A NORTHERN INDIAN BAND'S MODE OF PRODUCTION AND
ITS ARTICULATION WITH THE MULTINATIONAL MODE

By

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ABSTRACT

Even after the much heralded 1977 publication of "Northern Frontier: Northern Homeland" by Justice Thomas Berger, many ill-conceived perceptions about northern Canadian indigenous peoples continue to persist. Amongst northern policy makers, rural Indian Bands are thought to be virtually devoid of an economy where people work and where goods of value are produced, distributed and consumed. This attitude is not inconsequential.

Because Bands tend to have low levels of wage employment, per capita income and commercial activity, industrialization is seen by many as an essential path to development. For many reasons, not the least of which is the 'hidden' nature of Band 'underground' economies, the impacts of proposed industrial developments on the existing nature of Indian Band socio-economy are rarely taken into account.

This thesis through the application of a mode of production approach to impact assessment and by the examination of one Indian Band economy, argues that northern Indian Bands have a viable, culturally unique system of economic organization that deserves recognition and support within the Canadian multicultural milieu.

The concept of a mode of production, originating from the historical materialist tradition of K. Marx and F. Engels, stresses that the economy of a society can be understood by examining the character and interaction of such component 'sub-systems' as: property and resource management, production, distribution, consumption, reproduction
and the nature of land use and internal social relations. The degree to which component sub-systems of economies differ, is a substantial factor in differentiating diverse modes of production.

The thesis analyzes the Northern Indian mode of production as exemplified by the Ross River Indian Band— a group of Athapaskan Indian people residing in the rural part of Canada's northern Yukon Territory. After presenting historical information on the biophysical and post-contact human settlement aspects of the Ross River Indian people, an examination is made of several sub-components of their economy.

Contrary to government land use maps which show that northern Canada is unpopulated and essentially a frontier, the thesis Indian land use maps reduced from field maps complete in 1983, indicate that in at least one case, Indian land and resource use is spatially extensive and systemically complex in its adaptation to regional ecology.

An examination of the Ross River Indian economy indicates that is not moribund. Even today the largest Band economic sector is the bush economy, which annually produces an imputed $700,000—about 41% of all gross personal income. Indian participation in wage employment provides about $600,000 annually (36%); while government transfer payments provide about $380,000 (23%) of annual gross personal incomes.

Since the Ross River Indian Band is potentially facing a series of modernizing regional economic developments whose organizational 'sub-system' components are substantially different then that of the northern Indian mode of production, an examination is made of the important aspects of the multinational mode of production and the possible transformation effects on the northern Indian mode.
The stresses which Indian labor experiences when working within an industrial environment are presented in the people's own voices. In part, difficulties of adaptation are due to a lack of training, inter-racial tensions, and the misunderstanding of union and government officials. Aside from these however, the most significant inhibiting factor that have ultimately contributed to Band members preferring employment within their own Indian mode of production, over industrial-related activity, are related to the different system of social and economic relations that typify a multinational mode of production, and the stresses which that system places on the viable continuance of the Indian mode.

The effects of capitalist commoditisation on Indian land, labor and use-value production are examined, along with an analysis of the changes that might occur to Indian relations of production. As a result of Indian articulation with the multinational mode of production, Indian labor, lands, and resources become part of the global commodity market, and as a consequence, Indian Band control over their disposition becomes increasingly oriented to State and corporate interests.

While transformation effects may be extensive, it is acknowledged that the changes deriving from a multinational mode of production are extremely variable within and between the many Indian Bands of the Canadian north. The uneveness of the transformation is related not only to the inherent space and class contradictions of capitalist expansion and the hypermobility of capital, but also to preservation tendencies internal to the northern Indian mode of production.
Finally, this thesis examines a critical option whereby an Indian mode of production can protect and control its own development path. Rather than suggesting a variety of development strategies and institutional 'bureaucratic' vehicles (such as land use and regional planning commissions) that might, or might not, contribute to increased Indian protection and control, this thesis stresses that the fundamental question of ownership of the means of production is crucial to the persistence of any mode of production—including the northern Indian mode of production. For this reason, it is emphasized, that AT THE VERY LEAST, Indian proprietary ownership of land and resources needed for reproduction is essential for the preservation of development options for the northern Indian mode of production.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xi</td>
</tr>
<tr>
<td>CHAPTER 1: INTRODUCTION TO THESIS</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Dimensions of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>1.3 Thesis Objectives</td>
<td>8</td>
</tr>
<tr>
<td>1.4 Methodology</td>
<td>9</td>
</tr>
<tr>
<td>1.5 Thesis Outline</td>
<td>11</td>
</tr>
<tr>
<td>CHAPTER 2: THE INTERPRETATIVE APPROACH</td>
<td>13</td>
</tr>
<tr>
<td>2.1 Modes of Production and Historical Materialism</td>
<td>13</td>
</tr>
<tr>
<td>2.2 A System of Property and Resource Management</td>
<td>15</td>
</tr>
<tr>
<td>2.3 Economic Practice</td>
<td>18</td>
</tr>
<tr>
<td>2.3.1 The Productive Element</td>
<td>19</td>
</tr>
<tr>
<td>2.3.2 The Distributive Element</td>
<td>21</td>
</tr>
<tr>
<td>2.3.3 The Consumption Element</td>
<td>21</td>
</tr>
<tr>
<td>2.3.4 The Reproductive Element</td>
<td>22</td>
</tr>
<tr>
<td>2.4 Relationships</td>
<td>23</td>
</tr>
<tr>
<td>2.4.1 Relationship to Biophysical Environment: the System of Land Use</td>
<td>23</td>
</tr>
<tr>
<td>2.4.2 Internal Social Relationships</td>
<td>25</td>
</tr>
<tr>
<td>2.4.3 Relationships to Other Societies</td>
<td>26</td>
</tr>
<tr>
<td>Chapter</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>The Setting: Part 1 - The Biophysical Environment</td>
</tr>
<tr>
<td>3.1</td>
<td>The Animals</td>
</tr>
<tr>
<td>3.2</td>
<td>The Setting: Part 2 - History of the People</td>
</tr>
<tr>
<td>3.2.1</td>
<td>The Fur Trade Era</td>
</tr>
<tr>
<td>3.2.2</td>
<td>The Canol Road Era</td>
</tr>
<tr>
<td>3.2.3</td>
<td>The Cyprus Anvil Mine Era</td>
</tr>
<tr>
<td>3.2.4</td>
<td>Recent History: 1972 - Present</td>
</tr>
<tr>
<td>4</td>
<td>Indian Land Use</td>
</tr>
<tr>
<td>4.1</td>
<td>The Ross River Indian Land Use Maps</td>
</tr>
<tr>
<td>4.1.1</td>
<td>Fishing</td>
</tr>
<tr>
<td>4.1.2</td>
<td>&quot;Before&quot; Hunting and Trapping Maps</td>
</tr>
<tr>
<td>4.1.3</td>
<td>&quot;After&quot; Hunting and Trapping Maps</td>
</tr>
<tr>
<td>4.2</td>
<td>The Indian System of Land Use: Post-Anvil Era</td>
</tr>
<tr>
<td>4.3</td>
<td>The Annual Seasonal Round</td>
</tr>
<tr>
<td>4.4</td>
<td>Contemporary System of Use</td>
</tr>
<tr>
<td>4.4.1</td>
<td>Spring Hunt</td>
</tr>
<tr>
<td>4.4.2</td>
<td>Indian Summer</td>
</tr>
<tr>
<td>4.4.3</td>
<td>The Fall Hunt</td>
</tr>
<tr>
<td>4.4.4</td>
<td>Early Winter</td>
</tr>
<tr>
<td>4.4.5</td>
<td>Late Winter</td>
</tr>
<tr>
<td>4.5</td>
<td>General Aspects of System of Use</td>
</tr>
<tr>
<td>5</td>
<td>The Ross River Indian Band Economy</td>
</tr>
<tr>
<td>5.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>5.2</td>
<td>Methodological Design</td>
</tr>
<tr>
<td>5.3</td>
<td>Ross River and Indian System of Property Rights and Resource Management</td>
</tr>
<tr>
<td>5.3.1</td>
<td>The Indian System of Property Rights</td>
</tr>
<tr>
<td>5.3.2</td>
<td>The Indian System of Wildlife Management</td>
</tr>
</tbody>
</table>
7.2 The Necessity of Property Rights .............................. 130

7.2.1 Proprietary Rights—An Alternative to Fee Simple Property Ownership? ......................... 131

7.3 Proprietary Rights—An Essential Foundation of Indian Development Options? ..................... 134

BIBLIOGRAPHY ........................................................................ 136
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.1</td>
<td>Historic Modes of Organizing Economic Production</td>
<td>16</td>
</tr>
<tr>
<td>Table 3.1</td>
<td>Animal Resource Species in the Ross River Region</td>
<td>32</td>
</tr>
<tr>
<td>Table 5.1</td>
<td>Age of Trappers and Harvest Returns</td>
<td>87</td>
</tr>
<tr>
<td>Table 5.2</td>
<td>Food Weight Values Used to Calculate Ross River Indian Bush Food Harvests</td>
<td>89</td>
</tr>
<tr>
<td>Table 5.3</td>
<td>Annual Edible Meat Harvested</td>
<td>90</td>
</tr>
<tr>
<td>Table 5.4</td>
<td>Retail Cash Equivalents for Country Food</td>
<td>93</td>
</tr>
<tr>
<td>Table 5.5</td>
<td>Imputed Dollar Value of Ross River Indian Annual Meat Harvest</td>
<td>93</td>
</tr>
<tr>
<td>Table 5.6</td>
<td>Total Estimated Value of the Household Sector: Ross River Indian Bank 1981/1982</td>
<td>96</td>
</tr>
<tr>
<td>Table 5.7</td>
<td>Retail Costs of Harvesting Gear</td>
<td>98</td>
</tr>
<tr>
<td>Table 5.8</td>
<td>Ross River Annual Income from Transfer Payments</td>
<td>99</td>
</tr>
<tr>
<td>Table 5.9</td>
<td>Total Band Income: All Sources</td>
<td>100</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

| Figure 2.1 | Interactive Elements of a Mode of Production | 17 |
| Figure 3.1 | The Study Area | 29 |
| Figure 4.1 | Ross River Indian Fishnet Before MB | 53 |
| Figure 4.2 | Ross River Indian Fishline Before MB | 54 |
| Figure 4.3 | Ross River Indian Fishnet After MB | 55 |
| Figure 4.4 | Ross River Indian Fishline Before MB | 56 |
| Figure 4.5 | Ross River Indian Hunting Before MB | 59 |
| Figure 4.6 | Ross River Indian Trapping Before MB | 60 |
| Figure 4.7 | Ross River Indian Hunting After MB | 62 |
| Figure 4.8 | Ross River Indian Trapping After MB | 63 |
| Figure 4.9 | Seasonal Harvest Cycle and Residency Pattern: Post-Anvil | 69 |
| Figure 6.1 | Potential Mineral Development Projects | 107 |
CHAPTER 1

INTRODUCTION TO THE THESIS

1.1 The Introduction

This thesis focuses on the contemporary dynamics of northern Indian economies as exemplified by the case study of the Ross River Indian Band—a group of Athapaskan Indian people residing 250 miles northeast of Whitehorse in the Yukon Territory. The Band's economy and system of land use are analyzed by the application of a modes of production analytical framework.

The Indian mode of production cannot be understood in isolation from the articulation the Ross River Indian Band has had with regional industrial developments characteristic of a multinational mode of production. In this thesis a history of this articulation is presented and future potential transformations to the Indian mode are analyzed by reference to both underdevelopment-dependency theory and radical regional science. Finally, the thesis presents some recommendations to guarantee the protection of northern Indian modes of production, recommendations oriented towards the establishment of articulatory linkages with the Canadian State.

1.2 The Dimension of the Problem

Many Canadian government policy makers regard Canadian Indian Bands as underdeveloped. This perception is "substantiated" by reference to economic indicators that are commonly utilized throughout
most of North America. In modern Canadian society, the chief indicators of a healthy economy are considered to be such factors as labor participation rates, per capita incomes, and gross national or regional products. In terms of rural Yukon Indian bands underdevelopment is thought to be particularly severe (DIAND, 1980). Unemployment and transfer payments are, or are perceived to be, higher on a per capita basis than nationally, while per capita cash incomes are below national poverty line levels (Statistics Canada, 1983). Amongst northern policy makers rural Indian bands are thought to be virtually devoid of an economy.

This perception that rural Indian bands are virtually without an economy where labor is employed and goods of value are produced, distributed and consumed, is not just an abstract hypothesis of minimal consequence. The unstated attitude is that because Bands tend to have low levels of wage employment, per capita income and commercial business activity, industrial development can only be of benefit. The implications of industrial development on existing Indian Band culture and socio-economy are infrequently analyzed.

A recent publication on "Economic Circumstances in Yukon Territory" (Fournier, 1979) is illustrative of views that denigrate rural Indian Band economies.

In the publication's analysis of the Yukon economy, hunting is seen as an important part of Yukon's history but:

Today it is relatively less important though it attracts some individual income as sport and recreational activity
Similarly although furs were once an important Yukon resource before the 1880's:

With the Klondike gold rush and subsequent developments in mining, many who at one time relied on the fur industry, now had an alternative source of income available to them.

For future Indian hunters and trappers:

It is generally felt that as socioeconomic conditions improve for the native peoples their dependence on hunting to provide meat requirements will diminish.

The report goes on to say:

At the same time we can expect resident (sports) hunting to grow due to increased leisure time.

What the above two quotes imply is that the demand by resident sports hunters will increase as Indians buy more meat from the store.

In the Yukon Territory three quarters of the Yukon's 500-600 registered trappers are status and non-status Indians. Trapping is regarded by Fournier as essentially an unattractive economic activity, but it is seen as 'economic' in contradistinction with hunting.

The uncertain cash income and yields plus the relative hardships of running a winter trapline indicate that the number of trappers will continue to decline as other more attractive jobs become more attractive.
The Northern Roads and Airstrips "North Canol Initial Environmental Evaluation" (Canada, 1982) discussion of the importance of hunting for the Ross River Indian Band utilizes some of Fournier's conclusions respecting the decline of Indian hunting in relation to increased wage employment:

Recreational hunting in the MacMillan Pass by non-resident hunters provides important income to the local economy (through guiding, etc.). Resident hunting to supplement (imported) Native meat supplies is still important but dependence on this resource diminishes with improved socio-economic conditions. (Canada 1982)

To this author the economic role of hunting in a modern economy is the generation of cash through sports and outfitting activities; given the availability of wage jobs and amenities of modern life, hunting will no longer be a significant aspect of Yukon Indian life.

It is true that Indian hunting has declined in importance with increasing wage opportunities and transfer payments. In the Yukon Territory Indians no longer rely exclusively on the land to get all their food and clothing. Hunting has certainly declined in importance since fur trade days; it has also declined in importance since the earlier part of the twentieth century. The problem with statements by Fournier and Northern Roads and Airstrips is what is implied about the future and the process of economic change. It is assumed that the decline is a continuous one-way process into the future and the northern Indians will become occasional sports hunters like their white neighbours.
Given the preceding discussion it should not be surprising that the chief proposed remedies for the "underdeveloped" economy of Yukon Indian Bands are wage employment and business development with industrial development projects being the stimulus. Higher per capita incomes and labor participation rates would be a sign of "successful" development.

At present several rural Yukon Indian Bands, including the Ross River Indian Band are facing the prospect of large industrial development projects in their vicinity. These projects as "change events" will have impacts on the social and economic fabric of the Bands. Adaptations will have to be made. Rather than concerning itself with potential impacts on economic and social characteristics of Yukon Indian bands and the capacities of Bands to adapt, the Yukon Region Department of Indian and Inuit Affairs, has been concerned that impact assessments focus primarily on:

1. The Band income and wage employment multiplier effects of development, both directly and indirectly.
2. The extent to which developments will affect existing gross regional products (Inuit and Indian Affairs, 1982).

This impact assessment approach by the Yukon Region Indian and Inuit Affairs department is not only affected by "belief systems" about modernization and ethnocentric assumptions about rural Yukon Indian Band economies, it is also influenced by the social accounting methodology of impact assessment with a tendency to rely on national (Kuznets, 1941) and regional accounting approaches (Isard, 1960; Hirsch, 1962; Bendavid, 1974).
The fundamental assumptions of social accounting are that economic indicators such as per capita income and labor participation rates provide an accurate measure of standard of living, and that by calculating changes to such indicators for a group that would be affected by development, positive or negative impact may be determined.

Social accounting has enjoyed only a limited popularity primarily due to its simplistic assumptions. For example, it assumes that the only relevant measure of well-being are GNP, employment and income indicators. Indicators of access to public services and social amenities are not considered. More importantly, the technique of social accounting has overlooked cultural variances and the existence of household economies which contribute to meet basic needs via production activities often conventionally considered uneconomic.

Cognizant of these shortcomings, some government officials (Chambers, 1982) within the Yukon Regions of Indian and Inuit Affairs have acknowledged that reference to only income levels and labor participation may not be sufficient in assessing impact of developments on Yukon Indian Bands. It has been suggested that impact assessment needs to quantitatively evaluate predictable changes to Band demographic characteristics such as birth/death rates, education and skill training levels, availability of public services housing standards and many others. The fundamental idea behind this approach is that by comparing a Band's baseline indicators with 'objectively' predicted changes the pros and cons of development could then be ascertained and mitigation measures could then be devised. While this constitutes an expansion
of the social accounting approach for impact assessment there still are significant shortcomings of this methodology.

... the most important attribute of all the indicators, whether they can be quantified or not, is that they equate human happiness and well-being with consumption. The image is of man the consumer. The key economic indicators are the ability to consume, either privately (personal income) or publically (public revenue), or the means to get that ability (employment, sales). The social indicators tend to refer to the ability to gain employment as a means to consume (education, skills, health), or are taken as proxy indicators of the lack of the means to consume deviance, social pathology, non-participation).

... The consumer image of man is a fundamental part of the economic religion of modern industrial society. (Usher: 67-68)

These forms of impact assessment that view man primarily as a consumer have been the subject of criticism by such northern Indian organizations as the Council for Yukon Indians and Yukon Indian Bands proximate to proposed northern developments. At first their major criticism has been about southern Euro-Canadian ethnocentricism respecting methodological approaches. To circumvent this ethnocentricism there has been growing insistence for participation in all phases of research design, field data collection, compilation and evaluation and report write-up. Most recently, there has been an insistence that impact assessment research that involves northern Yukon Indian Bands be under independent Indian control. Given this turn of events whereby Yukon Indian Bands now insist upon Band-controlled impact assessments it is timely to discuss an approach to Indian impact
assessment which is not reliant on Euro-Canadian social accounting and which does not view man essentially as a consumer.

This approach must provide, at the least, the analytical tools to understand the productive, consumptive, distributive and land use aspects of both Indian economies and Euro-Canadian industrial economies. Furthermore, it must be capable of analyzing changes that might occur should these two entirely different human systems of organizing economic activity, or modes of production, happen to inter-relate. Finally, this approach must be able to suggest means for protecting and enhancing those components of an Indian system of economy and land use which are valued by Indian people.

In light of this discussion the thesis objectives are:

1.3 **Thesis Objectives**

1. To formulate the components of an approach to impact assessment that is based on an understanding of the dynamics of current northern Indian and industrial capitalist modes of production and of the possible forms this articulation might take.

2. To apply this approach to analyzing a case study of one northern Indian Band, its past relationship to industrialization and its possible future.

3. To outline measures which could be taken to protect Indian control over the development of their own economies.
1.4 Methodology

The conceptualization of an impact assessment approach appropriate to the Canadian north draws on two kinds of literature: documentation of indigenous economies and general literature on modes of production and underdevelopment-dependency theory.

The case study chosen for application of the analytical approach developed for northern impact assessment is the Ross River Indian Band, a group of Athapaskan Indians residing in the southeastern corner of the Yukon Territory.

