## Northern Conservation and Tourism:

The Perceptions of Clyde River Inuit

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Northern conservation and tourism: Inuit perceptions

### Abstract

This thesis focuses upon Clyde River Inuit knowledge, concerns, and attitudes to community tourism development and protected area establishment. The findings suggest that a cross-section of residents have a positive attitude toward community tourism development because it may provide local economic benefits. Residents also support the Igalirtuug Conservation Proposal because it protects the endangered bowhead whale and its critical habitat, while at the same time stimulating tourism development. Clyde Inuit are reluctant to attribute social and environmental costs to these initiatives but are, nevertheless, able to point out some specific negative impacts that such projects might have on their village. Most felt that few problems would materialise as long as residents were intimately involved in all aspects of a controlled and gradual development. The study illustrates the importance of this type of community oriented approach in providing guidelines for tourism and conservation area development policy makers. Analyzing local attitudes to issues of tourism and conservation together, before any initiatives have taken place, can provide insights into the ways these seemingly opposite development strategies can be blended. At the same time, local knowledge and input are vital in improving the general ability of sustainable development objectives to be met, satisfying local needs and desires.

## Résumé

Ce travail porte sur la connaissance, les préoccupations et les attitudes des Inuits de Clyde River face au projet de développement touristique et l'établissement d'une région protégée. Les résidents échantillonnés démontrent une attitude positive face au développement touristique communautaire qui semblerait Les résidents apporter des bénéfics économiques. soutiennent équalement le projet de conservation Igalirtuuq (Igalirtuug Conservation Proposal) gui entend protéger la population de Balaena mysticetus (Bowhead whale) et son habitat vital et qui, par surcroît, stimulerait le développement touristique. Les Inuits de Clyde prévoient certains impacts sociaux et environnementaux que de tels projets pourraient avoir sur leur village, mais ils soutiennent que ces problèmes ne se matérialiseront probablement pas si la communauté est impliquée dès le début, dans tous les aspects d'un développement contrôlé et graduel. Cette étude illustre l'importance de l'approche orientée vers la comunauté, en fournissant un guide aux développeurs et aux conceptualisateurs de sites touristiques et protégés. Une analyse conjointe des attitudes locales face au tourisme et à la conservation, avant d'entreprendre de nouvelles initiatives peut nous éclairer sur la manière d'agencer ces deux stratégies de développement, à premier abord contradictoires. La connaissance et la participation des résidents semblent essentielles pour atteindre les objectifs du développement durable ainsi que pour satisfaire les besoins et les désires des membres de la communauté.

## **Glossary of Acronyms**

COSEWIC - Committee on the Status of Endangered Wildlife in Canada CRTC - Clyde River Tourism Committee EDO - Government Area Economic Development Officer EDT - Economic Development and Tourism GNWT - Government of the Northwest Territories HBC - Hudson's Bay Company HTA - Hunters and Trappers Association ISTC - Industry, Science and Technology Canada IUCN - International Union for the Conservation of Nature MAB - Man and the Biosphere NGO - Non-Governmental Organization NWT - Northwest Territories UNEP - United Nations Environment Program UNESCO -United Nations Educational, Scientific and Cultural Organization WCED - World Commission on the Environment and Development

WWF - World Wildlife Fund

# TABLE OF CONTENTS

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Abst Resu Gols Tabl List List Ackn	me. sary of Acronyms	i ii iv vi vi vii
Chap	ter 1: INTRODUCTION	1
1.1	General Context of Research	1
1.2	Research Objectives	4
1.3	Methodology	6
1.4	Organization	8
Chap	ter 2: STUDY AREA AND BACKGROUND	10
2.1	Introduction	10
2.2	Community Profile	10
2.3	Clyde River Socio-Economic History. 2.3.1 The subsistence economy (Pre-1820) 2.3.2 The whaling era (1820-1920) 2.3.3 The fur trade (1920-1945) 2.3.4 The early government era (1945-1960) 2.3.5 The seal-skin industry (1961-1983) 2.3.6 The seal boycott era (1982-Present) 2.3.7 Contemporary economy of Clyde River 2.3.8 Tourism and Clyde River	12 13 14 16 18 20 23 24 28
2.4	The Conservation Area Link 2.4.1 Igalirtuug and Conservation 2.4.2 The Igalirtuug Conservation Proposal	30 32 35
Chapt	ter 3: TOURISM DEVELOPMENT, THEORETICAL BACKGROUN	<b>D</b> 38
3.1	Tourism Impacts - An Overview	38
3.2	Territorial Policies: Tourism Agenda for the North	ch.44
3.3	Local Attitudinal Studies of Tourism Development	47
3.4	Inuit Attitudes to tourism Development	48
3.5	Previous Clyde River Resident Attitudes to Touris	sm.51

### Page

Chapter 4: CLYDE RIVER RESIDENT ATTITUDES TO TOURISM 4.1 4.2 4.2.1 4.2.2 4.2.4 4.2.5 4.2.6 4.3 Accommodation......81 4.3.2 4.3.3 4.3.4 4.3.5 Links between Protected Areas and Tourism......93 5.1 5.1.1 5.1.2 Local Attitudes to Conservation Area Analysis of Igalirtuug Conservation Proposal Data..98 5.2.1 Community Involvement in the Igalirtuug 5.2 5.2.2 5.2.3 5.2.4 Attitudes Towards Continued Scientific **Research.....**106 Chapter 6: CONCLUSIONS - IMPLICATIONS FOR PLANNING.....109 **APPENDICES:** Interview Questionnaires
Interview Questionnaires
Whales Beyond Our Knowledge Letter
Options for Bowhead Whale Protection at Isabella Bay (WWF, 1988)
The Igalirtuug Conservation Proposal (WWF 1990)
Clyde River Community Feelings about Tourism (Marshal et. al. 1982, from Chapter 3: 2.5 - 2.7)

# LIST OF TABLES

Table 1.1.	Detailed Breakdown of the Informant Group7
Table 4.1.	Resident Response: Economic Issues54
Table 4.2.	Resident Response: Socio-Cultural Issues55
Table 4.3.	Resident Response: Environmental Issues58
Table 4.4.	Resident Response: Best Months for Tourism.,65
Table 4.5.	The Economic Activity of Clyde River Residents
Table 4.6.	<b>Resident Response: Tourist</b> Age Group Promoted by Clyde River residents
Table 4.7.	Resident Responses: Local Destination and Activities
Table 4.8.	Resident Response: Facility and Services79
Table 4.9.	Resident Response: Facility Improvement80
Table 4.10.	Qamaq Hotel Occupancy82
Table 4.11.	Residents Response: Tourism Information87
Table 4.12.	Environmental Conditions at Isabella Bay during Bowhead Whale study Period 1983-1988, on a Percentage Basis91
Table 5.1.	Alternatives for Management and Development of Natural and Cultural Resources95
Table 5.2.	Community Involvement in, and Attitudes toward, the Igalirtuuq Conservation Proposal101
Table 5.3.	Economic Input of Scientific Research at Isabella Bay to the Clyde River Community from 1983 to 1990, (but not including 1989)

vi

# LIST OF FIGURES

Figure	2.1.	Clyde River, Isabella Bay and the Surrounding Area11
Figure	2.2.	Winners and Losers from Tourism Development in the Baffin Region
Figure	3.1.	The Economic Cost/Benefit Sheet
Figure	3.2.	The Socio-Cultural Impact Sheet40
Figure	3.3.	The Environmental Impact Balance Sheet43
Figure	3.4.	Travel Zones of the Northwest Territories45

## vii

ł

1

T

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#### Chapter 1

### INTRODUCTION

#### 1.1 General Context of Research

Tourism is presently the world's fastest growing industry in terms of both sales and employment (ISTC 1990). This rapid growth has brought changes in that industry's nature, characterized by more aggressive global competition, more demanding consumers, modern technological changes and the formation of new niche markets. Tourists are beginning to demand products that offer something "different" from the traditional sun and sand holiday. "Mass" beach and urban tourism, although still the dominant form of holiday, are on the decline with increasing numbers of tourists seeking "pristine" environments, often enhanced in appeal by distinctive local cultures which have been spared the negative affects of mass package tourism (Urry 1990, Economist 1991, Li: iberg 1991).

The growth of this segment of the industry offers an important economic alternative for peripheral destinations that have remained far removed from traditional "mass" tourist routes. Ecological tourism, or nature-oriented "ecotourism", may be considered a viable development option for those regions characterised by small domestic markets and limited economic resource bases. This is because ecotourism is relatively easy to establish, as sightseers travel to the product, thus overcoming the problems of isolation. Also, the resources demanded by nature-oriented travellers, mainly the region's natural environment, cost little to develop because little development is desired.

But eco-tourism can also be an exploiter of natural resources, destroying the very environment and isolation upon which the industry's development depends (Ziffer et al. 1990). Tourism researchers have also found that many of the assumed economic benefits of the industry are not always realised, but many negative socio-cultural impacts emerge instead (Boo 1990).

Despite some of tourism's possible drawbacks, one of the most recently recognised advantages of this specialised form of tourism is that it can heighten local awareness to the importance of conservation. In this way tourism can contribute to the promotion and maintenance of a regions environmental integrity, often providing the funds to establish and maintain local protected areas while at the same time producing a viable means of stimulating a depressed economy (Fennell and Eagles 1990, Boo 1990, Lindberg 1991).

The Baffin Region of Canada's Northwest Territories consists of small-widely scattered villages whose indigenous Inuit majority continues to depend economically and culturally on traditional harvesting of wildlife and other natural resources. For the Inuit, the protection of the fragile arctic environment, and the animals that depend upon it, are of the utmost importance.

The importance of conservation concerns in the North are equaled by issues of a deteriorating northern economy. The Baffin region's limited economic resource base has caused the territorial government and several communities to push for tourism development as one of the few means of improving the local standard of living and decrease Inuit dependence on government aid. The region's beauty,

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isolation, and culture, make it an increasingly attractive destination for "nature," "cultural," and "adventure" types of tourism.

The Inuit community of Clyde River has recently shown concern over local resource use issues, and has become involved in a novel conservation initiative. Clyde residents, scientists, government, and non-government agencies, have recently worked together in an endeavour to ensure, through the sharing of traditional and scientific knowledge, the protection of a rare and endangered population of bowhead whale that arrive each summer at a near-by bay, called Igalirtuug (Isabella Bay).

Clyde River is in a unique situation in it's attempts to balance environmental conservation initiatives with those of economic development. The community's need for economic stimulation has brought to the minds of its residents, as well as government officials, thoughts of utilizing the rapidly expanding and relatively new sectors of the tourism industry, as a possible remedy for their economic problems. This coupled with the establishment of a local protected area, has the potential to stimulate the growth of a community tourist industry based on whale-watching. Thus, eco-tourism is seen by both government officials, and Clyde residents, as having direct relevance and application to solving the community's economic and ecological concerns.

In planning the optimal path for the establishment of new community development initiatives, the International Union for the Conservation of Nature (IUCN) (1980) and the World Commission on Environment and Development (WCED) (1987) have recommended that, it is essential to involve local people throughout the planning process. The first

step toward achieving this goal in Clyde River is to see how local people view issues of tourism development and conservation area establishment in their community. Unfortunately, few studies have looked at conservation and/or development issues in small isolated communities <u>before</u> such programs have been implemented, focusing instead on attitudnal perceptions after development has commenced. For resident peoples, it is this type of missing information that is essential for the proper compatible joining of development/conservation initiatives. Such information is also of extreme importance for the continued monitoring of impacts that might occur long after the introduction of initiatives, and can facilitate the appropriate management of future community development/conservation programs.

The successful union of conservation and development in Canada's Arctic are essential if both socioeconomic development and the conservation of biological and cultural diversity are to be sustained (Smith 1997). Northern sustainable development depends to a large extent on how well its strategies serve those who are to be most directly affected, namely the people living adjacent to the resource(s) in question (Jull 1986). The fate of rural people, development, and conservation are inextricably linked and there are compelling economic, socio-cultural, and environmental reasons for communities to concern themselves with the course of tourism development and it's relationship with environmental conservation.

#### 1.2 Research Objectives

The research presented here was undertaken in response to a request from the Hamlet of Clyde River for information

on the potential environmental, socio-economic, and cultural impacts of tourism development and conservation area establishment in their community. The overall objectives of the study are: 1) to study the history of economic and environmental conservation initiatives in the Clyde River region, and shed light on the factors that underlie current community economic development and environmental conservation concerns; 2) to outline the possible socioeconomic, environmental, and cultural impacts of tourism and conservation area development in small isolated northern communities; 3) to explore the Northwest Territories Government's tourism and conservation area development policies and agendas in the Baffin region; 4) to document and analyze Clyde River resident attitudes and perceptions toward the establishment and development of a tourism industry and a conservation area (the Igalirtuug Conservation Proposal) near their community; and, 5) prepare the findings of this study for presentation to community, as well as governmental and non-governmental agencies, for future planning and management purposes.

Assessment of local<sup>1</sup> perceptions and knowledge of Clyde residents to issues of tourism development and the Igalirtuuq Conservation Proposal can help influence the success, or failure, of these actions, as well as permit more effective community planning. An understanding of

<sup>&</sup>lt;sup>1</sup>. In this paper the terms "residents", "community members," "inhabitants," and "locals" are often used. In keeping with the latest definition supplied by West and Brechin (1991:6), these terms apply to "those individuals, families, and communities - "traditional" or "modern" - that occupy, reside in, or otherwise use, on a regular of repeated basis, a specific territory within or adjacent to an established or proposed protected area." Here I often use these terms in place of Inuit living in small isolated communities in the Canadian Arctic (especially from Clyde River). As stated by West and Brechin, these terms have their advantages in that they carry no political or cultural connotations, and are defined only by space and not by time (as is the term "indigenous").

resident attitudes might also help managers accommodate the impacts that are often associated with tourism development and conservation area establishment.

An accumulated data base of this sort will facilitate on-going project evaluations upon which a desired community development trajectory can be based. The study, and its recommendations, may also provide a model by those working in other community development projects to understand the complexities of resident attitudes to conservation and development issues.

#### 1.3 Methodology

Standard cultural anthropological techniques of observation and informal interviews with open-ended questions were used to gather both community socio-cultural data and Inuit perceptions of conservation area and tourism development. Macro level economic, social, and environmental data were obtained through interviews with regional biologists, government officials, and World Wildlife Fund representatives.

Detailed interviews were conducted in Clyde River for 36 days in 1990, and 24 days in 1991. Respondents were encouraged to express their feelings through a series of directed questions concerned with local perceptions and attitudes toward the potential establishment of the Igalirtuuq conservation area and possible tourism development near their community (see Appendix 1). An interpreter was used where individuals did not speak English. Interviews were largely restricted to residents who had lived in Clyde River for three years or more; hence the small non-Inuit component of the sample.

Seventy-three residents (28% of the adult population, and 14% of the total community population of 526) were interviewed. Representatives of all age groups, both male (52) and female (21), Inuit (70) and Qallunaat (4) (white) were included (Table 1.1).

In total, 86 Clyde residents were approached for interviews, with 13 refusals. Refusals were due to one of two reasons; either those individuals ./no were approached (9) were occupied at the time of meeting, or, they were newly arrived residents (4) who felt they had not been in the community long enough to make judgements on the issues in question.

Table	1.1	Detailed	Breakdown	of	the	Informant	Group.
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Inuit: Qallunaat: <b>Totals:</b>	Male: 50 Male: 2 Male: 52	Female: Female: Female:	19 2 21	Total: 69 Total: 4 <b>Total: 73<sup>b</sup></b>	
Age Groups:	Under 20: 20 - 29: 30 - 39: 40 - 49: 50 - 59: Elders : <b>Totals :</b> 2	4 19 19 7 5 73			
Total Cly	de populatio	on (1991):	526		

<sup>b.</sup> Interview refusals: 13 Source: Clyde River fieldnotes

The open-ended nature of the interviews meant that respondents tended to concentrate on the question areas they were most familiar with, avoiding those questions with which they had little knowledge or interest. Therefore, not all respondents answered all questions. Questions revolving around issues of guiding, hunting, and the Igalirtuuq proposal were mainly answered by Inuit males, while those

questions dealing with the household, crafts, food preparation, and accommodation were often answered by the Inuit women.

Quantitative analysis consisted of grouping the responses to particular questions within three categories: (1) economic; (2) cultural; and, (3) environmental concerns. Percentages of yes, no, and unqualified (don't know) responses were calculated where possible. The bulk of the analysis was, however, qualitative in nature.

#### 1.4 Organization

Chapter 2 describes the study area, which includes a community profile and the economic history of the Clyde River region. This chapter also comprises a section on the history of conservation initiatives in Clyde River, entailing historical sections on whaling at Isabella Bay, and the Igalirtuug Conservation Proposal. The third chapter contains a theoretical overview of the positive and negative impacts of tourism development. This chapter includes a section on the Northwest Territories Government's tourism agenda for the Eastern Arctic, and a literature review of the theoretical contributions of community-based perceptional and attitudinal studies in regard to tourism development. Chapter 4 contains an analysis of the data collected in Clyde River during the study. The following chapter turns to the integration of conservation and tourism development. This chapter includes a literature review of research that deals with resident attitudes to conservation area establishment, and ends with an analysis of the data gathered during this study on Clyde River resident attitudes and perceptions of the Igalirtuug Conservation Proposal. The final chapter, presents the studies conclusions and

implications for planning that apply to the future establishment of community development and conservation initiatives.

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#### Chapter 2

## STUDY AREA AND SOCIO-ECONOMIC BACKGROUND OF THE CLYDE RIVER REGION

#### 2.1 Introduction

To understand the economic and resource use concerns facing Clyde River at the present time, one must lock at the socio-economic history of the community. This chapter provides a brief community profile, followed by a socioeconomic history of the region. The concluding sections outline Clyde River residents' involvement in tourism and conservation initiatives.

#### 2.2 Community Profile

The hamlet of Clyde River consists of approximately 530 permanent residents, and is situated on the east coast of Baffin Island, Northwest Territories (70° 27'N, 68° 33'W, see Figure 2.1). The name "River Clyde" was originally given by Captain John Ross in 1818 while he was on expedition in search of the Northwest Passage. The Inuktitut name for the site of the community is "Kangiqtuqaapik," meaning small fiord.

At the time of the survey, fifty percent of the population was 25 years of age or under. The first language is Inuktitut, with English the second language spoken. Except for the Anglican minister, a handful of Whites who have married into the community and some fifteen non-Inuit transient southerners, Clyde River is distinctly Inuit. The transient section of the population consists of the police,



Figure 2.1. Clyde River, Isabella Bay and the Surrounding Area.

Source: Nickels 1991

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health care workers, a small number of visiting teachers, the conservation officer, store managers and construction workers who reside in Clyde River on a seasonal basis.

#### 2.3 Clyde River Socio-Economic History

Little information is available on the economic history of Clyde River. Inuit first met occasional parties of European explorers sometime around 1815, but the amount of trade that occurred was initially too small to bring European items into wide local use (Damas 1968:142). The first written impressions of European contact were made by William Parry (1821:283-7) who described the tools, clothing, and food he saw or bartered for. Parry's work was followed sixty years later by those of Franz Boas (1888), who's detailed anthropological studies showed how Wildlife and the products they provided for the Inuit were central to Inuit life, including those of the Clyde region.

It was not until 1967, that the first formal economic survey of the east coast of Baffin Island was completed (Anders et.al 1968). Later Kemp, continued similar work which included Inuit land-use (1976), and a synthetic ethnography of the region (1984). Finley and Miller (1980) conducted a statistical study of wildlife harvests of Clyde River in 1979, and the Government of the Northwest Territories, Department of Renewable Resources released a summary of the Baffin region in 1984. The later includes only the most basic economic data for the region. All these data apply to some understanding of the Clyde economic situation.

The bulk of recent information on the Inuit of Clyde River, however, comes from Wenzel (1991), who has spent

numerous years conducting geographic and anthropological research with the community. From Wenzel's work it is possible to piece together an outline of the major economic problems of Clyde River and why there has emerged an urgent need to stimulate the local economy.

#### 2.3.1 The Subsistence Economy (Pre-1820)

The dominant pre-contact economic system of Clyde River was the harvest of wildlife which supplied clothing, fuel, tools, rope, bedding, and virtually all food (Boas 1888). The customary annual pattern of settlement consisted of five to eight semipermanent winter villages which shifted location in other seasons according to resource availability (Wenzel 1990:987). Household organization centred on the nuclear family, while the focus of wider social organization was the consanguineously-linked extended family (<u>ilagiit</u>), in which the oldest male provided leadership (<u>isumatag</u>) to the local kindred group (Wenzel 1990:987; see also Damas 1963:55). This cohesive extended family unit was small enough to efficiently exploit dispersed and varied resources to meet the socioeconomic needs of the Inuit.

The most important species to Clyde Inuit was the ringed seal (<u>Phoca hispids</u>), its dense regional distribution and year-round presence made it a more reliable species than all others in the region. Also important were caribou (<u>Rangifer tarandus</u>), arctic char (<u>Salvinus arcticus</u>), narwhal (<u>Monodon monocerus</u>), arctic fox (<u>Alopex lagopus</u>), and polar bear (<u>Ursus arcticus</u>). The seal, bear, fox and, to a lesser extent, narwhal provided items for trade, barter, and more recently cash (Wenzel 1990:987).

Wenzel (1991:105) summarizes the relationship of Clyde Inuit economic/ ecological activity to community dynamics in

#### this way:

1) the generation of a material resource pool through cooperative harvesting; and 2) the allocation of resources through social regulation. That resources are harvested, stored, consumed, and replenished is all a part of Clyde Inuit natural ecology. That these resources are shared within and between Clyde <u>ilagiit</u> in a way that is inclusive of all members of the community is, however the result of social structural processes of which kinship is the main element.

This Inuit adaptation of sharing through social means, makes it possible for individuals to gain access to most of the material resources - be it food, tools, or cash - that are available in the community. But as Wenzel (1991:105) has pointed out, this highly "organized system of resource allocation," has been viewed by outsiders as being "informal" instead of "formal," and is thus treated simplistically as an <u>ad hoc</u> occurrence. Instead, <u>ningigtug</u> (the Inuit economy of sharing) is an intricate system of resource distribution. For southerners, it is the use of money that brings order and sense to exchanges of goods and services. This is precisely the reason why <u>ningigtug</u> is incomprehensible to most southerners, for the exchanges often involve non-monetary items without the expectation of immediate returns (ibid.:99). In Clyde River, any person can expect to "... receive reciprocal treatment from others because of the responsibilities that kinship, village coresidence, and cultural solidarity confer on each person" (ibid.).

#### 2.3.2 The Whaling Era (1820-1920)

Whaling was at one time an "industry in the grand tradition of Canadian resource industries... Arctic Whaling attracted more ships, employed more men, and produced greater profits than whaling anywhere else on the continent" (Francis 1984:ii). Because it was large, relatively easy to

capture, and profitable the bowhead whale (<u>Balaena</u> <u>mysticetus</u>) was the species pursued most by arctic whalers. Bowheads not only provided Europeans with oil for such things as lamps and cosmetics, but also baleen, which was used in items requiring flexibility, much like plastics are today.

In the mid-1800's, during what Goldring (1989) has called the "early contact period," Scottish and American whaling companies began plying the waters off the north Baffin coast in search of bowhead whales for a newly developed industry. These whaling fleets made contact with Baffin Island Inuit, marking the debut of barter exchange between both parties. In regard to the whalers, the Inuit appeared "anxious to increase their contacts with them, because of the mobility and reserves of food that whaling fleets represented (ibid.:261)." As Goldring (1989:261) states:

One consequence of this exchange was that Inuit began to incorporate the whalers into their own systems of sharing resources to minimize the risk of Arctic living. Initial interest centred on tools: Europeans traded or gave away files, nails, needles, and knives, as well as bread and molasses. In the short term commercial whaling gave Inuit access to stranded carcasses from which only the blubber had been stripped. In this early stage of exchange the Inuit traded baleen from their own hunts, traded weapons and implements as souvenirs, hunted seals for wintering whalers, and admitted Europeans and Americans to the system of wife-exchange even though incomers could not reciprocate directly.

During this period, the success of the whale hunt was dependent on the help of the Inuit who were hired by the whaling fleets as guides, harpooners, and flensers (ibid.). The industry expanded, leading to the establishment of whaling stations throughout the Eastern Arctic, including one established sometime after 1860, on Aulitiving Island in

Isabella Bay, approximately 100km. south of Clyde River. Many Inuit in the region found employment at these stations until the early part of this century when the depletion of the bowhead whale population caused the whaling industry to become marginalized and finally to collapse around 1920.

Today, remnants of the whaling industry are still to be found in Clyde River. Several elders can remember their parents speaking about their involvement in the whaling industry. Saturday is still called "sivatarvik" (biscuit day) by residents of the community because this was the day when the whalers used to hand out biscuits and molasses to Inuit.

#### 2.3.3 The Fur Trade (1920-1945)

By 1920, arctic fox pelts had become an important tradable commodity sought by Canadians and Europeans. Clyde hunters began trapping furs for trade to the regional Hudson's Bay Company (HBC), and Sabellum posts, established in 1923. But as Wenzel (1991:106) points out, "unlike Dene and Algonkian hunters further south, Inuit could treat fox trapping as part of their normal harvesting regime" (see by contrast, Feit 1973, Tanner 1979, Morantz 1980). The Inuit put emphasis upon the capture of ringed seal for food but, at the same time, could couple sealing with trapping. In terms of time and energy, the Inuit of Clyde did not have to choose between food production and fur production, as they could partake in both activities with mutual benefit (Wenzel 1991).

The available data suggest that the pattern of Inuit subsistence in the Clyde region was very stable until the massive intervention of the Canadian government after World War II (Wenzel 1991:106). Wenzel suggests that this runs

counter to the popular image that it was Inuit-<u>Oallunaat</u> contact through the fur trade that disrupted and even brought an end to traditional Inuit subsistence economy. It is difficult, however, to determine accurately the details of the Clyde Inuit harvesting economy practised during this period because little information about their non-market production of wildlife resources exists. Interview data by Wenzel (1984, 1986) shows that Clyde Inuit did not suffer from serious food shortages due to species decline or reductions in hunting because of the switch to market trapping. It appears that in no way was the trapping of arctic fox a deterrent to food production.

The effects that the fur trade had on Clyde Inuit are difficult to determine. As Wenzel (1991:108) remarks:

The main problem with the fur trade at Clyde, so far as we can infer from Inuit memory, was that traders were unable to keep their end of the relationship. Inuit ably integrated trapping and exchange into their adaptation, but the supplying of remote posts was often interrupted by arctic conditions, fluctuations in the fur market, and war.

Wenzel notes that shortages of ammunition, cloth, tobacco, and flour were most likely experienced, but the continued dependence of Clyde Inuit on ringed seal for subsistence safeguarded the community from food shortages. One thing that contact with <u>Qallunaat</u> did bring to the Inuit of Clyde was the periodic recurrence of endemic diseases which had profound effects on regional demography (see Wenzel 1981:8).

By the end of 1965, only two traditional <u>ilagiit</u>-based villages remained in the region which Wenzel estimates roughly numbered about 35 at Alpatu on Alexander Bay, and 28 at Aqviqtiuq on Eglinton Fiord (1990:988). In 1969, because of illness among several elderly members from Alpatu, most of the population immigrated to Clyde River. Then in 1975,

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the Aqviqtiuq village was reduced to one nuclear household for the same reasons.

#### 2.3.4 The Early Government Era (1945-1960)

The great influx of <u>Oallunaat</u> from southern regions during the Second World War and the increased post-war presence of government in the Arctic brought unprecedented changes to Canadian Inuit. This era resulted in massive disruption in the pattern of Inuit ecology and in settlement demography. The <u>ilagiit</u>, as the cohesive socioeconomic unit, was transformed in less than a decade by the government's northern policy. The policy consisted of the closure of small dispersed Inuit villages, and relocating their residents into large central settlements. "The objective of this concentration," according to Wenzel (1991:110) "was to make health, social and educational services on a par with those found in southern Canada available to Inuit." Still, by 1951, it is estimated that only five or six nuclear households of perhaps 25 to 36 people out of a total Clyde regional population of between 120 to 140 lived at the Clyde River HBC post (Foote 1967a:64, Wenzel 1984:52). The bulk of the Inuit remained in the fixed winter residence in six villages spread from Buchanan Gulf southward to Cape Hooper, an area of about 85,000Km2 in total (Wenzel 1990:987).

