augmented by the view of Canada as a nation of nations, with English, French and Aboriginal cultures addressed as separate yet equally-important realities within a unified

Canada. "A common Canadian heritage for the future," writes former Lieutenant Governor of Alberta, Honourable R.G. Steinhauer (1975), "must consist of a genuine blend of all the cultural heritages to be found in this country" (p.159).

Can such a blend of cultures be realized within a Canadian context such that a common Canadian heritage is established? Ovide Mercredi (in Mercredi and Turpel, 1993), in describing the place of First Nations people in a Canadian context writes,

We can speak for ourselves and no one has the political or spiritual authority to speak for us. Canadians can not speak for us, because Canadians are different. To define us with Canadian heritage is to enslave us (p.36).

Views such as that of Ovide Mercredi may seem to evade the vision of a common Canadian heritage, but within the margins of Native cultural autonomy, is the recognition that Canada is an incomplete nation without the inclusion of the First Nations, and that it is in the good interest of all Canadians to find a common reason to reclaim the past and celebrate in peace and respect (Mercredi and Turpel, 1993).

The key to achieving an understanding of ourselves through a shared history is to find the common thread which ties together both regional and cultural differences. The common thread is the land¹³. "The land is far more important than we are. To know it is to be young and ancient all at once" (MacLennan, 1967, in Munro, Doughty & King, 1975, p.123). Ovide Mercredi (in Mercredi and Turpel, 1993) shares with MacLennan an understanding of the importance of the land. "The spirits of our people

¹³ "The land" refers to the natural world of water, earth, sky, plants and animals.

are written on the land, our land. We cannot tell a story of somewhere else; we are this place" (p. 19).

Intricately woven into concepts of culture and heritage in Canada are concepts of space. Canada is a vast country, and the "lack of continuity between places and generations is evidence of a strong dis-continuity in the Canadian experience" (Franks, 1977 p. 53). Canada's 12th Prime Minister, William Lyon Mackenzie King may have been on the right track when he said "If some countries have too much history, we have too much geography" (in Munro, Doughty and King, 1975 p. 122).

MacLennan points out that "in a vast country like Canada, space in our daily lives can only be measured by the time and expenditure and effort it takes people to cover it" (1971 p. viii). A great deal of effort has gone into "joining" the country and overcoming the geographical vastness in search of a sense of continuity and a Canadian identity. The Northwest Company's water based trade network stretched from the St. Lawrence River in the east to the Athabasca region, and later to the Arctic and Pacific coasts - the trip from Montreal to The Athabasca took four-five months. In 1885 the last spike was driven in Craigellachie, British Columbia to complete the Canadian Pacific Railway, and for the first time the west was joined to the east for the common traveller. By 1948, Trans-Canada Airlines was making a flight from Montreal to Vancouver in just 13 hours (Lunn and Moore, 1992 p. 258).

While modern transportation connects otherwise distant points, it serves to alienate

the individual from experiencing the land and removes a valuable sense of time which permeates Canadian culture. "A knowledge of the Canadian rivers", argues MacLennan, "will recover this earlier sense of time in Canada" (1971, p.viii). Perhaps by better understanding the past, accepting a country of "limited identities" and altering the dream of nation building to one of region building, the concept of a general union (Canada) can serve as a context for individual desires and aspirations without creating conflict or confusion (Careless, 1969 p.10).

"Culture", according to George Ignatieff, (1975), "is the way each one of us imagines ourselves and our world" (p. 174). Under such a definition, one is able to maintain a unique culture within a shared history, such as that during the early fur trade in Canada. Heritage, is seen as a reflection of culture, in which one may find intrinsic value, and a sense of self which may be passed on to future generations. Heritage provides a link between history and culture in establishing a grounds for recognition and preservation of those things that provide identity (Steinhauer, 1975). There is now a need to embrace the multiple identities of the people of this land, and the bonds which they share (Bliss, 1991). By examining further the links between culture, heritage and history during the fur trade in Canada, through the common theme of the Alexander Mackenzie Voyageur Route, an integrated view of a country "joined by history, yet separated by culture and conflict" (Turpel, in Mercredi & Turpel, 1993), can be established, such that the role of the waterway route as a heritage resource is better defined.

A FUTURE CONTEXT

Long trails...are significant cultural creations, which reflect our visions of nature, our success in managing it, our hopes and doubts about the future and our pride in the past (Birch, 1979, p.9).

The Alexander Mackenzie Voyageur Route represents a cross section of rivers and lakes with valuable regional ties and strong links to a shared Canadian history. Canadian rivers, and the AMVR must be preserved, not only as valuable ecological systems, but as strands of continuity which connect the country - physically, culturally and intellectually -thereby providing a sense of the past. The need for such preservation is emphasised by Northrop Frye,

What kind of people we are is perhaps determined, and certainly conditioned by what we realize of our past, and sharpening our sense of the past is the only way of meeting the future. Preserving our heritage is a central part of that realization and that sharpened sense (1982, p.174).

Preservation, in the sense of protecting for the future, is also confronting the realization that the compartmentalizing of natural and cultural resources can be a failed effort in the face of evolving land use and resource demands from fishing, forestry and mineral extraction to recreation and tourism. It is important that resources are recognized, acknowledged and understood, to encourage cooperative stewardship.

"Stewardship", therefore involves much more than defining a resource and assuming the role of caretaker. True stewardship requires a recognition of the many heritage values of a resource, and it attempts to satisfy the needs of a variety of individuals without sacrificing the resource itself. The "old style" of preservation which included government land acquisition and park designation can no longer meet all the needs of the land or the individual (Hilts in Hummel, 1989, p. 100). Stewardship, then, becomes a personal responsibility. Unfortunately, such a role is still not well understood because the heritage for which we are stewards is defined within an individual context and is constantly evolving.

In assessing stewardship of the Alexander Mackenzie Voyageur Route - or "who should take care of this resource", it is useful to look at the history of the Route as a magnificent book with several volumes, each representing a different topic, and each telling a story, chapter by chapter through time - leading to the present, where the book does not end, but is continually being written. Each chapter represents a new era in this history, and the story line begins to really pick up with the late chapter titled "Footprints on the Shore". How to care for this book and ensure that it is well read and the writing of it continues is a tenuous question. Perhaps an illustration of what not to do will help.

Once upon a time there was a young boy who loved books. One day when he was shopping with his mother, he saw a wonderful book sitting in a store window - it had a colourful cover, was just the right size, had beautiful pictures, and the text was big and easy to read. Most of all though, he liked the story... it started with once upon a time, ended with happily ever after, and left plenty of room for imagination in between. After some careful prodding, his mother bought him the book and as soon as he got home he ran to HIS room to read HIS new book. His brother wanted to read it too, but he would not let him, it was HIS book. His mother wanted to show the book to a friend, but he would hear nothing of it, after all it was HIS book, even though it was his mother who made it possible for him to have the book, and his brother who helped him learn to read. He put the book away in a box, locked the lid and hid it under his bed so no one could read it. Soon after he lost the key, and the book still sits there, in the box in its colourful, literary beauty - the only problem is that no one can read it, not even the boy.

Just as a good book is more than a collection of ink, words and pictures, the Alexander Mackenzie Voyageur Route is more than a collection of rivers, lakes and streams. The story is as important as the content, but in order to ensure that the story is told, understood and appreciated, it is critical not to put it in a box and store it under the bed, although it is there that it may seem most secure.

The Alexander Mackenzie Voyageur Route was first recorded as a means of crossing a continent for trade and commerce, representing a culturally defining period in Canadian history - the meeting of distinct cultures. Recognition of the Route not only provides an opportunity for re-kindling cultural alliances within Canada, it provides the opportunity to examine our use of our waterways and develop new strategies for "equitable culturally appropriate sustainable development" (p.94) as noted by George Erasmus in Endangered Spaces.

There is a need for communities to turn and face the river - physically and intellectually, so that the river will once again become a central focus - as it was when the community was formed. In "facing the river", communities will profit, not only by better knowing themselves, but in seeing and understanding their place in a larger story and finding opportunities for sharing that story with others.

Chapter 3 - Background

HISTORICAL OVERVIEW

Alexander Mackenzie

Alexander Mackenzie was born at Stornoway on the Isle of Lewis in the Outer Hebrides of Scotland in 1764. He came to North America in 1774, and was employed as a clerk in the fur trade in 1779. By 1787, he was a wintering partner in the Northwest Company, and was posted at Ft. Chipewyan on Lake Athabasca under the direction of fur trader Peter Pond.

Based on information and maps provided by Pond, Mackenzie, Laurent Leroux, a guide known as English Chief, his two wives, five voyageurs, two of their wives, and two young natives set out on June 3, 1789 to follow a large river flowing west from Great Slave Lake in search of a northwest passage to the Pacific (Mackenzie in Lamb, 1970 p. 163). On July 13, Mackenzie and his party reached salt water, although it was the Beaufort Sea, and not the Pacific Ocean.

Mackenzie, realizing that his navigation and mapping skills were inadequate, completed another two years in the fur trade and then returned to England in the fall of 1791 for further schooling in astronomy and cartography. After a winter's studies, Mackenzie returned to Canada in the spring of 1792 with a proper set of instruments and tables, improved skills, and renewed determination. Fully concentrated on the task ahead, Mackenzie pushed west to newlyconstructed Fort Fork, near the junction of the Smoky and Peace Rivers, where he spent the winter preparing for his next and last great voyage.

In May, 1793, Mackenzie departed on a difficult passage by cance and foot through the Rocky Mountains. Mackenzie and his crew of six voyageurs, two natives and Alexander Mackay arrived on the Pacific Ocean near Bella Coola, British Columbia, inscribing in vermilion paint on a rocky outcrop on the shore of the Dean Channel (Figure 1.20):

Alexander Mackenzie, from Canada, by land the twenty-second of July, one thousand seven hundred and ninety three

Mackenzie returned to Grand Portage in 1794 and was commended for his efforts, although the route he followed and recorded did little to contribute to the business of the Northwest Company. The route Mackenzie followed was too difficult to be practical as a trading route. Mackenzie returned to Montreal and acted as an agent for the Northwest Company until 1799, after which he retired to England. In 1801, Mackenzie's book Voyages from Montreal, on the River St. Laurence, through the Continent of North America to the Frozen and Pacific Oceans, in the Years, 1789 and 1993 was published.

The publication of <u>Voyages</u> and Mackenzie's subsequent proposals drawing attention to the importance of the Pacific coast were perhaps as notable achievements as Mackenzie's journeys across Canada. In 1802 Mackenzie was knighted by King George III. Alexander Mackenzie served as a member of the Legislative Assembly of Lower Canada from 1804 to 1808. In 1812, Mackenzie married, and purchased an estate in Scotland. Mackenzie died in Britain in 1820 of Bright's disease.

The Alexander Mackenzie Voyageur Route

In his book <u>Voyages</u>, Mackenzie provides a detailed account of his 1789 trip to the Arctic and the 1793 voyage to the Pacific, as it was these two outings from Fort Chipewyan which gave Mackenzie the claim as the first European to successfully record a passage across North America from sea to sea. The canoe route between Lachine, Quebec and Lake Athabasca, however, was well established prior to its use by Mackenzie, and principally consisted of a joining of shorter well known Native routes. Mackenzie's significance with regard to the national route comes with the inclusion of a chapter in <u>Voyages</u> titled "A general history of the fur trade from Canada to the Northwest". In this chapter, Mackenzie provides a detailed description of the route from Lachine to Fort Chipewyan, reflecting on the land, the people and the waterway.

The Alexander Mackenzie Voyageur Route, then, bears Mackenzie's name not in celebration of any "discovery" by Mackenzie, but in recognition of Mackenzie as the first European to describe the route in its entirety from sea to sea. In using this route, it is essential to acknowledge the importance of thousands of years of aboriginal use of the waterways and footpaths along the route, and subsequent use of the route by traders and explorers who came before and after Mackenzie.

The Alexander Mackenzie Voyageur Association

The Alexander Mackenzie Voyageur Association (AMVA) was formed in 1993 from the earlier Alexander Mackenzie Trail Association, to expand its efforts from the designation of the Alexander Mackenzie Trail to the commemoration of the national Alexander Mackenzie Voyageur Route. Registered under the Society's Act of British Columbia and with Revenue Canada as a not-for-profit corporation, the Association;

continues to further the concept of a dedicated historic route between the Old Port of Quebec to Fort Chipewyan Alberta via the original Voyageur Route of the North West Company, and thence on the route of Alexander Mackenzie's 1792/93 expedition to the Pacific Ocean - known altogether as THE ALEXANDER MACKENZIE VOYAGEUR ROUTE - Canada Sea to Sea (AMVA, Spring, 1995).

The Voyageur Association is administered by a volunteer board of directors consisting of nine members with addresses in British Columbia, Alberta, Saskatchewan and Ontario. Honourary patrons for the Association are Hon. John Fraser P.C. Q.C., Pierre Berton and Peter C. Newman. The Association has a national membership of over 300, and produces a quarterly newsletter which highlights activities of the Association and information related to the Route.

The purposes of the Association, carried over from the Trail Association include¹;

- a) To educate the public concerning the Alexander Mackenzie Expedition in 1792-1793 from Fort Chipewyan to Dean Channel and its place in Canada's history.
- b) To encourage preservation, enhancement and interpretation of the natural, archaeological and scenic heritage of the route.
- c) To conduct and encourage research about the route.

¹ Taken from a copy of the Alexander Mackenzie Trail Association Constitution, submitted for inclusion in the British Columbia Society Act.

The Association has been active in the past two years promoting and supporting efforts for national proclamation and promotion of the Route, and it is holding its Annual General Meeting (AGM) in Thunder Bay, Ontario in August, 1995 - the first time the meeting has been held outside British Columbia/Alberta. With the recent issue of the national proclamation, the function of the AMVA will be reviewed at the 1995 AGM, perhaps creating a stronger and more diverse association with a truly national presence.

The Canada Sea-to-Sea Expeditions

In 1986, Dr. Jim Smithers, a Professor in the School of Outdoor Recreation at Lakehead University, in Thunder Bay, Ontario, first suggested the idea of a cross-Canada canoe expedition celebrating the 200th anniversary of the first recorded crossing of North America by Alexander Mackenzie. Dr. Smithers felt that such an event could be an important educational and life experience for the university students who would paddle the reproduction voyageur canoes, and the pageantry and celebration which would accompany the journey would be a memorable experience for all the communities which the expedition touched.

Dr. Smithers was not new to historical cance tripping, as in 1984 he led a group of 36 Lakehead University students on a journey from Lachine, Quebec to Thunder Bay, Ontario - "Rendezvous Fort William". The Rendezvous Fort William trip was in celebration of Ontario's bicentennial, and it proved to be a great success, providing a combination cance trip and travelling road show which brought history to life for the dozens of communities along the route. Rendezvous Fort William was the model for the

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Canada Sea-to-Sea Expeditions.

After two years of deliberations, the Canada Sea-to-Sea project began to take root. Two other organizations had joined Lakehead University as partners in the Sea-to-Sea project; The Alexander Mackenzie Trail Association of Kelowna, British Columbia, and The One Step Beyond Adventure Group of Canmore, Alberta. The Alexander Mackenzie Trail Association, a volunteer-based organization interested in the preservation of historic trails, saw the Expedition as a link to the concept of preserving a cross-Canada "Voyageur Route" following the path of Alexander Mackenzie. One Step Beyond, formed by John Amatt, manager of the 1984 Canadian Everest Expedition, took interest in facilitating the fund raising and financial administration of the Expedition from a consultative position. By 1988, under these three partners, the basis for what was to be a five year commemorative project was formed.

Goals & Objectives

Through the image of Mackenzie, the French Canadian Voyageurs, and the Native Guides and women, the Canada Sea-to-Sea project was to make a powerful statement about Canada, cooperation, unity and the importance of understanding our shared heritage.

The original project goals of the Canada Sea-to-Sea project, developed in 1988, and maintained throughout the Expedition are as follows;

<u>To Commemorate</u> - on the 200th anniversary of the first recorded crossing of the North American continent (north of Mexico) from the Atlantic to the Pacific Oceans.

<u>To Educate</u> - young Canadians, through the image of Sir Alexander Mackenzie and other European explorers in whose footsteps he followed - Cabot, Cartier, Champlain, La Verendrye, Niverville and others, about Canada's adventurous heritage and the role the spirit of adventure must play in modernized urban society.

<u>To Establish</u> - through a series of historical dramatizations and performances, the first route to link Canada from "sea-to-sea" and to provide a catalyst for the establishment of a national heritage trail, preserving and interpreting this route for subsequent generations of Canadians.

<u>To Reaffirm</u> - for young Canadians the spirit of teamwork, unity and multiculturalism that first built this nation, by demonstrating the vital roles of Canada's Native peoples, the European explorers and entrepreneurs, and the French Canadian voyageurs, without whose help Mackenzie's original expeditions would not have been possible.

(Report on the 1989 Sir Alexander Mackenzie Bicentennial Expedition)

During the summer of 1988, sixteen Lakehead University students were hired to begin planning the subsequent Expeditions by developing an information and experience base which could be carried on to following years. These students visited various festivals and events, developed promotional material, engaged in historical research and began the long process of planning the logistics of the 1989 Expedition to the Arctic Ocean.

In re-creating Mackenzie's journeys, the first Expedition, in 1989 involved 24 students re-tracing Mackenzie's "voyage of disappointment" paddling more than 3400 km from Ft. McMurray, Alberta to the Beaufort Sea at the mouth of the Mackenzie (Deh Cho) River. The 1989 Expedition was successful by any account, and provided a valuable learning experience for students and administrators which would set the stage for

the subsequent Expeditions.

The summer of 1990 was originally planned as a cross-Canada interpretive road show for schools and communities which would not be reached by the water-based portion of the Expeditions, but due to lack of financial support, there was no project in 1990. By 1991, however, a renewed effort and the inclusion of the Federal Stay In School initiative brought together a group of 41 for the 1991 Expedition from Lachine, Quebec to Winnipeg, Manitoba. This group sang, danced and paddled their way through Canada's population centre, encouraging thousands of young people to Stay In School like Mackenzie - and follow their goals to success. The 1991 Expedition was also a success.

The 1992 Expedition almost did not happen, despite the great success of the previous voyages and the year of Canada's 125th anniversary celebrations. Funding was very hard to come by, and the 1992 Expedition was all but cancelled when a grant through the Minister of State's, "Getting to Know Canada Better" program provided enough funding for a group of nine to set out on a journey from Winnipeg, Manitoba to Peace River, Alberta. The difficult, mostly upstream, 3300 km passage of 1992 provided an important continuity for the culminating 1993 Expedition which was already being planned through association with the Alexander Mackenzie Trail Association and the British Columbia Bicentennial Committee.

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The 1993 Expedition was an exciting culmination to the five year project, with a team of 24 paddling and hiking from Peace River, Alberta to Mackenzie Rock in the Dean Channel west of Bella Coola, British Columbia on the Pacific coast. The 1993 route involved the hiking of the 350 km Alexander Mackenzie-Nuxalk/Carrier Grease Trail from the Fraser River to the Bella Coola Valley, but unfortunately the expedition team was not able to hike this portion due to land claim disputes between local Native bands and the British Columbia and Federal government. Despite this setback, the 1993 Expedition provided a model finish to the successful and highly-public Canada Sea-to-Sea project, with a final performance in front of 4000 spectators at the Canada Games in Kamloops, British Columbia.

In total, the four expedition teams visited nearly 140 communities, spoke to more than 50 000 school children and paddled and portaged more than 12 000 kilometres, and in doing so, the Expeditions provided the important public relations support for the proclamation of what is now the Alexander Mackenzie Voyageur Route.

The Proclamations

Through the efforts of the Alexander Mackenzie Voyageur Association, the Sir Alexander Mackenzie Canada Sea-to-Sea Bicentennial Expeditions and countless volunteers and supporters, provincial proclamations declaring the Route were received between September, 1990 and June, 1994 (Appendix A). The proclamations acknowledge the importance of Mackenzie's achievements, and outline the course of the Route through each province. A federal proclamation, issued on Heritage Day, February 20, 1995, confirms the importance of the AMVR as a national heritage resource, joining the provincial proclamations. Although the proclamations do not provide any "real" protection status for the Route, they help to establish a platform of support on which the future of the AMVR can be based. The proclamations demonstrate a commitment to the concept of the Route by provincial and federal governments, and most importantly they give a clear description of the Route location in each province.

REVIEW OF HERITAGE ROUTE PLANNING MODELS

Although the Alexander Mackenzie Voyageur Route is a unique heritage route concept, a variety of related heritage initiatives in Canada and the United States (as well as elsewhere in the world) provide insight into the preservation of linear heritage routes. Examination of such initiatives aids in the development of an appropriate structural model for the AMVR.

The Alexander Mackenzie Trail

The Alexander Mackenzie Heritage Trail (Nuxalk-Carrier Grease Trail) is a 350 kilometre registered British Columbia Heritage Site managed by provincial agreement with the British Columbia Forestry Service. The site reaches from the confluence of the Blackwater and Fraser Rivers north of Quesnel, British Columbia to the Pacific Ocean at Bella Coola, British Columbia on the Dean Channel. The initial concept of the trail

came in 1975 after the Nature Conservancy of Canada received a proposal to preserve the Aboriginal grease trail over which Alexander Mackenzie was guided in his efforts to reach the Pacific Ocean, overland from Canada in 1793.

The initial report, dated April, 1976, was completed based on a 1975 field study of the trail conducted through financial support of the Agreements for Recreation and Conservation Branch (ARC) of Parks Canada and the British Columbia Parks Branch (Parks Canada, 1976).

The Alexander Mackenzie Historic Trail Preliminary Development Concept (Parks Canada, 1976) began a process that led to the signing of a Canada-British Columbia Agreement for Recreation and Conservation in 1982, "providing a mechanism for establishing, protecting and developing a co-operative heritage area along this historic corridor" (Alexander Mackenzie Heritage Trail Coordinating Committee, 1993 p.7). A Master Development Plan made under the ARC agreement between the British Columbia Minister of Lands, Parks and Housing and the federal Minister of the Environment was released in February, 1985 "making recommendations regarding future protection and management of the Trail" (Parks Canada, 1985 p.1). In 1987, the Alexander Mackenzie Heritage Trail was designated by an Order-In-Council as a historic site under the British Columbia Heritage Conservation Act. In April, 1993 a Draft Heritage Management Plan was released, with consultation on the plan continuing to the present.

The designation and development model of the AMHT, leading to recommendations for conservation, interpretation and recreation, offers several important

approaches which bear further consideration.

a) Historical Background

Throughout the process, a clear view of the historical importance of the project was maintained and continually stated, including the recognition of Aboriginal and European heritage.

b) Site Inventory

Much of the information for development and management options presented in the AMHT documents was based on multiple and comprehensive inventories of the trail involving physical mapping, and heritage resource inventories of physical, natural and cultural aspects.

c) Multi-agency Cooperation

Research and development of the AMHT was maintained by agreements between a variety of federal, provincial and non-government agencies. Much of this cooperation was facilitated by the ARC agreement which;

"allows Parks Canada, on behalf of the federal government, to enter into agreements with provincial, municipal and regional governments, private agencies, and concerned citizens to cooperatively develop measures for the identification, protection, interpretation and development of areas deemed to be nationally significant" (Parks Canada, 1985 p. 5).

While it appears that the ARC agreement presents an opportunity for Parks

Canada involvement in the AMVR, " the program was effectively terminated in 1988

when Parks Canada abolished the Branch responsible for the program" (AMVA, 1995 p.

6).

d) Public Review

Local citizen participation was encouraged and maintained throughout the development process, including the appointment of community representatives and direct Native participation (Parks Canada, 1985 p.7). A public review process involving the general public and local citizen's groups was also seen as integral to the planning process (Parks Canada, 1985 p. 8).

The Canadian Heritage Rivers System

In 1979, a task force, coordinated by Parks Canada, was established to investigate the concept of a Canadian Heritage Rivers System (CHRS). A task force report was completed in July, 1981, leading to an agreement between the federal Minister of the Environment, the Minister of Indian and Northern Affairs and provincial and territorial parks ministers on the establishment of the Canadian Heritage Rivers System (Parks Canada, 1984).

The CHRS is a co-operative program of the Government of Canada, all ten provinces and both territories. The objectives are to give national recognition to Canada's outstanding rivers, and to ensure long-term management that will conserve their natural, historical and recreational values for the benefit and enjoyment of Canadians now and in the future" (Canadian Heritage Rivers Board, 1994 p.iii).

Rivers nominated to the CHRS are jointly managed by federal and provincial/territorial governments. The Canadian Heritage Rivers Board (CHRB), is made up of two federal representatives, appointed by the Federal Minister responsible for Parks Canada, and the Minister of Indian Affairs and Northern Development, and one provincial/territorial representative for each participating province or territory. The role of the Board is to review and support the nomination and selection of rivers to the CHRS. The CHRS Secretariat is maintained by Parks Canada to support the Board, promote awareness and provide administrative and research support (Parks Canada, 1984 p. 6).

Rivers may be recommended for nomination by private citizens or groups to the local governing agency, with that agency deciding whether to submit a nomination document to the CHRB. Once the nomination is accepted, the Board member representing the nominating government submits a management plan to the CHRB for review. Upon approval of the management plan, the CHRB chairperson recommends the river for dedication to the Federal Minister responsible for Parks Canada and the Minister responsible for the nominating agency (Canadian Heritage Rivers Board, 1994

p.9)

Several attributes of the Canadian Heritage Rivers System provide good examples

for other heritage-based initiatives.

a) Inter-governmental Cooperation

Voluntary cooperation between provincial/territorial and federal government agencies is the basis of the success of the CHRS. Roles are clearly established with opportunity for public input and involvement in several stages of the nomination process. Federal commitment through Parks Canada in funding, managing and publicizing the CHRS is an important component of the CHRS, providing a central point of support for regional initiatives. Such federal support acknowledges the national heritage importance of the designated rivers.

Because the AMVR does not fit any existing Parks Canada programs, Parks

Canada is willing to "play a participatory role in the AMVR, but not a leadership role"

(AMVA, 1995 p. 7).

b) "Heritage Value Guidelines" (Parks Canada, 1984 p.13)

Criteria for nominating rivers are determined based on natural heritage value, human heritage value and recreational value. Frameworks for assessing such values as related to river environments are being designed, although nomination and designation does not require the use of such frameworks at this time. The "Heritage Value Guidelines" are considered in accordance with "Integrity Guidelines" which ensure the continuity of the related significant heritage features. (Parks Canada, 1984 p. 16).

c) Community Involvement

While the CHRS is a government managed program, nongovernmental participation is essential to the success of the program. Nomination often begins at the community/regional level, proceeding towards federal designation. The submission of nomination forms and management plans is usually the responsibility of the local governing agency, and such plans rely on public input and support. The flexibility within the nomination and designation procedure supports the variety of features for which a river may be nominated.

Three nominations to the Canadian Heritage Rivers System are located along the Alexander Mackenzie Voyageur Route. A 487 kilometre section (all included on the AMVR) of the Churchill River in Manitoba has been nominated. Designation of the Boundary Waters in Ontario is expected in June, 1996. The Jacques-Cartier River in Quebec flows into the St. Lawrence River section of the AMVR below Quebec City, and it is expected to be designated in January of 1996. Joining the French, Clearwater, and Mattawa, these new additions to the Canadian Heritage Rivers System serve to strengthen and confirm the merit of the Alexander Mackenzie Voyageur Route.

The Grand Strategy

The Grand Strategy is a recent and outstanding example of a management plan submitted to the Canadian Heritage Rivers Board, supporting the designation of the Grand River in Ontario to the Canadian Heritage Rivers System. The Grand Strategy "represents a new approach to fulfilling the CHRS requirements of conserving, interpreting and enhancing a river's heritage and recreational resources" (Canadian Heritage Rivers Board, 1994 p. 10).

The Grand River is unique in the CHRS because it has been designated primarily on the basis of its human heritage and recreational features (Grand River Conservation Authority, 1994), and because its designation includes the entire Grand River watershed, rather than just the main body of the river itself. The Grand River designation is also important because the river is recognized for its heritage importance even though it runs through some of the most populated areas in Canada, next to mostly privately-owned land with little "wilderness" character. As a result, the formulation of the management plan and the subsequent management of the Grand River are highly dependent on the contributions of a variety of stakeholders, from Native groups and government organizations to interest groups and private individuals (GRCA, 1994).