Information for this thesis was collected through the author's three year association with Yukon Indian bands, particularly from a major research endeavor carried out in Ross River during 1983. That research project, of which the author was the resident Project Director, utilized a variety of research methods including Indian land use mapping, examination of Band and archival records, questionnaire administration, open-ended interviews and daily participant—observation. While the details of the field methodologies are given in the chapters that discuss the results of their application a brief review at this time is appropriate.

The history of the Ross River Indian people and their land was obtained not only through a review of existing literature available via archives or through the Council for Yukon Indian's libraries but also through open-ended interviewing with key elders.

To document Indian land usage resident Ross River Indians eighteen years of age and older were asked to map on a 1:250,000 map
scale their hunting, fishing, trapping and camping use of land during two recent time periods that are historically significant for the band. These individual maps which remain confidential, were then aggregated using an mylar overlay methodology. The overlays, whose reductions are text maps in this thesis, represent the totality of Indian land use for the entire Ross River Indian village.

While the Indian maps document the factual and spatial extent of Ross River Indian land usage only the author's open-ended interviewing and participant-observation provide an in-depth understanding of other aspects of the Indian mode of production. The author's association with Ross River Indian Band members span two years of which approximately seven months were spent actually living with an extended Indian family in Ross River. Through this close contact the opportunity was available to observe and participate in many aspects of Ross River Indian life. On many occasions the author participated in hunting, trapping and fishing expeditions; observed kinship relationships amongst Band members and generally was available at the right place and time to gain an in-depth understanding of important areas of Band Indian life. The results of this participant—observation and extended open-ended interviews allowed the author to gain an insight into the Indian 'system' of resource and land use, the concept of Indian 'property' ownership and an understanding of indigenous systems of managing regional wildlife.

To gain statistical documentation of the Ross River Indian economy, both its bush-sector and its wage sector, a questionnaire was
administered to approximately 90% of all Band members. This questionnaire, which remains the confidential property of the band, was designed cooperatively with Indian members of the research team and the Band Council. The questionnaire asked all respondents to report on their harvests and cash income for the one year period November 1981 to November 1982. Questions were asked about the harvests of animal species and about income from wage employment, family allowance, child tax credits and unemployment insurance. Information about other incomes such as welfare and old age pensions that directly accrue to Indian Band members were obtained from Band Council records. Once this raw data was obtained and checked for completeness and reliability by the entire team, it was subjected to various kinds of computer analysis.

Finally, the nature of northern Indian adaptation to regional industrial modernization were examined through reference to over 70 indepth interviews carried out by the author with Band members. Interview topics included Indian wage labor experiences, family life, culture, the land, animals, alcoholism, and aspirations for the future.

The data collected from Ross River are analyzed through the categories and relationships that constitute the analytical approach developed for northern Indian impact assessment.

1.5 **Thesis Outline**

Chapter 2 of this thesis introduces the literature of Canadian Indian economies and on the mode of production school of thought. It
develops the conceptual approach whereby the dynamics of an Indian mode of production and the impacts on them of a multinational capitalist mode of production can be assessed. Chapters 3, 4 and 5 are a case study analysis of the economy of the Ross River Indian Band, one case of the northern Indian mode of production. Chapter 3 documents the history of the Ross River Indian people and their articulation to-date with regional non-Indian industrial developments. Chapter 4 analyzes the system of resource and land use on which the Ross River Indian economy is based. Along with presenting Indian land-use maps this chapter also explains the dynamic spatial-temporal resource adaptation to the region's ecosystem. Chapter 5 analyzes the current Ross River Indian mode of production which can be characterized as a 'mixed economy.' Chapter 6 utilizing the concepts developed in Chapter 2, analyzes some general changes that potentially could occur to northern Indian modes of production upon articulation with multinational capitalism and the capitalist commoditisation process. Finally, Chapter 7 outlines the major minimum articulatory guarantee which northern Indian modes of production require from the nation state for their protection and continued development. A legal contract with the Canadian state which involves the retention of title to land and resources by government and the conveyance to Indian people of proprietary rights to their traditional lands and resources essential to the Indian mode of production.
CHAPTER 2

THE INTERPRETATIVE APPROACH

Harris (1979) argues that "... facts are always unreliable without theories that guide their collection and ... (distinguishment of) superficial from significant elements. ..." For this reason a conceptual approach to assist in the collection of information and its interpretation for the purposes of Indian planning and impact assessment is required.

2.1 Modes of Production and Historical Materialism

The framework used in this thesis to interpret the dynamics of the Ross River Indian Band economy, as an example of the northern Indian mode of production, is based on two kinds of literature: documentations of Canadian indigenous economies and secondly, modes of production literature.

Design of the impact assessment approach began by drawing on a variety of methodologies used to document the operations of Canadian indigenous economies (Freeman, 1976; Weinstein, 1976; Berger, 1977; Bennet, 1977; Bowles, 1977; Brody, 1981; James Bay and Northern Quebec Harvesting Research Committee 1982; Geisler et al. 1982). These studies have revealed that at least two special factors about Indian economies must be incorporated in northern impact assessment. First, Indian people have different cultural traditions and values from the rest of Canadian society and secondly, it is acknowledged that many northern
people pursue a 'traditional' economy based on hunting, trapping and fishing, which are valued for reasons in addition to the cash incomes which they generate. These two factors imply, that at least with respect to northern Indian Bands, impact assessment approaches must consider man not primarily as a consumer, but more importantly as a producer. Therefore the approach should focus on the impacts of non-Indian industrial systems upon the viability of the natural resource base of Indian economies, upon unique Indian adaptations to the regional ecosystem which comprise Indian economic space, and lastly upon the ability of Bands to maintain and control the evolution of their economic and social relations.

The roots of the mode of production literature derive essentially from the historical materialist tradition (Marx, 1973 edition; Marx, 1975 edition; Marx and Engels, 1979 edition). As Harris (1979) explains this tradition, human life is seen as a response to the practical problems of earthly existence. "The mode of production of material life determines the general character of social, political and spiritual processes of life." The concept of "modes of production" is based on the view that

... in the social production of their life men enter into definite relations of production that are independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation on which rises a legal and political superstructure and to which correspond definite forms of social consciousness. ... (Marx 1859, cited in Tucker)
Economic practices comprise certain elements and it is the manner in which these elements combine that distinguish different modes of production. Weaver (1980) suggests nine major historical modes of organizing economic production (Table 2.1). These modes, ranging from "hunting and collecting" to "multinational capitalism" have been differentiated according to general attributes pertaining to property ownership patterns and technology.

Prior to examining particulars of the northern Indian mode of production and its articulation to the multinational capitalist mode of production we must first understand the key elements that comprise any mode of production (Figure 2.1).

2.2 **A System of Property and Resource Management**

Basic to any mode of production is a particular arrangement of rights and control over the use and alienation over property (Marx, 1867; Franklin, 1965; Clammer, 1978; Engels, 1978 ed.; Weaver, 1981). Property refers not only to individually or collectively owned goods, but more importantly to a dynamic system of recognized and enforceable rights and customs that codify who has what rights, to what they may use such rights, and how can they dispose and benefit of their rights (Hardin, 1968; Cail, 1974; MacPherson, 1978). Systems of property rights are entirely a cultural artifact (Godilier, 1977). Some societies and their respective modes of production may have formal written laws and regulations pertaining to property ownership and resource usage (Ince, 1976; 1977). Others may have entirely different
Table 2.1 Historic Modes of Organizing Economic Production (Weaver, 1980)

<table>
<thead>
<tr>
<th>Category</th>
<th>Ownership Patterns</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hunting and Collecting</td>
<td>resources held in common common, most tools used privately.</td>
<td>simple stone, bone, wood metal implements, fire.</td>
</tr>
<tr>
<td>2. Nomadic Animal Husbandry</td>
<td>communal and/or family use of resources.</td>
<td>simple stone, bone wood metal implements.</td>
</tr>
<tr>
<td>3. Communalist Agriculture Mixed Farming</td>
<td>communal or family land tenure and herds, privately held tools.</td>
<td>natural and metal tools, use of lever and harnessed animal power.</td>
</tr>
<tr>
<td>4. Feudalism</td>
<td>land and most tools owned by a few families and individuals.</td>
<td>more extensive agric. crop rotation.</td>
</tr>
<tr>
<td>5. Collectivist Capitalism</td>
<td>state ownership of land and most tools.</td>
<td>mathematics, accounting, large scale human organization, urban development.</td>
</tr>
<tr>
<td>6. Mercantile Capitalism</td>
<td>private ownership of secondary ownership of tools, resources and output.</td>
<td>advanced handicraft techniques, long-distance transport, accumulation of free capital.</td>
</tr>
<tr>
<td>7. Industrial Capitalism</td>
<td>private individual and corporate ownership of tools, resources and output.</td>
<td>factory syste, derived energy, metal engineering.</td>
</tr>
<tr>
<td>8. State Capitalism</td>
<td>state ownership of tools, resources and output.</td>
<td>industrial technology, collective agric.</td>
</tr>
<tr>
<td>9. Multinational Capitalism</td>
<td>private corporate ownership of tools, resources and output at int'l tional scale.</td>
<td>plastics, electrical engineering, computer technology, atomic energy.</td>
</tr>
</tbody>
</table>
Figure 2.1 Interactive Elements of a Mode of Production

2.2 A System of Property and Resource Management

2.3 Economic Practice

2.3.1 The Productive Element

2.3.2 The Distributive Element

2.3.3 The Consumption Element

2.3.4 The Reproductive Element

2.4 Relationships

2.4.1 Relationships to the Biophysical Environment: System of Land Use

2.4.2 Internal Social Relations

2.4.3 Relationships to Other Societies
systems of rights and ownership based on oral traditions, possession of
certain symbol-artifacts and genealogical relationships (Inglis, 1970;
Rey, 1975; Pritchard, 1977). Irrespective of how ownership and rights
to property are observed in any society or mode of production, the
management and control over the alienation of that property belongs
essentially to the holder of those property rights. Different practices
in the definition, use, alienation and management of property—including
land and resources—flows from the cultural system of rights attached to
property (Duff, 1980; Young, 1981). The Canadian native claims issue in
Canada is essentially about different systems of property rights over
land resources—which system of property rights will have subordination
and what types of legal arbitration and resource management control will

2.3 Economic Practice

In addition to human designed management systems regarding the
use and disposition of property, each mode of production has an economic
practice comprising productive, distributive and consumptive elements
(Marx and Engels, 1979 ed., Marx, 1867; Franklin, 1965; Hindess and
Hirst, 1977; Polanyi, 1957; Harris, 1979; Halperin, 1977; Weaver,
1981). To these are added three essential categories of human
relationship: firstly, relationship to the natural ecology; secondly,
social relationships within community; and lastly relationships among
other communities, their producers, consumers and their mode of
production (Weaver, 1981; Bowles, 1981; Asch, 1977). Furthermore, since
all societies must recreate themselves so as to exist through time, differing modes of production must reproduce themselves (Althusser, 1969; Clark, 1980).

2.3.1 The Productive Element

Regardless of the mode of production, the productive element contains "... the worker his means of production, and the object upon which he works. For production to take place, these elements must be combined by different types of connections (relations) ..." (Taylor, 1979). Modes of production are distinguished from each other by the manner in which these elements combine, the technological complexity of tools and via the predominant patterns of ownership of resources and tools of production. The productive element of any mode of production also includes the particular way in which labor processes are organized, division of labor for particular tasks are assigned, and the size and structure of the basic unit of production.

Irrespective of the mode of production, the productive elements combine in specific relations by means of which the appropriation of nature takes place to produce goods and services of value. Value may be determined not only by the quanta of immediate and accumulated labor power but also by some social valuation of the raw materials from which the product is made. Within any mode of production, two distinctions of value can be made: use-value, or the intrinsic utility of a human or naturally produced good or service; and exchange value, which is the social valuation of a good or service as a commodity of trade by such
institutions as a market or barter (Friedman and Weaver, 1979). Modes of production may differ not only by the relative proportion between use and exchange value goods and services, but also the capital and technological innovation required to produce value may derive from different sources—for example from the worker himself, or from sources that may not be owned or controlled by the worker.

Another attribute of any mode of production pertains to surplus labor and products which are subject to differing forms of appropriation. The methods by which surplus is appropriated are largely the result of specific relations of production which determine the dominant pattern of access to ownership and control of tools, resources, and the means of production. For example, in an industrial mode of production, tools, resources and the output from production are typically owned privately. The capitalist purchases the worker's labor power in exchange for a monetary wage and he appropriates any value produced surplus. The modern State may also play a significant role in the appropriation of surplus through such means as the levying of taxes, tarriffs, regulatory fees and licences (Mande, 1978; Poulantzas, 1974).

Differring modes of production may have varying barriers to productive entry. For instance (Orlove, 1977) argues that ecological conditions present one set of conditions which may delimit the spatial and temporal arrangements of productive activities. Further, he contends that a producer's social role within a society may affect his access to the means of production. Within the multinational capital mode of production access to mobile labor power, physical resources, and
international finance capital are essential requirements to production (Weaver, 1981; Poulantzas, 1974; Carney, 1980).

2.3.2 The Distribution Element

Every mode of production has distributive mechanisms which deals with the customs, institutions, rules and regulations by which goods and services are transferred from the point of production to points of consumption (Polanyi, 1957; Breman, 1976; Neale, 1977; Halperin and Dow, 1977). The exchange-value and use-value goods and services that may be distributed could be categorized as producer and consumer goods, capital, labor power, and information. Within every mode of production there exist transportation devices and institutional rules and customs governing exchange. In some societies the main institution which regulates distribution is the market mechanism, while in other societies some distributive exchange may take exist without the utilization of a market (Chaynov, 1925; Polanyi, 1957; Bradby, 1975; Smith, 1977). Today most societies and modes of production are to a lesser or greater degree integrated into one dominant mode of production—a global marketing system which by virtue of its pricing mechanism tends to value products, labor, land, and capital according to one normative standard—"fair market monetary value."

2.3.3 The Consumption Element

Another important element within any mode of production are the consumption processes and their relationship to the production of goods
and services. This thesis, through the case study, will focus on not only the quantitative aspects of consumption by final end users, but also on the relationship between cycles of production, ecosystem changes and Indian cultural styles of resource use.

2.3.4 The Reproductive Element

From the modes of production perspective all societies must recreate or reproduce themselves. Reproduction involves not only the recreation of labor power, but also, according to Clark (1980), involves the reconstitution of the means of production, thus implicitly the relations of production." Clark differentiates between simple and extended reproduction within a multinational capitalist mode of production.

Simple reproduction occurs ... when enterprises are replaced but no capital accumulation occurs and workers and capitalists spend all they earn on consumption goods (p. 230). On the other hand, extended reproduction involves capital accumulation ... which may involve replacement of capital stock and/or an increase in total capital stock (p. 231) along with the purchase and innovation of new producer goods by either the worker or the capitalist.

- According to Althusser (1969; 1970) the main concern of the modern state is to facilitate the extended reproduction of capital and those aspects of a society necessary to ensure the preservation of the dominant capitalist mode of production. The State according to Althusser (1969); Mandel (1978); Poulantzas (1974) actively intervenes
not only to assist in the reproduction of economic and political institutions of society, but also to assist capital production, circulation and accumulation, and to ensure that simple and extended reproductions of the means and relations of production take place. As this thesis confirms, even societies that are not fully part of the multinational capital mode of production, such as northern Indian bands, have unique strategies for reproduction.

2.4 Relationships

In addition to the above four elements that comprise the economic practice of a mode of production, each mode of production listed in Table 2.1 exists within a network of relationships. These dynamic relationships, whose essential characteristics vary over time and which are dependent on the economic practice that constitute the prevailing mode of production, are:

1. relationship of the mode of production to the biophysical environment;
2. social relationships internal to the mode of production;
3. relationship to other societies and their prevailing mode of production (Weaver 1981).

2.4.1 Relationship to the Biophysical Environment: The System of Land Use

According to several authors (Asch, 1976; Berger, 1977; Halperin and Dow, 1977; Harris, 1979; Bowles, 1979; Hindess and Hirst, 1977;
Knight, 1978) relationships between a social group and its natural environment are highly influenced, and influence in turn, by the manner in which economic production is organized. Whether or not natural materials are defined as resources is highly dependent on whether or not they are used within the production process of the prevailing mode of production. For instance, few hunting-gathering modes of production define non-renewable natural materials as resources for use in the productive process. On the other hand, the productive process of industrial modes of production rely heavily on non-renewable resources such as petroleums, and various other minerals found beneath the earth's surface.

Every mode of production has a particular 'system' of land use. The concept of land use has been used by most planners to describe static spatial patterns of land usage such as settlement and infrastructure patterns (Warkentin, 1968; Robinson, 1972). For instance, a map of a modern city might portray the geographic siting of such relatively permanent structures as roads, bridges, important buildings and homes. What such a map would not reveal is the dynamic temporal aspects of use of these structures by individuals residing in the vicinity, or the reasons and the methods whereby individuals move between structures located on a city land-use map. These aspects related to the dynamic process of land use and the human rationale behind movement, together with the physical geographic placement of permanent structures, comprise the 'system of land use.' Systems of land use are spatial and temporal social adaptations to a region's
ecosystem or man-made environment. They are dependent not only on the resources and technologies utilized within the productive process, but also on such factors as climate and the density, dispersal and movement of resources.

Varying modes of production may not only use different resources from the biophysical environment, and may not only have different 'systems of property rights and land use,' but different modes may compete and interfere with each other. This competition between modes of production may take the form of property alienation where the dominant mode may have hegemonic legally-sanctioned control of land resources and its use. This may occur to such an extent that the economic practices of the subservient mode may be disrupted to the point were it's reproduction may be adversely affected.

2.4.2 Internal Social Relations

Social relations within a geographic area are the patterns "... of intercourse among different individuals and groups (and) are shaped fairly directly by the role various people play in meeting society's economic needs (Weaver, 1981). " In every mode of production there are dominant customs and institutions that provide a framework for intercourse amongst its members, and which are important for preserving the mode of production of that society. In some societies access to tools necessary for production are not equally available to all, and as a consequence competition, and producer and consumer inequality are a fact of life.
While in every mode of production the family exists, its organization and functioning are generally variable (Engels, 1978). In some modes of production the family household exists as a productive unit, and what is produced by each individual is made available to all within the household. In other societies, where labor power is sold for wage-income and where the products of an individual's labor are not available for his appropriation, the economic well-being of a household depends on the internal distribution of wage-income amongst household members.

2.4.3 **Relationship to Other Societies and Their Prevailing Modes of Production**

No mode of production exists in a social vacuum. In order to understand the articulation of an Indian mode of production with the multinational mode of production it is necessary to sketch the economic and social history of the indigenous group that is affected by the latter. Such a historical narrative, focusing on

... the historical transformations of a productive economic activities and the social relations and institutions which have accompanied them ... (would provide) ... the basis for a survey of current conditions. It is only through understanding how things came to the present juncture that a realistic evaluation of contemporary society can be made. (Weaver, 1981)

Having examined various aspects of the mode of production approach let us now consider the characteristics of the prevailing northern Indian mode of production as exemplified by our case study of
the Ross River Indian Band. While it has been acknowledged that some historical information is necessary so as to provide a baseline setting respecting a northern Indian mode of production, the emphasis in the case study is placed on the current organization of the Ross River Indian band—a northern Indian mode of production—and its possible transformation by industrial developments characteristic of the multinational mode of production.
CHAPTER 3
THE SETTING

3.1 The Biophysical Environment

The Ross River traditional lands and the present village of Ross River are located in the central southeastern portion of the Yukon Territory. They are approximately 250 km northeast of Whitehorse, the Yukon Territory's largest community (see Figure 3.1). The lands are quite varied topographically. They are considered part of the Intermontane Yukon Plateau Range of the Canadian Cordillera. Major mountain ranges of the Ross River lands include the Selwyn on the north along the NWT boundary, and the Pelly Mountains on the South. Other mountain ranges in the area are the Anvil Range, Campbell Range, the South Fork Range, the Itsi Range, and the Glenlyon Range.

Between these mountain ranges are several wide valleys, the most extensive being the Ross River and Pelly River valleys. There are two major plateaus: the Pelly and MacMillan Plateau, subdivisions of the Yukon Plateau. These rolling uplands broken by occasional higher peaks are in the 3,000 to 5,000 foot range of elevation. The Pelly Plateau stretches from Francis Lake to the Ross River valley, while the MacMillan Plateau extends up from the Ross River valley to the MacMillan river in the north.

