#### **INFORMATION TO USERS**

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality  $6^{"} \times 9^{"}$  black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell information and Learning 300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA 800-521-0600

# UMI®

#### ECOTOURISM IN CHURCHILL, MANITOBA: PRINCIPLES, ATTITUDES & OPPORTUNITIES

#### UNIVERSITY OF MANITOBA

#### IN PARTIAL FULFILMENT OF A MASTERS OF CITY PLANNING DEGREE

#### DEPARTMENT OF CITY PLANNING FACULTY OF ARCHITECTURE

#### TAMARA RITA TANNIS

AUGUST, 1999

(c) Copyright by Tamara Rita Tannis, 1999



## National Library of Canada

Acquisitions and Bibliographic Services

395 Wellington Street Ottawa ON K1A 0N4 Canada Bibliothèque nationale du Canada

Acquisitions et services bibliographiques

395, rue Wellington Ottawa ON K1A 0N4 Canada

Your file Votre référence

Our file Notre rélérence

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

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission. L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

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

0-612-45125-9



#### THE UNIVERSITY OF MANITOBA

# FACULTY OF GRADUATE STUDIES \*\*\*\*\* COPYRIGHT PERMISSION PAGE

### ECOTOURISM IN CHURCHILL, MANITOBA: PRINCIPLES, ATTITUDES & OPPORTUNITIES

BY

#### TAMARA RITA TANNIS

#### A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University

#### of Manitoba in partial fulfillment of the requirements of the degree

of

#### MASTER OF CITY PLANNING

#### TAMARA RITA TANNIS © 1999

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

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

#### TABLE OF CONTENTS

ABSTRACT	•	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	•	٠	i
ACKNOWLEDG	EM	IEN	ITS	5	•	•	•	•	-	•	•	•	•	•	•	•	•	•	•	•	•	•				•		ii

#### <u>Chapter</u>

2.

#### <u>Page</u>

1.	INTRODUCTION	•	•	•	•	•	•	•	•	•		•	•	•		1
	Purpose of Practicum .	•			•	•	•		•	•	•	•	•			5
	Practicum's Objectives	٠			•	•	•		•	•	•				•	9
	Research Assumptions .	•	•	•	•	•	•	•	•	•	•	•	•		•	10
	Limitations	٠	•		•	•	•	•	•	•	•	•			•	10
	Structure of Practicum	•	•		•		•			•		•		•		12

#### OF ENVIRONMENTAL, SOCIAL & ECONOMIC RESEARCH . . . . 13 16 24 27 28 Socio-Cultural Evaluation . . . . . . . . . . . 32 Environmental Evaluation . . . . . . . . . . . 37 39 41 2 CHURCHILL PROFILE 46

ECOTOURISM LITERATURE REVIEW

5.	CHORCHIND FROFILE	•	• •	•	•	•	•	•	•	٠	•	•	•	•	40
	Churchill History	•	• •	•	•	•	•	•	•	•	•	•	•	•	46
	Location & Access	•	• •	•		•	•	•	•	•	•	•		•	50
	Local Population	•	• •	•	•	•		•		•		•	•	•	51
	Amenities & Attractions			•	•	•	•	•	•	•	•	•	•	•	54
	Flora & Fauna	•	• •	٠		•	•	•		•	•	•	•	•	57
	Summary	•			•	•			•	•	•	•	•	•	59

4.	METHODOLOGY	٠	•	•	•	٠	•	•	•	٠	•	٠	•	•	•	•	•	•	•	•	•	•	٠	6	1
----	-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

5.	FINDINGS & ANALYSIS OF CHURCHILL ATTITUDE SURVEY 68
	Demographic Profile of Respondents 68
	Perceptions of Churchill
	Community & Tourism Issues
	Northern Tourism
	Churchill Issues
	Additional Insights
	Summary

6.	ANALYSIS	•••	•	•	•	•	•	•	•	•	88
7.	SUMMARY, CONCLUSION & RECOMMENDATIONS										93
	Summary										93
	Conclusion										93
	Review of Process	• •	•	•	•	٠	٠	•	•	•	95
	Recommendations	• •	•	•	•	•	•	•	•		97
BIBLI	OGRAPHY	• •	•	•	•	•	•	•	•		105
<u>Appen</u>	dix									P	age
Α.	BERLIN DECLARATION	• •	•	•	•	•	•	•	•	•	112
в.	ATTITUDE SURVEY QUESTIONNAIRE			•	•	•	•		•		118

.

#### LIST OF FIGURES

<u>Figur</u>		Page
1.	Churchill Age Groups	. 52
2.	Churchill Educational Attainment, Over Age 25	. 53
3.	Churchill Industry Characteristics of Population Over Age 25	. 53
4.	Respondents Age Groups	. 68
5.	Respondents Marital Status	. 69
6.	Household Composition of Respondents	. 69
7.	Respondents Employment Status	. 70
8.	Total Household Income of Respondents	. 70
9.	Rent / Own Home	. 70
10.	Number of Moves to New Residence in Last 5 Years by Respondents	. 71
11.	Respondents Years of Residence in Churchill	. 71
12.	Education Level Attained	. 71
13.	Employment Sector	. 72
14.	Number of Jobs Held in One Year	. 73
15.	Employment Term	. 73
16.	Leave Churchill Due to Job Loss	. 73
17.	If Health Centre Transferred, Closure Would Affect Current Employment	. 74
18.	Summer Activities	. 78
19.	Winter Activities	. 79
20.	Potential Leisure Amenities	. 80

#### LIST OF TABLES

<u>Table</u>		<u>Page</u>
1.	Ecotourist Market Profile	. 24
2.	Principles of Sustainability	. 44
3.	Churchill Household & Dwelling Characteristics	. 54
4.	Churchill Seasonal Activities	. 60
5.	Importance of Ecotourism Factors	. 77
6.	Comparison of Churchill to Other Northern Communities as a Place to Visit	. 85

#### ABSTRACT

Over the last decade Churchill, Manitoba has experienced the economic transition imposed upon it by changing national and global markets. To address this change, ecotourism has been viewed as one key economic factor supporting the local economy. In such a situation it is imperative to ensure that the needs of the resident population are met prior to those of the tourist population. As well, ecotourism as an activity involves the viewing of the natural environment, including wildlife. In destination communities where local governments or businesses support the ecotourism industry but ignore their community, socio-economic issues increase and may remain unresolved.

The practicum analyzes ecotourism literature as it relates to social, economic and environmental factors. An analysis of the various research methods used to analyze ecotourism impacts include: social impact assessments, quality of life surveys, cost-benefit analyses, and scientific approaches in the natural resource field of study. These methodologies support the various ecotourism principles used to inform planning practice.

To implement and analyze the impacts of ecotourism upon Churchill, Manitoba, an attitude survey was compiled and administered by mail to residents. The results of the survey indicate that residents are satisfied with ecotourism as a positive factor affecting the local economy. Respondents show their keen insight into both the positive and negative impacts of ecotourism.

Many opportunities exist for the residents of Churchill, Manitoba in the area of ecotourism. It is recommended that the community should become better informed of their surrounding natural environment, and to recognize that through strategic planning, positive opportunities exist to address current social needs and issues.

#### Acknowledgements

Gratitude is extended to the members of the academic committee who expeditiously provided critical thought, review, literature and assistance in the improvement of this practicum's content and text:

- Dr. Ian Skelton Dean, Department of City Planning Faculty of Architecture
- Dr. Richard Bridgman Professor, Department of City Planning Faculty of Architecture
- Dr. Thomas Henley Professor, Department of Natural Resources

As well, appreciation is extended to the first academic committee members who provided philosophical direction and identified the need to contribute a positive critique, rather than a negative one:

- Dr. Mary-Ellen Tyler Dean, Faculty of Environmental Design University of Calgary
- Jeff Fielding Manager, Planning Implementation Department of Planning and Building, City of Calgary

And great thanks to each Churchill resident who responded to the practicum's survey questionnaire.

And finally, my family who supported me throughout my graduate studies:

- Maija, for providing moral support and childcare
- Tila, Marek and Peter, my kidlets, who did not always have their student mother around to play with
- Vecsmamin

#### Chapter 1 Introduction

Churchill, Manitoba is experiencing the economic transition imposed upon it by changing national and global markets. Future uncertainties, resulting from government restructuring and rationalization of services, are changing the dynamics of the political, economic and social sectors. Privatization of federal assets has reinforced the fragile state of Churchill's financial base and its long-time dependence upon government support.

One of Churchill's strengths lies within the service sector ecotourism. Churchill currently attracts the highest volume of foreign visitors to the province of Manitoba. Since the this category of tourism involves local natural resources such as the viewing whales, birds, and polar bears, the success is based upon the natural features of the area, rather than upon the town itself or the quality and provisions of the service sector.

During the employment of the author with a local Winnipeg consulting firm, the Local Government District (LGD) of Churchill retained the company to address the lack of quality urban design

in the community and requested an analysis of ways to enhance its urban image. It was perceived that such improvements would assist in attracting and retaining tourists to the area, while instilling pride in the residents.

It became evident during the planning process that consultation with the public sector signified that only key stakeholders within the community, and not the public-at large, would be involved. More specifically, process participants were those who were viewed as having a financial investment in the community, namely local business owners. The rationale of this approach was based on the time-line limitations and financial restrictions of the project. Yet it was the community which had identified, through one previous survey administered by the local government administration, the lack of pride residents felt toward their town.

In two separately administered tourism surveys, visitors were questioned about Churchill services, but not about the town's image. The Health, Leisure & Human Performance Research Institute of the University of Manitoba administered an exit survey entitled the "Churchill Visitor Study" from July to November, 1995. The purpose of this survey was to have Churchill visitors identify their satisfaction with local services, whether

accommodation or organized tour experiences. Another similar survey was developed in the fall of 1994 by Keewatin Community College students, in association with Parks Canada, which attempted to determine customer satisfaction with only three services offered in Churchill: 1) the Parks Canada Visitor Centre, 2) the Polar Bear Tours, and 3) hotel accommodation. In either case, further surveys have not been administered to provide comparative results, nor insights into the quality and performance of services over time. Neither acknowledged nor dealt with the opinions of the local services or residents.

The Department of Rural Development, Province of Manitoba, through its Community Economic Development Services Branch, initiated round-table discussions with rural residents. The results were compiled in an action plan identifying comprehensive opportunities for local socio-economic improvements in: business, local economy, tourism, recreation, service provision, education, health, agriculture, heritage/culture, environment, seniors, marketing, cooperation, beautification, and youth.<sup>1</sup> The vision identified "development and planning through participation in tourism, industry, transportation and health/social

<sup>&</sup>lt;sup>1</sup>Province of Manitoba, <u>Manitoba's Community Round Tables: Strong People Building a Stronger</u> <u>Tomorrow</u>, (Winnipeg: Government of Manitoba, 1991), p. 46.

initiatives."<sup>2</sup> The goals generically state that training and developing new businesses were vital for the future of the community.

Canada Mortgage & Housing Corporation (CMHC) has documented models for studying the quality of life in Canadian communities. These identify residents' satisfaction with general public services and utilities. Although a positive concept, the administrative costs are prohibitive not only to smaller towns and hamlets, but to the larger cities as well. The private consulting group Angus Reid has documented a comparative study which rates residents' satisfaction with broad public services for the purposes of comparing cities to one another rather than for the improvement of an individual city's services.

Specific academic studies of Churchill have focussed on the natural resources of the region and the impacts upon arctic wildlife and terrain. Planning studies are limited, if nonexistent, and identifies the void of information which links environmental, social and economic factors.

<sup>2</sup><u>Ibid</u>., p. 46.

#### Purpose of the Practicum

Given this context, the purpose of this practicum is to analyze the opportunities which ecotourism may provide to a community's quality of life through community development. Stephen McCool, in his article "Linking Tourism, the Environment, and Concepts of Sustainability: Setting the Stage" states that tourism has reached a crossroads in its development as one of the world's largest industries. He states that "it is increasingly confronted with arguments about its sustainability and compatibility with environmental protection and community development."<sup>1</sup> In his opinion,

consideration of tourism, the environment and concepts of sustainability should consider four key challenges: (1) a better understanding of how tourists value and use natural environments; (2) enhancement of the communities dependent on tourism as an industry; (3) identification of the social and environmental impact of tourism; and (4) implementation of systems to manage these impacts."<sup>4</sup>

These challenges set the context for the practicum's research. To date, Churchill's community has been reliant upon the provincial government's economic analyses of tourism which have been prepared from a broad, provincial perspective. The

⁴<u>Ibid.,</u> p. I.

<sup>&</sup>lt;sup>3</sup>McCool, Stephen F., "Linking Tourism, The Environment, and Concepts of Sustainability: Setting the Stage," (Utah, National Recreation & Park Association, Annual Meeting, Sessional Papers, Oct. 12-14, 1994), p. 1.

information does not specifically address what ecotourists value or how they use the Churchill area's environment. To address this, the Local Government District of Churchill analyzed and developed an enhancement design strategy for its urban setting, which was reflective of private sector economic determinants.

The emphasis of the practicum is on the social impact of tourism and to a lesser extent upon the environmental impacts. The argument is based on the fact that there are two populations in existence: 1) the resident population, and, 2) the visitor population. Issues have arisen in destination communities which emphasize servicing the visitor population at the expense of the resident population. Therefore the author developed an attitude survey and administered it to the resident population to identify whether, in fact, the perception exists that this bias is occurring in their community.

Rather than analyze the environmental impacts which may be caused by visitors to Churchill, only the residents' perceptions of environmental impacts are analyzed. It was decided that such expertise remains with natural resource specialists. The intent in this practicum is, rather, to identify the community's perceptions of significant concerns relating to ecotourists and the local natural environment, and not scientific analysis or

assessment of those impacts.

Due to the social bias of this practicum, one goal is to identify socio-economic interrelationships and opportunities which arise from the research documented. These opportunities fall within the area of community development. Another goal is to suggest potential strategic action plans which may benefit both the resident and visitor populations.

The above-noted points create a planning context for the practicum's research. Ecotourism and qualify of life have become important elements of a broad conception of planning which has emerged in recent years. To emphasize that planning practice is not confined to land use, Peter Hall in his book <u>Cities of Tomorrow</u> states:

traditional land-use planning has come under more basic attack... than ever in its eighty years of existence. It has become determinedly reactive, artisan and anti-intellectual, while planning in the academy has retreated ever higher up its ivory tower. Meanwhile, it faces a new range of problems, with which its practitioners were never equipped by education (and perhaps by inclination) to tackle: the problem of structural economic decline of whole urban communities and of rebuilding a new economy on the ruins of the old.<sup>5</sup>

Sim Van der Ryn and Peter Calthorpe also emphasize the recent

<sup>&</sup>lt;sup>5</sup>Hall, Peter, <u>Cities of Tomorrow</u>, (Oxford: Blackwell Publishers, 1991), p. 361

changes to planning and the planning profession:

... wherein the growth effects of the fifties will doubtfully be relived to such an extreme. The excessive urban sprawl has been questioned now for the last 2 decades. Planners and planning have had to reevaluate their role in context of this new urban situation of limited growth. Making cities responsive to our current social and environmental needs is a design, an economic, and a social problem... As a design problem it requires moving beyond ... functionalism to a philosophy of contextualism... As an economic problem, redirecting growth away from sprawl implies a basic shift in value. Long term life-cycle costing and replacement must become the criteria rather than relatively short run profit margins. ... As a social problem, ... requires that our well-being be based less on commodities and more on community. ... In classical Greece, ... the definition of citizen was tied to the notion of city, community, and shared responsibility. ... Our future lies in reestablishing those links.<sup>6</sup>

From a community development perspective, the argument is also provided that urban issues cannot be relegated to one specific component or variable, ie. only an economic problem or only a social problem. Stan Burkey says that "most development agencies, both local and international have refused... to recognize that there is an unavoidable relationship between human, economic, political and social development."<sup>7</sup>

<sup>&</sup>lt;sup>6</sup>Van der Ryn, Sim and Peter Calthorpe, <u>Sustainable Communities: A New Design Synthesis for Cities</u>, <u>Suburbs and Towns</u> (San Francisco: Sierra Club Books, 1991), pp. 32-33.

<sup>&</sup>lt;sup>7</sup>Burkey, Stan, <u>People First: A Guide to Self-Reliant, Participatory Rural Development</u> (London: Zed Books Ltd., 1993), p. 214.

From a policy perspective, separating professional knowledge and specifying problems as unique to one branch of knowledge, reduces opportunities for positive resolution. Lynton Caldwell, commenting on environmental problems and critiquing this approach, states:

Our national tendency is to deal with environmental problems segmentally, as specialists whose frequently conflicting judgements require compromise or arbitration. For example, the history of interagency relations in river basin development illustrates the deeply ingrained exclusiveness of technical thinking on environmental questions and the great difficulty of relating the technical competence of the specialized experts to a comprehensive public policy. ... Here is an instance of that all too common human failing - a seeming inability to mobilize and direct tremendous resources of specialized knowledge and technique into comprehensive, well-conceived, and generally beneficial public action.<sup>8</sup>

#### Practicum's Objectives

Analyzing opportunities which ecotourism may provide to a community's quality of life requires that research objectives are established. The following outlines the intent of the research:

- To analyze whether social impacts have occurred to the resident population by ecotourism;
- To analyze the community's perceptions regarding local environmental impacts caused by ecotourists;
- To identify linkages or opportunities between the resident

<sup>&</sup>lt;sup>8</sup>Caldwell, L.K., Environment as a Focus for Public Policy, (Texas: A&M University Press, 1995), p. 31.

population's leisure activities with those of ecotourists;

• To explore the potential for, and complementary nature of, ecotourism principles to provincial government sustainable development principles, community roundtables and provide potential implementation programs or opportunities.

#### Research Assumptions

Prior to research existing literature, various assumptions were established:

- That the ecotourism is a vital industry for Churchill's economic well-being and that it will continue to be relied upon in the future as a community asset;
- Planning may have a role in assisting the community achieve its community and economic development goals;
- Wildlife and the surrounding natural landscape are the main reasons for tourist visitations in the Churchill area.