In recognizing the goals of *The Grand Strategy* "to strengthen, through shared responsibility, the knowledge, stewardship and enjoyment of heritage and recreational resources of the Grand River Watershed and to improve the well being of all life in the Grand River Watershed" (GRCA, 1994 p. ix), several approaches were used.

a) Public Involvement

The process started with the offering of twenty open houses in eight locations throughout the watershed to solicit input of the public (GRCA, 1994 p.9). The input received at these open houses was important in identifying the goals and principles under which the Grand Strategy should operate, and in creating a framework for future management and conservation.

b) Registry of Endorsements and Commitments

As stakeholders became aware of the Grand Strategy, they were invited to sign a registry which indicated their support for the project.

c) Administration

The Grand Strategy is coordinated by a Steering committee, comprised of eight representatives from the managing government agencies and a Coordinating Committee, comprised of thirty members representing various stakeholder groups (GRCA, 1994 p. 9).

d) Presentation

The Grand Strategy is presented in a visually attractive, clearly written document which includes many high quality colour photographs of the region. Working definitions are provided for jargon, and headings and sub-headings are well used to organize the text. The result is an impressive and accessible document which clearly outlines the potential of the Grand as a Canadian Heritage River.

Heritage Canada - Heritage Regions Program

The Heritage Canada Foundation is a national non-profit organization dedicated to providing leadership "that encourages the largest number of Canadians to take charge of their heritage". Heritage Canada was established with a federal endowment fund in 1973 (AMVA, 1995 p. 9), and has been a leader in "identifying and developing historic downtown areas, recycling heritage buildings, influencing governments to pass laws favourable to conservation and providing information and training" (Heritage Canada for a Better Future).

Heritage Regions is a program developed by Heritage Canada which supports a regionally-oriented approach to redefining an area's heritage resources to improve the quality of life, including acceptable social conditions, economic opportunities, secure identity and sustainable environment (Heritage Canada Foundation, 1994). A Heritage Region is "an area in which the population works together to maintain and improve its quality of life by capitalizing on the historical and environmental forces which create a community of interest (Heritage Canada Foundation, 1994).

Heritage Canada assists interested regions by providing background material on other heritage projects, facilitating regional organization and providing technical assistance for strategic heritage planning and training.

Although there is currently only one Heritage Region project along the Route, at Manitoulin Island in Georgian Bay, Heritage Canada has resolved to support regions along the Route in joining the Heritage Regions program, and has indicated an interest in taking a partnership role in the future of the Alexander Mackenzie Voyageur Route. As a long term advocate of heritage preservation and development in Canada with a history of successful community based heritage initiatives, Heritage Canada is an important contributor to the AMVR.

Baccalieu Trail Heritage Region Project

The Heritage Regions program provides a variety of approaches to its users. The Baccalieu Trail Heritage Corporation, formed in 1993, presents a useful planning example

in its Strategic Plan for the Baccalieu Trail Heritage Region Project, located on the Bay de Verde Peninsula in Newfoundland.

The Strategic Plan (Baccalieu Trail Heritage Corporation, 1993) includes clear vision and mission statements for the region as well as a list of principles through which the plan was developed. Goals and objectives are presented within a seven point approach of the Heritage Regions Programme;

- 1. Organization
- 2. Resource Identification
- 3. Marketing
- 4. Economic Development and Tourism
- 5. Education
- 6. Design
- 7. Monitoring and Evaluation

A list of actions is also given in the Strategic Plan, with short and long term priorities and accompanying benefits of action.

The United States National Trails System

According to the U.S.D.A. Forest Service (in Backpacker, May, 1993), there are 300 000 miles of trails in the United States, with about 160 000 miles on federal land. Included in these trails are more than 1000 National Recreation Trails - "including everything from nature walks to river routes", 8 long distance National Scenic Trails and 11 National Historic Trails (Backpacker, May, 1993).

In 1968, nearly ten years after the Outdoor Recreation Resources Review Commission reported walking as the most popular outdoor recreation activity, legislation was established for a "national system of scenic, historic and recreational trails", called the <u>National Trails System Act</u> of 1968 (P.P. 90-543) (United States Department of the Interior, 1993). One of the major stepping stones to the approval of legislation for a national trails system was the formation of an inter-agency steering committee whose efforts to describe existing trail systems, assess the adequacy of trail programs and suggest appropriate roles for government and stakeholders, culminated in the report, <u>Trails for America</u> in 1966 (USDI, 1993).

The combined catalyst of the <u>Trails for America</u> document and congressional efforts to secure protection of the Appalachian Trail through the eastern United States, resulted in the eventual signing of the <u>National Trails System Act</u> into law on October 2, 1968, by outgoing president Lyndon Johnson (USDI, 1993). The purpose of the National Trails System Act (NTSA) is to "encourage and assist volunteer citizen involvement in the planning, development, maintenance and management, where appropriate, of trails", while promoting the "preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation" (NTSA, 1992).

The National Trails System Branch of the National Parks Service describes the three categories of U.S. trails as follows (National Trails System Map & Guide).

National Recreation Trails are "existing trails recognized by the Federal Government as contributing to the National Trails System. They vary in length, terrain, difficulty and accessibility. These trails are managed by public and private agencies at the local, state and national levels and include nature trails, river routes and historic tours".

- National Scenic Trails are Congressionally designated "continuous protected scenic corridors for outdoor recreation".
- National Historic Trails are Congressionally designated trails which "recognize prominent past routes of exploration, migration and military action. The historic trails generally consist of remnant sites and trail segments, and thus are not necessarily continuous".

Both Historic and Scenic trails are administered by federal agencies, although land ownership may be in public or private hands. The <u>National Trails System Act</u> includes a fourth trail category, "connecting or side trails", which act as connections between existing National Trails, or provide improved access to such trails (NTSA, 1992 p.2).

With more than half National Historic and Scenic trails land in private ownership, and no clear clause in the National Trails System Act for acquisition of such land, the physical continuity of the long distance trails is, in most cases, far from being a reality (American Trails, 1990). The acceptance of this deficiency is clearly acknowledged with regard to Historic Trails in the NTSA as "designation of such trails or routes [historic] shall be continuous, but the established or developed trail, and the acquisition thereof, need not be continuous on site" (NTSA, 1992 p.2). Several features of the United States trail system, now more than twenty-five years old, provide useful insight for the Canadian situation.

a) Trail Definition

National Historic Trails include both water and land based segments, with emphasis on the route joining areas of historic or scenic significance.

b) Criteria for Designation as an Historic Trail

National historic trails must;

- i) "be a trail or route established by historic use and must be historically significant as a result of that use".
- ii) "be of national significance with respect to any of several broad facets of American history such as trade and commerce, exploration, migration and settlement, or military campaigns. To qualify as nationally significant, historic use of the trail must have had a far reaching effect on broad patterns of American culture. Trails significant in the history of native Americans may be included".
- iii) "have significant potential for public recreational use or historical interest based on historic interpretation and appreciation".

The Lewis and Clark National Historic Trail

The Lewis and Clark National Historic Trail was established in 1978, stretching some 5900 kilometres from Wood River, Illinois to the mouth of the Columbia River in Oregon (NTSA, 1992). Meriwether Lewis and William Clark were commissioned in 1804 by President Thomas Jefferson to explore the newly-acquired Louisiana Territory and the "Oregon Country", and the primary purpose of the trail is "commemoration of the historic events that form the Trail's central theme" (National Parks Service, 1982).

Talk of a commemorative Lewis and Clark trail began in 1964 with the establishment of the Lewis and Clark Trail Commission, whose purpose was to "stimulate Federal, State and local agencies and individuals to identify, mark and preserve for public inspiration and enjoyment the routes travelled by the Lewis and Clark expedition" (National Parks Service, 1982 p. 1). In 1969, the Commission fulfilled its five year mandate, publishing the "Lewis and Clark Trail, Final Report of the Lewis and Clark Trail Commission" (NPS, 1982, p.1). The Lewis and Clark Trail Heritage Foundation today carries out much of the work started by the Commission (NPS, 1982).

When in 1978 the <u>National Parks and Recreation Act</u> amended the National Trails Act to include the new category of "National Historic Trails", the Lewis and Clark Trail was one of four trails named to the new designation (NPS, 1982 p.2). The "Lewis and Clark National Historic Trail, Comprehensive Plan for Management and Use" was released in January, 1982 by the National Parks service to guide the future of the Trail.

The Lewis and Clark National Historic Trail management plan provides a useful perspective on trail development and commemoration.

a) Trail Designation

Although the actual location of the route followed by Lewis and Clark is seen as important to the development of the Historic Trail, it is important to note that the "designation of the historic route is continuous, but the established or developed trail does not have to be continuous onsite" (NPS, 1982 p. 94). In keeping with such a "continuous route/dis-continuous trail" notion, the Lewis and Clark trail is divided into three types of components, termed sites, segments, and motor routes (NPS, 1982 p. 14).

Sites include historic areas of relevance to the central theme of the route,

though the site itself may not be positioned physically on the trail. Segments are crosscountry water and land corridors which follow the designated historic route. Motor Routes are roads and highways that closely follow the designated historic route, and serve to link sites and segments "where the opportunity for cross-country Trail development is not possible" (NPS, 1982 p. 14). The Lewis and Clark National Historic Trail, according to the recommended development plan (in NPS, 1982 p. 5) includes 27 trail segments including more than 500 historic and recreation sites. Twenty of the segments, totalling approximately 5200 kilometres are water-based, with 560 kilometres as land based segments and 1440 kilometres as motor routes.

b) Land Acquisition

The <u>National Trails Act</u> includes protection for "only those selected land and water based components of a historic trail which are included as federally owned lands and which meet the national historic trail criteria" (NTSA, 1992 p. 2). Other segments may be certified as protected segments, though administration of such segments must be without expense to the Secretary of the Interior or the National Parks Service. In the Lewis and Clark Trail management plan, all federal lands and waters along the route were considered as potential initial components of the trail, with management responsibility for such components staying with the managing body of the affected area.

Trail rights-of-way may be established on private lands through agreements with land owners, though there is no mechanism within the Act to secure lands located outside of Federal areas. State and local governments, however, are encouraged to seek avenues for securing lands outside of federal areas (NPS, 1982 p. 96). The purpose of such acquisition is; "to preserve the natural, cultural and historical resources of the trail, to manage public access, and to minimize adverse effects on the operations of private landowners" (NPS, 1982 p. 102).

c) Trail Management

As part of the National Trails System, the primary responsibility for the Lewis and Clark Trail lies with the National Parks Service. Such responsibility includes; - reviewing management and use plans

- encouraging and assisting in the implementation of recommended actions
- reviewing applications for new Trail components
- monitoring the status of sites
- coordinating development and issuance of regulations
- facilitating research
- reviewing conflicting development proposals
- coordinating marking of the Trail route
- encouraging the establishment of local interest/action groups
- providing for appropriate interpretive material for public distribution (NPS, 1982 p.103).

A National Trails Advisory Council including members from government, industry, and private organisations was formed to advise the secretary on matters relating to the Trail. It is also suggested that "the governor of each State should designate or establish and empower a Lewis and Clark Trail committee... to promote and coordinate the development and use of the National Historic Trail and serve as the focus for citizen interest in the Trail" (NPS, 1982 p. 99).

State or local agencies involved in the administration of "certified" sites or segments " should work in close cooperation and communication [with the NPS] in order to achieve a consistently high standard of operation and maintenance and a reasonable degree of uniformity in their development and management of the Trail (NPS, 1982 p. 98).

Cooperative agreements are signed between National Parks Service, other Federal agencies, State government and private organizations to establish an understanding of roles and responsibilities, and to establish mutual expectations (NPS, 1982 p.106).

d) Public Use

Interpretation on the trail focuses on the primary goal of delivering the theme of Lewis and Clark, while acknowledging secondary themes which include history before and after the Lewis and Clark expedition (NPS, 1982 p. 102). All onsite visitor or interpretation centres are encouraged to interpret some facet of the Lewis and Clark expedition to maintain continuity along the Trail (NPS, 1982 p. 103).

Improved access to Trail resources is the responsibility of Federal, state and local agencies, with user facility development encouraged as cooperative ventures between applicable agencies. Development, however, is to be limited to low intensity activities where not developed otherwise (NPS, 1982 p. 102).

In order to encourage safe and enjoyable public use of the trail, "early development of a brochure or series of brochures delineating the Lewis and Clark National Historic Trail is absolutely essential" (NPS, 1982 p. 116).

e) Implementation Priorities

A list of implementation priorities is given, emphasizing the overall role of the National Parks Service of the Secretary of the Interior. The following is a summary of the list, given in prioritized order of action (NPS, 1982 p.120).

- * "Appoint a qualified person within the National Park Service to function as fulltime administrator of the Lewis and Clark National Historic Trail"
- * Prepare a budget and funding requests to cover appropriate funding requirements for implementation of the management plan
- * Prepare an informative pamphlet on the Lewis and Clark National Historic Trail to provide information to the public and assist in solicitation of private support for the Trail.
- * Execute memoranda of understanding with other federal agencies having trail related responsibilities.
- * Produce Trail markers for distribution.

- * Incorporate information on the Trail into currently existing interpretive information available at National Parks areas along the Trail.
- * Encourage the full participation of the Lewis and Clark Trail Heritage Foundation Inc. in becoming a national focal point for those interested in the Trail.

A further list of subsequent development activities is given in the plan for management and use, emphasizing the initiation of cooperative management agreements, and completion of a comprehensive Trail inventory (NPS, 1982 p. 121).

OVERVIEW OF RELATED PROJECTS

There are a number of ongoing initiatives related to the development of the Alexander Mackenzie Voyageur Route. Some of theses projects will directly affect the Route, while others are illustrative of related initiatives which may provide insight into Route development.

The Federal Proclamation

On National Heritage Day, February 20, 1995, a Government of Canada proclamation was issued in Grande Prairie, Alberta concerning the Alexander Mackenzie Voyageur Route (appendix A). The Federal proclamation, signed by both the Prime Minister and Minister of Canadian Heritage, joins the six previously-issued provincial proclamations, acknowledging the importance of the Route as a national heritage resource.

The Northwest Territories Proclamation

Efforts are still in process to proclaim the route followed by Mackenzie in 1789 to the Arctic Ocean. Inclusion of the 1789 route from Fort Chipewyan to "Whale Island" in the Beaufort Sea would complete a vision of Canada from Sea-to-Sea-to-Sea, but there are logistical, political and historical barriers to the issuance of Northwest Territories proclamation. Such barriers include past interpretations of Mackenzie as a "discoverer" of the region in spite of thousands of years of Aboriginal occupation, and the subsequent naming of the Mackenzie River. Although inclusion of the Arctic route is important in the understanding of the AMVR as a whole, it is more important that such inclusion is locally supported, and would be beneficial to local inhabitants.

<u>A Partnership Strategy for The Alexander Mackenzie Voyageur Route²</u>

Prepared for the Alexander Mackenzie Voyageur Association in March of 1995, with the assistance of Parks Canada, this discussion document outlines the background of the Route, and proposes a possible strategy for establishment of the Route. The proposed Strategy includes recommendations for leadership and coordination, community involvement, preservation initiatives and development initiatives. The document will be presented as a discussion paper at the AMVA Annual General Meeting in August, 1995 with the content being invested in a proposed partnership strategy to be circulated to Route stakeholders.

² I prepared the preliminary copy of this document between January and March, 1995 under contract to Parks Canada, on behalf of the AMVA.

La Vase Portages - Restore the Link

The La Vase Portages, joining the Mattawa and French Rivers, are an important historical component of the Alexander Mackenzie Voyageur Route, but are also one of the few places where the actual route can no longer be followed due to private ownership and blocked access. In response to a recent land sale on the portage, the Restore the Link Committee, is working to secure the area as an historic site. In cooperation with the North Bay-Mattawa Conservation Authority, the Ontario Heritage Foundation and individual support, significant progress is being made towards the long term goal of restoring the full length of the portage so that it may again be used by canoeists and appreciated by all.

The Historic Boundary Waterway

Running between Atikokan and Minaki, Ontario, the Historic Boundary Waterway is a cohesive tourism initiative designed to attract boaters to a more than 300 kilometre stretch of recreational waterway. The waterway, primarily being developed and promoted for motorized cruising, is an example of a locally driven tourism initiative that could benefit through partnership with the Alexander Mackenzie Voyageur Route.

The Trans Canada Trail

The Trans Canada Trail is a proposed "shared use" recreational trail which will provide a continuous "linear park" from Newfoundland to the Pacific and Arctic oceans. The vision is spearheaded by a public funding campaign in which individuals can "buy" a metre of trail for \$36. Although an exact route for the Trans Canada Trail has not been decided, portions of the Trail will undoubtedly coincide with the Alexander Mackenzie Voyageur Route. Although there may seemingly be conflicts between the two projects, the essentially different purposes of the two may lead to a cooperative relationship.

The Red Coat Trail - The Thin Red Line

The Red Coat Trail is a linear tourist region which traces the path of the westward march of the Northwest Mounted Police across the southern regions of Manitoba, Saskatchewan and Alberta. The themed tourist region highlights historic and natural features located along the route, joining communities and regions by road. <u>The Thin Red</u> <u>Line</u> is a route guide which is designed to provide background information to the region and direct visitors to major attractions.

Mississippi River Country, U.S.A. - Mississippi River Parkway Commission

Mississippi River Country is a tourism initiative which joins the ten Mississippi River States by providing information to travellers, encouraging visitation of sites along the Mississippi River Corridor. In addition to providing general visitation information, the Parkway Commission releases a newsletter called *Currents* which describes sites and events in the region.

SUMMARY

The Lewis and Clark National Historic Trail is perhaps the closest model for the establishment of the Alexander Mackenzie Voyageur Route reflecting the similarities of the two routes as inter-regional, waterway based historic routes. The Lewis and Clark

Trail provides useful experience in trail classification, administration, research and local participation, but its usefulness as a true model for the AMVR is limited by the legislated status of the Lewis and Clark Trail where no such legislation exists in Canada.

The closest Canada came to initiating a Federal role in the preservation of historic routes was through the Byways and Special Places program, initiated through the National and Historic Parks Branch under the authority of Jean Chretien, Minister of Indian Affairs and Northern Development. Within <u>Byways and Special Places</u> was a plan to develop historic waterways, historic land trails and scenic and historic parkways with "the paths and experiences of the native peoples, the voyageurs and the early settlers... traced in Canada - along our byways and in our special places" (National and Historic Parks Branch p. 52). While this program recognized that "our vast systems of water routes were very important in the development of Canada" (National and Historic Parks Branch p. 48), the Byways and Special Places program is no longer active and there is no Canadian legislation (existing or pending) which supports the designation or protection of routes like the AMVR.

The Canadian Heritage Rivers System is a successful model of a new approach to heritage protection, with an emphasis on public grassroots involvement and provincial and Federal government support. And, while community-driven initiatives such as *The Grand Strategy* and the Heritage Regions program are showing that heritage preservation can still be a local priority, there is an increasing realisation that funding for such preservation will become a public and corporate responsibility. Even within Parks Canada, the recent development of a Heritage Tourism Secretariat indicates a future direction for heritage preservation. Tourism, recreation and improved public use may butter the bread of heritage resources in Canada, and the Alexander Mackenzie Voyageur Route is no exception. Although government will likely play a supportive role in Route initiatives, the weight of continued establishment of the Route will sit with the public and the Alexander Mackenzie Voyageur Association.

Chapter 4 - The Community Survey

THE QUESTIONNAIRE

Ригрозе

The questionnaire was designed to collect information from communities related to the use, development, perception, and future of the local waterway portion of the Alexander Mackenzie Voyageur Route. As the primary goal of the questionnaire is to "measure" attitude towards the local waterway, the questions are designed to test the feelings, beliefs and behaviours of the respondent (Abbey-Livingston and Abbey, 1982 p. 174). Most of the questionnaire is subjective, encouraging subjective response (e.g. "Rate the level of historic connection to your waterway from 1 to 10", as opposed to "How many museums are in your community?").

In the end, whether the questions asked are objective or subjective, the researcher must interpret the response. At least by asking more subjective questions, there is room for interpretation of the question by the respondent, allowing for regional or personal variation in understanding. Since the purpose of the survey is to investigate local perceptions of the waterway, interpretation of the questions on a personal basis is accepted and encouraged.

Rating scales are often used in the questionnaire to allow respondents to indicate their degree of agreement (Abbey-Livingston and Abbey, 1982 p. 194), while paired questions in various parts of the survey are designed to allow for comparison of present perceptions with future possibilities. There is very little reference to the Alexander Mackenzie Voyageur Route in the questionnaire. This is to encourage responses based on the local waterway rather than on the concept of the Route as a whole (which may not be familiar to the respondents). Hopefully, as respondents read through and answer the questionnaire, they are prepared for answering upcoming questions by thinking through previous responses.

Design

The questionnaire is divided into three sections; Background, Waterway Use, and The Future.

Background

Although it is often useful to collect objective information related to the background of the respondent (e.g. age, gender, income, etc.), such information was deemed less important to this survey than gathering initial "background perceptions" of the waterway. "Who replied" was not as important as "what does the respondent feel" in establishing the background. The nature of the distribution of the survey ensured that all respondents were seen as stakeholders within the local community. The *background* section collects information on individual beliefs and opinions regarding the "cultural value" of the waterway and current community facilities. The background section also contains a question regarding the respondent's familiarity with the Alexander Mackenzie Voyageur Route.

Waterway Use

The short section on waterway use relates to current use of the waterway for activities such as fishing, industry, recreation, tourism, waste disposal, agriculture, residential use, transportation and resource protection, and the perceived economic importance of such uses.

The Future

Questions in the final section involve future use of the waterway, with questions matching those in the first two sections to allow for comparison. The final page of the questionnaire re-visits the concept of the AMVR, allowing for the collection of direct opinion on the effect of promotion of the Route, and the willingness to get actively involved in the Route.

Alexander Mackenzie Voyageur Route Community Input Survey

PLEASE COMPLETE THE FOLLOWING SECTION PRIOR TO FILLING OUT THE QUESTIONNAIRE

I, the undersigned, agree that Peter Labor may use information provided in this questionnaire for completion of his M.A. Thesis -"The Alexander Mackenzie Voyageur Route; a community based inquiry on the development of a trans-Canada heritage waterway route", under the following conditions: (check one)

[]	no conditions guarantee of my anonymit other	у 						
Signe	ed:	Date:						
Name:	Name:							
Posit	Position:							
Organ	Organization:							
Addre	Address:							
City/	City/Town:							
Provi	Province/Territory:							
Posta	1 Code:	Telephone:	·					
		Fax:						

NOTE:

Please read the appended material prior to completing the questionnaire. Some of the questions require that you are familiar with the Alexander Mackenzie Voyageur Route concept.

Answer ALL the questions and feel free to make comments anywhere on the questionnaire.

For the purpose of this survey, "waterway" refers to the primary river or lake adjacent to your community which is part of the Alexander Mackenzie Voyageur Route.

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SECTION I - BACKGROUND

1.	Prior to this survey were you aware of the Alexander Mackenzie Voyageur Route through your community? (check one)
[]	Yes COMMENTS Somewhat No
2.	Does your local waterway play an important role in your community? (check one)
[]	Yes COMMENTS No Don't Know
3.	Rank the following aspects of the waterway in order of importance to your community (1- most important, 10-least important).
	Transportation Industry (logging, pulp, mining, power generation, etc.) Waste Management Recreation Tourism Fishing/Hunting Cultural Preservation Environmental Preservation Adjacent Residential Use Agricultural Use
4.	Is there a strong sense of history in your community associated with your local waterway? (check one)
	Yes COMMENTS No Don't Know
5.	Is your local waterway an important part of the cultural character of your community? (check one)
[]	Yes COMMENTS No Don't Know
6.	Does your local waterway contribute to giving your community a "sense of place"? (check one)
[] []	Yes, very much COMMENTS Somewhat Not at all Don't know

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7.		Are the historical links of your community to the local waterway evident in your community? (check one)
[[[]]	Yes COMMENTS Somewhat No Don't Know
8.		If yes to question #7, how are such historical links evident? (check any that apply)
]	events and festivals museum(s) historic park(s) local literature oral history historic sites/monuments other

9. Please indicate the level of historical linkage to the following themes within your community. (circle one answer for each theme)

	High	Medium	Low	Don't Know
The Fur Trade	1	2	3	4
Native Culture	1	2	3	4
European Culture	1	2	3	4
Native Technology	1	2	3	4
European Technology	1	2	3	4
Native Discovery	1	2	3	4
European Discovery	1	2	3	4
Geological History	1	2	3	4
Natural History	1	2	3	4

- 10. Which of the following aspects of your community are evident in tourism literature/promotion of your community or region? (check any that apply)
- [] Waterway resources
- [] Land resources
- [] Native habitation & culture
- [] The fur trade
- [] European exploration
- [] European habitation & culture
- [] Fishing / Hunting

- 11. Which of the following do you have in your community?

- [] Community Museum
 [] Waterfront Park (public)
 [] Waterfront Park (private)
- [] Marina/public dock/waterfront boat facilities
- [] Waterfront walkway
- [] Waterfront campground

SECTION II - WATERWAY USE

12. Indicate the level of use of your local waterway for the following. (circle one answer for each)

Very High High Moderate Low Very Low

Industry	1	2	3	4	5
Recreation	1	2	3	4	5
Tourism	1	2	3	4	5
Fishing	1	2	3	4	5
Waste Disposal	1	2	3	4	5
Agriculture	1	2	3	4	5
Private Land	1	2	3	4	5

13. The economic importance of our local waterway for ... (circle one answer for each)

	very	high	high	moderate	low	very low
Tourism is;	1		2	3	4	5
Industry is;	1		2	3	4	5
Farming is;	1		2	3	4	5
Recreation is;	1		2	3	4	5
Fishing is;	1		2	3	4	5

14. The natural resource protection associated with our local waterway is; (check one)

[]	Very High	COMMENTS
[]	High	
[]	Moderate	
-	_	Low	
[]	Very Low	

SECTION III - THE FUTURE

15. Should the following activities be increased, decreased, refined or stay the same in association with local waterway use. (circle one for each)

	Increase	Decrease	Refine	Same
Resource Protection	1	2	3	4
Recreational Use	1	2	3	4
Industrial Use	1	2	3	4
Transportation Use	1	2	3	4
Tourism Promotion	1	2	3	4

- 16. Should there be a stronger focus in your community on history associated with your local waterway? (check one)
- [] Yes [] No COMMENTS___ [] Don't Know
- 17. Should the historical linkage in your community to the following themes be increased, decreased, refined or left the same as it is now? (circle one answer for each theme)

	Increase	Decrease	Refined	Same
The Fur Trade	1	2	3	4
Native Culture	1	2	3	4
European Culture	1	2	3	4
Native Technology	1	2	3	4
European Technology	1	2	3	4
Native Discovery	1	2	3	4
European Discovery	1	2	3	4
Geological History	1	2	3	4
Natural History	1	2	3	4

18	•	Do you think the development and promotion of the Alexander Mackenzie Voyageur Route as a national heritage route is a good idea? (check one)
[Yes COMMENTS
		No
19	•	Would promotion of the Alexander Mackenzie Voyageur Route contribute positively or negatively or have no effect on the following for your community?
P	- 1	positive; N - negative; X - no effect
]	natural resource protection industrial resource use recreation tourism local economic development historical appreciation/education
20	•	Would your community benefit from taking an active role in the development of the Alexander Mackenzie Voyageur Route?
[]	Yes COMMENTS
E]	No Don't Know
21	•	Would your organization/group be willing to participate actively in the development and promotion of the Alexander Mackenzie Voyageur Route?
I	1	Yes COMMENTS
[[]	No
22	•	If yes, what agency(s), organization(s), group(s) or individual(s) should take a lead role in your community?

If you have any comments or suggestions regarding the information presented in the questionnaire or the Alexander Mackenzie Voyageur Route, please include your input below.

THANKS FOR YOUR HELP

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Pre-test

Prior to distribution, a draft of the questionnaire was circulated to five individuals in three communities in three different regions of the study for pre-testing. These individuals represented a cross-section of likely stakeholder groups, including historical societies, town councils, educational institutions, museums and conservation associations. The pre-test respondents were asked to read the questionnaire carefully, note the "answerability" of the questions, and comment on the appropriateness of the questions for measuring local attitudes. The final questionnaire incorporated the input of the pre-test group.

Distribution

One hundred and thirty-seven communities were identified for receipt of questionnaire materials, including fifty-eight Native communities and seventy-nine non-Native communities (Appendix B). The communities are all located adjacent to the primary local waterway section of the Alexander Mackenzie Voyageur Route, between Lachine, Quebec and Bella Coola, British Columbia. Questionnaires were not sent to communities between Quebec City and Lachine, as distribution pre-dated proclamation of this section of the route, and the same St. Lawrence River section of Route was not followed by the Canada Sea-to-Sea Expeditions, so "adjacent" communities have not been identified.

Questionnaires were sent to communities in the Northwest Territories (even though this section is not proclaimed) in hopes of gaining some insight into prospects for potential proclamation of the northern portion of Mackenzie's travels - thereby recognizing the Route from sea-to-sea.

While it was possible to send questionnaires to municipal, regional, provincial and federal offices connected with the Route, such distribution is beyond the scope of this thesis. The purpose of the questionnaire was to collect local community input on the local use and impact of the waterway. Commitment of Provincial and Federal governments to the concept of the AMVR is demonstrated in their proclamations.