The Ross River lands generally fall within the Pelly River drainage area, although eastern portions are drained by the Frances and Hyland Rivers which are tributaries of the Liard River. Other major
drainages include the Nisutlin and Big Salmon Rivers which are tributaries of the Yukon River. Throughout, there are numerous lakes. The largest are Little Salmon Lake, Pelly Lakes, Fortin Lakes, Francis Lakes and the chain of Sheldon, Field and Lewis Lakes to the north of the settlement of Ross River.

The climate of the Ross River lands is typically a long cold winter of approximately six months duration, with a short summer. Winter days, while frequently clear and windless, can be extremely cold. It is not uncommon to experience temperatures in the -30°C to -45°C range. The climate is quite dry. Snowfall is light in the valleys with higher accumulations in the plateaus and mountains. Records of annual precipitation (Canada, 1982) indicate that precipitation ranges between 263.6 mm in the valleys and 367.7 mm in the uplands. Typically the summer months are wettest, but on the average summer precipitation is only around 105.8 mm (4.2 inches).

Forest covers approximately 40% of the Ross River lands (Rennie, 1977) with trees typically covering valley and plateau areas. Alpine tundra occurs above treeline at the 1,350 to 1,500 metre range above sea level. The forests of the Ross River Lands are part of Canada's boreal forests although they are not as dense and have more spaces between trees.

Species of trees include the white and black spruce, larch, alpine fir, lodepole pine, aspen, balsam poplar, birch, willows and speckled alder (Hosie, 1973). Climax forests are generally white and black spruce. Pine and aspen are recolonizers after major disturbances
such as fires. In the subalpine areas below the treeline, alpine fir is dominant.

3.1.1 The Animals

The animals of the Ross River lands which are the foundation of the Band's hunting, fishing and trapping economy are common throughout most of Yukon. Table 3.1 (Dimitrov and Weinstein, 1984) lists the species of mammals, birds and fish that occur on the Ross River lands. Many of these animals have a part in the Ross River Indian Band's economy. The Ross River lands are particularly rich in diversity of ungulate species—notably moose, woodland caribou, mountain goat and Dall sheep. Mountain goats and sheet are not particularly abundant. They were not encountered by Rand (1945) in his survey of the Canol Road; Youngman (1975) notes only two sightings, both in the vicinity of the mountains north of Francis Lake. During the summer of 1981 a Yukon Territorial Government survey (Netti, n.d.) located 9 goats. Both the white and dark Dall's sheep are found on the Ross River lands (Banfield, 1974; Youngman, 1975), generally in the Rose-Lapie river area, and in some of the mountains to the north and south of the Pelly River.

Several species of woodland caribou exist on the Ross River lands. While the exact demarcation between herds is still disputable, there are two main herds in the area; the Fortin-Finlay herd and the Redstone herd—both of which are used by the Ross River Indian people. The Redstone herd, numbering between five and ten thousand animals, range in the MacKenzie Mountains along the Yukon-NWT border during
Table 3.1 Animal Resources Species in the Ross River Region.
(Based primarily on Banfield, 1974; Belrose, 1976; elson, 1974; Godfrey, 1966; McPhail and Lindsey, 1970; Rand, 1970; Scott and Crossman, 1971; and Youngman, 1975)

| MAMMALS | \- Moose | Alces alces gigas /andersoni |
| \- Caribou | Rangifer tarandus caribou |
| \- Dall Sheep | Ovis dalli dalli /stonei |
| \- Mountain Goat | Oreamnos americanus |

| Bears | \- Black Bear | Ursus americanus |
| \- Grizzly Bear | U. arctos |

| Fur Mammals | \- Beaver | Castor canadensis |
| \- Lynx | Lynx lynx |
| \- Marten | Martes americana |
| \- Mink | Mustela erminea |
| \- Otter | Lutra canadensis |
| \- Wolverine | Gulo gulo |
| \- Wolf | Canis lupus |
| \- Coyote | C. latrans |
| \- Muskcat | Ondatra zibethicus |
| \- Red Squirrel | Tamiasciurus hudsonicus |

| Small Game Mammals | \- Hoary Marmot (Ground Hog) | Marmota caligata |
| \- Arctic Ground Squirrel (Gopher) | Spermophilus parryi |
| \- Porcupine | Erethizon dorsatum |
| \- Snowshoe Hare (Rabbit) | Lepus americanus |

| BIRDS | Upland Game Birds | \- Blue Grouse | Dendragapus obscurus |
| \- Spruce Grouse | Canachites canadensis |
| \- Ruffed Grouse | Bonasa umbellus |
| \- Sharp-tailed Grouse | Pedioecetes phasianellus |
| \- Willow Ptarmigan | Lagopus lagopus |
| \- Rock Ptarmigan | L. mutus |
| \- White-tailed Ptarmigan | L. leucurus |

| \- Lake Trout | Salvelinus namaycush |
| \- Broad whitefish | Coregonus triolepis |
| \- Lake whitefish | C. clupeaformis |
| \- Round whitefish | Prosopium ciliare |
| \- Inconnu | Stenodus leucichthys |
| \- Grayling | Thymallus arcticus |
| \- Pike (Jackfish) | Esox lucius |
| \- Longnose Sucker | Catostomus catostomus |
| \- White Sucker | C. Commersoni |
| \- Burbot (Ling Cod) | Lota lota |
| \- Chinook Salmon (King Salmon) | Oncorhyncus tshawytscha |
| \- Chum Salmon (Dog Salmon) | O. keta |

M—for the most part, only birds which breed in the area are included in the table (Godfrey, 1966). The exceptions are a few species of larger birds which migrate through the area and which have played a role in the Ross River hunting economy. These have been annotated with an 'M' in the table.
spring and summer. It moves out of the high snowfall area of the MacKenzie and Howards Pass to winter ranges in the vicinity of the Selwyn and MacKenzie Mountains. "They return to their calving grounds, on the heights of land of the MacKenzie Mountains in the area of the MacMilland Pass and on the headwaters of the Keele and Natla Rivers in the N.W.T. by mid-May" (Farnell and Nette, 1981), following the corridors of the Natla, Keele, and Ekwi River Valleys (Archibald, 1974). In summer, the caribou disperse throughout the alpine regions of the boundary mountains (Farnell and Nette, 1981).

The range of the Fortin-Finlay herd, estimated between two and three thousand caribou, has recently been studied by Farnell (1982) using radio telemetry tracking. Local knowledge and the Farnell survey suggest that the herd's winter range lies in the lowlands of the Pelly Mountains between Hoole River and Wolverine Lake. Peak calving time is between mid May to early June during which time the caribou move into the dense spruce forest in the highlands of the Pelly and Francis River drainages. Farnell also identified two other caribou wintering groups, one near Tay Lake and the other near Lewis Lake.

Other caribou range on the Ross River lands but details are lacking at this time. Reid Crowthers and Partners (1982a) mention a Pelly Mountain herd numbering about 2,000 animals; Fuller (1956-7) mentions a MacMilland Plateau herd of 2,000 animals; and Farnell and Nette (1981) mention an Anvil and South Fork range herd which is found to the west of the Ross River.

Moose presently occur throughout most of the Ross River lands. Moose movement and habitat use are imprecisely known although the Yukon
Territorial Department of Renewable Resources have studied moose distributions during the fall and late winter in the area of the Pelly and Selwyn mountains (Farnell and Nette, 1981; Markel and Larsen, n.d.). Moose concentrations are highest near the Ross, Pelly and MacMilland rivers, and lowest in the headwaters region. It appears that moose, like caribou, prefer winter areas of low snowfall and as a consequence during late winter can generally be found at elevations below 4,000 feet. Local knowledge indicates that during the spring and the calving periods moose move closer to river systems and lowland ponds to feed on young willow shoots and to protect the young from predator attacks. During summer and late fall, moose progressively move to willow and birch habitats at elevations of between 4,000 and 5,000 feet, although some remain in river valley and boreal forest habitat at lower elevations.

Aside from Rand's 1944 survey and a recent study by Slough (1983) there appears to have been little investigation of the non-ungulate mammals that inhabit the Ross River lands. Species are similar to that of other forested regions of the Canadian sub-arctic with the exception of the presence of artic ground squirrels and a lack of abundance of the aquatic fur mammals beaver and muskrat. Snowshoe hares are cyclically abundant dependent upon their 6-13 year population cycle. According to local knowledge the carnivorous fur bearers of marten, red fox, lynx, mink are relatively abundant.

A particularly distinguishing aspect of the Ross River lands is the presence of two species of Pacific salmon—-the chinook and the
chum. Both these species spawn in the Pelly River drainage, while chums even migrate as far as the MacMillan River. Information on Pelly salmon spawning is known to occur on the Pelly, Lapie, Hoole, Ross, Woodside, MacMillan, Riddell, South MacMillan, Big Salmon, North Big Salmon, Nisutlin, Rose, McConnell and McNeil rivers and some lessor tributaries.

With the exception of a review by Elson (1974), biological information on other fish species is very limited. While no studies have been done on the fisheries productivity of the numerous lakes that dot the Ross River Lands, fish species known include lake trout, greyling, jackfish, inconnu, ling cod, and several sub-species of both whitefish and suckers.

Three species of grouse and ptarmigan are known to breed on the Ross River lands. While a variety of duck species and the Canada goose also breed in the vicinity, the area is not part of a major migratory corridor (Belrose, 1976). The Pelly River Mountains and the Frances Lake areas are part of the migratory path for sandhill cranes, while Frances Lake is also a major staging ground for swans, geese and diving ducks (Theberge et al., 1980).

3.2 The Setting: Part 2 - The History of the People

3.2.1 The Fur Trade Era

The Ross River lands are not mere landscape, wildlife species and river systems, they are also a homeland with a long history of Indian occupancy. The first records of human occupancy commence with the Hudson Bay explorers who entered the region in the 1840's. According to Wright
(1976), Robert Campbell was the first non-Indian to explore the headwaters of the Liard river system and to cross over the height of land into then unknown territory. The Pelly River Indians possessed European trade goods obtained via traditional trade networks between Yukon Basin Athapaskan Indians and Tlingit and possibly MacKenzie River Indians (Karamanski, 1983). Unfortunately Campbell's and other explorers' journals (Dawson 1888; Pike 1886) do not provide much information about Indian people on the Upper Liard or the Pelly Rivers. What is known of those days is largely the result of information obtained from present day Ross River Indian Elders. According to their stories, the forefathers of the present day Ross River Indians were a hunting-gathering band society with extended family groups highly mobile throughout their territory. Livelihood was dependent on moose, caribou, small game and other dispersed animal resources and as a consequence dispersal of the human population was required to harvest resources (Denniston, 1966; Tanner, 1965).

In 1842 Campbell established the first Hudson Bay Company (HBC) trading post at Frances Lake. Later, in 1845, another trading post was established at Pelly Banks. For unknown reasons HBC did not expand trading operations beyond Pelly Banks but instead established Fort Selkirk at the confluence of the Pelly and Yukon Rivers. The accidental fire at the Pelly Banks post in 1850, the abandonment of Fort Frances in 1851, and the 1852 assault on Fort Selkirk by the Tlingit ended direct trade and sustained contact between Euro-Canadians and the Indians of the Upper Pelly River until the twentieth century.
When Europeans returned to the Yukon their interest was gold and not furs. While the Pelly and Ross Rivers escaped most of the onslaught that accompanied the Klondike gold rush they still experienced considerable contact with whites. According to Wright (1976), in 1874 approximately 1500 miners were prospecting in the Dease Lake area of northern British Columbia. Experiencing failure in their quest many expanded their search to the Liard river system. In 1881, a prospecting party discovered gold on the Big Salmon river and in 1882 two groups had travelled up the Pelly River as far as the rapids at Hoole Canyon. In 1894 Inspector Constantine of the Northwest Mounted Police reported that there were about 500 miners working the Pelly and Stewart River systems.

According to Cruikshank (1974) the gold rush had immense effect on Indian society as the miners competed for the same game resources that were the historic livelihood of Yukon Indian people. Many of the miners trapped for furs to supplement income and they relied on game for food. The greatest impact was the displacement of the fur trade and the destruction of the Indian monopoly as suppliers of furs. With the economic shift of the gold rush, Indians could no longer control their own economic and social change. As a consequence they lost their leverage to influence white activities (Coates, 1982). With the end of the gold rush, emphasis again returned to furs.

In 1900 Poole Field and John Lewis opened a HBC post at Pelly Banks, which was later sold to a Whitehorse company, Taylor and Drury. At about the same time, another trading post, which was later bought by Taylor and Drury, was opened by Tom Smith (Denniston, 1966; Cruikshank,
1974) at the confluence of the Pelly and Ross Rivers. This post was well situated to serve Indians of the Upper Pelly, the Ross River and MacMillan River country and even hunting groups in the Carmacks area (McDonnell, 1975). Anglican Church records indicate that by 1915 about 200 hundred Indians were trading at both posts (Cruikshank, 1974).

According to McDonnell (1975) land use patterns had stabilized with Indians spending most of the year in their seasonal round of hunting, fishing and trapping, with increased emphasis on furs. As a result of the dispersal of fur animals, increased travel was required. Typically family groups would only come to the posts for two to four weeks prior to returning to their traditional areas (Sharp, 1973). McDonnell (1975) notes that different trading groups remained culturally and economically distinct with interchanges limited to ritual competitive singing and Indian gambling. During the 1920's and 30's as a result of good demand for furs, other trading posts were built. Independent buyers opened three posts on the MacMillan River, one on Sheldon Lake on the Ross River, and yet another at Francis Lake. Taylor and Drury expanded operations building a post at Pelly Lakes and one at Rose Point (MacDonnell, 1975). With the opening of these posts Ross River no longer remained the central meeting place as dispersed family groups could now trade close to their traditional areas (MacDonnell, 1975).

This pattern of economy and land-use continued until the 1940's when the cumulative effects of the Canol Road and Pipeline, government programs, and the post-war decline in fur prices signalled another set of change and adaptations.
In 1945 a major decline in fur prices commenced which lasted through the 1950's and 60's, only to rise again in the middle 1970's. While it is not clear if white trappers were active in the Ross River area during the 1930's, by the mid-40's Indians had become once again the exclusive fur harvesters (Rand, 1945).

With the advent of World War II the Ross River region and southern Yukon became opened to a "... development process which has reduced the quality of life for Indian people (and which) has made them increasingly marginal to the Yukon's economy and social structure" (Cruikshank, 1977).

3.2.2 The Canol Road Era

In April 1942 American soldiers arrived in Whitehorse to construct the Yukon section of the Alaska highway. The Ross River Indians were not directly affected by this construction, but the building of the Canadian Oil (Canol) Road and Pipeline in 1942-44 brought dislocations similar to those experienced by Yukon Indians who lived along the Alaska highway route (Cruikshank, 1977). The influx of some 3000 men and the building of the Canol road connecting to the Alaska highway, brought the Ross River Indians into sustained direct contact with the outside world (Sharp, 1973). Documentation of the impacts of the Canol project is not as complete as with the building of the Alaska Highway, nonetheless, stories told by Ross River Indian elders tell of difficulties with contagious diseases, hunting pressures, alcoholism and sexual abuse. In 1942, the Yukon Territorial Government
granted special hunting privileges to the American Engineering Corp (Cruikshank, 1977). This resulted in competition for game and loss of Indian control over land resource. A diphtheria epidemic struck Ross River Indians during the winter of 1942-43 and many Indian children died. During construction, the drinking patterns incorporated into Indian social life since gold rush days changed as they became exposed to construction crews (Cruikshank, 1977). From studies done elsewhere (Brody, 1981), Indian drinking was typically limited to social events when people came out of the bush to trade furs. With the construction of the Canol, younger Indians learned that it was acceptable to drink both excessively and frequently at ordinary social gatherings.

In contrast with other Yukon Indians who were impacted by the operation of the Alaska Highway, the Ross River Indians were only affected during the construction period of the Canol Road. By the end of the World War II the Canol Road and Pipeline was shutdown, except during 1951-52 when the road was briefly opened to permit pipeline and equipment salvaging (Sharp, 1973).

Subsequent to the War, many changes occurred for the Ross River Indian people. Fur prices dropped. The riverboat system up the Pelly River was disbanded and Indian workers who had cut firewood for the boats had less money to buy food staples and necessary hunting/trapping gear. Taylor and Drury closed their Pelly Banks and Pelly Lakes posts by 1952 (Miller, 1972). At the same time, government made available the Family Allowance Act which provided a cash incentive to encourage Indian children into schools. Welfare and pension payments became more
common. All of these changes served to alter Indian residency patterns as it became more necessary to stay for longer periods in the vicinity of the post office at Ross River. These changes, coupled with the drastic decline in fur prices and currency inflation at the end of the 1940's, made it extremely difficult for Indian and Inuit people throughout Canada's north to depend on trapping as the major source of cash income.

For the Ross River Indian people the decline in fur prices and currency inflation caused severe hardship and even hunger as people had less money to purchase rifles, bullets and store-bought food. With the closure of the Pelly Lakes trading post in 1952 it became difficult to get supplies. As a consequence many Indians living near Pelly Banks or Pelly Lakes moved to the 'old Ross River village' located on the north side of the Pelly River where access to government assistance from the post office was possible. These turns of events were exacerbated in 1952 by a polio epidemic that struck the village.

The migration of Ross River Indian people from dispersed regions to the old village resulted in a temporary abandonment of distant hunting and trapping areas and a land-use pattern shift closer to the settlement of Ross River itself.

Co-incident with this shift of land use the Yukon Territorial Government Department of Game and Publicity commenced its operation in 1949-50 by focussing on a wolf poison control program and trapline registration program. For the Ross River people the essential problem with the trapline registration program, aside from the ten dollar fee,
was the fact that the maps formulated to register traplines did not account for a flexible system of rotational trapping by extended families. Instead, registration underestimated trapping areas and tended to formalize 'ownership' to individuals—usually male, which ran counter to what was a previously matriarchial extended family system.

In 1957 and 1958 fur prices dropped to the lowest levels in one hundred years. Since the Ross River Indians did not have regular access to money or wage jobs, many could not afford the trapline registration fee. In an attempt to adapt to these severe economic circumstances many Ross River Indian people moved to Watson Lake, Carmacks, and even Whitehorse in the hope of gaining wage work. During these hard times the Yukon Territorial Government initiated a new registration program that required payment of fees for a five year period. The regulation also stipulated that holders of traplines must trap their areas every year or risk forfeiting their licence.

In response to these pressures, Ross River Indian trappers took the bold step of amalgamating their traplines forming Ross River Group Trapline Areas #1, #2, and #3. This collectivization of the traplines implied that Ross River Indian trappers did not have to pay individual trapline registry fees, but rather only a group trapline fee. This single innovative adaptation allowed the Ross River Indian band to retain control over traplines which might have otherwise been lost to government.

While these economic changes were occurring during the 1950's, residential schools were also having their effect. Ross River Indian
children were sent by plane to Lower Post to attend school for ten months of the year. The removal of children created disruptions not only for the child but for the entire family and community structure. Ross River Indian education changed from a family controlled system of education to one controlled by a white society. With English as the schooling language, communication between Elders and children deteriorated with the consequence that Elders were no longer the main guiding force. Traditional skills of survival on the land were not taught at school. Instead of teaching traditional Indian values and cosmology new concepts emerged:

... sharing and co-operation gave way to individualism and competition ... the "new" Biblical teaching which claimed man's superiority over animals and nature conflicted with the Indian belief that all life lived in harmony. (Easterson, 1982)

For the most part residential schools taught basic skills that were irrelevant to the Ross River Indian society to which students returned. The experience eroded traditional values, skills and structures which were a successful adaptive response to the realities of life as hunter-trappers in an isolated northern setting (Dimitrov and Weinstein, 1984).

The adaptations to the fur trade era can be considered the first wave of post-contact changes for the Ross River Indian people and the Canol Pipeline the starting point of a second set. The 1960's, with the relocation of the old village and mineral exploration leading to the construction of the Campbell Highway and Cyprus Anvil Mine at Faro,
signified yet another axial point for the Ross River Indian people.