Since Parry's first visit to the Clyde region in 1819, barter had been the mode of exchange between Inuit and <u>Qallunaat</u>, but the Inuit socioeconomic system did not necessitate reliance on these bartered goods. Seal hunting remaining the basis of Inuit subsistence, while imported goods enhanced harvesting efficiency and supplemented diets. This situation was altered by the Canadian government's

centralization program in which Inuit became attenuated from their resource base. In an attempt to alleviate local ecological pressures caused by relocation (hunters, now had to search for wildlife at greater distances from their community), Inuit began to rely on mechanized transportation technology. Innovative harvest adaptations were developed by combining imported technology, money, traditional skills, and knowledge (Wenzel 1989). But by this time, "centralization made money the cornerstone of the exchange economy" (Wenzel 1991:111). Whites began arriving in increasing numbers into these new northern settlements and, unlike during the fur trade era, they were heavily supported from the south (Damas 1988:121). As a result, "Inuit found themselves relying on <u>Oallunaat</u> for access to the North's new money economy" (Wenzel 1991:111).

At this time, when money became the major form of exchange with Whites and essential for the continuation of resource harvesting, Inuit had little opportunity to gain direct access to it. In Clyde, no DEW line or air base existed, and only three to four full-time jobs were available to Inuit (ibid.). As an unintentional consequence of government resettlement policy social assistance became the chief source of cash, and like all Canadian Inuit, Clyde residents were rendered economically marginal. To make matters worse, the demand for fox fur decreased until the furs were no longer of practical valuable. Now the Inuit lacked any means what-so-ever of diverting a portion of their harvesting production to acquire cash.

Government resettlement and the collapse of the fur economy meant that throughout the 1950's harvesting could no longer supply Clyde Inuit with all the cash resources they

required. The Inuit therefore, began using the only option available to them. As Wenzel (1991:114) outlines, the <u>ilagiit</u> allocation of material goods "was supplemented by an <u>ad hoc</u> distribution of such things as ammunition and fuel between cooperating hunters." A new form of <u>ningigtug</u> sharing also arose, called <u>nigitatitanag</u>. This involves the direct distribution of game, cash, and/or imported goods between unrelated hunters. This assured continued cooperation between harvesters and allowed the few residents with employment to share cash and/or goods for game. In this way the Inuit maximized limited cash resources and maintained their customary socioeconomic structure for the next twenty years.

#### 2.3.5 The Seal-Skin Industry (1961-1983)

In 1961, a new technique in the commercial tanning process of hair-seal pelts (Foote 1967b:267) created an opportunity for ringed and harp sealskins to be prepared and sold to Western European markets. Now that sealskins took on cash value, Inuit, for the first time since the decline of the fox trade, could gain access to cash resources.

Duffy (1988:166) reports that this new income was put directly towards harvesting in the form of purchased canoes, outboard engines, and snowmobiles. Wenzel (1991:115) states that the money received from the sale of skins was important to the 200 Inuit in Clyde River. Few steady jobs existed and the limited number of Inuit who possessed the requisite linguistic skills for employment within the community ensured that harvesting retained a major place in Clyde's economy, with money being used for the continued production of food. Social transfer payments in the mid-1960's provided roughly one-third to one-half of the Inuit cash

income, but most of these payments were made in the form of coupons that were redeemable for the purchase of things like "children's clothing, infant formula, and housing rental (ibid.)." Thus, the sale of seal furs was essential to obtain cash for reinvestment in subsistence activities, and also to allow hunters the opportunity to opt out of wage employment to pursue customary subsistence activities.

Inuit hunting, as Wenzel (ibid.:118) explains, was not stimulated solely by cash profits, but also by food production. Throughout the 1960's and 1970's wildlife harvesting remained a successful adaptation for Inuit subsistence, playing the role of a "social integrator." As Wenzel (1989:7) states, "it allowed all Clyde Inuit to participate in the monetized local economy of the community through a set of activities accessible to everyone and facilitated the distribution of money to Inuit outside, or with only limited access to the cash-wage and transfer system in the settlement."

Wenzel describes the ringed seal as the "linchpin of Inuit resource economy" because of its dual potential as the main earner of both local food and cash income for the people of Clyde River (1989:4). Throughout the 1960s and 1970s, ringed seals became even more valued as Clyde River felt the effects of hunting restrictions and quotas set by government, all of which limited the harvest of such animals as polar bear, and narwhal. The ringed seal, therefore, was not only important as a wildlife resource, but was used by community members to control the whole range of economic possibilities through a cultural sharing and/or barter system (Ross and Usher 1986, Wenzel 1989:5).

The Inuit took advantage of new imported foods, but the

use of southern fresh foods was limited because of their sporadic availability. Supplies were generally shipped in to communities once a year by sealift. The extreme cost of this transport was passed along to the village-level consumer. Prices were often so high that <u>Qallunaat</u> who inhabited northern villages received their food on special sealift orders largely subsidised by the government (Wenzel 1991:118). The Inuit also found many of the preserved goods not to their likirg, except for carbohydrates like white sugar, soft drinks, and candy, now prominent in all Inuit village diets (ibid.).

Country food, especially ringed seal (<u>natsig</u> in Inuktitut), allowed Inuit to avoid the prohibitively high cost of imported food. Finley and Miller (1980:10) show how wildlife harvesting by Clyde Inuit was a more economical alternative than their dependence on store bought food. In this way the role of subsistence harvesting was not only used as buffer between the Inuit and their natural environment, but also between the modern <u>Oallunaat</u> sector of the northern economy (Wenzel 1991:120).

In 1971, 7.2% of the adults in Clyde had employment from some sixty-six temporary jobs and about five full-time jobs (Wenzel, personal communication). By 1973, according to Wenzel (1991:123) three-quarters of the annual \$4,045 needed by a Clyde Inuk for harvesting equipment (snowmobile, outboard engine, canvas canoe) was provided by the sale of sealskins, polar bear, narwhal ivory, and fox.

Throughout the 1960's and 1970s, hunting provided the community of Clyde with "natural capital" in the form of food (ringed seals providing from 50% to 75% of the edible biomass brought in to the community), while the sale of

sealskins complemented the continued subsistence system in much the same way as the collapsed fox trade had. The sale of sealskins also provided the only means for Inuit to acquire capital that governmental economic policies made essential.

#### 2.3.6 The Seal Boycott Era (1982-Present)

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In 1983, responding to public pressure from the European public and animal rights advocates, the European Economic Community, advised its member states to ban the importation of immature seal products (Malouf 1986). While the ban was originally intended to stop the commercial hunt of harp seal (<u>Phoca groenlandus</u>), and most specifically whitecoat pups in the Gulf of St. Lawrence and off Newfoundland it prompted an end to the marketing of sealskins from Canadian Inuit, including those produced by Clyde River (Wenzel 1989:16).

The immediate effect of the boycott was the loss of control by Inuit over their local village economies, causing a shift of the local economic power away from collective organizations, based around extended family groups, to individuals (Wenzel 1989). As Wenzel (1991:123) puts it:

This presented Inuit with a conflict as to how to invest their time and energy. To choose harvesting would lead to the loss of needed cash resources, while other options meant losing time the most important traditional resource in effective harvesting.

The only means available to Clyde Inuit to gain money were wages or transfer payments, with the first curtailing high costs in terms of time and energy and the second leading to the economic marginalization of Inuit.

To overcome these dilemmas, the Clyde Inuit began focusing more attention on species that could be harvested from fixed sites - such as arctic char - or those whose

capture depended on large investments of human energy - such as caribou (Wenzel 1991:126). The pooling of money, resources, and energy, involving the whole community, has begun to take place. An example of this is the recent acquisition by Clyde residents of a 15 meter scallop dragger called the 'Uncle John', which has been used to take out groups of residents for the purposes of caribou hunting and berry picking. This community asset gives opportunity to those without equipment or cash to participate in hunting and gathering activities on a communal basis. What remains to be seen, however, is whether an increased in harvesting pressure on these focal species will continue to be sustainable.

#### 2.3.7 Contemporary Economy of Clyde River

Today, Clyde River has too few jobs to cater for a growing number of young adults. Residents below the age of 20 comprise 52% of the community population. Many of the young lack the skills to pursue the lifestyle of their parents and grandparents because the government's policy of mandatory education requires that they remain in school rather than accompany their parents in subsistence activities. Because of this, the conception of work to Clyde River residents has changed dramatically in the last ten years. While some individuals retain a strong interest in the traditional hunting/subsistence lifestyle, others are developing a desire to be educated and to enter the modern "southern-style" jobs which are now present in the community. Wage employment positions have expanded to some 45 full-time positions and about 16 part-time positions (Nickels 1991). Thus, more money than ever is present locally, but the apportionment of these monies has narrowed.

In 1971, every adult had access to money, while in 1990, regular cash inputs, other than through welfare payments, is limited to wage earners (Wenzel 1991, personal communication).

Despite these economic and demographic changes, the reliance by Clyde residents on the region's biological resource base remains strong. The rising costs of transportation services has caused an increase in the cost of living effecting all Clyde residents. Concurrently, government legislation in the form of hunting restrictions and a reduction in Clyde's polar bear quota (Lloyd 1986) has put further pressure on the potential subsistence harvest of Clyde hunters. The cash inputs required by harvesting are now prohibitively high, but many Clyde inhabitants are without jobs and are experiencing the effects of this cash scarcity (Wenzel 1989:17).

Money, more than ever, has become the critical resource for the purchase and operation of hunting equipment. Men with jobs have money to buy equipment and can therefore, if they can find the time, go hunting and bring home animals. Those hunters without jobs have little access to the amounts of money that would allow them to hunt as often and productively as they would like. Full and part-time hunters have explained that they require expensive equipment, such as Lake Winnipeg boats with large outboard engines and fast snowmobiles, in order to cover large distances in the small amounts of time they have in which to hunt. These individuals are willing to pay the extra costs of expensive equipment if it means they are able to hunt (Nickels 1991). In addition, employed hunters are beginning to plan their vacations to coincide with the expected arrival of
"prestige" species such as narwhal and caribou (Wenzel 1991:131). With quicker vehicles these individuals are able to travel beyond the range of non-wage supported harvesters who are restricted to hunting seals that can be found closer to Clyde (ibid.). The meat from narwhal and caribou are only entering the village after such "holiday" hunts, resulting in a pattern of "feast and then famine" (ibid.:132). More distant activities of non-wage supported hunters now require the cooperation of wage-employed community members.

Attempts to establish renewable resource-based initiatives to replace the sealing industry have had limited success. Though large stocks of shrimp, char, and inshore turbot have been found in the waters of Baffin Bay, commercial fishing has employed a limited number of Inuit in a few communities, but not in Clyde River (Kerr 1990). Without wage employment or hunting, many community residents are forced to rely on social assistance payments from the federal government. About three-quarters of Clyde residents receive their housing at the lowest welfare rent, which is \$35 per month. Social assistance is not suitable to the minimum cash-flow needs of the Inuit harvesting economy. It's intent is primarily to allow the consumption of lowgrade foodstuffs brought in from outside markets rather than to sustain the harvesting of local resources. In this way, it is generally thought that social assistance has the tendency to erode cultural values linked to the subsistence harvesting economy, rather than helping it (Tungavik Federation of Nunavut 1989:18).

The Clyde River economy is now highly dependent on the presence of the Federal and Provincial Government

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bureaucracies for both employment and income generation. Most of Clyde's income is derived from the Government of the Northwest Territories (GNWT), with Federal Government transfer payments and the municipal government also providing large amounts. Important, but smaller income generators are the local business and arts and crafts sectors, which are themselves often subsidised and supported by government programs.

More money is entering Clyde River than ever before, but Wenzel's (1991) data suggest that the government's objective of contributing to the transition from a subsistence economy to one based on a wage economy (GNWT 1990:6) is presenting new problems of "economic differentiation" in the food and money sectors of the local economy. As Wenzel (1991:133) states:

A decade ago, virtually all Clyde Inuit males were officially listed as employed, regardless of whether they held a wage position, were artisans or were harvesters. Only ten years ago, it was common to hear in the village how unfortunate it was that a man with a full-time job could not go hunting. Today, productive, experienced hunters are officially classified in the government roles as unemployed.

It is very possible that the economic problems facing Clyde River Inuit today may result in a break-down of the, until now, successful maintenance of their subsistence system. Clearly some form of community economic boost is needed, but the alternatives are extremely limited. The community must come to grips with a range of economic pressures in the near future, for not only must new job opportunities be created, but the expanding number of entrants into the labour force must be addressed. While it appears evident that the public sector will continue to meet some of Clyde's employment demands, and while social welfare payments will support

those individuals unable to find wage employment, the continued functioning of a successful subsistence system based on harvesting remains in jeopardy. Such a situation does nothing to increase the community's chances of gaining a degree of economic independence.

## 2.3.8 Tourism and Clyde River

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In the face of these socio-economic pressures there has been much attention given to the potential role that tourism can play as an engine of economic growth. Tourism is seen as an avenue through which Inuit may solve their employment dilemma, while, at the same time, continuing the maintainance of their subsistance system. Indeed the industry is strongly promoted by the GNWT as part of a broad strategy to improve economic conditions and job opportunities in the Baffin region (RT and Associates 1989).

General trends on the number and type of visitors travelling to the Baffin Region can be gained from various reports dealing with Baffin tourism (see Acres Int. 1988, 1990; Hamburg, 1989; GNWT, 1989, 1990). Due to the difficulties involved in surveying summer-based regional activities in the arctic, accurate figures for tourist types and numbers in small communities such as Clyde River are difficult to obtain or simply do not exist.

While Clyde River has the potential to cater to many tourist types, including: consumptive (hunting, fishing), adventure (mountaineering, hiking, kayaking, skiing), and nature/cultural (bird watching, art collecting)<sup>1</sup>, local Inuit have had only limited contact with tourists. The community remained one of the most isolated on the island,

<sup>&</sup>lt;sup>1</sup> Service sector workers, business people, scientific researchers, as well as Inuit visiting from other communities, though conceivably tourists, have not been considered as such for the purposes of this analysis.

and because of inconsistent air survice until 1973, tourists rarely visited. Interviews with community members reveal that a conservative estimate on the number of tourists visiting the community on average would be fewer than 10 per year.

Despite these small numbers, the potential for tourism development in the community has been the focus of a great deal of discussion in recent years. The first community wide discussions about tourism began in early 1985 when several public call-in programs on the subject were aired over the community radio. Interest in tourism saw the formation of the "Tourism Committee," a small group of residents who meet once a month to discuss tourism issues.

Clyde River has many of the natural and human resources that attract tourists. The area boasts spectacular scenery and unique flora and fauna, including polar bears, seals, caribou, whales, many species of birds and arctic flowers. There are many possibilities for animal watching, hiking, hunting, boating, and photography. The local Inuit culture is also of great potential interest to visitors. The community possesses most of the basic services required for tourism, such as a small hotel, partially owned and operated by a local Inuk, a large Retail store (groceries, and basic equipment), a coffee shop, and a crafts cooperative, telephone and television communication via satellite in almost every home, a weather station, a community radio station, about thirty individually owned Lake Winnipeg boats or canoes with engines, a large 15-metre cooperatively owned ship, five trained dog teams, and a number of trained persons who can provide government accredited guiding and outfitting services. In addition the community has an

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airport with scheduled commercial passenger service three times per week.

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Though Clyde River appears to have all of these favourable qualities for tourism development, it is interesting to compare how Clyde is viewed by the tourism industry in the rest of the Baffin Region. Clyde was given lowest priority in terms of its resource potential in the 1983 Community Based Tourism Strategy (Anderson 1990:11). Later, Wenzel and Milne (1990), asked various government and private sector representatives which communities on Baffin Island were most likely to be "winners" and "losers" in terms of future tourism development. They found that three distinct groupings of communities existed (see Figure 2.2): those that were considered to have great potential for tourism growth, those that had potential if certain conditions were met, and those that were considered to have very little chance for growth in the tourism industry. Clyde emerged at the low end of the middle grouping. While some of those involved agreed that Clyde had potential it was felt that several issues needed to be addressed before Clyde could develop its industry (ibid. 1990:10). Concerns centred around the need for tourism attraction development, inadequate accommodation and limited levels of service/training.

## 2.4 The Conservation Area Link

Closely linked with the increased interest in tourism is the preposed formation of a nearby conservation area (Igalirtuuq). Igalirtuuq (Inuktitut for Isabella Bay), located roughly 100 km. to the south of Clyde River (69° 35'N, 67° 15'W, see Figure 2.1), was frequently visited by

arctic whalers. The name Isabella Bay is reminiscent of the whaling days and comes from the name of Captain John Ross's vessel the <u>Isabella</u> (Ross 1985). Ross and MacIver (1982) show that in the mid-19th century a major whaling ground occurred in the months of September and October around Isabella Bay. They report that most of the harvest at this site occurred after 1860.

Figure 2.2 Winners and Losers from Tourism Development in the Baffin Region<sup>a</sup>.

High Potential <---- Medium Potential <---- Low Potential

Pangnirtung Pond Inlet Iqaluit Cape Dorset Lake Harbour

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Clyde River Arctic Bay Broughton Island Grise Fiord Igloolik

Hall Beach Sanikiluag

\*. Based on interviews with tourist industry representatives and government officials in Iqaluit, Pangnirtung and Clyde River. Source: Wenzel and Milne (1990:9)

Mitchell and Reeves (1981) have conservatively estimated the bowhead population prior to the peak of European whaling (1825-34) to be about 11,000. Ross (1979), using available records from the whaling years 1719-1911, stated that a minimum of 28,000 bowheads were taken from Baffin Bay. It has been over 75 years since the last commercial harvest of the Baffin Bay Bowhead, and the population has shown no indication of significant recovery (Finley 1990). The failure of the whales to rejuvenate from population decimation is believed to be due to a combination of predation by killer whales, occasional hunting by Inuit, and habitat instability (Mitchell and Reeves, 1981). The population, though no longer hunted, is thought to number only 200 to 300 animals and is designated as endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

## 2.4.1 Igalirtuuq and Conservation

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In the early 1980s, a local Clyde River hunter informed a visiting biologist about the summer presence of bowhead whales at Igalirtuuq. This knowledge, combined with the 1983 commencement of the World Wildlife Fund's (WWF) "Whales Beneath the Ice Program," marked the beginning of a long term study of the Igalirtuuq population (see Finley 1990). The research, in turn, stimulated conservation concerns for the bowhead whale both within and outside the community. This led to the formation in 1988 of the "Igalirtuuq Committee" by the Hamlet Council. This committee, working with the Hunters and Trappers Association, was given the mandate to develop a conservation plan for Isabella Bay based on community knowledge and concern for the bowhead whale.

In April 1987, the HTA of Clyde River, formulated a review document, "Whales Beyond Our Knowledge," and a letter outlining their interest in the protection of the whales and their habitat at Igalirtuuq (see Appendix 2). The letter and document were sent to the Federal Minister of Fisheries and Oceans, the territorial Minister of Renewable Resources, and other interested individuals and organizations (Myers 1990).

According to Myers (1990) and Finley (personal communication), the residents of Clyde River showed concern about the possible impacts of industrial activity and water pollution on the whales. There was the fear that oil and mineral development in Lancaster Sound, as well as the release of chemicals or garbage into the water by resource developers, Inuit in other communities, ships, and tourists, could have detrimental effects upon the Isabella Bay bowhead population.

In June 1988, stimulated by the HTA's initiative, Renewable Resources and the WWF sent the community background information on options for the protection of Isabella Bay (see Appendix 3). These were presented as: 1) a land use zone, embodied in the Lancaster sound Land Use Plan; 2) a whale sanctuary, under the federal Fisheries Act; 3) a combined whale sanctuary, archaeological site reserve and biosphere reserve; 4) a national marine park; and 5) a territorial park (Myers 1990:2).

As a further follow-up to what the WWF report Options for Bowhead Whale Protection at Isabella Bay initiated, a "Special Committee", composed of representatives from Renewable Resources, WWF, the marine biologist, and the community, visited Clyde during the summer of 1988. The purpose of the visit was for the committee to participate with the community in reaching a decision on the protection of Igalirtuug. The specific mandate of this cooperative planning committee was to decide upon the best protective scheme for Igalirtuug as well as recommend some management measures that would reflect local needs and concerns. As Myers (1990:2) outlines, "the main components of the summer's work were continued exchange of information with the community, gathering of traditional and local knowledge regarding the whales and Igalirtuug, and development of a more detailed proposal for protection of the area."

Periodic announcements in Inuktitut were made by the Special Committee over the radio in an attempt to involve the community (Myers 1990:6). An "open house" was held, where interested community members were invited to come and talk to committee members about Igalirtuug and conservation. A permanent display was also mounted at the school featuring old photographs of whaling activities and a whale wallhanging from the Igutaq print shop in Clyde River (Myers 1990:6). Donated to the community library was a copy of the book Arctic whalers, Icy seas, written by W.G. Ross (1985), which provides Clyde Inuit with the first images of the whaling era, their ancestors, as well as additional historical evidence that Isabella Bay was once an important site for the British whaling industry (Finley et. al. In addition, written summaries of tape recorded 1987:59). interviews with Clyde elders about their knowledge of Igalirtuuq and the bowhead whales were left in the library (Finley and Myers 1988).

According to Myers (1990:4) the community was "nervous about setting up a national or territorial park because they feared a heavy influx of tourists and possible constraints on the communities other activities in the area." By contrast, classification under any other sort of protected zone under the GNWT's land use plan was not felt to guarantee enough protection to the area. In the end, after substantial conversations with residents, the Special Committee supported a whale sanctuary and Biosphere reserve status as the best option. This designation, built upon the Department of Fisheries and Oceans' <u>Arctic Marine</u> <u>Conservation Strategy</u>, its <u>Fish Habitat Policy</u> and <u>Lancaster</u> <u>Sound Land Use Plan</u> (ibid). Also considered important was the recognition and protection of archaeological sites, which could be accomplished under territorial and federal legislation.

By the end of September, the Special Committee recommended drafting a management plan for Igalirtuuq. On October 13, 1988, a public meeting was held, attended by over 150 residents (Finley, personal communication). At this meeting video footage and slides were shown of the summer visit, a description of the project findings were summarized by Finley, and a report of the committee's recommendations were given to the community. The conservation plan received overwhelming support by the community (Finley, personal communication).

### 2.4.2 The Igalirtuuq Conservation Proposal

In 1990, the community of Clyde River in co-operation with the WWF, submitted a proposal (1990) to the Departments of Fisheries and Oceans, Renewable Resources, and Culture and Communications (Appendix 4). The document describes the importance of Igalirtuug as summer habitat to the endangered bowhead whale. It also outlines possible stresses on the whales, recommendations by the community regarding preferred conservation mechanisms, and a management plan. The document recommended the Northwest Territories Government establish through the Fisheries act the first arctic Whale Sanctuary to protect Isabella Bay as critical bowhead habitat. Surrounding this sanctuary, through federal and territorial legislation, they also recommended a Biosphere Reserve be established at Igalirtuuq under the UNESCO Man and Biosphere (MAB) Program. The purpose of this is to protect Inuit archaeological and historical European whaling sites. It is hoped that such a framework of local

community, scientists, and government cooperation will stimulate increased international recognition of the area and its urgent conservation needs.

The blending of Inuit and scientific knowledge through the Igalirtuuq Conservation Proposal process has revealed several unique biophysical features that make Isabella Bay critical summer bowhead habitat. Deep offshore troughs, ocean and wind currents, combine to provide the right conditions for the growth of the whales main source of food; the copepods <u>Calanus glacialis</u> and <u>C. hyperboreus</u> (Finley 1987:42). The shallow banks off the coast of Isabella Bay also afford adequate protection from predation by Killer Whales (<u>Orca orcinus</u>). The Bay also provides the whales with ideal habitat for socializing (Finley, 1990).

Within this favourable setting, however, exists the potential for several activities and disturbances which could threaten the survival of the bowhead whales. These threats include; "local boat traffic, pollution, tourism, defence activities, and natural factors such as the bowhead's slow rate of reproduction" (WWF 1990:3). Finley, also states that "the survival and eventual recovery of the eastern arctic bowhead may depend on the implementation of protective measures for the species and its essential habitats (1990:151)."

Presently Isabella Bay is isolated from large scale human industrial activities (Richardson and Finley, 1989), but has been an important area for traditional Inuit hunting (Freeman 1976). Boat travel between Clyde and Isabella Bay during the summer months when the whales are present is rare because of the difficult and dangerous travel along the exposed coast. The purchase of bigger boats, faster motors,

and tourism may change this.

In addition to protecting the Bowhead whale population, the Igalirtuuq Conservation Proposal, it is thought, can provide a model for strengthening the Department of Fisheries and Oceans relations with Inuit communities at the local and regional level. It could also strengthen Clyde's involvement, knowledge, and expertise in resource management, as well as being the "draw card" to promote locally-controlled tourism development.

The Igalirtuuq Conservation Proposal has stimulated a great deal of interest in the possible development of "whale watching" based tourism as a means of providing a boost for Clyde's limited economic base. Also, growing public awareness in southern Canada of the bowheads at Isabella Bay has attracted the attention of tour wholesalers who see tourism potential (Hume 1990).

## Chapter 3

## TOURISM DEVELOPMENT, THEORETICAL BACKGROUND

### 3.1 Tourism Impacts - An Overview

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Tourism is an important development option for many small isolated communities characterised by natural beauty but depressed economies. The industry, however, brings with it a host of positive and negative economic impacts (see Figure 3.1). For one thing, tourism is a growth industry and is, therefore, desirable for the economic development of many regions (Pearce 1989). The tourist market comes to the producer thus circumventing problems of isolation. The tourist industry, being labour intensive can create employment opportunities and tourist expenditures can contribute directly and indirectly to the local economy (Lindberg 1991). Tourism can also generate income as well as higher levels of intermediate demand through the multiplier effect. Thus, the industry can aid the community in diversifying the structure of its economy, and aid in reducing local disparities in income and employment (Milne 1990:16).

Tourism can also entail a series of economic costs. It can be an "unstable source of income, greatly influenced by uncontrollable factors such as political instability, weather, and international currency fluctuations (Boo 1990:xiv)." The goods and services required by tourists often cannot be provided from within the community, forcing a reliance on imported commodities and skills. In this way, some tourist expenditures leak from the local economy, leaving only a small amount in the hands of local people (Wilkinson 1989:164). In isolated regions this leakage factor can be very high.

FIGURE 3.1 The Economic Cost/Benefit Sheet

#### Potential Economic Benefits

1. Employment generation

- 2. Income generation downstream generation the multiplier effect 3. Government revenue
- 4. Diversification of economic structure
- Regional development
  Finance available from overseas overcoming local shortages in capital

#### Potential Economic Costs

- 'Unequal' employment locals participating only as employees
  Tourist expenditure may 'leak' from the economy
  Overseas investment may lead to profit repatriation and reduces avenues for local ownership
- 4. Government costs stemming from the industry's infrastructural requirements
- 5. Tourism will compete for indigenous labour, capital and land resources

#### Source: Milne, 1990:17

Tourism may also generate only semi-skilled jobs for locals, with managerial positions filled by outsiders (Milne In addition, it can be difficult for local 1987:120). residents to become involved in the organization and control of the industry because they lack the requisite capital and skills. The close linkages between travel wholesalers, airlines, and accommodation networks often make it difficult for local people to become directly involved in the industry, with "outside" operators retaining the bulk of the profits. The costs of operating airline facilities in an arctic setting has left a relatively limited number of airlines in the Baffin region. This keeps the costs of tickets prohibitively high, and with a limited capacity of seats tourists and local northerners are in direct

competition for seats.

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Another drawback to arctic tourism is its seasonal nature. It is often inefficient and costly to have equipment, capital, and labour, lying idle for extended periods throughout the year. The opportunity costs and timing of resident involvement in the industry must be considered as well. In Clyde, for example, a tour guide's investment of time and money may impede his/her ability to hunt (Wenzel and Milne 1990).

Tourism also leaves socio-cultural impacts in its wake (see Figure 3.2). Positive effects include the revival of 'traditional' social and material culture, the opportunity for local residents to experience new cultures, and the development of a tourism-based infrastructure which will also benefit local people (Milne 1990:18).

FIGURE 3.2 The Socio-Cultural Impact Balance Sheet

#### Potential Benefits

- 1. opportunities for social mobility
- 2. Exposure to other cultures
- 3. Revival of traditional arts and crafts
- 4. Restoration of sites/monuments
- 5. Increase in community self-awareness
  6. Improvements in social facilities

#### Benefits or Costs

- 1. Altering settlement patterns
- 2. Changing economic structure/occupational structure
- 3. Changing demographic structure
- 4. Changing social structure roles of sexes, class based structures
- 5. Demonstration effect changes in consumption

#### Socio-Cultural Costs

- 1. Overcrowding of infrastructures
- 2. Negative demonstration effects
- 3. Employment inequalities may cause fiction 4. Potential increase in undesirable activities
- 5. Erosion of indigenous language and social norms/values
- 6. Commercialization and debasing of art forms

Source: Milne 1990:20

Most of the impacts, however, are ambivalent in nature or negative (Mathieson and Wall 1982). Tourism inevitably effects community value systems, such as individual behaviour, family relationships, moral conduct, and creative expression, having the potential to alter or destroy a community's way of life (Milne 1990:19). Tourism has also been blamed for the introduction of drug trafficking, prostitution of local culture, crime, and inflation to communities (Belisle and Hoy 1980; Keogh 1990:450; Liu and Var 1986).