A package (Appendix C) was sent on August 8, 1994 to each community, addressed to either the "Office of the Mayor" or the "Chief". Included in the package was a cover letter and letter of support from Heritage Canada along with four questionnaire packages, each containing;

- i) a cover letter
- ii) a project description
- iii) an information sheet on the Alexander Mackenzie Voyageur Association
- iv) a six page questionnaire
- v) a self-addressed return envelope

The primary cover letter requested that the questionnaire packages be distributed to four groups/individuals identified by the receiver as "key stakeholders" in the local waterway. The goal of this distribution system was to allow the "community leader" to identify the groups, organizations or individuals as primary stakeholders in the Route. There are several obvious limitations to such a method of distribution, but it was felt that the advantages of allowing for local distribution, outweighed the disadvantages. A higher return rate could be expected if the researcher targeted particular individuals for receipt of the questionnaires, but such distribution may only increase the bias of the study by emphasizing those with a positive attitude toward the Route. Once again, in recognition of the purpose of the questionnaire, to measure attitude, the least involvement of the researcher possible may produce more genuine results (Abbey-Livingston and Abbey, 1982 p. 179).

Table 4.1 summarizes some of the advantages and disadvantages of the distribution system.

TABLE 4.1 Advantages and Disadvantages of Collective Local Questionnaire Distribution

Advantages	Disadvantages
allows more community control	little control over level of local participation
encourages participation of stakeholders unknown to the researcher	possibility of distribution to a non-representative community sample
allows for simpler distribution	limits participation of the general public
less researcher involvement	

Collection

Most of the returned questionnaires were received during September and October of 1994. A follow-up was made during the second week of December, 1994 by phoning all Ontario communities and faxing a reminder to all communities outside of Ontario. In response to the follow-up, several more questionnaires were returned in January, 1995.

Interpretation

Upon receipt, each questionnaire was given a case number, beginning with one and numbering up. Thus the earliest received questionnaires have the lowest case numbers. Questionnaire responses were compiled into a numbered data set using a prepared coding sheet (Appendix E).

SPSS PC+ 4.0 (Statistical Program for the Social Sciences) was used to calculate the frequency of the responses, and then to investigate the relationship between selected variables through the use of cross classification tables ("crosstabs") and chi-square analysis.

Frequency calculation simply groups the results of the individual questionnaires providing totals, percentages and cumulative percentages of results which can be interpreted as the results for the whole sample.

Cross classification tables allow for comparison between questions and grouping of responses to search for relationships. Chi-square is a statistic which gives an indication of the strength of the relationship between two independent nominal (not naturally occurring as numerical values) variables. Chi-square indicates whether the

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variability in the relationship between two variables in a population is more than one could expect to occur by chance within any population. A high chi-square value is indicative of a relationship between the variables. It is important to note, however, that even if a relationship is found between two variables, one can not assume causality (Norusis, 1987).

Written comments made on the questionnaires by respondents are summarized and included in Appendix D.

RESPONSE SUMMARY

A total of 548 questionnaires were sent to 137 communities, including 59 Native communities and 78 non-Native communities. For the purpose of data collection and analysis, nine "Stakeholder Regions", were designated, based mainly on physical and geographical similarity. These regions are as follows;

REGION	DESIGNATION	LOCATION
Region 1	Ottawa/Mattawa	Lachine to North Bay
Region 2	Great Lakes	North Bay to Thunder Bay
Region 3	Boundary Waters	Thunder Bay to Winnipeg
Region 4	Prairies	Winnipeg to Pelican Narrows
Region 5	Churchill	Pelican Narrows to La Loche
Region 6	Peace/Athabasca	La Loche to Ft. Smith to Hudson's Hope
Region 7	Rockies	Hudson's Hope to Quesnel
Region 8	Chilcotin/Pacific	Quesnel to Bella Coola
Region 9	Arctic	Ft. Smith to Inuvik

TABLE 5.1 - Stakeholder Regions

Table 5.2 summarizes the distribution of returned questionnaires, with 8 questionnaires (3%) returned from Native communities and 61 questionnaires (20%) returned from non-Native communities, for a total return of 71 questionnaires for a 13% response. A total of 43 communities (31%) were represented by the responses, including

37 non-Native communities (47%), and 6 Native communities (10%). All designated "Stakeholder Regions" were represented by the responses as shown in Figure 5.1.

	NATIVE			N	ON-NAT	IVE	TOTAL			
REGION	sent	rec.	%	sent	rec.	· %	sent	rec.	%	
1	16	1	6%	56	8	14%	72	9	13%	
2	40	2	5%	68	17	25%	108	19	18%	
3	12	0	0	40	11	28%	52	11	21%	
4	48	0	0	40	7	18%	88	7	8%	
5	16	0	0	32	1	3%	48	1	2%	
6	28	0	0	20	8	40%	48	8	17%	
7	4	0(1)	0	12	4(1)	33%	16	5	31%	
8	20	1	5%	8	1	13%	28	2	7%	
9	48	4(1)	8%	40	4(1)	10%	88	9	10%	
TOTAL	232	8(2)	3%	316	61(2)	20%	548	71	13%	

TABLE 5.2 - Questionnaire Response Summary

"sent" - questionnaires sent (4 per community)

"rec." - completed questionnaires received and recorded

(1) - "native" or "non-native" community undetermined

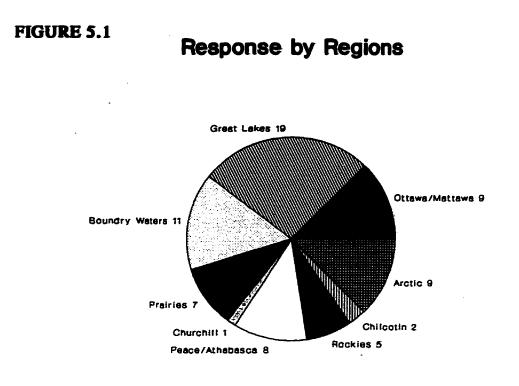
A variety of individuals, representing a cross-section of organizations responded

to the questionnaire. The respondents can be summarized as follows;

Table 5.3 - Organizational Response Summary

Level of Representation	Role/Organization	# 4	
Community Government/First Nation;	Leader		
•	Administrator/Councillor	20	
Community Representative;	Historical Society/Museum	17	
• •	Tourism Association	11	
	Chamber of Commerce	10	
	Conservation Association	3	
No Affiliation Specified		6	

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QUESTIONNAIRE CONTENT SUMMARY

The following summary is based on frequency of response descriptions and selected crosstabulations (Appendix E). All variables were crosstabulated by "region" and "native/non-native" to examine the possibility of regional or cultural variations in response. It is important to note, however, that due to the low response rate, for some regions, and especially for Native communities, any patterns indicated by such crosstabulations are included only here to demonstrate possible trends and should not be viewed as conclusive to this study. Variables that are not reported as varying by regional or native/non-native response can be assumed to follow general trends.

Although several chi-square tests were run, none of the tests turned out to be valid due to the low response rate and the distribution of scores, resulting in too many cells with low expected frequency. If more than 20% of the cells have expected values less than 5, chi-square analysis should not be used (Norusis, 1987 p. 238). Therefore, no chisquare results are presented in the following results.

To facilitate the presentation of questionnaire results and discussion, the results are classified according to;

- 1) Community Perception of the Alexander Mackenzie Voyageur Route
- 2) Community Relationship to the Waterway
- 3) Themes Associated with the Waterway
- 4) Cultural Use/Importance of the Waterway

Community Perception of the Alexander Mackenzie Voyageur Route

Sixty percent of respondents were fully aware of the AMVR through their community, while 87% of respondents indicated that the development and promotion of the AMVR as a national heritage route is a good idea. Seventy-three percent of respondents indicated that their community would benefit from taking an active role in the Route, while 56% indicated a willingness to participate in the development and promotion of the Route (Figure 5.2). As the level of commitment grows from "is it a good idea" to "will you actively participate", the level of uncertainty increases ("don't know") from 9% to 33%, while there is little change in the "no" response to involvement with the AMVR.

Although regions 3, 5, 6, 7 and 8 show a higher than average awareness of the AMVR (Figure 5.3), there is no apparent causal relationship between region and awareness of the Route. There is also no clear difference between Native and non-Native perception of the Route in terms of awareness or participation.

Participants were asked whether promotion of the Alexander Mackenzie Voyageur Route would contribute positively, negatively or have no effect on selected community aspects (Figure 5.4). More than 80% of respondents indicated that promotion of the Route would have a positive effect on Historical Appreciation/Education, Tourism and Recreation, while 73% of respondents indicated a positive effect in Local Economic Development, and 60% indicated a positive effect on Natural Resource Protection.

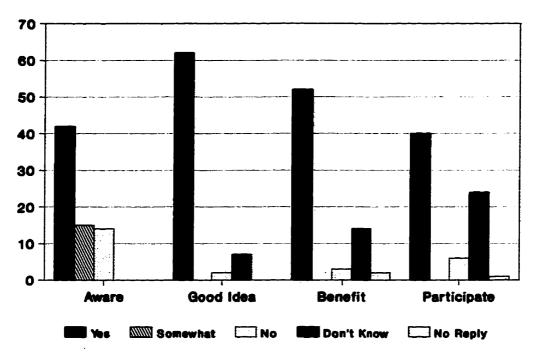
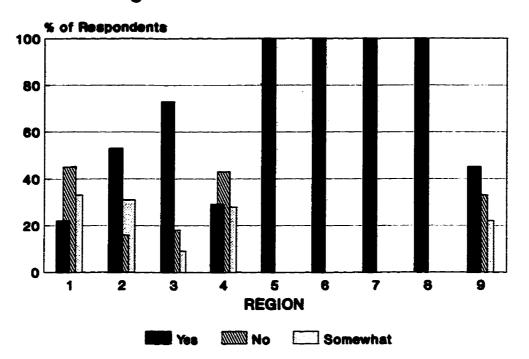


FIGURE 5.2 Community Perception of the AMVR

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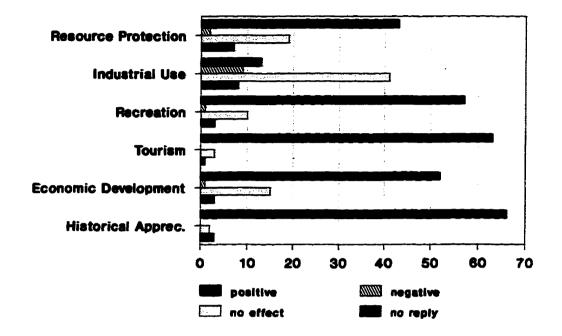




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Nearly 60% of respondents indicated that promotion of the Route would have no effect on Industrial Use.

Forty-five percent of Boundary Waters respondents and 42% of Great Lakes respondents indicated promotion of the AMVR would have no effect on Natural Resource Protection, compared to the 60% average. Half the Peace/Athabasca respondents indicated promotion of the Route would negatively affect Industrial Use. Sixty-seven percent of Arctic respondents indicated promotion of the Route would have a positive effect on Historical Appreciation/Education.

Community Relationship to the Waterway

Over 90% of respondents indicated that the waterway plays an important role in their community, 87% indicated a strong sense of history associated with the waterway, 88% indicated the local waterway as an important part of the cultural character of the community, and 87% indicated that the waterway contributes to giving their community a "sense of place" (Figure 5.5). In Region 1 (Ottawa/Mattawa), 55% of respondents indicated that the waterway contributes to giving the community a "sense of place".

Respondents were asked to rank particular aspects of the waterway in order of importance to the community. The intent of this question was to oblige respondents to produce a rank ordering of aspects from 1 to 10 (1 - most important, 10 - least important), but several respondents rated the aspects on a scale from 1 to 10 - thereby limiting the usefulness of the responses in assessing the relative importance of the various

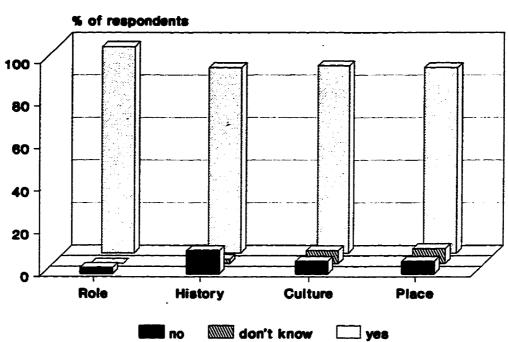


FIGURE 5.5 Community Relationship to the Waterway

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aspects to each other. The following table summarizes the responses.

RANK	1	2	3	4	5	¢	7	•	•	10		an raisty	
Transport		3	4	6			5	•		6	1	1	
industry	16		t	7	4	3	2		5	10	•	L	
Wante Management	3	3	4	5	6	6	4	6	•	14	•	16	
Accession	19	13	11	11	7	2	1	3	-		2	2	
Tourism	20	7	11	9	•		2	2	1	1	2	2	
FishMant	12	15	14		8	4	2	1	2	1	3	2	
Culture	4	3	3	7	8	11	10	4	5	5	3	6	
Environment	6	2	7	3	14	7	16		2	1	3	6	
Residential	8	3	9		10		6		6	t	1	8	
Agriculture	4	1	2		6	1	4	6	7	22	-	13	

TABLE 5.4 Rated Importance of Waterway Aspects

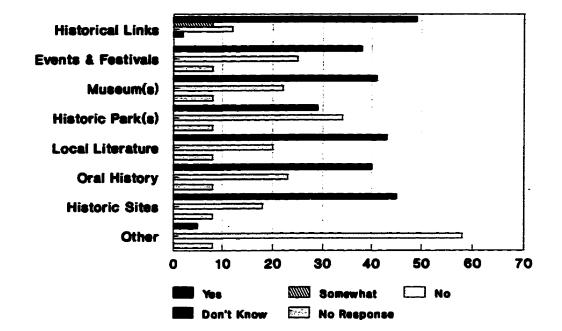
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Recreation, Fishing/Hunting, and Tourism stand out with the highest ratings of importance to the communities. Recreation was rated in the top four by 76% of respondents, Fishing/Hunting by 70% and Tourism by 66%. Agriculture and waste management are rated as the least important aspects, while industrial use appears to be either very important or not very important. Although there is some regional variation in ratings, there are no outstanding variations from the general summary of responses.

Sixty-nine percent of respondents noted evidence of historic links to the waterway in their community, while 17% found such links to be somewhat evident, and 11% indicated such links are not evident. Historic links are most evident in the Great Lakes Region - 74% and Prairies Region -100%, and least evident in Ottawa/Mattawa Region -56% (Figure 5.6).

FIGURE 5.6

Historical Links to the Waterway



n=71

Figure 5.6 also illustrates how such links are evident in the community, the most common being historic sites/monuments, museums and local literature. Events and festivals were most apparent in Boundary Waters - 73% and Prairies - 72% and least apparent in the Arctic - 33% and Ottawa/Mattawa - 44%. Museums are most apparent in Prairies - 71% and Peace/Athabasca - 75%, and least apparent in Arctic, Ottawa/Mattawa - 44%, and Rockies - 40%. Historic Parks are noted as evidence of historical links to the waterway by 86% of Prairie respondents as opposed to 22% in the Arctic and 27% in the Boundary Waters. Oral history links were indicated by 75% of Peace/Athabasca respondents and 36% of Boundary Waters respondents. Historic sites/monuments were noted as links by 100% of Prairie respondents and 82% in the Boundary Waters, while 33% of Arctic respondents indicated such links.

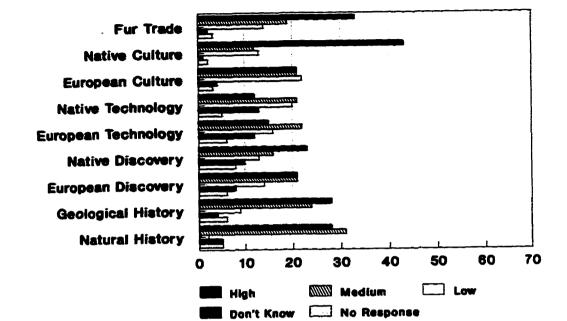
Less than half of Native respondents indicated historic links being evident in events (25%), museums (25%), and parks (13%). Eighty-eight percent of Native respondents indicated links through oral history, and 50% through sites/monuments and literature.

Themes Associated with the Waterway

When asked to rate the level of historic linkage to selected themes associated with the local waterway as high, medium or low, Native Culture (61%) and the Fur Trade (47%) received the most "high" ratings (Figure 5.7a). Native Culture was indicated as particularly high in Prairie (100%), Boundary Waters (82%) and Arctic (78%) regions, while receiving "high" ratings by less than 50% of respondents in Ottawa/Mattawa, Great

FIGURE 5.7a

Historic Linkage to Themes



n=71

Lakes and Rockies. All Native respondents rated Native Culture as high, compared to 56% of non-native respondents. The fur trade received a high rating by 86% of Prairie respondents and 67% of Arctic respondents, and 26% of Great Lakes respondents and 33% in the Ottawa/Mattawa region. Seventy five percent of Native respondents rated the Fur Trade as high, compared to 44% of non-Native respondents.

European Culture was evenly rated overall, with high, medium and low linkage each at 30-31%, with higher response rates for strong linkage in Prairie (57%) and Peace/Athabasca. Over 60% of respondents in Boundary Waters and Rockies rated European Cultural links as low.

Native Technology and European Technology received evenly distributed ratings of high, medium and low, though historical linkage to European Technology was indicated as high by 5% more respondents than Native Technology. European Technology was not rated as a high linkage by any Native respondents. Twenty-five percent of respondents indicated "don't know" or failed to respond to themes of Native or European Technology.

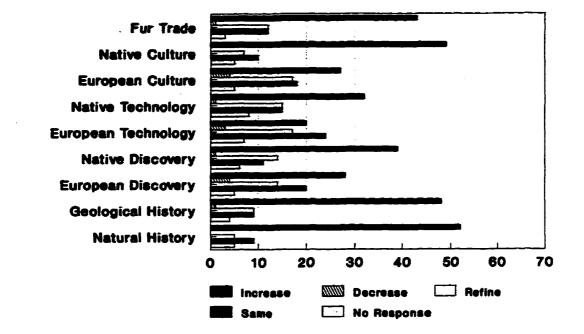
Respondents indicated an even distribution of response to links to Native Discovery and European Discovery, though no Native respondents rated links to European Discovery as high. Forty-four percent of respondents in the Arctic region indicated high level of linkage to Native Discovery, compared to 22% for European Discovery. Geological History was indicated to have a high or medium linkage by 73% of respondents, while Natural History received 83% high or medium ratings. Twenty-two percent of respondents in Ottawa/Mattawa indicated historical linkage to Geological History. All Boundary Waters respondents indicated a high or medium link to Natural History. Sixty percent of Native respondents rated Geological and Natural History as high, compared to 38% of non-native respondents.

When asked whether the historical linkage to the themes should be increased, decreased, refined or left the same (Figure 5.7b), more than half the respondents indicated a preference to increase Fur Trade, Native Culture, Native Discovery, Geological History and Natural History. European Culture, European Technology and European Discovery were rated to increase by less than 40% of respondents. Decreasing historical linkage to the themes was favoured by less than 5% or respondents for all categories, with Native Culture and Natural History receiving no "decrease" ratings.

Fifty-five percent of Arctic respondents indicated European Culture should be decreased or refined. Links to European Technology were not rated to increase by any respondents in Regions 5-8, and by only one respondent in region 9. Historical links to European Discovery were rated to decrease or be refined by 45% of Arctic respondents. Links to Natural History were indicated to increase by 56% of Ottawa/Mattawa respondents. All Native respondents indicated increasing links to Native Culture, and 75% indicated an increase in links to Native Discovery. Historical links to European Culture, Technology and Discovery were indicated to decrease by 38% of Native

FIGURE 5.7b

Future Linkage to Themes



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respondents, with 50% of such respondents indicating that the themes should be refined or left the same.

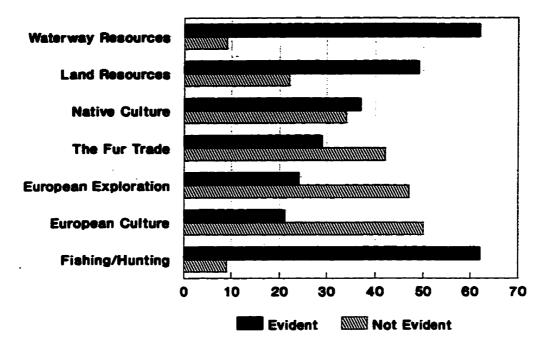
Waterway resources and Fishing/Hunting were identified by 87% of respondents as being evident in tourism literature/promotion of the community or region (Figure 5.8). Fewer than 50% of respondents indicted that the Fur Trade, European Exploration and European Culture are evident in tourism literature/promotion.

Eighty-six percent of Prairie respondents indicated evidence of the Fur Trade in tourism literature/promotion. European Exploration was indicated as evident in tourism literature/promotion by 9% of Boundary Waters respondents, 11% of Arctic respondents and no Rockies respondents, while 63% of Peace River/Athabasca respondents and 71% of Prairie respondents indicated evidence of European Exploration. No Arctic respondents indicated evidence of European Heritage and Culture in tourism literature/promotion, with 9% of Boundary Waters respondents indicating such evidence. Fishing and hunting is indicated as evident by 33% of Ottawa/Mattawa respondents.

Community Use/Importance of the Waterway

Eighty-six percent of respondents indicated that there is a public waterfront park in their community, 81% indicated a marina, public dock or waterfront boat facilities, and 72% indicated the presence of a community museum (Figure 5.9).

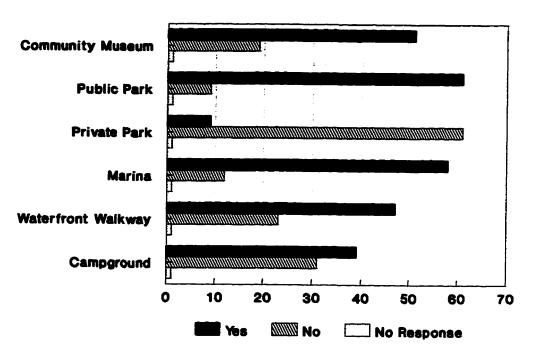
FIGURE 5.8



Waterway Aspects in Tourism Literature

n=71

FIGURE 5.9



Community Resources

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Arctic respondents indicated fewer community resources than the average in all categories except Waterfront Campground, which was indicated by 78% of Arctic respondents. Twenty-five percent or less of Native respondents indicated the presence of Community Museum, Public/Private Parks, or a Waterfront Walkway, while 88% indicated the presence of a community marina/dock or boat launch.

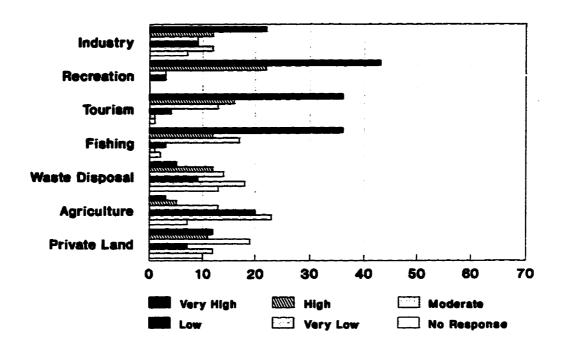
When asked to rate waterway use for selected activities as very high, high, moderate, low or very low (Figure 5.10), 92% of respondents rated Recreation as high or very high, 73% rated Tourism as high or very high, and 67% rated Fishing as high or very high. Nearly half the respondents rated Industry use as high or very high. Agricultural use was rated as high or very high by 11% of respondents.

Tourism use was rated high or very high by 20% of Rockies respondents, while rating high or very high by 90% of Boundary Waters and Arctic respondents. Nearly 90% of Arctic and Boundary Waters respondents rated fishing as high or very high, while 33% of Ottawa/Mattawa respondents indicated high or very high ratings for fishing. Over half of respondents in Great Lakes and Boundary Waters rated waste disposal as low or very low. Nearly 80% of respondents in Prairie and Peace/Athabasca regions rated Agriculture as moderate or higher.

Economic importance (Figure 5.11) was rated high or very high by 86% of respondents for Recreation, 81% of respondents for Tourism and 73% of respondents for fishing. Industry was rated as being of high or very high economic importance by 51%

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FIGURE 5.10



Waterway Use

n•71

FIGURE 5.11

	Very High Wigh					Moderate No Response		
	0	10	20	30	40	50	60	70
Fishing					- <u> J</u> -	Ł	Ł	
Recreation				;				
Farming/Agriculture			t ter tri rille a ferendera da tri A			·		
industry				- - -	•			
Tourism								

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Economic Importance of the Waterway

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of respondents while farming was rated as high or very high in economic importance by 11% of respondents.

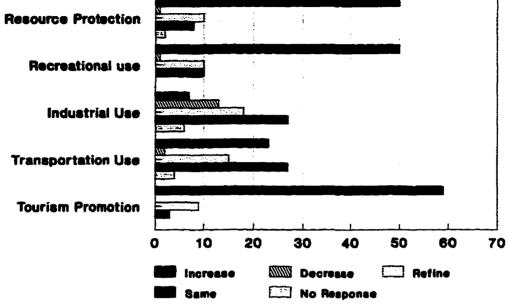
Industry was rated as high or very high economic importance by 11% of Ottawa/Mattawa respondents. Forty-three percent of Prairie respondents rated farming as of high or very high economic importance. Farming was rated as very low for economic importance by 78% of Arctic respondents. Fishing was rated as high or very high economic importance by 91% of Boundary Waters respondents, 89% of Arctic respondents and all Churchill and Chilcotin respondents. All Native respondents rated fishing as high or very high economic importance.

Fifty-six percent of respondents rated the natural resource protection associated with their local waterway as high or very high. All Chilcotin respondents, 80% of Rockies respondents and 72% of Prairie respondents rated natural resource protection as moderate or low.

When asked whether elements of waterway use should be increased, decreased, refined or left the same (Figure 5.12), 95% of respondents indicated increasing Tourism Promotion, and 71% indicated an increase in Recreational use and Resource Protection. Industrial use was indicated to leave the same or refine by 63% of respondents, and Transportation use by 59%. Twenty-five percent of respondents indicated industrial use should be decreased.

FIGURE 5.12

Future Waterway Use



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All Prairie respondents indicated the increase of Resource Protection. All Rockies and Chilcotin respondents indicated the increase of Recreation use. Fifty percent of Peace/Athabasca respondents indicated a decrease in Industrial use.

Eighty percent of respondents indicated that there should be a stronger focus on history in their community.

Chapter 6 - Discussion

THE QUESTIONNAIRE/METHODOLOGY

The purpose of the questionnaire was to investigate local perceptions of the waterway and opinion on the future/benefit of the Alexander Mackenzie Voyageur Route. The questionnaire, for the most part, fulfilled this purpose, although there were some areas where the questionnaire could be improved.

In question three, respondents were asked to rank various waterway aspects from 1-10. Despite several re-writings of this question before distribution, and specifically asking pre-test respondents about the answerability of it, the question seemed to cause confusion as several respondents "rated" different aspects from 1-10 rather than producing a ranking. An example given with the question may have improved the clarity of the question.

Questions twelve, thirteen and fifteen were meant to be matched/paired questions to allow for comparison of responses. Although there is appropriate overlap of waterway uses in the questions, the use categories should have been phrased the same in each question to ensure each attribute could be compared.

The themes presented in questions nine and seventeen were meant to be left open for interpretation, but some explanation of "Native/European Technology" would perhaps have helped to curtail the non-response rate for that category. The method of distribution of the questionnaire perhaps requires the most attention in assessing the methodology. Distribution is important because it affects the outcome of the study in both the return rate and the reliability of the results in terms of being able to extrapolate the findings to a greater population based on the findings from the selected sample. Several factors in this study posed difficulties in deciding on a distribution system - these include;

- * A large "population" including all the individuals living in 137 communities
- * A large geographical distribution
- * No defined "user group" for the AMVR
- * Great variance in the attributes of the regions / selected communities

The "population"¹ could reasonably include all individuals living along the AMVR. In order to gather a "representative/random sample"² from this population (which is very large) a complex method of distribution would be required, likely demanding the distribution of a very large number of questionnaires. If too few questionnaires were distributed in such a study, random distribution would be of no use for providing a representative sample.

The first decision, then, was to test at the "community level" rather than at the "individual level", as this afforded a natural point at which to define "groups" within the total population, and it also made sense in terms of the potential management/use of resources associated with the waterway - thus the "Community Oriented Survey". With a survey based on the sample unit of "the community", one questionnaire could have been

¹ a complete set of individuals having some common observable characteristic (Runyon and Haber, 1991 p.5)

 $[\]cdot$ ² a subset of the population selected such that each member has an equal opportunity to be selected (Runyon and Haber, 1991 p. 7)

sent to the elected "head" of each community, with information received theoretically representing the collective opinion of the community (based on the democratic election of representatives).