3.2.3 The Cyprus-Anvil Era

A consideration of the changes and impacts to the Ross River Indian people as a result of the Cyprus Anvil Mine development must regard the major events that accompanied the project. These in general were:

1. an in-migration of a large Euro-Canadian labor force for both the construction and operation phases.
2. the development of economic and social infrastructure to support the mine and the population in-migrants.
3. large scale mineral exploration throughout the region.
4. changes to Ross River community itself.

The discovery and development of the Anvil lead-zinc deposit by the joint venture company of Dynasty Exploration and Cyprus Mines Ltd. let to massive mineral staking between 1964 and 1969. For instance, of the 15,708 claims staked in the entire Yukon during 1966, approximately 10,000 were in the Anvil-Ross River region (Sharp, 1977). Between 1965 and 1969 exploration companies operating out of Ross River hired Indian men because they were "bush wise." After several seasons working as assistant prospectors, many Indian workers felt they should be making prospectors wages due to their success at finding 'showings.' In 1970 a prospectors course was finally offered in Ross River and all of the approximately 25 Indian men that took the course passed with honors. Unfortunately 1970 marked the decline in exploration activity and few could obtain work.
In addition to seasonal jobs and income, mineral exploration activity brought changes in the form of an influx of outside workers and mining tote roads that opened up the Ross River Lands for vehicle and hunting access. What had once been a small predominantly Indian community gradually expanded into an ethnically mixed community with a white-controlled business service sector capable of providing many of the amenities found in small southern towns.

In 1966 actual construction of the Cyprus Anvil Mine and the Faro townsite commenced under the direction of the general contractor, Parsons Ltd. Approximately 500 construction workers were employed and of these only about 15 were Ross River Indian men (Sharp, 1977). The construction workers, many of whom were single were housed on site and although basic necessities were well provided they often lacked entertainment. Some married men had arranged accommodation for their families in Ross River and at the end of their six day shifts would travel the forty miles to Ross River to rejoin their families. Few of these families had previous contact with Indian people and for many "... the structure and ambience of the older (non-Indian) community were incomprehensible (Sharp, 1977:55)." This together with their consumer demand for southern amenities changed the entire character of Ross River.

The trading post was changed into a department store; a garage was built; a bar and beer parlour were opened (in 1967-68). A motel, a cafe, police station, health clinic, territorial road maintenance garage, a water system, trailer court, a number of new houses, and a school were built in fairly rapid succession. (Sharp, 1977:52)
These services, all established on the white side of town, situated on the west side of the Canol road, served to emphasize the inequities between whites and Indians that existed throughout the Anvil project. The community became racially divided.

The whites into three groups: old-timers, government workers and construction workers. The Indian community, newly organized into a Band Council, into status and non-status Indians. It seemed that as a consequence of development "... one thing was abundantly clear: the changes ... were not controlled nor appreciably influenced by the Indian people (Sharp, 1977:57)."

The influx of white people coupled with these changes not only brought new ideas and values it also brought stereotypic perceptions of Indians, racism and prejudice. Typically, it was at the bar where inter-ethnic conflict was most apparent. According to Sharp (1977) and Miller (1972) Saturday evenings would see the arrival of several construction workers looking for "some action."

This action included drinks, fights, sexual encounters with women and girls, or all of these if the night was particularly eventful, as many were. ... The Indian people were the losers, not only in fights, but in the whole scheme of things. The climate of drunkenness, beatings, sexual exploitation and frustration at being incapable of altering these conditions, led Indian people into more frequent violent acts among themselves. (Sharp, 1977:59)

In addition to such conflict, Ross River Indian people began to have difficulties out on the land. Not only were there more white hunters and fisherman, but the actual siting of the Anvil mine and the
Faro townsite led to land use conflicts with several extended families of hunter/trappers.

With the reopening of the South and North Canol Roads and the construction of the Robert Campbell Highway in 1968 Ross River became situated at the crossroad of regional development. Improved road access meant not only cheaper freight rates and easier access to bush camps. The infusion of money and alcohol in the community coupled with an increase in Indian vehicle ownership led to an Indian death rate at least twice as high as for non-native Yukoners (Dimitrov and Weinstein 1984).

In addition, increased road access resulted in greater presence in Ross River of 'outsiders' which "... disrupted established social interaction and increased inter-racial conflicts (Sharp 1977:74)." With roads, an airport, a new school, and radio and television service, the partially closed "territorial" (Friedmann and Weaver, 1979) socio-economy of the Ross River Indian people became open to outside government and market places influences. While there have been some benefits from regional modernization, self-reliance and control over a way of life, economy and culture were quickly slipping from Indian hands.

The improved transportation system not only provided easier access for non-local hunters, it made possible increased industrial and government activity in the region. Transportation, energy and communication infrastructure facilitated increased extraction of non-renewable and renewable resources from the Ross River lands.
The commencement of Cyprus Anvil Mine milling operations in Faro was not a particularly noteworthy day for the Indian people of Ross River. Some of the white families and construction workers moved to the company town of Faro so as to take advantage of its amenities. For those who resided in Faro, the outdoor life, especially hunting became the way to cut food costs—despite the many subsidies of housing and utilities which the workers received. For the Ross River Indian people who did not receive these subsidies and for whom hunting was essential, the increased presence of non-Indian hunters meant competition for wildlife food resource. According to Sharp (1977), this "... meant a decline in the number of animals taken by (Indian) people in Ross River." This loss was in addition to the loss experienced by several extended families who had trapped/hunted in the Faro vicinity. The mere presence of more white people on the land whether as hunters or as recreationalists, constituted a 'disturbance' and often people would 'shy' away from areas they had traditionally used.

Throughout this regional modernization the Government of Canada had hoped that the Mine would result in national benefits and create employment for Indian people. To accomplish these ends, the Government and the Mine signed the 1967 Anvil agreement whereby the government attempted to insure that Cyprus Anvil Mine would make a

bona fide effort to employ competent local residents, particularly Indians and Eskimos, to the extent of at least 5 percent of the total number of employees within the first year, rising to 10 percent in the second year, and 25 percent in the fifth year after the mine comes into production. (Anvil Agreement, 1967: Section 3.2a)
From the Ross River Indian perspective, the Anvil Agreement was a total failure. There had been minimal consultation with the Idian Band and neither government or industry were aware of the extensive cross cultural barriers experienced in making the transition to industrial wage work.

Interviews conducted during 1982-83 indicated that for the majority, employment at Anvil was not attractive or practicable. Reasons cited ranged from the costs of transportation or moving an entire extended family, to cultural and lifestyle differences with a white labor force, and difficulties in adapting to the organization and management of the industrial plant. Open-ended interviews indicated that in the perception of the Ross River Indian people the development brought few positive changes and generally it had a negative effect. The developments beyond their significant input or control was too much for successful adjustment and adaptation. From the Ross River Indian perspective the 'Anvil Agreement' was an inadequate policy tool in providing Indian people with resources or mechanisms to adapt to the changes. According to Sharp (1977:87-88).

It appears that for the Indian people of Ross River the (Anvil) development was too much and too fast to allow the evolution of social and cultural mechanism to cope with change, and to allow them the opportunity to gain, economically from the development . . . when the classic question of development is asked "who benefits and who pays?" it appears that, in this case, the interests of the mining companies have prevailed, followed by those of a few established white entrepreneurs and in-migants. The interests of the Indian people of Ross River were given little consideration.
3.2.4 **Recent History: 1973-Present**

In 1972, the Council for Yukon Indians (CYI), an association of the twelve Indian Bands of the Yukon Territory, presented "Together Today for Our Children Tomorrow," a statement expressing their demand for the just negotiations of a land claim settlement with the Government of Canada. Since that date, the CYI has been involved in very complex negotiations that will eventually signify a major alteration of life for Yukon Indian people. Presently an interim-agreement in principle has been almost reached between the CYI and Governments of Canada and Yukon. This agreement which includes a clause respecting extinguishment of any claims based on 'aboriginal rights' has not been ratified by the majority of Indian Bands that govern the Council for Yukon Indians. Several bands, including Ross River have major difficulties with some sub-agreements negotiated by the CYI. While no one is certain what the final outcome will be, the stresses on the political leadership of both the Bands and CYI are considerable.

In addition to land claims, the Ross River Indian Band has been very active in developing the village and improving the welfare of its members through housing construction, social services, trapping development, and a few Band business to meet local demand. Many of these projects have been successful, not the least of which has been the Group Home, the Dena General Store, and the home construction program. The Trapping program has resulted in the amalgamation of two Group Trapping areas, the building of trapping cabins at La Force lake and the establishment of a fur purchase depot at the Band office.
While these Band-initiated accomplishments have taken place, mineral explorations have continued on traditional lands. The MacMillan Pass Task Force comprised of representatives from the Government of Yukon and Canada, as well as major corporations, have been planning, without the input of the Ross River Indian band, major developments for the region. Although the recession resulted in the dismantlement of the Task Force and the slowed implementation of regional development plans, the Band Council and Ross River Indian people remain highly concerned about mining and hydroelectric projects (cf. Chapter 6) proposed for their traditional homeland.
CHAPTER 4

INDIAN LAND USE

To delineate land usage, resident Ross River Indian adults eighteen years of age and older were asked to map on a 1:250,000 scale map their use of the land during the time period before the Anvil Mine and for the period after the Anvil Mine commenced operations. Out of the Band population of 141 adults a total of 106 persons, or 73.7% responded by individually preparing maps. To portray land usage by the entire Band all the individual maps were aggregated using a transparent overlay methodology.

Presently all individual maps and the 1:250,000 aggregate overlays which show details of important hunting, fishing and trapping locations are held confidentially by the Ross River Indian Band. What is publically available however, are 8.5 x 11.0 inch reductions produced photographically from the aggregate maps. These reductions of the 1:250,000 aggregates make it possible to identify not only spatial extent of usage, but also some key land use areas. In addition to these reduced land-use maps, knowledge gained by interviewing and participant-observation provides information respecting the system of land usage.

4.1 The Ross River Indian Land Use Maps (Cf: Figures 4.1 to 4.8)

The aggregate reduced 'before' maps represent land use of Band members prior to the Anvil Mine developments. In essence they represent
land use from the turn of the century to the late 1960's. During this period the Ross River Indians lived a semi-nomadic lifestyle which involved much travel throughout the region harvesting a variety of wildlife species. It should be noted that the land usage described by the 'before' maps is not as complete as the contemporary period, as many of the Elders that were alive during the 'before' Anvil period are now either dead or too infirm to be reliable map informants.

The aggregate reduced 'after' maps represent land use in the post-Anvil period from the late 1960's to the present. The lines on these 'after' maps are more numerous as the usage by younger Band members who were either not alive or too young to utilize the land during the 'before' period are shown.

4.1.1 Fishing

The fishing maps are of two categories. Interviewees were requested to map locations they had used for either line or net fishing during each of the two time periods. Both the 'after' and 'before' maps are covered with small circles often with several overlaps. Areas along the Pelly and Ross River, as well as many of the lakes that had been used during the 'before' time period, continue to be used today. For example the circles along the Pelly and Ross River are, and have always been important locations for salmon netting. All the fishing locations noted on the maps are important because collectively they represent a network of fishing spots whose value varies according to accessibility, seasonality of fishing use, species availability, proximity to family
camp locations, and varied other cultural-historical reasons. Viewed totally, the 'after' and 'before' fishing maps present graphic evidence of not only the continuity of fishing at specific locations but also the importance of fishing as a component activity of the Ross River Indian economy.

4.1.2 'Before' Hunting And Trapping Maps

Regarding the 'before' hunting and trapping maps one notes the large numbers of lines criss-crossing each other over an immense area. Each of these lines represent the route of a hunter/trapper carrying out his harvesting activity. The hunting territory during the 'before' period measures about 236 miles (east-west) by 160 miles (north-south) or about 37,760 square miles. The trapping area is about 30,784 square miles in area. While these areas are large they do not include all the land used as some Elders travelled far into British Columbia and into the North-west Territories. The maps portray the Ross River peoples' travel through varied habitats during the seasonal rounds that comprised their harvesting activities. This movement, as the section on the Indian system of land use will attest, was a social adaptation to the dispersals and concentrations of a multitude of wildlife species. In general however, the valleys near the Ross and Pelly Rivers and their tributaries, were important for winter-spring hunting and trapping, with upland pasturages being more important during late summer and early fall.
4.1.3 'After' Hunting And Trapping Maps

In addition to showing a different pattern of land use, the 'after' hunting and trapping maps are smaller in areal size than the before maps. For instance, the after trapping map while it still covers a large area of approximately 16,128 square miles, is approximately an areal decrease of about 47% from the 'before' time era. However, it would be incorrect to conclude that the Ross River Indian people do not consider all their traditional land as still important. The Indian land use maps show human usage; they do not show wildlife habitats that are important and used by wildlife species. For instance, while human harvesting is more concentrated in lowland areas, upland pasturages are of extreme importance to the continued productivity of moose and caribou. Thus, even if these areas were never hunted they are still important as vital components of the region's biological productivity.

Although the economic costs of transportation to more remote harvesting regions for the average Indian hunter has increased, the Ross River Indian band has plans for improving access. The Band is actively pursuing funds to improve transportation and communication infrastructure.

In addition to the above reasons for the reduction in spatial size of 'after' hunting and trapping land use, it should be noted that prior to the Anvil/Faro developments approximately eight extended family groups used the mine/townsite area. However, due to industrial activity, the large influx of workers and the Faro fire—which destroyed climax forests used by many furbearers—the Anvil/Faro region is not as frequently used.
All Ross River Indian trapping takes place within the boundaries of the Ross River Group Trapline. Traps, snares, cabins and caches are owned individually or by families, but no one person or family retains 'ownership' rights to an individual trapline. The Band Council assumes management rights for the entire Group Trapline and Group Trapline leaders assist in management and allocation of areas to different persons.

Contemporary trappers travel mainly by skidoo although dog teams are preferred by some because of their lower cost and dependability in the woods. Often men and/or women trap alone, sometimes journeying out from a main camp or the village for between one and three days. The size of traplines vary between 20 or 30 traps to as many as 200 traps and/or snares. The most intensive trapping areas are north and south along the Pelly River and its tributaries; east and west of the Ross River; and up the North Canol Road to about 30 miles past Sheldon Lake. In the month of June beaver and muskrat hunting takes place along the Pelly and Ross Rivers, as well as around Tay, Blind, and Orchie lakes. While trapping, hunting for caribou, moose and small game also takes place. For this reason the Trapping land use maps not only reveal the spatial extent of trapping, but also the spatial extent of winter/spring hunting.

When looking at the 'after' hunting map one notes a concentration of lines close to the transportation corridors of the North Canol Road and the Campbell Highway. The facile conclusion is that the Ross River people are principally road-hunters, and while it is true that game are
sometimes killed if intercepted close to a road that is not the only explanation for the convergence of lines near roads. According to Elders virtually all the major roads were built on, or close to Indian Trails along rivers and through valleys. Today the roads are not only infrastructure for resource developers they are also used by Indian people to gain access to hunting, trapping and fishing areas off the roads. For instance the lines that follow the Campbell Highway are usually the result of truck and skidoo traffic in the winter/spring period when trapping/hunting takes place. Regarding the lines up the Pelly River these are a combination of skidoo traffic during winter and boat travel to hunting areas during the spring and summer. The trapping and hunting lines along the Ketza, Lapie, Ross River and North Canol Road are the result of use by several family groups during winter and extensive use by virtually everyone during the summer/fall hunts.

In the summer, when the North Canol Road opens the road is used to travel to harvesting locations which according to Elders have been used for generations. The area in the vicinity of the Yukon-NWT border in the MacPass region is immensely important to the Ross River people as it is the primary location where both moose and caribou can be hunted during summer/fall. With the migration of the Fontin-Finlay herd to the mountains bordering Pelly River, hunting of the Redstone Herd in the Itsi, Hess, and Selwyn mountains off the North Canol road provides the only fresh caribou meat during summer/fall.

In conclusion, it must be stated that the analysis of land use activities into such categories as hunting, trapping and fishing is a
Euro-Canadian distortion of the integrated nature of Ross River Indian land and resource use. When a Ross River Indian goes trapping this implies a whole range of activities such as camping, hunting, and fishing far beyond the setting of traps and snares. Likewise, summertime activities are concurrently gathering, hunting, fishing, and camping. In total, the maps reveal spatial aspects of an integrated pattern of land use, and when regarded together with information about the economy and 'system' of land use, document the dynamics of a modern, household-oriented mixed economy based on cash and renewable resource harvesting.

4.2 The Indian 'System' Of Land Use: Post Anvil Era

The Indian land use maps portray the spatial extent and pattern of Indian land usage on specific lands for a variety of renewable resource harvesting purposes. What the maps do not portray is a complex system of human adaptation to the biophysical environment and wildlife resources. This system, which evolved over many generations, involves patterns of human movement during different seasons, shifts from one kind of wildlife species harvesting to another, and an enormous knowledge about the land and wildlife resources that is extremely difficult for non-Indian people to comprehend. Because of the immensity and complexity of this oral knowledge of the region's ecosystem which regulates the 'system' of human land use adaptations by the Ross River Indian people, this thesis could not possibly do justice to its richness. Nonetheless, if the impacts and articulation between
differing modes of production are to be understood, at least some idea of this dynamic Indian 'system' of human adaptation to the region's ecosystem and wildlife must be presented in addition to maps that portray only the spatial aspects of land use.

In the view of the Ross River Indian people the Anvil development marks the beginning of the distinct historical era. People had become semi-sedentary and had moved into village life or bush cabins in locations near major highway systems. The Robert Campbell Highway linking Ross River to other settlements provided a convenient way not only to travel from the village to bush cabins and harvesting areas, but it also facilitated the use of more modern technology such as skidoos and trucks. An understanding of the post-Anvil system of land use and how people adapted to the problems of being semi-sedentary and operating a renewable-resource harvesting activity from a village or fixed bush camp must begin with an examination of the Ross River Indian annual seasonal round.

4.3 The Annual Seasonal Round

For Euro-Canadians the year is divided into four seasons. The Ross River Indian year is essentially of five seasons. Each of these five Indian seasons which comprise the seasonal round is characterized by a different set of resource harvesting activities and land use. Conventionally these Indian seasons are (1) the fall dry meat hunt; (2) early winter trapping and hunting; (3) late winter hunting and trapping; (4) spring beaver, muskrat and bear hunt; and (5) the summer slack
period. Figure 4.9 (Dimitrov and Weinstein, 1984) adds the dimension of movement and seasonal resource harvesting to the concept of an Indian seasonal year. The circle at the centre of Figure 5.1 represents the Indian village, the black dots represent bush log cabins, and the open circles represent wall-tents or less permanent camps. The lines show movement. Lines with double arrows indicate travel by truck out from Ross River Village to bush camps or hunting/fishing locations. The dashed lines indicate a mixture of short or long term bush activities that occur by foot, horseback, boat, skidoo, dogteam and/or snowshoe. Residency and movement patterns on the land are highly differentiated and reflect differences between individuals respecting time commitments to wage labor, restrictions incurred because of children being at school and differences in locations of a family’s main dwelling. For instance, people in Ross River with a full or part-time job, or those with school age children tend to travel out to bush camps for day, weekend or holiday trips. On the other hand, those with fewer incumbrances often spend two weeks or longer at bush camps without returning to Ross River. The timing of seasonal wage work indicated on the outside of the circle usually takes place in the summer slack period of the Indian year.