#### Limitations

Analysis of planning, tourism, natural resources and socioeconomic theories would amount to a lifetime of research. Managing the vast scope and specialized theoretical knowledge was simplified for this practicum by applying ecotourism principles to research and organize results and analysis.

Area specific data on Churchill did not constitute a problem to research in terms of time constraints, as there is limited research in existence. That which does exist emphasizes natural resources in a scientific context, rather than a land use or sociological context. Information, which was developed during private sector employment, assisted in data collection and analysis. The difficulty in using such information is that it was project specific rather than broad in context. The use of relevant data structures from other community surveys was useful in developing a questionnaire and providing precedent survey typologies. Government census data complemented this information.

Although this research has taken two years, the administration of the survey occurred within a two month period. The collection and analysis demanded another two month period of time. As well, the practicum's emphasis was reassessed and realigned to coincide with a changed perspective and thereby increased the literature review stage.

Limiting the administration of a survey was the use of a personal and limited financial budget. This narrowed the scope of the research to a specific period of time and disallowed a more comprehensive study to be performed. The greatest limitation to

this practicum's research was the distance between Churchill and Winnipeg. This distance limited the survey format, administration and collection.

#### Structure of Practicum

The practicum is organized in the following sequence: Chapter Two provides a review of literature covering topics from ecotourism to sociological impact assessments and tourism economics. The results of the review provide the subsequent framework for analysis. Various evaluative methods are analyzed which inform the various components of ecotourism: social, economic and natural environmental factors. Chapter Three ensues with a profile of Churchill which describes its history, location, demographics, attractions and the native flora and fauna. In Chapter 4 the survey methodology is discussed with the survey findings and analysis presented in Chapter Five. The ecotourism principles identified in Chapter 2 provide the framework for Chapter 6's analysis and recommendations. Chapter Seven concludes the practicum with a critique of the practicum's objectives, methodologies and results.

#### Chapter 2 Ecotourism Literature Review of Environmental, Social & Economic Research

Over the past decade, tourism destinations have expanded beyond serviced recreation/leisure facilities to more extreme and unserviced locations due to changing tourist values. One of these values is to learn and experience extreme, natural environments. This shift in consumer demand has also changed tourism research from an emphasis on the economic benefits for tourism destinations to an emphasis on social and environmental impacts on communities. This chapter reviews recent literature related to ecotourism and includes sociological, economic and environmental research.

Ecotourism is considered to be a travel experience which contributes to the understanding and preservation of natural and cultural environments. The traveller's interest in natural environments involves the viewing of distinct landscapes as close to their virginal state (untampered by humans) as possible, as well as the viewing of rare and endangered animal species. The following definition is taken from the Australian National Ecotourism Strategy:

Ecotourism is nature-based tourism that involves education and interpretation of the natural environment (including cultural components) and is managed to be ecologically sustainable which involves an appropriate return to the local community and long-term conservation of the resource.<sup>1</sup>

From a recreational perspective, environmentally dependent tourism may also be defined as "recreation activities that depend directly upon nature-dominated settings and involve understanding, appreciating, or viewing natural environments, processes, or components."<sup>2</sup> More specifically it should reflect "responsible travel to natural areas which conserves the environment and sustains the well-being of local people."<sup>3</sup>

Ecotourism involves travel to distant destinations which demands a significant investment on the part of the traveller. Destinations such as the Amazon, Nepal, the Antarctic and Africa denote a few of the geographic locations attracting increasing volumes of ecotourists.

The common component of such destinations are their percieved,

Guevara, Jose, Convergence, (Australia: Vol. 9/3, 1993), p. 25.

<sup>2</sup>McCool, Stephen F., <u>The Socio-Economic Consequences of Environmentally Dependent Tourism</u> (Louisiana, Presentation Paper for Travel & Tourism Research Association, 21<sup>st</sup> Annual Meeting, June 10-14, 1990), p.2.

<sup>&</sup>lt;sup>3</sup>The Ecotourism Society, Ecotourism Statistical Fact Sheet, (Boston, 1998), p. 1.

fragile natural environments and resources. The travellers' goal is to bear witness to these endangered environments. These experiences are not based on leisurely activities such as sunbathing and shopping, but highlight a more educational approach to travel. Viewing of animals on a country's "extinct species" list provides the impetus for many destination seekers to see the last of a remaining species.

From the local, host perspective, ecotourism is viewed as a stimulus to economic development. In the developed world in many instances, ecotourism is viewed as an alternative resource, replacing industry or resource extraction as a commodity. It offers the potential of stimulating economic growth specifically in smaller communities. "Many smaller communities turn to tourism to reduce the impact of economic downturns from the loss of manufacturing employment or as an initial low-cost stimulant to a stagnant economy."<sup>4</sup> Another researcher agrees that "environmentally-dependent tourism is increasingly viewed as a way of revitalizing these economies (volatile, extractive-based natural resource industry), and providing their current quality

<sup>4</sup>Becker and Bradbury, "Social Impacts of Ecotourism" (Community Development Journal, 27/4, Oct. 1992), p. 268.

of life."<sup>5</sup> Ecotourism, therefore, may represent growth, jobs and an increased revenue base for the host community.

From the tourism market perspective, tourism represents large revenue. The United Nations in 1998, "estimated that tourism earned poor countries about \$55 billion, ... making it, after oil, the second largest earner of foreign exchange."<sup>6</sup> Such statistics bear witness and support to the positive aspects of tourism in Third World countries and may be used by communities to justify the financial benefits.

#### Issues in Ecotourism

As an industry, ecotourism continues to increase in popularity and development. Because of this, questions arise as to its sustainability and compatibility with community development and environmental protection.<sup>7</sup> Communities have developed mission and vision statements through community roundtables, as documented in the Province of Manitoba's <u>Manitoba's Community</u> <u>Round Tables: Strong People Building a Stronger Tomorrow</u> (1991)

<sup>6</sup><u>Ibid</u>., p. 340.

<sup>&</sup>lt;sup>5</sup>McLaughlin, W.J., <u>Linking Wilderness to Rural Revitalization: Managing America's Enduring</u> <u>Wilderness Resource</u> (Minnesota, University of Minnesota: Tourism Center Conference, 1998), pp. 608-615.

<sup>&</sup>lt;sup>7</sup>McCool, Stephen F., <u>Linking Tourism, the Environment and Sustainability</u> (Utah: Compiled Sessional Papers, National Recreation & Park Association, Oct. 12-14, 1994, p. 1.

which are not necessarily compatible with ecotourism development. Although local social and economic issues are identified, environmental issues are not. As well, the resultant objectives are broad implementation plans which only address generalized, rather than specific, issues.

In smaller, rural communities where ecotourism replaces an industrial resource base, ecotourism development is regarded as the remedy to the community's existence and survival. The future problem in regarding ecotourism in this light is taht "economies once diversified and independent become specialized and dependent.<sup>8</sup> As well, "concerns for profit margins and competition restricts wage levels, even where governments try to avoid exploitation of workers."<sup>9</sup>

Increased tourism volumes may result in increased costs to local residents. These costs include the prices of land and buildings, as well as day-to-day necessities, and thereby increase the costof-living for permanent residents.<sup>10</sup> Such impacts are generally

<sup>&</sup>lt;sup>8</sup>Lovel and Feuerstein, "After the Carnival: Tourism and Community Development," (USA: <u>Community</u> <u>Development Journal</u>, 29/3, 1992), p. 342.

<sup>&</sup>lt;sup>9</sup><u>Ibid</u>., p. 342.

<sup>&</sup>lt;sup>10</sup>Long, P.T., R.R. Perdue, and L. Allen, <u>Rural Resident Tourism Perception & Attitudes by Community</u> <u>Level of Tourism</u> (US: Journal of Travel Research 28(3), 1997), pp. 3-9.

associated with higher volume tourist destinations which are popular with the general population.

But such increased costs may result in lower volume tourist destinations as well. Hard infrastructure, such as sewer and water systems, in seasonal destinations experience peak flows for short periods of time. Accommodating this increase, the community must ensure adequate capacity to deal with such fluctuating demand. Ensuring the quality of building and infrastructure is a direct link to the community tax base. In communities which view ecotourism from an economic development perspective, decision-makers must also be aware that "revenues need to be balanced against these indirect costs as well as the direct costs which also tend to be underestimated. Expenditures on upgrading and expanding sewer systems, airports and roads can be enormous and often outweigh profits."11 There is also a "large proportion of economic leakage with polar tourism: little local employment is generated and most of the tourist payment for transportation and package tours accrues to the airline and tour operators, usually located outside the region."12

<sup>&</sup>lt;sup>11</sup><u>Ibid</u>., p. 342.

<sup>&</sup>lt;sup>12</sup>Johnston, Margaret E., <u>Polar Tourism: Tourism in the Arctic & Antarctic Regions</u>, (Toronto: John Wiley & Sons, 1995), p. 37.

Another dilemma may arise where the political decision-makers ignore the community's needs and replace those needs with those of the tourist. Such a situation has been described in the town of Branson, Missouri:

City Council and other community leaders have actively promoted Branson as a tourist destination and have encouraged and concentrated their economic development efforts on tourism-based industries... Thus, the needs of the tourist industry take priority over other community needs. Community leaders desire to keep the economic boom and commercial development growth continuing for as long as they can.<sup>13</sup>

McCool states that "while tourism may be viewed as a way to diversify and strengthen an economy when other alternatives do not exist, it also has the potential of bringing with it social and economic consequences that are neither expected nor desired, and can significantly alter the lifestyle of the area's residents."<sup>14</sup>

Becker and Bradbury go on to state that tourism fails to consider or protect either the local culture or the environment and that most studies fail to evaluate the non-economic, sodio-cultural impacts of tourism.<sup>15</sup>

<sup>15</sup>Op.sit., p. 271.

<sup>&</sup>lt;sup>13</sup>Becker, Barbara and Susan L. Bradbury, "Feedback on Tourism and Community Development: The Downside of a Booming Tourist Economy," (<u>Community Development Journal</u>, 29/3, July 1994), p. 272.

<sup>&</sup>lt;sup>14</sup>McCool, Stephen F., <u>The Social-Economic Consequences of Environmental Dependent Tourism</u>, (Louisiana: 21\* Annual Meeting, Travel & Tourism Research Association Paper, June, 1990).

Negative consequences from the visitor-host interaction may occur. One such consequence may be termed cultural ethnocentrism - viewing one's own culture as superior to another's culture.<sup>16</sup>

However, further analysis of ethnicity issues point to what may be seen as the commodification of a culture. A potential cultural conflict may arise between visitors and local residents "which can manifest itself in social and physical impacts for residents, and unpleasant experiences for visitors."<sup>17</sup> An example is provided, where viewing of wildlife creates a dilemma:

The actions of the tourists and the Inuit guides are in sharp contrast. The visitors ... start snapping photographs; the Inuit, after a suitable amount of time for photo-taking, shoot the animal in question.<sup>18</sup>

Tourism impacts on the natural environment, or conditionally renewable resources, include the ecosystem elements (air, land, plants, water and animals).<sup>19</sup> Air quality is impacted by tourists travel modes. In the case of the north, such an impact is created by the volume of air travel and the

<sup>18</sup><u>Ibid</u>., pp. 38-39.

<sup>&</sup>lt;sup>16</sup>Wei, L., J.L. Crompton, and L.M. Reid, <u>Cultural Conflicts: Experiences of US Visitors to China</u>, (US: Tourism Management, 10), pp. 322-332.

<sup>&</sup>lt;sup>17</sup>Johnston, Margaret E., <u>Polar Tourism: Patterns & Issues in Arctic & Sub-Arctic Tourism</u>, (Toronto: John Wiley & Sons, 1995), p. 38.

<sup>&</sup>lt;sup>19</sup>Ekins, Paul et al, The Gaia Atlas of Green Economics, (New York: Anchor Books, 1992), p. 64.

effects of airplane fuel on the atmosphere.

In soils, tourism recreational activities "change the structure, aeration, temperature, moisture and organic content of soil. As a result, the soil's ability to support plants is reduced."<sup>20</sup> Soil compaction by trampling, vehicle use and camping contribute to the reduction of pore space between the soil particles.

The soil structure... changes. The result is a decrease in aeration and water infiltration, leading to an increase of water runoff from precipitation and melting snow. Increased runoff has two major consequences. The first is the reduction of available soil moisture, which may result in the complete absence of vegetation cover. In case of extensive vehicular traffic, it leads to the desiccation of the landscape.<sup>21</sup>

Water and animals are also affected by tourism. In the case of Churchill, the viewing of whales by boating alongside may negatively impact the whales spawning or mating habits. The fuel from motorized boats, if high volume traffic occurs, may with time, affect water quality and water plant life. Artificial feeding of animals is of concern as it affects animal behaviour.

<sup>&</sup>lt;sup>20</sup>Mieczkowski, Z., <u>Environmental Issues of Tourism & Recreation</u>, (Toronto, John Wiley & Sons, Ltd. 1995), p. 196.

<sup>&</sup>lt;sup>21</sup><u>Ibid</u>., p. 198.

Offering tidbits of food is a method widely used by the public for bringing animals into closer contact. ... it can have unfortunate consequences. This is seen most dramatically with larger and bolder species which, having become accustomed to obtaining food in this way, are liable to beg for it in an aggressive fashion. If this behaviour results in human injuries, the offending species frequently suffers by becoming the target of vigorous control measures.<sup>22</sup>

Another example of disturbing wildlife in their habitat is

with bird-watchers.

Problems can arise in connection with birdwatching because of competition between participants to accumulate the longest personal tally of species observed. Reports of a rare species are liable to produce an influx of hundreds... of observers to a site, each intent on seeing the bird in question and if possible photographing it at close quarters. Frequently on these occasions little attention is given to the welfare of the animal itself or to the damage which might be caused to the habitat.<sup>23</sup>

A more specific example of wildlife disturbance in

Churchill, Manitoba states that:

In Churchill, Manitoba, "the bird-watchers' paradise of North America," there is a real danger of nests in the tundra being trampled by tourists. In some cases the birders trample and crush the vegetation surrounding their nests to

<sup>&</sup>lt;sup>22</sup>Edington, John M., and M. Ann Edington, <u>Ecology, Recreation and Tourism</u> (Cambridge: Cambridge University Press, 1986), p. 35.

<sup>&</sup>lt;sup>23</sup><u>Ibid.</u>, pp. 34-35.

such an extent that the birds desert them. Young birds starve, and along with any unhatched eggs, become sure victims of predators.<sup>24</sup>

There is another negative consequence to disturbing the various components of the natural environment, and that is a socio-economic factor:

Tourism effects on environment and ecology include: water pollution, air pollution, threat to vegetation and oceanic coastlines, wildlife harassment and destruction of archeological remains. ... When tourists note a decline in the environmental attractiveness of an area, they move on to other destinations.<sup>25</sup>

It is also noted that tourism development may occur without the benefit of community planning. In one case study in the United States, where buildings where buildings were constructed on an ad hoc basis, "there were virtually no land use controls or standards present... at that time. ... As a result, much of the land-use decisions that shaped ... (the) area were made by developers."<sup>26</sup> A suggestion is then made that the government should assist such small communities in their planning and land use strategies.

<sup>26</sup><u>Ibid</u>., p. 273.

<sup>&</sup>lt;sup>24</sup>Mieczkowski, Z., <u>Environmental Impacts of Tourism and Recreation</u>, (Toronto, John Wiley & Sons, Ltd., 1995), p. 240.

<sup>&</sup>lt;sup>25</sup>Lovell, H. and M.T. Feuerstein, "After the Carnival: Tourism and Community Development," (<u>Community Development Journal</u>, 27/4, Oct. 1992), p. 344.

"Only by setting a realistic pace to (change)... can communities meet the challenges of protecting the environment and quality of life that attracts tourism."<sup>27</sup>

#### Ecotourist Profile

Ecotourists represent a variety of age groups, but generally are found within the older age group categories. Both men and women participate equally in ecotourism travel and tend to represent higher levels of formal education. Complementary to this education is the higher levels of employment income.<sup>28</sup> The following table briefly outlines the profile of the typical ecotourist:

Factor	Data
Age Gender Education Preferred Party Composition	35 - 54 years 50% Female; 50% Male 80% college graduates 60% couples 15% families 13% alone
Trip Duration Expenditure Important Elements of Trip	8 to 14 days \$1,000 to \$1,500/trip 1) Wilderness setting 2) Wildlife viewing 2) Wildlife viewing
Motivation for Taking Next Trip	<ol> <li>3) Hiking/trekking</li> <li>1) Enjoy scenery/nature</li> <li>2) New experiences/places</li> </ol>

Table 1: Ecotourist Market Profile<sup>29</sup>

Ecotourists are viewed as being highly dedicated to their

<sup>29</sup><u>Ibid</u>., p 6.

<sup>&</sup>lt;sup>27</sup><u>Ibid.</u>, p. 275.

<sup>&</sup>lt;sup>28</sup>Eagles, P.F.J. and J.W. Cascagnette, <u>Canadian Ecotourists: Who Are They?</u>, (Ottawa: Tourism Recreation Research 20(1), 1995) p. 5.

#### activity, associated with a:

strongly held and coherent attitude set. They have an environmental philosophy that is well developed and that is reflected in many other cultural forms, such as literature and art. Their philosophy guides their travel actions. The resultant social rules are widely developed and widely transmitted to others. Travellers are sensitive to these rules as long as the rules fit within their attitude set. They work hard to force their rule set onto others, using all of their economic and social power to influence, often forcefully, the social and political structures to reflect the rules that they have developed. This is a powerful group, and it is rapidly gaining more influence.<sup>30</sup>

It is also noted that ecotourists have high levels of environmental conscience. Their philosophy of the environment states that nature must be protected, yet celebrated within a natural context. The results of such a philosophy is the trend toward environmental protection laws, rules and policies. Such regulations are translated into the protection of wildlife and nature in national and provincial parks to ensure that negative consequences, or impacts, do not occur. Because of this protectionist attitude, economic and social incentives may be viewed as furthering the cause of environmental protection.<sup>31</sup>

<sup>&</sup>lt;sup>30</sup>Eagles, Paul F.J., "Understanding the Market for Sustainable Tourism," (Utah: National Recreation & Park Association Annual Meeting Research Paper, Oct. 12-14, 1994), p. 10.