The elected mayor/chief, however, may not be the best person to represent the varied interests of the community in matters relating to heritage or development and use of the waterway. With 137 communities, there needs to be a limit to the number of questionnaires distributed to allow for analysis. Four questionnaires, then, were sent to each community in the care of the mayor/chief for distribution to identified "key stakeholders".

The "key stakeholders" could also have been selected prior to the distribution of the questionnaire, but allowing the selection of such by the mayor/chief, both simplified the distribution process and encouraged community level decision making. A lesson learned from this distribution method, however, is that it is perhaps better to send questionnaires to the town administrator or secretary, as the mayor/chief may not be as attendant to such requests - a point raised by several individuals during the December telephone follow up.

The rate of response to the survey reflects the distribution system, the cultural make-up of the communities and the content of the questionnaire. I hoped for a total return of 25% of the 548 questionnaires sent, with a response from each of the defined regions and at least half of the communities. Although only one of these goals was met,

with the return of at least one questionnaire from each region, the lack of response can be partially explained.

While a total of 548 questionnaires were sent, the distribution of these required that each community representative receiving a package of four questionnaires carried on with the distribution system. Several communities indicated during the follow-up that questionnaires never made it out of the town office. A failure to respond at this level effectively eliminates four potential respondents rather than just one. So, if, for example, in one third of the non-responding communities (a total of 94), the questionnaires were not distributed, a potential deficit of 124 potential respondents may be established for the 31 communities. While one could intellectualize forever on the possible "inefficiencies" in the distribution system, the most obvious pattern of response to the study is the difference in returns between the Native and non-Native communities.

Only eight responses were received from Native communities, for a total response rate of 3%, as compared to a 20% response from non-Native communities. Anticipating a low Native response rate to written questionnaires, I initially proposed visiting a sample of Native communities and conducting personal interviews, but later decided not to conduct such interviews as I was not comfortable entering the communities as a "researcher" that had greeted me so openly in my earlier visits with the Canada sea-to-Sea Expedition. While it is commonly accepted that the response to questionnaires is often lower in Native communities, I think the nature of the topic is also responsible for some lack of response. For some community representatives (perhaps more so than the community members), the level of political sensitivity towards natural resource and history issues creates an atmosphere of non-interaction and even conflict if there is a perceived "us and them" situation - as was the case in the sending of the questionnaire from a research institution outside of the community. The name of the Route, commemorating a European "explorer" in light of the negative impacts of exploration and European settlement on Native populations is also a cause for hesitation on the part of some Native stakeholders. A letter sent by a prominent First Nations organization in response to the questionnaire provides an ideal example of the difficulty in establishing a genuine relationship concerning heritage issues. The full letters and my responses are included in Appendix D, but a sample of the letter is as follows,

The Institute is disturbed by the fact that you have not provided an opportunity in your questionnaire for First Nations peoples to voice their views and attitudes regarding Mackenzie's "discovery" of northern Canada and subsequent imperialist expansion into aboriginal homelands....

Regarding this response - though it may represent the view of only one organization, it is important to point out that even though the primary purpose of this thesis is to provide the opportunity for First Nations people, along with all other communities, to "voice their views" regarding Mackenzie, the waterway, etc., there are some deeply set cultural barriers to the participation of Native communities in the AMVR which makes participation in such an endeavour difficult.

The topic of Native participation in the Route and this thesis could be a study in itself, so it is sufficient to say that the low response to this study by Native communities is disappointing, but not entirely unexpected, and that future attempts to gain input for the AMVR should continue to include Native communities. This will build a level of trust and understanding that will benefit the communities and the Route as a whole.

The Churchill Region had a notably low response rate (2% - one response), for which I can attribute no clear cause. The communities located in this region are smaller, more "isolated"³ and more resource-based than in many other regions (perhaps with the exception of the Arctic), but such attributes would not necessarily dictate a lower return.

It is interesting to note that although all the questionnaires were sent to community leaders, only four community leaders identified themselves as "key stakeholders" and returned a completed questionnaire (Table 5.3) - perhaps this says something about the role of politically-appointed officials in community administration. The one category of waterway stakeholder conspicuously absent from the respondents is the industrial sector. While such exclusion may point to a bias in the sampling (i.e. perhaps community distributers were led to believe that stakeholders should be conservation based), it may also be illustrative of a lack of contact between communities and large industry, even though in some areas industrial use of the waterway is very prominent. There are power dams on the Ottawa, Winnipeg, Churchill and Peace Rivers, pulp and paper mills along the Great Lakes, northern Prairies, Peace and Fraser Rivers, farming in the Ottawa Valley, eastern Prairies and Peace regions and countless commercial and private logging and fishing uses across the country. Industrial and resource use of the Route is significant, and needs to be considered in the planning of the Route from both local and

³ I hesitate to use the term "isolated" as it begs for the question - isolated from what?, but my intention is to indicate a physical removal from large population centres

national perspectives.

While the overall response to the study may seem low, and other methods of distribution may have produced a higher response, it is important to note the diversity and size of the population and the purpose of the study when assessing the return rate. The return rate from non-Native communities was 20%, nearly half of the non-Native communities were represented by responses, and all regions were represented by at least one response. The low response rate from Native communities might have been improved by conducting personal interviews or designing a different questionnaire for Native response to all communities, the gathering of input from Native stakeholders may best be left to another study.

QUESTIONNAIRE CONTENT

The questionnaire was designed for analysis of frequency of responses, crosstabulation of selected variables and chi-square analysis of selected variables. Any comparison or generalization based on regional response or Native/non-Native response must also be viewed critically due to the low response rate in some regions. There are, however, patterns of response which provide insight on the community perception of the Route as a whole, and some indications of regional variance in relation to the local waterway and the AMVR. While the following discussion of the results assumes that the respondents are representative of the whole population, it is also very possible that only those individuals who see merit in the AMVR responded - thus skewing the results of the

study to present a more positive view than is perhaps shared by the population. Unfortunately there is no way to test for such results without knowing who received the questionnaires and undertaking exhaustive follow-up.

Community Perception of the Alexander Mackenzie Voyageur Route

There is a fairly high level of awareness within the communities of the AMVR, with particularly high awareness in the western regions and Boundary Waters (Figure 5.3). The level of awareness is likely strongly related to the impact of the Canada Sea-to Sea-Expeditions, with the most recent expeditions occurring in the west, and the high visibility of the Expeditions in Thunder Bay (Boundary Waters Region), as the home of Expedition organizer, Lakehead University. Western familiarity with the Route may also be related to the long standing presence of the Alexander Mackenzie Voyageur Association in British Columbia, and the longer term of proclamation of the Route in the western provinces. The lack of awareness of the Route in the Ottawa/Mattawa region may be reflective of a disassociation with the heritage aspects of the waterway in the more populous areas, or more likely a lack of Route promotion in the eastern regions. The heritage/historic ties to the waterway are less focused in promotional material in the more heavily impacted eastern regions, whereas the western portions of the Route, often through less populated and more "pristine" environments are more closely linked to heritage and tourism/recreation use of the waterway.

Nearly all the respondents indicated that development and promotion of the

Alexander Mackenzie Voyageur Route as a national heritage Route is a good idea. Such an overwhelmingly positive response, with very few respondents indicating that the development and promotion of the Route is not a good idea, may indicate that the questionnaire was returned by people who were interested in the Route and liked the concept, while those who may have less interest did not bother to respond. It is also possible that there is a strong sentiment overall that development and promotion of the Route is a good idea. In either case, it is clear that there is community support for the concept. The increase in uncertainty about becoming involved with the Route as more commitment is requested indicates a need for providing communities with more information concerning the Route, and how to get involved in initiatives which would benefit the community.

The effects of promotion of the Route on various aspects of the community were once again seen as quite positive (Figure 5.4), with strong agreement that historical appreciation, tourism and recreation would be the greatest benefactors. The strong historical/cultural affinity to the waterway is reflected throughout the questionnaire (e.g. Figure 5.5), and recreation and tourism are clearly identified as key areas of current use (Figure 5.10), economic importance (Figure 5.11) and future use (Figure 5.12). While 60% of respondents indicated resource protection would be positively affected by the Route, nearly the same number indicated there would be no effect on industrial use. The perceived positive effect for economic development indicated by nearly 75% of the respondents focuses on the maintenance of fishing use and the increase of already predominant recreation and tourism use. An "underestimation" of the importance of industrial use of the waterway may reflect the nature of the distribution of questionnaires, although it may also be indicative of a prevalent positive attitude towards tourism and recreation use. Recreation and tourism are often viewed as the "low impact cure" for communities in economic decline, so, it is natural for there to be interest in such use of the waterway, especially considering the local heritage importance. There is already significant tourist and recreational "use"⁴ of the waterway in all regions although there is little promotion given to the waterway as a continuous theme connected to a common heritage.

Community Relationship to the Waterway

Based on the received questionnaires, community ties to the waterway are strong, with the waterway playing an important role in communities by bringing a strong sense of history, contributing to the cultural character of the community and giving the community a sense of place. These attributes indicate strong heritage ties to the waterway, and reflect the central importance of the waterway to the community. This positive response, however, does not necessarily indicate that such ties are related to the historical associations between the waterway and the Alexander Mackenzie Voyageur Route or the fur trade era. The town of Mackenzie, British Columbia is an example of a town with strong ties to the waterway, but only recent heritage ties to the Route. Located on the shores of Williston Lake⁵, Mackenzie is a recent addition to the

⁴ Such use may not always be attributed to the presence of the waterway (e.g. driving the trans-Canada highway along the north shore of Lake Superior), but the presence of the waterway is important to the recreational/tourism experience.

⁵ Williston Lake, covering 166 000 hectares, is British Columbia's largest reservoir, located behind the W.A.C. Bennet Dam at the head of the Peace River

waterway, with a human history related to the waterway reaching back less than fifty years. Mackenzie is a tourism/recreation destination (or drive through point), but such use is more related to fishing and forestry than any other historical aspect.

Only 55% of respondents in the Ottawa/Mattawa region indicated that the waterway contributes to giving the community a sense of place - a surprising figure considering the considerable stature of the Ottawa River and Ottawa River Valley and the historic importance of the Mattawa River⁴.

Despite the difficulty in deciding whether to rank or rate the various waterway aspects in question three, recreation, tourism and fishing/hunting again emerge as the primary areas of importance of the waterway for the community. Agriculture was, generally, the least important (with some regional exceptions), reflecting the dominance of the Canadian Shield bedrock. Industrial use was more evident here than in other questions, reflecting the importance of industry in communities where industry is present. It is interesting to note that the top four aspects, (Recreation, Tourism, Fishing, Industry) are all economic generators which are often largely localized.

The relatively low/mediocre rating of the importance of the waterway to cultural and environmental preservation, although somewhat contradictory to previous responses concerning heritage importance of the waterway, leads to the realization that when ranked

⁴ The Mattawa River joins the Ottawa system to the Great Lakes by La Vase Portages (near North Bay today), giving access to the interior of the continent

against aspects which may generate income, culture and environment are often seen as less important. In reality, however, without the cultural and environmental resources associated with the waterway, there will be no basis for recreation, tourism or fishing what remains is industry. Development of resource use without acknowledging that the resource itself is the most important component may lead to abuse and degradation of the very resource around which the development is based.

The lack of a sense of continuity with the waterway in the Ottawa/Mattawa region is again evident in that only 56% of respondents from that region indicated evidence of historic links to the waterway in their community, compared to the 69% average (Figure 5.6). While historic sites and museums top the list as evident historical links to the waterway, oral history and local literature are not far behind. The strength of oral history and literature as evident historic links supports a view of cultural links⁵ to the waterway which are not dependent on physical structures (like parks and museums).

There appear to be some regional variations in the type of historic links to the waterway. There are few reported "physical"⁶ links in the Arctic region and among Native respondents. Nearly 90% of Native respondents, however, reported historic links through oral history. The strong association with non-physical heritage links for Native respondents reinforces the need for Native involvement in heritage protection, as the

⁵ Such links can be viewed as "intangible" heritage resources associated with the waterway

⁶ Indicating "built" structures or designated parks or sites.

maintenance of intangible heritage requires the recognition and preservation of culture. The Prairie region most strongly indicated physical links to the waterway, while the Ottawa/Mattawa showed a lower than average response to the presence of events/festivals and museums.

Themes Associated with the Waterway

While it has been suggested in this discussion that there may be a lack of response by Native communities due to the historic links of the Route with Alexander Mackenzie as a European explorer, with such a portrayal leaving out the Native history of the Route, Native Culture was strongly linked to the Route by more respondents than any other theme (Figure 5.7a). Such a rating suggests that regardless of the name of the Route, respondents recognize that the Route passes through areas of significant cultural importance to Native communities (and therefore to Canada as well). The particular strength of "Native Culture" in the Prairie, Boundary Waters and Arctic regions suggests a similarity in cultural awareness/disposition between communities which are farther from the urban/southern influence, and off the path of the trans-Canada highway.

The communities located along the Alexander Mackenzie Voyageur Route vary from large cities like Ottawa, Ontario, Winnipeg, Manitoba and Thunder Bay, Ontario to small hamlets and villages like Patuanak, Saskatchewan and Wrigley, Northwest Territories. The common link between such communities is the waterway, but the "presence" of the waterway as a visible and active entity in the community is generally more evident in the smaller communities which are further removed from the southern east-west transportation/population corridor. While areas along the Great Lakes or the Ottawa River are bound physically to the adjacent waterway, the focus of the waterway may have turned inland to the highways which now serve as the main link between communities, and is seen as the main source of tourism, and recreation.

The overall rating of European Culture as "high" by only 30% of respondents supports the perceived need to reinforce Native cultural links to the waterway. The majority of communities along the Route, however, were settled because of European efforts at resource extraction, or trading posts, so the rating of "low" for European Culture by 30% of respondents indicates either an unfamiliarity with the history of the community, or a form of "cultural affirmative action" in which it is thought best to underrate the dominant cultural presence. In fact, the question asked may be misleading in that respondents may view local as Canadian and not make links to European roots at all. Responses to Native and European discovery and technology showed some confusion or indecision with the terms, as evidenced by the higher rate of "don't know" replies.

High or medium ratings of the linkage to geological and natural history by the majority of respondents demonstrates a continued recognition of the natural aspects of the waterway, though geological history was rated as high by less than one fourth of Ottawa/Mattawa respondents. The perceived importance of the natural elements of the Route are further supported by the high number of respondents who indicated that future linkage to geological history and natural history should be increased (Figure 5.7b).

The themes that rate highest for historic linkage are also rated to increase in the future by the most respondents. As all the themes (except European Technology) were indicated to increase by most respondents, it appears that there is an overall demand to maintain or re-establish historical links to the waterway. Even though there is not a particularly positive response to historic linkage to European culture, the fact that fewer than 5% of respondents indicated decreasing such links provides an opportunity for communities to proceed without stepping backwards. The reaction of Arctic respondents to European culture and discovery, with about half the respondents indicating such themes should be decreased, displays a disenchantment with prevalent views of European discovery in the north⁷.

While there is no indication as to "how" the linkage to the themes could be increased, demonstrated preferences for resource protection, recreation use and tourism promotion (Figure 5.12) may be the key elements to achieving such increased links. Waterway and land resources and fishing and hunting (Figure 5.8) are most evident in tourism literature, often emphasizing growth, resource use and active recreation, (e.g. fishing/boating) rather than non-consumptive tourism and recreation use. While the realization that culture is an important heritage resource for tourism is growing, culture is still often presented as a secondary attraction to active recreation opportunities. Culture, however, almost always provides the backdrop against which other tourism promotion takes place. From the shores of the St. Lawrence to the Pacific Coast and

⁷ I believe some of this sentiment is reflective of the naming of the Mackenzie River after an explorer who only briefly visited the area. Efforts to give the river its original name have also focused political and media attention on discounting the importance of Mackenzie's voyage in the Arctic.

north to the Mackenzie River Valley, people, culture and hospitality are the buzzwords of tourism promotion, but are used as decoration for the selling of other activities, rather than being used as ends in and of themselves.

Current Use/Importance of the Waterway

In examining the use or importance of the adjacent waterway for communities located along the Route, it is important to remember that the scale and diversity of the Route limit the drawing of conclusions regarding use of the Route. Each community has a unique relationship to the waterway, so any generalizations of use/importance must be viewed as applying to the Route as a whole, and not be inferred to apply to any particular community. There are, however, similarities in use along the waterway.

Community infrastructure related to the waterway is quite high (Figure 5.9), with most communities containing a community museum, public waterfront park and boat facilities. There are also waterfront resources along the Route which are not located in or administered by communities which contribute to the Route infrastructure - including provincial and national parks and historic sites, regional conservation areas and public access points. The lack of community resources in the Arctic can be attributed more to the overall undeveloped state of the waterfront rather than to a lack of infrastructure. While community resources contribute to the recognition and use of the waterway, the waterway itself is the central and most important of the community resources.

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As previously mentioned, recreation, tourism and fishing are clearly defined as the predominant uses of the waterway (Figure 5.10). Lacking in Figure 5.10 is "transportation", although transportation is not ranked as being of major importance by most of the respondents in Table 5.4. The perceived economic importance of fishing, recreation and tourism (Figure 5.11) may account for the preference for increasing such uses while protecting waterway resources (Figure 5.12).

The high ratings of tourism and fishing in the Arctic and Boundary Waters is reflective of the less developed nature of these areas, and the high economic dependence on resource based tourism. While there is some commercial fishing along the Route, the "economic importance" related to fishing in most areas is more related to "spinoff" income within the communities as a result of recreational fishing. Agriculture and industry tend to be either very important or not at all important for community economics. In areas where such activities are important, increases in resource protection, recreational use and tourism will have to consider the impact on industrial use and agriculture. Likewise, increases in industrial use along the waterways must recognize the potential impact on natural and cultural heritage resources which support recreation, and tourism as economic generators.

Chapter 7 - Conclusion

While there are a number of approaches to summarizing and concluding the material contained in this thesis, the most useful conclusion comes from re-visiting the original research questions and answering the questions based on the collected information. Following the presentation of the research questions is a discussion of the legitimacy of the thesis statement, followed by general conclusions and recommendations.

RESEARCH QUESTIONS

Do communities located along the Alexander Mackenzie Voyageur Route have ties to their waterway? What is the nature of these ties?

Communities located along the Alexander Mackenzie Voyageur Route are closely tied to their waterway by physical and cultural associations which extend into the past and reach to the future. Communities look to the waterway as a focus for providing a sense of history, cultural character and a sense of place. A long geological and natural history has created a country of water and rock linked by natural water corridors. Cultural links to the waterway have grown from early use for sustenance and transportation to resource and industrial use, and recreation and tourism and are evident today in museums, parks, events, and kept alive by oral history and local literature.

The strength of the ties to the waterway vary along the Route, with stronger identification with the waterway in less populated regions. Although the human connections to the "Route" are difficult to judge, the Route as a collection of physical

sites and significant segments which reflect tradition, heritage and culture, is closely tied to the communities it contains.

Are community stakeholders supportive of the development of the Alexander Mackenzie Voyageur Route?

The majority of community stakeholders, as identified in the study, support the concept of the Alexander Mackenzie Route, and see the development and promotion of the Route as a positive force for increasing historical appreciation, recreation use and tourism use, while strengthening economic development. A low level of response to the questionnaire, especially by Native communities, may be indicative of a lack of interest or even a refusal to participate in the AMVR. There is, however, a distinct basis of support, as evidenced by the positive community response, for the development of the Route in all regions between Montreal, Quebec and Bella Coola, British Columbia.

Uncertainty about the degree and form of community participation in the Route reflects a need for coordinated promotion of the Route and leadership outside the community. The Alexander Mackenzie Voyageur Association, with an increased national membership and national partnership strategy is best positioned to provide such leadership, with the support of organizations like Parks Canada and Heritage Canada. The key to successful development or preservation of the Route, however, lies with the communities. While the Route provides a common thread through which the individual communities can find reasons to share a common history, each community is tied to the Route by its own heritage, and must identify, protect and promote that heritage in the most appropriate manner.

Should the Alexander Mackenzie Voyageur Route be protected, developed and promoted as a local and national heritage resource for tourism and recreation?

While tourism and recreation are identified as the most important Route resources for current use and future use and community economic development, the identification and protection of the tangible and intangible heritage resources associated with the Route must take priority. Protection, in terms of compartmentalizing the Route in its entirety and setting it aside for future generations is unrealistic due to the size, complexity and variation of the Route along its course. While it is possible to increase local initiatives for protection of areas along the Route, it is more important to "protect" the Route as a regionally and nationally important heritage resource through promotion and appreciation. Protection of "intangible" aspects of heritage involves knowing them better, so, by better understanding the Route as an evolving heritage resource, the future of the Route and its associated history is more secure. Oral history and literature associated with the Route are as important as museums and historic sites, reflecting the depth of the relationship to the waterway.

Development of the Route for recreation and tourism requires the identification of existing uses of the Route, and must take into consideration the economic importance of industry, agriculture and fishing. Development should be controlled at the community level, with administrative, logistical and, if possible, financial support from regional, provincial and federal government and national associations and supporters. The Alexander Mackenzie Voyageur Route is many things to many people. Promotion of the Route, locally or nationally, should not be limited to the historical importance of Alexander Mackenzie or even the fur trade. Understanding the Native culture and heritage associated with the Route is essential, and ideally should stem from the participation of Native communities. The Route contains a rich geological and natural history which provides a basis for national promotion when coupled with the historic use of the Route (or segments thereof) by Native and non-Native society.

National promotion of the Route should be directed by local participation, and support and complement community based development. While there is no legislation to protect the route, acknowledgement of the Route by provincial and federal government, through the proclamations, provides a starting point for responsible use of the Route and its waterways.

THESIS STATEMENT

The Alexander Mackenzie Voyageur Route has both local and national heritage significance, and further establishment of the Route is perceived by stakeholders to benefit communities through which it passes and Canada as a whole.

The Alexander Mackenzie Voyageur Route is proclaimed by the Prime Minister of Canada and Minister of Canadian Heritage as an "integral part of our Canadian heritage" (Federal AMVR proclamation) - a claim supported by provincial proclamations from each province through which it passes. The Route represents a diversity of geological and natural history and a long history of human use of its waterways which are fundamental to the foundation of Canada.

The clearest national significance of the Route lies in its identification by Alexander Mackenzie in recording the first crossing of North America, and its representativeness in commemorating the importance of the interior waterways and the fur trade to the development of the Nation.

Local significance is more associated with the specific waterways and pathways than the Route itself, reflecting regionally significant heritage ties of importance to individuals and communities.

Selective, locally-controlled development of the Route by communities will help support local initiatives for increasing recreation and tourism use of the Route, while protecting natural and cultural heritage resources. Communities can benefit through involvement with the Alexander Mackenzie Voyageur Route through;

- * increasing heritage awareness
- * promoting the sharing of culture
- * establishing innovative and creative partnerships between individuals, organizations and communities
- * developing a greater awareness of regional heritage resources and their links to those in Canada as a whole
- involving more individuals in heritage matters, encouraging personal stewardship
- * initiating responsible and sustainable tourism and recreation use of the Route and adjacent waterways, thereby supporting economic growth and diversification

"A nation", wrote Edmund Burke, "is a partnership of the dead, the living and the unborn. We are the living, and the responsibility is ours to preserve this nation and to fulfil our duty to the partnership" (in Legget, 1975 p.97). The Alexander Mackenzie Voyageur Route reflects the local and national heritage significance of the inland waterways of Canada. Carefully managed promotion of the Route through communitybased identification, education and selective development for recreation and tourism will benefit the communities through which it passes, and in doing so create an atmosphere of cooperative stewardship, benefitting the Nation as a whole.

RECOMMENDATIONS

The Federal proclamation of the AMVR in February, 1995 marked an important day in the establishment and commemoration of the Route and reinforced the importance of recognizing and preserving waterways in Canada. The future of the Route, however, is uncertain. In an atmosphere of growing fiscal restraint and the privatization of the preservation of heritage resources, the development of the Route is limited by the very things that makes it important - its breadth and diversity.

With no Federal or provincial government initiatives in Canada to manage linear heritage resources like the AMVR, the future of the Route truly depends on the participation of the communities through which the Route passes. The Alexander Mackenzie Voyageur Association should continue to play a leadership role in the Route, identifying Route resources, distributing Route information and facilitating community involvement.

Education is vitally important in increasing the public understanding of the Route. The Route represents an important era in Canadian history - the fur trade, and should be viewed as treasured part of heritage for all those who live along its shores. If the name of the Route alone is the greatest stumbling block for the participation of First Nations communities, then the alteration of the name to be more inclusive should be considered. It is important, however, that the key role played by Alexander Mackenzie be reinforced, in that without Mackenzie's record, a clearly delineated route from sea to sea to sea would not exist.

While the overall goal for the AMVR may be preservation of a valuable heritage resource, a variety of development initiatives including increased tourism and recreation use may provide financial and public support. Increased recognition of the Route will help to ensure that the value and appreciation of waterways and the AMVR will continue to grow.

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References Cited

- Abbey-Livingston, D. & Abbey, D. S. (1982). <u>Enjoying Research: a 'how-to' manual</u> on needs assessment. Toronto: Queen's Printer.
- Alexander Mackenzie Heritage Trail Coordinating Committee (1993). <u>Alexander</u> <u>Mackenzie Heritage Trail Draft Management Plan</u>. Williams Lake, British Columbia.
- Alexander Mackenzie Voyageur Association (1995). <u>A Partnership Strategy for the</u> <u>Alexander Mackenzie Voyageur Route: discussion document</u>.
- American Trails (1990). <u>Trails for all Americans: the report of the National Trails</u> <u>Agenda Project</u>. National Park Service, United States Department of the Interior.
- Baccalieu Trail Heritage Corporation (1993). <u>Baccalieu Trail Heritage Region: Strategic</u> <u>Plan.</u>
- Backpacker (1993 May). A Tradition of Trails. Backpacker. (insert).
- Bennet, P. W. (1980). <u>Rediscovering Canadian History a teacher's guide for the 80's</u>. Toronto: Institute for Studies in Education.

Good News Bible (1976). American Bible Society: U.S.A..

- Bird, J.B. (1972). <u>The Natural Landscapes of Canada: a study in regional earth science</u>. Toronto: Wiley Publishers of Canada Ltd..
- Bliss, M. (1991). Privitizing the Mind: the sundering of Canadian history, the sundering of Canada. Journal of Canadian Studies. 26(4), 5-16.

Burch, W.R.J. (1979). The Long trail as significant cultural creation.

Caduto, M.J. and Bruchac, J. (1989). <u>Keepers of the Earth</u>. Fifth House Publishers: Saskatoon.

- Canadian Heritage Rivers Board (1994). <u>Annual Report on the Canadian Heritage Rivers</u> <u>System 1993-94</u>. Ottawa: Minister of Supply and Services Canada.
- Careless, J.M.S. (1967). Frontierism, Metropolitanism and Canadian History. In R. Cook, C. Brown & C. Berger (Eds.), <u>Approaches to Canadian History</u>. University of Toronto Press: Toronto.
- Careless, J.M.S. (1969). "Limited Identities" in Canada. <u>The Canadian Historical</u> <u>Review</u>. <u>1</u>(1): 1-11.
- Franks, C. E. S. (1977). <u>The Canoe and White Water</u>. Toronto: University of Toronto Press.
- Francis, D. and Morantz, T. (1983). <u>Partners in Furs: a history of the fur trade in</u> <u>Eastern James Bay 1600-1870</u>. McGill-Queens University Press: Kingston and Montreal.
- Frye, N. (1982). Divisions on a ground. Toronto: House of Anansi Press Ltd..
- Eccles, W.J. (1979). A Belated Review of Harold Adams Innis, <u>The Fur Trade in</u> <u>Canada. Canadian Historical Review. 60(4)</u>, 419-41.
- Grand River Conservation Authority (1994). <u>The Grand Strategy: for Managing the</u> <u>Grand River as a Canadian Heritage River</u>. Cambridge, Ontario.
- Heritage Canada Foundation (1994, May-June). Heritage Canada. I (V).

Heritage Canada for a Better Future. Ottawa: Heritage Canada.

- Hummei, M. (Ed.) (1989). Endangered Spaces the Future for Canada's Wilderness. Toronto: Key Porter.
- Ignatieff G. (1975). Preservation of the Canadian Heritage. <u>Preserving the Canadian</u> <u>Heritage</u>. Ottawa: The Royal Society of Canada.