The type of tourist that visits a community plays a major role in determining the degree of impact (Butler **1990:43).** Some tourists want only limited interaction with local residents, while others seek contact. Some tourists will expect high quality services and amenities and will not adjust to local conditions, while others find such adjustments exciting and part of their learning experience. Negative socio-cultur: | impacts will likely increase if locals and tourists perceive themselves in competition for the same resources (Romeril 1989:207). From a tourism planning perspective, these attitudinal extremes should be as influential in setting limits to tourism development as environmental carrying capacities. Most authors show concern for the effects of foreign domination of the tourist industry and the impacts of the "demonstration effect" - the introduction of foreign material and social ideologies into societies previously unexposed to these lifestyle; (Sayer 1981). As Milne states, "heightened economic expectations among the local population who aspire to the material standards and values of the tourist may lead to the copying of consumption patterns (1990:19)." The inability of some

local communities to achieve western-induced desires by socially accepted means creates tension. Increased employment of "outsiders" in the industry, along with changes in the economic roles of women and community social organization can also intensify local resentment towards tourists (Milne 1990:19).

Tourism is increasingly being seen as an industry inseparably related to the environment, providing economic opportunities for peripheral and non-industrialized regions that have been previously overlooked (see Figure 3.3). Preservation of the physical environment is now viewed as an investment when planning tourism development (Farrell and Runyan 1991; Innskeep 1987; Romeril 1989). Tourists increasingly demand high-quality environments, and if expectations are not met, will change their travel patterns (Innskeep 1987:119). As a result tourism can increase local awareness of the importance of conservation and lead to the establishment of environmental protection legislation while producing the economic means to put such measures in place (Boo 1990; Milne 1990:17; Travis 1982). Tourism can, in fact, lead to the conservation of natural resources which may have ecological, scientific, social, and educational values while at the same time stimulating economic activity and growth in isolated, rural areas (Laarman and Perdue 1989; Lindberg 1991).

As an "exploiter" of natural resources tourism unfortunately can be associated with environmental costs. Trampling of plants, soil erosion, and pollution are just some of the impacts commonly associated with tourism (Farrell and Runyan 1991:31). Architectural "pollution" also occurs when culturally accepted and aesthetically

pleasing building design is not taken into consideration when constructing facilities (Milne 1990). Success in the industry can also lead to the scenario of "slapping the hand that feeds it," because the popularity of a region often brings with it overcrowding and environmental degradation. In these cases, "tourism destroys tourism" leading to decreased visitation (OECD 1980 in Boo 1990:xiv).

FIGURE 3.3 The Environmental Impact Balance Sheet

#### Potential Benefits

Environmental protection legislation
 Awareness of the importance of conservation
 Extension of environmental appreciation/pride
 Potential Costs/Problems

Pollution
 Crowding and congestion
 Damage of natural resources, resource depletion
 Loss of land for other uses
 Loss of flora and fauna
 architectural/aesthetic pollution
 General impact on ecosystems

Source: Milne 1990:17

Clearly not all of these impacts will affect small arctic communities such as Clyde River. Travel to the Baffin region has always been hampered by high costs, shortage of parks and visitor services, and a harsh climate (Keller 1987). Despite the fact that the flow of tourists to the region has doubled during the past decade, annual arrivals still only number approximately 3,000 (Milne and Wenzel 1992). Nevertheless, the recent growth of nature/culture tourism and increasing interest on the part of tour operators indicates that flows will increase considerably in the next decade. This growth will be supported by ongoing infrastructural development, an increase in the number of parks, and the recent introduction of discounted flights to the area. While tourism to the region is unlikely to ever be classified as "mass" in nature it is important to note that the small size of the communities will magnify potential impacts.

3.2 Territorial Policies: Tourism Agenda For The North

It was not until the 1980's, that serious consideration was given to northern tourism. In 1980, a formal tourism policy document called "Community Based Tourism" was prepared by the GNWT. The document emphasized the development of an industry which would be largely owned and operated by Northerners, reflecting community aspirations, and which would distribute tourism equally across the NWT (Marshall et al. 1982). Government funding was made available under this program, mainly to increase the quantity and quality of accommodation services considered to be lacking.

Balmer, Crapo and Associates (1980) were commissioned to produce a <u>Travel Industry Strategy and Action Plan for</u> <u>the NWT</u>. This study, found that facilities in the north were of poor quality and highly priced. Information services were almost non-existent and business practices inefficient. These reports then provided a basic inventory of tourism resources in the area and recommended the division of the NWT into six travel zones (see Figure 3.4). Regional Tourism Strategies, as well as the first comprehensive marketing strategy were drafted and implemented by the GNWT (1983). Finally, each Regional Travel Association began to receive annual core funding to implement programs for tourism development from the GNWT (Anderson 1990).



Figure 3.4. Travel Zones of the Northwest Territories.

Source: Anderson, 1990.

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Little attention, until recently, has been given to the NWT in national tourism strategies, even though this region represents roughly one third of Canada's total land area (Anderson 1990). The 1987 signing of the Canada/NWT Economic Development Agreement, which allocated \$12 million to NWT tourism development, with 70% of the cost being provided by the federal government, showed the federal government's recognition that tourism was a way of improving the northern economy (<u>Our Future</u> 1988). In 1990, Tourism Canada and the GNWT released a new Federal Tourism Policy which formed the basis for regional tourism strategies to be developed in consultation with regional economic development agencies (GNWT 1990, ISTC 1990).

It has been recognised over the past decade that planning in the tourism industry has paid off in the development of new attractions, facilities, and skills. Northern ownership of tourism services and businesses has expanded, visitor numbers have increased (GNWT 1990). Spending by tourists in the north, from 1979 to 1988, has increased 179%, and stands at a figure of 31.4 million dollars (ibid.). The new Territorial Tourism Development Strategy (ibid.:13-15) emphasises a series of guiding principals:

 Development must be consistent with the abilities and aspirations of the host communities; it must respect northern cultures, expectations and lifestyles;
 Development must be sustainable with the use of today's resources not compromising their use by further generations, it should be designed to yield maximum possible economic benefits for residents of the Baffin Region;
 Tourism should be well distributed between communities to facilitate this government support will be given to small and medium sized communities;
 Development will recognize and respect the spirit and intent of all aboriginal land claims;
 Major tourism initiatives will embody extensive

community and industry participation in the planning process; 6. The private sector should take the lead in developing a viable tourism industry. Government provides financial incentives and public infrastructural support. It will also encourage and support the private sector in the marketing arena.

Many of these guidelines, unfortunately, may be difficult to implement because of the limited knowledge that exists on the socio-economic, cultural, and environmental impacts that Baffin tourism might cause. At present, the main issue is how the various communities that desire tourism development can control growth so as to maximise positive impacts while reducing negative effects.

## 3.3 Local Attitudinal Studies of Tourism Development

Studies conducted over the last decade have shown that host communities usually welcome tourism's economic impacts (see Keogh 1982, 1990; Kendall and Var 1984; Liu and Var 1986), but are wary of the social and environmental consequences of the industry's growth (see Allen et. al. 1988; Belisle and Hoy 1980; Brougham and Butler 1981; Pizam 1978; Liu, Sheldon and Var 1987; Thomason et. al. 1979). If these negative impacts are not addressed, deteriorating and even hostile resident attitudes towards tourism may result.

Initially tourism researchers, developers, and planners saw host societies as passive recipients of tourism. Gradually this assumption has been shown to be detrimental to sustainable development. Today, it is largely recognised that local peoples need to become more powerful participants in the decision-making process. Many planners in communities where tourism is already functioning realise that it is vital to involve residents in the planning process and to keep them informed and consulted about the

scope of any development. Resident attitudes towards tourism, and perceptions of its impact on community life, must also continually be assessed if sustainable forms of development are to be set in place (Keogh 1990).

To date, most resident attitude studies have been conducted after tourism development has occurred. Researchers have generally been concerned with reactions to existing levels of development, opinions on the desirability of further tourism development and the direction such development should take (see D'Amore 1983; Milman and Pizam 1988; Murphy 1981, 1985; Moser and Peterson 1981; Perdue et. al. 1987; Ritchie 1988). Few studies have examined resident impressions of tourism development where little or no tourism exists; fewer still have studied these aspects in arctic communities. I will now briefly outline those studies that have addressed Inuit attitudes and perceptions of tourism development.

## 3.4 Inuit Attitudes to Tourism Development

The most useful and detailed studies of resident perceptions and attitudes to tourism development in the Baffin Region have been conducted in the community of Pangnirtung. Larger than Clyde River (1,100 people), Pangnirtung has been involved in tourism since the early 1980s when the GNWT aimed to redirect the economic benefits of tourism to all parts of the N.W.T (GNWT 1983:2). Senior staff of the Department of Economic Development and Tourism (EDT) in both Yellowknife and Iqaluit in the early 1980's were looking for ways to strengthen local economies in communities of the Eastern Arctic. A pilot project was set up to develop new tourism planning and implementation

techniques in the Baffin Region. In 1980 the Baffin Regional Council chose Pangnirtung as the "test" site for the program (Kuiper 1987:27). Also important is the fact that Pangnirtung is located at the gateway to Auyuittuq National Park and, thus, the "Park-people relationship" is of extreme interest.

In consultation with the community and the GNWT's "Community Based Tourism Program" (GNWT 1983), the consulting firm of Marshall Macklin Monaghan Limited was given the task of completing a tourism study of the entire Baffin Region in 1981. Under the program, community tourism development plans for each community in the Baffin Region, including Pangnirtung and Clyde River, were to be completed. Resident views towards tourism were a major part of the Community Tourism Study. The main purpose of the exercise was to find out if community residents were interested in developing tourism; and, if so, what kind of tourism and under what conditions. Although this report is informative, no sample size is given on the numbers of residents that were interviewed. Notably, the section on "Community Feelings About Tourism" is very weak, leaving little data of any quality.

A subsequent study by Kuiper (1987), which included more details on Inuit perceptions of tourism development was done in Pangnirtung. The intent of the study was to discover how the people who have been involved in the Pangnirtung Pilot Study and Tourism Plan felt about the plan. It also attempted to define what residents perceived to be the Plan's objectives, what they felt were major strengths and weaknesses, how it could have been improved, and what lessons from the experience would help other

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communities set up effective tourism programs elsewhere in the north (ibid.). Of particular interest here are a number of questions that dealt with residents' personal involvement in tourism.

In 1989, Reimer (1989) began a long-term study in Pangnirtung. She conducted an analysis of local attitudes towards tourists and tourism development with special regard to social and cultural effects. Residents were asked whether the social and community development objectives set out by the tourism program were in fact the objectives of the community members themselves. Although her sample size is small (3.5% of the total community population), it is the latest look we have at the feelings of Inuit towards tourism development.

The various studies mentioned above all obtained similar results. Community views as summarized by Reimer (1989:ii), are:

Overall, residents view tourism to be good for the economy although they are not yet satisfied with direct employment benefits. The tourism industry is generally compatible with the local landoriented lifestyle and has also proven to be a vehicle of Inuit cultural revitalization. However, residents fear overcrowding and related negative social consequences, Pangnirtung, like other communities in the process of development, is in transition between a traditional and modern way of life. Future research calls for studying this process within a broader economic, social, and political context.

Although these studies have been done in a community where tourism is already established, such information highlighting the lessons learned and experience gained can be of great assistance for other communities, such as Clyde River, interested in getting involved in the industry.

#### 3.5 Previous Clyde River Resident Attitudes to Tourism

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The most relevant report in regard to the present study is the Community Tourism Development Plan for Clyde River, which was part of the Baffin Regional Tourism Planning Project completed by Marshall et. al. (1982). As part of the regional study, the tourism planner and the Government Area Economic Development Officer (EDO) visited Clyde River for ten days and tried to speak to as many residents as possible to find out their views on possible tourism development (see Appendix 5). Most results centred around Clyde's organised institutions, for example, Hunters and Trappers Association representatives expressed uncertainly about whether or not tourism would be good for the community. One community member expressed concern that once tourism was started it might not, if it became a problem, be possible to stop (ibid.: B-2). "Members of the Co-op Board of Directors indicated that they realized the potential of tourism to help the Co-op diversify their activities and become more economically viable (ibid.)," but they too were concerned about the community's ability to control tourism once it was created. The Local Education Authority showed concern that tourists might report what they see in the community to the government and news media. These residents were concerned about the adverse criticism of their northern way of life by visiting southern tourists.

The study concludes by saying that though Clyde River has tremendous potential to attract a variety of tourists, a negative and suspicious public attitude prevents the development of the area's full potential (ibid.:3-2). For these reasons, the consulting firm suggested conducting a thorough public awareness program to get to the "root of the

suspicions and concerns surrounding tourism" and show residents how tourism can be developed to the benefit of the community (ibid.). It appears that Marshall et al. (1982) felt that the development of tourism was undoubtedly in the community's best interest, whether they liked it or not. Unfortunately, the root of the problem for Marshall et al. (1982), was to show the community how tourism could be developed to the benefit of the community, rather than first finding out what the feelings of the community were and how tourism might be molded to fit their needs and desires.

One is left wondering how many residents in Clyde River were actually interviewed and how these interviews were conducted. Further, there is no review of the attitudes of the general public, so it is very difficult to say whether the views expressed are those of a vocal few, or are actually representative of the community as a whole. Much more detailed information is needed in order to make any accurate statements about Clyde Inuit attitudes towards tourism development.

#### Chapter 4

# Clyde River Resident Attitudes to Tourism Development

## 4.1 Tourism Impacts

Tourism development has provoked much discussion and action within Clyde River. Radio shows, and community debate on the subject, as well as the formation of a Tourism Committee, are evidence of this. But what remains unanswered is whether this concern reflects the broad desires of the community or only that of a small number of residents. What is clear is the existence of a range of perceptions about tourism and its potential costs and benefits. The following discussion addresses this issue, focusing on community attitudes toward the current and potential socio-economic, cultural, and environmental impacts of tourism development.

## 4.1.1 Socio-Economic Impacts

Ninety-two percent of the residents surveyed said that they wanted to see tourism in Clyde, while 93% stated that local economic benefits would stem from the industry's growth (Table 4.1). When discussing who would gain economically, 30% commented that they felt tourism would bring employment opportunities to everyone in the community. One quarter of the respondents felt that guides/outfitters and carvers would benefit most from such employment. Only 11% thought the hotel would benefit because it presently caters to temporary maintenance and construction sector workers and is usually full during the summer months leaving

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no room for tourists. Four percent thought the store would benefit and the same percentage thought that the special Committees or heads of the community would profit from tourism.

Table 4.1 Resident Response: Economic Issues.

Overall Attitude to Tourism Development	Perce Yes (%)	ntage No (%)	Responses Don't Know (%)	Total Number of (Responses) <sup>a</sup>
General Support for Tourism	92	7	1	72
Perceived Economic Benefits	93	0	7	70
Perceived Overall Problems	29	52	19	65

a. N = 73. Not all questions were answered by respondents. Source: Clyde River fieldnotes

While approximately half of the respondents thought there would be no socio-economic costs associated with tourism development, a major fear, revolves around the potential lack of community involvement in the industry. Most residents would prefer to see tourism run from within Clyde and worry that outsiders, including Inuit from other communities, will gain control of the industry. Clyde residents feel the consequences of lacking control of the industry would be outside competition for local labour, capital, and land resources, as well as a loss of power in policy and decision making.

#### 4.1.2 Cultural Impacts

Seventy-two percent of those surveyed thought there would be clear cultural benefits from tourism development (Table 4.2). Over half mentioned that some form of cultural exchange between tourists and community members would be a distinct benefit. It was believed by 38% that cultural revitalization would result, while 6% of the respondents mentioned that as long as tourists listen to the community and support its development plans then the government might gain some confidence in the leadership and organizational abilities of the community. This, it was believed, might lead government officials to listen more closely to the wider needs of the community. "Clyde River," as one resident explained, "has had a hard time getting the government to listen to community needs." A few residents thought that as long as the community and tourists worked together and built mutual trust, then tourism development could work well.

Table 4.2 Resident Response: Socio-Cultural Issues.

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Overall Attitude to Tourism	Percentage		Responses	Total
Development	Yes	No	Don't Know	Number of
	(%)	(%)	(%)	(Responses) <sup>a</sup>
Perceived Cultural Benefits	72	12	16	58
Perceived Cultural Problems	16	61	23	57
Perceived Lifestyle Change	31	64	5	42

a. N = 73. Not all questions were answered by respondents. Source: Clyde River fieldnotes

Finally, 2% stated that the young may also benefit from the facilities set up as a result of the tourism industry. The reconstruction of traditional items and historical displays intended for tourists might also teach young Inuit children about their heritage. For example, one resident noted that the recent construction of two traditional <u>Qayaqs</u> (Kayak), a <u>Qangmag</u> (sod houses), and an <u>iperalik</u> (oil lamp and wick), by the elders, had stimulated the interest of many children to learn more about traditional skills. Thus, tourism related cultural revitalization may help the younger generation to learn more about their traditions and culture. As one Inuk stated, "once the community knows what to expect [from tourism], the Tourism Committee will know how to preserve our own culture... for example, how to build a sealskin tent display would teach tourists as well as reinforce our own culture."

Asked whether they thought tourism development in Clyde would bring any cultural costs, 61% thought there would be no costs, and 23% were uncertain of the impact. Cultural costs that were mentioned related to fears that tourists may break community rules. In Clyde River all alcohol entering the community must be cleared through the community Alcohol Committee and, of course, drugs are illegal, although they do find entry into the community. Residents show concern that tourists may disregard the rules and bring in such substances.

One resident said that, "stress will be added to the community by tourists... there is already a cycle of stress which ends in a few social catastrophes per year." She fears increased problems of spousal assault and drug and alcohol abuse caused by the additional stress of tourists. Other worries mentioned were the possibility of social disruption, due to the possible increase in sexually transmitted diseases brought to the community by visitors, and also a decrease in traditional hunting activity due to time spent guiding tourists. There is also apprehension that there is not enough equipment in the community to go around to each resident interested in working in the tourist sector.

Two Qallunaat teachers, who have each taught in the community for four years, stated that they did not believe tourists get a good feel or exposure to the culture. They think tourism will, "perpetuate a lot of myths, stereotypes,

and an increased number of whites who think they know the Inuit when they don't." As for cultural revitalization, the two teachers didn't believe tourism would do this. One Inuk also believes there will be cultural costs if tourists do not show respect towards the indigenous culture. In an elaborate story of an event that happened in Clyde, he explained how the feeling of "being on display," and problems of tourists taking pictures of residents without permission are problems that are difficult to prevent.

Nearly two thirds of those surveyed (64%) thought that there would be no lifestyle change resulting from tourism development. Many Inuit said they are not worried about changing their lifestyle because they are changing everyday and they are still Inuit in the way they think about the land. Some see it as an unavoidable part of life; as one resident responded, "it [tourism] is part of our life whether we want it or not." Another stated, "we might lose a little of our culture but that is expected, every culture changes a little." Some believed they would experience a lifestyle change, but that the amount and speed of change would be difficult to gauge, while others thought that changes would only effect the younger generations.

A small number of residents stated that tourists should accept Inuit the way they are and not force a change in lifestyle. This point was expressed best by one member who stated:

Inuit should not have to change their lifestyle to suit the tourists. Tourists should experience the Inuit way of life the way it is, how the Inuit really are, as Inuit have to experience southerners when they go south. If I go south as a tourist you can't expect me to tell you to get rid of all the cars and pollution for me. You wouldn't do it. So why should we Inuit change our lifestyles for the few tourists that come up here?

#### 4.1.3 Environmental Impacts

Eighty-one percent of those surveyed said they did not think tourism would bring any environmental problems as long as the community controlled the tourist industry (Table 4.3). If the community was well organized and set guidelines which tourists respected, most felt that no environmental impacts would follow. Nevertheless many residents discussed the possibility of garbage problems at both Clyde and Isabella Bay.

Table 4.3 Resident Response: Environmental Issues.

Perc	entage R	Total	
Yes ( <b>1</b> )	No Do	n't Know (%)	Number of (Responses)*
12	81	7	57
52 60	31	17	65 52
	Perc Yes (1) 12 52 60	Percentage R        Yes      No      Do        (%)      (%)        12      81        52      31        60      23	Percentage      Responses        Yes      No      Don't Know        (%)      (%)      (%)        12      81      7        52      31      17        60      23      17

a. N = 73. Not all questions were answered by respondents. Source: Clyde River fieldnotes

Clyde River has rules about garbage. All garbage from camping trips must be brought back to the community and put into cans that go to the hamlet dump. Many residents felt that the various community committees should make similar regulations for tourists. It is feared that southern tourists will disregard the rules, with possible negative consequences. Many residents felt that guides could inform tourists when they are acting inappropriately, and tell them what they should do about their garbage.

One resident said that the degree of negative environmental impacts would depend upon the scale of tourism. If only a few tourists go to Isabella Bay and watch whales from the land, he thought no environmental impacts would occur. If a lot of tourists went to Isabella

Bay, however, he believed there would be impacts because trails would develop and plants would be trampled (see Hutchison 1988; Welch and Churchill 1986). Further, he stated that if tourist boats landed at the Kuuktannaq River (Figure 2.1), tourists would need transportation overland to Isabella Bay. A road or developed trail constructed for such tourist travel would bring environmental impacts. But if all tourists went straight to Isabella by boat, they have a higher probability of scaring the whales in the water. For the sake of the land, he said, boats would be better, while for the sake of the whales, land travel would be better, he felt that it is difficult to say what is best. **4.1.4 Carrying Capacity and Tourism Infrastructure** 

The tendency for natural and human resources to be overused by tourism is well known (Healy 1991:2). Most tourism resources, including specific attractions and landscape, are what economists call "congestible goods" (Dixon and Sherman, 1990:27, 202). Thus, large numbers of tourists can reduce the quality of the experience they are seeking. The method often employed to visualize this relationship between intensity of use and the management objectives for a resource area is through the concept of carrying capacity.

Visitor carrying capacity has mostly been studied in the context of parks and protected areas. Shelby and Herberlein (1986), distinguish four types of recreational capacity: ecological capacity (impacts upon the ecosystem), physical capacity (the number of people who can physically fit in to delineated space), facility capacity (the number of tents, boats and equipment available), and social capacity. The latter, though difficult to define, is very

important, as it depends upon the preferences of visitors as well as host community residents, rather than on any physical principle. Healy (1991:3), explains that "because tourists often look and act differently from the "locals," any evaluation of crowding must consider not only the total number of people in a given place, but the tourist/nontourist ratio." In a small community like Clyde River, for example, a few tourists can be quite obvious.

The majority of residents (52%) agreed that there should be restrictions on the number of tourists coming to Clyde (see table 4.3). Most believed small parties of tourists to be better than large groups, as the latter may overwhelm the community's small number of guides. In addition, if a large number of tourists arrive at one time then transportation and lodging capacity would be exceeded. Some residents stated that crowding at Clyde, as well as at Isabella Bay, would pose a problem for the community, and felt that the Tourism Committee should set guidelines on the numbers of tourists that enter Clyde at any one time. It is thought that with fewer tourists community members could spend more time giving a higher quality experience. Also. by starting with a small number of tourists some residents believed that continual assessment of the industry would be possible to determine whether tourist numbers could be increased without further negative impacts. As one community member stated, "we can always increase the numbers who arrive, but it may be difficult to decrease the number if we start too high."

Of those who felt a `ceiling' was unnecessary, the majority believed that the tourist season is already short and restrictions would decrease the amount of jobs and money

entering the community. These respondents were confident in the ability of the community to absorb of a large number of tourists because not all tourists would arrive at the same time.

Sixty percent of the respondents felt there should be restrictions on the numbers of people travelling to Isabella Bay (Table 4.3). Many said there should be limits on the number tourists but not on the number of Clyde residents. Although, no specific figure on the total number of tourists who should be permitted to visit at any one time was given, some residents mentioned that no large crowds should be allowed during the months when the whales are actually present. A number of other Inuit stated that there should be a ceiling on the numbers of boats, not the number of people, who go to the bay, while others thought there should be restrictions on the number of tourists because there are no facilities for them at Isabella Bay. Some were of the opinion that the ratio of guides to tourists has to be sufficient in order to ensure the safety of the tourists. One Inuk advised that the seas between Clyde and Isabella can be very dangerous and that guides should not overload their boats. There were also fears expressed that large parties could be stranded at the bay by bad weather. Large parties of tourists are thought to be more difficult to feed and rescue than small parties.

Of those residents who stated that restrictions were not needed (23%), most felt this way because, in their minds, it is still too early to predict what the impacts of tourism will be. These people believed that if a problem did develop, the separate committees could then regulate tourist access. Many in this group mentioned that they
thought the HTA and Tourism Committee should be responsible for establishing the regulations.

Other comments concerned the type of tourist activity, for example, "if the tourists don't use helicopters, or motors, and just whale watch from kayaks, then no restrictions will be needed." Still, other residents said that they would like to see a well-organised industry where small groups of tourists would go in to Isabella Bay, while at the same time another group would be returning back to Clyde. Some believed that restrictions would only be needed at first when the community has less equipment (ex. boats, motors, tents). But, as the situation changes and adjustments are made, these restrictions could be relaxed. Finally, some residents thought that if too many tourists were allowed to travel to Isabella Bay, widespread disregard of instated regulations might result from a loss of control of tourist activities by guides. This concern may stem from local fears of their inability to control the industry.

## 4.2 Local Aspects of Tourism

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An understanding of some local aspects of tourism development is needed before a proper community plan can be prepared. For example, managers will need to discern what the majority of residents think might be the most favourable seasons for tourist arrival, as well as what might be the common local activities during these seasons. It is also important that tourism planners comprehend who community members consider to be tourists. From this information it will be possible to establish which type of tourist the community may want to attract, and what type of tourism the community should promote.

# 4.2.1 The Tourist Season

While many Baffin Island communities may, at first appearance, display similar socio-economic, cultural, and environmental characteristics, closer scrutiny reveals marked distinctions. The strategic physical location of each community, for example, determines the advent of open water, which in turn, determines the timing of hunting, trapping, fishing and, ultimately, certain tourism activities. For the efficient functioning of the tourist industry, it is important to gain some idea of the best time for tourist arrival. To generate such information, Clyde River residents were asked which months they felt would be best for tourism. Many commented on the difficulties of giving a precise response. This, they told me, is not only because of seasonal unpredictability of the North Baffin weather, but also because of yearly fluctuations. The arrival and departure of both snow and ice can regularly vary at Clyde in consecutive years by as much as a month. This makes accurate statements about the best timing for tourist arrival rather subjective.

Most residents agree, however, that the winter months, though stable and possibly of interest to some visitors, would be much too dark and cold for most. The problem of providing adequate equipment and clothing for the safety and enjoyment of most tourists during the winter months is another drawback.

Many residents remarked that spring (March, April, and May), when there is more light and quick and easy travel by ski-doo, would be a good time for "winter" tourists (see Table 4.4). The lingering cold weather, however, might deter some, and the snow would still cover many of the

historical sites, making their viewing impossible. By the end of May and early June most of the snow is gone, allowing tourists to see these features. Several residents remarked that in early June, when the school is out, many residents who are ordinarily occupied by work become available to participate in the tourism industry. It was also observed that the best time for boat travel is just after the ice goes out, as the loose ice reduces wave action. This same loose ice can, however, make it difficult to get close to shore, often trapping boaters for long periods of time. Late June and July, say residents, are often the months of unpredictable ice conditions where travel by ski-doo can be difficult and travel by boat not yet possible. Therefore, there is a period, where tourism might not be logistically feasible for those who want to travel great distances from the community. For those who are interested in hiking, the problem of wet tundra, resulting in uncomfortable travel conditions and increased environmental damage to the flora and soil regimes, often makes this month unsuitable for overland travel.