4.4 Contemporary System of Use

4.4.1 Spring Hunt

In spring, harvesting shifts from the winter emphasis on ungulates to small game, birds, beaver, fish and some gathering. During
Figure 4.9
Seasonal Harvest Cycle and Residency Pattern: Post Anvil

- April
  - Seasonal Village Work - In or Near Village of Ross River
  - Beaver, Musk Rat, Bear, Hunt, Eggs, Occasional Moose, Porcupine, Caribou, Fishing, Grouse
  - Late Winter
    - Moose, Caribou, Rabbits, Furs
    - Porcupine, Fishing, Furs

- January
  - Early Winter
    - Moose, Caribou, Rabbits, Porcupine, Furs
    - Beaver, Furs

- October
  - Fall
    - Waterfowl, Ground Hogs, Sheep, Rabbit, Water-Fowl, Caribou, Sheep, Forest, Berries, Grouse

- Mid-July
  - Fall Outfitting/Outpost

- Permanent Bush Cabins
- Less Permanent Bush Dwellings, Tents
- Movement to and from Ross River
- Movement in Bush
the pre-Anvil, era reliance was placed on small game such as gophers, rabbits, porcupine and grouse. Today there is now increased purchase of store bought foods. Net fishing for whitefish and line-fishing for spring runs of greyling are common on many of the lakes and creeks proximate to winter bush cabins. Migrating geese, ducks and even cranes are hunted and sometimes their eggs are collected as a delicacy. "Bear-roots" which grow near river banks and such other plants as poplar buds and willow stems are also gathered. Beaver as a rich energy food becomes a welcome variation to Spring diet.

This shift from ungulates to the hunting of dispersed small game species is not a whimsical hunting decision but rather is based on a knowledge of animal movements and a cultural self-regulation in the form of Elder's rules that disapprove of the hunting of ungulate cows and calves during spring. In terms of animal movements, caribou hunting which provided a mainstay of winter diet continues into May. This however becomes less dependable due to their unpredictable movements caused in part by increased wolf harassment and predation made easier as the days become warmer and a snow crust develops for wolves to travel on (MacDonnel, 1975). By May, cows and yearlings move to their calving grounds at higher elevations which makes access by hunters more difficult. With respect to moose which usually move down in spring to lowland areas so as to feed on willow patches, they too wander to higher grounds as snow melts in May. To mark the advent of spring thaw many families take a final long hunting trip up the Pelly River to the Pelly Lakes area. With the melting of snow, winter trapping ends, and wage work in the form of building construction in Ross River itself begins.
4.4.2 Indian Summer

The warm months of summer from early June to mid-July immediately following the birth of young animals is a time when hunting for big game species is minimal. In the logic of Ross River Indians, summer is a good period to allow animals to "fatten-up" so that they would be in prime condition for the fall dry meat hunts. Summer is generally the time for occasional hunting mixed with wage employment, and as such, the use of the land and resources is not as intensive as other seasons of the year. Summer diet consists of small game, fish, berries and occasional big game. Outdoor camping at favourite fishing locations along the Pelly or Ross Rivers, or at such lakes as Seagull, Sheldon and Dragon lakes is frequent. To supplement harvested food greater reliance is made on store boughts, paid for in part by wages earned while working for the Indian Band or such government agencies as Forestry, Highways or Public Works. Towards the end of summer, around mid-July, the fall hunt commences.

4.4.3 The Fall Hunt

By mid July or early August large summer fish camps break up. People move off in smaller hunting groups to upland pasturages and special locations which according to their knowledge of animal behavior, distribution and population levels are likely to provide a successful return on hunting effort expended. The focus is moose, caribou and sheep found in upland areas, although small game, grouse, waterfowl and berries are also harvested. The main purpose of the fall hunt is
preparation of dry meat which sees people through early winter. Bull moose and caribou are most highly sought, although once the rut begins in Mid-September the hunt shifts to cows (MacDonnel, 1975). Typically once a kill is made, meat would be brought back to camp where women would cut it into thin strips for smoke drying over a fire.

One of the most important contemporary fall hunting areas is in the headwaters of the Ross and MacMillian Rivers near the MacMillan Pass. It is only at this location that all major big game species can be found and it is the major summer-fall source of caribou. During Indian fall there is much traffic up the North Canol road between Ross River and camping spots such as Blue Mountains, Dragon Lake, Sheldon Lakes. These camping spots serve as jumping off points to hunts taking place within a day travel from camp. Other families use the road system off the Campbell Highway and South Canol, while still other boat along the Pelly River in search of game. Fall is also a time when some men are employed as guides for big-game outfitters.

4.4.4 Early Winter

By late September the fall dry meat hunt is usually over. Moose and caribou are in the post-rut and for the Ross River Indian people their meat has a disagreeable odour. People have returned to Ross River or their main winter bush camp, children are in school and preparations are being made for the advance of winter and commencement of trapping season. Wood is cut and hauled, traps and snares bought, skidoos fixed, and much discussion centres around key fur species and the prices they
will fetch at the Ontario and British Columbia fur markets. As snow covers mountain uplands the Fortin-Finlay caribou herd descends into the lowlands of the Pelly River where they feed on lichens and caribou moss. To supplement a diet of caribou, whitefish are netted and small game such as rabbits and grouse are killed. Although the main beaver hunt takes place in spring, some winter beaver trapping takes place prior to the formation of heavy ice. However, as winter temperatures drop, trapping emphasis shifts to fine furs such as marten, fox and mink. Food harvests consist of caribou, small game and fish supplemented by minimal amounts of store-foods. In terms of winter travel patterns the Campbell Highway from Ross River to bush camps is heavily used. From bush camps people run traplines by either skidoo or dog sled. Although the North Canol Road is closed for winter, some truck traffic between Ross River and Tenas Creek and Marjorie Lake takes place, while trappers using skidoo go as far as Sheldon Lake.

4.4.5 Late Winter

After Christmas, some of which is spent in Ross River socializing, and some with children and families in remote bush camps, life turns to a focus of trapping with emphasis paid on the larger fur mammals such as lynx and fox. During late winter, longer periods are spent in bush camps. When the weather turns cold, attention is paid to skinning and stretching furs and the making of gloves and moccasins. Virtually every male engages in some winter trapping and hunting, while those who are not interested in trapping or can't afford outfitting costs remain in Ross River usually supported by Unemployment Insurance.
The above descriptions provide information about the specific manner in which Ross River Indians have adapted their system of land use according to such variables as animal movements, climatic patterns, and accessibility to hunting locales. Nevertheless, there remains some general features about Northern Athapaskan hunting/trapping economies and their relationship to resource animals that remains to be clarified if we are to gain a more indepth understanding of how an industrial mode of production will affect the dynamic system of Indian movement and use of the land and animal resources.

4.5 General Aspects Of System Of Use

Irrespective of the richness of a region's non-renewable resources, Indian people rooted to a region rely essentially on renewable wildlife resources. As such, they have had to adapt their system of land use and resource harvesting according to the relative supply of a variety of species at different times and places within their particular hunting-trapping territory. Some of the adaptations have been relatively easy, such as the accommodations by the Cree Indians of the James Bay Quebec region where lakes and watersheds support an abundance of beaver (La Russic, 1978) and where the system of land use during part of the annual seasonal round revolves around beaver. Other human adaptations and strategies of renewable resource harvesting are more complex and are closely related to biological productivity, movements, and cycles of resource animals. The boreal forests which comprise most of the Ross River Lands are noted for major changes that
occur to animal populations. Some animals such as waterfowl move in and out seasonally. Others such as caribou and moose shift locations topographically within the hunting territory. To manage harvesting activities, Indian hunters must be aware of these shifts and must quickly modify their harvesting to adapt to the necessities of gaining a livelihood from the land.

Along with seasonal migrations and shifts of animal populations, some animal species undergo dramatic population cycles over time. A most interesting example of the correlation between the biology of resource animal species and harvesting strategies revolves around snowshoe hare populations. At the peak of their cycle population densities can reach as high as 3,000 hare per square mile, and at the low point can drop to 35 hare per square mile. According to Indian hunters the supply and presence of lynx, an animal trapped extensively by the Ross River Indian people, is closely correlated to rabbit populations. If populations are relatively high a certain type of trapping strategy will occur, while on the other hand, if populations dip, a switch to a different strategy and even another species occurs.

Aside from these changes, another type of change relates to a more random and unpredictable decline or increase in the population of some species. For instance, according to Ross River Indian Elders there have been times when populations of salmon have been higher than today, and there have been times when caribou and moose were extremely scarce. What these changes imply is that Indian resource harvesters must be extremely flexible in their patterns of resource harvesting and land
use. They must be willing to move to other areas of their hunting/trapping territory as game moves, and they must be willing to reorient their hunting strategies to other animals as one species becomes less available. The viability of a renewable resource based Indian harvesting economy to meet relatively inelastic food needs depends not only the rotational use of certain geographic areas within a territory, but also on the ability and willingness of hunters to shift reliance to a diversity of resource species.

Another aspect of Indian land and resource use relates to the fact that generally Indian hunters do not pursue scarce species. For instance, if grouse or snowshoe hare populations are low, hunters will typically ignore them. Instead, they will focus on larger and more available species such as moose or caribou, or on small game and fish that are easy to procure. When calculating a hunting strategy numerous factors are taken into account. Among these are the relative population of animal species, their concentration or dispersal, competition or disturbance that is likely from other non-Indian users of the land, climatic conditions, hunting/or trapping technique used, and the amount and variety of food and/or furs that can be harvested in relation to time and resources expended.

In addition to these general comments, which apply to the Ross River Indian people, there are some special features of the indigenous system of land and resource use related to management of habitat and animals. With regard to hunting, it must be understood that the success of hunting depends on knowledge of animals and skills employed. For the
Ross River Indian people, the Elders are experts respecting the land. The transmission of their knowledge is linked to advice and prohibitive sanctions that are orally explained to a younger hunter. Wastage and disrespect towards the animals and land is not tolerated. Likewise the hunting of some animals in spring, or the hunting of yearlings is not sanctioned. Often I have seen occasions when animals of a particular sex or age were not killed even though the opportunity existed to kill them. Elders rules about taboo animals and about not hunting rare species also serve as indigenous practices which regulate land and resource use. Likewise, the dependence on a wide variety of wildlife species acts to distribute hunting pressure away from one or two big-game species. Elders are concerned with preserving a food and fur supply from a variety of species inter-generationally. They understand that beyond the fluctuations and unfamiliarity with the whitemans world the land represents a secure 'savings bank' where a livelihood can dependably be gained. The emphasis is not on maximizing harvests. Needs for food are relatively inelastic and as long as needs are being met by hunting and/or reciprocal exchange the emphasis is placed on a conservative approach to land and resource use.

With regard to trapping, the Ross River Indian Group Trapline is one of two group-traplines hold in the Yukon. The Group trapping area is presently divided into two areas, each with a group trapline leader who together with the Band Council formulates policy respecting usage. Generally, certain extended families use particular areas of the Group Area, while in other regions of the Trapline the area is open for use by
any Band member. Typically, the Indian trappers of Ross River deliberately employ a rotational system of trapping so as to give animals that use a specific area time to increase their productivity. While such self-regulation may not serve the requirements of governments which often seek to maximize resource revenues over the short-term, it has been a way for the Ross River Indian people to insure harvests intergenerationally. Considering that the Ross River Lands have been home for thousands of years and that there is little inclination to leave, the Ross River Indian people have concerns over the longterm ability of the land and animals to sustain themselves, not only for dietary and economic reasons, but also for social-cultural reasons.

Finally, as another chapter explores, it is not only the spatial aspects of Indian land and resource use that are affected by the articulation of the northern Indian mode of production to a multinational industrial mode of production, but also the dynamic subtle 'system' of human adaptations and strategies to land and animals.
5.1 Introduction

This chapter examines the contemporary nature of the Ross River Indian economy from a mode of production perspective. The band economy is a mixed economic base where livelihoods of households depend on the production of food and furs from the land in combination with seasonal wage work. It is an economy where dependence on the land is both economic and cultural, and which has both a history and a future. According to Brody (1981) "conventional economic analysis by (social scientists) systematically misrepresents the Indian economy" and as a consequence Northern Indian Bands are generally seen as without an economic base. As this chapter demonstrates, the Ross River Indian people have a unique mixed economic base which, although changing, is significantly tied to renewable resource harvesting.

At one time the Kaska Indian people that today comprise the Ross River Indian Band depended entirely on the land for their existence. Within the memory of some of the oldest Elders this dependence was entirely at the subsistence level. As a previous chapter demonstrates, this subsistence economy was partially displaced by the turn of the century by a market economy. Trade with the white man comprised not only meat but also furs, and all were essentially dependent not only on what could produced from the land for household needs, but also on whatever surplus could be traded for imported goods. Nonetheless,
during the subsistence era Indian dependence on the land and in particular its renewable resources remained essentially complete.

With the advent of the early 1950's fur prices collapsed and cash inputs for Canada's Indian people from the fur trade economy reached an all time low. As a response, the Canadian government provided Indian people with wages, jobs, welfare, pensions, and education (Cruikshank, 1977). As a result, the dependence on the land of Indian people, including the Ross River Indian Band, is today no longer complete.

This shift is significant but is not as total as might appear superficially. Persons familiar with the Ross River Indian people (Miller, 1972; MacDonnell, 1975; Rigo, 1983; Vera, 1983) suggest that up until the late 1950's, despite the fur trade collapse, many were still largely dependent on the land. With few exceptions many had boats and dog-teams, the diet was almost exclusively country food, and housing was crude by normative Canadian standards. By all appearances, despite the collapse of the fur trade economy, Indian renewable resource harvesting prevailed.

Today 'traditional' life is more hidden and to the casual observer the impression is easily gained that it is non-existent. Dogteams are rare, skin clothing with the exception of mittens and moccasins are infrequent, and the trading posts have been displaced by a Band-owned general store. In addition, one sees modern frame housing, cars and trucks, color television, snowmobiles and refrigerators. For the casual observer these perceptions reinforce the assumption that traditional ways are dead or rapidly dying, and that with the exception
of a few older people, Indian involvement with the land will cease as more younger people become involved in a wage economy. As the examination of the Ross River Indian Band land use and economy indicate, these assumptions are erroneous and based on superficial appearances.

5.2 Methodological Design

The methodological design of the research leading to an understanding of the Ross River Indian economy is based not only on the conceptual framework of a modes of production school of thought, but also on the fact that elsewhere in North America several studies (Feit, 1973; Brice-Bennett, 1977; Inuit Tapirisat of Canada 1976; Weinstein, 1976; JBNQA, 1976, 1978, 1979; Shindelka 1978; Brody, 1981) have designed methodologies to document Indian hunting, trapping and fishing economies.

To gain an understanding of the Ross River Indian Band's economy information was gained not only by daily participant—observation over a two year period, but also by the administration of a questionnaire during the spring of 1983. The confidential questionnaire, designed in cooperation with Band members, attempted to obtain information about harvests and cash income for the one year period, November 1981 to November 1982. Questions were asked about the harvests of various animal species and about income from employment and government programs such as family allowance, child tax credits and unemployment insurance. Information about total Band members income from other government programs such as welfare and old age pensions were obtained directly from Band Council records.
The questionnaire was administered to as many Band members 18 years of age and older who were on the Council for Yukon Indian's enrollment list for the Ross River Indian Band. At the time of research there were 243 people on the Band enrollment list and of these 141 were 18 years of age and older. In all 92 questionnaires were completed by 127 of the 141 adults. For the sake of completeness, information about the harvests and income of non-adult members of a family were also obtained. In total, the questionnaire represents annual harvest and cash income information from approximately 90% of Ross River Indian people.

5.3 **Ross River Indian System of 'Property' Rights and Resource Management**

The Ross River Indian people have occupied and used their traditional lands since time immemorial. They have never signed any treaties with the Government of Canada respecting their lands. Presently, comprehensive Yukon Indian Land claim negotiations are taking place with the Government of Canada. At dispute is the aboriginal claim by Yukon Indians people for the Yukon Territory. Negotiations which have been progressing for over ten years have almost reached culmination in an interim-agreement in principle between the Council of Yukon Indians, representing all twelve Yukon Indian Bands, and the Government of Canada. The implementation of a final agreement sometime in the future will have enormous implication for all Yukon Indian people, including the Ross River Indian people. Two aspects of Ross River Indian life that will be affected pertain to the prevailing Indian system of 'property rights and wildlife resource management.'
5.3.1 The Indian System of ‘Property Rights’

The Ross River Indian Band utilizes the land and resources within their Group Trapline area for renewable resource harvesting. This Group Trapline area, which is a part of the traditional lands that were historically used by descendants of today's Band members is common property. All band members have access to it and no one can partition sections off for individual ownership. The land is a heritage of all Band members by virtue of their history, legends, stories, naming of geographic sites, and because of their occupancy and usage. While access is guaranteed to all Band members by virtue of being born within Band society, the right to harvest in particular regions of the Group trapline is regulated. Explicitly there exists a social system used to promote harmony and allocate wildlife resources so that all can benefit. For the most part, genealogical history is significant in deciding who has pre-eminent rights to hunt, trap and fish in particular locations of the Group Trapline. People are not allowed to harvest where and how they want—there are customs and rules to follow which seem to be common knowledge of all Band members. Although the Band Council, together with assistance from Elders and Group trapline leaders acts to resolve disputes and to propose guidelines applicable to all, for the most part the allocation of hunting-trapping territories is according to family and inter-family genealogy.

5.3.2 The Indian System of Wildlife Management

In addition to these customs, which prescribe the pattern whereby individuals or families have pre-eminent rights of occupancy and use
within specific areas of the Group Trapline, there exists a set of oral customs regarding wildlife, its harvesting, use and distribution. These Band rules whose appropriateness is affected by both Indian needs and the conditions of wildlife species have the general effect of conserving wildlife harvests and minimizing waste of country foods. The customs specify who can hunt/trap, where they can hunt/trap, what animals, what sex, what age can be hunted, which animals are taboo, what respects are to be paid to animals and how food is to be distributed so as to minimize spoilage. The oral rules emanate from the Elders of the Band and are enforced by means of kin-censure by both Elders and respected senior hunters and trappers. Like anywhere, rules can occasionally be broken, but in the authors two year experience with the Ross River Indian Band conservative and efficient use of animals was the norm. Along with these rules, conservative Band harvesting of wildlife occurs because of the immense diversity of wildlife species which are harvested. While big game is important, the Ross River Indian economy also relies on small game, fish and store-bought food. The presence of these social customs regarding the allocation of hunting/traping rights for specific areas of Band lands, and the presence of Elders customs respecting renewable resource harvesting disputes the claim by Theberge (1981) that no self-regulatory wildlife harvesting mechanism existed amongst northern aboriginal peoples, and that hunting was strictly a predator-prey relationship. In terms of Ross River, the opposite is true. The Ross River Indian people have not only occupied and used their traditional lands since time immemorial but they have done so
within an indigenous system that regulated who had access to what lands for harvesting, and how harvesting practices were to be carried out.

5.4 The Productive Element

The Ross River Indian people rely on thirty-four wildlife species for food and furs (cf.: Table 3.1). These include six big game species, three edible fur mammals, ten non-edible fur mammals, six small game animals, two species of waterfowl and approximately seven major fish species. In addition to these, Band members gather six different types of berries and various roots and plants for food and medicinal purposes. Firewood is gathered as the primary household fuel by approximately 98% of all households.

5.4.1 Who Works?

In terms of use-value production (Friedman and Weaver, 1979) the exploitation of labor is self-regulated and is incurred to whatever level is necessary to meet simple reproduction needs of a household. The primary unit of use-value production is the household, defined as a main residence, or domicile, for a person or group of persons. For the Ross River Indian Band average household size was 3.9 persons, markedly less than the national Indian average of 5.6 persons (DIAND 1980).

Typically use-value production had a sexual division of labor with men assuming major responsibilities for running traplines, fishing, and hunting. Women participated in these activities to a lesser degree and they assumed primary responsibility for raising children, producing
simple commodities such as handicrafts, mittens and mukluks, and butchering and preserving food harvested from the land. The results of the questionnaire (Dimitrov and Weinstein (1984) indicated that 88.0% of the sample population participated in hunting and had successfully killed game during the one year period which the questionnaire surveyed. Of these, 100.0% of all adult men sampled indicated that they had hunted and had successfully harvested game. In terms of trapping, 57.6% of the sample population indicated that they had trapped fur mammals and of these 75.0% were men. Fishing by nets was undertaken by 23.9% of the sample population while 80.4% indicated that they fished with line and hook.