- Innis, H.A. (1956). <u>The Fur Trade in Canada</u>. (rev. ed.). Toronto: University of Toronto Press.
- Lavender, D. (1977). <u>Winner take all: a history of the trans-Canada canoe trail. The</u> <u>American Trail series</u>. Moscow: University of Idaho Press.
- Legget, R. F. (1975). A Sense of History. <u>Preserving the Canadian History</u>. Ottawa: The Royal Society of Canada.
- Lunn, J., & Moore, C. (1992). <u>The Story of Canada</u>. Toronto: Lester Publishing: Key Porter Books.
- MacLennan, H. (1971). Seven Rivers of Canada. Toronto: Macmillan of Canada.
- Mercredi, O. and Turpel, M.E. (1993). In the Rapids Navigating the Future of First Nations. Toronto: Penguin.
- Miller, J.R. (1989). <u>Skyscrapers Hide The Heavens: a history of Indian-white relations</u> in Canada (Rev. Ed.). Toronto: University of Toronto Press.
- Miller, J.R. (Ed.) (1991). <u>Sweet Promises: a reader on Indian-white relations in Canada</u>. Toronto: University of Toronto Press.
- Morse, E. W. (1979). <u>Fur Trade Routes of Canada / Then and Now</u> (2nd ed.). Toronto: University of Toronto Press.
- Morse, E. W. (1987). Freshwater Saga: memories of a lifetime of wilderness canoeing in Canada. Toronto: University of Toronto Press.
- Munro, I. R., Doughty, H. A., & King, J. C. (1975). <u>Canadian Studies: self and</u> society. Toronto: Wiley Publishers.
- National Parks Service (1982). <u>Lewis and Clark National Historic Trail: comprehensive</u> plan for management and use. United States Department of the Interior.

- National Trails System Act (U.S.A.) (1992). (P.L. 90-543) (16 U.S.C. 1241 et. seq.) as amended through P.L. 102-461, October 23, 1992.
- <u>National Trails System Map and Guide</u>. National Parks Service, United States Department of the Interior.
- National and Historic Parks Branch (Canada). <u>Byways and Special Places</u>. Ottawa: Indian and Northern Affairs & Parks Canada.
- Parks Canada (1976). <u>Alexander Mackenzie Historic Trail: preliminary development</u> <u>concept</u>. Ottawa: Planning Division, ARC Branch, Indian and Northern Affairs.
- Parks Canada (1984). <u>The Canadian Heritage Rivers System: Objectives. Principles and</u> <u>Procedures.</u> Ottawa: Minister of Supply and Services Canada.

Parks Canada (1985). Alexander Mackenzie Heritage Trail: master development plan.

- Pasachoff, J.M. (1987). <u>Astronomy: from the earth to the universe</u>. New York, NY: Saunders College Publishing.
- Ray, A.J. (1974). <u>Indians in the Fur Trade: their role as trappers, hunters and</u> <u>middlemen in the lards southwest of Hudson's Bay, 1660-1870</u>. Toronto: University of Toronto Press.
- Russel, B. (1948). <u>Human Knowledge its scope and limits</u>. New York: Simon and Schuster.
- Selby, M.J. (1985). Earth's Changing Surface. New York, NY: Oxford University Press.
- Short, S., & Neering, R. (1992). In the Path of the Explorers: tracing the expeditions of Vancouver. Cook. Mackenzie, Fraser and Thompson. Vancouver: Neering.
- Steinhauer, Hon. R.G. (1975). The Canadian Heritage: a Native's point of view. <u>Preserving the Canadian Heritage</u>. Ottawa: The Royal Society of Canada.

- Tyrell, J.W. (1898). <u>Central Canadian Waterways Transit System</u>. [from public address] "Navigable waterways of the four great interior basins of Canada, and the economics of utilizing them in the formation of a joint mid-continental transit system ". Toronto.
- United States Department of the Interior (1993). History of the National Trails System Act; 1945 to 1993. (unpublished paper).
- <u>Webster's Encyclopedic Dictionary of the English Language</u>. (1988). New York: Lexicon Publications Inc..
- Wise, S.F. (1975). Historical Preservation: the antiseptic time machine. <u>Preserving the</u> <u>Canadian Heritage</u>. Ottawa: The Royal Society of Canada.
- Wright, R. (1992). <u>Stolen Continents: the new world through Indian eyes since 1492</u>. New York: Viking.

Selected Bibliography

Research Methods

- Abbey-Livingston, D. & Abbey, D. S. (1982). <u>Enjoying Research: a 'how-to' manual</u> on needs assessment. Toronto: Queen's Printer.
- Berdie, D. R., Anderson, J. F., & Niebuhr, M. A. (1986). <u>Questionnaires: design and</u> <u>use - second edition</u>. Metuchen, N.J.: The Scarecrow Press.
- Burgess, R. G. (Ed.). (1982) <u>Field research: a sourcebook and field manual</u>. London: Allen & Irwin.

Physical Science

- Allen, D.S. and Ordway, R.J. (1966). <u>Physical Science</u>. Princeton, N.J.: D. Van Nostrand Companay, Inc..
- Bird, J.B. (1972). <u>The Natural Landscapes of Canada: a study in regional earth science</u>. Toronto: Wiley Publishers of Canada Ltd..
- McCann, L. D. (Ed.) (1987). <u>Heartland and Hinterland: a geography of Canada</u>. (2nd ed.). Scarborough, ON: Prentice-Hall Canada Inc..
- Pasachoff, J.M. (1987). <u>Astronomy: from the earth to the universe</u>. New York, NY: Saunders College Publishing.
- Pincus, H. J. (Ed.) (1962). <u>Great Lakes Basin</u>. Washington, D.C.: American Association for the Advancement of Science.

Selby, M.J. (1985). Earth's Changing Surface. New York, NY: Oxford University Press.

Taylor, G. (1961). <u>Canada: a study of cool continental environments and their effect on</u> <u>British and French settlement</u>. London: Methuen & Co. Ltd..

Social Science

Bates, M. (1964). Man in Nature. Englewood Cliffs, N.J.: Prentice-Hall Inc..

- Broom, L. and Selznick, P. (1958). <u>Sociology a text with adaptive readings</u>. Evanston, Ill.: Row, Peterson and Company.
- Frye, N. (1982). Divisions on a ground. Toronto: House of Anansi Press Ltd..

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- Himelfarb, A. and Richardson, C.J. (1984). <u>Sociology for Canadians: a reader</u>. Toronto: McGraw-Hill Ryerson Ltd.
- Russel, B. (1948). <u>Human Knowledge its scope and limits</u>. New York: Simon and Schuster.
- Vickers, J. (1992). Where is the discipline in interdisciplinarity. <u>Interdisciplinarity</u>. Working Documents, Association of Canadian Studies.
- Wadland, J. (1992). Core courses in interdisciplinary Canadian studies programs. Interdisciplinarity. Working Documents, Association of Canadian Studies.

Canadian Studies

- Clement, W. (1990). Introduction: Canadian Society, Interdisciplinary Approaches. in Artibise, Alan F.J. (Ed.), Interdisciplinary Approaches to Canadian Society. Montreal & Kingston: Queen's University Press, 3-8.
- Cook, R. (1990-91). Cabbages not Kings: towards an ecological interpretation of early Canadian history. Journal of Canadian Studies, 25(4), 5-16.

Kirbyson, R.C. (1977). In Search of Canada. Scarborough, Ontario: Prentice-Hall.

Krocker, A. (1980). Migration from the disciplines. <u>Journal of Canadian Studies</u>. <u>15(3)</u>, 3-10.

- Munro, I. R., Doughty, H. A., & King, J. C. (1975). <u>Canadian Studies: self and</u> society. Toronto: Wiley Publishers.
- Steinhauer, Hon. R.G. (1975). The Canadian Heritage: a Native's point of view. <u>Preserving</u> the Canadian Heritage. Ottawa: The Royal Society of Canada.

History

- Bennet, P. W. (1980). <u>Rediscovering Canadian history a teacher's guide for the 80's</u>. Toronto: Institute for Studies in Education.
- Berger, C. (Ed.). (1967). <u>Approaches to Canadian history</u>. Toronto: University of Toronto Press.
- Bliss, M. (1991). Privitizing the mind: the sundering of Canadian history, the sundering of Canada. Journal of Canadian Studies. 26(4), 5-16.
- Brown, J. S. H. (1980). <u>Strangers in Blood: fur trade company families in Indian</u> <u>country</u>. Vancouver: University of British Columbia Press.
- Burpee, L. J. (1908). <u>The Search for the Western sea: the story of the exploration of</u> northwestern America. Toronto: Museum Book Company.
- Burpee, L.J. (1944). <u>The Discovery of Canada</u>. Toronto: Macmillan Company of Canada Ltd..
- Creighton, D. (1957). <u>Dominion of the North: a history of Canada</u> (rev. ed). Toronto: Macmillan.
- Cruikshank, E. A.. Early traders and trade routes in Ontario and the west 1760-1783. Transactions of the Royal Canadian Institute. 3, 253-74, 4, 299-313.
- Durnford, H., & Madely, P. (Eds.). (1976). <u>Great Canadian Adventures</u>. Montreal: The Reader's Digest Association (Canada) Ltd..

Gray, R. (1955, Aug.). Across Canada by Mackenzie's track. National Geographic.

- Grayson, L. M. and Grayson, J. P. (1974). <u>Paddles and Wheels: everyday life and travel</u> in <u>Canada</u>. Toronto: Oxford University Press.
- Heidenreich, C. E. and Ray, A. J. (1976). <u>The Early Fur Trades: a study in cultural</u> interaction. Toronto: McClelland and Stewart Limited.
- Innis, H.A. (1956). <u>The Fur Trade in Canada</u>. (rev. ed.). Toronto: University of Toronto Press.
- Lamb, W. K. (Ed.) (1970). <u>The Journals and Letters of Sir Alexander Mackenzie</u>. London: Cambridge University Press.
- Lavender, D. (1977). Winner take all: a history of the trans-Canada canoe trail. The American trail series. Moscow: University of Idaho Press.
- Legget, R. F. (1975). A sense of history. <u>Preserving the Canadian History</u>. Ottawa: The Royal Society of Canada.
- Lunn, J., & Moore, C. (1992). <u>The story of Canada</u>. Toronto: Lester Publishing: Key Porter Books.
- MacDonald, A. (1971). <u>Peace River: a canoe voyage from Hudson's Bay to Pacific</u>. Edmonton: M.G. Hurtig Limited.
- Morse, E. (1961). <u>Canoe routes of the Voyageurs: the geography and logistics of the</u> <u>Canadian fur trade</u>. Minneapolis: Minnesota historical Society.
- Morse, E. W. (1979). Fur Trade Routes of Canada / then and now (2nd ed.). Toronto: University of Toronto Press.
- Morse, E. W. (1987). Freshwater Saga: memories of a lifetime of wilderness canoeing in Canada. Toronto: University of Toronto Press.

- Prang, M. (1977). National unity and the uses of history. [President's address to the Candian Historical Association, 1977]. <u>Canadian Historical Association Papers</u>, 4-5.
- Ross, E. (1970). <u>Beyond the river and the bay: some observations on the state of the</u> <u>Canadian northwest in 1811. with a view to providing the intending settler with</u> <u>an intimate knowledge of that country</u>. Toronto: University of Toronto Press.
- Sheppe, W. (1962). <u>First Man West: Alexander Mackenzie's account of his expedition</u> across North America to the Pacific in 1793. Montreal: McGill University Press.
- Short, S., & Neering, R. (1992). In the path of the explorers: tracing the expeditions of Vancouver. Cook. Mackenzie. Fraser and Thompson. Vancouver: Neering.
- Smythe, T. (1968). <u>Thematic study of the fur trade in the Canadian west</u>. Ottawa: Historic Sites and Monuments Board of Canada.

Heritage/Culture

- Benton-Banai, E. (1988). The Mishomis Book: the voice of the Ojibway. Saint Paul, Minnesota: Red School House.
- Carls, E. G. (1984). Wild and Scenic Rivers of the United States. <u>Park News</u>. 20 (3) pp. 30-31.
- Finkelstein, M. (1993, Summer). Our rivers, our selves. Kanawa. pp. 29 & 45.
- Franks, C. E. S. (1977). <u>The Canoe and White Water</u>. Toronto: University of Toronto Press.
- Hodgins, B. W., & Hobbs, M. (Eds.). (1987). <u>Nastawgan: the Canadian north by canoe</u> and snowshoe. Toronto: Betelgeuse.
- Ignatieff G. (1975). Preservation of the Canadian heritage. <u>Preserving the Canadian</u> <u>Heritage</u>. Ottawa: The Royal society of Canada.

Labor, P. (1992, Spring). Canada: from sea-to-sea by canoe; 1989-93. Kanawa.

Labor, P. (1995). Linking Natural and Cultural Heritage on The Alexander Mackenzie Voyageur Route. In J. Marsh & J. Fialkowski (Eds.), <u>Linking Cultural and</u> <u>Natural Heritage</u>. Peterborough: The Frost Centre for Canadian Heritage and Development Studies.

MacLennan, H. (1961). Seven Rivers of Canada. Toronto: Macmillan of Canada.

McGuffin, G., & McGuffin J. (1988). Where rivers run. Toronto: Stoddart.

- Mercredi, O. and Turpel, M.E. (1993). In the Rapids navigating the future of First Nations. Toronto: Penguin.
- Peckham, H. & Gibson, C. (1969). <u>Attitudes of Colonial Powers toward the American</u> <u>Indian</u>. Salt Lake City: University of Utah Press.

Raffan, J. (1988). Canexus: the canoe in Canadian culture. Toronto: Betelgeuse Books.

- Ray, A.J. (1974). <u>Indians in the Fur Trade: their role as trappers. hunters and</u> middlemen in the lands southwest of Hudson's Bay. 1660-1870. Toronto: University of Toronto Press.
- Roberts, K.G. & Shackelton, P. (1983). <u>The Canoe a history of the craft from Panama</u> to the Arctic. Toronto: Macmillan of Canada.

Rustrum, C. (1964). North American Canoe Country. New York: Macmillan Co..

- Smithers, J. (1994 February/March). The Mackenzie Expeditions; 1789/93, 1989/93 a Journey through History. Explore.
- Tilden, F. (1977). <u>Interpreting our Heritage</u> (3rd ed.). Chapel Hill: University of North Carolina Press.

- Tyrell, J.W. (1898). <u>Central Canadian Waterways Transit System</u>. [from public address] "Navigable waterways of the four great interior basins of Canada, and the economics of utilizing them in the formation of a joint mid-continental transit system". Toronto.
- Wade, M. S. (1927). <u>Mackenzie of Canada: the life and adventures of Alexander</u> <u>Mackenzie, discoverer</u>. London: William Blackwood & Sons Ltd..
- Warkentin, G. (1993). <u>Canadian Exploration Literature</u>. Toronto: Oxford University Press.
- Warkentin, J. (1964). The Western Interior of Canada: a record of geographical discovery. 1612-1917. Toronto: McClelland and Stewart Limited.
- Wise, S.F. (1975). Historical Preservation: the antiseptic time machine. <u>Preserving the</u> <u>Canadian Heritage</u>. Ottawa: The Royal Society of Canada.
- Woodworth, J. (1992, Spring). The Alexander Mackenzie Voyageur Route 92/93; "Canada Sea-to-Sea". <u>Kanawa</u>.
- Wright, R. (1992). <u>Stolen Continents: the new world through Indian eyes since 1492</u>. New York: Viking.
- Wright, J. V. (1975). The destruction of Canada's pre-history. <u>Preserving the Canadian</u> <u>Heritage</u>. Ottawa: The Royal Society of Canada.
- Ziegler, R. (1991). <u>Wilderness Waterways the whole water reference for paddlers</u>. Kirkland, Wa.: Canoe America Association.

Resource Management

- Frome, M. (Ed.) (1985). Issues in Wilderness Management. Boulder, CO: Westview Press.
- Grand River Conservation Authority (1994). <u>The Grand Strategy for Managing the Grand</u> <u>River</u> as a Canadian Heritage River. Cambridge, ON.

- Hummel, M. (Ed.) (1989). Endangered Spaces the future for Canada's wilderness. Toronto: Key Porter.
- Marsh, J., & Kharouba, N. (1992). <u>A natural heritage framework for Canadian Heritage</u> <u>Rivers</u>. Peterborough, Ontario: Trent University.
- Palmer, T. (1986). Endangered Rivers and the Conservation Movement. Los Angeles: University of California Press.

Government Publications

- British Columbia, Ministries of Forests, Tourism, & Culture. (1993). <u>Alexander</u> <u>Mackenzie Heritage Trail: draft management plan.</u>
- British Columbia, Ministry of Forests. (1991). <u>Upper Blackwater local resource use plan</u>. Vanderhoof/Quesnel Forest Districts.
- Canada, Department of Industry, Trade and Commerce. (1979). <u>Response of the federal</u> government to the recommendations of the consultive task force on the Canadian tourism industry.
- Canadian Heritage (1994). <u>Parks Canada Guiding Principles and Operational Policies</u>. Ottawa: Minister of Supply and Services Canada.
- Canadian Heritage Rivers Board (1992). <u>Annual Report on the Canadian Heritage Rivers</u> <u>System. 1991-92</u>. Ottawa: Environment Canada.
- Canadian Heritage Rivers Board (1994). <u>Annual Report on the Canadian Heritage Rivers</u> <u>System</u>. Ottawa: Minister of Supply and Services Canada.
- Environment Canada. (1991). <u>Canadian Parks Service proposed policy</u>. Ottawa: Canadian Parks Service.
- Ontario, Ministry of Citizenship and Culture. (1987). <u>Giving our past a future: a</u> <u>discussion paper prepared for the Ontario Heritage Policy review</u>. Toronto: Queen's Printer for Ontario.

- Ontario, Ministry of Culture and Communications. (1990). <u>A Strategy for conserving</u> <u>Ontario's heritage: the report of the Ontario Heritage Policy Review</u>. Toronto: Queen's Printer for Ontario.
- Ontario, Ministry of Culture and Communications. (1990). <u>A vision of heritage for</u> <u>Ontario</u>. Toronto: Queen's Printer for Ontario.
- Ontario, Ministry of Tourism and Recreation. (1992). <u>Recreation research and evaluation</u> <u>strategy</u>.
- Parks Canada (1973). <u>Background Papers on major historic routes: their historical</u> significance and constraints. Ottawa: Parks Canada.
- Parks Canada. (1984). <u>The Canadian heritage rivers system</u>: <u>Objectives. principles and</u> <u>procedures</u>. Ottawa: Environment Canada.
- Parks Canada. (1985). <u>Public Input Summary: Alexander Mackenzie heritage trail master</u> <u>development plan</u>. Calgary: Parks Canada, Western Region.
- Parks Canada. (1985). <u>Alexander Mackenzie Heritage Trail: master development plan</u>. Calgary: Parks Canada, Western Region.
- Special Joint Committee of the Senate and the House of Commons on a Renewed Canada (1992). <u>Report of the Special Joint Committee on a Renewed Canada</u>. Ottawa: Queen's Printer for Canada.
- United States National Park Service (1992). <u>Lewis and Clark National Historic Trail:</u> <u>comprehensive plan for management and use</u>. United States Department of the Interior.
- United States National Park Service (1993). <u>Trails Tommorrow: a call to action the</u> report of the New York / New England Trails Summit.

United States Government (1992). <u>The National Trails System Act</u>. (P.L. 90-543; 16 U.S.C. 1241 et. seq.; as ammended through P.L. 102-461, Oct. 23, 1992).

United States Department of the Interior (1993). <u>History of the National Trails System</u> Act. Recreation Resources Assistance Division, National Park Service.

Appendices

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Appendix A - The AMVR Proclamations

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Date Issued **Issued By** Region Jean Chretien Canada February 20, 1995 Prime Minister of Canada Michel Dupuy Minister of Canadian Heritage June 29, 1994 Georges Farrah Quebec Ministre délégué Industrie, Commerce, Science et Technologie Responsable du Tourisme Ontario July 18, 1992 C.J. (Bud) Wildman Minister of Natural Resources Manitoba Eric Stefanson Minister of Industry, Trade and Tourism Saskatchewan June 1, 1992 Darrel Cunningham Minister of Natural Resources August 23, 1991 Doug Main Alberta Minister of Culture and Multiculturalism British Columbia September 6, 1990 David C. Lam Lieutenant Governor

The Alexander Mackenzie Voyageur Route Proclamations

The Federal Proclamation (text only)

A Proclamation Regarding the Alexander Mackanzie Voyageur Route

Wherees on July 22, 1793, Alexander Meckenzie, for trader and explorer of the North West Company, accompanied by voyageurs and Aboriginal guides, completed the first recorded crossing by a European of Continental North America; and

Whereas Mackanzia followed the ancient trails of the Nuxalk and Cerrier people in the final and most difficult leg of his journey; and

Whereas this unprecedented schievement, occurring thirtsen years before an equivalent expedition in the United States, was a major factor in the economic development of western Canada and in the establishment of Canada from sea-to-sea; and

Whereas, because of his accomplichments and contributions, on the recommendations of the Historic sites and Monuments board of Canada, Alexander Mackenzie has been declared to be an individual of national historic significance; and

Whereas Heritage Canada has recognized and promoted the unique netural, historic and scanic heritage of the distinctive regions along Alexander Mackenzie's route; and

Whereas two hundred years after Mackanzie's journey, crews of Canadian students followed the same route to demonstrate to Canadians the significance of the accomplishment of Mackanzie and his crew; and

Whereas the Alexander Mackanzie Voyageur Route, beginning in the old port of Quebec and ending at Dean Channel, near Bella Cools in British Columbia, has been described and proclaimed by the governments of all Provinces through which it passes; and

Whereas the Alexander Mackenzie Voyageur Route follows many of the great rivers of Canada; the St. Lawrance, Ottawa, Mattawa, French, Winnipeg, Churchill, Clearwater, Athabasca, Peace and Fraeer, of which 900 kilometres have been designated as Canadian Heritage Rivers;

Now Therefore, we the undersigned members of the Government of Canada do hereby recognize and proclaim as a vital and integral part of our Canadian heritage the route followed by Alexander Mackanzie and his crew in 1789-93, and by his contemporary followers in 1989-93.

By This Proclemation, We do appeal to all Canadians to honour this momentous achievement, and to celebrate and protect this heritage which is the Alexander Mackenzie Voyageur Route.

Proclamation concernant la route des Voyageurs Alexander-Mackanzie

Attendu qu'Alexander Mackenzie, traiteur de pelleteries et explorateur de la Compagnie du Nord-Quest, a été le premier Européen à compléter la traversée terrestre de l'Amérique du Nord le 22 juillet 1793, en compagnie de voyageurs et de guides autochtones;

Attendu que Mackenzie a suivi les pistes anciennes des peuples Nuxelk et Carrier pour la demiére et la plus difficile pertie de son expédition;

Attendu que cet exploit sans précédent, survenu traize ans avant l'organisation d'une expédition semblable aux Étata-Unis, fut un factaur Important dans le développement économique de l'Ouest canadien et l'éstablissement du pays d'un océan à l'autre;

Attendu que, sur la recommandation de la Commission des lieux et monuments historiques du Canada, Alexander Mackanzie a été déclaré un personnage d'importance historique nationale en raison de ses contributions et de ses réalisations;

Attendu que Héritage Canada a reconnu et mis en valeur le petrimoine naturel et culturel unique des régions caractéristiques que traverse la route Alexander-Mackenzie;

Attendu que deux cents ans après l'expédition de Mackanzie, une équipe d'étudients canadiens a refeit le même trejet pour montrer eux. Canadiens l'importance de l'accomplissement de Mackanzie et de son équipe;

Attendu que la route des Voyageurs Alexander-Mackanzie, partant du vieux port de Quebec et se terminant à Dean Channel, près de Balla Coola en Colombie-Britannique, a été décrite et proclamée par les gouvernements de toutes les provinces à travers lesquelles elle passe;

Attendu que la route des Voyageurs Alexander-Mackanzie, dont une longueur de 900 kilomètres a été désignée flivière du patrimoine canadien, suit les grandes rivières du Canada; le fleuve St-Laurent, les rivières des Outsouais, Mattawa, des Français, Winnipeg, Churchill, Clearwater, Athabasca, de la Peix, et le fleuve Fraser;

En Canséquence, nous soussignés, membres du gouvernement du Canada, par les présentes reconnais et proclame que la route suivie par Alexander Mackenzie et son équipe entre 1789 et 1793, puis par des jeunes et intrépides aventuriers de notre époque entre 1989 et 1993, constitue une partie vitale et intégrale de notre patrimoine canadien.

Per cette proclamation, nous invitons tous les Canadiens à honorer cet exploit important, et à commémorer et à protéger le patrimoine que représente la route des Voyageurs Alexander-Mackenzie.

ROUTE-DES-VOYAGEURS-ALEXANDER-MACKEWZIE

Considérant que Alexander Mackenzie, explorateur de la Compagnie du Nord-Ouest a été le premier à compléter la traversée terrestre de l'Amérique du Nord le 22 juillet 1793, avec une équipe de voyageurs qui comprenait entre autres des Canadiens français.

Considérant l'importance de cet exploit pour l'exploration et le développement du Canada d'un océan à l'autre.

Considérant que la traite des fourrures a ses racines dans la vallée du Saint-Laurent et qu'il est important que les Québécois se rappellent les exploits de ces pionniers qui font partie de leur histoire.

Considérant que l'Ontario, la Saskatchewan, le Manitoba, l'Alberta et la Colombie-Britannique ont déjà reconnu la «Route des voyageurs Alexander Mackenzie».

Considérant que la portion de la route qui passe au Québec, correspond à deux circuits déjà identifiés comme «The Explorer's Route» de Hull-Ottava à Montréal et «The Navigator's Route» de Montréal à Québec et que, «The Alexander Mackenzie Trail Association» accepte que le Québec positionne ses propres noms de circuits en apposition à l'«Alexander Mackenzie voyageurs Route».

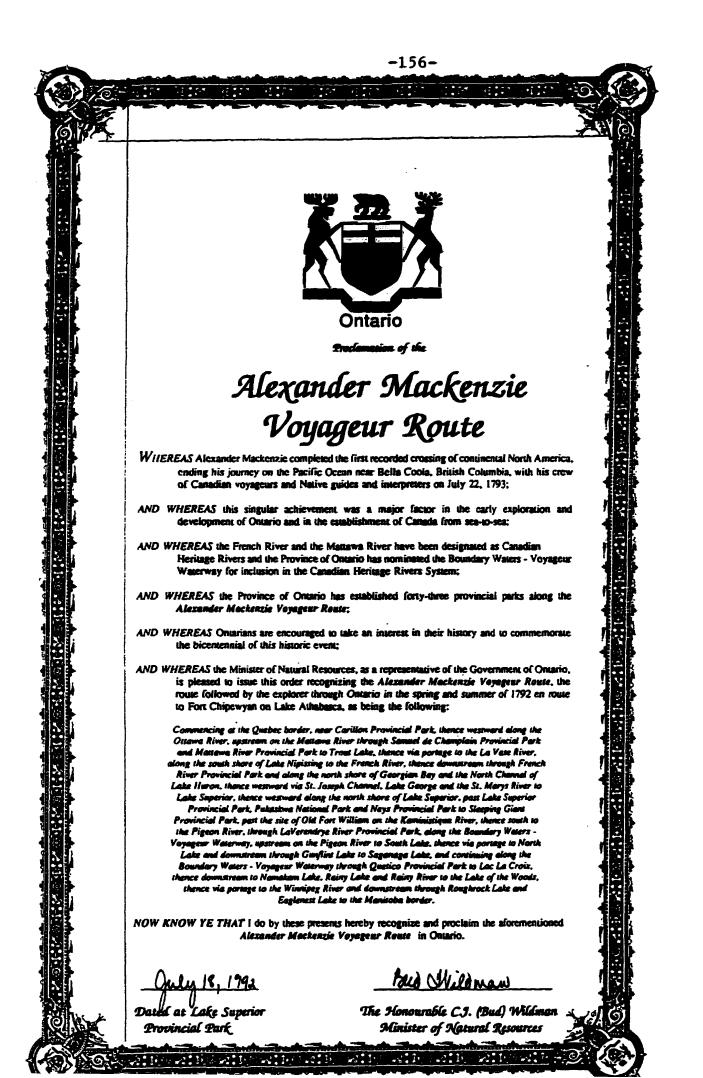
Georges Farrah, à titre de ministre délégué à l'Industrie, au Commerce, à la Science et à la Technologie, responsable du Tourisme, est heureux de reconnaître en hommage à Alexander Mackenzie et à tous ses voyageurs, Route-des-voyageurs-Alexander-Mackenzie, la route suivie par l'explorateur au Québec :

De Québec, capitale historique, en empruntant la voie fluviale du Saint-Laurent vers Montréal puis, de Lachine, poste de traite des fourrures, traversée du lac Saint-Louis; emprunt de l'étroit passage entre l'île Perrot et l'île de Montréal, traverse du lac des Deux Montagnes pour remonter la rivière des Outaouais jusqu'à la limite de la province de l'Ontario.