<sup>&</sup>lt;sup>31</sup><u>[bid</u>., p. 11.

Demographic information (specifically as it affects lifestyle and recreation choices) of the North America population may also highlight the importance that ecotourism may play in future Churchill visitations. Age plays a significant factor in recreational participation. As David Foot the popular economist/demographer has pointed out, when people age, they are less attracted to dangerous recreational activities, and more attracted to passive outdoor pursuits. His argument is that facility-based and snow-based recreation (swimming in pools, downhill skiing) and recreational sport activities (mountain climbing), or other dangerous activities, will show declining participation numbers. Comparatively, activities such as bird-watching, pleasure walking/driving, and sightseeing will increase.<sup>32</sup> What may be concluded from this, is that ecotourism may experience an increase in participation as the population ages.

The above is reinforced in data compiled by two Canadian research groups: Sage Group and Tourism Research Group, who report that the environment is a high priority with a diverse age group throughout the world. Their studies have

<sup>&</sup>lt;sup>32</sup>Foot, David K., "The Age of Outdoor Recreation in Canada," (Toronto: <u>Recreation Canada</u>, December, 1990), pp. 16-22.

shown that for adults over the age of 65 in Canada, the top three travel interests are: history and culture (85 percent), environment (82 percent), and outdoors (70 percent).<sup>33</sup> These numbers are reflected in the American population where the highest levels of travel interest are history and culture (100 percent), environment (95 percent), and outdoors (75 percent).<sup>34</sup> For an older German visitor population, scenery is the top priority for overseas vacations, while for Japanese, nature and the environment are the main reasons for their Canadian visits. As well, older people in France and Britain have stated that Canada provides a potential destination due to its national parks, outstanding scenery, and interesting wildlife.<sup>35</sup>

## Evaluation of Ecotourism

Tourism impacts may be grouped into three main categories: economic, socio-cultural and environmental.

The threefold categorization of impacts should be regarded as purely pragmatic, useful for analytical purposes. But in the real world things are much more complex than in theory:

<sup>34</sup><u>Ibid</u>., p. 144.

<sup>&</sup>lt;sup>33</sup>Sage Group, <u>Prospects of Canadian Educational Programs & Learning Vacations for Older Adults</u>, Ottawa: Tourism Canada, Industry Canada, 1993), p. 144.

<sup>&</sup>lt;sup>35</sup>Eagle, Paul, <u>The Travel Motivations of Canadian Ecotourists</u>, (Toronto: Journal of Travel Research, XXXI(2)), pp. 3-7.

the economic, socio-cultural and environmental systems overlap significantly and the impacts coincide.<sup>36</sup> This generally occurs in high volume visitor destinations, rather than low volume locations. These three components form the framework of analysis for the following sections.

## Economic Evaluation

Evaluating tourism from an economic perspective involves analyses based on cost/benefit and market assessments. Comparative studies may also be produced to evaluate those destinations which are cost effective versus those which are not.

A cost/benefit approach involves the quantification and comparison of the benefits of ecotourism, as well as its drawbacks. Establishing a strictly "economic" cost/benefit analysis should not be done without assessing the social impacts. "Tourism and its perceived costs or benefits cannot be quantified easily and manipulated into an economic model. The quantitative models need to have descriptive elements in order to tie them into economic reality."<sup>37</sup> An

<sup>&</sup>lt;sup>36</sup>Mieczkowski, Zbigniew, <u>Environmental Issues of Tourism & Recreation</u>, (Toronto, 1995), p. 3.

<sup>&</sup>lt;sup>37</sup>Lundberg, D., et al, <u>Tourism Costs: Economics as Applied to Tourism</u>, Toronto: John Wiley & Sons, Ltd., p. 46.

example which establishes a cost/benefit analysis of tourism highlights this fact:

Pros:Tourism DevelopmentCons: Anti-DevelopmentIncreased revenue, tax base and jobs.Increased costs of social<br/>services.More classrooms, hospital beds.More roads, bureaucracy,<br/>police and fire services.Increase in status for some.Loss of status for some.Increase in restaurants and<br/>entertainment choices.Increase in crime and<br/>prostitution.

This critique of cost-benefit analysis has long been supported by the literature:

It is now well recognized that people experience gains and losses which cannot be expressed in monetary terms. It is also recognized that without substantial new development in social indicators, many of these gains and losses cannot be incorporated as variables into formal models and submitted to calculations which permit clearly quantitative conclusions about costs and benefits.<sup>39</sup>

One component of tourism economics is demand forecasting. This allows a community to predict their capacity to service future events and conditions.

Forecasting is,... a systematic process involving several steps: collection of basic facts about past trends and forecasts; analysis of changes in past demand trends and differences between previous forecasts and actual behaviour; examination of factors

<sup>&</sup>lt;sup>38</sup><u>Ibid</u>., p. 47.

<sup>&</sup>lt;sup>39</sup>Bowles, Roy T., <u>Social Impact Assessment in Small Communities</u> (Toronto: Butterworths & Co. Ltd., 1981), p. 30.

likely to affect future demand; forecasting for some future period; and continually monitoring the accuracy and reliability of the forecast.<sup>40</sup>

One method to collect such data involves the administration of exit surveys which provide quantities of tourists entering/leaving a destination, monies spent, income levels and age brackets. Administering exit surveys is critiqued as being time-consuming and difficult to conduct.<sup>41</sup>

Other components of tourism market assessments involve estimating tourism revenues through simple random sampling techniques (surveying the public as to their vacation expenditures); or doing a time series analysis which consists of analyzing historical data (trend, seasonality, cycles and random variations). These methods use quantifiable indicators and analyze past trends to forecast future patterns of behaviour and, therefore, financial expenditure by tourists.

Quantitative tourism economic models include analysis of seasonality and cycles. Seasonality involves the analysis of tourist preference as to time of year for travel. Economic

<sup>&</sup>lt;sup>40</sup>Lundberg, D., M. Krishnamoorthy, and M.H. Stavenga, <u>Tourism Economics</u> (Toronto: John Wiley & Sons, Inc., 1995), p. 151.

<sup>&</sup>lt;sup>41</sup><u>Ibid</u>., p. 151.

analysis develops indices of fluctuations, patterns and time series for study. Cycle analysis is another component of seasonality. These are travel patterns in time which occur every few years and can provide projections as to future tourist behaviour. Local businesses may then adjust their responses and preparations for these fluctuations.

Causal models in tourism economics involve analyzing variables as well as time in determining patterns and outcomes. One method is input-output analysis. This views relationships amongst variables within a system. The following provides an example:

The demand for hotel accommodation at a tourist spot is a function of a number of tourists arriving there. But hotel accommodation consists of beds, rooms, ... restaurants,... travel agencies, shopping malls, and other infrastructure facilities. Thus an increase in demand for hotel accommodation also results in an increasing need for these components. This results in a chain reaction, with commensurate demand for the materials that make up these items, eventually leading to a spurt in orders for steel,... wood, and so forth. Thus a demand for an end product such as hotels influences the demand for various intermediate products that make up the end product. The usefulness of input-output analysis stems from the identification of these linkages, all of which help the forecasting process.42

Comparative advantage is another method which analyzes why one

<sup>&</sup>lt;sup>42</sup>Lundberg, D., M. Krishnamoorthy, and M.H. Stavenga, <u>Tourism Economics</u> (Toronto: John Wiley & Sons, Inc., 1995), p. 163.

community outperforms another community in attracting visitors through opportunity costs. A community which has a comparative advantage produces a particular good at a lower opportunity cost than competitors. In tourism, determining comparative advantage is difficult, but may include an analysis of transportation, culture, climate and marketing skills of the destination community.<sup>43</sup>

## Socio-cultural Evaluation

It is important to view ecotourism, not only for the travellers' intent, but more broadly, as a sociological phenomenon. Lovel and Feuerstein note that tourism is associated with unequal development on a world scale, where a range of relationships exist between the host community and visitors, and where tourism and local recreation may share facilities."

In the case of sociological impacts on travellers, studies analyze the travellers' perceived experience. Such studies assess the quality of local services provided to indicate recommendations to service improvements. The indicators are measured under the concept of human experiential thresholds known

<sup>&</sup>lt;sup>43</sup><u>Ibid</u>., p. 45.

<sup>&</sup>lt;sup>44</sup>Lovel, Hermione and M.T. Feuerstein, "After the Carnival: Tourism & Community Development" (<u>Community Development Journal</u>, 27/4, Oct. 1992, pp. 336-337.

as limits of acceptable change or the carrying capacity of nature-dependent destinations. Research for carrying capacity involves identification of which social, economic or environmental conditions are acceptable to the positive experiences of tourists. One framework of study emphasizes:

- Outputs;
- Select variables which represent outputs;
- Variables which are measurable; and
- Development of standards for acceptable change.<sup>45</sup>

The social variables which may be studied are grouped under the headings: economic, social and experiential. The measurable indicators of tourists, for example, may include their income levels, concerns related to personal safety while at a destination, or the tourist's desired experiences while at a destination.

This type of research reflects strategic planning in that issues are identified, goals are developed, standards are created, an inventory is established, actions are initiated and, finally through the indicators, the ability to monitor outcomes which may become a product or implementation mechanism. This monitoring allows for positive changes to occur at the destination locale

<sup>&</sup>lt;sup>45</sup>McCool, Stephen F., <u>Limits of Acceptable Change: A Strategy for Managing the Effects of Nature-Dependent Tourism Development</u>, (Montana: Institute for Tourism & Recreation Research), Whistler, B.C. presentation, Dec. 1-3, 1991.

through impact management.

It is important for policy-makers to understand the consequences of tourism on a host community. Six key consequences of tourism which should therefore be analyzed through survey questionnaires include the need to:

- 1) Preserve qualities of the community;
- Develop information on enhancing experiences and the quality of those experiences;
- 3) Determine the desirability of tourism developments, both for the tourist as well as the host population;
- 4) Determine service needs and opportunities;
- 5) Understand conflicts in values and attitudes; and
- 6) Assess economic benefits and costs.46

In the social sciences, one method of analyzing tourism development impacts on a community is through a Social Impact Assessment (SIA). There are a few assumptions which are made in researching social impacts:

- There is a defined community with more or less stable patterns of social behaviour, social relationships, and way of life;
- Some identifiable intervention (eg. The construction of a resource project) takes place;
- 3) This intervention has consequences which produce changes in the pattern of activities, the social relationships, and the way of life; and
- 4) These changes are different from, or in

<sup>&</sup>lt;sup>46</sup>McCool, Stephen F., <u>The Social-Economic Consequences of Environmental Dependent Tourism</u>, (Louisiana: 21<sup>st</sup> Annual Meeting, Travel & Tourism Research Association Paper, June, 1990).

addition to, those which would have occurred as a consequence of processes already operating in the community.<sup>47</sup>

Unlike the study of carrying capacity, Social Impact Assessment does not analyze trends, but attempts to forecast the impacts of a certain action upon a community. The intent of conducting an SIA is that it is done within "defined decision-making contexts and for the primary purpose of guiding the decision-making process."<sup>48</sup> In the case of promoting tourism development, the question is raised as to how the changed ecotourism components affect the community's residents.

Social impact assessment begins with the anticipation of intentional action which can be considered before it is initiated and poses the questions of what consequences that course of action will have. The results of SIA are designed to guide the action and to answer the question: Should the action be taken? If yes, which of the available alternatives for implementation should be pursued? ... Social impact assessment is anticipatory of events and programs which may be initiated and the changes which ensue.<sup>49</sup>

Social Impact Assessment first involves a pre-impact assessment which involves 6 steps of analysis:

 Profile: outlines the social indicators and demographics of a community;

<sup>48</sup><u>Ibid</u>., p. 39.

<sup>&</sup>lt;sup>47</sup>Bowles, R.T., <u>Social Impact Assessment in Small Communities</u>, (Toronto: Butterworth & Co., 1981), p. 7.

<sup>&</sup>lt;sup>49</sup><u>Ibid</u>., pp. 22-30.

- 2) "Without" project projection: if tourism development is not done, what is the community's future scenario based on the above indicators;
- 3) "With" project projection: outlines the benefits and consequences of tourism development;
- 4) Identify significant impacts: these are impacts which may be both positive and negative to a community;
- 5) Describe and display: this is a descriptive outline of all of the variations of with and without tourism development and the opportunities or constraints involved; and
- 6) Evaluation with public: the community is involved in directing and creating a strategic plan.

From this stage a systems diagram is developed which narrows the phenomenon impacting the community, as well as the scope of the assessment. It allows a researcher to categorize impacts by degrees, i.e. high or low. In the study of communities, phenomenon to be analyzed are categorized under: economics, politics, social, cultural and environmental phenomenon. How the phenomenon impacts on each category may the establish a communities' social life patterning.<sup>50</sup>

<sup>&</sup>lt;sup>50</sup><u>Ibid.</u>, pp. 17-19.

Another method used in SIA is to create scenarios. Scenario writing allows the researcher to formulate what may occur to the community based on alternate implementation plans. The critique of using SIA as a research method is that it should be an iterative process "repeated again and again as a project develops."<sup>51</sup> As in any research, the opportunity to provide such on-going analysis is financially restrictive and improbable.

## Environmental Evaluation

Environmental analysis of the effects of tourism in geographic regions is done through scientific indicators. Such an approach allows scientists and natural resource specialists analyze the effects of visitors on vegetation degradation (random sampling over time in a specific area), significant changes in wildlife patterns such as migration and population counts. Carrying capacity studies also analyze ecological capacities. Components which are analyzed involve the impacts of visitor use on plants, animals, and soil, as well as on water and air quality. Again the research involves human use of the earth and observing and recording behaviour of humans on these ecological components.

Carrying capacity uses an impact management model. Controlling a

<sup>&</sup>lt;sup>51</sup><u>Ibid</u>., p 25.

destination site's levels of use by tourists through visitation scheduling or determining the amount of soil hardening by visitors' trampling feet, allows researchers to view how these controls affect visitors. Researching the kind of tourism experience provided by the community and experiences expected by the tourists, then requires creating standards for those experiences sought. By evaluating both what is occurring in the environment, as well as managing the resource to satisfy visitors' expectations, allows monitoring of observable data and standards.<sup>52</sup>

In the preceding section on sociocultural impacts, the Social Impact Assessment (SIA) research method was described. Similarly, in environmental evaluation, an Environmental Impact Assessment (EIA) may be administered. This type of analysis involves:

- Describing the environment as it exists prior to a new development;
- Describing the activities involved in the operation of the new project;
- 3) Relating these activities and their products to the features of the existing environment;
- 4) In future-oriented studies, predicting how the environment will be changed as a consequence of the activities involved in

<sup>&</sup>lt;sup>52</sup>McCool, S., <u>How Many is Too Many? Determining Social Carrying Capacity</u>, (Oregon: Oregon State University, 1991), p. 10.

Berkes and Fast suggest that amore appropriate study is to provide a cumulative impact assessment rather than viewing impacts singularly: "... cumulative impact assessment is needed for conservation planning because assessing impacts project by project has not been adequate to protect the land resource base."<sup>54</sup>

From the scientific field of study, pattern changes which are caused by tourists are studied. These changes include analyses of animal habitats, eating/mating/migration behaviours and how they have been negatively impacted by human interaction. Assessing volumes, whether flora or fauna, identifies changes in the ecosystem and alerts scientists to significant problems and impacts caused by visitors. The most effective tool in natural environment research involves comparative studies which emphasize environmental damage or changes over time.

## Quality of Life

Administering quality of life surveys represents another process

<sup>&</sup>lt;sup>53</sup><u>Ibid</u>., p. 31.

<sup>&</sup>lt;sup>54</sup>Berkes, Fikret and Helen Fast, <u>Aboriginal Peoples: The basis for Policy-Making Toward Sustainable</u> <u>Development</u> (Winnipeg: University of Manitoba, 1997), p. 206.

which may be used to evaluate ecotourism. The survey content may include economic, social and environmental factors to provide a combined systems perspective in urban settings.

A recent study aiming to ascertain the relevance of the process for the study of urban communities describes the historical methods used to monitor communities' quality of life. During the 1970s the emphasis was on empirical evidence gained from national surveys such as Statistics Canada's census data. In the 1980s and 1990s Canadian cities were compared and rated against one another by means of quality of life indicators to provide business investors a locational tool.

There was also a greater interest in making quality of life research more policy oriented by incorporating quality of life studies more directly into the planning process. The second major shift in the mid-1980s was the emergence of more holistic planning approaches incorporating ideas from quality of life, sustainable environment, and healthy cities perspectives.<sup>55</sup>

Two models are described: 1) a Conceptual Framework of Quality of Life; and, 2) a Community Oriented Model of the Lived Environment. In the first instance, research is based on objective and subjective indicators. In the second model, information is developed from sustainable environments and healthy cities' research is closely related to municipal policy

<sup>&</sup>lt;sup>55</sup>Bates, Judy, et al, <u>Monitoring Quality of Life in Canadian Communities: A Feasibility Study</u> (Ottawa: CMHC, 2<sup>nd</sup> Ed., 1996), p. iv.

issues.<sup>56</sup> The authors criticize this second model due to the fact that it does not include subjective indicators of economic vitality, social well-being and environmental integrity.<sup>57</sup>

Both models tend to support the monitoring of public policies and programs affecting the following components: housing, land use, transportation, natural environment, employment/commerce and public services. These components are then rated by three factors: economic vitality, social well-being, and environmental integrity. The creation of measurable indicators allows the ongoing management of outcomes which specifically affect the urban government's budget or capital programming.

These quality of life models are generally administered by cities which have the financial capacity and human resources to produce such research and analysis. Although useful in municipal management, smaller, rural communities do not have the resources to perform such formal surveys to garner public input, and must rely upon active citizen involvement instead.