Active trappers came from all age groups (cf: Table 5.1). An analysis of this information indicates that the youngest age group were the most successful trappers of mink, and with the exception of lynx were the third most successful age group in terms of overall trapping of fur mammals. The most successful trappers were generally those in the 30-49 age class followed by those between the ages of 50 and 59. Although information is not available regarding the comparative importance of human factors to influence trapping returns, it is known that the most important factors include amount of time involved in seasonal or year-round wage employment, age, sex, the adequacy of trapping outfit and skill. A reference to questionnaire results regarding employment patterns sheds some light on the factors of sex and wage employment patterns in relation to participation in trapping.

According to the questionnaire results, sixty-one men and seventeen women reported holding jobs between November 1981 and November
1982. Of the 60 jobs held by men 62.3% were three months or less duration, 26.2% were of four to six month duration, 6.5% of seven to nine months duration and 4.9% of ten to twelve month duration. On the other hand 58.8% of women employed worked between ten and twelve months. This fact, that 88.5% of the men who reported working had worked only for six months or less, and principally during the spring and summer, strongly correlates with the results of both the questionnaire and participant observation that men were the principal seasonal wage workers and seasonal trappers, while women were the more frequent regular wage workers.

Table 5.1
Age of Trappers and Harvest Returns

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Beaver</th>
<th>Lynx</th>
<th>Marten</th>
<th>Fox</th>
<th>Muskrat</th>
<th>Mink</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 and under</td>
<td>17.3%</td>
<td>14.4</td>
<td>15.2</td>
<td>18.4</td>
<td>23.2</td>
<td>30.4</td>
</tr>
<tr>
<td>30-49</td>
<td>27.1%</td>
<td>48.0</td>
<td>29.3</td>
<td>41.2</td>
<td>19.4</td>
<td>24.1</td>
</tr>
<tr>
<td>50-59</td>
<td>40.0%</td>
<td>19.5</td>
<td>12.4</td>
<td>22.7</td>
<td>32.8</td>
<td>20.5</td>
</tr>
<tr>
<td>60 +</td>
<td>15.9%</td>
<td>18.2</td>
<td>43.0</td>
<td>17.8</td>
<td>24.6</td>
<td>25.0</td>
</tr>
</tbody>
</table>

5.4.2 Country Food Production

The key to understanding the Indian economy of Ross River revolves around measuring the volume of country food and furs that come from the land. The questionnaire provided confidential information
regarding numbers of species of animals harvested. As confidentiality was assured to all respondents and since the Band has not authorized the release of raw data, a method was devised to give harvest figures in terms of quantities of edible meat per major animal species grouping.

Given the availability of information respecting harvests, the question arose as to what proportion was available for human consumption. Converting harvest kills into estimates of edible food available for human consumption is not a simple task. While this thesis does not intend to go heavily into the exact methodology of calculations, a short review of how edible food weight values were calculated is essential.

In general, to calculate pounds of edible food available for human consumption three steps are required. Firstly, a whole animal weight must be obtained; secondly the question of what proportion of the animal is edible must be determined; and finally, an estimate of the age/sex structure of the animal population harvested is required.

Table 5.2 (Dimitrov and Weinstein, 1984) provides an estimate of the edible food portion available for human consumption based on the Ross River animal resource species harvested. The problem of converting the numbers and age/sex structure of animals harvested to total edible weights was circumvented by relying heavily on the animal weight and edible proportion estimates of the James Bay Cree harvesting study (JBNARHC 1982). The Cree Harvesting Research Committee report is to-date the most extensive review of biological literature respecting whole animal weights and the proportion of food available for human
Table 5.2  Food Weight Values Used to Calculate Ross River Indian Bush Food Harvests

<table>
<thead>
<tr>
<th>Species</th>
<th>Food Portion (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moose</td>
<td>621.0</td>
</tr>
<tr>
<td>Caribou</td>
<td>180.0</td>
</tr>
<tr>
<td>Sheep</td>
<td>85.0</td>
</tr>
<tr>
<td>Beaver</td>
<td>18.0</td>
</tr>
<tr>
<td>Lynx</td>
<td>8.5*</td>
</tr>
<tr>
<td>Marten</td>
<td>0.0</td>
</tr>
<tr>
<td>Weasel</td>
<td>0.0</td>
</tr>
<tr>
<td>Wolverine</td>
<td>0.0</td>
</tr>
<tr>
<td>Fox</td>
<td>0.0</td>
</tr>
<tr>
<td>Wolf</td>
<td>0.0</td>
</tr>
<tr>
<td>Coyote</td>
<td>0.0</td>
</tr>
<tr>
<td>Muskrat</td>
<td>0.0</td>
</tr>
<tr>
<td>Squirrel</td>
<td>0.0</td>
</tr>
<tr>
<td>Fisher</td>
<td>0.0</td>
</tr>
<tr>
<td>Mink</td>
<td>0.0</td>
</tr>
<tr>
<td>Otter</td>
<td>0.0</td>
</tr>
<tr>
<td>Bears</td>
<td>210.0</td>
</tr>
<tr>
<td>Geese</td>
<td>4.0</td>
</tr>
<tr>
<td>Ducks</td>
<td>1.4</td>
</tr>
<tr>
<td>Rabbits</td>
<td>1.9</td>
</tr>
<tr>
<td>Porcupine</td>
<td>10.5</td>
</tr>
<tr>
<td>Gophers</td>
<td>1.1</td>
</tr>
<tr>
<td>Ground Hogs</td>
<td>9.0</td>
</tr>
<tr>
<td>Grouses</td>
<td>1.2</td>
</tr>
<tr>
<td>Ptarmigans</td>
<td>0.7</td>
</tr>
<tr>
<td>Lake Trout</td>
<td>1.2</td>
</tr>
<tr>
<td>Whitefishes</td>
<td>2.0</td>
</tr>
<tr>
<td>Salmon</td>
<td>21.3</td>
</tr>
<tr>
<td>Grayling</td>
<td>1.0</td>
</tr>
<tr>
<td>Jackfish</td>
<td>2.2</td>
</tr>
<tr>
<td>Suckers</td>
<td>1.6</td>
</tr>
<tr>
<td>Lingcod</td>
<td>0.9</td>
</tr>
</tbody>
</table>

*Only about 1% of lynx meat is consumed by people. We have modified our meat harvest figures to take this into account.
consumption from the harvests of sub-artic wildlife resources.
According to the James Bay Cree and Northern Quebec study (1971-72 to 1978-79) food values "... assumed have been from the lower portion of the range of reported values. In most cases, ... the final weights used err on the conservative side and should be treated as minimums."
For the most part the Ross River edible weight figures rely on the JBNQHRC calculations with minor adjustments to account for differing whole body weights of such species as moose, caribou and some fish species.

According to (Dimitrov and Weinstein, 1984) the renewable harvesting sector of the Ross River Indian Band economy produced 138,574 pounds of edible meat during the period November 1981 - November 1982 (Table 5.3). Assuming that the ten percent of the Ross River Band population that did not complete the questionnaire harvested similar amounts of animals, the figure should be adjusted upwards ten percent to 152,431 pounds.

Table 5.3
Annual Edible Meat Harvested: Ross River Indian Band

<table>
<thead>
<tr>
<th>Food Harvest (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Game Animals</td>
</tr>
<tr>
<td>Small Game Animals</td>
</tr>
<tr>
<td>Edible Fur Mammals</td>
</tr>
<tr>
<td>Waterfowl</td>
</tr>
<tr>
<td>Fish</td>
</tr>
</tbody>
</table>

Total Questionnaire Results 138,574 pounds
Harvest Adjusted for Total Population 152,431 pounds
Looked at this from other perspectives, these figures indicate that about 1.7 pounds of meat per capita per day comes from Ross River Indian harvesting activity. Considering that the average Ross River Indian household size is 3.9 persons this implies that on the average about 6.6 pounds of meat per household per day, or 198 pounds per month, comes from renewable resource harvesting. These figures are comparable to results available from other areas of Canadian north. Brody (1981), reporting on the Indian economy of northeatern British Columbia, indicates that meat consumption averaged between one pound per capita daily up to 2.24 pounds. These meat production figures underline the importance of meat for Ross River Indian households and attest to the amazing productivity of the 141 adult Band members that comprised the sample population.

5.4.3 Imputed Value of Country Food Production

The non-monetary figures of meat production are but one way to present the productivity of the food harvesting sector of the Ross River Indian economy. For purposes of comparing this sector with other economic activities it is necessary to set a dollar equivalence value to meat produced from the land. This type of conversion is not only difficult, but to Indian people is actually misleading and repugnant. The cultural, psychological and economic importance of hunting for Indian people cannot be valued in dollars and cents. Hunting is the essence of culture and a way of life. Another problem is that country food is not replaceable either nutritionally or taste-preference wise for many Indian people. To equate pounds of meat produced to monetary
terms is simplistic reductionism—and for potential non-renewable resource developers to think that the loss of hunting territories and a way of life can simply be compensated by providing the equivalent dollar value is yet another gross simplification.

Dollar equivalent values for country food are calculated only to provide information about the importance of meat within the mixed Ross River Band economy. It is recognized that store bought meat and country food do not have the same nutritional values. Country food have significantly higher protein than commercial meats (Berger 1977:14) and while it is tempting to try and calculate the dollar value of country food taking into account nutritional factors, the calculations would be extremely complex and subject to much controversy. For the sake of simplicity, calculations are based on pound for pound values. As suggested by Justice Thomas Berger in the MacKenzie Valley Pipeline Inquiry (Berger 1977:14) local retail costs of commercial meat are used to calculate dollar equivalent values for country food. In this case the retail costs of meat at the Band store are utilized as that is the manner in which the overwhelming majority of Ross River Indian people would purchase meat if country food was not locally available. Table 5.4 (Dimitrov and Weinstein, 1984) shows the types of commercial meats and their Ross River retail prices that are used to substitute for various categories of country food. The summer 1983 prices are not for the most expensive cuts of commercial meat.
Table 5.4
Retail Cash Equivalents for Country Food

<table>
<thead>
<tr>
<th>Category</th>
<th>Commercial Meat</th>
<th>$ Value/Pound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big game mammals</td>
<td>Beef</td>
<td>$3.40</td>
</tr>
<tr>
<td>Small game animals</td>
<td>Pork</td>
<td>$3.37</td>
</tr>
<tr>
<td>Edible fur mammals</td>
<td>Chicken</td>
<td>$2.29</td>
</tr>
<tr>
<td>Fish</td>
<td>Whitefish</td>
<td>$1.79</td>
</tr>
</tbody>
</table>

Table 5.5 (Dimitrov and Weinstein, 1984) shows the estimates of the dollar equivalents for Ross River country food harvests. This figure of $416,062 for the one year period November 1981 to November 1982 represents 90% of the Band population, when adjusted upwards 10 percent assuming again an equivalence of harvest, the imputed country food value comes to $457,668.

Table 5.5
Imputed Dollar Value of Ross River Annual Meat Harvest

<table>
<thead>
<tr>
<th>Category</th>
<th>Pounds of Food</th>
<th>$ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Game Animals</td>
<td>89,159</td>
<td>303,130.40</td>
</tr>
<tr>
<td>Small Game animals</td>
<td>11,826</td>
<td>39,853.62</td>
</tr>
<tr>
<td>Edible Fur Mammals</td>
<td>3,434</td>
<td>11,572.58</td>
</tr>
<tr>
<td>Waterfowl</td>
<td>736</td>
<td>1,685.44</td>
</tr>
<tr>
<td>Fish</td>
<td>33,419</td>
<td>59,820.01</td>
</tr>
<tr>
<td>Questionnaire Totals</td>
<td>138,574</td>
<td>416,062.05</td>
</tr>
<tr>
<td>Adjusted totals</td>
<td>152,431</td>
<td>457,668.25</td>
</tr>
</tbody>
</table>
Information from the authors' participant-observation indicates that Ross River Indian Band households are virtually self-sufficient in terms of meat supply. This is confirmed by figures from the Ross River Indian Band store for 1981/1982 which indicated that annual meat sales only amounted to $56,109. Assuming that this represents only one-half of the commercial meat purchases by Band members, with the rest coming from other retail outlets in Faro or Whitehorse, this implies that about $112,218 worth of commercial meats would have been bought by Band members. These figures indicate that approximately 80% of the Band's annual meat requirements are produced by the hunting efforts of Band members.

This rate of production of country food by Ross River Indian hunters shatters the myth that the Ross River Indian labor force is idle and non-productive. As reported previously, 88% of the sample population of 141 persons hunted and successfully killed game during the one year period which the questionnaire covered. This implies that 124 people were the primary country food producers. Assuming that each harvested approximately an equal amount of food, this means that each Indian hunter produced approximately 1129 pounds of country food annually. In terms of imputed dollar values as reported in Figure 5.5, the 124 active hunters each produced approximately $3,690.87 worth of country food annually, or about $307.57 worth a month. These production figures for the entire Band undoubtedly vary from year to year, but in the view of the Ross River Indian Band the one year period examined was representative of a typical year of harvests. The production values by
individual producers are given only as annual and monthly averages, as actual levels of production by individual hunters varies not only from person to person but from season to season. At some times of the year very little meat comes into the Band, in addition, during some times of the year some persons hunt more intensively than others.

5.4.4 Trapping and Handicraft Production

To estimate the total Band income that comes from renewable resource harvesting, or the northern Indian mode of production, monies that come from trapping and the sale of handicrafts must also be included. The questionnaire also asked questions about annual harvests for fur mammals for the one year period November 1981 to November 1982. Information about handicraft sales was received from the Band Manager. To calculate the Band's trapping income the questionnaire returns specifying numbers of fur mammals trapped were multiplied by average Yukon fur prices for the year. A figure of $192,533 was obtained which was adjusted upwards 10% to give an estimated annual value of $211,786 from the trapping sector. Considering that 57.5% of the sample population, or 81 people reported to be active and successful trappers this implies that on the average, assuming no variances in productivity, that each trapper produced approximately $2,614.64 worth of furs. In addition to this, $10,866 was reported as revenue from handicraft sales.

The Ross River Indian Band's total imputed annual production from the renewable resource harvesting sector is estimated (Table 5.6) to be $680,320 for the sample year. Discounting variances in productivity
levels amongst individual producers this implies that the 141 members of the sample population produced an estimated $4,824.96 worth of furs, food, and handicrafts during the one year sample period. In actuality however, the real value of the household sector production exceeds these figures. The dollar value estimates for other use value products made for household use such as firewood, plant harvest for food and medicinal purposes, mitts, snowshoes, coats and mukluks have not been included because of the difficulty in quantifying these products and converting them to a dollar value. Just calculating an imputed dollar value on household production of firewood would significantly increase the imputed dollar value as approximately 98% of all Ross River Indian households rely on wood as the primary home fuel.

Table 5.6

<table>
<thead>
<tr>
<th>Food Production</th>
<th>$457,668</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fur Income</td>
<td>$211,786</td>
</tr>
<tr>
<td>Handicraft Income</td>
<td>$10,866</td>
</tr>
<tr>
<td>Total Value</td>
<td>$680,320</td>
</tr>
</tbody>
</table>

5.5 **Wage and Transfer Payment Incomes**

To effectively participate in renewable resource harvesting from the fixed locations of the village or a bush bash camp it is necessary to purchase a modern hunting, trapping, fishing outfit, a cost that
might run into thousands of dollars (see Table 5.7). Therefore, in addition to cash and income in-kind produced from renewable resource harvesting many Band members have seasonal or full-time wage employment and most receive some money from government transfer payments. In addition, through the Council for Yukon Land Claim negotiations, approximately 15 Elders sixty years of age and older receive 'elders benefits.' As a result the Band's economy has become a mixed renewable resource harvesting and wage economy.

5.5.1 Wage Income and It's Sources

In terms of monetary income earned from wage employment the results of the questionnaire indicate a before tax gross income of $548,072. Assuming once again that 10% of the people not covered by the sample earned approximately the equivalent amount, this would increase the gross wage earnings to $602,879 for the one year period.

In addition, the questionnaire also provided information about the relative importance of employers in terms of providing both jobs and income to Ross River Indian people during the sample year 1981-1982. That sample year was prior to the recession affecting the Yukon. All mines, including the Cyprus Anvil Amine were fully operational.

The results indicated that the Band was the most important employer for Band member providing a full 50% of the 78 jobs and 50% of all gross income for the 90% of all Band members who completed the questionnaire. Government employment by both federal and territorial departments were the next important employers providing 23% of the jobs
Table 5.7 1983 Retail Costs of Harvesting Gear, Ross River

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeping bags</td>
<td>$300 - 530</td>
</tr>
<tr>
<td>Assorted firearms</td>
<td>$1,000 - 1,500</td>
</tr>
<tr>
<td>Truck</td>
<td>$3,000 - 7,000</td>
</tr>
<tr>
<td>Reconditioned truck motor</td>
<td>$1,600 - 1,800</td>
</tr>
<tr>
<td>Skidoo</td>
<td></td>
</tr>
<tr>
<td>- new</td>
<td>$1,900</td>
</tr>
<tr>
<td>- used</td>
<td>$700 - 1,200</td>
</tr>
<tr>
<td>Skidoo toboggan</td>
<td>$50 - 300</td>
</tr>
<tr>
<td>New skidoo motor</td>
<td></td>
</tr>
<tr>
<td>- single track</td>
<td>$450</td>
</tr>
<tr>
<td>- double track</td>
<td>$1,000</td>
</tr>
<tr>
<td>Skidoo maintenance/year</td>
<td>$500</td>
</tr>
<tr>
<td>24 foot boat</td>
<td>$1,200 - 2,000</td>
</tr>
<tr>
<td>20 HP boat motor</td>
<td>$1,500 - 1,800</td>
</tr>
<tr>
<td>Gasoline/litre</td>
<td>$0.62</td>
</tr>
<tr>
<td>Wall tent</td>
<td>$290</td>
</tr>
<tr>
<td>Tent wood stove</td>
<td>$70</td>
</tr>
<tr>
<td>Tarpaulins</td>
<td>$40 each</td>
</tr>
<tr>
<td>Trapping cabins</td>
<td>$2,000</td>
</tr>
<tr>
<td>Axe</td>
<td>$35</td>
</tr>
<tr>
<td>Knives</td>
<td>$100</td>
</tr>
<tr>
<td>Fishing nets</td>
<td>$60 - 150</td>
</tr>
<tr>
<td>Traps and snares</td>
<td>$150 - 300 season</td>
</tr>
<tr>
<td>Bullets and shells</td>
<td>various prices</td>
</tr>
</tbody>
</table>

In addition there are costs for bush clothing, rental costs of two way radios for extended trips, and the cost of airplane charters into more remote regions of the Ross River Indian lands.
and 27.8% of the gross wage income earned. Local Indian businesses, local non-Indian businesses, the Churches, game outfitters, and mining companies provided about 21.0% of the jobs and 15.7% of all gross income. The Council for Yukon Indians provided 3% of the jobs and 6.5% of all gross wage income, while mining companies, the major non-Indian economic sector in the region, provided only 3.0% of all jobs and 2.6% of all gross wage incomes.

5.5.2 Transfer Payments

Table 5.8 presents income from various transfer payments.

Information regarding unemployment insurance, family allowances and the

| Table 5.8  |
| Ross River Annual Income from Transfer Payments |

<table>
<thead>
<tr>
<th>Program</th>
<th>Amount (in $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment Insurance</td>
<td>80,962</td>
</tr>
<tr>
<td>Family Allowance</td>
<td>33,612</td>
</tr>
<tr>
<td>Child Tax Credit</td>
<td>30,939</td>
</tr>
<tr>
<td>Federal Pensions</td>
<td>36,000</td>
</tr>
<tr>
<td>YTG Pension</td>
<td>14,000</td>
</tr>
<tr>
<td>CYI Elders Benefits</td>
<td>42,408</td>
</tr>
<tr>
<td>Social Assistance: Employables</td>
<td>42,241</td>
</tr>
<tr>
<td>Social Assistance: Unemployables</td>
<td>75,388</td>
</tr>
<tr>
<td>Social Assistance Special Needs</td>
<td>6,487</td>
</tr>
<tr>
<td>Guardians Allowance</td>
<td>15,839</td>
</tr>
<tr>
<td><strong>Estimated Total</strong></td>
<td><strong>378,276</strong></td>
</tr>
</tbody>
</table>
child tax credit came from the questionnaire, while incomes from federal and Yukon government pensions, Council for Yukon Indians Elders Benefits, social assistance and guardian allowances came directly from the Band Council's records. As noted previously, incomes have been increased 10% to account for the part of the population not covered by the questionnaire.