July and August are by far the best months for tourism according to community members. Reasons include, warm weather, generally agreeable conditions for land and boat travel, the abundance of wildlife, and frequent opportunities for their viewing. August is considered to be the best time for tourists to see bowhead whales and narwhal along the coast close to Clyde River and is also the best time for trips to be taken to Igalirtuuq. Residents felt, however, that there is one important feature of this month that can have both positive and negative affects for tourism. By August polar bears have moved from the sea ice

to the land, and are present in large numbers throughout the Clyde River region. Frequent encounters with bears, even in the hamlet, can be expected and, though admittedly a draw for some tourists, represent an extreme safety hazard. By September, storms with high winds, rain, fog, and snow are frequent, and by October most residents said boat traffic is very dangerous and not suitable for residents or tourists.

Month	Number of Responses *	Percent (%) of Responses <sup>b</sup>
March	4	3 %
pril	13	9 %
Yay	15	10 %
June	19	13 %
July	25	18 %
lugust	44	31 %
September	20	14 📽
)ctober	1	0.7%
linter	2	1 %
lotal	143	99.7%

Table 4.4 Residents Response: Best Months for Tourism.

a. A total of 59 respondents answered the question, for a total of 143 responses.
b. N = 73. Not all questions were answered by respondents.
Source: Clyde River fieldnotes

# 4.2.2 Socio-Economic Activities of Residents

As important as the relationship of physical conditions is to tourism development at Clyde River, there are also socio-economic variables that must be considered. Undoubtedly, community employment patterns will effect, and be effected by tourism development. In its simplest form, there exist six economic options in Clyde River. These are: permanent employment (which includes full and part-time jobs), periodic and seasonal employment, unemployment (children, social assistance), recipients of pensions (elders and disabled), hunting, and carving (see Table 4.5). None of these options are mutually exclusive, as often community residents will take advantage of several categories. Soon guiding, and tourism activities may be introduced into the community.

Community members were surveyed as to their occupational activities in order to gain an understanding of the opportunity costs of the tourist industry. While precise answers were rare, the unpredictable nature of temporary and seasonal employment means that residents function as economic opportunists.

Most tourism activities, according to Clyde residents, will involve travel outside the community and thus would involve male members of the community. Questions which focused on guiding, travel over land and water, and hunting were answered almost exclusively by males. Many residents, on the other hand, believe that tourism will also involve Clyde women, especially at the household and service sector levels. It is felt that women can display their talents at traditional skills such as sewing, carving, and many types of arts and crafts. Women contend that they will be the ones to show tourists interested in the proper methods of skinning an animal, hide preparation, and cooking traditional foods. Clyde women believe they will have close association with tourists in both community and camp situations because of their societal roles.

Those who worked full-time said that their specific type of job would determine their interaction with tourists. If their job did not involve direct or indirect contact with tourists, then after work hours would be the only time available for mingling with tourists. The majority of full-

TABLE 4.5The Economic Activity of Clyde River Residents.1

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Economic Activity	Males	Females	Totals
Permanent Employment (Full and Part-Time) Periodic and Seasonal Employment Unemployed, <sup>2</sup> Full-Time Hunters <sup>3</sup> Pensioners (Elders and disabled) <sup>4</sup> Carvers <sup>5</sup>	45 13 37 28 6 9	36 4 74 0 3 1	81 17 111 28 9 (10) 0
TOTAL	129	117	246

<sup>1</sup> This table includes those residents 20 years of age and older, in 1991 (ie. those born before 1972). There are 276 Clyde residents (53%) under the age of 20 years old, out of a total of 522 people.

<sup>2</sup> Although full-time hunters are officially considered by the GNWT as unemployed, they have not been considered as such for the purposes of this table. One residents who is a carver has been included in the unemployed category. Those on Social Assistance fall into this catigory.

<sup>3</sup> Many part-time hunters exist in Clyde River, which are not included here.

<sup>4</sup> These individuals are not employed, but because they collect a pension, have not been included in the unemployed category. There are two elders, Aipeelee and Peugituq Qillaq, who do not receive pensions and therefore have been included in the unemployed category.

<sup>5</sup> It is difficult to define who in Clyde is a full-time or a part-time carver. Many residents carve in their spare time, and most full-time hunters are also carvers. For this reason, all of those people included in this category have already been categorized as hunters, except one who was classified as unemployed. Thus, this shows up in the totals as (10) individuals (9 males, and 1 female), but should actually count as 0

Source: Clyde River Social Officer, GNWT

time workers admitted that they could only take tourists out on the land for a couple of days on weekends when they usually go camping close to the community.

Many of the seasonal jobs in Clide's service and construction sectors become available during the spring and summer seasons, also the best months for tourism. Thus, many residents seeking employment may choose these types of positions and, therefore, would not be available to work in tourism. Those who could not gain seasonal jobs, however, would be available to work in the tourist industry in various capacities.

Most of the full-time hunters said that they could either take tourists with them on hunting trips, or they could organise their time in such a way as to engage in both activities, keeping in mind the possible conflicts between "green" anti-hunters and those who condone hunting. Pensioners, of course, are sedentary and would be available to participate in certain tourist activities, such as teaching traditional skills, Inuit history and storytelling. Carvers could get involved in tourism on an opportunistic basis.

#### 4.2.3 Who Is A "Tourist" ?

I asked several Inuit in Clyde River their perceptions of who is, and who is not, a tourist. It became evident that the Inuit, even in communities like Clyde that have not had significant tourism contact have a sophisticated language to describe the phenomena.

Most residents defined a tourist, as any person, from another community, visiting Clyde for a stay of one to an indeterminate number of days for any purpose except employment. Many residents did not consider Inuit visitors

from other communities as tourists, especially if they have family or friends to visit. Most Inuit commonly call non-Inuit visitors to their community, <u>gallunaag</u>, the term used for any human, usually Caucasian, who comes from the south or abroad.

When pressed to respond more accurately to the question of "who is a tourist," I found that the general word gallunaag was broken down into more rigorous categories which described various visitor "types". Thus, people who come from outside the community to find work are called, ikanyjagriasimaju (he came here to work), or more simply, ikanyjatiit (workers). Biologists who arrive in the community specifically to work on whale biology would be called <u>arviligiji</u>. The research biologist who conducted research on the bowhead whales at Isabella Bay was called this by most community members. Journalists or economic development officers who visit the community are often called pivaliajuliriji. This, according to some sources, would be my official title in the community. Most residents more generally called me gauisarti (researcher), but I was assured that in a program over the radio I would more accurately be called <u>pivaliajuliriji</u>, because my work focused on the subject of economic development.

The word <u>pulagatiit</u> is used for sight-seers, or those who take pictures, and as a general term for tourists. I was told by one community member that, "people who visit the community, mainly <u>gallunaag</u>, who have a camera, backpack and strange clothing", are called <u>pulagatiit</u>. Further, <u>pulagatiit</u> can be broken down into more exact categories. For example, people who arrive specifically to hunt polar bear are officially called <u>nanugasautiit</u>. Those who arrive

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specifically to fish would be called <u>igalugasuti</u>. People who visit with the intension to kayak would be <u>gayaqtuqtiit</u>. I also heard the term <u>kiinaujalikjuat</u> used, and found this to be slang for visitors with lots of money. This term was used, almost pejoratively or at least in joking, about visiting sports hunters, or those who arrive on cruise ships and have, as one Inuk put it, "lots of money to throw around."

#### 4.2.4 "Type" of Tourist to Attract

As stated earlier, many residents feel that the "type" of tourist arriving in Clyde will ultimately determine the variety and extent of impacts the community will experience. When residents were asked what specific "type" of tourist they would like to attract, most appeared to have only vague ideas of the various categories of tourist and the impacts that are attached to each. Thus, the majority had problems answering this question.

Many residents think that they are in no position to decide what type of tourist they would receive, as tourists themselves would choose whether they would travel to Clyde River or not. Several residents stated that the community would only get a certain variety of visitor anyway (nature/culture/adventure types) and that they are in no danger of receiving "mass type" tourists or the impacts associated with them. But some individuals felt that the community was not a good destination for "greenpeacers" or "vegetarians" and that only visitors prepared to see "blood and guts" should be promoted. A few residents felt differently about this, and thought that the community could accommodate all types of tourism. This was shown by one Inuk who stated, "I would like to see all types

of tourists with different interests; hunters and conservationists, but we would have to keep them separated." Some felt that the outfitters should have a say in the type of tourist to arrive in Clyde and all agreed that only socially informed, adaptable, and physically fit should be promoted.

When questioned about the specific tourist age category that should be attracted, most community residents believed that all ages were worthy of enticement (see Table 4.6). Residents felt that the elderly (50 years and older) would be interesting to meet because of their knowledge. Thev would also behave well, act calmer than younger tourists and, because they are cautious, would be easier to handle. Middle-aged tourists (20 years to 50 years old), residents believe, would be more physically fit than older ones, and would be a good group for guides to take on more strenuous journeys at greater distances from the community. Young tourists (Under 20 years old) are generally felt to be more difficult to control because they are often careless and get into trouble easily. Several residents, however, stated that they would like to see adults with children come to Clyde and that it would be better if young tourists were accompanied by their parents. These people feel that if both community residents and visitors alike are to benefit from tourism all age groups will be necessary.

# 4.2.5 Type of Tourism to Promote

Fourty percent of the residents who responded to the question on the type of experience they would like to give tourists said they would like to expose tourists to Inuit traditional skills and cultural history (see Table 4.7). Many of the respondents thought it important that Qallunaat

learn about the history of the Inuit people and their traditional ways of life in the past. As one Inuk clearly explained, "(e)verybody has hard times, even the whiteman, but I would like to tell them about history - what our ancestors went through." Along similar lines another Inuk said, "in the past days the elders walked as far as Nuvutiapik [Cape Raper] to hunt without supplies. I would like to show and share the memories of the hard past with tourists." Related to this was a response that tourists also need to be shown the Inuit culture as it exists today, because it is very different from that of the past.

TABLE 4.6 Resident Response: Tourist Age Group Promoted by ClydeRiver Residents.

Age Category	Number of Respondents	Percentage of Respondents (%)
Elderly (50 years of age and older)	7	12%
Middle Age (20 to 50 years of age)	8	138
Young (20 years of age and below)	3	5%
All Ages	42	70%
TOTALS	60	100%

Source: Clyde River fieldnotes

A quarter of the respondents feel it important to get tourists out on the land for a variety of reasons. Asked where they would take tourists, or if there were any specific places that they thought tourists should see, almost half mentioned specific sites (see Table 4.7). Many (20%), also stated that they would take tourists where they wanted to go, leaving the decision of destination up to them.

Those residents who were non-committal as to where they would take tourists, fell into two categories. First were those who expressed no idea of what tourists want to see. The second, consisted of residents who have an idea of what tourists want to see, but who would leave them ultimately to decide upon a destination. One Inuk, representing the first category, responded by saying, "I can't really say because there haven't been many tourists here." Another Inuk representing the second category, simply stated that, "there is just about everything here [in the region] to see... it is their [the tourist's] choice."

Nineteen percent feel that the animals of the region are important for tourists to see, with bowhead whales and polar bears being the two most interesting species, followed by seals and narwhal. Historic sites were noted by another 14% as attractive to tourists. Other activities community members would like to involve tourists in are fishing for arctic char in near-by rivers, hunting, natural history (plants, birds, and ice bergs), and meeting Inuit elders and children of the community.

Three residents also responded that they would like to teach the tourists about Inuit Carving, with one individual explaining an ingenious plan to show tourists the life history stages of a whale bone from when it is part of the anime: to when it becomes a carving. Two Inuit think it important to expose tourists and community members to the reciprocal interchange of questions and answers. One Inuk explained, "us Inuit hardly know the lifestyle of the tourist and it is the same for the tourist, they don't know ours." It is felt by these individuals that a form of cultural exchange is important for the education of both sides of the tourist industry.

Other types of experiences that community members feel are important to give tourists include: information on

Location/Activity	Number of	Percent (%)
	Responses *	of Responses <sup>c</sup>
Specific Sites Mentioned	40	44%
- Igalirtuuq*	15	
Scott Inlet*	3	
Inugsuin Fiord*	3	
Samford Fiord	3	
Clyde Inlet	2	
Old Settlement*	2	
Dexterity Island*	1	
Cape Hunter	1	
Cape Adalr	1	
MCBeth Flord	+	
Cape Chrigtiant	1	
Cape Christian.	1	
Sawcooln Mountain Fiords Sconery		
make tourists where they want	$t_{0}$ $r_{0}$ $18$	208
Jave contines where chey want	17	198
Bowhead Whales	5	223
Polar Bears	5	
Seals	ĩ	
Narwhal	ī	
Historic Sites	$1\bar{3}$ (5) <sup>b</sup>	(6%)
Old Settlement	2	
Igalirtuug	2	
Dexterity Island	1	
Cape Christian	1	
Scott Inlet	1	
Livingston Fiord	1	
Fishing	3	3%
Hunting	2	2%
Ice bergs	1	1%
Birds	1	1%
People (Inuit elders and child	dren) 1	1%
D14 NOT KNOW	2	2%

Table 4.7. Resident Response: Local Destinations and Activities.

# TOTALS

91

100%

a. 51 people responded to the question but because some responded with more than one answer, there are a total of 91

responded with more than one answer, there are a total of 91 responses. b. Five individuals responded specifically that Historic sites were important (number inside brackets). Eight people responded indirectly by menticning that a Specific Site was important as a Historic Site (indicated by \*). c. N = 73. Not all questions were answered by respondents. Source: Clyde River fieldnotes

bowhead whale biology and their protection; the history of whaling in the region; and exposure to traditional Inuit foods.

# 4.2.6 Community-Level Tourism Institutions

In many communities like Clyde River, which largely depend upon regional natural resources for survival, any change in the number of resource users, or the productive characteristics of users, may induce institutional change. The type and degree of change has been shown to depend upon the characteristics of the new resource users (Rodgers 1991, personal communication), which in-turn directly influences the way in which resources will continue to be used in the future.

Tourists, as I have shown in Chapter Three, are users of resources who can often induce environmental, socioeconomic, and cultural impacts. Changes in traditional resource-use patterns and competition for resources held in common by local residents, are two impacts resulting from tourist/local interaction (Ris 1991, personal communication). If local resources are to continue to be used sustainably, an understanding of the ways in which community social organizations function to regulate resource use and an understanding of local and national level balances of institutional power are extremely important considerations for tourism planners and managers.

In Clyde, the advent of tourism development has resulted in the establishment of a new institution - the "Clyde River Tourism Committee" (CRTC). The CRTC is charged with the responsibility of coordinating all tourism related programs and activities, such as: 1) co-ordinating outfitting services required by tourists; 2) keeping the community informed about all tourism plans and activities; 3) ensuring that tourists do not become a problem within the community; 4) reviewing tourism development proposals; and, 5) reporting to the Hamlet Council any problems or concerns that the community has in regard to tourism (U. Qaqqasiq 1990, personal communication). The tourism committee is made up of local residents who have a direct say in the direction of community tourism initiatives. Thus, in the eyes of Clyde residents, any study or project proposal must first be approved by the Tourism Committee which represents them. Many residents I spoke to feel this type of arrangement is necessary for continued effective local control of the industry.

The Tourism Committee, however, does not have complete authority over tourism related issues. The Hamlet Council, the most powerful local body in terms of decision-making, approves or rejects proposals made by all local committees or government agencies. Therefore, the tourism Committee, being a sub-committee of the Hamlet Council, is subject to Council approval and monitoring. This arrangement, say residents, functions as a second check over the local exercise of power. The Tourism committee, because it is new, has not taken a significant role as an organisation in Clyde and has only met a few times per year since 1987. Many residents expressed their wish that the Tourism Committee become more active.

The extent of local input into certain proposed tourism-related projects is also dependent upon interactions with representatives from other organizations, such as the Hunters and Trappers Association (HTA), and the Igalirtuuq Committee. This is because tourism is closely linked to

issues of resource use and conservation, concerns of these two committees.

The HTA's mandate covers hunting, trapping, recommending future harvest quotas to the GNWT, and coordinating the use of the community vessel (Uncle John). The Committee also decides how many polar bear tags from a quota of 20 bears are to be used for sport hunting purposes, and who will ultimately guide such hunts. Resource harvesting is still a major activity in Clyde and the HTA holds a very prominent position in the community.

The Igalirtuuq Committee makes recommendations to Hamlet Council on actions relating to the proposed establishment of the Igalirtuuq Conservation Area at Isabella Bay. Those residents I talked to who are interested in working in tourism told me that if their operations involved Isabella Bay and/or the bowhead whales, they would have to seek approval from the Igalirtuuq Committee before taking any action.

In the end, all tourism decision-making shifts between the Tourism Committee at the local level, and the GNWT's Department of Economic Development and Tourism (represented by an Area Economic Development Officer who resides in Broughton Island). The Tourism Committee is also constrained by the regulatory and administrative controls presently exercised by government agencies. The GNWT, in this way, primarily acts as a funding agency for tourism studies and projects.

Many residents felt that because the GNWT hold the "pot of gold," they also control most of the decision-making powers. The direct link between the GNWT and the community is through the local Development Officer, whose

receptiveness to community needs and desires to a large extent determines the community's sense of control. Several residents commented about the relatively few visits made to Clyde by their development officer. They understand that the Development Officer has tried to assist the community in tourism related issues, but in fact, has provided little help in relaying to his superiors the community's rational behind requests for equipement and funding.

Most residents felt that, in the end, the balance of power ultimately rests in the hands of the government's "white" administrators. Nevertheless, many Clyde residents look to the Tourism Committee to take charge of the community's tourism development, planning and problem solving. They feel that with an increase in action by this local committee, community tourism development will prove successful.

#### 4.3 Future Development - Facilities and Services

Before tourism can be promoted and expanded in Clyde River, the infrastructural needs for the proper functioning of the industry must be met. A community's social and physical carrying capacity is also dependent upon available facilities and services (O'Reilly 1986). The attitudes of Clyde residents to existing facilities and writes, and whether these are adequate for the development of a tourism industry, must necessarily form an element of this analysis. 4.3.1 Facilities

When asked whether present facilities in Clyde are adequate for tourism development, just over half of those who responded stated that they are sufficient (see Table 4.8). The remaining respondents (39%) believed that many facilities are in need of upgrading or replacement before serious tourism gets under way. Indeed, several residents felt that new facilities are required.

Table 4.8 Resident Response: Facilities and Services.

Overall Attitude to Tourism Development	Percent Yes (%)	age No (%)	Responses Don't Know (%) (F	Total Number of (esponses)*
Perceived Facilities Needed	39	49	13	70
Home-Billet Accommodation	93	4	-3	70
Would They Try Billet system	92	6	2	66
Need of Hospitality Workshops	93	5	1	60
Clyde River Brochure	100	0	0	25

a. N = 73. Not all questions were answered by respondents. Source: Clyde River fieldnotes

Many of those who say facilities are adequate, none-theless, stated that these could be improved. Most agreed that the hotel, which is often filled by construction workers during the summer months when tourists arrive, badly needs expansion, or that a new hotel is needed (see Table 4.9). The next most important item mentioned was the need for a Community Hall which could house such things as a tourist information centre, a museum, an outlet for local arts and crafts, and a space where the elders could meet amongst themselves. Here, also small groups of locals and tourists could meet to tell stories and learn Inuit history.

With regard to other facilities, informants stated that recreational facilities such as a sports arena are needed for both tourists and residents. A campground facility for tourists who may arrive with their own tents was also mentioned by a few residents as a possible consideration. Inevitably, residents say there will be those tourists on low budgets, who seek to experience the North through camping, and the community must be prepared for them. A few residents also mentioned the

Facility 1	Number of Responses		Percent Responses
Hotel	31		40%
<b>Community Hall</b> Tourist Information Centre Local crafts outlet Museum Elders Committee Space	<b>5</b> 5 2 2 1	(16) <sup>b</sup>	21%
Guide Certification and Equipmen	nt 12		15%
Home Billet Program	4		5%
Recreational Facilities Sports Arena Hockey Arena	<b>2</b> 1 1	(4)	5%
Campground	3		4%
Structure at Cape Raper (Igalirt	:uuq) 2		3%
Miscellaneous Airport improvements Taxis service Restaurant New Store Dock improvements	5 1 1 1 1		7%
TOTALS	78		100%

Table 4.9 Residents Response: Facility Improvement.\*

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a. A total of 54 respondents answered this question, some of which gave more than one response. This resulted in a total of 78 responses.
b. Numbers within brackets are totals for the section.
Source: Clyde River fieldnotes

need for a permanent structure to be built at Cape Raper for the use of locals, biologists, and tourists, noting that this site is the best location in Isabella Bay for both scientific and tourist whale observation. Residents explained that frequent encounters with polar bears and bad weather at this locale make such a structure imperative.

Other ideas about facility improvements include the

introduction of a dedicated service for transporting tourists to and from the airport. Of lower priority were improvements to the airport itself, a new store to increase competition and reduce prices in the community, and improvements to the dock facilities which are seen to be old, inadequate and dangerous. 4.3.2 Accommodation

Presently the only commercial accommodation at Clyde is the Qamaq Hotel, which is owned and operated by a local Inuk The hotel can house a total of 12 people in six entrepreneur. rooms, and features private baths and a meal service. This facility typically has a yearly occupancy rate of only 47% (see Table 4.10), with few people visiting during the winter months. During the summer months, however, the hotel is frequently filled by government, legal, and commercial personnel and in 1990, had an occupancy rate of 101% for July and 109% in August, with alternative accommodation being needed for surplus visitors. A new structure called the "Staff House" was established by the hotel owner to house excess visitors during the summer months, with the hope of freeing the hotel for tourist visitors. Thus, while the hotel is often under utilized during the spring, winter, and fall, it is overflowing in summer, leaving no room for prospective tourists.

Related to the apparent inability of the hotel to provide accommodation to tourists is the fact that several residents mentioned the possibility of starting a home-billet-type accommodation system, similar to bed and breakfast services in the south. They feel that this would present another option to tourists wishing to experience life with an Inuit family for a short period of time and would also put more money into local hands. The establishment of this type of accommodation has previously been attempted by the residents of Pangnirtung

(Reimer 1989) and appears to hold great promise for community residents.

Clearly a majority (93%) of Clyde residents think that a home-billet program would be a good idea. Almost the same number (92%) of people said they would cooperate in the system. This scheme is seen as both a potential way to distribute money to those who need it in the community, as well as a way of sharing Inuit culture and improving Inuit-Qallunaat relationships and understanding.

Category	Number of Persons	% Total of Rooms	Room Nights
Politician	2	18	3
P.O.L Mouriet <sup>®</sup>	3	18	5
Logal	4	43 92	<b>9</b> 10
Bell Canada	16	8%	25
Education	14	78	30
NTPC	8	48	34
Contractor	11	58	39
Health	10	58	47
Commercial	25	12%	61
Fed. Government	18	98	81
GNW1'	37	18%	95
TOTALS	206	100%	1389
NUMBER OF INDIVIDUAL	GUESTS from 90	/01/01 206 D 1389	i i
TOTAL ROOM/NIGHT AVA	ILABLE	2962 473	

TABLE 4.10. Qamaq Hotel Occupancy.

a. All tourists who stayed at the Hotel were single tourists who arrived between April and September, 1990. The two tourists, one which arrived in July, and the other who arrived in August, stayed in the "Staff House," as there was no room in the Hotel. Source: Qamag Hotel Statistics

Residents also stated that many problems would have to be overcome if the home-billet program was to become reality. The present shortage of housing, and space within each house, is severely limited in the community and it is not uncommon to find several families sharing the same house. Few homes currently have room to spare for tourists. Many residents said they would try the billet system, but only when they get a new house, or when a spare room in their present home becomes available.

The Baffin Tourism Association and the Baffin Regional Council both approve and support the billet program in Pangnirtung (Reimer 1989); however problems do exist. In Clyde, as in Pangnirtung, few residents own their own homes, occupying subsidized rental units owned by the local Housing association, which itself is under the authority of the GNWT. It is presently illegal for residents to run a home-billet operation from such a subsidized home. The Department of Economic Development and Tourism, as one of its goals of 1983, set out to change this aspect. Presently, the GNWT and the Housing Association are reviewing the legislation to allow a home-billet program in Housing Association homes.

# 4.3.3 Training

Several residents repeated that if tourists are to enjoy the Clyde River environment, they will need certified guides to take them out on the land. Therefore, these people feel it is important for hunters to have access to government guide training courses to obtain official certification. Presently, such courses are given only once or twice a year, and interested individuals must go to other, sometimes distant, communities for training. It is felt that these courses should be offered in Clyde, or at least in near-by communities, at convenient times and with sufficient frequency to allow those interested to enrol.

Related to Clyde resident views of increased access to government guiding courses is the emphasis placed on the need

for guides to have proper equipment. It was frequently mentioned in interviews that individuals who wish to get involved in tourism are often those who need employment the most, and thus have little equipment because of their lack of access to cash. According to residents this is an important consideration that must be analysed and improved upon if tourism is to get under way in Clyde River.

Many residents mentioned the importance of satisfying visitor needs. They frequently remarked that tourists will go home and talk about their experiences when they return to the South. Clyde residents worry that if what tourists say about their community is bad, the result will be fewer visitors. Most worry about the cultural differences that exist between Inuit and southern tourists, especially the kinds of food they consume and the way they eat it.

Residents said they would welcome locally-offered workshops to set standards of cleanliness and hospitality for tourism. Indeed, ninety percent saw this as a need. Most said they require information regarding tourists' wants, needs, and expectations. Many residents felt that a joint group, consisting of one or two government representatives from the Economic Development and Tourism Department, working with members of the community and tourism committee, could best develop and conduct such a training program. Workshops, with radio shows, were seen as one way to inform and prepare the community for tourism. As one resident stated;

I think the community has no idea what to expect. I think the community needs to be informed of how much they themselves will have to work if they want tourists. Tourists will not just come and shower money on the community. Tourists expect something for their money. If Clyde expects tourists to come back or spread a good word to other tourists, then Clyde will have to work.

# 4.3.4 Information for Tourists

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Tourists wanting to visit the arctic often have difficulty finding relevant information (Milne and Grekin 1991). This lack of information can seriously affect the ability of communities like Clyde River to attract visitors. It has also been shown that nature-oriented tourists' in particular, often demand more information, increased interpretive opportunities, and professional lectures by guides than "standard" tourists (Butler and Hvenegaard 1988, and Wilson 1987). Thus, to keep future visitors happy, it appears neccessary to expand supplemental information and make it more available to them.

On the other side of the information issue is the fact that naive visitors can also be detrimental to destination communities, resulting in visitors conducting themselves in culturally unacceptable ways, and, given the natural environment, even placing themselves at risk. Informing tourists in advance about such things can safeguard them against harm, make their activities more compatible with those of the Inuit, and decrease the negative impacts that tourist activities might have upon the local community. Presenting tourists with the proper information will increase their enjoyment and offset the possibility of a destination site developing a negative image. Thus, welldeveloped information packages can have significant effect upon the success of a sustainable tourist industry.

It is for these reasons that I asked community residents what they feel visiting tourists should be informed about before or upon their arrival. These data are summarized in Table 4.11. It is clear that 34% of Clyde residents felt that tourists should be informed about the animals of the region, with 86% mentioning the dangers of polar bears and how visitors should and should not act if they encounter one.

The second most important item (28%) was community regulations on alcohol, drugs, wildlife (hunting, firearms, and export permits), and garbage. Fifteen percent of the respondents feel that notifying visitors about community activities and facilities (possibly including a location map) would be a good idea. Eight percent thought it essential that visitors be told about Inuit culture and proper forms of conduct. One resident feels that tourists should be told that the Inuit of Clyde River are friendly people, who will do all they can to help visitors have an enjoyable visit. Another 7% also feel it is important that tourists be told about the unpredictable East Baffin weather, and what clothing they should bring in order to keep comfortable.

Five percent of the respondents expressed a desire to be informed by tourists who are planning to visit, so that the community can make preparations for their arrival. Another 3% believe that tourists should be told they must be in good physical condition and have a medical examination before their arrival. This is because, as one person explained, the guides are taking a big risk if they have someone who is no<sup>+</sup>. physically and psychologically prepared for the rigors of the arctic environment. These Clyde residents generally thought that tourists should be informed to prepare themselves to rough it, and be able to "survive without a shower for several days."

One of the ways that Clyde residents feel they can inform visitors about the community is through the creation

86

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84.0

ITEM	Total Number of (Responses)	Percent of Responses
Animals -polar bears	21	34%
Regulations -alcohol -drugs -wildlife (hunting, firearms, export permits) -garbage	17	28%
Community Activities (facilities and services)	9	15%
Cultural Information	5	8%
Weather -Specific types of clothing	4	7%
Inform Community When Arriving	3	5%
Medical Check-up -good mental and physical conditio -prepared to rough it	n 2	3%
Totals	61	100%

# Table 4.11. Resident Response: Tourism Information.\*

N.Y.