29 juin 1994

QUÉBEC LE

GEORGES FARRAH Ministre délégué Industrie, Commerce, Science et Technologie Responsable du Tourisme



PROVINCE OF MANITOBA 21 Ja ALEXANDER MACKENZIE VOYAGEUR ROUTE, 1991 and 1992 NHEREAS Alexander Mackenzie, fur trader and explorer of the North West Company, completed the first recorded crossing of continental North America, ending his journey on the Pacific Ocean near Bella Coola, British Columbia, with his crew of Canadian voyageurs and Native guides and interpreters on July 22, 1793; and NHEREAS this singular achievement was a major factor in the exploration and in the establishment of Canada from sea-to-sea; and WHEREAS Manitobans are encouraged to take an interest in their history and to commemorate the bicentennial of this historic event: NOW THEREFORE, I, Eric Stefanson, Minister of Industry, Trade and Tourism, do hereby recognize and proclaim the ALEXANDER MACKENZIE VOYAGEUR ROUTE, 1991 and 1992 the route followed by Alexander Mackenzie through Manitoba in the summer of 1792 en route to Fort Chipewyan on Lake Athabasca, as being the following: Commencing at the present Manitoba-Ontario border westward along the Winnipeg River to Traverse Bay, north on Lake Winnipeg to Grand Rapids, across Cedar Lake, and then along the Saskatchewan River to the present Manitoba-Saskatchewan border.



SARKATCHENNN

Proclamation of the

Alexander Mackenzie Voyageur Route

V hereas Alexander Mackenzie completed the first recorded crossing of Continental North America, ending his journey on the Pacific Ocean near Bella Coola, British Columbia, with his crew of Canadian voyageurs and Native guides and interpreters on July 22, 1793;

And

Whereas this singular achievement was a major factor in the early exploration of Saskatchewan and in the establishment of Canada from sea-to-sea;

And Whereas Saskatchewan residents are encouraged to take an interest in their history and to commemorate the bicentennial of this historic event;

And

Whereas the Minister of Natural Resources as a representative of the Government of Saskatchewan is pleased to issue this order recognizing the Alexander Mackenzie Voyageur Route, the route followed by the explorer through Saskatchewan during July and August 1792, as being the following:

"Alexander Mackenzie Voyageur Route"

Commencing at the Manitobe border, west on the North Saskatchewan River to Cumberland House and north to Sturgeon Landing then following the Sturgeon-weir River in a northerly direction and on to Pelicen Nerrows via Mirond Lake, thence onward to Wood Lake and the Churchill River via Frog Portage, thence west upstream through Lac La Ronge Provincial Park and onward to III-a-le-Crosse, thence northerly across Peter Pond Lake, up the Methye River and over the Methye Portage to the Clearwater River, flowing through Clearwater River Provincial Park west to the present Alberta border.

Government of Saskatchewan Department of Natural Resources Proclamation

Therefore, I Derret Cunningham, Minister of Natural Resources, hereby make the recognition of the "Alexander Mackenzie Voyageur Route" in Sestatchewan.

The Honourable Darrel Cunningham Minister of Notural Resources

June 1 1992

Dated at Regina. Saskatchewan



Province of Alberta Recognition of the Alexander Mackenzie Voyageur Route Order

Whereas Alexander Mackenzie completed the first recorded crossing of Continental North America, ending his journey on the Pacific Ocean near Bella Coola, British Colombia, with his crew of Canadian voyageurs and Native guides and interpreters on July 22, 1793;

And Whereas this singular achievement was a major factor in the early exploration of Alberta and in the establishment of Canada from sea-to-sea;

And Whereas Albertans are encouraged to take an interest in their history and to commemorate the bicentennial of this historic event;

And Whereas the Minister of Culture and Multiculturalism as a representative of the Government of Alberta is pleased to issue this order recognizing the Alexander Mackenzie Voyageur Route, the route followed by the explorer through Alberta from October 1792 to May 1793, as being the following:

"Alexander Mackenzie Voyageur Route"

Commencing at the Saskatchewan border West on the Clearwater to Fort McMurray and North on the Athabasca River to Lake Athabasca and Fort Chipewyan and following the Peace River Westward upstream to Peace Point, thence along the Peace River to the "Falls", thence upstream to the "Old Establishment (Boyer's Post)", thence to Fort Fork, near the mouth of the Smoky River, where the expedition wintered; in the spring the expedition proceeded west past Dunvegan and the confluence of the Clear and Pouce Coupe Rivers to the contemporary Alberta-British Columbia border.

> Government of Alberta Department of Culture and Multiculturalism

Ministerial Order

By virtue of the authority given to me as Minister of Culture and Multiculturalism under Section 6 of The Historical Resources Act, I hereby make the recognition of the "Alexander Mackenzie Voyageur Route" in Alberta Order.

The Honourable Doug Main Minister of Culture and Multiculturalism

Dated at Edmonton, Alberta



Canada Province of British Columbia

A Proclamation

ELIZABETH THE SECOND, by the Grace of God, of the United Kingdom, Canada and Her other Realms and Territories, Queen, Head of the Commonwealth, Defender of the Faith

To all to whom these presents shall come - Greeting

WHEREAS Alexander Mackenzie completed the first recorded crossing of continental North America, ending his journey on the Pacific Ocean near Bella Coola, British Columbia, with his crew of Canadian voyageurs and Native guides and interpreters on July 22, 1793;

AND WHEREAS this singular achievement was a major factor in the early development of British Columbia and in the establishment of Canada from sea-to-ses;

AND WHEREAS Alexander Mackanzie's journey was commemorated with the establishment of the Sir Alexander Mackanzie Provincial Park in 1926 and the Alexander Mackanzie Haritage Trail in 1987;

AND WHEREAS British Columbians are encouraged to take interest in their history and commemorate the bicentennial of this historic event;

AND WHEREAS Our Lieutenent Governor, by end with the edvice end consent of the Executive Council, has been pleased to direct by Order in Council in that regard that a Proclamation be issued recognizing the Alexander Mackanzie Voyageur Route, the route followed by the explorer through British Columbia from May to July 1793, as follows:

Commencing on the Pesce River at its crossing of the Alberts-British Columbia border, thence westward upstream to the Pesce Conyon Dem and the W.A.C. Bennett Dem, thence along Williston Lake west and southeast to the Perenip River, and upstream on the Perenip to Arctic Lake, thence over the height of land to Pecific Lake, thence downstream on Jemes Creek to McGreegor River, thence west to the Fraser River and downstream to the eastern terminus of the Alexander Mackenzie Heritage Trail/Nuxalk-Cerrier Route approximately two kilometers north of the mouth of the West Road (Blackweter) River, thence westward in the general vicinity of the West Road River on the said Alexander Heritage Trail/Nuxalk-Cerrier Route to the height of land near Gatcho Lake, thence continuing westward on the Trail, entering Tweedemult Provincial Park, crossing the Dean River, pessing along various streams and lakes, including Tenys Lakes, Kohesgenka Creek and Burnt Bridge Creek to the Bella Coole River, thence downstreem to the Pecific Ocean at North Bentinck Arm, thence west and north vis Lebouchere Chennel and Dean Chennel to Sir Alexander Mackenzie Perincial Park;

NOW KNOW YE THAT We do by these presents by proclamation do hereby recognize, the aforementioned Alexander Mackenzie Voyageur Route:

"Alexander Mackenzie Voyageur Route"

in British Columbie;

IN TESTIMONY WHEREOF We have caused these Our Letters to be made Patent and the Great Seal of Our Province to be hereunto affixed.

WITNESS The Honourable David C. Lam, Lieutenant Governor of Our Province of British Columbia, in Our City of Victoria, in Uur Province, this sixth day of September, in the year of Our Lord one thousand nine hundred and ninety and in the thirty-ninth year of Our Reign.

BY COMMAND.

Appendix B - The AMVR Community Contact List(s)

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Alexander Mackenzie Voyageur Route - Community Mailing Addresses

Note: this list does not include communities between Quebec City and Lachine

Non-Native Communities

<u>Ouebec</u>

Office of the Mayor Lachine, PQ 1800 St. Joseph Blvd. H8S 2N4

Office of the Mayor Ste Anne du Bellvue 109 St. Anne Ste. Anne du Bellevue, PQ H9X 1M2

Office of the Mayor City of Hull Hull, Quebec

Office of the Mayor Town of Aylmer 115 Principal 5th Floor Aylmer, PQ J9H 3M2

Office of the Mayor Town of Fort Coulonge, P.O. Box 640 Fort Coulonge, PQ JOX 1V0

<u>Ontario</u>

Office of the Mayor Town of Hawksbury 600 Higginson St. Hawkesbury, ON K6A 1H1

Office of the Mayor City of Gloucester P.O. Box 8333 1400 Blair Place Gloucester, ON K1G 3V5

Office of the Mayor City of Ottawa 111 Sussex Dr. Ottawa, ON **K1N 5A1** Office of the Mayor Town of Arnprior P.O. Box 130 105 Elgin St. W. Arnprior, ON K7S 3H4 Office of the Mayor West Carlton Township 5670 Carp Road Kinburn, ON KOA 2H0 Office of the Mayor City of Pembroke **P.O. Box 277** 1 Pembroke St. E. Pembroke, ON K8A 6X3 Office of the Mayor Town of Deep River P.O. Box 400 100 Deep River Rd. Deep River, ON KOJ 1P0 Office of the Mayor Town of Mattawa P.O. Box 390 356 Pine St. Mattawa, ON POH 1VO Office of the Mayor City of North Bay 200 McIntyre St. E. North Bay, ON

P18 8H8

Reeve Township of Rutherford and George Island 32 Commissioner St. Killarney, ON POM 2A0 Office of the Mayor Town of Little Current P.O. Box 340 50 Merideth St. W. Little Current, ON POP 1KO Office of the Mayor Town of Gore Bay P.O. Box 298 5 Water St. Gore Bay, ON POP 1H0 Office of the Mayor Town of Blind River P.O. Box 640 11 Hudson St. Blind River, ON POR 1B0 Office of the Mayor Town of Bruce Mines P.O. Box 220 56 Taylor St. Bruce Mines, ON POR 1CO Office of the Mayor Town of Thessalon P.O. Box 220 169 Main St. Thessalon, ON POR 1L0 Reeve Village of Hilton Beach P.O. Box 25 Hilton Beach, ON POR 1G0 Reeve Township of St. Joseph P.O. Box 187 Richard's Landing, ON POR 1J0

Office of the Mayor City of Sault Ste. Marie P.O. Box 580 99 Foster Drive Sault Ste. Marie, ON P6A 5N1 Reeve The North Shore Township P.O. Box 108 Algoma Mills, ON POR 1A0 Reeve District of Algoma and Michipicoten P.O. Box 500 40 Broadway ave. Wawa, ON POS 1KO Office of the Mayor Town of Marathon P.O. Box 190 4 Hemlo Dr. Marathon, ON POT 2BO Reeve Township of Terrace Bay P.O. Box 40 12 Simcoe Plaza Terrace Bay, ON POT 2WO Chairman of the Local Services Board Rossport, ON POT 2R0 Reeve Nipigon Township P.O. Box 160 25 2nd Street Nipigon, ON POT 2JO Reeve Redrock Township P.O. Box 447 42 Salls St. Red Rock, ON

POT 2PO

Office of the Mayor City of Thunder Bay 500 Donald St. B. Thunder Bay, ON P7E 5V3 Reeve Atikokan Township P.O. Box 1330 120 Mark St. Atikokan, ON POT 1C0 Office of the Mayor Town of Rainy River P.O. Box 488 200 Atwood Ave. Rainy River, ON POW 1LO Reeve Township of Chapple P.O. Box 4 Barwick, ON POW 1A0 Reeve Township of Emo P.O. Box 358 39 Queen St. Emo, ON POW 1E0 Reeve Township of Sioux Narrows P.O. Box 417 Sioux Narrows, ON POX 1NO Office of the Mayor Town of Fort Frances P.O. Box 38 320 Portage Ave. Fort Frances, ON P9A 3M5 Office of the Mayor Town of Kenora P.O. Box 1110 1 Main St. S. Kenora, ON P9N 3X7

Office of the Mayor Town of Keewatin P.O. Box 139 221 Main St. Keewatin, ON POX 1C0 Manitoba Office of the Mayor Village of Lac du Bonnet P.O. Box 339 Lac du Bonnet, MB ROE 1A0 Pointe du-bois Reeve Victoria Beach 303-960 Portage Ave. Winnipeg, MB R3G OR4 Office of the Mayor Town of Selkirk 200 Baton Ave. Selkirk, MB R1A OW6 Office of the Mayor City of Winnipeg Council Centre, Civic Centre 510 Main St. Winnipeg, MB R3B 1B9 Office of the Mayor Town of Winnipeg Beach P.O. Box 160 Winnipeg Beach, MB ROC 3GO Office of the Mayor Town of Gimli P.O. Box 88 70 1/2 1st Ave. Gimli, MB ROC 1BO

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Office of the Mayor Village of Riverton P.O. Box 250 Riverton, MB ROC 2R0

Reeve Grand Rapids General Delivery Grand Rapids, MB ROC 1E0

Office of the Mayor Town of the Pas P.O. Box 870 The Pas, MB R9A 1K8

Saskatchewan

Office of the Mayor Village of Cumberland House P.O. Box 190 Cumberland House, SK SOE 0S0

Chairman of the local advisory committee Sturgeon Landing General Delivery Sturgeon Landing, SK SOP 0H0

Office of the Mayor Village of Pelican Narrows General Delivery Pelican Narrows, SK SOP 0E0

Office of the Mayor Village of Stanley Mission General Delivery Stanley Mission, SK SOJ 2P0

Office of the Mayor Village of Missinipe P.O. Box 1617 La Ronge, SK S0J 1L0 Office of the Mayor Town of La Ronge P.O. Box 5680 La Ronge, SK SOJ 1L0

Office of the Mayor Hamlet of Patuanak General Delivery Patuanak, SK SOM 2H0

Office of the Mayor Village of Ile-a-la-Crosse P.O. Box 280 Ile-a-la-Crosse, SK SOM 1C0

Office of the Mayor Village of Buffalo Narrows P.O. Box 98 Buffalo Narrows, SK SOM 0J0

Office of the Mayor Village of La Loche P.O. Box 310 La Loche, SK SOM 0J0

<u>Alberta</u>

Office of the Mayor City of Ft. McMurray 9909 Franklin Ave. Ft. McMurray, Alberta T9H 2K4

Chairman of the local advisory council Fort Vermillion P.O. Box 1110 High Level, AB POH 120

Office of the Mayor Town of Peace River P.O. Box 125 Peace River, AB TOH 2X0

British Columbia

Office of the Mayor District of Taylor P.O. Box 300 Taylor, B.C. VOC 2K0

Office of the Mayor City of Fort St. John 10631 100th St. Fort St. John, BC V1J 325

Office of the Mayor District of Hudson's Hope Box 330 Hudson's Hope, BC VOC 1V0

Office of the Mayor District of Mackenzie Bag 340 Mackenzie, BC VOJ 2CO

Office of the Mayor City of Prince George 1100 Patricia Blvd. Prince George, BC V2L 3V9

Office of the Mayor City of Quesnel 405 Barlow Ave. Quesnel, BC V2J 2C3

Bella Coola

Native Communites

<u>Ouebec</u>

Kahnawake Mohawk Council Chief Box 720 Kahnawake, PQ JOL 1B0

Kanesatake Mohawk Nation Chief 681-Ste. Philomene Kanesatake, PQ JON 1E0

Abenakis De Wolinak Chief Reserve indienne de Wolinak 4670, rue Kolipaio Becancour, PQ GOX 1B0

Conseil De Bande De Odonak Chief 58, rue Wabanaki Odanak, PQ JOG 1H0 Ontario Batchewana First Nation of Ojibways Chief 236 Frontenac St. Sault Ste. Marie, ON P6A 5K9 Garden River First Nation Chief Box 7, Site 5, RR#4 Garden River, ON P6H 5K9 Fort William First Nation Chief Box 786, Stn F Thunder Bay, ON P7C 4Z2 Michipicoten First Nation Chief Box 26, Site 7 Wawa, ON POS 1K0 Mississauga #8 First Nation Chief P.O. Box 1299 Blind River, ON POR 1B0 Nipissing First Nation Chief **RR#1** Sturgeon Falls, ON POH 2G0 Pays Plat First Nation Chief P.O. Box 819 Schrieber, ON POT 2S0 Pic Mobert First Nation Chief Mobert, ON POM 2J0 Ojibways of Pic River First Nation Chief Heron Bay, ON POT 1R0

Rainy River First Nation Chief P.O. Box 450 Emo, ON POW 1E0 Washagamis Bay First Nation Chief McKenzie Portage Road P.O. Box 625 Keewatin, ON POX 1CO Thessalon First Nation Chief P.O. Box 9, RR#2 Thessalon, ON POR 1L0 Lake Helen First Nation Chief Box 489 Nipigon, ON POT 2J0 Manitoba Brokenhead Ojibway Nation Chief Scanterbury Community Hall General Delivery Scanterbury, MB ROE 1W0 Bloodvein Ojibway Nation Chief Bloodvein, MB ROC 0J0 Chemawawin First Nation Chief Box 009 Easterville, MB ROC OVO Dauphin River First Nation Chief Box 58 Gypsumville, MB ROC 1J0 Grand Rapids Cree Nation Chief P.O. Box 500 Grand Rapids, MB ROC 1E0 Fisher River First Nation Chief General Delivery Koostatak, MB ROC 1S0

Hollow Water First Nation Chief Wanipigow, MB ROE 2E0 Little Black River First Nation Chief O'Hanley, MB ROE 1K0 Sagkeeng First Nation Chief Fort Alexander, MB ROE 1MO Opaskwayak Cree Nation Chief P.O. Box 297 The Pas, MB R9A 1K4 Saskatchewan Cumberland House First Nation Chief Box 220 Cumberland House, SK SOE 0S0 Cumberland First Nation Chief Box 278 Cumberland House, SK SOE 0S0 English River First Nation Chief General delivery Patuanak, SK SOM 2H0 Big C First Nation Chief Box 145 La Loche, SK SOM 1G0 Lac La Ronge First Nation Chief Box 480 La Ronge, SK SOJ 1L0 Peter Ballantyne First Nation Chief **Box 100** Pelican Narrows, SK SOP OBO

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Alberta Athabasca Chipewyan First Nation Chief **Box 366** Fort Chipewyan, AB TOP 1B0 Fort Mckay Band Council Chief Box 5360 Fort McMurray, AB T9H 3G4 Fort McMurray Band Chief Box 6130 Clearwater Station Fort McMurray, AB T9H 4J1 Little Red River Cree Nation Chief Box 1165 High Level, AB TOH 1Z0 Lubicon Lake First Nation Chief Box 6731 Peace River, AB T8S 1S5 Miskisew Cree First Nation Chief P.O. Box 90 Fort Chipewyan, AB TOP 1B0 Tall Cree British Columbia Kluskus First Nation Chief 395 A Kinchant St. Quesnel, BC V2J 3J8 Nazko First Nation Chief P.O. Box 4534 330 Front Street Quesnel, BC V2J 3J8 Lheit-Lit'en First Nation Chief RR#1, Site 27, comp, 60 Prince George, BC V2N 2H8

Red Bluff First Nation Chief 1515 Arbutus Road Box 4693 Quesnel, BC V2J 3J9 Ulkatcho First Nation Chief Box 3430 Anahim Lake, BC V0L 1C0 Nuxalk Nation Chief P.O. Box 65 Bella Coola, BC V0T 1C0 Alexander Mackenzie Voyageur Route - Telephone & Fax List

Note: This list does not include the Route section between Quebec City and Lachine

Organization	Telephone	Facsimili
FIRST NATIONS		
Quebec		
Kahnawake Mohawk Council Kanesatake Mohawk Nation Abenakis de Wolinak Conseil de Bande de Odanak	(514)632-7500 (514)479-8373 (819)294-6696 (514)568-2810	638-5958 479-8249 294-6697 568-2919
<u>Ontario</u>		
Batchewana First Nation of Ojibwaya Garden River First Nation Fort William First Nation Michipicoten First Nation Mississauga #8 First Nation Nippissing First Nation Pays Plat First Nation Pic Mobert First Nation Ojibways of Pic River First Nation Rainy River First Nation Washagamis Bay First Nation Thessalon First Nation Lake Helen First Nation	(705)946-6300 (807)623-9543 (705)856-1993 (705)356-1621 (705)753-2050 (807)824-2541 (807)822-2134	759-9171 945-1415 623-9519 856-1642 356-1740 753-0207 824-2206 822-2850 229-1944 482-2603 543-2964 842-2332 887-3446
<u>Manitoba</u>		
Brokenhead Ojibway Nation Bloodvein Ojibway Nation Chemawawin First Nation Dauphin River First Nation Grand Rapids First Nation Fisher River First Nation Hollow Water First Nation Little Black River First Nation Sagkeeng First Nation Opaskwayak Cree Nation	(204) 766-2494 (204) 395-2148 (204) 329-2161 (204) 659-5370 (204) 639-2219 (204) 645-2171 (204) 363-7278 (204) 367-4411 (204) 367-2287 (204) 623-5483	766-2306 395-2099 329-2017 659-4458 639-2503 645-2745 363-7418 367-2741 367-4315 623-3819
Saskatchewan		
Cumberland House First Nation Cumberland First Nation	(306) 888-2226	888-2084
English River First Nation Big C First Nation	(306)396-2055 (306)822-2021	396-2155 822-2212

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Town of Marathon	(807)229-1340	229-1999
Township of Terrace Bay	(807) 825-3315	825-9576
Rossport	• • • • • • • • • • •	
Nipigon Township	(807)887-3135	
Rerrock Township	(807) 886-2245	
City of Thunder Bay	(807) 625-3600	623-1164
Atikokan Township	(807) 597-2738	597-6186
Town of Rainy River	(807) 852-3244	852-3553
Township of Chapple	(807) 487-2354	
Township of Emo	(807) 82-2378	482-2741
Township of Sioux, Narrows	(807) 226-5241	•
Town of Fort Frances	(807) 274-5323	
Town of Kenora	(807) 467-2000	467-2045
Town of Kewatin	(807) 547-2881	547-2284
Manitoba		
Village of the du Pernet	(204) 245 8602	
Village of Lac du Bonnet Pointe du-Bois	(204) 245-8693	
Victoria Beach	(204)774 2462	x .
Town of Selkirk	(204)774-2463	
	(204)482-4321	040 0ECC
City of Winnipeg	(204)986-2196	949-0566
	(204) 389-2698	389-2019
		642-7151
	(204)378-2281	378-5616
Grand Rapids Town of The Pas	(204) 639 - 2260	677 550 <i>6</i>
IGWI OF THE PAS	(204)623-6481	623-5506
Saskatchewan		
Village of Cumberland House	(306)888-2066	
Sturgeon Landing	(306)888-4511	
Village of Pelican Narrows	(306) 632-2225	632-2006
Village of Stanley Mission	(306)635-2222	
Village of Misinipi	(306)635-4540	635-4434
Town of La Ronge	(306) 425-2066	425-3883
Hamlet of Patuanak	(306)396-2020	396-2092
Village of Ile-a-la-Crosse	(306)833-2122	833-2132
Village of Buffalo Narrows	(306)235-4225	235-4699
Village of La Loche	(306)822-2032	822-2078
Alberta		
Fort McMurray	(403) 743-7010	
Fort Chipewyan		
Fort Vermillion		
Town of Peace River	(403) 624-2574	
<u>British Columbia</u>		
District of Taylor	(604) 789-3392	789-3543
City of Fort St. John	(604) 785-4443	785-7106
District of Hudson's Bay	(604) 783-9901	783-5741

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Appendix C - The AMVR Community Survey Package

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August 8, 1994

Dear Community Leader,

My name is Peter Labor, and I am a master's degree student at Trent University in Peterborough, Ontario. I am writing to request your assistance in the completion of my thesis on the Alexander Mackenzie Voyageur Route.

I am surveying all the communities and First Nations along the provincially proclaimed Alexander Mackenzie Voyageur Route from Lachine, Quebec to Bella Coola, British Columbia, and along the proposed route through the Northwest Territories. The development of the route has implications on industry, economic development, resource use and tourism for all the areas through which it passes, and as such I am collecting community input on the current and future use of the local waterway.

You will find enclosed four information packages and questionnaires in self addressed envelopes. My request is that you distribute these envelopes to four groups/individuals identified as "key stakeholders" in the use of your local waterway. As such stakeholders will vary for each community, I leave the choice up to you, but the more diverse the groups, the better. Suggested groups/individuals include; town/city planning, local tourism board, chamber of commerce, historical association/museum, hunter/trappers association, town council, recreation committee, environmental group, etc..

I have included some background information on my project and the Alexander Mackenzie Voyageur Route, and I hope you will take this opportunity to provide valued input.

If you have any questions regarding any of the above, please do not hesitate to contact me at (705) 740-1119, or at the Frost Centre at the above address.

Thank you for you attention and assistance.

Sincerely,

Peter Labor



Peterborough, Ontario, Canada. K9) 788 Frost Centre for Canadian Heritage and Development Studies Tel: (705) 748-1750, FAX: (705) 748-1801, E-mail: FROSTCENTRE@TRENTU.CA

August 8, 1994

Dear First Nations member,

My name is Peter Labor, and I am a Master's student at Trent University in Peterborough, Ontario. I was a member and leader of the Sir Alexander Mackenzie Bicentennial Expedition ("The Voyageurs") which passed through your community during the summer of 1989.

Through the efforts of the Alexander Mackenzie Trail Association, the waterway through your community is proposed as part of the Alexander Mackenzie Voyageur Route. I am surveying communities on "The Route", to collect input on such an initiative. I am also interested in views of the heritage value and use of the local waterway.

I feel the input from First Nations communities is essential in gaining a full understanding of the value and use of this waterway, so I hope you will find time to complete the enclosed questionnaire.

I have included some background information on my project, in addition to a questionnaire. Although you are under no obligation to fill out and return the questionnaire, I would greatly appreciate your assistance in doing so. My thesis will offer a summary of results from the questionnaires returned, and it is my intention that this information will be used in future planning of the route.

If you have any questions regarding my project, the Alexander Mackenzie Voyageur Route or the questionnaire, please feel free to contact me at (705) 740-1119, or by writing the Frost Centre at the above address.

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Thank you for your assistance!

Sincerely,

Peter Labor



Peterborough, Ontario, Canada. K9J 788 Frost Centre for Canadian Heritage and Development Studies Tei: (705) 748-1750, FAX: (705) 748-1801, E-mail: FROSTCENTRE@TRENTU.CA

August 8, 1994

Dear First Nations member,

My name is Peter Labor, and I am a Master's student at Trent University in Peterborough, Ontario. I was a member and leader of the Sir Alexander Mackenzie Bicentennial Expedition ("The Voyageurs") which passed near your community sometime in the last three years.

As a result of efforts by the Alexander Mackenzie Trail Association, the waterway through your community has been proclaimed by your province as part of the Alexander Mackenzie Voyageur Route. I am surveying communities on "The Route", to collect input on such an initiative. I am also interested in views of the heritage value and use of the local waterway.

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Thank you for your assistance!

Sincerely,

1 Foll Peter Labor



Peterborough, Ontario, Canada. K9J 788 Frost Centre for Canadian. Heritage and Development Studies Tel: (705) 748-1750, FAX: (705) 748-1801, E-mail: FROSTCENTRE@TRENTU.CA

August 8, 1994

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If you have any questions regarding my project, the Alexander Mackenzie Voyageur Route or the questionnaire, please feel free to contact me at (705) 740-1119, or by writing the Frost Centre at the above address.

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Thank you for your assistance!

Sincerely,

Peter Labor

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Strengthening Canadian identity by connecting people and places Le sentiment d'appartenance au milieu : une question d'identité

3 August 1994

To Whom It May Concern

Dear Sir:

On behalf of Heritage Canada, I am writing in support of the current research work of Mr. Peter Labor, Trent University, pertaining to the Alexander Mackenzie Voyageur Route.

Mr. Labor has had considerable experience in studying and surveying the Mackenzie route. As a member of the Alexander Mackenzie Expedition, Mr. Labor has actually travelled and re-enacted the journeys of Mackenzie in the 1790s. This outstanding physical feat has provided Mr. Labor with an intimate knowledge of the regions in question, a matchless background for his academic work.

Heritage Canada strongly supports the concept of the Alexander Mackenzie Voyageur Route as a natural, historic and cultural amenity. Heritage Canada has endorsed the work of the Alexander Mackenzie Voyageur Route Association in protecting and developing this vital part of our Canadian heritage.

Any assistance that may be provided to Mr. Labor would be deeply appreciated.