To estimate the Band's total annual income the contributions from the various sectors: the renewable resource harvesting sector, wage labor and transfer payments must be totalled. As Table 5.9 indicates the estimated annual gross income from all sectors is estimated at $1,661,475, with transfer payments providing about $378,276 or 22.8%, wage employment providing about $602,879 or 36.3%, and 41% or $680,320 deriving from harvesting activities.

Table 5.9
Total Band Income: All Sectors

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer Payments</td>
<td>$378,276</td>
<td>22.8%</td>
</tr>
<tr>
<td>Wage Employment</td>
<td>602,879</td>
<td>36.3%</td>
</tr>
<tr>
<td>Harvesting Sectors</td>
<td>680,320</td>
<td>41.0%</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>$1,661,475</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

These figures are not just abstractions when considering the daily reality of earning a living for Ross River Indian Band members. What they imply amongst other things is that the two productive sectors of the bands economy produce an estimated income of $1,283,199 which
accounts for 77.3% of all gross personal annual income. Harvesting activities contribute 53% towards annual household livelihoods and wage employment contribute 47% of total gross income. Assuming an equivalency of individual productive output, these figures imply that the 141 adult producers each produced approximately $4,275 from wage employment and approximately $4,824.96 from the harvests of renewable resources. Looked at another way, the information about the Band economy reveals that approximately 1.7 pounds of edible meat per capita is produced per day for consumption, and that the mixed wage and harvesting income of the Ross River Indian Band economy provided an annual per capita income equivalent of $6,837.34. Without the productivity of the harvesting sector the Ross River Indian per capita income would only have been $4,037.67, considerably lower than the 1981 Yukon per capita income of $11,997.30 (pers. comm. Glen Grant, YTG Department of Economic Development and Tourism).

In some ways the monetary analysis of the mixed Ross River Indian economy tends to undervalue the importance of meat harvests. The requirements of the Band's households for meat are relatively inelastic over time, whereas the needs for cash are relatively elastic. Meat, unlike cash is produced and distributed via a reciprocal exchange network that insures that people have adequate levels of meat during the year. Unlike dollars, meat cannot be 'banked' and thus is not used to accumulate wealth. Given the inelastic requirements for meat and the fact that it cannot be accumulated as cash, and given an increasing amount of jobs and accumulated wage incomes, it might appear that over
time the proportional importance of meat harvests relative to other Band sectors have been declining, even if harvests remained constant.

5.6 Non-Quantitative Aspects of the Economy

This presentation of the productive aspects of the Ross River Indian Band's economy would not be complete without mention of other non-numerical aspects of the Band economy. With regard to consumption, it has already been mentioned that requirements for meat are relatively inelastic and are based on household needs for country food. This observation supports the conclusions of Chaynov 1925:262) who suggests that "... the degree of self-regulation in (use value economic production systems) is determined by a particular equilibrium between demand satisfaction and the drudgery of the labor itself. As soon as equilibrium is reached continuing to work becomes pointless, as any further labor expenditure becomes ... harder to endure than is foregoing its economic effects."

In addition to this self-regulation, meat consumption levels are set by the productivity and skills of the adult producers in relation to cyclic fluctuations of animal populations, and their densities over space/time. Levels of consumption are also determined by a distribution mechanism that ensures that all members of extended families who require meat have access to it via reciprocal exchange. This reciprocal kinship exchange serves as a cultural risk-aversion mechanism that creates a safety net whereby each household, by virtue of its inter-family connection, has adequate supplies of a basic level of country food.
Regarding cash requirements, Ross River Indians have seemingly an elastic need for cash. In most instances however, cash and involvement in a wage or business activity are not ends in themselves. Rather, they are means not only to purchase consumer items, but more importantly to obtain producer goods necessary for continued participation in renewable resource harvesting activities.

5.7 The Band Economy: A Conclusion

In conclusion, this chapter has focused on numbers and the utilitarian aspects of the mixed Ross River Indian Band economy. Such an abstraction focusing simply on the economic aspects of a culture, does not accurately convey the reality of how Ross River Indian people think about themselves and the future. From a mode of production perspective the continued capacity of any society to function and exist depends on its ability to recreate or reproduce the means and relations of production (Clark, 1980:229). Renewable resource harvesting is essentially what the way of life is all about, and cash incomes represent a means to participate in those activities. There are other aspects to the Indian mixed economy and the continuance of the Band's economy and culture depends not only on cash inputs and sound management of the region's bioproductivity, but also upon certain socio-cultural elements of Band society.

Renewable resource harvesting that produces use-value goods for household consumption and simple commodities (furs, handicrafts) for resale on the market are not individual endeavours. They would not be
possible without a sense of historical rootedness to the land and an
intimate knowledge of animals which intergenerational rootedness
provides. It would not be possible without collective contributions and
divisions of labor within the band. The social relationships among
friends and extended families and the role of Elders are vital
underpinnings to Indian economy. To be a successful hunter/trapper
specialized skills and information about animal behaviour and
hunting/trapping must not only be acquired. One must continually
maintain friendly social relations with extended family and friends
through such customs as 'reciprocity.' This reciprocity does not just
involve the exchange of meat but also the sharing of skills and
information about animal sightings and signs, the making of dry-meat and
bush clothing by the women of the Band; the sharing of labor to
transport meat out of the bush, and most importantly the Indian
education and caring for of children. In essence, the entire
perpetuation of the Ross River Indian mixed economy is linked to the
socio-cultural fabric of Band society which is closely interwoven with
renewable resource harvesting, that is in turn intimately tied to
changes in the region's ecosystem in a dynamic manner that is beyond
numerical dollar value calculations.

As Chapter 6 indicates the Ross River Indian Band, like other
rural Indian Bands throughout Canada, are potentially facing large scale
industrial developments on their traditional economic territory. As
with the fur trade, the CANOL project, and the Cyprus Anvil regional
developments, the proposed industrialization of the region will bring
changes, all of which will require Indian adaptations. The Ross River Indian people want to continue harvesting country food and furs and they want their close association and cultural continuity with the land and animals to be maintained. This is not to state that there are no requirements for cash and wage jobs, but rather that these needs are not seen as an either/or replacement of the Indian renewable resource economy and its supportive socio-cultural underpinnings. Seven years ago Mr. Thomas Berger made the assertion that those who advocate large scale industrial development in the North have "... assumed that the native economy is moribund and that native people should therefore be induced to enter wage employment (Berger, 1977, Vol. 1). The last three chapters have presented solid evidence that this assumption, still held by many Indian, government and industry decision makers, is fallacious. This is not to say however, that the Ross River people do not want wage work but rather they do not want to

... depend exclusively on industrial wage employment  
... (for) if the production of country food for local consumption ceases ... than the self-employed will certainly become the unemployed. (Berger, 1977, Vol. 1)
CHAPTER 6
TRANSFORMATION EFFECTS OF CAPITALIST PENETRATION
ON THE NORTHERN INDIAN MODE OF PRODUCTION

The previous chapters have looked at the history of the Ross River Indian Band and the dynamics of its mode of production. In this chapter we examine future industrial developments proposed for Ross River Indian lands and explore some difficulties in northern Indian adaptation to regional industrial modernization. It is argued that preservation of Indian development options to preserve and enhance the simple reproduction of Indian renewable resource harvesting requires an understanding not only of the general dynamics of Indian modes of production, but also of the transformation effects thereupon by a multinational capitalist mode of production and the capitalist commoditisation process (Asch, 1977; Brody, 1981).

6.1 Proposed Resource Developments: Ross River Region

Many types of developments are being proposed for the Ross River region. These includes several mining projects (Figure 6.1), two hydroelectric generating facilities, a possible new townsite and improvements to regional transportation infrastructure. It is possible that within the next ten years as many as six new mining operations may be in operation within 125 miles of Ross River. These would be Yukon Barite Company's barite claim at Tea; Cyprus Anvil Mining Corporation's Ross River coal leases; the development of a tungsten mine at MacTung in
POTENTIAL MINERAL DEVELOPMENT PROJECTS

(FROM: Reid Crowther & Partner, 1983b)
the MacMillan Pass by AMAX Ltd. of Canada; Hudson Bay Exploration and Development Company's lead-zinc claim at Tom; Aberford Resource's lead and zinc deposit at Jason; and several lead-zinc claims in the Howards Pass area of the Ross River Region. Given the current economic recession and low metal prices, the likelihood of all these mines being operational by the 1990's is not great. Nonetheless, some could be operational by that time and it is likely that much of the regional infrastructure will be in place to support other developments.

With the exception of the Yukon Barite claim which has seen some preliminary construction and mining before economic and legal problems temporarily closed it down, the mining projects are all in various phases of the planning stage. The Ross River coal project has completed virtually all necessary land use applications and with the resumption of the Cyprus Anvil Mine would be ready for rapid start-up. With respect to the MacMillan and Howards Pass developments, extensive engineering planning has been completed only for Amax's MacTung tungsten claim. According to Reid Crowthers and Partners (1982), best estimates place the construction phase of this mine between 1984 and 1986. Should the recession and low metal prices continue however, development of the MacTung mine may be later.

Presently, the Department of Indian Affairs and Northern Development are reconstructing the North Canol Road so as to facilitate an all-season linkage between mining developments and potential markets. With the completion of this road reconstruction and an improvement in world metal prices the basic infrastructure will have
been laid for the development not only of the MacTung mine but conceivably other mining claims in the Howards and MacMillan Pass area.

The MacMillan Pass Task Force, an ad hoc joint corporate and government regional planning body concluded that over the short term diesel electric generators would suffice as power for the MacMillan Pass mines, but as other mines come into operation hydroelectric or thermal generating plants would be required (Reid Crowther and Partners, 1982). The Northern Canada Power Commission (NCPC) has completed initial engineering and environmental studies of three potential hydroelectric generating sites located on Ross River Indian Traditional lands. According to NCPC, the Ross Canyon and the Hoole Canyon sites have excellent potential should demand require their development (Reid Crowther and Partners, 1982).

At this point it is clear that changes which the Ross River Indian Band may have to adapt to could result not from a single project but rather from a regional modernization that could encompass several mining projects, transportation and energy infrastructure, the periodic influxes of non-Indian corporate and government workers, and conceivably greater competition from sports hunters. Prior Band experience with the Canol project and the Cyprus Anvil Mine developments have raised doubts amongst Band Members regarding the validity of government and corporate perceptions that Band members would only benefit from nearby industrial projects because of job and business opportunities that may accompany them.
6.2 *The Stresses Of Industrial Labour: An Indian View*

Band members have experienced problems in adapting to industrial wage employment and commercial business. These problems are in part due to a lack of training and education, in part due to a lack of understanding and resolve by employers and government in assisting them to cope with change, and in part due to the problems of inter-racial tension and union membership. The following quotes of Ross River Indian Band members reveal aspects of their experiences in adapting to industrial wage labour.

Part of the problem with working at Faro (Cyprus Anvil), people weren't getting to work on time. An Indian person would start late in the day and work into the night. A white person looks at their watch all the time.

Because of transportation problems, or whatever, they get late or miss a shift, and they just don't bother going back.

Communication problems between the white person and the Indian person. They got different ideas, different culture.

When you work for a mine you have to work at their pace.

I don't like the routine, I don't like the change of shifts, just when you get used to it they shift you around. Bosses—as long as I'm doing it, I don't like them looking down my back.

Day in, day out, routine. Go to work, do your job, come home. Probably would have stayed one more year, I doubt even that. I couldn't see myself driving truck like that, production oriented, same routine.

Unions are another problem, Indians get fired first, hired last.

Problems in advancing yourself in a mine, you have to wait your turn to get seniority.
On several occasions, Ross River Indian people expressed problems in adjusting to working conditions at Cyprus Anvil:

They put me in the dryer, that is when I quit. I had that mask on, still doesn't help. Is it ever hot in there

Oh God, a real hazard in the mill, stink, dust, noise all the time.

My ex-husband tried to work in the mill at Anvil, didn't like the chemicals so he quit. (XX) tried working there, quit and come home; (XX) quit and come back.

These perceived problems all exist to some degree, nonetheless one fact that this case study has demonstrated is that Indian labour is not lazy, and the 141 active producers of Ross River have enormous skills vital to the viability of use-value and simple commodity production within their own mode of production. The above factors which inhibit Indian labour participation within industrial systems of production are perceived by many Euro-Canadian planners and policy makers as 'blockages' to Band participation in modernization, yet from the perspective of the Indian mode of production these very 'difficulties' are what retain Indian productive labour within the Indian mode of production.

6.3 Articulatory Stresses Between Diferring Modes of Production

The most significant inhibiting factor which ultimately have contributed to the majority of Band members preferring employment within their own Band mixed economy over industrial-oriented activity are
related to the social and economic relations that typify a multinational
capitalist mode of production and the stresses which that system places
on the Indian mode of production. Rather than asking the specific
question about the nature of factors that inhibit Indian worker
participation within a multinational capitalist system of production,
the question could be refocused in two important ways so as to shed
light on the problems of adaptation to industrial systems of
production. First, what are the factors that retain Indian labour
participation within the Indian mode of production, or more explicitly
are 'conservation' (McGee, 1976; 1977; 1978) tendencies for the entire
mode of Indian production. Secondly, what are the articulatory
relationships (Obregon, 1974; Friedmann and Sullivan, 1975; Breman,
1976;) between the entire Indian mode of production (of which Indian
labour is only one part) and a multinational capitalist mode of
production that are problematical for the entire Indian mode. This
thesis does not explore the first set of factors, but the articulation
linkages between the two modes of production can be understood first by
contrasting the social and economic relations of the two differing modes
of production.

6.3.1 The Indian Mode of Production: A Summary

This case study of the Ross River Indian Band economy has
demonstrated that a northern Indian mode of production has a mixed
economic base that involves renewable resource harvesting, an intricate
system of land use and a pattern of seasonal wage employment usually
under Band or individual control. The Indian labour force is skilled and productive, and social relations and cultural ties with the land and animals form a strong basis for supplying a variety of needs to households. From the Indian perspective, economic organization is relatively uncomplicated, and the production of food or simple commodities (e.g. furs, handicrafts) is by self-employed individuals and households, using local knowledge and resources. Disregarding the legal controversy over title and ownership to land resources which are currently being negotiated in Northern Canada as comprehensive Indian Land claims, Indian producers 'own' their means and tools of production, control and manage their own activity and decide to whom they will barter/sell or reciprocally share the products of their exchange or use-value labour. While there is no doubt about the importance of wage employment to northern Indians, little wealth is accumulated from wages and what surplus is generated becomes a means to purchasing productive inputs necessary for renewable resource harvesting. The evidence suggests that wage employment is a means to land based production. This is why there is a preference for employment that does not require relocation or several years of training away from the community, and why there is a preference for seasonal or part-time wage employment. In historical materialist terms, Indian reproduction is essentially simple and guarantees the reconstitution of the means of production and the relations of production.

While the land is accessible to all as a common heritage, there exist Indian rules respecting who can harvest where and how animals and
harvesting activity should be carried out. Elected Band Councils which usually represent major extended family groupings act on behalf of Band members by a consensus decision-making process.

6.3.2 Multinational Mode of Production: A Summary

A multinational capitalist mode of production tied to global markets and international financial institutions operates quite differently than does a northern Indian Band (Brody, 1981). Many theories of the capitalist mode of production have been advances which analyze capitalist dynamics of production, capital accumulation, extended reproduction and the role of global markets and the nation state (Frank, 1967; Myrdal, 1969; Holland, 1976; Amin, 1974; Mandel, 1978; O'Conner, 1973; Poulantzas, 1975).

Within a multinational industrial mode of production, the unit of production is usually a firm or state corporation whose legal owners may or may not be residents of the region or the country within which production takes place. Through the intermediation of a global market, labor, land resources, capital and technology are obtained for the production solely of exchange-value commodities. Usually a board of directors of the firm elected by the majority shareholders or appointed by its owners retains the legal rights of management and control of all phases of commodity production and distribution. These rights according to Usher (1983: 26) include:

1. the determination of what will be produced, when, by whom and for whom.
2. the determination of the technical process of production, and how and when new technology and equipment will be introduced.

3. the determination of what constitutes safe, healthy and desireable working conditions.

4. the organization, direction, and supervision of manual and clerical labour.

The delegation of tasks within a firm usually involves the separation of the conceptualization and execution of tasks between managerial and technical personnel on one hand, and manual and clerical personnel on the other. In exchange for wages, workers generally forfeit all rights except those circumscribed by union contracts, state law or those delegated respecting the management of the corporation and the utilization of labor in the production process.

As in the Indian mode of production, the capitalist mode of production must also reproduce itself. However, whereas the Indian mode of production requires only simple reproduction for use value and simple commodity production, the capitalist mode of production requires extended reproduction. According to Clark (1980: 230) extended reproduction requires capital accumulation or profits. This surplus may be used to replace existing capital stock and/or increase total capital stock via the purchase of additional production goods. In order to facilitate the accumulation of surplus capital the capitalist mode of production requires a market whose prime purpose is to facilitate the assembly and commoditisation of labor, technology, finance capital and land resources and their exchange via an international monetary or
credit system. The market also functions to distribute mass manufactured producer and consumer commodities. In order to function and facilitate accumulation of surplus necessary for capitalist extended reproduction, a market of mobile exchange-value labor must become globally established. As a result, modes of production that are fundamentally non-capitalist (Scott, 1976; Chaynov, 1977; Halperin and Dow, 1977; Bromley and Gerry, 1979) and that require labor for use-value production, or that prevent labor's mobility like any other commodity, must be commoditized, in the same manner of "the great transformation" which Karl Polanyi (1957) referred to in his rendition of the modern history of Europe. Likewise, a market for land and its resources must be established, and pre-existing systems of land tenure that impede the free commodity exchange of land and resources must be terminated (Dimitrov, 1982). For extended capitalist reproduction to take place . . . people, as the embodiment of labor, must become separable from their ties to the land, and from their ties to kin and community (Usher, 1983: 27).

To facilitate extended reproduction for the capitalist mode of production, the State, contrary to liberal economic or non-interventionist perspectives, must become involved, as individual corporations have no interest in, and legally are not required to . . . recreate the means and relations of production for other enterprises (Clark, 1980: 229). Due to the fiscal crises of the State (O'Conner, 1973; Mandel, 1978; Poulantzas, 1975) it intervenes to assist capital accumulation through such legal authority as the power to impose rents,
taxes, royalties and fees. Often the State also pays for social and economic infrastructure (Holland, 1976a, 1976b) as well as providing tax, location and even labour cost subsidies.

It is clear from the above discussion that social and economic relations of the multinational capitalist mode of production are far different than that of the northern Indian mode of production. Before Indian development options can be formulated it is necessary to understand some of the major transformations that might be expected to occur to northern Indian socio-economies upon their articulation with a multinational capitalist mode of production.

6.3.3 The Uneven Character Of Capitalist Penetration And Commoditisation

In clarifying some of these major "transformations" that can be expected by northern Indian Bands due to articulation with multinational capitalist modes of production and the process of capitalist commoditisation, it is important to stress that the "transformation" is an extremely uneven process varying within and between the multiplicity of rural Indian bands that dot Northern Canada. The unevenness of the "transformation" is related not only to the inherent space and class contradictions of capitalist expansion (Amin, 1974; Carney, et al 1975; Emmanuel, 1972; Fox, 1978; Holland, 1976a, 1976b; Markusen, 1978, Massey, 1978) and the hypermobility of capital (Walker, 1978), but also to conservation/dissolution tendencies (McGee, 1976; 1977; 1978) internal to Indian modes of production.
An important possible change to the Indian mode of production revolves around the effect of the capitalist mode of production upon the Indian means of production, namely land and wildlife species. As Indian lands become subsumed within nation states, the laws of general application within the dominant society respecting property ownership and resource extraction are usually extended to apply to the Indian mode of production. When this occurs the struggle to retain "territorial" (Friedmann and Weaver, 1979) control over Indian traditional lands becomes exceedingly difficult. Land and resources via state law now become commodities for exchange within the national and global capitalist market. Previously existing Indian customs of land tenure and resource management are superseded in favour of state laws and regional developments that often accentuate "functional" integration and "functional development" (Friedmann and Weaver, 1979; Weaver, 1980) over "territorial needs."