## Ecotourism Principles

Even though ecotourism may be viewed as a recent tourist phenomenon, ecotourism researchers have already developed and

<sup>&</sup>lt;sup>56</sup><u>Ibid</u>., p. iv.

<sup>&</sup>lt;sup>57</sup><u>Ibid</u>., p. iv.

refined guiding principles over the last few years. These principles are a "popular way of expressing commitment to certain ideals... principles which can bring us a step closer to understanding community sustainability."<sup>58</sup>

These ideals, based on sustainable development concepts, may also be categorized into the 3 factors as previously described, under social, economic and environmental systems. The Ontario Roundtable on the Environment & Economy outlines how communities view the principles of community sustainability. The principles of the social system may be described under sustainable community and healthy community; the economic, as economic sustainability and finally the environment as biophysical sustainability (see Table 2). Ecotourism principles refine these principles into more holistic statements.

Research of third world ecotourism concludes that true ecotourism is when this type of tourism:

- 1. Entails a type of use that minimizes negative impacts to the environment and to local people;
- Increases the awareness and understanding of an area's natural and cultural systems and the subsequent involvement of visitors in issues affecting those systems;
- 3. Contributes to the conservation and management of

<sup>&</sup>lt;sup>58</sup>Richardson, Nigel, "Making our Communities Sustainable: The Central Issue is Will," <u>Ontario Round</u> <u>Table on Environment & Economy</u>, (Toronto: Government of Ontario, 1993), p. 2.

legally protected, and other natural areas;

- Maximizes the early and long-term participation of local people in the decision-making process that determines the kind and amount of tourism that should occur;
- 5. Directs economic and other benefits to local people that complement rather than overwhelm or replace traditional practices (farming, fishing, social systems, etc.);
- 6. Provides special opportunities for local people and nature tourism employees to visit natural areas and learn more about the wonders that other visitors come to see.<sup>59</sup>

A more generic framework applicable to industrial nations integrates social, economic and environmental goals under 9 principles:

- Environmentally sound development without resource degradation;
- First-hand, participatory, enlightening experiences;
- Multi-party education (communities, government, national government organizations, industry and tourists);
- Recognition of the intrinsic values of the resources;
- Acceptance of the resource on its own terms, recognizing limits, which involves supply-oriented management;
- Understanding and partnerships between all stakeholders;
- Promotion of ethical responsibilities and behaviour towards the natural and cultural environment;
- 8. Long-term benefits (economic and non-economic) to the resource, industry and the local community;
- Responsible conservation practices related to both internal and external operations.<sup>60</sup>

<sup>&</sup>lt;sup>59</sup>Wallace, George, and Susan Pierce, "An Evaluation of Ecotourism in Amazonas, Brazil," (USA: Annals of Tourism Research, 23(4), 1996), pp. 4-6.

<sup>&</sup>lt;sup>60</sup>Wight, Pamela, "Ecotourism - Balancing Sustainability & Profitability," (Estonia, International Conference on Central & Eastern Europe, Sept. 22-27, 1997), p. 2.

# Table 2: Principles of Sustainability60

Economic Sustainability	Human & Social Sustainability	Biophysical Sustainability
<ul> <li>Pursuit of economic development as the means of providing the community with the resources to achieve social and environmental sustainability;</li> <li>Building a local economy that is stable and diversified;</li> <li>Economy based on future-oriented enterprises that can endure and flourish within changing global and national economies without relying on artificial suports or subsidies;</li> <li>Economic development programs do not focus on attracting large firms from "outside;"</li> <li>Build upon local strengths and resource, and encourage local initiative (diversififed economy);</li> <li>Enhance stability and increase variety of jobs responsive to community's needs;</li> <li>Support small enterprises managing use of local skills and resources;</li> <li>Support worker ownership and local co-ops and credit unions;</li> <li>Cannot be environmentally destructive nor voracious in its resource demands;</li> <li>Cannot impair another community's quality of air, water, land, etc.</li> <li>Long-term goals are established, not short-term profits.</li> </ul>	<ul> <li>The satisfaction of basic human needs for food, shelter, education, work, income, and safe living and working conditions;</li> <li>Equity: fair distribution of the benefits of development;</li> <li>Enhancement or, at least, maintenance of physical, mental and social well-being;</li> <li>Education and the development of human potential for the whole population;</li> <li>Conviviality: people living together harmoniously;</li> <li>Democratic government that promotes citizen participation and involvement;</li> <li>A livable physical environment which "links the form of public places to social, emotional and physical well-being."</li> </ul>	<ul> <li>Use material in continuous cycles;</li> <li>Use continuously reliable sources of energy;</li> <li>Come mainly from the qualities of being human (i.e. creativity, communicatoin, movement, apprecitation, and spiritual and intellectual development);</li> <li>Does not use non-renewable resources or renewable resources faster than their race of renewal;</li> <li>Does not cause cumulative degradation of the environment;</li> <li>Does not lead to extinction of other life forms.</li> </ul>

<sup>&</sup>lt;sup>61</sup>Richardson, Nigel, "Making Our Communities Sustainable: The Central Issue is Will," <u>Ontario Round</u> <u>Table on Environment & Economy</u>, (Toronto, Government of Ontario, 1993), p. 2.

Ecotourism Principles may further be simplified into broader statements:

- Ecotourism should be one part of a balanced economy;
- The use to ecotourism environments must allow for long-term preservation and for use of those environments;
- Ecotourism should respect the character of an area;
- 4. Ecotourism must provide long-term economic benefits; and
- Ecotourism should be sensitive to the needs of the host population.<sup>62</sup>

These five principles will form the guiding framework to the practicum's research as they provide broader statements under which the practicum's findings may be analyzed. The following chapter will provide a profile of Churchill, its history and its community.

<sup>&</sup>lt;sup>62</sup>Owen, R. Elwyn, et al, <u>Sustainable Tourism Development in Wales</u>, (UK: Tourism Management, December, 1993), pp. 463-474.

## Chapter 3 Churchill Profile

Since the Town of Churchill provides the context for this practicum's research, a description is provided of its history, geography, demographic structure and visitor attractions. Clarifying these aspects of the area highlights a cognizance of area specific factors and disallows research results to be analyzed in isolation of them. The background information is documented under the following headings: history; location and access; local population; amenities and attractions; and, flora and fauna.

## Churchill History

Ecotourists' travel purpose is mainly to learn and become informed of, not only the natural environment and cultural aspects of a destination, but also its history. To begin, it must first be noted that there was no settlement at Churchill prior to the 1700s. During the eighteenth century, explorers and fur traders arrived in the Churchill area as representatives of the Hudson Bay Company. Prior to this, the regional residents represented various aboriginal groups including the Cree, the

Chipewyan and the Dene. To the north were the Inuit peoples. These were the hunters and gatherers of the north who developed inter-group economies and communications. Spiritual beliefs and tribal political structures were unique to each group, as were languages. As a note, not all relationships were positive. The Dene and Inuit were known to war with one another over hunting area boundaries.

The first European explorers arrived in during the early 1600s searching for the Northwest passage. By 1670, the Hudson Bay Company established a trading depot at York Factory. This became the central Hudson Bay Company shipping and receiving port until the mid-1800s.<sup>1</sup> After approximately 40 years of labour, the Company completed construction of Fort Prince of Wales on the west side of the Churchill River. The stone structure, with cannon included, was built to withstand any military siege. This was never experienced due to the fact that in 1782 the British surrendered the fort to the French invaders. Prior to this, Fort Cape Merry reached the construction stage of its battery in 1749, but work was discontinued and the fort was never completed.

<sup>&</sup>lt;sup>1</sup>Newbury, Robert, "Northern Waters: The Discovery and Development of the Rivers of Northern Manitoba," <u>People & Land in Northern Manitoba</u> (Winnipeg: University of Manitoba Anthropology Papers, 1992), p. 84.

Upstream from the Bay along the Churchill River is Sloop's Cove where ships were safely moored from harsh conditions. Iron mooring rings are embedded in the rocks to this day, as is the engraved name of Samuel Hearne, the northern explorer and governor of the Hudson Bay Company during the late 1700s, on a nearby rock face.

European exploration and trade brought lifestyle changes to the aboriginal people. Trade and monetary exchange economies demanded settlement in one area. Following animal migratory patterns became a challenge when trade posts were strategically located on transportation water routes. New diseases imported by the Europeans dessimated many northern aboriginal populations. Later, zealous missionaries brought further disruptions to traditional family structures through the residential schooling system.

During the late nineteenth and early twentieth centuries, when the Trans Canada rail line was constructed, an emphasis was placed upon the east-west trade routes of Canada for resource distribution. The relative importance of the northern areas was reduced with new market demands in the south. But by 1929 the Hudson Bay Rail line was completed allowing for the northern development of resource extraction and distribution. Forestry,

mining and hydro-electric development were supported by the existence of this line through the Pas, Flin Flon and Grand Rapids. Churchill became the point for international export through its port facilities.<sup>2</sup>

The Cold War, during the 1950s and 1960s, brought the American Army with their DEW Line facilities, to Manitoba's northern boundaries. Because of this for a period of 20 years, increased settlement occurred adjacent to the Town of Churchill. This settlement has since been dismantled, but the rocket range facilities remain to the east of town.

In the mid-1950s hydro-electric development occurred on the Nelson River, southwest of the Churchill River. A need was established to increase the flow of water on the Nelson River and, as a result, the Churchill River was diverted into the Nelson River in 1976. The results of this diversion were negative impacts to fish and wildlife habitat, and to the main source of food for those living off of the land, the First Nations.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup>Friesen, Gerald, "Northern Manitoba 1870-1970 - An Historical Outline," <u>People & Land In Northern</u> <u>Manitoba</u> (Winnipeg: University of Manitoba Anthropology Papers, 1992), p. 48.

<sup>&</sup>lt;sup>3</sup><u>Op.Sit</u>., p. 88.

#### Location & Access

Churchill is located in the Norman Region of Northern Manitoba on the shores of Hudson Bay. The Churchill River flows from Lake Winnipeg into the Bay alongside the town. What makes Churchill a unique ecotourist destination is that it is past the treeline and considered to be within the Arctic.

There is no road access to Churchill due to the nature of the land. Muskeg and permafrost represent high implementation and maintenance costs and minimize cost recovery for rail line owners due to low traffic volumes.

Land access is limited to the one rail system known as the Bay Line which was built during the 1920s. This line was originally constructed by the Canadian National Railways to service the Churchill port and not travellers. Travel by rail represents a significant investment in time as the train moves slowly in light of the warped rail lines caused by the effects of permafrost on underlying land.

Two other options exist to reach Churchill. One is by air and the other by sea. Churchill currently has year-round daily flights from Winnipeg with connections to Rankin Inlet in Nunavut. During the summer months, the Northwest passage tour

boats are provided ice-free access to the port of Churchill.

## Local Population

Churchill has experienced a slow decline in its population base. Using Statistics Canada census, the data indicates a five (5) percent decline in population over the last 2 census periods of 1991 and 1996. In actual numbers, this represents a decline of approximately 50 persons. Although not as drastic a reduction as experienced when the United States Army abandoned its military base in Churchill, the numbers indicate that migration may be occurring.

Other demographic characteristics of Churchill residents include age groups, educational attainment and average income. The following outlines this background data.

Figure 1 provides the percentage values of Churchill's demographic profile. As is evident, the majority of residents are under the age of 55. What is interesting to note from the current census data is that the 0 to 24 year old age group represents a majority of the population base. As well, although indicated in the above data, is that fifty percent (50%) of the total population is of Aboriginal descent. Of this population, twelve percent (12%) learned, and still understand, their native

language.4

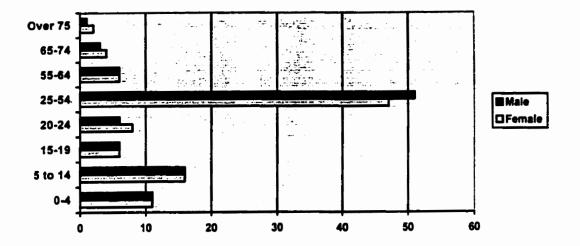


Figure 1: Churchill Age Groups

Of some concern in the census data is the fact that almost one quarter (18.6%) of the population over the age of 25 have less than a grade nine education (Figure 2). The data does not specify in which age bracket these residents are grouped, i.e. whether it is more specific to an older age group or to various race groupings.

Under the employment characteristics, the majority of residents over the age of 15 are employed in the service industries. Service industries include the health and educational sectors and

<sup>&</sup>lt;sup>4</sup>Statistics Canada, "Population Statistics for Churchill (LGD), Manitoba" <u>Community</u> <u>&Neighbourhood Demographic Census Data</u> (Ottawa: Government of Canada, 1996)

## Figure 2: Churchill Educational Attainment, Over Age 25



🛛 < Gr. 9
High School
E Trade
University

must not be interpreted as the service sector, such as tourism. Figure 3 shows the importance of this employment sector.

Figure 3: Churchill Industry Characteristics of the Population over Age 15



Resource Mfg/Constr Service

The following Table 3 outlines household composition and dwelling characteristics found in Churchill in 1996. When comparing the age group data of adults in the 25 to 54 age bracket (a total of 540 persons) with household composition which states that there exist 320 couples, it may be assumed that the majority of Churchill persons in this age group live as couples and earn an average income of \$55,000 annually. The fifty (50) single parent families identified in the 1996 census data earn significantly less than married or common-law couples, averaging \$28,000 per annum. It should be noted that residents live within comfortable standards of low densities (0.5/persons/room). Only four percent of households experience crowded living conditions.

Table	3:	Churchill	Household	Characteristics	£	Dwellings <sup>5</sup>
				CHRTROCTTDCTCD		owerride

Characteristics	Total Number			
Selected family characteristics				
Number of married or common-law families	230			
Average number of persons in husband-wife or common-law families	3.2			
Average total income of couples	\$54,920			
Number of lone-parent families	50			
Average number of persons in lone-parent families	2.7			
Average total income of lon-parent families	\$28,015			
Selected dwelling characteristics				
Total - Number of private occupied dwellings	405			
Dwellings constructed before 1981	380			
Dwellings constructed between 1981 and 1996	30			
% of accupied dwellings with more than one person per room	3.7			
Average number of persons per room	0.5			

## Amenities & Attractions

Various historic sites exist in the Churchill vicinity. A few of these sites may be dated back to the Pre-Dorset People, who hunted seals and caribou in 1700 B.C. The Dorset and Thule cultures, as well as the Cree, Chipewyan and Inuit, may also be

<sup>&</sup>lt;sup>5</sup>Statistics Canada, "Population Statistics for Churchill (LGD), Manitoba" <u>Community</u> <u>&Neighbourhood Demographic Census Data</u> (Ottawa: Government of Canada, 1996).

found at other area sites. Of note, is the Eskimo Museum which displays Inuit artifacts and carvings.<sup>6</sup>

The original forts built by the Hudson Bay Company stand as walled compounds. A gravel road leads to the Cape Merry National Historic site and can be accessed from the town on foot after bear migration periods. A boat must be taken during summer months to visit the Prince of Wales historic site across the Churchill River from the Cape Merry site. In winter, each is accessible, but not clearly visible due to snow and snow drifts.

The Spaceport represents the conversion of the Churchill Research Range which was originally used to send rockets into the atmosphere for research purposes. Today the facility represents an economic development asset. The owner, Akjuit Aerospace Inc., plans to launch telecommunications satellites into space for global client companies. This facility is closed to the general public, but may be seen from adjacent locations (such as roads) to the east of town.

Another key asset located at this site, is the Churchill Northern Studies Centre. The Centre offers courses specializing in Arctic

<sup>&</sup>lt;sup>6</sup>Kuehn, Felix, et al. Eds. <u>Manitoba Travel Guide</u>, (Winnipeg: Manipeg Publications, Inc., 1995), p. 301.

studies such as: ecology, geology, and ornithology courses, as well as courses in survival or photography techniques.

Parks Canada operates a visitor centre in the Bayport Plaza in town. The history of the Hudson's Bay Company, as well as exhibits of the fur trade, are displayed. Staff are hired during peak visitation periods to provide area information to tourists. This centre is generally open during the summer months, but may hold special sessions during the winter season by special request.

A handful of hotels exist in central locations of the town and are open year-round to accommodate visitors. Rooms offer cable television, and the normal, modern conveniences expected by visitors (such as showers) in each room. Accommodations cannot be considered to be as luxurious as hotels in the south, but are adequate in providing basic necessities to visitors. Nightly rates are quite high due to the high land development costs, and ongoing utilities, operations and maintenance (heating costs are extensive in winter). The Town Centre Complex offers the health centre with medical staff present year-round, 24 hours per day. A library, swimming pool, curling rink, hockey arena, gymnasium, playground and cafeteria are all housed within this complex.

#### Flora & Fauna

The most important attraction for visitors to the north is the Churchill wildlife. The polar bear represents the key highlight of the northern animal kingdom, followed by the beluga whale. Migrating birds represent another enticement to visitors engaged in bird-watching.

Polar bear viewing is a seasonal phenomenon and only occurs during two months of very year. October to November represents the prime period for bear viewing. This period reflects the polar bears' migratory movement from land to ice. When the ice begins to freeze, the polar bears' route and movement is along the Hudson Bay shoreline where they await and anticipate seal hunting. Because the Town of Churchill is situated directly within the path of the migrating bear, bears are known to wander through the town itself. Therefore, the government has established a "bear prison" which involves a holding tank for bears that have entered within the Town's boundaries. These bears are sedated and airlifted to a location northwest of Churchill.

During the summer season, beluga whales arrive to give birth in the warm waters at the mouth of the Churchill River. It is estimated that as many as 3000 whales may swim through the area

over the course of the summer months making them highly accessible and visible to people travelling in boats. Scuba diving is also increasing in popularity as a means to view whales.

Mid-April to the end of June, and the month of September, represent the key nesting and migration seasons for birds within the Churchill region. Hundreds of species may be viewed in the course of a week, but the most numerous is the snow goose and the Ross' gull.