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a. A total of 39 respondents answered this question, some of which gave more than one response. This resulted in a total of 61 responses. Source: Clyde River fieldnotes and dissemination of a "Tourist Brochure." This fact became evident well into the interview process after several residents raised the idea. At this later stage in the research I began to ask community members if they would like to see a brochure given to tourists before or upon arrival in Clyde River. For this reason only 25 responses to this question were elicited (see Table 4.8).

All the respondents asked this question were in support and agreed with the usefulness of a "Tourist Brochure." They feel it is important that visitors to the community receive important information outlining community rules, regulations, activities, facilities, weather, and dangers.

# 4.3.5 Tourism Potential at Igalirtuug (Isabella Bay)

The Minister of Economic Development and Tourism, together with personnel from the Iqaluit branch, visited Isabella in August of 1989 to look at its potential as a tourist destination (Hamburg 1990, personal communication). Though the area was found to be interesting, in terms of historic, archaeological, and whale watching potential, the group does not see much point in promoting tourism that will include trips to Isabella Bay. This is due to the many obstacles the area presents to tourism development, such as the great distance, the difficult travel conditions, and the large expense involved in reaching the site.

Many persons have approached the Iqaluit branch of the Department of Economic Development and Tourism (EDT) with the idea of setting up a facility at Isabella. All interested parties, however, have pulled out after realizing the distances and logistics involved. One member of the community, apparently, also applied for funds to do this. The branch considered his application very carefully, but after visiting

Isabella Bay, they too decided against supporting such a venture.

Government officials feel Isabella Bay is just too difficult a place to warrant tourism. Thus, Clyde River, as one Development Officer put it, has been "put on the backburner" as tar as EDT are concerned. The branch has instead decided to put money and energy into the development of Kekerton Island Historic Park, near Pangnirtung, as a tourist destination. This site, they say, is easier to develop, will cost less, and many facilities exist there already. The site holds great promise as a whale watching station because whales can often be seen in the area each spring. For example, in the spring of 1988 as many as six bowhead whales were easily viewed just off the island.

The Iqaluit Tourism Branch also stress concern for Isabella Bay's sensitivity and the possible negative environmental impacts that visiting tourists might cause. One official stated that even now the Clyde hunters may be damaging the ecological sensitivity of the area by scaring the bowheads. The branch members also expressed intrigue over Clyde's interest in protecting the bowhead whale population. In a time when most other communities are applying for harvest rights of bowhead whales (ex. Pangnirtung, Broughton Island, Resolute) it is puzzling to these officials why one such community would be so adamant for their protection.

Weather conditions, as outlined by Clyde River community members (see Chapter 3), can play a significant role in the tourism potential of a destination site. Little detailed information is available on the weather conditions at Isabella Bay that can be used to access the bay's potential as a tourist site. The only information obtainable is from Kerry Finley,

who conducted marine biological work at Isabella Bay since 1983.

A scientific crew, comprised of biologists and a few Clyde residents, were present at Isabella Bay from a period very soon after ice break-up until early October, each year from 1983 to 1988. Weather and ice records were taken by crew members in various forms (ie. field note books and record sheets) (these data are summarized in Table 4.12). Though very basic in its form, this information may shed some light on the tourism potential of Isabella Bay in terms of weather conditions. It can be assumed that local weather would effect the activities of biologists and tourists similarly, as both groups correspond quite similarly in their activities.

In order for whale watching to be a success at Isabella Bay, certain weather requirements must be met. The first is that pack ice must not be present in the bay, as this will prevent the whales from entering. Secondly, visibility must be good in order to see the whales at great distances and up close. Thirdly, if kayaking is to be the mode of transport by which whale watchers are to view the animals, as put forward in the Conservation Proposal, then calm sea states without oceanic swells are a necessity.

But the east coast of Baffin Island is notorious for its drastic climatic fluctuations. This is because the region is located under a major upper-atmospheric trough (see Jacobs et al. 1974, Maxwell 1982). Small adjustments in atmospheric circulation can severely alter the regions weather patterns from year to year. As stated by Finley (1990:142), writing about his field experience:

Annual variability in weather conditions greatly influenced the study. Fog in 1986 prevented observations on over half the days. In 1987, persistent strong winds and blizzard-like

conditions late in the season obliterated our view for up to a week at a time. Lack of pack ice in 1985 promoted high sea states, thereby interfering with boat-based studies. The persistence of pack ice in 1983 dampened the oceanic influence, resulting in unusually stable weather and excellent visibility.

It is clear that sea states around Isabella Bay are highly variable from year to year depending on amount of ice, and wind that is present. In Finley's study, 1985 and 1987, were bad years for sea states, leaving few days where kayaking was possible (personal communication). A good year for sea states was 1983, where the persistence of ice stopped the formation of swells, but this indirectly resulted in preventing whales from entering the area. Southeast winds in this area often give rise to fog and precipitation (personal observation), thwarting any possibility of observing whales, as in 1985.

Table 4.12. Environmental Conditions at Isabella Bay During the Bowhead Whale Study Period, 1983 - 1988, on a Percentage Basis.<sup>a</sup>

% days	1983 15/08-18/09	1984 17/08-15/09	1 985 18/08-23/09	1986 06/09-09/10	1987 30/08-02/10	1988 21/08-11/09
wind from NW quad	drant 47	23	30	53	56	33
wind from SE guad	rant 15	23	46	21	17	29
mostly calm	35	43	22	24	28	19
visibility obscured b	18	37	46	59	50	36
visibility fair - excelle	ent 82	53	46	41	50	64
pack ice present	77	26	0	35	0	71
with oceanic swells	° 6	26	75	59	56	19
Total # days	35	30	37	34	34	21

\* Prevailing conditions during daylight hours.

<sup>b</sup> Due to fog or blowing snow.

 $^{\circ}$  > 0.5 m. in height.

Source K.J. Finley.

Although not enough information is given in Table 4.12 to accurately state the tourist potential of Isabella Bay, a few basic conclusions can still be made. According to the data it is obvious that there are relatively few days during the whale watching season which provide conditions free of ice, with good visibility, and calm seas. The numbers of possible working days made available to biologists by good weather during these six years was relatively few, therefore, tourists can expect only a small number of favourable whale whatching days at Igalirtuuq.

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# Chapter 5

# INTEGRATING CONSERVATION AND TOURISM

#### 5.1 Links between Protected Areas and Tourism

Chapters three and four examined the cost/benefits of, and local resident attitudes to the possibility of tourism development in the Clyde region. These data indicated that nature/cultural tourism, as a form of economic development, is extremely dependent upon the proper maintenance of high quality environments. These data also show that the Inuit of Clyde River themselves see close connections between tourism and resource use. It would, therefore, appear that in order to have a comprehensive understanding of community tourism development in the North, consideration must not only be given to issues of development, but also to environmental conservation.

Nature/cultural tourism is perhaps one of the best examples of a development form which limits consumptive use of "natural areas", while at the same time broadening the possibility of economic benefits. The establishment of a Protected Area can often help launch a region's tourism industry (Boo 1990). Nature reserves, with their unique or endangered flora and fauna, are often the major tourist "draw" to most regions.

The growth of "eco" and "cultural" sectors of tourism, expounded in the recent tourism literature, is having an effect on arctic regions. There has been a decline in consumptive forms of tourism (hunting, fishing) and a g<sup>-</sup> wth in adventure and nature tourism (Karpan 1990, Milne and Wenzel 1992). Many of the communities that have depended on sport Aunting and fishing are now being forced to develop other attractions to maintain cliencele. For example, as Milne and Wenzel (1992) explain, a major outfitter in Pangnirtung has recently converted his fishing camp into a naturalist/bird watching operation. Thus, circumstances have already brought recreation and conservation issues together in the Baffin region and, given the type of tourism presently being promoted by a few arctic communities, conservation is of extreme importance in terms of community sustainable development.

# 5.1.1 Toward an Interactive Process

Governments and outside funding organizations have considerable power in establishing conservation areas, and implementing policies and strategies. Because of this, West and Brechin (1991:23) believe that the responsibility to involve resident peoples in the planning and decision-making process rests significantly on the shoulders of government and NGO representatives. It also appears that the use of any protected area resource utilization model must draw upon ecologic, ethnographic, and economic principals in order to serve as an efficient design plan for economic and conservation strategy implementation.

It is unlikely that one conservation strategy will be equally adaptable to all cultures or every natural environment, for each situation will have its own particular nuances. It is for this reason that for many years now the IUCN has been involved in developing and refining management categories to improve upon the worlds protected areas. Table 5.1 outlines this framework and defines the schema of conservation objectives. There is much debate over the

	Alternative Management Californie										
Conservation and Development Objectors	Seim- tife Newwork I	National Park II	Natural Manu- mans III	Nature Conser- uation Reserve IV	Pro- natural Land- campo V	Resource Resource VI	Anthro- pologrami Reserve VII	Multiple Use Manage- mani Arua VIII	Pro- Miciol Arvie for Local Use IX	Bio- ophere Reserve X	World Herings Sile SI
Meintein gemale en-	•	•	•	•	0	0	•	<i>a</i>	•		
options in actural state	•	•	•	-	-	-	•	~	•	•	-
Maintain sublegial diver-	o	•	•	0	0	0	•	0	0	•	•
ally and environmental											
regulation											
Consurve grittetic recommen	٠	٠	•	٠	Ø	0	٠	0	0	•	٠
Provide admontion, ro-	٠	0	٠	•	0	0	0	0	0	•	۲
search and environmen-											
thi monitoring											
Conserve wetershed	0	0	0	0	Ø	0	0	0	0	0	0
productions											
Centrel eranism and protest	0	0	Q	0	0	0	0	0	0	0	0
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Provide continuance und/or	Ø	ø	•	ø	0	0	0	٠	٠	o	ø
opers isometing and Solar											
Provide for respective and	ø	•	0	0	٠	Ø	0	•	•	0	٠
tourism.	-	•	-	_	-						
Produce Limber and Arego	ø	ø	ø	ο	0	ø	0	•	•	0	ø
on sustained y sid havin											
Protest important alterni,	ø	•	ο	Ø	•	0	٠	0	0	0	•
historia attei archeologue											
aites											
Protost sounds resources	0	•	0	C	۰.	ø	ø	0	0	0	٠
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Maintain Contibility	ø	Ø	ø	ø	0	٠	0	•	۲	O	0
through smaltlpurpose											
Sinegensist.											
Support rural development	0	٠	0	0	٠	0	O	٠	•	O	O
through rotional use of											
merginal lands and pro-											
vide stabile employment											
appertuneties											

# Table 5.1. Alternatives for Management and Development of Natural and Cultural Resources.

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EXT: © Primery Objectives © Secondary Objectives © Lesser Objectives Ø Not Imperiant or Applicable (adapted from K. R. Miller 1978, medicled)

Source: West and Brechin 1991:10

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appropriateness of protected area categories across cultures (West and Brechin 1991:10), and this table exposes the complex roles played by the different types of parks and reserves.

5.1.2 Local Attitudes to Conservation Area Establishment

Most conservation area managers, like tourism managers, now agree that the success of protected area establishment depends upon the degree of support and positive attitudes of local people living within or adjacent to such areas (Dasmann 1984, Hough 1988, Machlis and Ticknell 1985, Sharma 1990, Zube and Busch 1990). Consultation with local peoples who have a long history of use or occupancy in areas considered for protection is crucial for both conservation area maintenance and conflict avoidance (Dasmann 1984:670). It is for this reason that more consideration is now given to the need for local participation in the planning, implementation, and assessment of conservation and development projects (Rao and Geisler 1990). It is also important that local residents be made aware of the potential costs and benefits that might accrue to them from the activities carried on at the protected area site (Zube 1986:16).

Researchers opinions on how local people view near-by conservation areas vary widely. The early account of Harroy (1964) stated that there was a broad understanding and support of the National Parks. A variety of often conflicting perceptions between scientists, managers, tourists, and/or local populations was noted by several authors in Nelson et. al. (1978). Marnham (1981) found little interest in wildlife conservation and great resistance to conservation areas in rural Africa. A wide

variety of responses was found by Abrahamson (1983), but he stated that the reality of local people's poverty balanced their desire to protect wildlife. Kellert found that people in developed nations "value natural-area preservation mainly for aesthetic, historical, and what might be called "humanistic reasons (1984;101)." He also found substantial support among North Americans for land preservation to protect well known endangered species (Kellert 1980).

The general public, however, is still largely unaware of the distinctions among the various types of landprotection categories (Kellert 1986). Infield (1988) found results similar to those of Harcourt et. al (1986) among residents in a rural community in Natal, South Africa. He found that "though faced with problems of poverty, land shortages, and other difficulties directly associated with the existence of the Conservation Area, more respondents strongly supported the protection of wildlife than rejected it." Finally, Jacobson (1991), found that villagers living near Mt. Kinabalu park, in Malaysia, showed strong support for its preservation, probably because its establishment resulted in transportation improvements and new development The park provided employment, education, and schemes. recreational facilities, as well the preservation of a significant area of cultural heritage. Zube (1986) concluded that one of the issues meriting further research attention is the identification of local populations perceptions of benefits and costs associated with protected areas.

Virtually all recent work dealing with tourism, protected areas and local peoples, stresses the importance of the latter group's participation in the planning and

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management process. In many cases, however, what occurs in terms of protected area planning, is in reality far from what is espoused as the ideal (Kutay 1991, Hill 1983, and Weeks 1981, and a rebuttal by Weaver 1991). Repeatedly, the assessment of strong community support is taken from the perception of the protected area administrators, who think they have done well at getting their message on the purposes of the reserve across to the public, but who in reality frequently have not. "This confuses public relations with true participation; mistakes communication to, for communication with (West and Brechin 1991:395)." Two notable cases where social assessment involved the study and discussion in participation with local people from the early stages of the project design and into its' implementation are the Annapurna Conservation Area in Nepal (Bunting et al. 1985), and the Mount Kubal Biosphere Reserve in Kenya (Lusigi 1984). In these particular examples, alternatives were uncovered that theoretically facilitated an outcome beneficial to all sides. The inclusion of local people in the earliest stages of protected area planning appears to be largely an "unfulfilled agenda with which the conservation community will need to come to grips (West and Brechin 1991:396)."

## 5.2 Analysis of Igalirtuug Conservation Proposal Data

In previous chapters of this thesis we have seen that socio-cultural, environmental, and economic factors cannot realistically be treated in isolation when planning tourism development. Planning the optimal path for the establishment of a protected area is no different.

Like the tourism development process, establishing a

protected area requires that local people gain the direct benefits and become involved in the planning process. Similarly, the first step toward achieving these goals is to gauge resident perceptions of proposed developments before they commence. As Zube (1986:16) precisely states:

Successful integration of conservation, development and traditional life styles, it is suggested, must include recognition of local values, modes of communication and culturespecific behaviours. Furthermore, it is suggested that integration requires active cooperation and participation of local residents in the development process, starting with the conceptualization of the protected area, and continuing through to its realization and on-going management.

We can now understand that it is unwise to look at local perceptions and attitudes to tourism development without looking at feelings toward conservation, as one influences the other. Local approaches to community conservation initiatives will have direct and indirect effects upon desired tourism development, and vise versa. We have already looked at many of the socio-economic, environmental, and cultural issues regarding tourism development in Clyde River, and have found that local initiatives have been meagre, unorganized, and inadequate to get the industry functioning at any significant level. By contrast, the history of Clyde's conservation initiatives has shown clear involvement, distinct opinions, and solid community organization.

Given the community's feelings that tourism development is directly related to resource use, it is essential to compare these attitudes with those of environmental conservation. For any conclusions to be drawn from tourism and conservation planning in Clyde River, what remains to be accomplished is an examination of Inuit attitudes and

perceptions of the Igalirtuuq Conservation Proposal. Integrating tourism and conservation issues at this point requires the identification of local attitudes to involvement, cost and benefits associated with the proposed establishment of the Igalirtuuq Conservation Area, and acceptable spacial and behavioral patterns within the proposed area.

## 5.2.1 Community Involvement in the Igalirtuug Proposal

Without the support of local peoples the future of any protected area is insecure (Dasmann 1984). It has been shown how the amount of local involvement in the development of a conservation area can often influence a community's attitude towards it (Gardner and Nelson 1981).

When Clyde Residents were asked whether they knew about the Igalirtuug Conservation Proposal, 80% of the 59 respondents answered yes, while 20% said they knew nothing (Table 5.2). Residents learnt about the Proposal, from the Hunters and Trappers Association, community radio announcements, the marine biologist conducting research at Isabella Bay, and a community meeting held to discuss the proposal on October 13, 1988. At this meeting representatives of the WWF, the territorial government, a consulting marine biologist, various community committees, and 150 local residents were present. The conservation plan was presented by a Special Committee on Igalirtuug and the Biosphere concept was chosen by the community over other forms of conservation area designation (see Appendix 2 for an outline of the options available for protected area establishment).

Twenty three percent of the respondents claimed to have read all or part of the actual Igalirtuuq Conservation

Proposal document. Sixty-six percent had seen it but not read it, and only 9% of those asked had never seen the document before. Nearly one-third felt that they were directly involved in the Proposal's formation, and 68% felt they were not. Fifty-three percent believed that they had indirect input into the plans formulation, either through expression of views at the community meeting, or to one of the community committees. Half the residents asked felt they had been kept well informed by the various community committees, and most expressed a strong desire to be kept well informed. One resident stated that somebody going door-to-door to inform the community about the issues would be better than the other methods used (ex. radio and community meetings). This person believes that the issues of conservation and tourism are important enough that "all" residents should have their views heard.

TABLE 5.2 Community involvement in, and attitudes toward, the Igalirtuuq Conservation Proposal<sup>®</sup>.

Overall Attitude to the		centag	Number of	
Conservation Proposal.	Yes	No	Unsure	Responses
Knowledge of Proposal	80	20	0	59
Read Proposal	23	75	2	56
Direct Involvement in Proposal	32	68	Ő	37
Indirect Input into Proposal	53	47	0	38
Agreement for the Need of Igalirtuug	87	2	11	53
Kept Informed	49	51	0	43
Benefits to Community	74	8	18	51
Costs to Community	27	55	18	51
Hunting/Travel Restrictions	59	35	6	51
Limits to Visitor Numbers	60	23	17	52

a. N = 73. Not all questions were answered by respondents. Source: Nickels et al. 1992

## 5.2.2 Attitudes to the Igalirtuug Proposal

Eighty percent of the respondents agreed with the need for the conservation area but stressed that the community must be kept informed about it's development. Nearly three quarters of the respondents said that the community would benefit from the establishment of Igalirtuuq. They felt that the protection of the bowhead whales would stimulate tourism which would, in turn, provide employment for hunters and guides conducting whale watching tours. Also, the protection of the bowhead whale might aid in the species eventual recovery. Many residents openly express their interest in hunting the bowhead whale once their numbers have increased sufficiently.

The significance of this desire cannot be overstated, for most residents are keenly aware of the benefits that the capture of even one bowhead whale might bring to the community. It has been estimated that a bowhead of medium size (10 metres) can provide on average 6,136 kilograms of edible dressed meat<sup>1</sup> with an astimated total cash value of 61,360 dollars<sup>2</sup> (Braund and Associates 1991).

Other possible benefits of the Igalirtuuq Proposal mentioned by residents included: the continuation of scientific research, and helping to resolve land claims agreements. Over half of the residents thought that there would be no costs for the community if Igalirtuuq were established, but only as long as the community was involved and informed about all decisions.

Residents who disagreed with the need for Igalirtuuq did so because they felt there is no direct threat to the whales and preferred the unregulated status of Isabella Bay. Most of those who thought there might be negative

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<sup>&</sup>lt;sup>1</sup>. Rule of thumb is 1 foot of whale is equale to 1 ton of dressed meat.

 $<sup>^2</sup>$ . This value is based on an average cost of \$10/kg. for edible dressed meat at the Clyde River Northern Store (Wenzel, Personnel communication).

consequences stemming from the development (27%), equated these problems with the stimulation of tourism development which might cause social disruption in the form of drug and alcohol abuse, and environmental costs such as the disturbance of the whales, trampling of plants and increased amounts of garbage left in the area. Some residents felt that certain regulations presently written in the proposal were not practical and could cause problems for Clyde residents. For example they felt it was simply not practical to cut engines and drift through the whale feeding areas within Igalirtuuq. They also felt that the use of only kayaks in this dangerous area was simply not realistic. **5.2.3 Local Access to Protected Area Resources** 

Policies on access to resources by resident peoples within protected areas vary widely from country to country, and amongst the different categories of these areas (see, Table 5.1). The access to natural resources by many indigenous peoples is not only important to them economically, but is also often an integral part of their cultural identity (Nietschmann 1984). Numerous cultures depend on the social institutions in which their viable economy is imbedded. Therefore, "resource exploitation by indigenous peoples represents more than securing just the resource." "It is part of socialization, moral education, teaching of social and economic responsibilities, and an expression of skill and ability" (Nietschmann 1984:342). This is often the reason why limitations on resource use by "outsiders" are frequently contested. Even allowing residents to use some resources while disallowing the use of others can have drastic consequences on local peoples, yet may be undetectable by outsiders. The social consequences

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of restricting local access to resources in the name of conservation are not only culturally devastating for locals but short-sighted from the perspective of maximizing management options (Rao and Geisler 1990:21).

In most cases, denying resident people access to resources within protected areas results in the imperfect accomplishment of resource protection. Excluding resources from local users has often lead to poaching, vandalism, incendiarism, and antisocial behaviour by excluded resource claimants, which is counterproductive to the goal of resource protection (Guha 1985). Nietschmann (1984), shows that this denial of access often is caused by scientists and resource managers from outside protected areas who rarely recognize the breadth of the specific resource needs of local cultures. Because of this, West and Brechin believe that "careful social assessment must be done to determine the range and priority of needed resources (1991:374)."

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In order to protect the bowhead whale population, hunting and travel restrictions have been suggested in the Igalirtuuq Conservation Proposal. Hunting and fishing are still an important part of the subsistence economy of Clyde River, with Isabella Bay being an important area for such activities. Thus, Hunting and travel restrictions have the potential to affect the way of life for many Clyde residents.

Over half of the residents agreed with hunting and travel restrictions, but only during the season when whales are present at Isabella Bay. Most residents think restrictions are important to protect the whales from boat harassment and noise. Interestingly, many mentioned that they would like to protect the whales so that someday, when

their numbers increase sufficiently, they can be hunted again. Many felt that hunting and travel restrictions would be easy to implement because Isabella Bay is seldom used for hunting when the whales visit the bay in the late summer and fall. Only one community member stated that he wanted to be able to hunt in the area in the fall when the whales are present. He hunts seal, not at the mouth of Isabella Bay but further up McBeth Fjord, where the bowhead never travel. This area is also occasionally used as a boat route for Caribou hunting further inland, and he feels that other hunters should be able to continue this practice.

Those who disagreed with restrictions did so on the grounds that the Inuit have always had access to Isabella Bay, hunting when and where they pleased, and emphasized that bowhead whales have never left the area. Those residents therefore questioned the need for a protected area. Added to this was the fact that hunters often pass through the fall whale feeding grounds to go to Home Bay to hunt walrus, an activity that already faces restrictions. The Kuuktannag River is also used in the summer months for char fishing, and a few residents wanted no limitations at this site. Respondents who generally disagreed with constraints felt that there are already "too many hunting restrictions... soon no animals will be able to be hunted... maybe not in our lifetime but our children's," replied one resident. Some felt the area should be left open for hunters, maybe tourists, but not for oil exploration or industry. Another person added that community hunters "only go that far 'to Isabella Bay] to hunt seal when the researchers are there because they know if they have problems there is somebody to help them." It appears that

biological research conducted at Igalirtuug may indirectly increase the frequency and numbers of visitors to the area.

Those who responded that they were unsure as to wether restrictions were necessary either needed more information to answer the question, or, were on the Igalirtuuq committee and said that the committee is studying these restrictions to decide what is the best course of action.

## 5.2.4 Attitudes Towards Continued Scientific Research

Scientific research is allowed, and often actively promoted within biosphere reserve boundaries (see Table 5.1). The primary objective of this is to provide educational, research, and environmental monitoring of the critical area. The only scientific research that has continued within the proposed reserve has been research on the biology of the bowhead whale. When community members were asked whether they would like to see the scientific research continue 93% said that they would. When asked whether they thought the research has benefited the community the majority felt that it has by providing employment to a few community members.

Information gained from Finley (personal communication), on the economic input of the marine research to the community from 1983-1990, support this statement (see Table 5.3). Direct inputs of the study through wages to community members, equipment rentals, and accommodation, as well as indirect input, via the purchase of food and equipment, make a total of \$73,500 for the seven years. This figure averages out to a contribution of \$10,500 per year to the community of Clyde River from the scientific research.

Economic Input	Average input/year	Seven year total
Direct input: wages and equipment rental accommodation	\$8,000 \$1,500	\$56,000 \$10,500
Indirect input: food and equipment	\$1,000	\$7,000
Totals	\$10,500	\$73,500

Table 5.3.	Economic Input of Scientific Research at Isabella Bay to the
	Clyde River community from 1983 to 1990 (but not including
	1989).

Source: Finley, Personal Communication.

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Not only do Clyde residents feel there has been monetary gain as a result of this marine research, but many feel it has given the community increased knowledge and kept them informed and involved in the research. It was stated by a several residents that scientific information on the whales is important to the hunters and that they would like to know more. For example, one hunter mentioned that to know how long the whales live would be useful management information to have in the future when bowhead numbers might have increased sufficiently for the possibly of a community hunt.

It was the biologists at Isabella Bay, say residents, who informed the community that the area was visited by "outsiders;" members from the nearest community to the south, Broughton Island. This appears to have been important information for the community to know and they appeared pleased that the biologists were there to relay such information to them. Some felt that the research had also given the community much information about marine biology that has expanded the education of their children. Many felt such knowledge was important for their children to learn in school. An example of this was the participation of school children in a bowhead whale naming contest designed to name a particular whale that had been seen in the area for many years; identifiable by its obvious white tail. I was told that this was not only fun for the children but they also learned a lot about the whales.

Some residents see instructional benefits stemming from the research if tourism starts. They feel that the marine biologist could train those interested in guiding whale watching tours on the proper methods which safeguard against whales disturbance. A few residents felt that the scientific research might eventually be taken over by community members themselves, while others felt with the knowledge received from research that more power would be relinggished to the community by the government in resource management decision making. Several hunters stated their concern that the scientific research has not continued on a large scale after 1988. They were distressed that this might create gaps of information in the important long-term research that began in 1983. They felt that bowhead whale recovery was dependent to a certain degree on the continuation of such research. Other residents were disturbed that they had lost the monetary gains and training opportunities that the research had provided.

## Chapter 6

# CONCLUSIONS: IMPLICATIONS FOR PLANNING

Development and conservation have routinely been seen as "polar opposites" instead of parts of an interrelated, and potentially compatible community socio-economic strategy (Rao and Geisler 1990:20-21). Because of this, researchers tend to overlook the numerous benefits that these two schemes, once amalgamated, can have on local residents. The successful union of conservation and development are now seen as essential by many world agencies for both sustainable socio-economic development and the conservation of biological and cultural diversity (IUCN 1980, WCED 1987). Contemporary conservation planners and managers are increasingly aware that protected areas must also provide a viable and sustainable economic future for the people living closest to them (NcNeely 1988, West and Brechin 1991). This economic factor often determines the survival of the conservation area (Saharia 1984). In the final analysis, just as development strategies can no longer disregard environmental conservation, neither can conservation initiatives occur in isolation from the planning and development of local communities.

The findings of this study suggest that a cross-section of Clyde River residents have a positive attitude toward tourism development in their community. The majority of residents also support the Igalirtuuq Conservation Proposal. In addition to the protection of the bowhead whale, it's critical habitat, European and Inuit historical and archaeological sites, it is also felt that the establishment

of a whale sanctuary will benefit the community by stimulating the growth of tourism.

The community feels that many economic benefits are associated with tourism development. In the absence of any other viable means of local economic stimulation such a response is perhaps to be expected. Less expected, however, is the high level of agreement (72%) on the cultural benefits of tourism and ambivalence (81%) towards the environmental costs. It appears that residents are reluctant to attribute general social and environmental costs to tourism and conservation area development, but never-the-less are able to point out some specific negative impacts that such initiatives might have on their village.

The main fear of residents is the potential lack of community involvement in the planning and management of both tourism and conservation projects. For the people of Clyde, local control of the tourist industry and conservation area establishment is paramount. Most felt that the growth of these two projects would continue with few problems as long as residents were involved in all aspects. Community members support a controlled, gradual type of tourism development that will allow potential socio-economic, environmental and cultural costs to be monitored and reduced. It is also clear that residents want to retain priority use and access of traditional hunting and camping areas. Thus, they envision separate means of management for locals and tourists.