In addition to these changes, industrial developments, to varying degrees affect Indian means of production by virtue of their destruction and/or modification of wildlife habitat and land forms. The modification of habitat and land forms may affect biological productivity and the over-all carrying capacity of Indian renewable resource harvesting lands, which in turn may affect the ratio of Indian production returns to labor time expended.

Also, to an unknown extent animal movement patterns may change. Indian hunting and trapping not only requires a diverse supply of wildlife within discrete seasonal time periods, it also requires
knowledge of animal behaviour and the predictability of that behaviour. Indian hunting systems rely on the intactness not only of habitat, but also of information systems of animal signs and tracks, climate, sounds and even smells. Decreased hunting efficiency and changes to hunting/trapping strategy can occur when predictable animal movements and signs are disturbed. Such disturbance might contribute to the retreat of wildlife to more remote, less accessible regions of traditional Indian territory. Given the uneven degree of capitalist development, changes to bioproductivity and established animal movements may vary. As a consequence, Indian resource use and system of land use may shift, a shift that may differentially affect wildlife species populations, and Indian costs of successfully engaging in renewable resource harvesting.

6.3.4 The Effects of Capitalist Comoditization

Few northern Indian Bands are unaffected by markets which commoditize their land, labor, use-value products and even their scanty supply of capital. The differences in the way markets affect Indian producers can be explained not only by the degree in which markets engage the Indian mode of production, but also by the differences in rural marketing systems. Some Indian economies are only partially integrated into the global market, while others may lack markets altogether, and still others may be fully integrated to the global capitalist market. Increasingly, the question of how much Indian economies are integrated to markets is becoming irrelevant as most are
somewhere near the middle of a market-penetration continuum. Rather, the relevant question is to ask how various systems of markets affect Indian economic and social structures?

As "territorial" Indian lands and resources become part of the global commodity market, and as varying types of capitalist market systems (Smith, 1977) improve access to these previously Indian non-commoditized resources, pressures from industrial/recreational land uses and sports hunters on wildlife and land commodities affect the same wildlife populations which form the basis of use-value Indian household production and Indian systems of land use. In some cases, Indian traditional lands become "alienated" not only by land ownership and state or corporate proprietary leasing arrangements, but also by the mere presence of unpredictable Euro-Canadian intrusions.

6.3.5 Changes to Indian Relations of Production

Other changes that might be expected should Indian modes of production articulate with industrial capital modes of production revolve around the nature and organization of work, particularly relations of production.

There will be a shift from flexibility, egalitarianism and consensus among producers to rigidity, hierarchy and dominance. Whereas the self-employed (Indian) producer can transmit his tools, skills and knowledge to the next generation of producers through apprenticeship and inheritance, under an industrial system the state must assume these functions. The school becomes the institution whereby children are trained, not for specific skills and occupations (germane to the Indian mode of production), but to become members of a labor force—to compete in the labor market. Competition replaces
solidarity as a virtue. Cooperation is given new meaning—no longer is mutual aid recognized as a necessity among co-producers, but a self-denial for a purpose not one's own . . . . (Usher, 1983: 29)

Further, as labour participation in industrial exchange-value production increases, use-value household production as a proportion of total gross output can be expected to decline. As a consequence of this retraction of use-value labour power from renewable resource harvesting, the "basic needs" material requirements for simple reproduction are eroded. Consequently, households may be compelled to obtain a greater portion of their requirements through commodity production for exchange, or the sale of their power. Explicitly, to obtain the now necessary cash, Indian labour must either specialize in simple commodity production to acquire the increasingly non-indigenous consumer goods or abandon use-value labor. As the integration into the capitalist commodity production/capital circulation circuit increases, the sale of labor power, the production of simple commodities and the commoditisation of land resources become virtual necessities for the mere simple reproduction of the Indian mode of production.

6.3.6 The Intensification of Capitalist Commodity Relations

The degree in which the simple reproduction of Indian modes of production is achieved through the production and exchange of 'capitalist' commodities represents the 'intensity' of capitalist commodity relations (Asch, 1977; Mandel, 1978; Dimitrov, 1981). With the intensification of commodity relations, the acquisition of money
becomes more essential to Indian simple reproduction. Those Indian workers who specialize in wage labor or commercial business become more vulnerable to short-falls of country-food as their labor, time and scarce capital resources are not available for household use-value production. When food or producer-goods needs can only be satisfied by regular capitalist commodity purchases, a reduction in wage-labor, in simple commodity production and/or income can lead to serious indebtedness and possibly even deprivation of country foods.

A second consequence that might occur from intensified capitalist commoditisation would be the occurrence of contractual 'outputing' for a factory. For instance, Indian women that have use-value skills in producing clothing for household consumption might, to obtain cash, produce clothing garments such as gloves and overalls for factory usage. Such outputing, perhaps paid on a piece-basis, is one form of Indian producer articulation with capitalist modes of production that could lead to a greater dominance of capitalist relations of production over Indian relations of production.

As the Indian means of production are commoditized and Indian wage labor within multinational and commercial modes of production becomes more common, the intensification of commodity relations may also lead to a more class differentiated structure amongst northern Indian people (Marx and Engels, 1979 edition; Frideres, 1974; Knight, 1978; Kellough, 1980). Poor, middle, and rich class Indians may become differentiated according to their levels of consumption of both use-value and capitalist commodities, or according to variable access to
modern tools of production. Poor Indians unable to reproduce themselves through household use-value production might resort to the sale of their labor power within a regional market. Middle class Indians would be able to simply reproduce themselves by adroit combinations of use-value and exchange value production. Finally, the rich class of Indians insofar as they might be able to increase use-value and commodity production by the cash purchase of modern tools of production and labour power, might be able to reproduce themselves in an extended fashion thereby accumulating surplus capital.

6.3.7 Changes to Indian Distribution Systems

Increased cash income, and an intensification of commodity relations may also disrupt traditional distribution networks. Meat that previously was distributed along kin-lines according to needs may become scarcer as the Indian labor force withdraws its use-value production and earns increasing amounts of cash. The articulation of Indian Bands with multinational capitalist development will compensate exchange-labor differently than does use-value self-employment within a social structure that emphasize cooperation and reciprocity. Cash incomes will accrue to wage laborers and Indian corporations differentially, and as this occurs, disparities of income between bands, persons and households can be expected to occur, unless of course a 'reciprocal cash sharing distribution system' is instituted. This disparity of incomes will shock social, political and family structures and the
... general sense of perceived well-being based on (traditional) concepts of rights and obligations amongst members of . . . (Indian communities). For, and this is a related consideration, the reward to producers accrues not solely as income in cash or kind, but also as status and prestige within the community. (Usher, 1983: 30)

6.3.8 Wage Labor: Entry to or Exit from the "Traditional" Sector

It is argued by some (Hobart, 1981) that increased Indian wage employment in industrial capitalist production will provide the cash necessary for the continuation and modernization of the Indian renewable resource harvesting sector. While it is certainly true that cash inputs are required, it does not necessarily follow that only industrial labor participation or capitalist commodity production will actually fulfill the desired objectives of assuring the viability of Indian renewable resource producers. In fact, as the following discussion reveals, wage employment can become a means to exit from, rather than participate in the transitional sector.

First as Indian labor derives more cash income from wage employment, traditional production and consumption styles will change in the manner described earlier. Secondly, cash from wage employment flows on a smaller, more periodic, yet seemingly secure basis than the sudden irregular pulses of money that come from a season of good trapping. As dependency on market commodities increase, expensive producer and consumer items that previously were purchased opportunistically when money was irregularly available, tend to be financed over a long terms with a debt repayment plan that requires consistent secure income flows. If alternate means to a regular supply
of cash are not available people must resort to increased wage work. This could imply that.

Their tax liability will increase (and) with the decline of social solidarity at the community level, they must avert catastrophe by investing in pensions and insurance. All of these things amount to continuing financial (and time) obligations on a regular basis: monthly payments on mortgages, loans, consumer items. . . (Usher, 1983: 31). A possible consequence is that Indian renewable resource harvesting could decline even though people have higher per capita cash incomes.

If the objective is to finance renewable resource harvesting then the merits of wage labor must be weighed by comparison to other means such as the direct payment of monies to individuals or households via government transfer payments such as unemployment insurance benefits, child tax credits, or even a guaranteed income support program designed along the lines of the James Bay Cree Income Security Program (La Ruusic, 1978). Other means that might not require an Indian harvester to forego any of his time to finance participation in harvesting could be the Indian receipt of taxes and rents from industrial resource development (Banks, 1983) and the implementation of production subsidies or fur price support systems (Dimitrov, 1982; Ross River Indian Band).

As previous chapters have presented, Indian hunting and trapping economies with their system of land and resource use are complex human-ecological systems that require the conservation of a myriad of factors for their viable operation. It is simplistic to reason that cash gained only from industrial labor participation or capitalist commodity production will assist Indian household producers in gaining
entry to, or maintaining transitional harvesting activities. As mentioned previously, long-term wage employment may result in increased debt. In addition, the problem of time allocation between household production and industrial commodity production is a difficult task. One must not only have enough time, but the right amount of time in specific locations and intervals and in specific times of year so as to keep apace of land and animal changes, to keep equipment prepared and maintained, and to maintain trustworthy social relations with persons skilled in cooperative harvesting endeavors. Otherwise one risks becoming less productive and making less efficient use of now expensive producer goods. Being employed in wage labor with its regular time commitments is relatively easy in comparison to moving in and out of household use-value production. As a result of a poor hunting/trapping year due to low fur prices or animal population cycles, or personal disability, an individual because of debts may be forced to take on increased wage work, or in the wrong season, and as a consequence household use-value production may be adversely affected. For these, and the other reasons presented in this thesis, it is inappropriate to view money that might accrue from Indian economic articulation with industrial capitalist modes of production as a basis for preserving the essence of the traditional mode.

6.3.9 Concluding Remarks

The simple reproduction crisis for the Indian mode of production is intimately related to the effects of articulation with capitalist
commoditisation and general attributes of the industrial capitalist mode. In general, the articulations may increase 'costs' of Indian use-value production while decreasing returns to use-value labor per units of time expended. While pressures leading to this crisis can be associated with the transformations heretofore mentioned, a final contributing factor is the deteriorating terms of exchange relative to the inflated costs of capitalist commodities now required for Indian use-value production. Falling prices of Indian simple commodities (e.g. furs, handicrafts) relative to inflated capitalist commodities requires either a reduction in Indian levels of consumption, an intensification of simple commodity production, or an increased debt load to obtain producer goods. Thus, unequal exchange (Emmanuel, 1972; Amin, 1974) between two modes of production, under the hegemony of the capitalist mode directly raises the costs of production and reduces the returns to Indian household.

To offset transformations form the commoditisation process northern Indian bands can no longer rely simply on their innate capacity to adapt to change, or the voluntary 'goodwill' of government and corporate officials to consider their interests. The pace and scope of Indian transformations resulting from multinational capitalist penetration in Northern Canada are massive, the fiscal crisis of the State and Capital is severe (O'Conner, 1973; Mandel, 1978) and the usual adaptive Indian response of initially testing the suitability of change events and then possibly moving out of range, up a distant mountain, or further down the river if things don't work out just will not suffice to protect and enhance the unique northern Indian mode of production.
CHAPTER 7

INDIAN PROPRIETARY RIGHTS: THE PRIMARY ARTICULATORY BASIS
FOR PROTECTION AND PRESERVATION OF INDIAN DEVELOPMENT OPTIONS

7.1 The Necessity of Articulatory Linkages with the Canadian State

As the previous chapter describes, articulation with industrial capitalist modes of production can transform and commoditise Indian modes of production to the point where simple reproduction becomes threatened. To gain a measure of control over these transformations and ease the simple reproduction crisis Indian Bands must negotiate articulation linkages with the State. Capital is hypermobile (Holland 1976a; 1976b; Palloix, 1977; Walker, 1978) and the only legal authority that can potentially assist Bands in implementing selective territorial closure (Friedman and Waver, 1979), thereby controlling Indian band capitalist transformation and commoditisation, is the State, explicitly the Canadian government which retains a legal trust responsibility for Canada's indigenous peoples. The character of the linkages that must be negotiated should be based on knowledge not only of the dynamics of the Indian mode of production and its requirements for simple reproduction, but also of the transformation effects of the industrial capitalist mode of production and the commoditisation process.

Surprisingly, while Indian hunting, fishing and trapping have been of extreme importance in initiating land claim discussions in Northern Canada, the opinion of the author, after several years of active involvement in Canadian land claims issues, is that thorough
consideration has not yet been adequately given to the question of specifying legal articulation linkages required for effective protection and enhancement of the northern Indian mode of production. This personal perception is buttressed by Hunt's (1978) review of Australian and Alaskan land claim agreements, and by La Russic's (1979) review of the James Bay and Northern Quebec Land Claim Agreement.

7.1.2 What Must These Linkages Accomplish?

To protect and enhance the northern Indian mode of production Indian people must not only be involved in the formulation of natural resource management policies that would be applicable to their traditionally defined lands, they must also establish legally binding articulatory linkages that serve to control the commoditisation of their land and labor and the disruptive penetration of industrial capital into their traditional economic space. These articulatory linkages should not be of an advisory capacity such as technical land use planning boards, or administrative linkages established by government that could be abolished or superseded by regulation or Cabinet orders-in-council. Legally binding articulation linkages with the State that protect the Indian mode of production, their systems of land use, and their supportive socio-cultural relations must be negotiated in the political arena. These linkages must have the express effect of establishing "selective territorial closure" of Indian modes of production in their articulation with State laws, regulations, and functional economic
development strategies that embrace industrial capitalist developments in frontier regions of Canada.

Explicitly, northern Indian Bands require articulation linkages that allow for their traditional territories to be non-market resources for their exclusive hunting/trapping use, and territories where the presence of non-Indian hunters and industrial land users can be legally controlled and managed by Indian people. In addition to this, despite the erroneous claim by Theberge (1981) that Indian bands have no self-regulatory or conservation practices respecting country food harvesting and therefore should be regulated as any other harvesting user, Indian Bands also require the rights to manage wildlife resources within that exclusive territory according to their indigenous wildlife management practices (Lee and Devore, 1968; Bennet, 1976; Peit, 1973; 1983).

7.2 The Necessity of Property Rights

Indian resource harvesting and management rights and the non-commoditisation of Indian lands cannot adequately be protected except by acquiring some legal property rights to land and resources. Unlike the way these rights are understood today, the rights of Indian persons to hunt, fish and trap should not be mere licences to enter Crown land without trespassing. Like every other northern resource user the Indian right to hunt fish and trap should be a proprietary right (pers. com. Usher, 1983), if not outright title in fee simple. Such a right would legally guarantee resource management policy control
at senior levels and it would provide the leverage to negotiate other articulation linkages to protect and enhance northern Indian modes of production.

7.2.1 Proprietary Rights—An Alternative to Fee Simple Property

Ownership

Proprietary rights are not property rights or fee-simple ownership rights as land remains under Crown title. Essentially propietory rights issued by the Crown have four characteristics (da Costa et al. 1982; Hollowell, 1982; Sinclair, 1982; Usher pers. comm. 1983):

1. they grant exclusive use of a particular resource within a defined territory;
2. they are rights which must legally be compensated for in the event of third party damage or nuisance;
3. they are rights which must be compensated for should they be expropriated.
4. they imply a legal right of profit a prendre—which is a legal right to benefit from resource use.

Presently proprietary rights are granted as mining claims, oil exploration permits, grazing leases and timber licences. In the north all these rights are granted to mining corporations, oil companies and outfittes who want grazing permits for their animals. Only one group of people do not have their land economic resource use rights protected in this manner—Indian people. What this implies, is that even after a land claims settlement, given the existing Yukon land claim harvesting
sub-agreements, Indian people will only have a licence to enter unoccupied Crown land to harvest country food and trap fur mammals. That licence to hunt or trap does not place any binding conditions on parties that may be granted a proprietary licence. Therefore when a mining proprietary licence is granted to lands where Indian people hunt or trap, the mining company has no legal obligations to Indian users unless they have damaged private property such as cabins or traps. The holders of the mineral licence or any other proprietary licence can essentially do what they please.

For the protection of the Indian mode of production and to ensure management input into non-Indian resource use and industrial capitalist developments, Indian people require a proprietary right to land and/or a proprietary right to a certain quantity of specific wildlife species necessary for hunting, fishing and trapping within a circumscribed area.

To protect the Indian mode of protection the Crown should retain fee simple ownership rights to land but convey back to Indian people proprietary rights to land and animals. If that were to occur, Crown agencies and industrial developers would be compelled to carefully consider and implement their plans because damages or disruptions that occur could have costs, or at least replacement values attached to them. Under a system of proprietary rights, hunting and trapping compensation is no longer a matter of voluntary goodwill, but becomes legal and enforceable.

Proprietary rights of hunting and trapping would also imply a legal right to expect a benefit from hunting and trapping. If a
developer were to build a hydroelectric dam and destroy a fishery or muskrat and beaver lodges, Indians would have a legal right to expect compensation. An Indian Band may under this system not be able to stop industrial developments but a third party could not simply enter the land and do what they please. A legal negotiating situation is established between holders of competing proprietary rights. If developments affect Indian rights to animals, or a certain level or harvest subject to a principal of animal conservation, Indian people would have the legal right to expect an equitable arbitration process and compensation.

While such a system of granting proprietary rights to Indian hunters, fisherman and trappers would not be a panacea for all the transformation and commoditisation pressures which Indian modes of production face, it would strengthen the Indian Band position to the point where it would no longer be a matter of social policy, regulation or charity for governments and corporations to consult with Indian people respecting regional developments— it would be a legal binding requirement.

The compensation which Indian people could legally expect to receive as a result of required negotiations between competing proprietary rights holders is the leverage required to obtain a multiplicity of articulation linkages with government and industry. These linkages could take many forms and they could be designed to preserve and protect Indian modes of production thereby allowing Indian Bands greater choice in selecting a development path.
7.3 Proprietary Rights—An Essential Foundation for Development

Options

No longer need Indian Bands be locked, or forced into choosing a functional development paradigm centered around export base theory (North 1955; 1975; Richardson, 1973; Perloff et al. 1960), polarization and growth pole theory (Friedmann, 1966; Friedmann and Alonso, 1975; Hirschman, 1958; Perroux, 1970), or the stages of growth modernization theories elaborated by (Rostow, 1971). These development approaches would imply the opening of band modes of production and the commoditisation of their land, labor and resources by integration to global supply and demand markets—a choice which the previous chapter has indicated would lead to massive transformations and a simple reproduction crisis.

Instead Indian proprietary interest in land and resources would allow Bands to choose a territorial development model that emphasizes selective closure of Indian modes of production to integration with capitalist modes of production and the global commodity market.

Selective closure refers to a policy of enlightened self-reliance . . . it flies straight in the face of the ideology of free trade and comparative advantage and the attempts of transnational enterprise to organize a functionally integrated world economy under its tutelage. Selective closure is a way to escape from the fetishism of growth efficiency; it is an expression of faith in the abilities of a people to guide the forces of their own evolution. It means to rely less on outside aid and investment, to involve the masses in development, to initiate a conscious process of social learning, to diversity production, and to pool resources. It means learning to say 'we' and to assert a territorial interest. (Friedmann and Weaver, 1979)
This choice, strengthened by the rights of resource use and management that would flow from proprietary interest could allow Indian Bands to adopt a key strategies of territorial development (Stohr, 1978; Friedmann and Weaver, 1979). These strategies could be uniquely designed to meet specific cultural and economic requirements of the northern Indian mode of production, its system of land use and the threats and opportunities from industrial capitalist development and the commoditisation process.
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