Complementing the bird season is the black fly and mosquito season. During this summer period, the caribou evade these vicious insects by feeding along the tidal flats along the coastline where strong winds protect them. Ringed and bearded seals may also be seen along the coastline during this time, as well as in the spring.

Table 4 denotes the seasonal aspects of wildlife and natural feature viewing in Churchill. The main seasons for ecotourism are from April to June for birders, June to August for beluga whale viewing, followed by the October/November polar bear viewing season. From December to March, the numbers of ecotourists visiting Churchill declines significantly to

virtually zero visitations.

## Summary

Churchill offers the key elements ecotourists pursue. A rich history of settlement from a hunter-gatherer society to one of market-driven civilization is presented through historic sites and services. Visitors are guaranteed that their basic needs will be met by local amenities, such as hotels, while tour operators provide the key experiences which are avidly sought: the viewing of wildlife in their natural habitat.

# Table 4: Churchill Seasonal Activities'

		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	ОСТ.	NOV.	DEC.
	WANTS PORT		L	L				ر میں اس اور کی اور میں میں میں اور کی	<u>.</u>				
-	Саре Мету			_			2		::::::::::::::::::::::::::::::::::::::				
	Sleep's Cove				[ — —								
	Ithica										±		
-	Aljult Arrespace								· · · · ·		1	1	
9	Beresl Gardens		me by appoint								1	1	
	Northern Studies Centre												
क्त	Chartered Aircraft		ļ										
~	Metel Accommode Occupancy	cten .											
	Average Celcius	-27.5	-25.9	-20.4	-10.1	-1.5	6.2	11.6	11.3	5.4	-1.5	-12.1	-22.8
	Temperature	cel.	cei.	cel.	cel	cel.	cel.	cet.	cel	cel	cel.	cel	- cel.
*	Insects							•		+		· · · · · · · · · · · · · · · · · · ·	
	Raintail	0	01mm	0.6 mm	2.0 mm	13.5 mm	39.9 mm	45.6 mm	58.8 mm	44.5 mm	15.4 mm	10 mm	0.2 mm
	Snowfall	16.9 cm	14.6 cm	18.6 cm	22.3 cm	19.5 cm	3.5 cm	0	0	6.4 cm	29.3 cm	41.6 cm	22.8 cm
	Average Mean Wind Speeds	24.2 W	24.1 WNW km/hr	22.2 WNW km/hr	22.6 NW	22.2 NNW km/hr	20.7 N hm/hr	19.3 N km/hr	20.5 NNW	23.7 NNW	24.9 NW km/hr	25.6 WNW km/hr	22.7 W km/hr
wironme	nt Canada - Parks ception Centre	+											
	Outdoor Tours/ Activities							F					
(111)	Eskime Museum												
		JAN.	FEB.	MAR	APR.	MAY	JUNE	JULY	AUG.	SEPT.	ОСТ.	NOV.	DEC.
-	Wheles		1		r —		1			· · · ·	· · · · ·	r	
	Polar Bears							25%	30%	-458-	70% 10	ios	
	Seals						<u> </u>	<u> </u>		1-1	///		
	Birda												
-	Birds									┝╍╍╍┠╍			
-	Nesting Birda						┝┸┯┯╸			···			<u> </u>
	Haiched Hunting Caribou						┝╼╍┹╼╼╸						
	Hundland		┟──┸╼╼								<u></u>		
	Geree Hunding												
	Plarmigan Fishing Churchill												
-	Fishing											<b></b>	
	Flowers												
	Spring .												
	Autumn Coleurs Toun						<u> </u>			<b>* * * </b>			
	Complex Facilities Northern												
<u></u>	Ughts Grain												
								and the second s			··· · · ·		

<sup>&</sup>lt;sup>7</sup>Churchill Chamber of Commerce, <u>Visitor Information</u>, (Churchill: Churchill Chamber of Commerce, 1992), Appendix.

## Chapter 4 Methodology

The purpose of the practicum is to determine the Churchill community's attitude of how ecotourism affects its quality of life. The preceding chapters provided the various methodologies undertaken to study social, economic and natural environmental factors, as well as an insight into the locational context of the practicum's research. This chapter will outline the process undertaken in the development of the practicum's attitude survey.

## The Questionnaire

Given the distance of the practicum's author to the community of Churchill, it was determined that the use of a survey format would be the most cost-effective mechanism. Both the pros and cons were weighed as to the administration of a survey, whether to hire local residents to administer a telephone survey or residents, or to visit the community and attempt a time-consuming door-to-door interview technique, or develop a self-administered mail-out questionnaire. Hiring local residents would significantly limit control over interpretation of questions and answers (both for the interviewer and the interviewee), reduce

the sample group size due to time and financial constraints, and would not provide performance/implementation guarantees. Doorto-door interviews require extensive time commitments, which was unmanageable and financially impossible for the author.

When the questions were developed, the gender of respondents was mistakenly not included. Although not of great import to the results, the future research needs may identify the necessity of including this data. As well, cultural differences were not included in the demographic section of the questionnaire. This was purposely not included as, at the time, it was felt that this involved more sociological specialization in cultural research and analysis. This may be viewed as an error specifically in light of ecotourists' expectations to learn about, not only the natural environment, but also the native cultures. Another method not used was an age-specific questionnaire for youth to identify their perceptions relating to life in the north. Time and finances disallowed any chance to gain insights into how area youth view ecotourism in relationship to themselves and the future.

Community workshops involving representative groups of residents would have been preferable as a methodology as the results would not only have identified needs and issues, but perhaps more

appropriate implementation amenities or programs.

After weighing the benefits of these options, it was decided to use the questionnaire mail-out method. Other Canadian attitude surveys, such as the Angus Reid comparative city study<sup>1</sup> and the Greater Toronto Area study,<sup>2</sup> which had been developed and administered by various agencies were used to inform the questions for the Churchill survey. One of these was an attitude survey administered by the town of Whistler, B.C. to determine the residents' perceptions of visitor impacts upon the local social and economic factors and assisted in the development of informative questions.<sup>3</sup> Local agencies, whether public or private, were not consulted in the development of the questionnaire.

The positive aspects of using a self-administered questionnaire method:

- The cost is low compared to other methods;
- Biasing error is reduced as respondents are not influenced

<sup>&</sup>lt;sup>1</sup>Angus Reid Group, Inc., <u>The Urban Canada Study</u>, (Vancouver: Angus Reid Group, Inc., 1997), 1-971-09.

<sup>&</sup>lt;sup>2</sup>Environics Research Group, <u>An Enviable Quality of Life</u>, (Toronto: GTCC, Oct., 1995).

<sup>&</sup>lt;sup>3</sup>Gill, Dr. Alison, <u>1995 Whistler Community Survey</u>, (Vancouver: Simon Fraser University, Dept. of Geography, 1991).

by interviewer characteristics or techniques;

- Questionnaires provide a high degree of anonymity for respondents. This is especially important when sensitive issues are involved;
- Respondents have time to think about their answer and/or consult other sources; and
- Questionnaires provide wide access to geographically dispersed samples at low cost.<sup>4</sup>

A non-probability convenience sample design was used due to the low population count of 1,089 residents. All names within the Churchill section of the Manitoba Telephone Directory became the sample group selected for study. A minimal bias occurs as this sample group does not include those residents who may have unlisted telephone numbers, those without telephones, or multiple individuals/singles within one household.

A cover letter was written to identify the researcher, the purpose of the research and the expected one month return date. A post-paid return envelope addressed to the University of Manitoba was included with the questionnaire to induce a greater response rate. In total, two hundred and eighty-five (285)

<sup>&</sup>lt;sup>4</sup>Frankfort-Nachmias, C. and D. Nachmias, <u>Research Methods in the Social Sciences</u>, (New York: St. Martin's Press, 1996), p. 226.

surveys were mailed out during the month of May in 1997. Eight questionnaires were returned due to out-migration (changes of address), while fifty-eight (58) Churchill residents responded for a twenty-one percent (21%) return rate. According to research methods and standards, a sample size of 1,000 persons is considered to the minimal sample size required for representative results, but due to the low population base of Churchill (population 1,089 in 1996), this was not possible. Due to financial constraints, neither follow-up letters nor long distance telephone calls were administered to improve response rates.

The questions were quantitative and included factual, ranking, closed and open-ended questions (refer to Appendix 2). Factual questions identified demographic factors, ranking questions determined attitudes of the community in terms of import and priorities of various local issues, while the close-ended questions simplified and limited answers related to employment. Open-ended questions were included to elicit insights into unidentified issues unknown to the author.

Some hypothesis directed the development of the attitude survey questionnaire for Churchill. These include that:

Low incomes exist for residents employed in service sector;

- When interaction occurs between residents and visitors it may be either positive or negative or both;
- The community residents themselves may not view Churchill as a first choice destination, but that other communities are superior through the provision of better services;
- The community may not be a socially interconnected network of residents (antisocial/racist/anomic) and may be apathetic to the benefits of ecotourism or mutually beneficial leisure/recreation facilities;
- Residents partake of few outdoor recreational activities
   with more emphasis on indoor activities;
- Those who do recreate outdoors, do not have adequate facilities which meet their needs;
- The residents may have insights into environmental or wildlife degradation which may not be evident in current scientific research literature but which may affect ecotourism;
- The youth are perceived as "problems" to local society due to their boredom and are not involved in any capacity of the service sector;
- There is minimal interaction between tourists and residents;
- There is low awareness of what ecotourism may provide in terms of future opportunities for local residents.

The attitude survey results are detailed in the following chapter and are presented in a simplified format as either a chart figure or table and attempt to follow the ecotourism principles outlined in Chapter 2.

# Chapter 5 Findings & Analysis of Churchill Attitude Survey

The results of the attitude survey administered to the Churchill residents provided information, not only in context of ecotourism, but of the demographic profile of the respondents as well. The following sections highlight characteristics of respondents, their views and attitudes of their town, tourism and the natural environment.

# Demographic Profile of Respondents

The majority of respondents were over the age of 36 (Figure 4) and

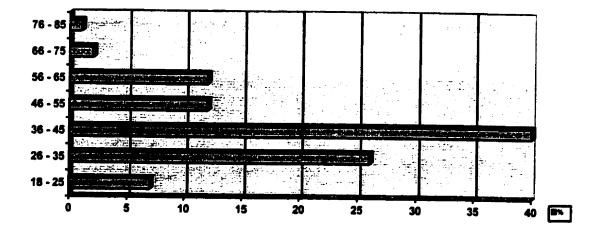
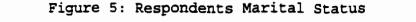


Figure 4: Respondents Age Groups



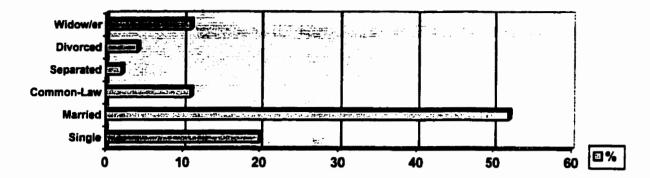
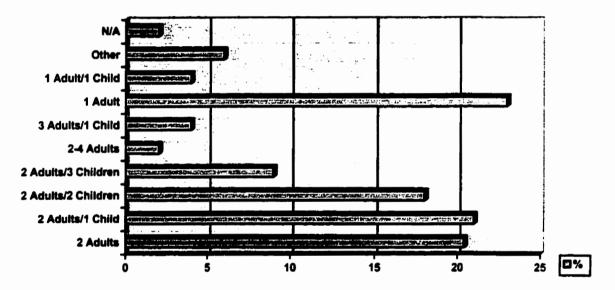
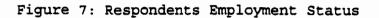


Figure 6: Household Composition of Respondents



were generally living with a partner (married or common-law) and children (Figures 5 and 6). Most are employed with a total household income between \$40,000 and \$80,000 per annum (Figures 7 and 8). They reside mainly in rental accommodation and do not migrate between homes (Figures 9 and 10). The majority of respondents have lived in Churchill for well over 10 years representing a very stable population (Figure 11).



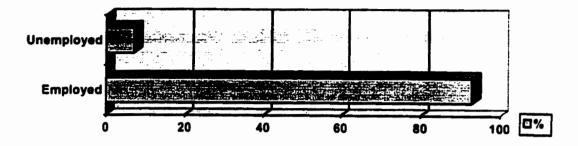


Figure 8: Total Household Income of Respondents

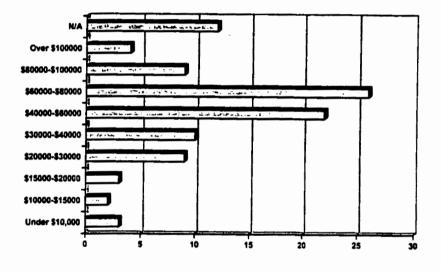
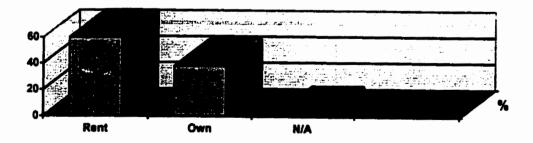


Figure 9: Rent / Own Home



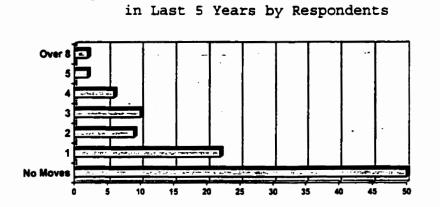


Figure 11: Respondents Years of Residence in Churchill

Figure 10: Number of Move to New Residence

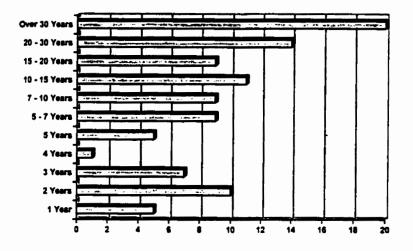
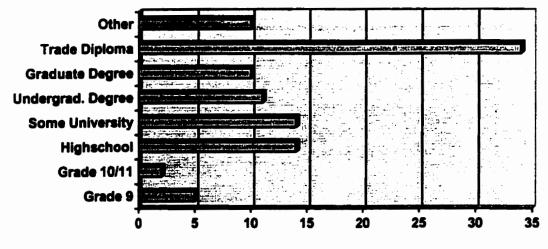


Figure 12: Education Level Attained



Most respondents have completed high school and have pursued further studies, mainly in trade schools (Figure 12). This result does not correspond well with which employment sector they identify themselves as employed in (Figure 13). Most felt that their employment fell under the category of service sector, rather than trade and industry. Secondary to this sector were health and tourism as key employment areas. Most positions are indeterminate and represent full-time, year-round employment

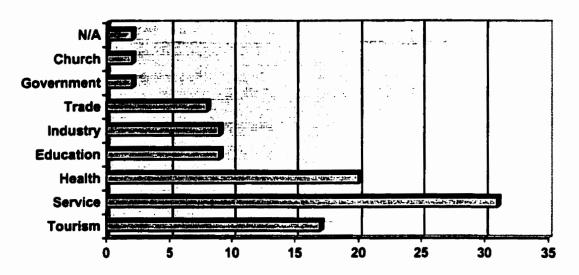


Figure 13: Employment Sector

(Figures 14 and 15). However, if they were to lose their jobs, they would leave Churchill to find work in other communities (Figure 16). Again of significance, is that should the health centre be transferred north to the Keewatin Region in Nunavut, the majority of respondents maintain that their current employment would not be affected (Figure 17).

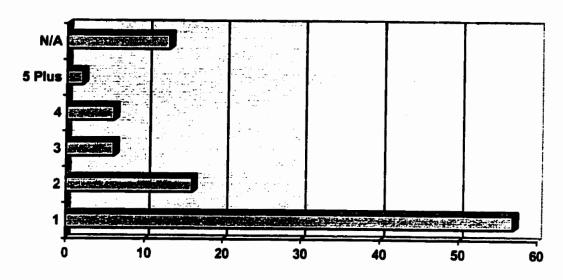
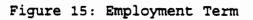


Figure 14: Number of Jobs Held in One Year



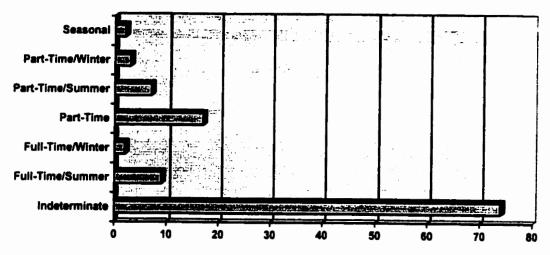
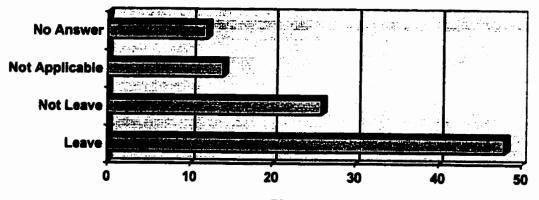


Figure 16: Leave Churchill Due to Job Loss



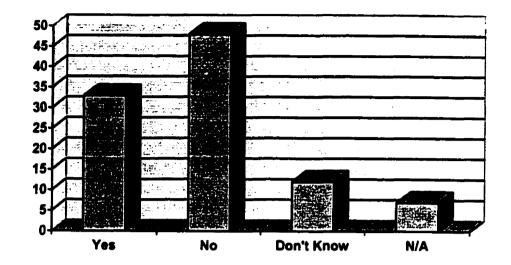


Figure 17: If Health Centre Transferred, Closure Would Affect Current Employment

The respondent group of the attitude survey is representative of the majority population within the 25 to 54 age group identified in the Statistics Canada Census Neighbourhood Profile of 1996. Those respondents who are retired identified similar opinions of local and ecotourism issues and were not in contrast to the majority age group. The minority who were unemployed also agreed with the majority and wrote comments reflective of employed respondents.