The large proportion of ambiguous answers to many of the questions asked reveals a lack of community understanding of contemporary costs/benefits of tourism development and conservation area establishment. This

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reflects the shortage of information available in Clyde on tourism/conservation issues that may affect the community. This may also indicate possible weaknesses in the present methodologies being used to involve community residents on these matters.

Tourism at this point is just a perception in the minds of the community. It is unlikely that residents will have much understanding of the detailed workings of the tourist industry until supplied with specific information. Presently, the main source of knowledge about tourism appears to come from those residents who have had contact with Inuit from other villages where tourism is already underway. Those involved in the tourism development process can perhaps learn much from a review of the methods used in the conservation area process. Attempts by the GNWT and tourism agencies to disseminate information to community members have actually been few. In contrast, it appears that the methods used in the planning of the Igalirtuug Conservation Proposal, entailing intense involvement by all parties (WWF, scientists, residents, and various departments of the GNWT), have been considerably more successful. The "Special Committee," in contrast to the "Tourism Committee," appears to have responded well to community concerns.

The values that local people place on their particular landscape for conservation or development purposes will likely differ from those of outside planners and managers because they have had different experiences and patterns of use over differing time periods. This thesis provides ample proof in the ability of Clyde Inuit, as local resource users, to organize and manage local resources effectively. Evidence shows that Clyde River Inuit have independently

devised, maintained, and adapted communal arrangements to manage their common-property resources. The interviews conducted in this study reveal that residents show a wealth of local socio-economic, cultural, and ecological knowledge, much of which can be applied to both tourism and conservation area development. This is perhaps not surprising given that these arrangements have been built on local knowledge of the resources and cultural norms that have evolved over thousands of years. Clyde Inuit lifespace knowledge is very complex, but an understanding of portions of it by tourism and conservation managers appears essential if development is to occur within a sustainable framework.

This study also illustrates that for the long-term stability of the tourist industry and protected area establishment, resident input and positive resident attitudes must be taken into account. This is in agreement with those that recommend that all planning be based on the priorities and goals of local residents. Therefore, local tourist attractions should be promoted only when endorsed by residents (Cooke 1982; D'Amore 1983; and Murphy 1985) and the same is similarly recommended for the establishment of protected areas, except under certain circumstances (West and Brechin 1991).

If sustainable development initiatives require local input and involvement, then local people will have to have continued access to information about these activities, starting from the earliest stages of development. The formation of every conservation and development program will have to address the all too often missing, but inseparable, links between the economic, ecological, and the human dimensions of planning. Stress will have to be placed on

"moving from a 'react and cure' to an 'anticipate and prevent' mode of environment and development decisionmaking, incorporating larger time frames for planning (Sadler 1990:XV)." As Lusugi (1981:88) wrote in the context of wildlife conservation in Kenya:

Planning must be based on an evaluation of cultural, political and socioeconomic as well as ecological factors and conservation must be balanced against local human needs in both the short and long term, and above all, be acceptable to the local people.

Increasingly, human relationships with the resourcebase needs to be conceptualised in terms of time and space. These are not static but dynamic relationships, independent of time and capable of change. It is difficult to tell what "future" benefits a community might receive from the maintenance of an intact environment. In Clyde it is clear that residents see future potential in both the consumptive and non-consumptive "exploitation" of bowhead whales. They also feel that conservation is currently needed in order to safeguard the future potential that bowhead's represent.

Every effort must be made to inform the community as thoroughly as possible about the impacts of tourism/conservation development in order to build local competence in the planning and managing of these activities. The continued increase in resident knowledge on these subjects and the enhancement of their institutions - which are ultimately responsible for insuring local sustainable development - must also be considered, for this might be the only means for a community to reach some degree of economic independence. The purpose of McGill Geography Department's, Eastern Arctic Economic Development Research Project, which this study is but a small component, is to assist this process.

The community of Clyde River has proven to be an interesting location for this case study because local concerns and initiatives involving both economic development and conservation have transpired simultaineously. Similar issues are being addressed globally in a new <u>World</u> <u>Conservation Strategy</u> (IUCN, WWF, UNEP), which stresses the need for the compatible integration of the environment and economy. The new <u>Mark II</u> strategy focuses, in particular, on the growth of the indigenous peoples and their subsistence economy within an open system, and also concentrates on the national and international linkages necessary for promoting self-reliance and interdependence for growth and development (Furtado 1990:107). All of these issues are of immediate concern to the Inuit of Clyde River.

While a growing number of arctic settlements have found themselves addressing the coexistence of tourism and conservation issues, Clyde River is unique in that the attitudes and perceptions of community residents are being considered before any major activities begins. The data suggest that analyzing local attitudes to tourism and conservation together can provide insights into the ways these seemingly opposite development initiatives can be blended. Conservation issues need not, and should not, be separated from issues of tourism development.

At the same time local knowledge is vital in improving the general ability of sustainable development objectives to be met. Identifying the different interest groups involved and the major issues at stake within the community, promotes a critical understanding of the informational requirements of residents and this, in turn, allows subsequent actions to be taken to satisfy local needs and desires. Future

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research should continue to look at the components that contribute to locally perceived problems, with the goal of eventually formulating and applying solutions that involve the active participation of the community. It is hoped that the citizens of Clyde River will continue to be allowed to map out their own future, while being aware in advance of the possible consequences their choices and actions may have on future generations.

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**Tourism Questions** Date: Name: Sex: Age: Occupation:

1- Do you want to see tourism in Clyde River?

2- Do you think there would be any economic costs/benefits for the community from tourism?

3- Do you think there would be any cultural costs/benefits for Clyde River from tourism?

4- Do you think there would be any environmental impacts or problems if tourists start to arrived in Clyde River? Isabella Bay?

5- What type of tourist would you like to see come to Clyde?

b- Any particular age group? (Old, middle age, young).

6- What type of experience would you like to give tourists who arrive?

7- If tourists came to Clyde River where would you take them?

b- Are there any particular places you think they should see before they leave the area?

8- What months would be best for tourists to come to Clyde River?

b- What do you usually do during this season?

c- Would you have time for tourists during these months?

9- Should there be restrictions (numbers limit) on the numbers of tourist who come to Clyde River at one time?

10- Are the facilities in Clyde River presently adequate for tourists to arrive? If not what facilities are needed?

11- Would a Billet-type of accommodation as has been tried in Pangnirtung, where tourists stay with Inuit families, work in Clyde River? Would you yourself try it?

12- Would you welcome workshops to be given to the community to set standards of cleanliness and hospitality to prevent dissatisfied guests?

b- Do you think that your Inuit Lifestyle might change because you are dealing with tourists?

13- What should every tourist be informed of about Clyde River before coming to the community?

Igalirtuug Conservation Proposal Questions Date:

Name: Sex:

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#### Sex: Age: Occupation:

1- Do you Know about the Igalirtuug Conservation Plan?

2- How did you here about it?

3- Do you like the idea or agree with the need for a Conservation Plan?

4- Do you see any good things happening in Clyde River because of the Conservation Plan?

5- Do you see any bad things happening in Clyde River because of the Conservation Plan?

6- Were you involved in the Conservation Plan?

b- Do you feel you have had a say (input) in the Plans formulation?

c- Have you been kept informed about the Conservation Plan? By who?

7- Would you agree with the Conservation Plan who says that hunting and travel restrictions through the Igalirtuug Area during certain times of the year when the Bowhead whales are present might be necessary so that the whales are not disturbed?

8- Should there be restrictions on the numbers of people who entre Igalirtuuq? Inuit? Tourist? Researchers?

9- Have you read the (this) actual Conservation Proposal?

10- Would you like to see the Scientific Research on the Bowhead whale continue?

b- Do you think the scientific research has benefitted or harmed the community in any way?

11- Why do you think the Community is concerned with the protection of the Bowhead?



Purpose: To find means and ways to protect bowhead whale habitats while our knowledge of the endangered species is vague;

## Community Description

The Hamlet of Clyde River is situated at the West side of Patricia Bay, Latitude 7028 and Longitude 6836. The name "Clyde" was assigned by Captain (later Sir) John Ross in the year 1818 while on an expedition in search of the Northwest Passage. The exact origin of the name is unknown but it may possibly be named for River Clyde in Scotland. The traditional name is "KANGIRTUGAPIK", meaning small fiord.

The original site two miles East of the present location came into existance in the summer of 1922 when the Hudson's Bay Company set up a Post to trade with natives in the area. The settlement was moved in the late 1960's to the present location, where the ground is more suitable for future community expansion and the water supply is adequate.

The present population is about 500, including both natives and non-natives.

#### Clyde River Hunters & Trappers Association (HTA)

The HTA was incorporated on April 19, 1973. At present, there are over 100 members (there are over 200 eligible members - both males and females) to the Association with seven Directors, a President and a Secretary. The goals and objectives of the Association are to assist its members in getting hunting, fishing, trapping, and camping supplies and equipment in a most economical way. Also, to represent the general interests of its members in matters dealing with wildlife, environment, and Association business in general. Also, to assist the Government of the Northwest Territories (the Department of Renewable Resources) in the Management of Wildlife and environment and the enhancement of appropriate Wildlife Acts or Regulations and the Departmental policies regarding Resource Development.

#### Bowhead Whale Description

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The bowhead whale grows to a length of 65 feet and it can weigh up to 70 tonnes. The color of the skin is dark gray to brownish gray with white spots on the bottom of lower jaw. The mature whale has a white spot inmediately in front of the tail fluke. It has a fading fin on the back, situated over two thirds way back from the tip of the jaws. It swims at a speed of 3 to 4 km per hour undisturbed and it will speed up to 8 to 10 km. per hour when retreating from potential disturbances. It can stay under water tor over half hour when feeding and will stay down longer when threatened. The head takes up about two thirds of the total length. The mouth is large enough to hold twenty men and it has baleen hanging from the upper jaw, that consists of over 300 plates. The horny substance of the plates enables the whale to collect and retain food. The skin is said to have a thicker outer layer (soft part) than a narwhal but the inner part (fatty part) is said to be thinner than that of a narwhal. The blubber is over one toot thick, which enables the animal to float when dead, thus it was given the name of "the right whale" (to hunt) by whalers.

#### Traditional Domestic Whaling

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The bowhead whales were hunted traditionally by Inuit from qayaqs using harpoons and the ends of their paddles.

A dozen men in qayaqs would approach a bowhead whale and throw their harpoons into the animal. The type of harpoon heads they use on bowhead whales were designed to sink in deeper with every twitch of the marscles in the animal. One of the harpoon heads would eventually hit a vital organ in an animal and kills it. Another way to kill a bowhead whale was to cut open the skin into the blubber with the sharpened ends of qayaq paddles after the harpoons were in the animal. Being stung by the cut through the skin, the bowhead would submerge. The next time the bowhead' surfaces, the sharpened end of a paddle would be driven in to the wound previously cut opened. Each time the paddle is thrusted in farther, the bowhead would submerge with the paddle stuck on its side. And every time the bowhead surfaces, the paddle would be driven in farther until the animal dies.

Once the animal was dead, a bunch of qayaqs would tow it ashore inch by inch. The process was so time consuming, the men would sometime tall asleep. The next to him would hit his paddle with his his and that woke him up quick.

The maktaq (skin, it's pronounced a little different from a narwhal - narwhal skin is pronounced maktaaq) was used as food by the Inuit, internal organs by dogs and meat was used by both Inuit and dogs. The blubber would be used for fuel for the lamps, which provided heat and light for many months.

The reason is not known why the domestic whaling seized, although there are some theories. When the firearms were introduced by Europeans, it became easier to hunt seals and polar bears during an open water season. Also, the qayaq's range being no match to the sail boat was probably making it harder for the Inuit to find bowheads near the shore.

#### Commercial Whaling

Commercial whaling along the East Coast of Baffin Island and in the Lancaster Sound area started after the year 1818. The whalers (mostly British) found much wealth in selling baleen and blubber of the right whales, and many bowhead whales and similiar type baleen whales were hunted every summer. The bowhead whale population was believed to be around 11,000 at the early stage of the commercial whaling period, but the population was nearly wiped out by the turn of the twentieth century. The last of the whaling fleets were seen around 1911 in the Eastern Arctic. Many factors were involved in the cessation of commercial whaling, including:

(a) Bowhead whales were hard to find as the population was down to only hundred; from 11,000, thus making the hunts financially unviable;

- (b) World War One interrupted the whaling industry as most sailors enlisted in the Navy;
- (c) Baleen has since been replaced by plastic material. Items that were originally made from baleen were now being manufactured in an enconomical way using plastic material;
- (d) Natural oil products were now available at a cheaper cost than the whale blubber;

### Our Understanding of The Bowhead Whale

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It was in 1930's that the protection of bowhead whales was enacted as result of world wide concern for whales. Since then, not one bowhead while has been killed by anyone other than predators in the East Coast of Battin Island, but the population is still in poor health. Precise infortation regarding the state of the bowhead whale population has been difficult to obtain.

The biology of a bowhead whale is not well known but we know a bit from talking to older hunters who gained their knowledge from the generation before them and through personal experiences with seals and polar bears which can be related to bowheads. We have also learned from biologists who have done some scientific studies on the species.

The population we are concerned about spend the Winter months in a year-round open area in Davis Strait, between Disco Island in Greenland and Isabella Bay of Baffin Island. In late Spring to early Summer, females with young and pregnant females migrate North to the Prince Regent Inlet area through Lancastor Sound, using the pack ice as protection from Killer Whales. Probably about the same time, mature males and calfless females head to Isabella Bay to feed, breed, and generally to socialize. This is the way it seems to be according to whalers' log books, and through the personal knowledge of our elders and with the confirmation of biologists.

There are other areas between Isabella Bay and Lancaster Sound where bowhead whales spend their summers but majority of them are believed to go to Isabella Bay. The bowhead whale studies by the World Wildlife lund organization through Kerry Finley of LGL Limited (an organization of biologists who conduct scientific studies on various species of endangered wildlife) between 1983 and 1986 have seen some of the same individual animals in different years. This suggests, that the same group of animals uses Isabella Bay year after year.

A number of things seem to attract bowhead whales to Isabella Bay. One of them is that the Isabella Bay area has some good areas of Shallow waters, which provide good protection from killer whales. Killer whales do not normally occupy shallow waters. The bowhead whale studies have twice seem killer whales chasing after mature bowheads, but none were successful. Another reason why the bowheads are attracted to Isabella Bay is that Isabella Bay is rich with plankton which the bowheads feed on. The plankton are moved by ocean currents and collect in hollows on the sea bed.

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There are two main feeding areas at Isabella Bay where there are deep trenches that collect plankton, thus making it easier for bowheads to feed on.

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The animal is very sensitive to noises created by outboard hotors, ships, gun shots into water, and other loud noises. Bowheads when feeding, breeding, socializing, or simply cruising along have been seen and documented retreating from the disturbing noises. It is most important to keep the disturbing noises to a minimum, to prevent interterence to feeding, breeding, and socializing patterns. If this very important habitat is continually disturbed, the bowhead whales no doubt would move elsewhere.

The ocean currents come down from the North carrying plankton, which the bowheads feed on. The plankton is pushed down and back up by the circular movement fo currents as result of deep trenches in the bottom of the sea. On the surface of the water, a slick line is formed right along the deep trench at the bottom. The oil slick is from crushed fatty plankton resulting from plankton hitting another plankton when moved about by ocean currents. On the slick line, we have seen garbage from ships collecting into one area. Excess garbage can have bad effects on reeding of bowhead whales as they swallow anything that goes in the mouth with the plankton. Also, if there is an oil spill up North, it will eventually reach the slick lines at Isabella Bay where bowhead whales feed. And if that happens, oil would destroy the baleen plates on a whale. Oily baleen plates would fail to function as strainers, therefore, this would affect the way the whale feeds. The whale would die eventually from malnutrition as it would be taking in more water and less food than usual. The whale could also die from the negative effects of oil to the health of the whale.

If teeding, breeding, and socializing patterns of a bowhead whale are threatened, it would likely move elsewhere. Being in an unfamiliar territory, a bowhead whale could become an easy prey to killer whales and it would have bad effects on feeding, breeding, and socializing habits. Already an endangered species, the population would go down steadily, being easy prey to killer whales. The reproductive rate would go down as well, due to change in breeding patterns as result of poor health or by simply being in an unfamiliar territory.

As mentioned earlier in this letter, part of the same population as the Jsabella Bay bowheads, spend the entire summer in the Prince Regent lulet area. As these animals go through Lancaster Sound, the area is also a concern to us. Protecting one area but not the other is senseless. Any bad effects on either of the two groups will affect the population as a whole; therefore, both habitats (Isabella Bay and Prince Regent Inlet) should be protected. Appendix 3.

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# OPTIONS FOR BOWHEAD WHALE PROTECTION AT ISABELLA BAY

Prepared for the Clyde River Hunters and Trappers Association by World Wildlife Fund Canada

June 2, 1988

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OPTIONS FOR BOWHEAD WHALE PROTECTION AT ISABELLA BAY, BAFFIN ISLAND

OPTION 1. LAND USE ZONE

i) What is a Land Use Zone?

An area of land and/or water whose conservation significance has been identified by the local residents and whose future use is defined in the Lancaster Sound Land Use Plan. Under this option, the Isabella Bay area would be designated as a 'Red' 'zone, a Critical Importance Area.

ii) How would a Land Use Zone protect the Bowhead?

Proposals for activities which may disturb the Bowhead through pollution and underwater noise for example, may be reviewed by Clyde River. Guidelines may be established which would prevent or minimize the impact of these activities on the Bowhead. These guidelines may not legally protect the Bowhead, and the degree of their enforcement has yet to be determined.

iii) What might the boundaries be?

Given the knowledge we have of the Bowhead's needs and our understanding of their use of the Isabella area, the land use zone would include the marine area extending north from Home Bay to Scott Inle.. This zone also includes all fjords except Inugsiun near Clyde River and extending 12 miles offshore to include the Territorial Seas boundary as generally outlined on Map 2.

iv) Who would be involved in setting up a Land Use Zone?

- Lancaster Sound Land Use Planning Commission
- Residents of Clyde River
- Clyde River Hunters and Trappers Association
- Tungavik Federation of Nunavut
- Minister of Indian and Northern Affairs
- Minister of Renewable Resources (GNWT)
- Related federal and territorial departments

v) How could a Land Use Zone be established?

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Clyde River would have to make a proposal to the Lancaster Sound Land Use Planning Commission as soon as possible or before the end of 1988. This proposal must then be accepted by the Commission and approved by the Minister of Indian and Affairs and Northern

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Development with agreement from all the planning partners including the relevant federal and territorial departments.

vi) How soon could this happen?

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This option may take 1 to 3 years to put in

#### OPTION 2. DEPARTMENT OF FISHERIES AND OCEANS BOWHEAD WHALE SANCTUARY

i) What is a Bowhead Whale Sanctuary?

Under the <u>Fisheries Act</u>, the area to be protected becomes a legally regulated conservation/management zone which is administered by the federal Department of Fisheries and Oceans.

ii) How might a whale sanctuary protect the Bowhead?

Under the <u>Fisheries Act</u>, activities that might disturb the Bowhead or damage the area where it lives, such as noise pollution and development would not be allowed in the area. This would be done by enforcing regulations to protect the Bowhead within the <u>Fisheries Act</u>.

iii) What might the boundaries be?

The sanctuary might include the critical Bowhead habitat areas as identified by researcher Kerry Finley off Cape Raper in Isabella Bay and Cape Henry Kater (see general outline on Map 1). This is considered the minimum size for a protected area for the Bowhead.

iv) Who would be involved in establishing a whale sanctuary?

- Federal Cabinet
- Minister of Fisheries and Oceans
- DFO regional officials
- Those who use the area, especially Clyde River residents

v) How could a whale sanctuary be established?

Clyde River would have to put forward a proposal for the establishment of a sanctuary to the Minister of the Depatrment of Fisheries and Oceans (DFO). The proposal is then approved by Order in Council at the level of the federal government. The Lancaster Sound Land Use Planning Commission should be informed of any plans in the area.

vi) How soon could this happen?

This option could take anywhere from 2 to 5

years.

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#### OPTION 3. <u>DFO SANCTUARY, BIOSPHERE RESERVE AND ARCHAEOLOGICAL</u> SITES REGULATION

i) What does this option include?

This option combines 3 different protection mechanisms in order to include a larger marine area for the Bowhead as well as some important sites on land.

The proposal for the DFO Sanctuary remains as stated in Option 2. A Biosphere Reserve is a way to protect the Bowhead which the community may wish to explore at the present time or at a later date. It is an agreement between Clyde River, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the federal government. A local management advisory committee is established and the emphasis would be placed on education, training, environmental research and monitoring in the reserve.

Under the GNWT Archaeological Sites Regulation, once an area has been recorded and documented, it is automatically protected under the Regulation. It is difficult to enforce protection for these areas because of their remote location.

ii) How would these mechanisms protect the Bowhead?

The mechanisms for protecting the Bowhead within the whale sanctuary are described in option 2. The Biosphere Reserve which would incorporate an area larger than the Bowhead sanctuary would provide a buffer zone to the identified critical area. Having this larger area protected for the Bowhead would mean that there would be a larger area for the whales to feed and socialize and less of a chance that they will be disturbed by human activities. However, protection for the whales cannot be legally enforced outside the core protected area and within the Biosphere Reserve. The Archaeological Sites Regulation would protect sites and artefacts that are historically significant to the people of Clyde River and the residents of the Baffin region.

iii) What might the boundaries be?

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The boundaries for the whale sanctuary are discussed in option 2. The Biosphere Reserve might include the marine area extending north from Home Bay to Eglinton Fjord and all fjords and waters in between and extending out as far as the 12 mile limit of the Territorial Seas. The Archaeological sites would include Dexterity Island, the south shore at Cape Raper and Aulitiving Island (see Map 2).

# vi) Who might be involved in establishing these mechanisms?

- The Government of the Northwest Territories
  - The Minister of DFO
  - Department of Renewable Resources
  - Clyde River residents
- UNESCO
- \_ Canada Man and Biosphere Committee

iv) How could a DFO Sanctuary, a Biosphere Reserve and a Archaeological Sites Regulation be established?

The DFO Sanctuary is established as outlined in

Option 2.

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The Biosphere Reserve would have to be nominated by the Clyde River HTA. The proposal is then sent to the National Man and Biosphere Advisory Committee for acceptance and referred to UNESCO for approval. The archaeological sites are automatically protected once they are recorded and documented by the department of Renewable Resources.

vi) How soon could this happen?

It may take 2 to 5 years to establish the Sanctuary and the Archaeological Sites and perhaps longer to establish the Biosphere Reserve. OPTION 4. NATIONAL MARINE PARK

i) What is a National Marine Park?

A National Marine Park provides strong legal protection for an area under the <u>National Parks Act</u>. There is an emphasis on conservation and public awareness of the area. Some areas within the National Marine Park would be more strongly protected than others for conservation and/or local social and economic reasons.

ii) How would a National Marine Park protect the Bowhead?

Under a National Marine Park, Bowhead protection could be accomplished by regulations under the <u>National Parks Act</u> or the <u>Fisheries Act</u>. The <u>National Parks Act</u> could also be used to protect Bowhead habitat. Under this option, the Bowhead may be legally protected from all kinds of disturbance such as pollution and oil exploration.

iii) What might the boundaries be?

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The boundaries might include the Marine area extending north from Home Bay to Scott Inlet including all fjords in between and the archaeological sites mentioned above. This area would extend out to the 12 mile limit of the Territorial Seas. At this point, it is too early to determine if these boundaries would be acceptable to Parks Canada.

iv) Who might be involved in establishing a National Marine Park?

- Minister of Environment
- Canadian Parks Service
- Local residents
- Government of Northwest Territories
- Department of Fisheries and Oceans
- Parliament

v) How could a National Marine Park be established?

The community of Clyde River would inform the Canadian Parks Service that they wish to consider the National Marine Park option. The Government of the Northwest Territories would have to be informed and the Tungavik Federation of Nunavut should be kept up to date on these activities. If the Canadian Parks Service accepts the proposal, they will begin a study of the area. The next step is to develop a park proposal and to do

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'feasibility' study of the area. Federal Cabinet would need to give the final approval to the park. Since land claims are still in negotiation, the National Marine Park proposal should become part of the land claims discussions.

. vi) How soon could this happen?

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It may take from 5 to 15 years to establish a National Marine Park.



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111 Area for consideration for Bowhead protection . 1111: Historically significant sites



1111 Critical Bowhead Sites

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Options and	Questions and Answers for Each Option of Bowhead Protection			1
Questions	Option 1: Land Use Zone	Option 2: DFO Whale Sanctuary	Option 3: DFO whate Sanctuary, Biosphere Reserve Archaeolog. Sites Reg.	Option 4: National Marine Park
How would protection for the Bowhead be enforced?	We're not sure, guidelines for protection are still being discussed by Regional Planning Comm	Protection provided by Fisheries Act, Legally enforced	(See Option 2) No legal protection provided outside core area	Legal protection by National Parks Act or Fisheries Act.
How might Clyde be involved in protecting the Bowhead?	Clyde may decide which activities to allow, involvement in managing/ monitoring the area.	Involvement may be negotiated. As it is now, Clydes involvement not provided for.	Local involvement in management or monitoring encouraged in Biosphere Reserve.	Local involvement may be negotiated.
How might other agencies be involved in protecting the Bowhead?	No mechanism available for area management or monitoring.	No on-site management provided.	No on-site management provided.	Parks Canada would manage the park.
How easy/difficult is to get the area protected in each option?	Option may be part of the Land Use negotiations, shouldn't be difficult.	All agencies involved are eager for protection, shouldn't be difficult.	Reserve may take longer than Option 1 or 2.	May take the longest to implement.
What traditional activities may be allowed in the area?	Traditional hunting allowed. No Bowhead hunting.	Traditional hunting allowed. No Bowhead hunting.	Traditional hunting allowed. No Bowhead hunting.	Traditional hunting allowed. No Bowhead hunting.
Will this Option protect other species?	May be negotiated.	May be negotiated.	May be negotiated.	May be negotiated.
Will there be tourism?	This option neither encourages or discourages tourism.	Visitors may be attracted to the area.	Visitors may be attracted to the area.	A park may attract visitors, activities are regulated by Parks Canada,
How expensive is it to implement this option?	No cosis.	Minimal costs to the government	Costs are minimal.	Expensive to establish and manage.
Are there benefits to Clyde River	Clyde may have a role in decision making, reviewing development activities.	Clyde will gain recognition and there may be jobs and training.	Benelits may include: recognition, decision making, opportunities for	Gains may include jobs. revenue. training. reception and relection

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Appendix 4.

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Igalirtuuq: A Conservation Proposal for Bowhead Whales at Isabella Bay, Baffin Island, NWT

Prepared by the Community of Clyde River, NWT

January 1990

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# CONTENTS

Acknowledgements
Executive Summary
1.0 How the Proposal Came About
2.0 Our Goals and Objectives
3.0 The Regional Setting
4.0 What Is To Be Protected?
5.0 The Need and Opportunity for a
Conservation Plan8
6.0 The Conservation Plan11
7.0 How to Manage the Area? 15
8.0 How Should the Conservation Plan
Be Implemented?16
9.0 Costs and Benefits18
10.0 Conclusion

# DISTRIBUTION AND IMPORTANT SUMMERING AREAS OF THE BOWHEAD WHALE IN THE EASTERN CANADIAN ARCTIC.

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Bowhead whales are recovering. The population is thought to number in the low hundreds, is no longer hunted, and remains officially endangered as classified by the Committee on the Status of Endangered Wildlife in Canada.

Through Clyde River's involvement in WWF's work at Isabella Bay, we have a better understanding of the whales and their predicament. We believe that action to secure long-term protection for their critical habitat, as well as work to develop an overall recovery plan for the Bowhead, is urgently needed. This conservation plan for Isabella Bay is an essential first step, vital to the survival of the whales.

Several physical features at Isabella Bay combine to make this area critical to the Bowhead during the summer Shallow banks off the coast at Isabella Bay, deep troughs further offshore, ocean and wind currents, all combine to provide the right setting for the Bowhead's main source of tood and to provide protection from its predation by Killer whales (<u>Qica orcinits</u>).