Yours sincerely,

Loughes Franklin

Douglas Franklin Director Government and Public Relations

HERITAGE CANADA

Board of Governors Conseil d'administration

> Kate Waygood Chair of the Board Présidente du Conseil

Ruth Saturley Sheldon Godfrey Vice-Chairs of the Board Vice-présidents du Conseil

> Brent Slobodin Yukon

Wilma Wood British Columbia Colombie-Britannique

Susan Cross Northwest Territories Territoires du Nord-ouest

Reginald Crowshoe

Glenda James Saskatchewan

Rosemary Malaher Manitoba

Sheidon Godfrey Ontario

Claude Dussault Québec

Robert Dallison New Brunswick Nouveau-Brunswick

Elizabeth Pacey Nova Scotia Nouvelle-Écosse

T. Daniel Tweel Prince Edward Island Île-du-Prince-Édouard

Ruth Saturley Newfoundland and Labrador Terre-Neuve et Labrador

> Christma Cameron Bill Peters Department of Canadian Heritage Ministère du parrimoine canadien

Jacques Dalibard Executive Director Directeur général



Peterborough, Ontario, Canada. K9J 788 Frost Centre for Canadian Heritage and Development Studies Tel: (705) 748-1750, FAX: (705) 748-1801, E-mail: FROSTCENTRE@TRENTU.CA

The Alexander Mackenzie Voyageur Route A community based investigation of the development of a trans-Canada heritage waterway route Project Summary

In commemoration of the 200th anniversary of the first recorded crossing of Canada by a European, during the summers of 1989-1993, groups of students from Lakehead University in Thunder Bay, Ontario re-traced, by canoe, the 12 000 kilometre system of inland waterways which join our country from the Atlantic to the Arctic and Pacific Oceans. The Alexander Mackenzie Voyageur Route, a water based corridor stretching from Lachine, Quebec to Bella Coola, British Columbia is a legacy of these expeditions, and the route has been proclaimed by each of the six provinces through which it passes. Efforts are also in progress to solicit recognition of the route through the Northwest Territories to the Beaufort Sea.

Not only does this trans-Canadian waterway have significant historical importance, many sections of the route are important today for commerce, transportation, power, tourism and recreation.

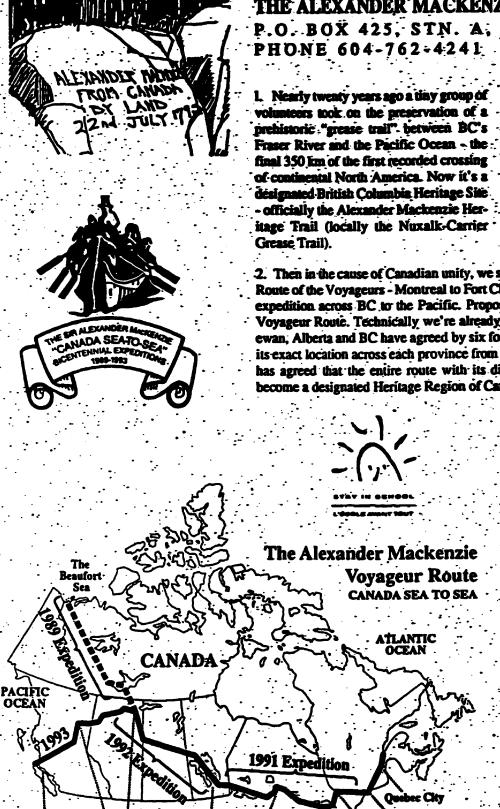
The hundreds of communities along the Alexander Mackenzie Voyageur Route provide a crosssection of Canadian culture and enterprise. The purpose of this thesis is to determine whether community interest in the Alexander Mackenzie Voyageur Route is sufficient to support the implementation of selective development and preservation strategies which would lend to the utilisation of the Alexander Mackenzie Voyageur Route as an historical, cultural, recreation and tourism resource of national significance. The historic value of these waterways far exceeds the European influence, and include facets from pre-glaciation, to continued use by First Nations.

Through this project, the researcher will;

- A. examine, through an integrated analysis of historic and contemporary thought, the heritage status of the Alexander Mackenzie Voyageur Route.
- B. conduct a survey of community "stakeholders" in the Alexander Mackenzie Voyageur Route.
- C. make recommendations for future development/preservation of the Alexander Mackenzie Voyageur route

Prime areas of consideration which will be addressed by the stakeholder's survey will include; waterway use/designation, adjacent land use/designation, current levels of infrastructure, domestic and international tourism potential, recreation potential, funding potential, cultural relevance, historical relevance, educational relevance and management/administration concerns.

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commencing January 1, 1994, THE ALEXANDER MACKENZIE TRAIL ASSOCIATION will publicly use the new Jexander Mackenzie Voyageur Association. We retain our original registration under the Societys Act of British Colu nd with Revenue Canada, as a not-for-profit charitable corporation. We continue to further the concept of a dedicated istoric route between the Port of Quebec to Fort Chibewyan AB via the original voyageur route of the North West Company, nd thence to the Pacific Ocean on the route of Alexander Mackenzie's 1792/93 expedition to the Pacific Ocean - known Nogether as THE ALEXANDER MACKENZIE VOYAGEUR ROUTE - Canada Sea To Sea.

Bella Caala

· Fert Chip

Peace River

THE ALEXANDER MACKENZIE VOYAGEUR ASSOCIATION P.O. BOX 425, STN. A, KELOWNA, BC VIY 7P1 FAX 604-868-8398

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2. Then in the cause of Canadian unity, we set out to link the famous North West Company Route of the Voyageurs - Montreal to Fort Chipewyan, Alberta - with Mackenzie's 1792/93 expedition across BC to the Pacific. Proposed "sea to sea" as the Alexander Mackenzie Voyageur Route. Technically we're already there. Quebec, Ontario, Manitoba, Saskatchewan, Alberta and BC have agreed by six formal Proclamations that the route exists and to its exact location across each province from border to border. In addition, Heritage Canada has agreed that the entire route with its distinct origins and heritage attractions should become a designated Heritage Region of Canada.

> 3. In 1989 we agreed to partner The Lakehead University 4-summer Mackenzie Bicentennial Expeditions, in which student voyageurs paddled over 10,000 km retracing all of Mackenzie's 1789-1793 "voyages". They arrived July 22nd, 1993, at Sir Alexander Mackenzie Provincial Park on the Pacific to share the bicentennial ceremonies. Lakehead's expeditions. aided by the federally-sponsored Stay in School program, demonstrated to thousands of Canadians, young and old, our unique national inheritance - Native, French, Scottish and English.

> 4. So what does our 300-member association do next? We let Canada and the world know the Alexander Mackenzie Voyageur Route is there. Canada Sea to Sea. We describe for public information the 100 or more en route parks, heritage rivers, historic sites, museums and scenic offerings, along with tourism support facilities. We encourage route enhancement proposals, beritage festivals, site conservation and route improvements. · Care to join us?

Your AMTA/AMVA Contact is:

Appendix D - Questionnaire Comments Summary

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Question 1

- there are poor records of Mackenzie passing through this area
- I have never seen any literature form any government department or group nor have I seen any marketing programs
- I wasn't aware that a route had formal designation
- this area is prime Mackenzie territory
- I was involved with the expedition
- informed by the expedition
- stop over here by the expedition
- I recall the expedition arriving here a couple of summers ago
- we welcomed the voyagers
- participated in the local commemoration
- helped organize voyagers stop over
- hosted voyagers during 1991 expedition

Question 2

- for pleasure boaters
- for marina and tourism
- summer and winter recreation and drinking water
- in the past much more than today
- local boat use
- rapids in the river are the historic reason for the location of this settlement
- primary summer shipping route and tourism draw
- major tourism river right through our community
- recreation and water source only
- it is becoming more important all the time
- great recreation benefits and great tourism potential for our community and region
- our marina counts on business from boaters travelling the route
- tourism and recreation commercial activities
- I think we are all a little complacent about a waterway which has always been there
- historical commerce opening up of the interior
- barge annual supply of groceries to the community
- transportation, logs and goods by barge
- many uses for recreation

- commercial fishing
- for some residents
- first settlers reached the area by river
- early settlement and strong Native history
- first pioneers arrived by boat
- not for everyone
- transportation via water was a vital link in early days

- used as a major transportation route before the railway arrived
- commercial fishing
- freighters still use the waterway
- older residents much more aware of the significance the attention of the community lies elsewhere
- many places reflect historical names
- fishing and timber trade
- historic use for transportation
- being taken for granted these days

Question 5

- big part of the tourism appeal
- much revolves around waterway
- much more important to the Native sector of the community
- depend on the waterway for food
- tour companies and pleasure boat use
- many major sites on the river
- more for tourism than anything else
- community was founded because of proximity to river
- recreation picnics etc.
- I think it is although many don't realize it
- Native culture, european influence, French-Canadian culture

Question 6

- the community is becoming more aware
- recorded history goes back approximately 10,000 years
- taken for granted
- adds beauty to city
- enhances quality of life and delineates geographical boundaries
- is increasing rapidly with new development focusing on recreation and tourism
- much of our history revolves around the waterway
- the geographic location is a major factor in all our river related activities
- historically, scenery and tourism
- the most significant factor in the location of this community

- historic markers and ruins
- mining, logging, fishing
- locks, power generation, fishing, recreational boating
- freighters, commercial fishing, tourism
- adjacent museums
- historical books
- designated recreational site

- old buildings, monuments, old industries - outside of city

Question 14

- much better than four years ago
- maybe a little too high adversely affecting tourism and recreation
- restricted development
- through Provincial and Federal regulation
- dwindling fish stocks
- discharges cause environmental problems
- awareness of importance is rising
- hydro doesn't run it properly
- local officials very adamant about protection of local wetlands and preservation of shore areas
- waterways could be utilized more for recreation and tourism
- awareness is increasing river is identified as an area of concern
- some pollution by local paper mill but levels are being reduced
- local council mandated to protect waterways and keep them pristine
- many active environmental groups government protection is complicated

- historical knowledge in general is lacking in too large a segment of the population but is the interest there?
- people have forgotten the essential role of waterways need reacquaintance
- need to teach younger generations about their local history
- anything to promote the community and promote water recreation is good
- it should become a central focus of historical interpretation community should turn and again face the river in physical and intellectual terms as it did in the past
- this waterway is very well known world-wide
- there is always room for better educational programs in local history
- currently very strong
- we need to promote our rivers history to the world
- would foster appreciation
- I think it could be promoted to a greater degree
- tourism benefits valuable learning resources under used
- important in opening up of western Canada has a colourful history
- aside from transportation, hunting and fishing, I don't know what else it was used for
- we are trying to get Alexander Mackenzie Days going
- the construction of a museum would be great as long as not done in the discourse of the European

Question 18

- depends on what the conditions are
- it should at the most be promoted as a route of the fur trade credit should not go to an extremely late-comer i.e. Mackenzie
- environmentally responsible eco-tourism perhaps
- we know very little about the impact of the fur trade other than exploitation of Hudson's Bay Company
- anything to promote natural history is good for both naturalists and the economy
- it is part of out history
- this would be very exciting
- except for the name we all know that Alexander Mackenzie did not discover our river
- good for tourism
- our waterways made Canada, we must preserve and promote that heritage
- tourism is a mammoth industry why not?
- La Verendrye is the explorer we promote
- it will tie the country together
- it will perhaps increase interest in use of waterways
- many benefits to many people
- there is more to Canada than our so called central Canada, let's identify our country correctly and not by population and economic control
- the concept is good but the actual cost must be weighed against the benefits
- promotes national unity via history and would give all communities involved another promotional tool
- Alexander did not discover anyone or anything that wasn't there already

- depends on conditions
- if you can get volunteers
- campground use will probably go up
- it will help tourism
- must go cautiously until land claims are settled
- we did in the past the future depends on local leadership and interest of the public
- not beneficial to community
- the historical importance would benefit the community
- it could possibly give people a greater sense of how great a place we have
- do not have volunteers available
- anything that attracts more tourists would help economically
- our main industry is tourism it can only benefit us
- it would enhance development of cultural tourism
- more information would be needed
- would need careful coordination you won't want to duplicate programs or usurp leadership already in place

Question 21

- depends on outcome of people living here
- yes, but we are small in numbers
- no, he didn't discover it, he merely used it
- need more information
- already part of the Alexander Mackenzie Committee
- no, more appropriate group
- given proper information and format
- if within reasonable limits
- I cannot speak for the Regional Board of Directors
- as long as Native concerns are addressed we are not prepared to support a combative situation or to be seen serving "white" history interpretation
- need opportunity to discuss project with my tourism committee
- would have to have a business plan submitted to the Board of Directors for approval

Final Comments

- this survey appears highly uninformed on the current existing Native sentiments towards Eurocentric history - you will have to prepare some very convincing material for our indigenous population to convince them that Alex's trip is worthy of such attention and credit
- this sounds like an exciting project Mackenzie's performance was a stunning thing
- I think a biennial event would be well received
- the expedition was well received in the region and served well to make people aware of our heritage
- a reenactment along the route that is linked to each site would be fun and good for tourism
- the project could be beneficial to our community as long as the Native groups in our area are supported
- Native people developed and used many aspects of the route to name it after a European would and does contribute to the continued colonization of the land and us, the original inhabitants
- I found the questionnaire a little confusing under technology, culture and discovery



PHONE: (403) 874-8480 FAX: (403) 874-3867 MODEN: (403) 874-3965

eMAIL: pcisek@acs.ucalgary.ca

August 22, 1994

Peter Labor Frost Centre for Canadian Heritage and Development Studies Trent University Peterborough, Ontario K9J 7B8

Dear Mr. Labor:

We have received a copy of your questionnaire and information package concerning the "Alexander Mackenzie Voyageur Route".

The Institute is disturbed by the fact that you have not provided an opportunity in your questionnaire for First Nations peoples to voice their views and attitudes regarding Mackenzie's "discovery" of northern Canada and subsequent imperialist expansion into aboriginal homelands.

You should be aware that the Dene Cultural Institute has formally resolved to change the name of the Mackenzie River back to its original Dene name "Deh Cho", which can roughly be translated as "Big River." The Government of the Northwest Territories has undertaken a process to change the name officially.

A copy of the Institute's booklet "DEH CHO: Mom, We've Been Discovered!" is enclosed. This should provide you with an __understanding of Dene perspectives on Alexander Mackenzie's voyage. Kindly return this booklet when you are finished or, if you wish to keep it, please forward \$12.95 to the Institute.

Sincerely yours,

Pétr Cizek Research Director September 7, 1994

Petr Cizek Box 570 Hay River, NWT X1A 2N2

Dear Mr. Cizek,

I wish to thank you for your prompt reply to my questionnaire regarding the Alexander Mackenzie Voyageur Route, and to clarify some misconceptions which you have regarding my research project.

I am well aware of the Dene perspective on Alexander Mackenzie, having travelled, in 1989, to all the communities along the route in the NWT as part of the Bicentennial celebration. I have been using "DEH CHO: Mom. We've Been Discovered!" as a research and teaching tool for five years. I have developed my personal and professional view on the impacts of Alexander Mackenzie on aboriginal homelands and peoples through historical research and conversations with aboriginal and non-aboriginal people across Canada over the last six years and I understand your concerns.

I believe if you can read past the name (Alexander Mackenzie Voyageur Route) given to this trans-Canadian waterway, you will see that the purpose of my research project is to objectively collect community perspectives on the use and cultural importance and future of the waterway as an entity unto itself - not as a manifestation of European discovery. I am also confident that by carefully reading and answering the enclosed questionnaire you will find sufficient forum to express your stated views on the "discovery" aspect of route.

I have actively worked to discourage the notion of Mackenzie as "discoverer", and I urge you to re-read the outline material with an understanding that even though the name of the route reflects the fact that Mackenzie was the first individual to complete and record the route in its entirety, the "value" of the waterway as a resource far exceeds the scope and time of Mackenzie, remaining significant to all who live along its shores.

I agree with your expression of the importance of allowing for First Nations people's to express their views, and I hope that you can see involvement in this initative as an indication that others think such expression is important too. Please work with me to provide a "balanced" view of these waters as both physical and cultural resources which are uniquely significant to each community, family and individual.

Thank you for your attention and concern.

Sincerely,

Peter Labor



-189-ILTURAL INSTITUTE

P.O. Box 207 Yellowknife, N.W.T. X1A 2N2

<u>REPLY TO:</u> Pho W.T. Box 570 F Hay river Northwest territories, canada

Phone: (4O3) 873-6617 Fax: (4O3) 873-3867

PHONE: (403) 874-8480 FAX: (403) 873-3867 BBS: (403) 874-3965 and 874-3195 eNAIL: prisck@acs.ucalgary.ca

XOE ORO

January 17, 1995

Peter Labor Frost Centre for Canadian Heritage and Development Studies Trent University Peterborough, Ontario K9J 7B8

Dear Mr. Labor:

In reply to your letter of September 8, 1994, the Dene Cultural Institute's must express its candid position regarding your survey and the "Alexander Mackenzie Voyageur Route".

Your notion that Mackenzie was "the first individual to complete and record the route [to the arctic ocean] in its entirety" reflects an unfortunate Eurocentric bias. Mackenzie was simply the first WHITE man who completed and recorded the route in WRITTEN . form.

Our oral history tells us that Dene routinely travelled for thousands of miles across their homelands. Trade goods originating from distant places are routinely found in **pre-contact** Dene archaeological sites. The archival record attests to the epic overland treks of the Denesoline (Chipewyan) across the barrenlands to Fort Churchill and to Coppermine.

Mackenzie would never have made it to the arctic ocean and back in one season if he had not been led by experienced Dene guides who knew the route. If English Chief, the Dene leader of the expedition, had not convinced Mackenzie to head south at the end of summer rather than exploring another river westward to the mountains, it is likely that the expedition would have faced starvation over the winter. Given the Institute's long-standing initiative to restore the original name of the river to "Deh Cho", we cannot look past the name "Alexander Mackenzie Voyageur Route". Nevertheless, the Institute would support a Canadian Heritage Rivers or other designation that ensures an appropriate balance between aboriginal and European history. However, we will actively oppose any proposed public designation that further inflates the name of a disgruntled trader.

Sincerely yous,

CC

Joanne Barnaby Executive Director

Board of Directors, Alexander Mackenzie Voyageur Association Executive Director, Frost Centre for Heritage and Canadian Development Studies ·

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* <u>SECT</u>	No Response - "9" ION I - BACKGROUND
1.	Prior to this survey were you aware of the Alexander Mackenzie Voyageur Route through your community? (check one)
	Yes COMMENTS Somewhat No
2.	Does your local waterway play an important role in your community? (check one)
[2]	Yes COMMENTS No Don't Know
3.	Rank the following aspects of the waterway in order of importance to your community (1- most important, 10-least important).
	Transportation Industry (logging, pulp, mining, power generation, etc.) Waste Management Recreation Tourism Fishing/Hunting * No Response - "20" Cultural Preservation * Check Only "15" Environmental Preservation Adjacent Residential Use Agricultural Use
4.	Is there a strong sense of history in your community associated with your local waterway? (check one)
į2j	Yes COMMENTS No Don't Know
5.	Is your local waterway an important part of the cultural character of your community? (check one)
[2]	Yes COMMENTS No Don't Know
6.	Does your local waterway contribute to giving your community a "sense of place"? (check one)
[3] [2]	Yes, very much COMMENTS Somewhat Not at all Don't know

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7. Are the historical links of your community to the local waterway evident in your community? (check one) [1] Yes COMMENTS [3] Somewhat [2] No [8] Don't Know If yes to question #7, how are such historical links evident? 8. (check any that apply) $Y_{es} = 1[$] events and festivals [] museum(s) No - 2No Response - 9] historic park(s) ſ] local literature] oral history ſ] historic sites/monuments [] other ſ 9. Please indicate the level of historical linkage to the following themes within your community. (circle one answer for each theme) High Medium Low Don't Know The Fur Trade 1 2 3 4 Native Culture 1 3 2 4 European Culture 1 2 3 4 No response - 9 Native Technology 1 2 3 4 European Technology 1 2 3 4 Native Discovery 1 2 3 4 Buropean Discovery 1 2 3 4 Geological History 1 2 3 4 Natural History 1 2 3 4 Which of the following aspects of your community are evident 10. in tourism literature/promotion of your community or region? (check any that apply) [] Waterway resources [] Land resources Yes - 1 [] Native habitation & culture No - 2 [] The fur trade [] European exploration No Response - 9 [] European habitation & culture

[] Fishing / Hunting

11. Which of the following do you have in your community?

[] Community Museum Yes - 1
[] Waterfront Park (public)
[] Waterfront Park (private) No - 2 No Rsponse - 9
[] Marina/public dock/waterfront boat facilities
[] Waterfront walkway
[] Waterfront campground

SECTION II - MATERNAY USE

12. Indicate the level of use of your local waterway for the following. (circle one answer for each)

	Very	High	High	Moderate	Low	Very Low
Industry	1		2	3	4	5
Recreation	1		2	3	4	5
Tourism	1		2	3	4	5
Fishing	1		2	3	4	5
Waste Disposal	1		2	3	4	5
Agriculture	1		2	3	4	5
Private Land	1		2	3	4	5

13. The economic importance of our local waterway for... (circle one answer for each)

	very	high high	moderate	low	very low
Tourism is;	1	2	3	4	5
Industry is;	1	2	3	4	5
Farming is;	1	2	3	4	5
Recreation is;	1	2	3	4	5
Fishing is;	1	2	3	4	5

14. The natural resource protection associated with our local waterway is; (check one)

Ε	1]	Very High	COMMENTS
]	2]	High	
[3]	Moderate	
I	4]	Low	
[5]	Very Low	

SECTION III - THE FUTURE

15. Should the following activities be increased, decreased, refined or stay the same in association with local waterway use. (circle one for each)

	Increase	Decrease	Refine	Same
Resource Protection	1	2	3	4
Recreational Use	1	2	3	4
Industrial Use	1	2	3	4
Transportation Use	1	2	3	4
Tourism Promotion	1	2	3	4

- 16. Should there be a stronger focus in your community on history associated with your local waterway? (check one)
- [1] Yes COMMENTS______ [2] No [8] Don't Know
- 17. Should the historical linkage in your community to the following themes be increased, decreased, refined or left the same as it is now? (circle one answer for each theme)

	Increase	Decrease	Refined	Same
The Fur Trade	1	2	3	4
Native Culture	1.	2	3	4
European Culture	1	2	3	4
Native Technology	1	2	3	4
European Technology	1	2	3	4
Native Discovery	1	2	3	4
European Discovery	1	2	3	4
Geological History	1	2	3	4
Natural History	1	2	3	4

18.	Do you think the development and promotion of the Alexander Mackenzie Voyageur Route as a national heritage route is a good idea? (check one)
[2]	Yes COMMENTS No Don't Know
19.	Would promotion of the Alexander Mackenzie Voyageur Route contribute positively or negatively or have no effect on the following for your community?
P - 1	positive; N - negative; X - no effect
	natural resource protection.industrial resource usep - 1recreationn - 2tourismlocal economic developmentk x - 3historical appreciation/education
20.	Would your community benefit from taking an active role in the development of the Alexander Mackenzie Voyageur Route?
[2]	Yes COMMENTS No Don't Know
21.	Would your organization/group be willing to participate actively in the development and promotion of the Alexander Mackenzie Voyageur Route?
[2]	Yes COMMENTS No Don't Know
22.	If yes, what agency(s), organization(s), group(s) or individual(s) should take a lead role in your community?
	If you have any comments or suggestions regarding the information presented in the questionnaire or the Alexander Mackenzie Voyageur Route, please include your input below.

THANKS FOR YOUR HELP

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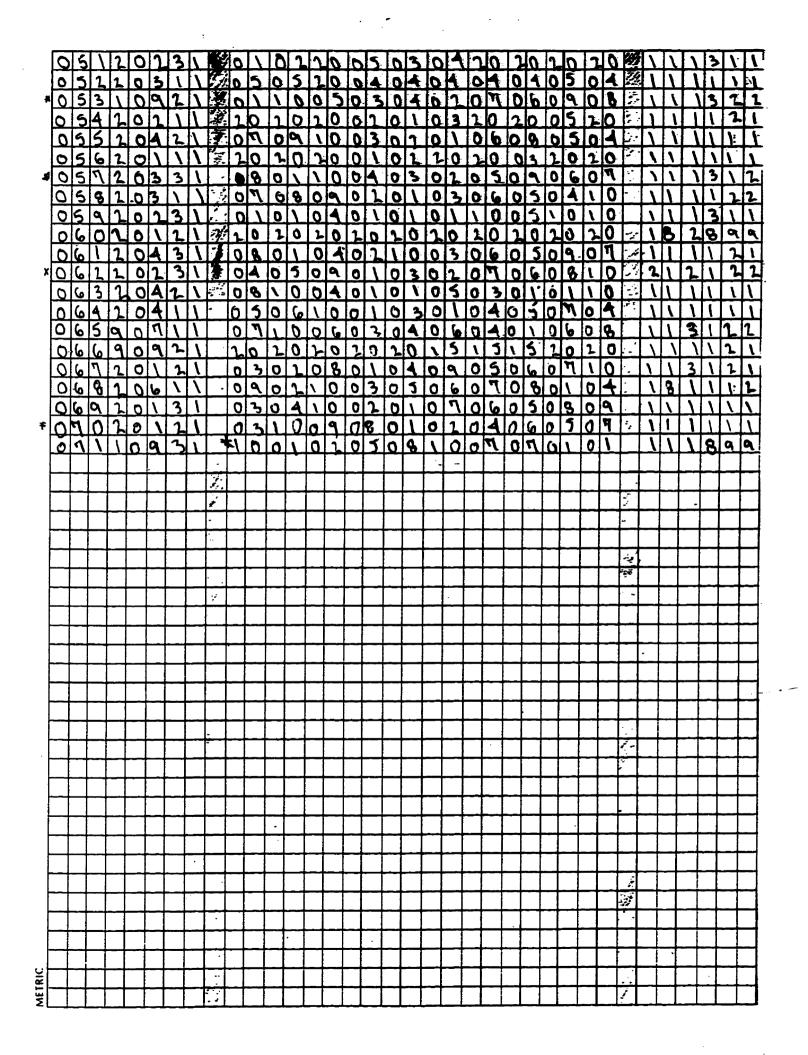
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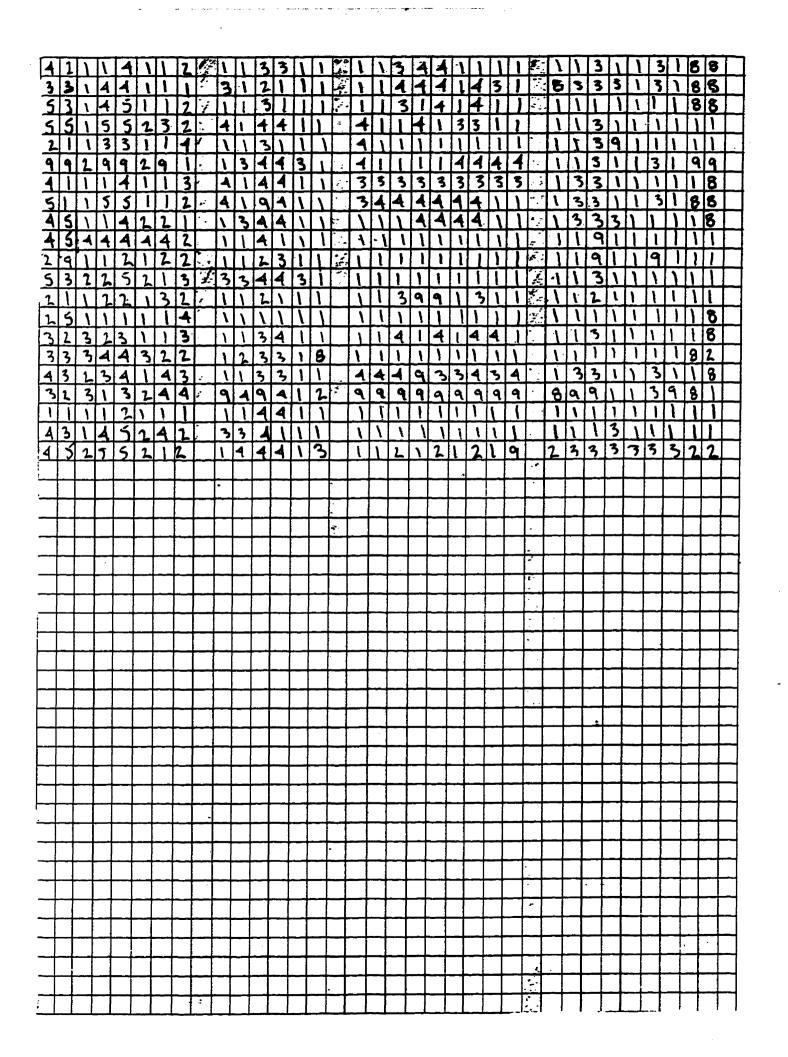
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C. Berrait			Linn Percent	228788828282 2.3.5.8.8.8.9.8.2.9 2.3.5.2.8.8.9.9.9.1 2.3.5.2.8.8.9.9.9.1 2.3.5.2.8.9.9.1 2.3.5.2.8.9.1 2.3.5.2.8.9.1 2.3.5.2.8.9.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.8.1 2.3.5.2.5.2.1 2.3.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1 2.5.5.2.1.1 2.5.5.2.1.2.1.2.1.2.1.2.1.2.1.2.1.2.1.2.		Fercent Fercent	59.2 100.0	Cue Percent	97.2 100.0
Valid Pernent		100.0	Valid Percent	228.0 10 10 10 10 10 10 10 10 10 10 10 10 10	100.0	Valid Percent	23.2 19.7 100.0	Valid Percent	97.2 2.8 100.0
Berrant		100.0	Percent	22.21 25.51 26.51 26.51 26.51 26.52 27.52	100.0	Percent	59.2 1.12 1.01 1.01	Percent	97.2 2.8 100.0
Francen	7 80 80 7	U	Frequency	₽ ਗ਼ ਜ਼~_⊣®₨ഗഊ	Ľ	Frequency	89 H H	Frequency	50
aila	-20	latal	ĥlue		lotal	Value	1 2 3 Total	Value F	1 2 Total
MITVE (Native/Non-Native) Value Label	native non-native not specified		REGION Value Label	Ottane/Nattane Great Lakes Boundry Naters Prairies Churchill Peace/Athabasca Rocties Chilcotin Arctic		AUARE Value Label	yes somenhat no	ROLE Value Label	ୟୁ ଅ