### Perceptions of Churchill

The following words capture what respondents feel are the key characteristics of residing in Churchill:

• freedom

• slower lifestyle (no smog, no traffic)

- friendly people
- beautiful scenery
- natural habitat
- wildlife (uniqueness polar bears/whales)
- quiet.

What are viewed as dislikes of residency include:

- long, cold winters (the weather)
- cost of travel (to other destinations)
- closure of facilities when tourism season complete
   (December)
- cost of living
- small town politics.

These characteristics are those which should be respected by visitors to the area. What are both attractions and detractions to residents are reflected in what ecotourists find enjoyable in destination travel.

# Community & Tourism Issues

Ecotourism may not be depended upon as a single economic resource base for Churchill. Such an emphasis would make many residents dependent upon a changing and volatile market. A balanced economy, or one which provides a diversity of industry and trade, ensures that if one sector of Churchill's economy experiences negative financial losses, another sector would provide a positive balance and reduce the impacts. Table 5 outlines the results of how the Churchill respondents perceive the economic impacts from ecotourism.

Churchill respondents strongly support the fact that the community should diversify its economy (Table 5: No. 9). This is supported by their agreement with the statement that dependency upon ecotourism could make Churchill vulnerable to economic changes (Table 5: No. 3). The community is well aware of the consequences of reliance upon one sector of the resource economy.

At the same time the awareness exists of the value which ecotourism provides within the region and that the community should continue to actively encourage this resource. It is perceived that ecotourism provides worthwhile employment opportunities for residents, and does not economically benefit only a small minority of residents (Table 5: Nos. 10 and 21). Yet with these perceptions, the respondents were neutral or indecisive in terms of whether or not ecotourism jobs provide low wages (Table 5: No. 20) and of their satisfaction with the Town's future vision for Churchill's ecotourism (Table 5: No. 19). Yet respondents do believe that the benefits of ecotourism outweigh the negative consequences of ecotourism development (Table 5: No. 1). This signifies that what development may have occurred to date in Churchill, in fact has not negatively impacted upon the residents' lives, or has had minimal impacts.

No.	Statement	Mean Score (5 - Strongly Agree)
1	The benefits of tourism outweigh the negative consequences of tourism development.	4
2	Because of tourism there are more parks and other recreational areas and facilities which local residents can use.	3.12
3	Dependency upon tourism could make Churchill vulnerable to economic changes.	3.76
4	I believe tourism should be actively encouraged in the Churchill region.	4.35
5	The quality of life for residents in Churchill may deteriorate at the expense of increasing tourism.	2.12
6	Churchill residents need places and facilities that are separate and apart from those used by tourists.	2.43
7	Residents have little control over tourism initiatives which take place in Churchill.	3.03
8	Tourism encourages a variety of cultural activities by the local population (such as arts, crafts, music, etc.).	3.74
9	Churchill should try to diversify its economy.	4.38
10	The tourism industry provides many worthwhile employment opportunities for residents of the Churchill region.	3.95
11	The quality of life in Churchill has improved because of tourism.	3.79
12	I am against new tourism facilities which will attract more tourists to Churchill.	1.78
13	It is easy to make friends with a wide range of people in Churchill.	4.03
14	Tourism has a positive impact on my life.	3.69
15	An increase in tourists visiting Churchill may negatively impact upon local wildlife.	2.91
16	The environmental impacts resulting from tourism development are relatively minor.	3.12
17	The Flats should be left in its present state as it represents the historical legacy of the Churchill River.	2.74
18	The Flats provide potential for hiking trails.	3.21
19	I am satisfied with the Town's vision for Churchill's future in regards to tourism.	3.16
20	Most of the jobs in tourism are low paying.	3.21
21	Only a small minority of residents in Churchill benefit economically from tourism.	2.88
22	If I had to move away from Churchill I would be sorry to leave.	3.81
23	i would rather live in Churchill than anywhere else.	3.12

# Table 5: Importance of Ecotourism

Supporting the positive economic opinion respondents have of ecotourism development, is their approval of new tourism facilities which may attract an increased number of ecotourists to their community (Table 5: No. 12). Complementing this, is the respondents identification of desired recreational/leisure facilities in Churchill which would be mutually beneficial to both residents and visitors. Figures 18 and 19 highlight both summer and winter leisure activities which respondents enjoy. The main summer activities include: hiking, socializing with neighbours, driving (all-terrain vehicles), cycling and picnicking (55% to 80% of respondents; Figure 18). Less popular activities are participating as a birder, photographer, kayaker and hunter. In winter, skidooing is the most important outdoor recreational activity (57% of respondents; Figure 19).

Figure 20 details which outdoor leisure amenities respondents would appreciate having within the Churchill vicinity. Hiking and cycling trails would have many users should these be provided (33% to 36% of respondents), as well as a marina on the Churchill River for those involved in boating activities (33% of respondents). Another amenity which complements summer leisure activities, would be the provision of picnic areas (28% of respondents).

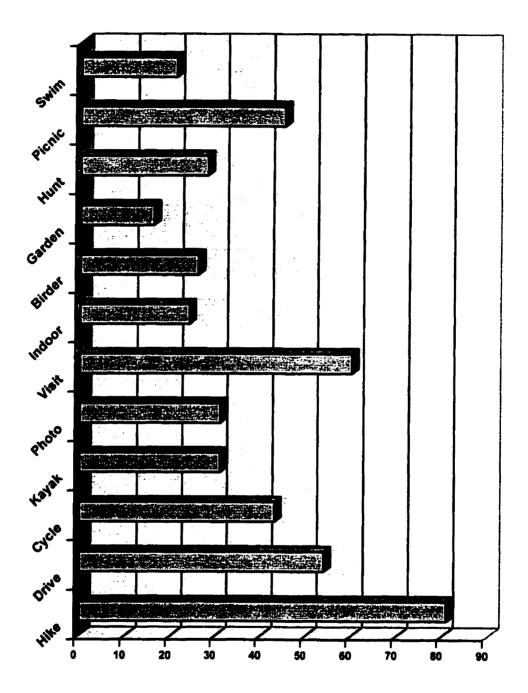
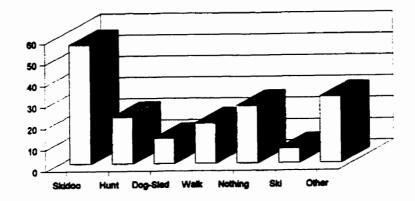


Figure 19: Winter Activities



Respondents were requested to identify what they felt were the issues which existed in relationship to tourism and polar bears, birds, whales and plants. The question (Appendix 2, No. 47) asks "Do you feel there are any issues related between tourists and: polar bears; birds; whales and plants?" Because this was an open-ended question, the respondents were able to openly state their views. The following paragraphs provide the recurrent insights respondents provided.

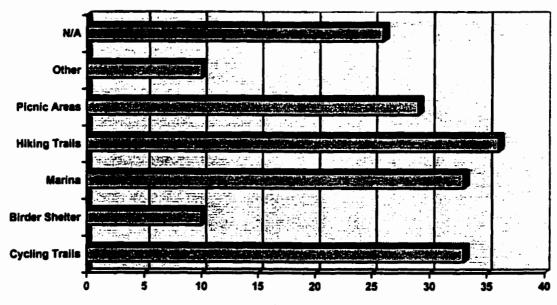


Figure 20: Potential Leisure Amenities

The two greatest concerns respondents viewed as tourism affecting polar bears include the destruction of the viewing area by the touring tundra buggies (75% of respondents) and the baiting of the polar bears (50% of respondents). They felt that the viewing area is over-run with vehicles in too concentrated and congested an area. One site mentioned is at Gordon Point. One respondent felt that the bears are becoming too tame and are lingering by the buggy motel licking tires (which have allegedly been smeared with attractive flavours, such as fish oils).

There appears to be a need, in the views of the respondents, for the education of the ecotourist. Many responses indicate that respondents thought that the ecotourists are naive in their knowledge of polar bears: that bears may be vision (personal safety) and should not be fed (eg. bear baiting for or by photographers at Cape Churchill).

Another repetitive comment was that there is inconsistency in the quality of tour guides. Respondents felt that those involved in educating tourists, should themselves be educated in Churchill's natural resources.

A minority of respondents (20%) felt that the Province of Manitoba's Department of Natural Resources should increase its

presence at the polar bear viewing site to ensure that baiting of the bears does not occur. Another criticism of the Department is that there may be too great a role taken in protecting the town residents through the darting of the bears (polar bear jail) which ensures that the bears do not enter the town site.

Respondents felt that the biggest issue in relationship to the birds in the Churchill area, is the birder. These ecotourists show little respect for the bird habitats and are viewed as harassing the birds through indiscriminate trampling of sensitive tundra and wetlands to reach bird nesting grounds. Birds then leave the nest never to return.

These ecotourists have a habit of not respecting local traffic regulations. They will stop vehicles in the middle of roads to view birds. This creates hazardous driving conditions for local drivers, not to mention general disruption to local vehicular traffic.

There were suggestions made by respondents that physical barriers were required to guide birders/ecotourists through bird habitat areas. Suggestions included the creation of self-guided trails, viewing areas, increasing the number of educated guides to lead tourists and providing special rest stop areas away from

vehicular traffic movement.

Some local activity is also viewed as harming bird habitat. Wetlands and ponds are polluted with garbage and experiencing ground seepage from the old dump sites. Another danger to birds is that posed by all-terrain vehicles which disrupt bird mating and nesting habits.

Another opinion of respondents is that they feel there are too many geese in the area - both snow and Canada geese. One solution many respondents agree with is to harvest the geese to control a population over-growth.

The majority of respondents (60%) do not feel that there is a problem between ecotourists and whales. The only concerns mentioned were potential water pollution caused upstream of Churchill which may affect the whale birthing areas. These respondents feel that the tour operators control the activity well and provide reasonably priced whale viewing tours for local residents. A very small minority (10%) mentioned that the environment and habitat should be protected.

The question of impacts upon plant life provided an array of responses. One respondent noted that although many rare plant

species grow in the tundra, tour groups who come to view flowers are scarce. Another point raised was that there is a lack of local expertise or available knowledge in relationship to local flora except at the academic level.

A general comment was that there is a need for designated trails so as to ensure that both ecotourists and residents do not trample the fragile plant growth in the area. Again the tundra buggies are viewed as destroying vast areas of vegetation due to tour operators driving off of designated/developed trails.

Another point raised was that of past gravel excavations in the Churchill town area. These sites were stripped of plant life and have remained barren since the sites were abandoned by road and construction crews. No group or institution has claimed responsibility, nor rehabilitated these sites and they now remain unused and unsightly for both residents and visitors.

# Northern Tourism

Survey respondents were requested to compare Churchill to other northern communities as a place to visit and to rate whether certain factors were much better or much worse (Appendix 2, Question 25). Churchill was rated as the best place to visit compared to other northern towns and hamlets (90% of respondents)

due to the wildlife, scenery and historical attractions which respondents consider to be superior to other northern locations (Table 6). Recreational activities, as well as hotels and restaurants are viewed as being somewhat better than other destinations. Where Churchill is weak is in the weather, retail shopping, entertainment and visual appeal of the town.

# Churchill Issues

In the attitude survey respondents were asked in an open-ended question what they considered to be the biggest issue in Churchill at that time (Appendix 2; Question 46). Ironically,

Facilities/Attractions Provided to Tourists by Other Communities	Merit Scale (5 - Much Better)	
Wildlife / Scenery	4.5	
Historical Attractions	4.1	
Recreational Activities	3.4	
Hotels / Restaurants	3.3	
Retail Shopping	2.5	
Weather	2.3	
Entertainment	2.3	
Visual Appeal of Town	2.2	

Table 6: Comparison of Churchill to Other Northern Communities as a Place to Visit

the majority of respondents (80%) stated that they felt that no major issues exist in Churchill. Those respondents who did

identify concerns generally posed rhetorical questions/appeals to the author to contact the rail line companies to ensure continuation of the rail line and port facilities. Minimal responses were received (2%) which identified any social or cultural concerns or considerations.

In another question respondents were asked to note what key issues they felt were affecting Churchill's youth (aged 15 to 18 years) (Appendix 2; Question 47). The majority of responses to the open-ended question identified boredom as the biggest issue affecting youth. As a result of this state, the youth were allegedly engaging in alcohol/drug abuse and general negligent behaviour. No solutions to this dilemma of boredom were offered, although these were not requested in the questionnaire itself.

# Additional Insights

Respondents are very supportive of their town. Many identified the amenities which Churchill offers, not only in terms of the natural environment, but in active local individuals. These are individuals who educate themselves in specific areas of expertise, such as tundra botany, and then share their knowledge and understanding not only with residents but with visitors as well.

Many respondents felt obligated to inform and educate the author with insights into local social and economic factors to ensure that no misunderstanding exists as to the true essence of the Churchill community. A very small minority of respondents were

antagonistic to researchers in general whom they viewed as invading their privacy, while being ignorant of northern life. This opinion was further reinforced with the fact that they felt over-studied without experiencing benefits from the research results in terms of visible actions.

# Summary

The demographic profile of respondents correlates significantly to the profile of ecotourists. They are older, well-educated and earn a substantial annual income. Although it may be perceived as an assumption, it may be surmised that recreational and leisure activities may be similar between the two groups.

Respondents recognize both the positive and negative aspects of their community. These are insightful in providing a platform towards promoting opportunities which support the positive characteristics (eg. friendliness of residents, proximity to wildlife) while improving or countering the negative ones, such as the isolation of Churchill or the boredom of youth. In general these insights are helpful in developing activities or facilities for both residents and visitors which recognize the social, economic and natural environments, and provides a competitive edge of Churchill in the northern ecotourism market. The subsequent chapter analyzes these opportunities and identifies implementation opportunities.

# Chapter 6 Analysis

Analyzing the survey results, in conjunction with the background information and literature, provides the basis for recommendation of opportunities and solutions. Such recommendations must not be viewed as finite, but as a platform for further discussion and potential implementation strategies. To facilitate comprehension of the relationship between the information provided in the preceding chapters, the analysis follows the five ecotourism principles presented in the literature review of Chapter 2.

# Ecotourism should be one part of a balanced economy

In the literature cited in Chapter 2, various authors noted that ecotourism has been viewed as a financial solution to ensuring survival of smaller, rural communities. Developing one economic sector, while sacrificing other sectors, is not recommended as it creates economic limitations to future growth and opportunities. Substantiating the fact that ecotourism is insufficient as a main economic base, respondents of the attitude survey supported the fact that Churchill should continue to support a diverse economy.

The provincial government has recognized the importance of economic diversity in rural communities through its rural community roundtable process. At the time of this research, the Province of Manitoba, along with the Winnipeg Airport Authority and Local Healthy Services were in discussions with the Government of Nunavut to develop partnerships to ensure the economic vitality of both northern Manitoba, as well as the Keewatin Region of Nunavut located immediately north of Churchill across the provincial border.

As well, the American company OMNITrax which owns the Bay Line railway and the Churchill port has continued its marketing strategy to lure North American industrial, agricultural and commercial institutions to use its short-rail transportation services and seasonal port facilities.

The survey results highlighted the fact that the respondents work in diverse economic sectors. This signifies that Churchill is not as reliant upon ecotourism as other rural Canadian communities may be.

The use of ecotourism environments must allow for long-term preservation and for use of those environments The literature review noted that damage to natural environments

occurs through ecotourism activities. Soil compaction by hikers' and all-terrain vehicles affects the resilience and future life of the tundra. Wildlife behaviour (mating/spawning) and habitat (mating/spawning) is disrupted by ecotourists who believe that through their appreciation of nature, their actions are not negatively impacting native species. The survey respondents identified "birders" to be the highest perpetrators of insensitivity to wildlife habitat. Contradicting the definition of an ecotourist who travels to learn, the birder is a "tourist" in competition with others (to witness unique bird species).

Survey respondents also cited the tour group businesses as guilty of baiting polar bears. The need to satisfy clients' demands overrules the need to protect the wildlife from behavioural alterations.

# Ecotourism should respect the character of an area

In the case of many northern communities, it is the residents who determine the character of a destination. But as noted in the survey results, the respondents felt that Churchill was a superior destination compared to other northern communities. What was of concern was that increasing choices in services, such as entertainment and retail, would improve the attractiveness of the town.

As well respondents are concerned with the visual image/urban design of their town. Northern communities have been built using volume construction approaches - one or two housing designs used throughout the north. Discerning variations between northern communities' architecture is difficult, if not impossible.

# Ecotourism must provide long-term economic benefits

One of the dilemmas of ecotourism is that when historical and natural features are destroyed over time at one destination, the tourists will move on to other destinations. It must be remembered that travelling to extreme global locations is currently a trend. Ensuring that Churchill remains an attractive destination should be the goal of both the government as well as the local Chamber of Commerce.

# Ecotourism should be sensitive to the needs of the host population

In ecotourism destinations, the visitor population's needs have been recognized as overriding the host population's needs. In some cases, providing facilities for visitor's activities does benefit the host population but generally incurs costs to the host group.

Survey respondents noted various recreational activities in which

they participate. Most of these activities require infrastructure of some sort, whether pathways, docks or built structures. Generally, the host population's activities are low cost activities: hiking, kayaking, skiing, and bicycling for example.

Implementation recommendations follow in Chapter 7 and are detailed under the principles of ecotourism.

# Chapter 7 Summary, Conclusion & Recommendations

The final chapter summarizes the practicum and provides a conclusion and review of the practicums' contents and research process. The recommendations follow this commentary and follow the guiding principles of ecotourism outlined in previous chapters.

# Summary

The recommendations which follow the conclusion are not definitive to resolving the social, economic or natural environmental issues involved with ecotourism. They are provided as a platform for further discussion by Churchill residents, business owners, researchers and the various levels of government by identifying creative opportunities provided by the ecotourism market. With today's communication capacity of the internet and visual interface of teleconferencing, these various stakeholders have access to cost-effective and timely discussions.

#### Conclusion

Chapter 1 identified that the practicum's objectives which were

- analyze whether social impacts had occurred to Churchill's residents by ecotourism;
- analyze the community's perceptions regarding local environmental impacts caused by ecotourists;
- identify linkages between the residents leisure activities and those of ecotourists;
- explore the complementary nature of ecotourism principles with provincial government objectives through implementation opportunities.