However, within this setting, there are various activities and disturbances, both existing and potential, which together may seriously jeopardise the survival of the whale. These include, local boat traffic, pollution, tourism, defense activities and natural factors such as the Bowhead's slow rate of reproduction

In order to help the Bowhead population recover, every effort must be made to protect these whales and their habitat. As the Department of Fisheries and Oceans (DFO) has the primary mandate for marine mammals in Canada, and in an attempt to meet the objectives of the <u>Arctic</u> <u>Marine Conservation Strategy</u>, we are recommending that DFO take the lead and establish a Whale Sanctuary at Isabella Bay. This effort would result in the first arctic marine sanctuary in Canada

At present, the <u>Fisheries Act</u> does not specifically provide for the establishment of a Whale Sanctuary, however, it is within the general mandate of the <u>Act</u> to do so and we are confident that specific regulations can be developed or amended for such a purpose. In our view, a regulated Whale Sanctuary is the best way to establish a long-term conservation commitment and a related management process in which Clyde River plays a clearly defined role.

A Biosphere Reserve, though it has no legal authority, will aid protection achieved by the sanctuary in several ways. As a UNESCO designation, it will promote international awareness of the urgency of Bowhead protection and the critical habitat at Isabella Bay. It will encourage sensitive use around the sanctuary through the identification of a buffer zone and establishment of a management committee of local users and other agencies with interests in the reserve. It will also attract continuing scientific research projects on marine conservation in the area

We have spent a great deal of time weighing the pros and cons of various conservation options. We have chosen this conservation plan because we teel that it best fits the needs of both the Bowhead and the community, provides the basis for cooperative conservation by Clyde River, the Department of Fisheries and Oceans, Renewable Resources and other concerned agencies will attract international attention and encourage further research to aid the Bowhead in other parts of its international range, and be cause it does not involve great expense or legislative process.

Since the <u>Lancaster Sound Land Use Regional Plan</u> already endorses our development of this proposal, action to implement it can and should begin immediately under the leadership of Fisheries and Oceans, with the goal of establishing the sanctuary in two years or less. A senior DFO official should be assigned to coordinate the project and organise asteering committee drawn from the community and other public sector agencies who can contribute

The main tasks of this group would be to

- · develop draft regulations for the Whale Sanctuary
- design an ongoing administrative structure for the Whale Sanctuary and Biosphere Reserve.
- organise the training and work program of local wardens for the sanctuary
- organise a study of tourism options for Isabella Bay; and
- design future Bowhead research projects and recruit funding

Supported by this cooperative effort, the community of Clyde River looks forward to leading the way in achieving a milestone in arctic marine conservation

# 1.0 HOW THE PROPOSAL CAME ABOUT

For centuries, the limit of Baffin Island and the eastern arctic Bowhead whale have co-existed as inhabitants of Canada's far north. Three hundred years ago, the Europeans began commercially hunting these whales with the help of local limit. Our knowledge of the whales and our ability to survive in this harsh land were a valuable service to the whalers.

As a result of commercial whaling, the Bowhead whale population dropped from at least 11,000 to near extinction in Baffin Bay- Davis Strait. It has now been nearly 100 years since the last commercial harvest and yet there are no signs that Bowhead numbers are recovering Today, this endangered stock is thought to number roughly 200-300 at most.

The survival of the Bowhead whale is important to Canada and the world since whales are a critical component of the rich marine environment in which we share and on which we all depend, especially the people of Clyde River. There is also much more to learn from studying the Bowhead in its marine habitat that will be useful knowledge for future economic development in the region, such as tourism. Of special concern to Clyde River is the fact that the cultural heritage of the linuit of Baffin Island is directly linked to the Bowhead, as the remaining archaeological artifacts indicate. Moreover, many of the elders from Clyde River have first-hand recollections of the Bowhead during their summers at Isabella Bay. We want to keep these memories alive for our children by keeping the Bowhead alive.

Since 1983 the community of Clyde River, Baffin Island, has been involved with World Wildlife Fund Canada (WWF). DFO. Renewable Resources and the Department of Indian and Northern Affairs in biological research on these whales at Isabella Bay. Every summer, the Bowhead migrate through the waters of Battin Bay-Davis Strait to their feeding and breeding grounds at Isabella Bay 120 km south of Clvde River. Our knowledge of this migration first attracted scientists to the area and our work with WWF and the other agencies has led to a better understanding of the whales and their predicament. From this work we have concluded that, even though the Bowhead are no longer hunted, their numbers are not increasing. Therefore, further conservation action is required if the Bowhead whale population is to recover in the tuture

During the summer of 1988, a committee was formed by the Hamlet Council and Hunters and Trappers Association of Clyde River to develop a conservation plan for Isabella Bay Based on knowledge of the Bowhead and the concerns of Clyde River residents, the plan was endorsed by the community at a public meeting on October 13, 1988. This proposal was subsequently developed to recommend action needed to implement the conservation plan and to identify the likely paracipants.

### 2.0 OUR GOALS AND OBJECTIVES

The overall goals of our conservation plan are as follows i) To protect the Bowhead whale and their critical habitat at Isabella Bay. Battin Island from human disturbance and pollution.

 ii) To aid recovery of the Bowhead whale population by encouraging scientific research and conservation action at Isabella Bay and the surrounding region
iii) To protect an important cultural heritage of the Inuit of Baffin Island; and,

iv) To provide for the direct involvement of Clyde River in decisions and work related to carrying out the conservation plan.

The specific objectives of this proposal are:

- i) To secure government leadership to protect critical Bowhead whale habitat through the establishment of a Whale Sanctuary, archaeological sites and a Biosphere Reserve at Isabella Bay: and,
- ii) To draw public attention to the urgent conservation needs of the Bowhead whale by sharing the knowledge and concerns of Clyde River

### **3.0 THE REGIONAL SETTING**

#### 3.1 Environment and Wildlife

The coastal environment of northeastern Baffin Island from Home Bay to Cape Hunter has several key features. Physically, coastal lowlands alternate with deep fjords and underwater glacial troughs Offshore, the cold ( $<0^{\circ}$ C), southward-flowing Baffin current dominates the surface circulation of western Baffin Bay- Davis Strait, flowing across the mouths of the fjords and transporting the copepods on which the Bowhead feed. Interaction of this current with bathymetric features and the tidal currents of the fjords establishes many localized current patterns which influence the activities of marine wildlife.

Overall, the severe arctic climate exerts the most important and highly variable influence on the physical and biological character of the region. Northeast Batfin is well-known for changing weather conditions as a result of its position underneath a major upper-atmospheric trough whose movements expose the region to two very different air masses. This variability shows up in changing sea ice conditions from year to year and is a very important factor in lnuit use of the area and the migration of marine mammals such as the Bowhead. A land fast ice platform lasts approximately nine months of the year and reaches out as far as 70 km from the coast, the floe edge roughly paralleling the 180 m depth contour in Baffin Bay-Davis Strait. Open water only reaches the shore for a matter of weeks, starting between early July and late August depending on local wind conditions which may keep broken ice jammed against the shore.

The region's physical setting has combined with the elements to create areas along the coast where many species in addition to Bowhead, find favourable habitats For example, the terrestrial area directly north-east of Clyde River has been given international recognition and is designated an International Biological Programme (IBP) site known as Clyde Foreland. This site is biologically rich, containing a wide variety of unique plant species (see following map).

Another area of international importance is Scott Inlet, located at the northern end of the region of interest This site contains a large colony of northern fulmars, a glaucous gull nesting area and has a representative selection of passerine species

At the tederal level, the Department of Fisheries and Oceans has identified the area from Home Bay to Isabella Bay as a Priority 1 marine area due to its importance to the Bowhead This classification means that habitat in the area is very critical to the Bow head and that only very restricted seasonal development be permitted in the area. The northern end of this site coincides with the area being proposed as a Whale Sanctuary. The Canadian Wildlife Service has identified the area around Scott Inlet has a 'Key Migratory Bird Migration Habitat' for northern fulmars.

At the territorial level, the Government of the Northwest Territories (GNWT) has identified the terrestrial area from Cape Hunter to Home Bay as a 'Wildlite Area of Special Interest' This designation results from the fact that it is a polar bear summer retreat and also has a concentration of winter denning sites.

At the local level, the marine and terrestrial area extending from Home Bay to Scott Inlet is particularly important to the people of Clyde River. The inlets and fjords are used for hunting caribou, polar bear and seal. The marine areas are also used for char fishing.

#### 3.2 Isabella Bay

Isabella Bay (69° 35'N,  $67^{\circ}$  15'W) is the outer extension of McBeth Fjord, a typical deeply-incised Batfin Island fjord. Depths reach 560 m near the head of the fjord and gradually decline toward the 30 km wide mouth of the Bay where they do not exceed 250 m

From research in the area, we know that Isabella Bay has two important features which make it particularly important to the Bowhead. The first is an extensive shallow shelf at the entrance of Isabella Bay. The second is a deep (>200 m) trough that cuts across the continental shelf. The Bowhead use the shallow shelf for breeding grounds and to seek shelter from Killer whales. They also find their main food supply, copepods, in the deep troughs

The floe edge at Isabella Bay and further south at Cape Henry Kater is used by the people of Clyde River for hunting ringed seal in both the winter and spring Cape Raper also has served as the base camp for field studies on the Bowhead during the ice- free season. However, travel by small boat to this site is difficult and the only facility there is a tiny hut

#### 3.3 Clyde River

The Hamlet of Clyde River (70° 27'N, 68° 33'W) is situated on the west side of Patricia Bay off Clyde Inlet. The name "Clyde" was assigned by Captain (later Sir) John Ross in 1818 while on an expedition in search of the Northwest Passage. The traditional name is "Kangiqtuqaapik," meaning small fjord.

The original site two miles east of the present location came into existence in the summer of 1922 when the Hudson's Bay Company set up a post to trade with local fnuit. The settlement was moved in the late 1960's to the present location where the ground is more suitable for future community expansion and the water supply is adequate

The present population of Clyde River, predominantly Inuit, is about 500 Community facilities and services include a new public school with instruction to grade ten, a nursing station, a new privately-owned hotel, a weather station and airport with scheduled commercial passenger service, as well as a community radio station

Though only two families from our community live on the land year-round, Clyde River residents still depend heavily on traditional subsistence use of the region's wildlife. Summer and winter camps for hunting, fishing and trapping are set up throughout the region every year. Our livelihood and our community were dealt a serious blow by the European boycott of seal pelts. Our polar bear quota has also been substantially reduced for conservation reasons. The possibility of developing commercial fishing and other renewable resource activity in the region may someday help to offset these losses. However, this will take a great deal of time and work by the Hunters and Trappers Association (HTA).

The Clyde River HTA was incorporated in 1973. At present there are over 100 members of the Association with seven Directors, a President and a Secretary. The objectives of the association are

- i) To assist members in obtaining hunting, fishing, trapping and camping supplies and equipment in the most economical way.
- ii) To represent the general interests of its members in matters dealing with wildlife, environment and association business in general and

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iii) To assist the government of the Northwest Ferritories (Department of Renewable Resources) in the management of wildlife, the enhancement of various wildlife acts or regulations and the departmental policies regarding resource development

The HTA has been concerned for some time with the future of the Bowhead whales and Isabella Bay HLA

# WILDLIFE AND HABITAT AREAS OF SPECIAL INTEREST



members have worked closely with World Wildlite Fund in studying the Bowhead. On April 27, 1987, the HTA took the initiative of writing to the Baffin Regional Hunters and Trappers Committee and many other agencies to encourage support for protecting the Bowhead (see Appendix 1) Since then, HTA members have worked many hours to develop this proposal

## **4.0 WHAT IS TO BE PROTECTED?**

#### 4.1 The Bowhead Whale

Bowhead are the only baleen whales that live in arctic seas all year round. Using their heads and backs they can break through ice over half a metre thick. Growing to a length of more than 20 m, an adult Bowhead can weigh up to 70 tonnes and its giant mouth can accommodate twenty people. These slow-moving whales (3 to 4 km/hour) can stay underwater for more than on  $\mathbf{e}$ -half hour when teeding and longer when threatened. Their blubber is over 30 cm thick, enabling the animal to float even after it is dead. From this, the whalers nicknamed it the "right whale" (to hunt).

Bowhead whales once had a disjunct circumpolar distribution throughout the arctic waters. Today, there are only four or five geographically separate populations. Only two of these, including the Batfin Bay-Davis Strait population, which gathers at Isabella Bay, are thought to be reproductively viable.

Despite their reduced numbers. Bowhead appear to occupy much of their former range in the eastern arctic and to follow the same migration routes as their ancestors Local knowledge, whaler's accounts and recent scientific surveys suggest that the whales spend the winter months in a year-round open water region of Davis Strait between Disco Island, Greenland and Isabella Bay. In late spring to early summer, females with young and pregnant females migrate north along Greenland through Lancaster Sound to the Prince Regent Inlet, using the pack ice as protection from Killer whales. At approximately the same time, mature males and califless temales head to Isabella Bay to feed, breed and generally to socialize

In 1986, the Bowhead was designated as 'endangered' by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) The potential for recovery of the Bowhead is limited, among other factors, by its slow rate of reproduction. It is believed that the females, once they have reached maturity, at approximately 13.5 in in length, only give birth once every three or four years Unfortunately, the Killer whale is known to prey on calves As a result, estimates of recruitment into the Bowhead population are not promising

Little more is known about the biology of the Bowhead and there is little we can do to and reproduction or ensure the protection of individuals, especially since they travel over such distances. What we can do, and must is protect known critical habitat along the migration route of the whales

# **4.2 Critical Habitat**

Whaling records suggest that there are a number of areas such as Prince Regent Inlet, where Bowhead once gathered in large numbers. It is difficult to confirm all of the Bowhead's habitats because there are so few whales and their migration routes cover such a vast expanse of eastern arctic waters. What we do know is that as much as one third (68) of the known Battin Bay-Davis Strait population have been present at Isabella Bay at the same time during the August-October ice-free season. This represents the largest known concentration of the species in its entire former eastern arctic range. Consisting mainly of paus this group apparently uses the shallow banks directly offshore as breeding grounds and for social activities. We also know that many of the same individual Bowheads return to Isabella Bay year after year, for breeding, feeding, and shelter from Killer whales

Recent interviews with elders from Clyde River as well as local sightings recorded for WWF, contirm that the coastal zone from Scott Inlet to Home Bay is a heavily used migration route and summering zone for the Bowhead Small gatherings have been observed in Eghnton I jord and further research may show this site to deserve protection as well as Isabella Bay

The Bowhead whale plays a central role in the arctic marine environment as the largest maminal in the food chain. Despite the fact that we still have a great deal to learn about this remarkable animal, we do know that no price can be attached to the loss of a species. For this reason, we must make every attempt to ensure that the Bowhead does not disappear. Protecting the critical habitat at Isabella Bay is a major first step.

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#### 4.3 Archaeological Sites

Aulattivigjuuq Island and several nearby rocky islets in Isabella Bay were used by whalers as lookout stations while their ships were harboured nearby. I wo rock shelters, a gravesite and an underwater "whale-bone grave yard" have been identified, along with former fnuit camps

In light of the depressed economic situation in the region, money obtained from the sale of whale bone

carvings is increasingly important. While whale bone has become a scarce commodity, the prices paid for carvings has increased dramatically in the last few years. There are many historically significant sites in and around the eastern shorthne and islands off. Battin Island. Many of these sites have had most of their artifacts removed by carvers and collectors as they attempt to meet the growing demand for carvings and whale bone. Therefore, there is an urgent need to protect the Isabella Bay sites and their artifacts, before they disappear, and ensure that they remain part of the community's heritage.

# 4.4 Future Hunting Opportunity

Bowhead whales were traditionally hunted by Inuit from kayaks using harpoons and the ends of their paddles Having not been able to live by the Inuit tradition for over a century we would like the future generations to have the opportunity to hunt. Bowhead whales once again. The cultural value of hunting Bowhead whales again, once the



Photo by Heather Myery.

population is large enough to support this, is a future possibility we want to ensure. To do this, we must make every effort to increase the Bowhead's population to the extent that it is removed from the endangered species list.

# 5.0 THE NEED AND OPPORTUNITY FOR A CONSERVATION PLAN

To date, the only action taken to conserve the eastern arctic Bowhead has been the total ban on hunting issued under the federal Fisheries Act in compliance with decisions by the International Whaling Commission. Generally speaking, the Bowhead population is seen to be too sparsely distributed and economically unimportant to warrant spending the necessary research money to identify further action to aid its recovery

Based on what is now known about the Bowhead we believe the ban on hunting alone is not sufficient to deal with all the challenges, old and new, to the survival and recovery of this endangered species. If these challenges are not dealt with, the hunting ban may not only fail to achieve its conservation goal, but also be seen as discriminatory. All parties whose actions may stress the species should accept restrictions for the purpose of aiding long-term conservation.

Furthermore, there are many positive developments on the conservation scene which provide opportunities for new measures to protect the Bowhead. All that is missing is leadership and a starting point for action. Our proposed conservation plan for Isabella Bay is designed to fill this need.

#### 5.1 Possible Stresses on the Bowhead

#### 5.1.1 Local Traffic

Recent observations in the area of Isabella Bay indicate that the Bowhead is extremely sensitive to disturbance by local motor boats, gun shots into water and perhaps by the more distant passage of ships. WWF research shows that Bowhead whales react strongly to certain noise sources at ranges of several kilometres and the potential range of influence could extend much further. For example, it was recently found that two other arctic whales, the narwhal and beluga, are capable of detecting low ship sounds at distances up to 80 km and that they display strong avoidance to ships approaching at distances of 40-45 kms.

Isabella Bay is an important traditional seal hunting area and was continually inhabited by the Inuit until the mid 1960's Today, the area is still used by hunters during the open-water season. Unfortunately, this coincides with the timing of the arrival and use of the area by the Bowhead As boats become more sophisticated and as there are more people returning to traditional hunting grounds in and around Isabella Bay, the threat to the Bowhead will increase.

# 5.1.2 TOURISM

News of the whales at Isabella Bay is spreading quickly across North America and Europe. At the same time, tourism in the Baffin region is growing. Sea kayaking, charter boat tours along the coast and whale watching expeditions will likely bring a steady flow of tourists to the area in coming years during the short open water season Recently, an American company has proposed to build an air strip at Isabella Bay to service future charter flights. The territorial government has included Isabella Bay in its long-range tourism plans with the possibility of developing viewing facilities on site.

If properly planned with the involvement of Clyde River, tourism can help to raise public awareness and support for protecting the Bowhead It can also be a source of modest economic benefit to Clyde River. However, it is important that a conservation plan for Isabeila Bay be implemented before tourism develops to ensure that the whales and their habitat are not disturbed.

#### 5.1.3 POLLUTION

In recent years, the presence of garbage in the arctic waters has become a much more obvious problem. Along the shorelines, washed up motor oil containers and styrofoam cups from passing ships are in greater abundance. The ingestion of these and other garbage is detrimental, if not fatal, to the Bowhead as their baleen and small stomachs are not equipped to handle large objects. Other pollutants such as sewage, tuel, toxins and other waste materials have not yet been discovered in the Bowhead. The Bowhead has yet to be examined for toxins although other marine species such as polar bears are already showing traces of toxins in their body systems.

Another pollution concern is the warming of the global climate due to increased levels of carbon dioxide in the atmosphere. Although the full impact of this is not yet understood, it appears as though this poses a further threat to the Bowhead Changes in the temperature and salinity of the arctic waters could affect the balance of marine life, including the species on which the Bowhead feed Changing weather patterns could affect the current and ice patterns which are so important to the Bowhead whale migration.

#### 5.1.4 Resource Development

Given what we understand and have witnessed of the Bowhead's sensitivity to human disturbance, such as the noise of boat engines, it appears as though any resource development or increased level of human activity in and around the area of Isabella Bay may deter the whales from returning to this area, thus exposing them to greater risk of Killer whale predation and a less abundant food source Changes in reproductive rates may also result

At present there are no immediate plans for resource development in the area. However, research activities for development projects do occur in the area, such as the Arctic Delta Failure Experiment in Itirbilung Fjord, and these may be potentially harmful. Fortunately, this project was stopped as a result of the efforts of concerned people and organisations. We are also concerned about the possibility that pollution associated with resource development to the north might reach Isabella Bay, transported by the south-flowing Baffin current.

## **5.1.5 DEFENCE ACTIVITIES**

At this time, it is difficult to know what defense activities are planned for the north and what their impacts would be on the Bowhead. The two activities that seem inevitable are low flying surveillance aircraft and the passage of submarines.

On only one occasion during the five years of Bowhead research was a low-flying aircraft seen in the vicinity of the whales and there was as obvious negative reaction by the whales to this activity. The extent to which submarine activity in the north will disturb the whales is unknown. However as the survival of these whales depends a great deal on the security of their breeding and feeding grounds at Isabella Bay, defence activities should not be conducted in this area.

#### 5.1.6 NATURAL FACTORS

Killer whale predation on the Bowhead has been observed in recent years. To what extent the Killer whale has been successful in preventing the Bowhead population from successfully recovering is unknown. The Bowhead is also limited by its slow rate of reproduction. In combination with their vulnerability to Killer whale predation, this fact lowers the prospects for recovery of the population.

Other natural factors that affect the Bowhead are the dynamics of copepod populations at Isabella Bay Researchers have suggested that some aspects of copepod feeding ecology are of great importance to the recovery of the Bowhead population as the availability of food may be a limiting factor for the Bowhead in years of low productivity. It is also not known how closely the productivity of the Bowhead is linked to the population dynamics of a single species. However, should there be a link, there may be significant consequences. It may be that the Bowhead is competing with other species for their food supply. Although not yet proven, a possible competition may exist between the Bowhead and the Arctic Cod (<u>Boreogadas</u> <u>saida</u>) both of whem are major consumers of copepods.

## 5.1.7 SUMMARY

We still have a great deal to learn about the Bowhead—its natural history, habitat and sensitivity to various disturbances. In examining the possible impacts of limiting factors on the present stock, our intent is not to single out an individual issue, but to emphasise the fact that **any** additional stress or combination of stresses on the Bowhead may seriously jeopardise the future survival of these whales As it is, current recruitment levels indicate that the whales have yet to recover from the stress of the whaling industry **which stopped 80 years ago**  What this picture tells us is that precautions must be taken to ensure that these whales are given every opportunity to continue to exist undisturbed by human activities, so that they will have a better chance of survival. By implementing this conservation plan, we are confident that some of the limiting factors that directly disturb the whales, such as boating in the critical areas can be controlled at the local level. Other factors, such as defense activities and pollution, will have to be dealt with through the Whale Sanctuary regulations and through recommendations by the area's management committee

# 5.2 Opportunities for Action

# 5.2.1 Community Support and Involvement

Through our involvement with WWF research, the work of the HTA and our Special Committee on Igalirtuuq (Isabeila Bay), the entire community of Clyde River has become concerned about the need to protect the Bowhead and Isabella Bay. Our public meeting on October 13, 1988 was attended by 150 people from the community and the conservation plan presented by the Special Committee



Photo by Heather Mycry

received overwhelming support.

In the history of conservation in Canada, we know of no other situation where the call for conservation has been stronger or more unanimous from an limit community. We want to protect the Bowhead and we want to be a part of that effort. Our involvement with the Bowhead research, our historical and cultural attachment to the Bowhead and our proximity to the critical habitat makes us logical partners with the government to protect the whales By playing a major role in carrying out the conservation plan. Clyde River will gain more expertise and resources for resource management. This in turn will benefit other agencies who need to rely on local assistance to protect the environment

## 5.2.2 Fulfilling Government Initiatives

Many territorial and federal government agencies are making plans to improve arctic conservation and give local communities a bigger role in making decisions about the use of the land and wildlife. The <u>Task Force on Northerm</u> <u>Conservation</u>, the <u>Arctic Marine Conservation Strategy</u>, the <u>Lancaster Sound Regional Land Use Plan</u>, the <u>Inuit</u> <u>Regional Conservation Strategy</u> and the <u>Fish Habitat</u> <u>Management Policy</u> are examples of this effort. In addition there are many projects to identify sites of special importance for conservation. Many of these plans and studies have yet to achieve results on the ground. This conservation proposal for Isabella Bay provides an ideal way to translate broad principles into specific conservation action. This fact has already been recognized in the Land Use Plan for Lancaster Sound

The organisation among different agencies is necessary to carry out our proposal for Isabella Bay. It is also useful for dealing with other conservation issues in the region, such as the polar bear management and the protection of other special habitats.

Protecting Isabella Bay can also have other benefits At a time when national concern for the protection of the environment is at an all-time high, the immediate implementation of this plan would encourage concerned Canadians in other communities to take action on issues that affect them. The Bowhead is nationally designated by COSEWIC as an endangered species so it is only right that the whole of Canada share our concern and the pride of establishing the first marine sanctuary in the arctic

## 5.2.3 INTERNATIONAL SIGNIFICANCE

Isabella Bay likely represents the only site in the world where individual Bowhead whales can be observed for several consecutive days. As such it represents a chance for Canada to make an exciting international contribution to the conservation biology of a species which has endangered right whale relatives in both hemispheres.

Since the eastern arctic Bowhead range includes both Canada and Greenland, its recovery is really an international conservation challenge. Though action to protect its habitat may start at Isabella Bay, it is important that our efforts encourage contributions from scientists, as well as from other members of the international conservation community

One way to do this which fits with our objectives emerging international law and Canada's responsibility to protect marine species, is to establish a Biosphere Reserve surrounding Isabella Bay. In addition, the lnuit Circumpolar Conference (ICC) is developing the lnuit Regional Conservation Strategy as a guide for conservation in the circumpolar north. ICC is also developing specific projects for the eastern arctic. For this reason, it may serve as an important forum through which additional conservation initiatives for the Bowhead and other marine mammals can be pursued internationally.

In short, we hope that our conservation plan, focussed on the Bowhead, will stimulate action by others to maintain the renewable resources and marine environment of our region. The Biosphere Reserve we are proposing would provide a focus for different agencies to cooperate in this larger work

# 6.0 THE CONSERVATION PLAN

#### 6.1 Key Recommendations and Rationale

Discussions about how best to protect the Bowhead and Isabella Bay have taken place over several years in Clyde River. WWF provided technical assistance by developing planning options for us to review and consulted with a wide range of government and non-government experts. As a result of this work and our appreciation of the challenges and opportunities outlined above we developed the plan illustrated on the centerpiece map. The key recommendations and rationale, as endorsed by the community on October 13, 1988 are as follows.

1 "Establishment of a Whale Sanctuary using the Eisherges Act, to protect the marine area of Igalithung (Isabella Bay), especially the deep marine troughs used by the whales for feeding, and the shallow bank at Nuvuktiapik (offshore at Cape Raper) which the whales use for mating resting, and retreat from the Killer whales  Establish a Biosphere Reserve around the Whale Sanctuary as the core area, and extending from Arbatuq (Home Bay) to Nattir sujuuq (Scott Inlet). This would include a coastal strip, in order to encourage protection of the whales from water quality impacts that might be caused by development activities along the coast.

3 Use existing federal and territorial legislation to protect the archaeological and lustorical sites in the area.

The Committee's reasons for selecting this option are as follows.

- 1 "Bowhead whales are endangered Taalutuuq (Isabella Bay) is an extremely important area for these whales, for mating, feeding, socializing and retreat from Killer whales
- 2 Whates are frequently seen in the area from Scott Inlet to Home Bay although they concentrate most heavily in Igalit tung
- 3 The Bowhead are sensitive to disturbance by motor noise and water pollution. The Bowhead are very sensitive to what is going on in their surroundings because their perception is so good. We know that once a Bowhead notices the sound of an engine or a Killer whale it will alert others. It does not take much noise particularly from human activity, to disturb the whales and frighten them away.
- 4 There are many sites in the area which can tell us about the limit and the European whalers who lived there. These should be researched so we can have a better understanding of the history of humans and whales at Igalir tung, and they should be protected from disturbance or destruction.
- 5 AWhale Sanctuary should be a strong way to protect the whales and their habitat from disturbance or development impacts
- 6 A Biosphere Reserve adds international recognition to the importance of this area although it has no legal strength. It stresses several things which the Committee thinks are important.
  - local participation in management of the area
  - biological research with local participation, and

- learning by comparing the protected area with areas of human activities to see how the whales respond
- 7 Existing legislation under the <u>Archaeological Sites</u> <u>Regulation</u> (GNWT) would provide the tools to protect archaeological and historical sites once they have been researched and documented.

#### **6.2** Discussion

#### 6.2.1 WHALE SANCTUARY

DFO has the primary mandate for marine mammals in Canada and jurisdiction over their marine habitat. Theretore, this proposal plans to work within the <u>Fisheries Act</u> to protect the Bowhead through the creation of a Whale Sanctuary At present the <u>Fisheries Act</u> and regulations do not specifically provide for the establishment of a "Whale Sanctuary." Generally, they authorize the regulation of harvests and problems associated with development activities. However, we understand that the <u>Act</u> carries sufficient authority for the establishment of a sanctuary and we are confident that specific regulations can be developed or amended for such a purpose. Ideally, this should be done during the consolidation of the marine mammal regulations, a process which is currently underway.