Percent Percent Percent Percent Lecent Lecent Valid Percent Valid Percent 21.1 11.3 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 9.9 11.3 7.0 7.0 100.0 Valid Percent 100.0 Percent 100.0 Percent Percent 100.0 Frequency Value Frequency Value Frequency Z 1980-1-4-2-265-28 നന*ം* പറനന കനമം പ്പെ F Value ーこうすららて89四匹効 しこうすらら~89四の の四日日日とうちゃらろー WSTE (waste management) TRNKS (transportation) IND (industry) Value Label Value Labei Value Label ٠

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REC (recreation)				Kalid	Č.
Value Label	Value	Frequency	Percent	Valid Percent	ûn Percent
	1 2 3 4 5 6 7 8 15 20	19 13 11 7 2 1 3 2 2	26.8 18.3 15.5 15.5 2.8 1.4 4.2 2.8 2.8	26.8 18.3 15.5 9.9 2.8 1.4 4.2 2.8 2.8	26.8 45.1 60.6 76.1 85.9 88.7 90.1 94.4 97.2 100.0
	Total	71	100.0	100.0	
TOURISM Value Label	Value	Frequency	Percent	Valid Percent	Cua Percent
	1 2 3 4 5 6 7 8 9 10 15 20	20 7 11 9 6 8 2 2 1 1 2 2	28.2 9.9 15.5 12.7 8.5 11.3 2.8 2.8 1.4 1.4 2.8 2.8	28.2 9.9 15.5 12.7 8.5 11.3 2.8 2.8 1.4 1.4 2.8 2.8 2.8	28.2 38.0 53.5 66.2 74.6 85.9 88.7 91.5 93.0 94.4 97.2 100.0
	Total	71	100.0	100.0	
FISH (fishing and hunting) Value Label	Value	Frequency	Percent	Valid Percent	Cun Percent
	1 2 3 4 5 6 7 8 9 10 15 20 Total	12 15 14 9 6 4 2 1 2 1 3 2 71	16.9 21.1 19.7 12.7 8.5 5.6 2.8 1.4 2.8 1.4 4.2 2.8 1.4 4.2 2.8	16.9 21.1 19.7 12.7 8.5 5.6 2.8 1.4 2.8 1.4 4.2 2.8 1.4	16.9 38.0 57.7 70.4 78.9 84.5 87.3 91.5 93.0 97.2 100.0

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well cultural preservatio	n)			Valid	Ûø
Value Label	Value	Frequency	Percent		Percent
	1 2 3 4 5 6 7 8 9 10 15 20	4 3 7 8 11 10 4 5 3 8	5.6 4.2 9.9 11.3 15.5 14.1 5.6 7.0 7.0 4.2 11.3	5.6 4.2 9.9 11.3 15.5 14.1 5.6 7.0 4.2 11.3	5.6 9.9 14.1 23.9 35.2 50.7 64.8 70.4 77.5 84.5 88.7 100.0
*****	Total	71	100.0	100.0	
ENVIR (environmenta) preser	vation)			Valid	Cura
Value Label	Value	Frequency	Percent		Percent
	1 2 3 4 5 6 7 8 9 10 15 20	5 2 7 3 14 7 15 6 2 1 3 6	7.0 2.8 9.9 4.2 19.7 9.9 21.1 8.5 2.8 1.4 4.2 8.5	7.0 2.8 9.9 4.2 19.7 9.9 21.1 8.5 2.8 1.4 4.2 8.5	7.0 9.9 19.7 23.9 43.7 53.5 74.6 83.1 85.9 87.3 91.5 100.0
	Total	71	100.0	100.0	

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CULT (cultural preservation)

RES (adjacent residential u	ise)			Walid	Če j
Value Label	Value	Frequency	Percent	Valid Percent	Cun Percent
	1 2 3 4 5 6 7 8 9 10 15 20 Total	8 3 9 6 10 6 9 6 1 1 6 	11.3 4.2 12.7 8.5 14.1 8.5 8.5 12.7 8.5 1.4 1.4 8.5 1.4 1.4 8.5	11.3 ⁻ 4.2 12.7 8.5 14.1 8.5 8.5 12.7 8.5 1.4 1.4 8.5 1.4 1.4 8.5	11.3 15.5 28.2 36.6 50.7 59.2 67.6 80.3 88.7 90.1 91.5 100.0
AGRI (agricultural use)		•••••			
Value Label	Value	Frequency	Percent	Valid Percent	Cun Percent
	1 2 3	4 1 2	5.6 1.4 2.8	5.6 1.4 2.8	5.6 7.0 9.9
	2 3 4 5 6 7 8 9 10 20	1 2 6 5 1 4 6 7 22 13	8.5 7.0 1.4 5.6 8.5 9.9 31.0 18.3	8.5 7.0 1.4 5.6 8.5 9.9 31.0 18.3	18.3 25.4 26.8 32.4 40.8 50.7 81.7 100.0
	8 9 10	4 6 7 22	7.0 1.4 5.6 8.5 9.9 31.0	7.0 1.4 5.6 8.5 9.9 31.0	25.4 26.8 32.4 40.8 50.7 81.7
SENSE (sense of history) Value Label	8 9 10 20 Total	4 6 7 22 13	7.0 1.4 5.6 8.5 9.9 31.0 18.3 100.0	7.0 1.4 5.6 8.5 9.9 31.0 18.3 100.0 Valid	25.4 26.8 32.4 40.8 50.7 81.7 100.0
	8 9 10 20 Total	4 6 7 22 13 71	7.0 1.4 5.6 8.5 9.9 31.0 18.3 100.0	7.0 1.4 5.6 8.5 9.9 31.0 18.3 100.0 Valid	25.4 26.8 32.4 40.8 50.7 81.7 100.0

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CHWR (cultural character) Value Label	Vaine	Frequency	Percent		Cua Percen
yes	1	63	86.7		88.7
no don't know	2	4 4	5.6	5.6 5.6	94.4
	Total	71	100.0	100.0	
PLACE (sense of place)				Valid	Cun
Value Label	Value	Frequency	Percent		
yes	1	62		87.3	
no don't know	2 3	4 5		5.6 7.0	
	Total	71	100.0	100.0	
LINK (historical links)				11-7-4	с. <u>-</u>
Value Label	Value	Frequency	Percent	Valid Percent	Cua Percer
yes	I		69.0	69.0	69.0
sonewhat no	2 3	8 12	11.3 16 9	11.3 16.9	80.3 97.2
don't know	8	2	2.8	2.8	
	Total	71	100.0	100.0	
EVENT (events and festival	s)				С.
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percen
yes	1	38 25	53.5	53.5	53.5
no no response	2	38 25 8	35.2 11.3	35.2 11.3	88.7 100.0
	Total	71	100.0	100 0	

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MISEUM				usta.	6-
Value Label	Value	Frequency	Percent	Valid Percent	
	1 2 9	41 22 8		57.7 31.0 11.3	66.7
	Total	71	100.0	100.0	
PARK (historic park)	<u> </u>			Walid	
Value Label	Value	Frequency	Percent	Valid Percent	Cual Percent
	1 2 9	29 34 8	47.9	40.8 47.9 11.3	88.7
	Total	71	100.0	100.0	
LIT (local literature)	*******	•		Valid	
Value Label	Value	Frequency	Percent		
	1 2 9	43 20 8	28.2	60.6 28.2 11.3	88.7
	Total	71	100.0	100.0	
ORAL (oral history)		*******			•••••
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1 2 9	40 23 8	56.3 32.4 11.3	56.3 32.4 11.3	56.3 88.7 100.0
	Total	n	100.0	100.0	
SITE (historic sites/norum	ents)				
Value Label	Value	Frequency	Percent	Valid Percent	ûn Percent
	1 2 9	· 45 18 8	63.4 25.4 11.3	63.4 25.4 11.3	63.4 88.7 100.0
	Total	71	100.0	100.0	

Û		Value	-	Record	Valid	(UE
rcent	Value Label	Value	Frequency	Percent	Percent	Percen
57.7		I	5	7.0	7.0	7.0
66. 7 00.0		2	58 8	81.7 11.3	81.7 11.3	88.7 100.0
		Total		100.0	100.0	
	FT1 (fur trade)					
ia rcent	Value Label	Value	Frequency	Percent	Valid Percent	Cue Percent
0.8	high	1	33	46.5		
8.7	nedium	2	19	26.8	26.8	73.2
0.0	l ow	2 3 4	14	19.7		93.0
	don't know no response	4	2 3	2.8 4.2	2.8 4.2	95.8 100.0
		Total	71	*		100.0
		IULGI	11	100.0	100.0	
un cent	NCI (Native culture)					·····
0.6	Value Label	Value	Frequency	Percent	Valid Percent	Cuni Percent
8.7 D.0		1	43	60.6	60.6	60.6
V.V		2	12	16.9	16.9	77.5
		2 3 4	13	18.3	18.3	95.8
			1	1.4	1.4	97.2
		9	2	2.8	2.8	100.0
un cent		Total	71	100.0	100.0	
6.3	EC1 (European culture)			•••••		
8.7).0	Value Label	Value	Frequency	Percent	Valid Percent	Cu n Percent
		1	21	29.6	29.6	29.6
		2	21	29.6	29.6	59.2
		3	22	31.0	31.0	90.1
•		1 2 3 4 9	4 3	5.6	5.6	
ent .		3	J 	4.2	4.2	100.0
		Total	71	100.0	100.0	

NTI (Native technology)				11-12-1	6 -	GHL (geological history)				11-12-1	6 -
Value Label	Value	Frequency	Percent	Valid Percent	Cull Percent	Value Label	Value	Frequency	Percent	Valid Percent	Cua Perce
	1 2 3 4 9	12 21 20 13 5	16.9 29.6 28.2 18.3 7.0	16.9 29.6 28.2 18.3 7.0	16.9 46.5 74.6 93.0 100.0		I 2 3 4 9	28 24 9 4 6	39.4 33.8 12.7 5.6 8.5	39.4 33.8 12.7 5.6 8.5	39. 73. 85. 91. 100.
	Total	 71	100.0	100.0	100.0		Total	 n	100.0	100.0	100.
ET1 (European technology)						WIL (natural history)					
Value Label	Value	Frequency	Percent	Valid Percent	Cuni Percent	Value Label	Value	Frequency	Percent	Valid Percent	Cur Perca
	1 2 3 4 9	15 22 16 12 6	21.1 31.0 22.5 16.9 8.5	21.1 31.0 22.5 16.9 8.5	21.1 52.1 74.6 91.5 100.0		1 2 3 4 9	28 31 2 5 5	39.4 43.7 2.8 7.0 7.0	39.4 43.7 2.8 7.0 7.0	39 83 85 93 10
	Total	71	100.0	100.0			Total	71	100.0	100.0	
NDI (Native discovery) Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent	WATR (waterway resources) Value Label	Valuo	Frequency	Parrant	Valid Percent	Cur Perce
	1 2 3 4	23 16 13 10	32.4 22.5 18.3 14.1	32.4 22.5 18.3 14.1	32.4 54.9 73.2 87.3	yes no	1 2	62 9	87.3 12.7	87.3 12.7	87. 100.
	5 9	1 8	1.4 11.3	1.4 11.3	88.7 100.0		Total	71	100.0	100.0	
	Total	71	100.0	100.0		LANR (Tand resources) Vatue Labet	Vaiue	Frequency	Percent	Valid Percent	Cun Perce
ED1 (European discovery)			. .	Valid	Cun		1	49	69.0	69.0	69 .
Value Label	Value	Frequency					2	22	31.0	31.0	100.
	1 2 3 4 5 9	21 21 14 8 1	29.6 29.6 19.7 11.3 1.4 8.5	29.6 29.6 19.7 11.3 1.4 8.5	29.6 59.2 78.9 90.1 91.5 100.0		Total	71	100.0	100.0	
	Total	71	100.0	100.0	~~~~						

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WC (listics hshitstim and cuitnes)	- Continue Continue					() (rananity acam)					
Value Label	falue	Value Frequency	Percent	Valid Percent	Com Percent	Value Latel	Value	Nature Frequency	Percent	Valid Percent	Cua Percent
	2	68	22.1 47.9	52.1 47.9	52.1 100.0	<u>8</u> 2		59.	71.8 26.8	71.8 26.8	71.8
	[dta]	Ľ	1001	100.0		no response	y Total		1.4	100.0	IM.O
TFT (fur trade)				Valid	3	APP (weterfront bark - public)	olic)				
Value Label	Yalue	Value Frequency	Percent	Percent	Percent	laind akei	(a) in	Francery	Carront	Valid	Parrant Parrant
	12	ଅୱ	40.8 59.2	40.8 59.2	40.8 100.0						
	[ota]	11	100.0	100.0			75	7	174 174	177 174	o.e
EE (European exploration)				hiled			[dta]	Ľ	100.0	100.0	
Value Label	Value	Value Frequency	Percent	Percent	Percent	PP (waterfront park - private)	lite)				2
		24	33.8 8.7	33.8 66.7	33.8 100 0	Value Label	Value	Value Frequency Percent	Percent	Percent	Percent
	Total	11	100.0	100.0			26	69-	12.7 16.9 1.4	12.7 86.9 1.4	12.7 9.86 100.0
EAC (European habitation and culture)	nd cultur	(a)		1114			lotal	ľ	100.0	100.0	
Value Label	Value	Value Frequency	Percent	Percent Percent	Percent.						
	12	ត ភ	20.6	29.6 70.4	29.6 100.0	NRC (sarina/public dock) Value Label	Value	Value Frequency	Percent	Valid Percent	Cun Percent
	[eta]	12	198. O	0.01				82-	1.19 16.9 1.4	81.7 16.9 1.4	81.7 98.6 100 0
FH (fishing/hunting) Value Label	Value	laive Frequency	Percent	Valid Percent	Cua Percent		Total	ll I	100.0	1001	
	2	යුං	87.3 12.7	87.3 12.7	87.3 100.0	Wi (waterfront valkvay) Balua i Anal	مىرادى	Environment	Darrant	Valid	
	[dta]	12	1001 1001	100.00 1				i 10	reucau 6K 7	L Seren	reutau. Kr 7
							- ~ ~	÷¤⊓	27.4 1.4	37.4	9.6 100.0
							[ota]	Ц	100.0	100.0	
						•					

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Value Label	Value	Frequency	Percent	Valid Percent	
	1 2 9	. 39 31 1	43.7	54.9 43.7 1.4	98
	Total	71	100.0	100.0	
I (industry)				16724	
Value Label	Value	Frequency	Percent	Valid Percent	
very high	1	22		31.0	
high noderate	2 3 4 5 9	12 9			4] 61
low	4	9	12.7	12.7	73
very low	5	12	16.9	16.9	90
	9	7	9.9	9.9	100
	Total	71	100.0	100.0	
R (recreation)					
Value Label	Valua	Frequency	Darcast	Valid Percent	U) Parce
		nequency			rau
	1	43		60.6	60.
	2 3	22 3	31.0 4.2	31.0 4.2	91. 95.
	4	3	4.2	4.2	100
	Total	71	100.0	100.0	
T (tourism)					•••••
Value Label	Value	Frequency	Percent	Valid Percent	
	1	36	50.7	50.7	50.
	2	16	22.5	22.5	73.
	1 2 3 4 5 9	13 4	18.3	18.3 5.6	91. 97.
		4 1	5.6 1.4	э.о 1.4	97. 98.
	ğ	Î	1.4	1.4	100.

F (fishing)				0.1:4	6-
Value Label	Value	Frequency	Percent	Valid Percent	Cual Percent
	1 2 3 4 5 9	36 12 17 3	50.7 16.9 23.9 4.2	50.7 16.9 23.9 4.2	50.7 67.6 91.5 95.8
	5 9	1 2	1.4 2.8	1.4 2.8	97.2 100.0
	Total	71	100.0	100.0	
ND (waste disposal) Value Label	Value	Frequency	Percent	Valid Percent	Cun Percent
	1 2 3 4 5 9	5 12 14 9 18 13	7.0 16.9 19.7 12.7 25.4 18.3	7.0 16.9 19.7 12.7 25.4 18.3	7.0 23.9 43.7 56.3 81.7 100.0
	Total	71	100.0	100.0	
A (agriculture)				H-1-4	6
A (agriculture) Value Label	Value	Frequency	Percent	Valid Percent	Cun Percent
-	Value 1 2 3 4 5 9	Frequency 3 5 13 20 23 7	Percent 4.2 7.0 18.3 28.2 32.4 9.9		-
-	1 2 3 4 5	3 5 13 20 23 7	4.2 7.0 18.3 28.2 32.4	Percent 4.2 7.0 18.3 28.2 32.4	4.2 11.3 29.6 57.7 90.1
-	1 2 3 4 5 9	3 5 13 20 23 7	4.2 7.0 18.3 28.2 32.4 9.9	Percent 4.2 7.0 18.3 28.2 32.4 9.9 100.0	Percent 4.2 11.3 29.6 57.7 90.1 100.0
Value Label	1 2 3 4 5 9 Total	3 5 13 20 23 7	4.2 7.0 18.3 28.2 32.4 9.9 100.0	Percent 4.2 7.0 18.3 28.2 32.4 9.9 100.0 Valid	Percent 4.2 11.3 29.6 57.7 90.1 100.0
Value Label PL (private land)	1 2 3 4 5 9 Total	3 5 13 20 23 7 7 71 71 Frequency 12 11 19	4.2 7.0 18.3 28.2 32.4 9.9 100.0 Percent 16.9 15.5 26.8 9.9	Percent 4.2 7.0 18.3 28.2 32.4 9.9 100.0 Valid Percent 16.9 15.5	Percent 4.2 11.3 29.6 57.7 90.1 100.0 Cum Percent 16.9 32.4 59.2 69.0

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ECT (tourism) Value Label	Valne	Frequency	Porrant	Valid Percent	Úuli Porcent
very high high	1 2 3 4	4 <u>1</u> 16	57.1 22.5	57.J 22.5	57.7 80.3
noderate	23	9	12.7	12.7	
lor	4	5	7.0	7.0	100.0
	Total	71	100.0	100.0	
ECI (industry)				Walid	
Value Label	Value	Frequency	Percent	Valid Percent	Cua Percent
	1	21	29.6	29.6	29.6
	1 2 3 4 5 9	15	21.1	21.1	50.7
	3	9 13	12.7 18.3	12.7	63.4 81.7
	4 5		10.3 11.3	18.3 11.3	01./ 93.0
	9	8 5	7.0	7.0	100.0
	Total	71	100.0	100.0	
ECF (faming)					
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	4	5.6	5.6	5.6
	1 2 3 4 5	4	5.6	5.6	11.3
	5	14 19	19.7 26.8	19.7 26.8	31.0 57.7
	-	27	20.0 38.0	20.0 38.0	95.8
	9	3	4.2	4.2	100.0
	Total	71	100.0	100.0	
ECR (recreation)				W. 1 = 1	·····
Value Label	מוובע	Frequency	Darrant	Valid Percent	UM Dorront
TOTUC LOUCE					
	1	4)	56.3	56.3	56.3
	2	21	29.6	2 7.0	85.9 97.2
	2 3 4	8 1	11.3 1.4	14	98.6
	5	Ī	1.4	1.4	100.0

ECFI (fishing) Valid Û Value Frequency Percent Percent Percent Value Label 47.9 25.4 14.1 34 18 10 47.9 47.9 1 2 3 4 25.4 14.1 73.2 87.3 9.9 1.4 9.9 1.4 7 97.2 5 I 98.6 9 I 1.4 1.4 100.0 71 100.0 100.0 Total NPP (natural resource protection) Valid Û∎ Value Frequency Percent Percent Percent Value Label
 18
 25.4
 25.4
 25.4

 22
 31.0
 31.0
 56.3

 20
 28.2
 28.2
 84.5

 9
 12.7
 12.7
 97.2

 2
 2.8
 2.8
 100.0
 1 2 3 4 very high high noderate lar 🛛 9 no reply -----71 100.0 100.0 Total FRP (resource protection) Valid (Lung) Value Label Value Frequency Percent Percent Percent increase 1 50 I 1.4 50 70.4 70.4 70.4 2 3 4 1.4 71.8 decrease 10 14.1 14.1 85.9 refine 8 11.3 11.3 Same 97.2 9 2 2.8 2.8 100.0 71 100.0 100.0 Total FRU (recreational use) Valid Cun Value Frequency Percent Percent Percent Value Label 70.4 70.4 70.4 50 1 23 1.4 1.4 Ι 71.8 14.1 10 14.1 85.9 4 10 14.1 14.1 100.0 71 100.0 100.0 Total

FIU (industriai use)	Value	Emplorer	Decont	Valid	
Value Label		Frequency			
	I 2	7 13		9.9 18.3	
	2 3 4	18	25.4	25.4	53.5
	4	27 6	38.0 8.5	38.0 85	91.5 100.0
					760.0
	Total	11	100.0	100.0	
FTU (transportation use)	······				
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	23	32.4	32.4	32.4
	2 3	2	2.8	2.8	35.2
	5 4	15 27	21.1 38.0	21.1 39.0	50.J 04.4
	ģ	4	5.6	5.6	100.0
	Total	71	100.0	100.0	
FTP (tourism promotion)					
Value Label	Value	Frequency	Percent	Valid Percent	Cun Percent
	1	59	83.1	83.1	83 .1
	3 4	9 3	12.7 4.2		95.8 100.0
	•	*******		******	244 · V
	Total	11	100.0	100.0	
FOC (focus on history)	*******			 11-11-1	
Value Label	Value	Frequency	Percent	Valid Percent	
yes	1	59	83.1		83.1
no	2	5	7.0	7.0	90.1
dont" know	1 2 3 8 9	1 4	1.4 5.6	1.4 5.6	31.5 97 2
no reply	ğ	ž	2.8	2.8	100.0
	Total	 71	100.0	100 N	
	IVLUI	п	100.0	100.0	

Ûa	FT2 (fur trade)				Valid	Cum
Percent	Value Label	Value	Frequency	Percent	Percent	Percent
9.9 28.2 53.5 91.5 100.0	increase decrease refine same no reply	1 2 3 4 9	43 1 12 12 3	16.9 16.9	60.6 1.4 16.9 16.9 4.2	62.0 78.9
		Total	71	100.0	100.0	
	NC2 (native culture)					
û n Percent	Value Label	Value	Frequency	Percent	Valid Percent	Cua Percent
32.4 35.2 56.3 94.4		1 3 4 9	49 7 10 5	69.0 9.9 14.1 7.0	69.0 9.9 14.1 7.0	69.0 78.9 93.0 100.0
94.4 100.0		Total	71	100.0	100.0	
	EC2 (european culture)				Wated	6
	Value Label	Value	Frequency	Percent	Valid Percent	Cun Percent
Cun Percent 83.1 95.8 100.0		1 2 3 4 9	27 4 17 18 5	38.0 5.6 23.9 25.4 7.0	38.0 5.6 23.9 25.4 7.0	38.0 43.7 67.6 93.0 100.0
		Total	71	100.0	100.0	
Cua Percent	NT2 (native technology) Value Label	Value	Frequency	Percent	Valid Percent	Cun Percent
83.1 90.1 91.5 97.2 100.0		1 2 3 4 9 Total	32 1 15 15 8 71	45.1 1.4 21.1 21.1 11.3 100.0	45.1 1.4 21.1 21.1 11.3 100.0	45.1 46.5 67.6 88.7 100.0

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ET2 (european technology)				Valid	(un	N2 (natural history)				Valid	Û
Value Label	Value	Frequency	Percent			Value Label	Value	Frequency	Percent		
	1	. 20	28.2	28.2	28.2		1	52 5	73.2	73.2	73.
	23	3 17	4.2 23.9	4.2 23.9	32.4 56.3		3 4	5	7.0	7.0 12.7	80 93
	4	24	33.8	33.8	90.1		g	5	12.7 7.0	7.0	IQ.
	ģ	1	9.9	9.9	100.0		Total		100.0	100.0	
	Total	П	100.0	100.0			IUCOI	11	T00.0	TAA*A	
im lastica discussi						IDEA (good idea?)	·				
102 (native discovery) Value Label	Value	Frequency	Darcant	Valid Percent	Cua Percent	Value Label	Value	Frequency	Percent	Valid Percent	Cu Perce
IGIUE LOUEI	TRIVE	requency				yes	1	62	87.3	87.3	87.
	1	39	54.9	54.9	54.9	10	Ž	2	2.8	2.8	- 90.
	2 3 4	1	1.4	1.4	56.3	don't know	8	1	9.9	9.9	100
	3	14	19.7	19.7	76.1		Tak - 7	 71	100 0	100.0	
	4 9	14 11 6	15.5 8.5	15.5 8.5	91.5 100.0		Total	71	100.0	100.0	
	Total	71	100.0	100.0		ENRP (natural resource pr	otection)				
						Value Label	Value	Frequency	Percent	Valid Percent	Cur Perci
102 (european discovery)				16124	6	anitin	1	•			7 0
lalue Label	Value	Frequency	Percent	Valid Percent	û m Percent	positive negative	1	43 2	60.6 2.8	60.6 2.8	60. 63.
	IGIUE	nequeicy				no effect	2 3	19	2.0 26.8	2.8 26.8	90.
	1	28	39.4	39.4	39.4		ě.	ĩ	1.4	1.4	91
	2 3	4	5.6	5.6	45.1	no reply	9	6	8.5	8.5	100.
	3	14	19.7	19.7	64.8		• • •			*****	
	4 9	20 5	28.2 7.0	28.2 7.0	93.0 100.0		Total	71	100.0	100.0	
	Total	71	100.0	100.0		EIR (industrial resource	use)				
						Value Labei	ไปไม่ค	Enninger	Docoast	Valid	lun Docco
H2 (geological history)	******	********	*******		******		Value	Frequency	reitent	Percent	Perce
- /2-a - a - a - a - a - a - a - a - a - a				Valid	Cum		1	13	18.3	18.3	18.
Value Label	Value	Frequency	Percent		Percent		2	9	12.7	12.7	31.
	٦	10	516	5 6	516		3	41	57.7	57.7	88. 100
	1	40 1	67.6 1.4	67.6 1.4	67.6 69.0		7	8	11.3	11.3	100.
	2 3	9	12.7	12.7	81.7		Total	71	100.0	100.0	
	4	9	12.7	12.7	94.4						
	9	4	5.6	5.6	100.0						
	Total	71	100.0	100.0							

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ER (recreation) Valid Û Value Frequency Percent Percent Percent Value Label 80.3 1.4 80.3 1.4 80.3 81.7 57 1 1239 10 3 14.1 14.1 4.2 95.8 4.2 100.0 71 100.0 Total 100.0 ET (tourism) Valid (în Value Frequency Percent Percent Percent Value Label 139 67 94.4 94,4 94.4 4.2 1.4 4.2 1.4 3 1 98.6 100.0 71 100.0 100.0 Total EED (local economic development) Valid (Ling) Value Frequency Percent Percent Percent Value Label 73.2 1.4 21.1 73.2 1.4 1239 52 1 15 3 73.2 74.6

Total

1 39

Total

EVA (historical appreciation/education)

Value Label

21.1

4.2

71 100.0 100.0

Value Frequency Percent Percent Percent

93.0

2.8 4.2

71 100.0 100.0

66 2 3

95.8

Cua

93.0

95.8 100.0

4.2 100.0

Valid

93.0 2.8 4.2

Value Label	Value	Frequency	Percent	Valid Percent	(un Percent
yes no don't know no reply	1 2 8 9		19.7	73.2 4.2 19.7 2.8	77.5 97.2
	Total	71	100.0	100.0	
PART				16724	
Value Label	Value	Frequency	Percent	Valid Percent	Cunt Percent
yes no don't know no reply	1 2 8 9	24	8.5 33.8	56.3 8.5 33.8 1.4	64.8 98.6
	Total	71	100.0	100.0	

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BEN (benefit)