The following section details whether these objectives were met through the practicum's research and analysis.

Objective 1: The literature cited in Chapter 2 identified that ecotourism activities in isolated destinations may incur negative socio-economic impacts. The survey results did not support this. Instead, the survey's respondents support and encourage ecotourism as a positive social and economic activity for Churchill.

Objective 2: The respondents did raise concerns in relationship to environmental impacts caused by ecotourists. These included birders trampling and disturbing wild fowl from their natural habitats to tour operators allegedly baiting polar bears thereby

to:

causing potential disruption to natural feeding processes. Of concern, was the minimal recognition by Churchill respondents of negative impacts upon native flora. The majority responded to the open-ended question with the words "not an issue."

Objective 3: In terms of recreation and leisure activities common to both residents and ecotourists, hiking and photography would be the most important aspects identified in both the literature, as well as survey responses. The ecotourist profile information combined with the survey results identifies future opportunities for amenity development.

Objective 4: Government objectives and ecotourism principles strive to attain the same goal of social and economic equity for rural residents. The results of the survey support the broad government objectives by providing more insightful detail by Churchill residents. Financial and professional support of action plans for various Churchill interest groups should be the main directive of the Province of Manitoba's Departments of Rural Development and Industry, Trade & Tourism.

# Review of Process

The experience of developing practical applications to theoretic principles was insightful in substantiating planning

practitioners' ongoing advice throughout graduate education that theory informs practice. Ecotourism principles provided the vehicle for both analysis and recommendations and were key in providing guidance in limiting the expanse of available knowledge. But it appears to also be a paradox, that although the principles provided guidance and limitations, they are, by nature, comprehensive. Due to the short-term time period of graduate research (as well as personal financial limitations), it is difficult to provide comprehensive results and recommendations. This creates the need to provide opportunities for continued research.

One suggestion would be to administer a similar questionnaire every five years to Churchill residents. This would enable future analysis of time-relevant changes within the local ecotourism market. This would provide information as to what factors within the Churchill ecotourist services have improved or deteriorated allowing an effective response by the relevant stakeholders.

Another recommendation would be to administer a similar attitude survey to Churchill's ecotourists rather than an exit survey. This could identify what they may have viewed as local social or economic issues, as well as commentary on the local services rendered such as: whether or not they would prefer greater access

to the host population, activities which they would have preferred, but are not offered, etc. This would provide an insightful cross-reference between the needs of the host population and the needs of the visitor population.

Churchill was at a crossroads when this research was initiated. Over the two year time period, many positive economic development opportunities have been occurred. The new Nunavut Territory will provide continued transportation opportunities to Churchill, supported by the private sector company located there. The key to the future, in terms of the local environmental attraction (bears, whales, birds), is to create a strategic plan which assists in educating not only the local community residents, but assists the youth in developing employment skills through partnerships so that present ecotourism activities meet the needs of the future.

#### Recommendations

The recommendations, which are provided under the five principles of ecotourism detailed within the preceding chapters, conclude the practicum.

# Ecotourism should be one part of a balanced economy

1. Supporting respondents views of the need for a diverse

economy in Churchill, it is important for the local government administration to continue marketing the benefits of Churchill's transportation facilities. With the creation of Nunavut as a new territory, and the potential construction of a highway linking Rankin Inlet to Churchill, the local government should develop a transportation planning strategy which links resource extraction locations in Nunavut, through Churchill's transportation facilities and amenities to processing facilities throughout North America.

2. Chapter 1 identified that ecotourists desire adequate emergency health services within their chosen destination area due in part to the older age group they represent. As well, many survey respondents identified that they would leave Churchill should the Health Centre's services be terminated. To ensure its relevance to servicing not only northern residents, but ecotourists as well, the Province of Manitoba's Department of Industry, Trade & Tourism should recognize that provision of health services is important to ecotourists. This is supported by tourist market data which identifies northern Manitoba as the main destination within Manitoba.

3. Since qualified medical personnel are not currently trained in Nunavut, this fact should ensure the continuation of Churchill's health services for the short-term. It is recommended that the Health Services facility analyze the opportunity for providing medical education to northern residents/students which would assist in securing its importance and continuation in the northern region. As well, it may provide an educational goal for Churchill's youth. A cooperative educational program may be developed which allows youth to work in the health services to learn the skills required to attain relevant medical diplomas and degrees. Another youth-oriented program may involve youth volunteering their time and services in the capacity of candy-stripers in the health facility to support the medical administration while increasing their employment skills.

# The use of ecotourism environments must allow for long-term preservation and for use of those environments

4. It is recommended that regional planners designate protected areas for wildlife in their land-use plans and by-laws within the town and surrounding areas. Through this mechanism, implementing pathways and viewing areas for ecotourists (eg. birders) is simplified yet enforced. Private consultants' recommendations for interpretive and

directional signage will then follow a pre-determined course.

5. Another recommendation is to develop polar bear viewing policies. The Department of Natural Resources should create a specific ecotourist and wildlife viewing policy for Churchill which states that such activities as baiting are not permitted. Monetary compensation for seasonal losses incurred by polar bear tour companies (where clients may not witness polar bears during their visit) may require analysis to further deter this practice.

## Ecotourism should respect the character of an area

- 6. Retaining the simplicity and accessibility of Churchill's residents should be continued. Inviting ecotourists to participate in daily recreation and leisure activities will provide the unique experience visitors crave. This participation should be recognized as an informal process and not be formalized into programs or administrative structures.
- 7. Creating a unique exterior urban environment should be sought. In the past, the Town of Churchill has hired private consultants to address the urban design issues. The

product from this consultation was a strategic plan to guide opportunities for financial partnerships between two levels of government (local/provincial). It is recommended that the Town hire a landscape architectural group to develop a design guidelines manual which the Town and its residents could follow over a short-term period (10 years maximum).

## Ecotourism must provide long-term economic benefits

- 8. The local government should develop indicators which can provide a measure identifying areas negatively impacted by ecotourism, i.e. soil compaction, structural deterioration of architectural features such as the Prince of Wales fort.
- 9. Respondents noted that there were insufficient activities for area youth. Due to their boredom, they are partaking in activities which are unacceptable to many respondents (drinking, drugs, etc.). One goal of sustainable development is to ensure benefits to future generations. The youth represent that segment of the population.
- 10. To create an educational partnership program between the Department of Natural Resources and the local public schools. The goal of the partnership would provide employment training to high school youths in such areas as

guiding and interpreting regional features to ecotourists. During the summer months, the Tourism Department should develop employment opportunities for these students which would support the needs of both the youth and local ecotourism businesses.

## Ecotourism should be sensitive to the needs of the host population

- 11. The Town of Churchill should develop a recreational/leisure activity action plan outlining a ten-year implementation strategy. This plan should identify potential partnerships between private sector organizations and businesses who could provide professional expertise or building materials for facilities/infrastructure. Area youth could provide the labour for construction of such facilities as picnic areas, outdoor skateboarding parks or bicycle paths. Such facilities should primarily benefit the host population but complement ecotourism opportunities as well.
- 12. The literature review also mentioned the concerns of commoditisation of cultural groups. Churchill has a significant First Nation's population which may be perceived as a marginalized group, although survey respondents did not identify racism as an issue within the survey. Historically

lack of communication between racial groups in Churchill has deterred support of traditional lifestyles and the guidance of incorporating those traditions within educational ecotourism experiences. The literature identifies that an ecotourist travels to learn. Hence this should be viewed as both a cultural and economic opportunity for the host population.

- 13. The First Nation's should be supported in developing ecotourism educational opportunities. Such opportunities could include: traditional hunting and fishing trips identifying techniques used over time (changes from traditional methods to modern); overnight camping trips providing lessons in traditional foods and food preparation techniques; spiritual retreats for northern residents and ecotourists using traditional healing methods.
- 14. In the Town of Churchill lies an area known as the Flats. Respondents identified their neutrality regarding the historic legacy of this area as representative of traditional lifestyles. To many residents, the structures on this site (particle board facades) should be demolished. Others believe that it is the inherent right of the site's users to remain. The site's users were not identified as a separate category within the demographic section of the attitude survey, so any animosities or biases have not been

calculated or included in this research.

15. In the arctic communities in Nunavut, the Inuit's traditional lifestyle demands locating facilities near waterways. Although now urbanized, the majority continue to locate personal use facilities (such as white army tents) by the water and these facilities tend to be well-maintained sites.

It is recommended that the Town of Churchill zone the Flats area for traditional use. This would be a new type of zoning area, unique to the north and not used in southern urban areas. The development plan policies should be developed in coordination with the local population to determine appropriate uses of such a zone, as well as appropriate structures/facilities. This approach would provide a positive approach to solving both cultural and recreational issues.

### BIBLIOGRAPHY

- Angus Reid Group, Inc., <u>The Urban Canada Study</u>, Vancouver: Angus Reid Group, Inc., 1-971-02, 1997.
- Bates, Judy et al, <u>Monitoring Quality of Life in Canadian</u> <u>Communities: A Feasibility Study</u>, Ottawa: CMHC, 2<sup>nd</sup> Ed., 1996.
- Bath, Alistair, <u>Public Atittudes Toward Polar Bears: An</u> <u>Application of Human Dimensions in Wildlife Resources</u> <u>Research</u>, St. John's, Memorial University of Newfoundland, 1990.
- Becker and Bradbury, <u>Community Development Journal</u>, New York, 27/4, October, 1992.
- Berkes, Fikret and Helen Fast, <u>Aboriginal Peoples: The Basis for</u> <u>Policy-Making Toward Sustainable Development</u>, Winnipeg: University of Manitoba, 1997.
- Burkey, Stan, <u>People First: A Guide to Self-Reliant</u>, <u>Participatory Rural Development</u>, London: Zed Books Ltd., 1993.
- Bowles, Roy T., <u>Social Impact Assessment in Small Communities</u>, Toronto: Butterworths & Co. Ltd., 1981.
- Caldwell, L.K., <u>Environment as a Focus for Public Policy</u>, Texas: A&M University Press, 1995.
- Canadian Heritage Parks Canada, <u>Developing A Management Plan for</u> <u>Prince of Wales Fort National Historic Site</u>, Churchill: Government of Manitoba, 1996.
- Canadian Tourism Research Institute, <u>1994 Canadian Travel Survey</u>, Winnipeg: Department of Industry, Trade & Tourism, Government of Manitoba, 1994.
- \_\_\_\_\_, <u>1994 Economic Impact of Tourism in Manitoba</u>, Winnipeg: The Conference Board of Canada, July, 1996.

- Churchill Chamber of Commerce, <u>Visitor Information</u>, Churchill: Churchill Chamber of Commerce, 1992.
- Clark, Larry, <u>The Churchill Treeline Round Table's 1996-2000</u> <u>Strategic Planning Report for Community Economic</u> <u>Development</u>, Winnipeg: Government of Manitoba, 1994.
- Eagle, Paul, <u>The Travel Motivations of Canadian Ecotourists</u>, Ottawa: Journal of Travel Research, XXXI (2), 1995.
- \_\_\_\_\_, "Understanding the Market for Sustainable Tourism," Utah: National Recreation & Park Association Annual Meeting, October 12-14, 1994.
- Eagles, P.F.J. and J.W. Cascagnette, <u>Canadian Ecotourists: Whoe</u> <u>Are They?</u>, Ottawa: Tourism Recreation Research 20(1), 1995.
- Edington, John M. and M. Ann Edington, <u>Ecology, Recreation and</u> <u>Tourism</u>, Cambridge: Cambridge University Press, 1986.
- Ekins, Paul et al, <u>The Gaia Atlas of Green Economics</u>, New York: Anchor Books, 1992.
- Environics Research Group, <u>An Enviable Quality of Life</u>, Toronto: G.T.C.C., October, 1995.
- Filion, Fern L., et al, <u>The Economics of Global Ecotourism</u>, Hull, PQ: Environment Canada, Canadian Wildlife Service, 1992.
- Fleck, S. and S. Herrero, <u>Polar Bear: Human Conflicts</u>, Yellowknife: Government of the Northwest Territories, January, 1988.
- Fleming, Mark, <u>Churchill: Ppolar Bear Capital of the World</u>, Wininpeg: Hyperion Press Limited, 1988.
- Foot, David K., "The Age of Outdoor Recreation in Canada," Toronto: Recreation Canada, December, 1990.
- Frankfort-Nachmias, C. and D. Nachmias, <u>Research Methods in the</u> <u>Social Sciences</u>, New York: St. Martin's Press, 1996.
- Friesen, Gerald, "Northern Manitoba 1870-1970: An Historical Outline," <u>People & Land in Northern Manitoba</u>, Winnipeg: University of Manitoba Anthropology Papers, ed. Lithman, Y.G. et al, 1992.

Gill, Dr. Alison, <u>1995 Whistler Community Survey</u>, Vancouver: Simon Fraser University, Department of Geography, 1991.

Guevara, Jose, Convergence, Sydney: Volume 9 / 3, 1993.

- Hall, Colin M., <u>Tourism and Politics: Policy, Power & Place</u>, Toronto: John Wiley & Sons, Ltd., 1994.
- Hall, Peter, <u>Cities of Tomorrow</u>, Oxford: Blackwell Publishers, 1991.
- Honderich, James E., <u>Churchill, Manitoba: The Reliance of a</u> <u>Northern Community Upon Renewable Natural Resources</u>: Waterloo, Wilfred Laurier University, 1984.
- Johnston, Margaret E., <u>Polar Tourism: Patterns & Issues in Arctic</u> <u>& Sub-Arctic Tourism</u>, Toronto: John Wiley & Sons, 1995.
- Keewatin Community College, Churchill Regional Centre and Parks Canada, <u>Tourism in the Churchill Region: 1994 Pilot Project</u> <u>Customer Service Survey of Accommodation, Tundra Vehicle</u> <u>Tours and Parks Canada Visitor Centre</u>, Winnipeg: Keewatin Community College, April 25, 1995.
- Kuehn, Felix, et al, eds., <u>Manitoba Travel Guide</u>, Winnipeg: Manipeg Publications Inc., 1995.
- Lanken, Dane, "Home of the White Bear", <u>Canadian Geographic</u>, Toronto, November/December, 1996.
- Long, P.T., R.R. Perdue, and L. Allen, <u>Rural Resident Tourism</u> <u>Perception & Attitudes by Community Level of Tourism</u>, New York: Journal of Travel Research 28(3).
- Lovel, Hermione and M.T. Feuerstein, "After the Carnival: Tourism and Community Development," <u>Community Development Journal</u>, 27/4, October, 1992.
- Lundberg, D., M. Krishnamoorthy, and M.H. Stavenga, <u>Tourism</u> <u>Economics</u>, Toronto: John Wiley & Sons, Inc., 1995.

\_\_\_\_\_, <u>Tourism Costs: Economics as Applied To Tourism</u>, Toronto: University Press, 1994.

- McCool, Stephen F., <u>How Many is Too Many? Determining Social</u> <u>Carrying Capacity</u>, Portland: Oregon State University, 1991.
- , <u>Limits of Acceptable Change: A Strategy for Managing the</u> <u>Effects of Natuer-Dependent Tourism Development</u>, Montana: Institute for Tourism & Recreation Research, Whistler, B.C. presentation, December 1-3, 1991.
- , "Linking Tourism, The Environment, and Concepts of Sustainability: Setting the Stage," Utah, National Recreation & Park Association, Annual Meeting, Sessional Papers, October 12-14, 1994.
- , <u>The Socio-Economic Consequences of Environmentally</u> <u>Dependent Tourism</u>, Louisiana, Presentation Paper, Travel & Tourism Research Association, 21<sup>st</sup> Annual Meeting, June 10-14, 1990.
- McLaughlin, W.J., <u>Linking Wilderness to Rural Revitalization:</u> <u>Managing America's Enduring Wilderness Resource</u>, Minnesota, University of Minnesota, Tourism Center Conference, 1992.
- Mieczkowski, Zbigniew, <u>Environmental Issues of Tourism &</u> <u>Recreation</u>, Toronto, University Press, 1995.
- Moore, Stewart and Bill Carter, <u>Ecotourism in the 21<sup>st</sup> Century</u>, Tourism Management: April, 1993.
- Newbury, Robert, "Northern Waters: The Discovery and Development of the Rivers of Northern Manitoba," <u>People & Land in</u> <u>Northern Manitoba</u>, Winnipeg: University of Manitoba Anthropology Papers, ed. Lithman, Y.G. et al, 1992.
- Northern Manitoba Economic Development Commission, <u>Sustainable</u> <u>Economic Development: A Plan for Action for Northern</u> <u>Manitoba</u>, Winnipeg: Government of Manitoba, 1993.
- Owen, R. Elwyn and Susan Gammon, <u>Sustainable Tourism Development</u> <u>in Wales</u>, London: Tourism Management, December, 1993.
- Pelesh, R.E., <u>A Tourism-Based Economic Development Strategy for</u> <u>Churchill, Manitoba</u>, Winnipeg: University of Manitoba, 1985.
- , <u>A Wildlife-Based Tourism Development Strategy for</u> <u>Churchill, Manitoba</u>, Ottawa: National Library of Canada, 1989.