The Department of Fisheries and Oceans (DFO) has a mandate for co-ordinating the policies and programs of Canada with regard to oceans. This mandate has never been fully exercised and the department is currently dratting a new "Oceans Act" for Canada This new legislation might also provide a mandate for the establishment of marine protected areas such as we are proposing.

Though the proposed Isabella Bay sanctuary is the first to be submitted, more are likely to come in the future. The basis for responding to such proposals must be established if Canada is to meet its responsibility for marine conservation

#### 6.2.2 BIOSPHERE RESERVE

Biosphere Reserves give international recognition to representative examples of the world's important ecosystems and to human uses within these areas. They are intended to be used as a tool for promoting a balanced relationship between people and their local environment. Canada presently has five Reserves, all south of 60 degrees. A great deal of interest is developing internationally in setting up both northern and marine Biosphere Reserves in Canada Isabella Bay should be the first. According to Canada S <u>National Action Plan for</u> <u>Biosphere Reserves</u>, each Reserve should conserve ecosystems representing natural regions of the world: recognise the role of people and their activities within the environment, encourage monitoring, research, education and training, and include local people in a management committee

The Biosphere Reserve core area (Whale Sanctuary) we propose is intended to provide strict protection for Bowhead whales and encourage local monitoring and research activities. The boundaries for the core area will include only the critical Bowhead sites at Isabella Bay and Cape Henry Kater (see map following). Local resource use in the buffer area surrounding the proposed sanctuary will be consistent with this primary objective. Buffer zone boundaries extend from Eglinton Fjord to the middle of Home Bay. Although the whales concentrate most heavily in two areas in Isabell. Bay, they are also frequently seen in the Biosphere buffer zone. As we learn more about the Bowhead, the boundaries of this area may be changed Though the Biosphere Reserve is primarily intended to support Bowhead protection, it can also serve as a focus for other marine conservation studies and cooperative management of renewable resources in the region

Biosphere Reserves have no legal authority and therefore cannot be used to enforce restrictions on activities within their borders. Their conservation value depends on the commitment of local people, scientists and other resource users to cooperate in managing the area for conservation and research. Also their international recognition can help to attract the money and expertise necessary for research. Clyde River is interested in this approach and we hope others will join us.

# **6.2.3 Area Boundaries**

The habitat that is most critical to the Bowhead lies approximately 120 km south of Clyde River at Isabella Bay. Many important features in this area combine to form this critical habitat. However, as the Bowhead is a migrating species, there is a much larger marine area which surrounds Isabella Bay that is also inhabited by many Bowhead during their summer—fall migration. It is this larger area that we would like to see designated as a Biosphere Reserve.

i) North-South—This boundary has been determined according to Bowhead sightings by Clyde River residents. These include both historical and recent observations. This boundary also includes the northern and southern limit of the region used extensively by 'ne residents of Clyde River for hunting and boat travel The extent to which the residents of Clyde River can effectively manage the area once it has been designated, has also been taken into consideration when determining the north-south boundary

Other factors include the Bowhead's migration route within Clyde River's use area as well as historical accounts of whaling activities

ii) East-West—The western boundary of the Bio sphere Reserve will include a narrow strip of land along the shore in order to monitor the water quality of the area in light of possible future development inland. This terrestrial strip also includes sections of other conservation sites such as the Clyde Foreland Polar Bear critical areas and important northern sea bird nesting colonies

The boundary is based on our primary concern with the Bowhead and its environment. However, we are open to moving it further inland, to accommodate a wider range of conservation interests in the region if there is support for this among the agencies in volved in implementing the overall plan. Using water shed boundaries might be a good way to proceed

There are three eastern boundaries which extend 30 km, 60 km and 100 km offshore. The 30 km boundary is the outer edge of the Whale Sanctuary. The 60 km boundary in the outer limit to the Biosphere Reserve's buffer zone and the third boundary. 100 km, is based on traditional knowledge of the area and the fact that whales use migration corridors as they travel each year. It is believed that the 100 km limit would incorporate an area large enough to ensure sate passage for the Bowhead along the coast of Baffin Island and also takes into account the edge of the ice floe

#### 6.2.4 Archaeological Sifes

Much of what we know of the history of the Bowhead in this area comes from whalers journals written at the time of commercial whaling activities, and the information we have learned from the elders of Clyde River. Unfortunately, their vast knowledge and tales of first-hand experiences with the Bowhead is something that many residents of Clyde River know little about. We must now try to preserve what we can of our past involvement with the whalers and the Bowheads as for many years, hunting the whales was a way of life for our people. Community pride about protecting this history, should be encouraged

Existing territorial legislation will be used to document and record important archaeological sites in and around the area extending approximately from Scott Inlei



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Important feeding areas



Important breeding areas

to Home Bay. Some of these sites will fall outside of the Whale Sanctuary and the Brosphere Reserve, however, we feel that their neighboring presence indicates that they too are critical to the understanding of important historical and cultural whaling activities in the area. The sconer these sites are protected, the more information can be gathered for dissemination throughout the community and to other interested parties.

Ploto in Heather Myery



# 7.0 HOW TO MANAGE THE ARE A?

The following management policies were approved at the community meeting on October 13, 1988. Except as noted they apply to the Whale Sanctuary only.

# 7.1 Use of the Igalirtuug Area

Any uses of the accountist is a set the current openceful

nature of lgalirtunq During the time that the whales use the area (mid-August to mid-October), human activities should not disturb or harm the whales (If there are people or boats there, it should only be for meaningful reasons). The rest of the year (mid-October to mid-August), the only constraint on human activities is that they should not damage the habitat that is important to the whales (the water quality, the deep feeding areas, the shallow bank used for mating and rock-nosing).

i) Boats—When the whalers hunted in Igalii tuuq, they would cut their engines a few miles from Igalii tuuq, and use sails so that they did not scare the whales When they sa — whale, they would use rowboats so the whales did not hear them. The Committee recognizes that both large and small boats can still distinb the whales, so the following guidelines should apply to all boats.

- Kavaks and non-motorized boats are preferred, but even they should avoid harassing the whales
- Motorized boats must completely avoid the shallow area beside Nuvuktiapik (off Cape Raper)
- In the deep troughs where the whales feed, boats should

-avoid the area

-avoid staying in the area with motors ( unning -cut their motors and drift through with the current

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ii) Aircraft—An planes and helic opters should not fly low over Igalitung

iii) Hunting—There is no real need to hunt scals and walt us at Igali tunq during the time that the Bowhead whales are there, seals and walt us are both hunted in other places. Hunting at other times of the year is not a problem for the whales. Protection of Igali tunq will not obstruct necessary hunting by Clyde River and Broughton Island people, although boats must honour the guidelines for all boats in the whale areas

- From mid-August to mid-October, seal, narwhal and walrus hunting at Igalirtuuq should be avoided, especially in the areas where the whales concentrate (the shallow bank and the deep feeding areas)
- iv) Research—Continuing research on the whales is important
- Residents from Clyde River should be informed of and involved in the research
- The whales should not be harassed during research activities
- Research should be expanded to other areas used by or important to the whales, for instance, calving areas
- Research boats should obey the boat guidelines

v) Tourism—Fourism should be developed in phases and be watched to see if it has any negative impacts on the whates

- Start with just a few visitors
- There should be no disturbance of the whales
- Land-based tourism is preferred, perhaps based at the Kuuttannak River with overland transport to Nuvuktiapik to watch the whales from the high observation post there
- Any boats must obey the boat guidelines, above
- More research needs to be done on the whales before tourism starts
- Only outfitters from Clyde River, who are familian with the need to protect the whales, should take visitors to Igalii tuuq
- The management authority that is eventually set up for the Igalit tunq protected area should be responsible for reviewing the effects of tourism there, and deciding how many tourists to permit in the area each year

vi) Non-renewable resource development—Developmentis of sectous concern because of the sensitivity of the whales to distuic bance and the possibility that they could be harmed by oil, chemicals or garbage in the water

- There should be no development activities in the core or buffer areas at any time of the year Research for oil or mineral development is also not desirable expecially if it changes the quality of the water, the land surrounding Igalithuiq, or the whale habitat in general
- Large ships should stay at least 30 km offshore, in the outer biosphere reserve zone
- Seismic and other exploration should not occur in the core and only in the buffer zone and transition area when the whales are not in the core area
- rgalinning must be a priority area for oil spill protection and clean-up

**vii) Defence exercises**—These are not desirable at any time of the year, in Igalituitiq

viii) Garbage—The whales are especially vulnerable because their baleen and very small stomachs may become fouled or clogged

- There must be no dumping of garbage by anyone especially plastic, styrofoam or paper
- There must be no release of oil or chemicals upstream, which could affect the whales or the waters of Igalithua
- There should be no ocean-dumping of scrap metals within the core or buffer areas

#### 7.2 Research needs

- Develop techniques to identify whales
- Develop a catalogue of the whales that use Igalntunq
- Find other areas used by other parts of the whale population (such as the pregnant cows and calves)
- Find out what the whales are sensitive to and how to protect them
- Find out more about how many whales there are and where they go
- Find out more about how fast the whales grow and reproduce
- Review and research the archaeological and historical sites in the area
- Develop information packages for schools and the public

## 7.3 Administration

The Commutee has left details of the management structure for the Igalitung protected area until later discussions with the government Ideally, of course, there should be one or two persons from Clyde River involved on a management committee As well, two to four persons from Clyde River should be "wardens' for Igalitung They would be at Igalitung during the season that the whales are there and would do whale observations and research, enforcement of guidelines, explanations for visitors, public and schoel information programs

# 8.0 HOW SHOULD THE CONSERVATION PLAN BE IMPLEMENTED?

### 8.1 How to Make It Happen

A series of actions must be taken by several agencies to implement this plan. To begin, we are looking to the Department of Fisheries and Oceans (DFO) to provide the necessary leadership to ensure that these steps are taken. A senior official in the department should be given this responsibility and hold it until the sanctuary is established hopefully in 1-2 years.

The next step is for DFO to cultivate a partnership between the various public and private agencies involved, especially the Department of Renewable Resources. NWT, so that everyone may work efficiently together to ensure the implementation of the plan. This partnership should be guided by a common work plan and timetable. Finally, we believe that the success of this conservation plan depends on the involvement of Clyde River Therefore, the community must be equipped to take the primary steps of implementing the conservation plan. This will require some financial and technical assistance. We would like this involvement to have the following elements:

- The residents of Clyde River would like to be informed of and involved in any further whale research in the area.
- The degree and type of tourism in the area must be agreed upon by a management committee. This committee will also be responsible for reviewing the effects of tourism in the area.

• Clyde River will provide guides and outfitters. Other possible benefits to the community include:

- Providing basic shelter at Isabella Bay to meet the needs of researchers, wardens and possibly small numbers of tourists
- The training and participation of local people as area wardens and as assistants to further research and monitoring.
- · Participation in the land use permit review process

for proposals which include the area of concern for the Bowhead

# 8.2 Immediate Action

Clyde River is willing to commit both people and skills to help with the implementation of this conservation plan. This is particularly true of the Special Committee on Igalittuuq, the Mayor, the Hunters and Trappers Association and the local Wildlife Officer. Many people in Clyde River look forward to the opportunity to help the protection of this area become a reality.

We realize it will take some time to fully implement the conservation plan for Isabella Bay. To help everyone to start working as quickly as possible we recommend the following actions for 1989-90

i) DFO should accept the proposal for the Whale Sanctuary, as a pilot project to implement the <u>Arctic</u> <u>Marine Conservation Strategy</u> and appoint a project coordinator.

ii) The project coordinator should organise a steering committee, with representatives from public and private agencies, to guide the work that needs to be done



Photo by Bob L. au

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to implement the conservation plan This group should include some or all of the following agencies

Fisheries and Oceans Indian and Northern Attairs Transport Canada Renewable Resources NWT Economic Development and Tourism, NWT Culture and Communications NWT Clyde River Inuit Circumpolar Conference World Wildhite Fund Canada Battin Regional Council Canada Man and Biosphere Committee Arctic College

Prince of Wales Heritage Centre

- The main tasks of this group would be to.
- develop draft regulations for the Whale Sanctuary
- design an ongoing administrative structure for the Whale Sanctuary and Biosphere Reserve
- organize the training and work program of local wardens for the sanctuary
- organise a study of tourism options for isabella Bay
- design tuture Bowhead research projects and recruit funding.

iii) Prepare and submit the Biosphere Reserve proposal to UNESCO. This should be done by Clyde River, World Wildhite Fund and the Canada Man and Biosphere Committee.

iv) Construct a suitable shelter at Cape Raper for use by local wardens and researchers working at Isabella Bay. This might be funded by private money and built by people from Clyde River, and

v) Organise an informal Bowhead monitoring network along the whales migration route. This would involve local hunters and trappers on Battin Island and Greenland in recording the movements of the Bowhead and developing a catalogue of individuals. Pethaps the Inuit Circumpolar Conference could take the lead on this project.

# 9.0 COSTS AND BENEFITS

# 9.1 What Will the Plan Cost?

There are two types of costs to consider: a) the direct expenditures needed to implement our proposals, and b) the "opportunity cost" or the value of economic development which might be lost by managing Igalirtung as we have proposed

We are not in a position to precisely estimate the direct

costs of implementing the conservation plan. This is something which the proposed inter-agency steering committee will need to do. However, we would like to note the following

- We have chosen a low-cost conservation option, recognizing that governments are very concerned with this issue. Start-up and on-going costs are modest, relating primarily to inter-agency meetings, and assistance to Clyde River to play its role in implementing the plan.
- Protecting Isabella Bay should not be expensive since we are proposing to "leave it alone"
- The co-operative approach to management we are proposing means the agencies involved can share financial responsibility.
- The tourism potential at Isabella Bay should attract private investment, and there may be some way for a share of this investment, or the resulting revenues to cover on-going costs of the conservation activities.

We believe the opportunity cost to be negligible. As indicated through the land use planning process for Lancaster Sound, the prospects for resource development are limited at Isabella Bay. Further, the conservation plan will have little, if any, impacts on local harvesting of renewable resources. In fact, the potential tourism and research activity associated with our proposals is likely the best way for Clyde River to benefit from the resources of the area, so long as we are equipped to guide these activities.

#### 9.2 What Are The Benefits of the Plan?

We believe the Igalittuuq proposal will provide a wide range of benefits to Clyde River, tederal and territorial governments, the people of Canada and the international conservation community. The proposed plan represents a rare opportunity for all parties to benefit from local conservation action. Specifically, in addition to its protecting the Bowhead whale population at Isabella Bay our proposal will

- Strengthen Clyde River's involvement and expertise in resource management
- Lay the foundation for locally-controlled tourism and business opportunities
- Serve as a demonstration project for regional plans and conservation strategies such as the <u>Arctic</u> <u>Marine Conservation Strategy</u>, the <u>Inuit Regional</u> <u>Conservation Strategy</u>, the <u>Lancaster Sound Regional Land Use Plan</u> etc.
- Provide a model for strengthening DFO's relations with local communities

- Demonstrate the potential for inter-agency cooperation in dealing with local conservation projects
- Help implement the tederal Throne Speech commitment to protect the arctic environment
- Gain international recognition and support for Canada's first arctic marine sanctuary
- Demonstrate to other communities that local efforts can contribute to action needed to protect the Arctic environment
- Set the stage for developing a recovery plan for the Bowhead population and stimulate further study of marine mammals in the region

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# **10.0 CONCLUSION**

The proposed conservation plan for Igalituuq is an ambitious project to address an even more challenging conservation issue—survival and recovery of the Bowhead whale. The actions we recommend are on the frontier of conservation in more ways than one and will require cooperation by many people to serve the urgent opportunity at Isabella Bay. The situation is well described by a poet who wrote. Traveller, there is no path. Paths are made by walking. 'Clyde River has taken the first step. We hope many others will join us in taking the next.

Kerry Finley, 7 LGL Limited, 4 Sidney, B.C. Baffin Region Inuit Association, P.O. Box 219, Iqaluit, N.W.T. Titus Alcoloo, Lancaster Sound Planning Commission, Yellowknife, N.W.T. Heather Myers, Land Use Planning Analyst, Renewable Resources, Pond Inlet, N.W.T. Boughton Island Hunters and Trappers Association, Broughton Island, N.W.T. Pond Inlet Hunters & Trappers Assoc,, Pond Inlet, N.W.T. Monte Høummel, World Wildlife Fund, 60 St. Claire Ave. East, Toronto, Ont. Jim Bourque, Deputy Minister, Dept. of Renewable Resources, Yellowknife, N.W.T. Dr. Ian McTaggart Cowan, Committee of Whales and Whaling, Victoria, B.C. Pauloosie Paniloo, MLA, Central Baffin, Clyde River, N.W.T. Inuit Circumpolar Conference, 176 Gloucester St., 3rd Floor, Ottawa, Ont. Dr. RR Campbell, Committee on Species of Endangered Wildlife, ttawa, Ont. Doug Brouchet, Arctic Petroleum Operators Association, Calgary, Alta.

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Dr. Herb Lawler, Eastern Arctic Committee on Marine Transportation, Winnipeg, Man.

P.S. Kerry Finley's report on the results of the bowhead whale studies to-date will follow shortly.
#### Whales Beyond Our Knowledge

Purpose: To find means and ways to protect bowhead whale habitats while our knowledge of the endangered species is vague:

### Community Description

The Hamlet of Clyde River is situated at the West side of Patricia Bay, Latitude 7028 and Longitude 6836. The name "Clyde" was assigned by Captain (later Sir) John Ross in the year 1818 while on an expedition in search of the Northwest Passage. The exact origin of the name is unknown but it may possibly be named for River Clyde in Scotland. The traditional name is "KANGIRTUCAPIK", meaning small fiord.

The original site two miles East of the present location came into existance in the summer of 1922 when the Hudson's Bay Company set up a Post to trade with natives in the area. The settlement was moved in the late 1960's to the present location, where the ground is more suitable for future community expansion and the water supply is adequate.

The present population is about 500, including both natives and non-natives.

## Clyde River Hunters & Trappers Association (HTA)

The HTA was incorporated on April 19, 1973. At present, there are over 100 members (there are over 200 eligible members - both males and females) to the Association with seven Directors, a President and a Secretary. The goals and objectives of the Association are to assist its members in getting hunting, fishing, trapping, and camping supplies and equipment in a most economical way. Also, to represent the general interests of its members in matters dealing with wildlife, environment, and Association business in general. Also, to assist the Government of the Northwest Territories (the Department of Kenewable Resources) in the Management of Wildlife and environment and the enhancement of appropriate Wildlife Acts or Regulations and the Departmental policies regarding Resource Development.

## Bothead Whale Description

The bowhead whale grows to a length of 65 feet and it can weigh up to 70 tonnes. The color of the skin is dark gray to brownish gray with white spots on the bottom of lower jaw. The mature whale has a white spot inmediately in front of the tail fluke. It has a fading fin on the back, situated over two thirds way back from the tip of the jaws. It swims at a speed of 3 to 4 km per hour undisturbed and it will speed up to 8 to 10 km, per hour when retreating from potential disturbances. It can stay under water for over half hour when feeding and will stay down longer when threatened. The head takes up about two thirds of the total length. The mouth is large enough to hold twenty men and it has baleen hanging from the upper jaw, that consists of over 300 plates. The horny substance of the plates enables the whale to collect and retain food. The skin is said to have a thicker outer layer (soft part) than a narwhal but the inner part (fatty part) is said to be thinner than that of a narwhal. The blubber is over one foot thick, which enables the animal to float when dead, thus it was given the name of "the right whale" (to hunt) by whalers.

#### Traditional Domestic Whaling

The bowhead whales were hunted traditionally by Inuit from qayaqs using harpoons and the ends of their paddles.

A dozen men in qayaqs would approach a bowhead whale and throw their harpoons into the animal. The type of harpoon heads they use on bowhead whales were designed to sink in deeper with every twitch of the auscles in the animal. One of the harpoon heads would eventually hit a vital organ in an animal and kills it. Another way to kill a bowhead whale was to cut open the skin into the blubber with the sharpened ends of qayaq paddles after the harpoons were in the animal. Being stung by the cut through the skin, the bowhead would submerge. The next time the bowhead' surfaces, the sharpened end of a paddle would be driven in to the wound previously cut opened. Each time the paddle is thrusted in farther, the bowhead would submerge with the paddle stuck on its side. And every time the bowhead surfaces, the paddle would be driven in farther until the annual dies.

Once the animal was dead, a bunch of qayaqs would tow it ashore inch by inch. The process was so time consuming, the men would sometime tall asleep. The next to him would hit his paddle with his his and that woke him up quick.

The maktaq (skin, it's pronounced a little different from a narwhal - narwhal skin is pronounced maktaaq) was used as food by the Inuit, internal organs by dogs and meat was used by both Inuit and dogs. The blubber would be used for fuel for the lamps, which provided heat and light for many months.

The reason is not known why the domestic whaling seized, although there are some theories. When the firearms were introduced by Europeans, it became easier to hunt seals and polar bears during an open water season. Also, the gayaq's range being no match to the sail boat was probably making it harder for the lnuit to find bowheads near the shore.

# Commercial Whaling

Commercial whaling along the East Coast of Baffin Island and in the Lancaster Sound area started after the year 1818. The whalers (mostly British) found much wealth in selling baleen and blubber of the right whales, and many bowhead whales and similiar type baleen whales were hunted every summer. The bowhead whale population was believed to be around 11,000 at the early stage of the commercial whaling period, but the population was nearly wiped out by the turn of the twentieth century. The last of the whaling fleets were seen around 1911 in the Eastern Arctic. Many factors were involved in the cessation of commercial whaling, including:

(a) Bowhead whales were hard to find as the population was down to only hundreds from 11,000, thus making the hunts financially unviable;

- (1.) World War One interrupted the whaling industry as most sailors enlisted in the Navy;
- (1) Baleen has since been replaced by plastic material. Items that were originally made from baleen were now being manufactured in an enconomical way using plastic material:
- (d) Natural oil products were now available at a cheaper cost than the whale blubber;

## Our Understanding of The Bowhead Whale

It was in 1930's that the protection of bowhead whales was enacted as result of world wide concern for whales. Since then, not one bowhead whale has been killed by anyone other than predators in the East Coast of battin Island, but the population is still in poor health. Precise inforhation regarding the state of the bowhead whale population has been difficult to obtain.

The biology of a bowhead whale is not well known but we know a bit from talking to older hunters who gained their knowledge from the generation before them and through personal experiences with seals and polar bears which can be related to bowheads. We have also learned from biologists who have done some scientific studies on the species.

The population we are concerned about spend the Winter months in a year-round open area in Davis Strait, between Disco Island in Greenland and Isabella Bay of Baffin Island. In late Spring to early Summer, females with young and pregnant females migrate North to the Prince Regent Inlet area through Lancastor Sound, using the pack ice as protection from Killer Whales. Probably about the same time, mature males and calfless females head to Isabella Bay to feed, breed, and generally to socialize. This is the way it seems to be according to whalers' log books, and through the personal knowledge of our elders and with the confirmation of biologists.

There are other areas between Isabella Bay and Lancaster Sound where bowhead whales spend their summers but majority of them are believed to go to Isabella Bay. The bowhead whale studies by the World Wildlife Fund organization through Kerry Finley of LGL Limited (an organization of biologists who conduct scientific studies on various species of endangered wildlife) between 1983 and 1986 have seen some of the same individual animals in different years. This suggests, that the same group of animals uses Isabella Bay year after year.

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A number of things seem to attract bowhead whales to Isabella Bay. One of them is that the Isabella Bay area has some good areas of Shallow waters, which provide good protection from killer whales. Killer whales do not normally occupy shallow waters. The bowhead whale studies have twice seem killer whales chasing after mature bowheads, but none were successful. Another reason why the bowheads are attracted to Isabella Bay is that Isabella Bay is rich with plankton which the bowheads feed on. The plankton are moved by occun currents and collect in hollows on the sea bed.

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There are two main feeding areas at Isabella Bay where there are deep trenches that collect plankton, thus making it easier for bowheads to feed on.

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The animal is very sensitive to noises created by outboard hotors, ships, gun shots into water, and other loud noises. Bowheads when feeding, breeding, socializing, or simply cruising along have been oven and documented retreating from the disturbing noises. It is most important to keep the disturbing noises to a minimum, to prevent interterence to feeding, breeding, and socializing patterns. If this very important habitat is continually disturbed, the bowhead whales no doubt would move elsewhere.

The ocean currents come down from the North carrying plankton, which the bowheads feed on. The plankton is pushed down and back up by the circular movement fo currents as result of deep trenches in the buttom of the sea. On the surface of the water, a slick line is formed right along the deep trench at the bottom. The oil slick is from crushed fatty plankton resulting from plankton hitting another plankton when moved about by ocean currents. On the slick line, we have seen garbage from ships collecting into one area. Excess garbage can have bad effects on tending of bowhead whales as they swallow anything that goes in the mouth with the plankton. Also, if there is an oil spill up North, it will eventually reach the slick lines at Isabella Bay where bowhead whales feed. And it that happens, oil would destroy the baleen plates on a whale. Oily baleen plates would tail to function as strainers, therefore, this would affect the way the whale feeds. The whale would die eventually from malnutrition as it would be taking in more water and less food than usual. the whale could also die from the negative effects of oil to the health of the whale.

If teeding, breeding, and socializing patterns of a bowhead whale are threatened, it would likely move elsewhere. Being in an unfamiliar territory, a bowhead whale could become an easy prey to killer whales and it would have bad effects on teeding, breeding, and socializing habits. Already an endangered species, the population would go down steadily, being easy prey to killer whales. The reproductive rate would go down as well, due to change in breeding patterns as result of poor health or by simply being in an unfamiliar territory.

As mentioned earlier in this letter, part of the same population as the Isabella Bay bowheads, spend the entire summer in the Prince Regent Inlet area. As these animals go through Lancaster Sound, the area is also a concern to us. Protecting one area but not the other is senseless. Any bad effects on either of the two groups will affect the population as a whole; therefore, both habitats (Isabella Bay and Prince Regent Inlet) should be protected. Appendix 5.

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#### 2.4 Community Feelings About Tourism

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During the visit of the tourism planner and the A.E.D.C., many residents were contacted and asked what they thought about tourism. (A list of groups and individuals contacted is found in Appendix B.)

Many of the people spoken to had some doubts about whether tourism development would be good for Clyde River. These negative, suspicious, and sometimes hostile attitudes are the greatest constraint to the development of tourism here, although greater understanding of tourism could easily change these attitudes.

The following points briefly summarize the general feelings of residents towards tourism.

- Most residents have had little or no contact with tourists and do not understand why tourists visit the north or what tourists like to do.
- About three years ago, Council decided that tourism should not be developed in Clyde River. However, since that time, the community appears to have become more open to the possibility of tourism development.
- There is widespread suspicion about what tourists do in the north. Many believe that tourists are looking for and extracting minerals without telling the community. Some believe that tourists report what they see in the north to the government. Others are afraid that tourists are somehow associated with the news media which has, in the past, been critical of Inuit hunting practices.
- Other concerns about tourism are that tourists will disturb wildlife and historic sites.
- Some community members are concerned that tourists might give handouts to children in exchange for photographs, and encourage local children to think that they can get something for nothing.

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- One of the greatest concerns of the community is that once it accepts tourism, it will be unable to stop tourists from coming to Clyde River even if they create problems.
- Even those residents who believe that tourism could create much-needed jobs and bring in money to the community, have some concerns about it. The general feeling among even those who are in favour of it is that tourism must be tightly controlled by the members of the community, and that it must not damage or interfere with the still traditonal lifestyles of Clyde River residents.
- A recent door to door survey showed that the majority of Clyde River residents are opposed to the sale of polar bear tags to sports hunters even for a substantial amount of money.

## 2.5 Who Should Visit Clyde River?

The resources in and around Clyde River are most appealing to certain types of people. The following section identifies the people who would be most interested in visiting this area and who should be encouraged to visit Clyde River in the future.

- The resources around Clyde River are most appealing to people interested in outstanding Arctic scenery, wildlife and natural features. It also has great potential to attract serious crosscountry skiers, backpackers, and mountain climbing enthusiasts. It is these people who should be encouraged to visit Clyde River during the next few years as they tend to be more self-reliant and less dependent upon an existing tourism infrastructure and tourism programs than are other tourist groups.
- Group tours should be emphasized as these are easier to service and may be able to make use of group rates to lessen the high cost of Arctic travel.

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- There are a large number of groups who might be interested in travel to Clyde River. These groups include naturalist clubs, university groups, climbing and hiking clubs, arts and craft groups, photography clubs and others.