- Province of Manitoba, <u>Manitoba's Community Round Tables: Strong</u> <u>People Building a Stronger Tomorrow</u>, Winnipeg: Government of Manitoba, 1991.
- Richardson, Nigel, "Making our Communities Sustainable: The Central Issue is Will," <u>Ontario Round Table on Environment &</u> <u>Economy</u>, Toronto: Government of Ontario, 1993.
- Sage Group, <u>Prospects of Canadian Educational Programs & Learning</u> <u>Vacations for Older Adults</u>, Ottawa: Tourism Canada, Industry Canada, 1993.
- Sly, P.G., <u>Human Impacts on the Hudson Bay Bioregion: Its Present</u> <u>State and Future Environmental Concerns</u>, Winnipeg: Hudson Bay Programme, June, 1996.
- Statistics Canada, "Population Statistics for Churchill (LGD), Manitoba, <u>Community & Neighbourhood Demographic Census Data</u>, Ottawa: Government of Canada, 1996.
- Stieb, D. and K. Davies, <u>Health Effects of Development in the</u> <u>Hudson/James Bay Region</u>, Winnipeg: University of Manitoba, October, 1993.
- The Ecotourism Society, <u>Ecotourism Statistical Fact Sheet</u>, New York: Ecotourism Society, 1998.
- The Professional & Technical Service Centre, Prairie/NWT Region, <u>Call for Proposals: Assessment of the Tourism Potential of</u> <u>Current & Potential Parks Canada Operations in the Western</u> <u>Hudson Bay Area</u>, Ottawa: Department of Canadian Heritage Prairie-Northwest Territories Region, Parks Canada, August, 1996.
- Tourism Research Group, <u>Adventure Travel in Eastern Canada: An</u> <u>Overview of Product & Market Potential</u>, Ottawa: Tourism Canada, 1990.
- Town of Churchill Council, <u>1996 Year-End Council Report</u>, Churchill: Local Government District of Churchill, December, 1996.
- Van der Ryn, Sim and Peter Calthorpe, <u>Sustainable Communities: A</u> <u>New Design Synthesis for Citïes, Suburbs and Towns</u>, San Francisco: Sierra Club Books, 1991.

Wallace, George, and Susan Pierce, "An Evaluation of Ecotourism

in Amazonas, Brazil," Montana: Annals of Tourism Research, 23(4), 1996.

- Webb, A.J., <u>Dissertation</u>: "Environmental Impact of All-Terrain Vehicles in the Cape Churchill Wildlife Management Area," Winnipeg: University of Manitoba, September, 1985.
- Wei, L., J.L. Crompton, and L.M. Reid, <u>Cultural Conflicts:</u> <u>Experiences of US Visitors to China</u>, New York: Tourism Management, 1993.
- Wight, Pamela, "Ecotourism Balancing Sustainability & Profitability," Estonia: International Conference on Central & Eastern Europe, September 22-27, 1997.
- , <u>Sustainable Ecotourism: Balancing Economic, Environmental</u> <u>& Social Goals Within an Ethical Framework</u>, New York: The Journal of Tourism Studies, 4(2), 1993.

## Newspaper Articles

- Winnipeg Free Press, "Banff Report Signals Start of Battle: Study Seeks to Balance Growth, Environment," Winnipeg: Thompson Publishing, October, 1996.
- \_\_\_\_\_, "Churchill Airport Transfer Planned," Winnipeg: Thompson Publishing, December 26, 1996.
- \_\_\_\_\_, "Churchill: New Highway Eyed," Winnipeg: Thompson Publishing, January 16, 1997.

\_\_\_\_\_, "CN Rail Deal Vital: Churchill Officials Fear No Buyers will be Found for Two Northern Tracks," Winnipeg: Thompson Publishing, October 3, 1996.

- \_\_\_\_\_, "Hotel Built of Random Rubble Gets off the Ground in Churchill," Winnipeg: Thompson Publishing, January 12, 1997.
  - \_\_\_\_, "Russia to Send Rocket Gear: ICBM Launchers Slated for Use at Churchill Range," Winnipeg: Thompson Publishing, October 10, 1996.

- , "Steel Lifeline: For Thousands of Northerners, the Bay Lines is Just the Ticket," Winnipeg: Thompson Publishing, December 26, 1996.
- \_\_\_\_\_, "U.S. Railway Firm Hopes to Answer Call of North: OmniTRAX Seeks "Real Presence" in Manitoba," Winnipeg: Thompson Publishing, December, 1996.

#### Appendix 1

## International Conference of Environment Ministers on Biodiversity & Tourism March, 1997, Berlin, Germany

#### BERLIN DECLARATION

- Aware that tourism is an important source of economic wealth and one of the fastest growing sectors in the world economy;
- Considering that tourism is a world-wide phenomenon involving a growing number of people undertaking more long-distance journeys;
- Recognizing that a healthy environment and beautiful landscapes constitute the basis of long-term viable development of all tourism activities;
- Observing that tourism increasingly turns to areas where nature is in a relatively undisturbed state so that a substantial number of the world's remaining natural areas are being developed for tourism activities;
- Concerned that while tourism may importantly contribute to socioeconomic development and cultural exchange, it has, at the same time, the potential for degrading the natural environment, social structures and cultural heritage;
- Taking into account that sustainable forms of tourism generate income also for local communities, including indigenous communities, and that their interests and culture require particular attention;
- Recognizing also that tourism may generate or increase a demand for wild animals, plants or products made thereof for souvenirs, and thus endanger species and affect protection measures;
- Further recognizing that there is a need to value and protect nature and biological diversity as an essential basis for sustainable development;
- Convinced that nature has an intrinsic value which calls for the conservation of species, genetic and ecosystem diversity to ensure the maintenance of essential life support systems;
- Furthermore convinced that sustainable forms of tourism have the potential to contribute to the conservation of biological diversity outside and inside protected areas;
- Bearing in mind that vulnerable areas, including small islands,

coasts, mountains, wetlands, grasslands and other terrestrial and marine ecosystems and habitats of outstanding beauty and rich biological diversity, deserve special measures of protection;

- Convinced that achieving sustainable forms of tourism is the responsibility of all stakeholders involved, including government at all levels, international organizations, the private sector, environmental groups and citizens both in tourism destination countries and countries of origin;
- Determined to work together with all who are involved in the elaboration of international guidelines or rules that harmonize the interests of nature conservation and tourism, that lead towards sustainable development of tourism, and thus, contribute to the implementation of the Convention on Biological Diversity and the objectives of Agenda 21;

AGREE ON THE FOLLOWING PRINCIPLES:

- 1. GENERAL
  - Tourism activities should be environmentally, economically, socially and culturally sustainable. Development and management of tourism activities should be guided by the objectives, principles and commitments laid down in the Convention on Biological Diversity.
  - Tourism activities which directly or indirectly contribute to the conservation of nature and biological diversity and which benefit local communities should be promoted by all stakeholders.
  - 3. To conserve nature and biological diversity as a major resource of tourism activities, all necessary measures should be taken to ensure that the integrity of ecosystems and habitats is always respected. Additional burdens from tourism development should be avoided in areas where nature is already under pressure from tourism activities. Preference should be given to the modernization and renovation of existing tourism facilities.
  - 4. Measures inspired by the principles of precautionary action should be taken to prevent and minimize damage caused by tourism to biological diversity. Such measures should include monitoring of existing activities and assessment of environmental impacts of proposed new activities, including the monitoring of the negative effects of wildlife viewing.
  - 5. Tourism activities which use environmentally sound technologies for saving water and energy, prevent pollution, treat waste water, avoid the production of solid waste and encourage recycling should be promoted to the fullest extent.

Similarly, tourism activities which encourage the use of public and non-motorized transport should be supported wherever possible.

6. All stakeholders including governments, international organizations, the private sector and environmental groups should recognize their common responsibilities to achieve sustainable forms of tourism. Policies and, where appropriate, legislation, environmental economic instruments and incentives should be developed to ensure that tourism activities meet the needs of nature and biological diversity conservation, including mobilizing funding from tourism.

The private sector should be encouraged to develop and apply guidelines and codes of conduct for sustainable tourism.

All stakeholders should cooperate locally, nationally and internationally to achieve a common understanding on the requirements of sustainable tourism. Particular attention should be given to trans boundary areas and areas of international importance.

7. Concepts and criteria of sustainable tourism should be developed and incorporated in education and training programs for tourism professionals. The general public should be informed and educated about the benefits of protecting nature and conserving biodiversity through sustainable forms of tourism. Results of research and concepts of sustainable tourism should be increasingly disseminated and implemented.

## 2. SPECIFIC

- 1. Inventories of tourism activities and attractions should be developed, taking into account the impacts on ecosystems and biological diversity. Coordinated efforts of governments, the private sector and all other stakeholders should be undertaken to agree on criteria to measure and assess the impacts of tourism on nature and biological diversity. In this regard, technical and scientific cooperation should be established through the clearing house mechanism of the Convention on Biodiversity.
- Tourism activities, including tourism planning, measures to provide tourism infrastructure, and tourism operations, which are likely to have significant impacts on nature and biological diversity should be subject to prior environmental impact assessments.
- 3. Tourism activities should be planned at the appropriate levels with a view to integrate socio-economic, cultural and environmental considerations at all levels. Development,

environment, and tourism planning should be integrated processes. All efforts should be made to ensure that integrated tourism plans are implemented and enforced.

- 4. Tourism should be based on environmentally friendly concepts and modes of transport. Negative impacts of transport on the environment should be reduced, paying particular attention to environmental impacts of road and air traffic, specifically in ecologically sensitive areas.
- 5. Sports and outdoor activities, including recreational hunting and fishing, particularly in ecologically sensitive areas, should be managed in a way that they fulfill the requirements of nature and biological diversity conservation and comply with the existing regulations on conservation and sustainable use of species.
- 6. Special care should be taken that living animals and plants, and products made thereof for souvenirs, are offered for sale only on the basis of a sustainable and environmentally sound use of the natural resources and in conformity with national legislation and international agreements.
- 7. Whenever possible and appropriate, economic instruments and incentives including awarding of prizes, certificates and ecolabels for sustainable tourism should be used to encourage the private sector to meet its responsibilities for achieving sustainable tourism. The abolition of economic incentives encouraging environmentally unfriendly activities should be strived for.
- 8. Tourism should be developed in a way so that it benefits the local communities, strengthens the local economy, employs local workforce and wherever ecologically sustainable, uses local materials, local agricultural products and traditional skills. Mechanisms, including policies and legislation should be introduced to ensure the flow of benefits to local communities. Tourism activities should respect the ecological characteristics and capacity of the local environment in which they take place. All efforts should be made to respect traditional lifestyles and cultures.
- 9. Tourism should be restricted, and where necessary prevented, in ecologically and culturally sensitive areas. All forms of mass tourism should be avoided in those areas. Where existing tourism activities exceed the carrying capacity, all efforts should be made to reduce negative impacts from tourism activities and to take measures to restore the degraded environment.
- 10. Tourism in protected areas should be managed in order to ensure

that the objectives of the protected area regimes are achieved. Wherever tourism activities may contribute to the achievement of conservation objectives in protected areas, such activities should be encouraged and promoted, also as cases to test in a controlled manner the impact of tourism on biodiversity. In highly vulnerable areas, nature reserves and all other protected areas requiring strict protection, tourism activities should be limited to a bearable minimum.

- 11. In coastal areas all necessary measures should be taken to ensure sustainable forms of tourism, taking into account the principles of integrated coastal area management. Particular attention should be paid to the conservation of vulnerable zones, such as small islands, coral reefs, coastal waters, mangroves, coastal wetlands, beaches and dunes.
- 12. Tourism in mountain areas should also be managed in environmentally appropriate ways. Tourism in sensitive mountain regions should be regulated so that the biological diversity of these areas can be preserved.
- 13. In all areas where nature is particularly diverse, vulnerable and attractive, all efforts should be made to meet the requirements of nature protection and biological diversity conservation. Particular attention should be paid to the conservation needs in forest areas, grasslands, fresh water ecosystems, areas of spectacular beauty, arctic and antarctic ecosystems.
- 14. The Ministers gathered in Berlin on 7 and 8 March, 1997, for the International Conference on Biodiversity and Tourism
  - Recommend that the Conference of the Parties to the Convention on Biological Diversity draw up in consultation with stakeholders guidelines or rules for sustainable tourism development on a global level on the basis of the "Berlin Declaration" in order to contribute to the implementation of the Convention's objectives,
  - Agree to submit the "Berlin Declaration" to all Parties and Signatory States with the objective of bringing about a discussion at the 4<sup>th</sup> Conference of the Parties in Bratislava,
  - Call upon the Special Session of the General Assembly of the United Nations to support this initiative under the Biodiversity Convention and recommend to the UN General Assembly Special Session to include the subject of sustainable tourism in the future work program of the Commission on Sustainable Development in order to draw increased attention to the objectives of Agenda 21,

 Call on the bilateral and multilateral funding organizations to take into account the principles and guidelines of the "Berlin Declaration" when supporting projects relating to tourism.

Agreed at Berlin, on the 8<sup>th</sup> of March, 1997. The "Berlin Declaration" was elaborated by the following countries and institutions: Bahamas, Brazil, Bulgaria, Costa Rica, Dominican Republic, France, Germany, Greece, Hungary, Kenya, Maldives, Mexico, Namibia, Poland, Portugal, South Africa, Spain, Tunisia; European Commission, United Nations Environment Program, Global Environment Facility, Secretariat of the Convention on Biological Diversity, World Tourism Organization, International Union for the Conservation of Nature and Natural Resources; Deutscher Fremdenverkehrsverband, Deutscher Naturschutzring, Deutscher Reiseburoverband, Forum Umwelt und Entwicklung.

## Appendix 2

## Attitude Survey Questionnaire

## Community & Tourism Issues

Agree / Disagree with following statements: Strongly Agree (5) ; Agree (4) ; Neutral (3) ; Disagree (2) ; Strongly Disagree (1)

- The benefits of tourism outweigh the negative consequences of tourism development.
- 2. Because of tourism there are more parks and other recreational areas and facilities which local residents can use.
- 3. Dependency upon tourism could make Churchill vulnerable to economic changes.
- 4. I believe tourism should be actively encouraged in the Churchill region.
- 5. The quality of life for residents in Churchill may deteriorate at the expense of increasing tourism.
- 6. Churchill residents need places and facilities that are separate and apart from those used by tourists.
- 7. Residents have little control over tourism initiatives which take place in Churchill.
- 8. Tourism encourages a variety of cultural activities by the local population (such as arts, crafts, music, etc.).
- 9. Churchill should try to diversify its economy.
- 10. The tourism industry provides many worthwhile employment opportunities for residents of the Churchill region.
- 11. The quality of life in Churchill has improved because of tourism.
- 12. I am against new tourism facilities which will attract more tourists to Churchill.
- 13. It is easy to make friends with a wide range of people in Churchill.
- 14. Tourism has a positive impact on my life.
- 15. An increase in tourists visiting Churchill may negatively impact upon local wildlife.
- 16. The environmental impacts resulting from tourism development are relatively minor.
- 17. The Flats should be left in its present state as it represents the historical legacy of the Churchill River.
- 18. The Flats provide potential for hiking trails.
- 19. I am satisfied with the Town's vision for Churchill's future in regards to tourism.
- 20. Most of the jobs in tourism are low paying.
- 21. Only a small minority of residents in Churchill benefit economically from tourism.
- 22. If I had to move away from Churchill I would be sorry to leave.
- 23. I'd rather live in Churchill than anywhere else.

### Northern Tourism

- 24. Compared with other cities in the norther region (NWT, Yukon, northern Canada), how would you rate Churchill as a place for others to visit. Much Better (5), Better (4), Same (3), Worse (2), Much Worse (1)
- 25. Compared with other northern Manitoba communities, how would you rate Churchill as a place for others to visit based on the following features: Wildlife/Scenery; Historical Attractions; Recreational Activities; Hotels/Restaurants; Retail Shopping; Weather; Entertainment; Visual Appeal of Town

Much Better (5), Better (4), Same (3), Worse (2), Much Worse (1)

26. Which northern community do you feel is the best place to visit?

## What You Think of Churchill

- 27. What do you like most about living in Churchill?
- 28. What do you dislike most about living in Churchill?
- 29. What outdoor leisure activities do you enjoy pursuing in the summer?
- 30. What outdoor leisure activities do you enjoy pursuing in the winter?
- 31. What leisure activities and associated facilities would you like to pursue and have during the summer months which currently do not exist?

#### Demographic Information

32.	Age Group:					
	18 - 25	46 - 55	76 -	85		
	26 - 35	56 - 65	over	85		
	36 - 45	66 - 75				
33.	Marital Status: Single Married	Common-Law	Separated	Divorced	Widow/er	
34.	Grade 10/11 Un Highschool Diploma Gr		ome University ndergraduate Degree raduate Degree rade/Technical School Certificate			

35.	Total Household Income:Under \$10,000\$40,000 - \$60,000\$10,000 - \$15,000\$60,000 - \$80,000\$15,000 - \$20,000\$80,000 - \$100,000\$20,000 - \$30,000\$100,000 - \$200,000\$30,000 - \$40,000Over \$200,000N/A						
36.	Household Composition: Number of Adults Number of Children						
37.	Years of Residence in Churchill: 1 Year 2 Years 3 Years 4 Years 5 Years 5-7 Years 7-10 Years 10-15 Years 15-20 Years 20-30 Years Over 30 Years						
38.	Do you rent or own the building in which you live?						
39.	How many times have you moved in the last 5 years? 0 1 2 3 4 5 Over 8 times						
Emp 1	loyment						
40.	Are you currently employed? Yes No If yes, in which sector: Tourism Service Health Education Government Industry Trade Other						
41.	Number of jobs held in one year: 1 2 3 4 5+ N/A						
42.	Please state the term of your employment as: Full-time, year-round Part-time, year-round Full-time, summer Part-time, summer Full-time, winter Part-time, winter Seasonal						
43.	Were you transferred here from another Canadian city? Yes / No If yes, how long are you stationed in Churchill: Under 1 year 2-3 years 5 years 8 years 10 years Indefinitely						
44.	If you were to lose your current job, would you leave Churchill? Yes / No If yes, please explain why:						
45.	If the Health Centre was transferred to a location outside of the L.G.D. of Churchill, would its closure affect your current employment? Yes / No If yes, please explain how, or why:						

#### Churchill Issues

- 46. What do you consider to be the biggest issue in Churchill today?
- 47. What do you feel are the key issues affecting Churchill's youth (aged 15 to 18 years)?
- 48. Do you feel there are any issues related between tourists and: Polar Bears; Birds; Whales; Plants?

#### Additional Comments

Please add any comments or concerns you feel are important: